AGENDA

MEETING OF THE
SAN ANTONIO WATER SYSTEM
BOARD OF TRUSTEES
October 6, 2020, 9:00 A.M.
6th Floor Board Room #609
Administrative Offices
2800 U. S. Hwy 281 North, San Antonio, Texas 78212

NOTICE TO THE PUBLIC. This meeting will be held in person at SAWS’ Headquarters, however, some Trustees may participate remotely by videoconference and their attendance will be counted. The public may attend the meeting in person in the board room and participate in the public comment portion of the meeting. However, SAWS will require that the public follow certain social distancing practices at the meeting, including, those related to the wearing of masks and spacing of attendees. SAWS may require attendees to view the meeting from another room if space within the board room cannot safely accommodate those in attendance. In the event there are any technical difficulties in broadcasting the two-way audio visual deliberation to the public in the board room, then those attendees will be provided another room to watch and listen to the live meeting.

Members of the public are also encouraged to watch the meeting live online at http://www.saws.org/live. All members of the public, and SAWS’ staff, are strongly encouraged to use this link to watch the meeting live online.

Finally, any member of the public who wants to participate in the public comment portion of the meeting, but does not wish to attend the meeting in person, may do so by submitting written comments by email at PublicComment@saws.org by 3:00 p.m. Monday, October 5th. Please include your name and the number of the agenda item to which your comment applies. All comments must be limited to 300 words or less in total (not per item). All written public comments will be available to the Board prior to or at the beginning of the meeting and will become a part of the public record. The Board Chair may, in her discretion, have some or all of the submitted comments read aloud.

SAN ANTONIO WATER SYSTEM
HANDICAPPED ACCESSIBILITY STATEMENT
The San Antonio Water System Buildings and Meeting Rooms are accessible to individuals with disabilities. Accessible visitor parking spaces as well as the accessible entrance and ramp are located at the west side main entrance of the SAWS Headquarters Building, Tower I, 2800 U.S. Highway 281 North. Individuals with disabilities in need of auxiliary aids and services, including Deaf interpreters, must request such aids and services forty-eight (48) hours prior to the meeting. For assistance, contact the Board Administrator at 210-233-3537 or 711 (Texas Relay Service for the Deaf).
1. **MEETING CALLED TO ORDER.**

2. **Announcements.**

   A. The San Antonio Water System Board of Trustees will, during the Meeting, close the Meeting and hold an Executive Session pursuant to and in accordance with Chapter 551 of the Texas Open Meetings Act. The Board of Trustees may, at any time during the Meeting, close the Meeting and hold an Executive Session for consultation with its attorneys concerning any of the matters to be considered during the Meeting pursuant to Chapter 551 of the Texas Open Meetings Act.

3. **Public Comment.**

4. **Nomination and Election of Officers for a term of one year for the San Antonio Water System Board of Trustees. (JELYNNE LEBLANC BURLEY, CHAIRWOMAN)**

5A. **Appointment of Members to the Audit Committee for the San Antonio Water System Board of Trustees. (JELYNNE LEBLANC BURLEY, CHAIRWOMAN)**

5B. **A Resolution Amending Resolution No. 09-046 by creating the Compensation Committee of the Board of Trustees and modifying the frequency and times of the Policy and Planning Meeting of the Board of Trustees. (JELYNNE LEBLANC BURLEY, CHAIRWOMAN)**

5C. **Appointment of Members to the Compensation Committee for the San Antonio Water System Board of Trustees. (JELYNNE LEBLANC BURLEY, CHAIRWOMAN)**

6. **Minutes.**

   A. Approval of the Minutes of the San Antonio Water System Board of Trustees Regular Board Meeting of August 4, 2020.

7. **Ceremonial and Recognition Items.**

   **CONSENT AGENDA ITEMS**

   Items 8 – 33

   **ITEMS CONCERNING THE PURCHASE OF EQUIPMENT, MATERIALS AND SUPPLIES**

8. **A Resolution accepting recommendations regarding the contracting for certain services, equipment, materials, and supplies, and authorizing the acceptance of bids as follows: (DOUG EVANSON – YVONNE TORRES)**

   A. **Award of New One Time Purchases of Materials, Equipment and Services.**

      1. Approving a one-time purchase from JCS Industries, Inc. to provide: automatic valve shutoff control panels and chlorine cylinder shutoff valves, Bid No. 20-20089, for a total of $463,125.00.
B. Award of New and Renewal Annual Goods & Services Requirement Contract and Maintenance Agreements. Estimated annual purchases are based on unit prices bid. Actual totals and quantities may vary from the estimate.

1. Acceptance of the bid of J & S Materials, LLC dba Madden Materials to provide: annual contract for hauling of spoil material, Bid No. 20-0648, for a total of $636,600.00.

CAPITAL IMPROVEMENT CONTRACTS
PROJECTS INVOLVING IMPROVEMENTS, EXTENSIONS AND ADDITIONAL CAPACITY

Developer Customer Contracts

9. A Resolution awarding a construction contract to Longhorn Tejas Property Builders, LLC in an amount not to exceed $298,452.46 in connection with the Chavaneaux Subdivision Unit 1 Off-Site Water and Sewer Project; approving a contract between the System, Longhorn Tejas Property Builders, LLC, and HK Chavaneaux, LLC for the project work; authorizing the expenditure of funds in the amount of $72,195.65 for the System’s proportionate share of the project work payable to Longhorn Tejas Property Builders, LLC, and the expenditure of funds in the amount of $7,219.57 for the System’s proportionate share of the engineering design fees and associated easement cost payable to HK Chavaneaux, LLC. (ANDREA BEYMER – TRACEY LEHMANN)

Water and Sewer Line Improvements

10. A Resolution awarding a construction contract to Facilities Rehabilitation, Inc. in an amount not to exceed $420,730.00 in connection with the Roosevelt Ave. 36-inch Sewer Abandonment Project. (ANDREA BEYMER – GAIL HAMRICK-PIGG)

Production, Transmission and Treatment Improvements

11. A Resolution awarding a construction contract to Pesado Construction Company in an amount not to exceed $2,528,600.00 in connection with the Micron Pump Station Well Pump No. 4 Project. (ANDREA BEYMER – JUAN GOMEZ)

12. A Resolution awarding a construction contract to Associated Construction Partners, Ltd. in an amount not to exceed $2,669,250.00 in connection with the Water Production Facilities Upgrades Phase II Project. (ANDREA BEYMER – JUAN GOMEZ)

REPLACEMENT AND ADJUSTMENT PROJECTS

Governmental Relocations and Replacements

13. A Resolution awarding a construction contract to Pronto Sandblasting & Coating & Oil-Field Services Co., Inc. in an amount not to exceed $936,378.67 in connection with the 2021 SMP Package II (Guadalajara, Minuteman, Village Haven). (ANDREA BEYMER – GAIL HAMRICK-PIGG)
14. A Resolution awarding a construction contract to Pronto Sandblasting & Coating & Oil-Field Services Co., Inc. in an amount not to exceed $1,536,021.40 in connection with the 2021 SMP Package III (Gorman St, Wyoming St, Paul St, NW 20th St). (ANDREA BEYMER – GAIL HAMRICK-PIGG)

15. A Resolution awarding a construction contract to Pronto Sandblasting & Coating & Oil-Field Services Co., Inc. in an amount not to exceed $1,191,482.00 in connection with the 2021 SMP Package V (Hilary Rd, Delaware, Whitefield). (ANDREA BEYMER – GAIL HAMRICK-PIGG)

16. A Resolution awarding a construction contract to D Guerra Construction, LLC in an amount not to exceed $1,092,181.50 in connection with the 2021 SMP Package VI (Hale, Kernan Dr., Hoover Ave.). (ANDREA BEYMER – GAIL HAMRICK-PIGG)

17. A Resolution approving expenditures in an amount not to exceed $1,811,066.81 for the adjustment and replacement of sewer facilities by the City of San Antonio in connection with the Broadway Street: E. Houston Street to IH-35 Project. (ANDREA BEYMER – GAIL HAMRICK-PIGG)

18. A Resolution approving expenditures in an amount not to exceed $802,333.93 for the adjustment and replacement of water and sewer facilities by the City of San Antonio in connection with the Bynum Ave.: W. Gerald Ave. to S.W. Military Project. (ANDREA BEYMER – GAIL HAMRICK-PIGG)

19. A Resolution approving expenditures in an amount not to exceed $1,446,060.63 for the adjustment and replacement of water and sewer facilities by the City of San Antonio in connection with the West Commerce Street: Frio Street to Colorado Street Project. (ANDREA BEYMER – GAIL HAMRICK-PIGG)

20. A Resolution approving an Interlocal Agreement with the Alamo Regional Mobility Authority; authorizing the expenditure of funds in an amount not to exceed $1,291,703.01 for the adjustment of water and sewer facilities by the Alamo Regional Mobility Authority in connection with the Candlemeadow: Binz-Engleman to Foster Rd. Project. (ANDREA BEYMER – GAIL HAMRICK-PIGG)

21. A Resolution approving an Advance Funding Agreement with the Texas Department of Transportation; authorizing the expenditure of funds in an amount not to exceed $297,873.40 for the adjustment of the water and sewer facilities by the Texas Department of Transportation in connection with the FM 1535: Huebner Road to Loop 1604 Project. (ANDREA BEYMER – GAIL HAMRICK-PIGG)

EASEMENT AND REAL PROPERTY

22. A Resolution accepting an offer in the amount of $110,000.00 for the sale of approximately 4.298 acres located at 19845 Clayton Street in the City of Somerset, Bexar County, Texas; approving a purchase agreement with Lorenzo Marquez Puente; affirming a six percent commission to be paid equally between Cano and Company and Homes with Elli at closing and authorizing payment of closing costs up to $5,000.00 at closing. (NANCY BELINSKY – BRUCE HABY)
23. A Resolution declaring a 0.0679 acre tract of land located along the southern right of way of IH-10 east of the intersection of Foster Road in the northeast quadrant of Bexar County, Texas, as surplus to the needs of the System and authorizing the President/Chief Executive Officer to dispose of said property.  
(NANCY BELINSKY – BRUCE HABY)

MISCELLANEOUS ITEMS

24. A Resolution awarding a professional services contract to HDR Engineering, Inc. in an amount not to exceed $837,339.20 in connection with the Eastern and Far Western Basins Wastewater Collection System Model Update and Calibration Project.  
(ANDREA BEYMER – TRACEY LEHMANN)

(DONOVAN BURTON – SCOTT HALTY)

(DONOVAN BURTON – DARREN THOMPSON)

27. A Resolution approving the Third Amendment to the Wholesale Water Service Contract with the City of Elmendorf.  
(DONOVAN BURTON – DARREN THOMPSON)

28. A Resolution authorizing Engagement Letters with McCall, Parkhurst & Horton, LLP to serve as lead bond counsel and Escamilla & Poneck, LLP and Kassahn & Ortiz, PC to serve as co-bond counsel for a three-year term with one two-year renewal option to provide debt- related legal services.  
(DOUG EVANSON)

29. A Resolution awarding a services contract to JPMorgan Chase Bank, N.A. in an amount not to exceed $322,000.00 for a term of one year with three, one-year renewal options to provide lockbox services for the processing of customer water payments received through the mail.  
(DOUG EVANSON)

30. A Resolution authorizing and approving the defeasance and redemption of certain currently outstanding City of San Antonio, Texas Water System revenue obligations; requesting that the San Antonio City Council take action with respect to the redemption of such obligations.  
(DOUG EVANSON)

31. A Resolution recommending and requesting that the San Antonio City Council take certain actions with respect to an application to the Texas Water Development Board’s Drinking Water State Revolving Fund Program, and adopt a reimbursement resolution.  
(DOUG EVANSON)
32. A Resolution recommending and requesting that the San Antonio City Council take certain actions with respect to an issuance and sale of obligations to the Texas Water Development Board pursuant to its Drinking Water State Revolving Fund Program and designated as “City of San Antonio, Texas Water System Junior Lien Revenue Bonds, Series 2021A.” (DOUG EVANSON)

33. A Resolution authorizing the execution of an Amended and Restated Continuing Disclosure Agreement with the Guadalupe-Blanco River Authority in connection with the issuance of contract revenue bonds associated with the Western Canyon Regional Water Supply Project. (DOUG EVANSON)

34. **PUBLIC HEARING: 2021 ANNUAL BUDGET**
   
   A. Public Hearing Briefing (DOUG EVANSON)
   

35. Public Comment.

**ITEMS FOR INDIVIDUAL CONSIDERATION**

**CAPITAL IMPROVEMENT CONTRACTS**

**PROJECTS INVOLVING IMPROVEMENTS, EXTENSIONS AND ADDITIONAL CAPACITY**

**Developer Customer Contracts**

36. A Resolution approving Utility Service Agreements to provide water and/or wastewater service to the tracts listed below requiring potential oversizing of mains (OVR), and/or are located outside the San Antonio Water System water and/or wastewater Certificate of Convenience and Necessity (CCN). (ANDREA BEYMER – TRACEY LEHMANN)

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<th>Tract Name</th>
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<th>Acres</th>
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<th>CoSA / CoSA ETJ / Outside</th>
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37. A Resolution awarding a construction contract to MGC Contractors, Inc. in an amount not to exceed $27,060,230.00 in connection with the Water Resources Integration Program (WRIP) Phase 2 Pump Stations Improvements Project.  
(ANDREA BEYMER – JUAN GOMEZ)

MISCELLANEOUS ITEMS

38. A Resolution awarding an AMI Solution contract to Itron, Inc. in an amount not to exceed $171,452,773.47 in connection with the Connect H2O Program; approving an amount not to exceed $935,144.13 for the Pilot Phase of the ConnectH2O Program.  
(MARY BAILEY – JOSE DE LA CRUZ)

39. A Resolution awarding an Endpoint Installation services contract to Vanguard Utility Service, Inc. in an amount not to exceed $278,740.00 in connection with the Pilot Phase of the ConnectH2O Program.  (MARY BAILEY – JOSE DE LA CRUZ)

40. A Resolution awarding a Meter Data Management System contract and a Meter Data Management System professional services contract to Harris SmartWorks in an amount not to exceed $5,795,415.37 in connection with the ConnectH2O Program; approving an amount not to exceed $1,345,355.31 for the Pilot Phase of the ConnectH2O Program.  (MARY BAILEY – JOSE DE LA CRUZ)

41. A Resolution approving additional funds to the existing consulting services contract with VASS Solutions in an amount not to exceed $518,721.00 in connection with the ConnectH2O Program.  (MARY BAILEY – JOSE DE LA CRUZ)

42. BRIEFING SESSION.

A. Briefing and deliberation regarding the Vista Ridge Project

43. Inquiries of the Board of Trustees for future briefings and/or follow-up action.

44. The Regular Session of the October 6, 2020 Regular Board Meeting is hereby recessed to hold an Executive Session and discuss the matters listed pursuant to Section §551.071 of the Texas Open Meetings Act.

45. EXECUTIVE SESSION.

A. Consultation with attorneys regarding legal matters related to the Interlocal Agreement and Term Wholesale Water Service Contract with Kendall County Water Control and Improvement District No. 3 pursuant to Texas Government Code Section §551.071.
B. Consultation with attorneys regarding legal matters related to governance and authority of the San Antonio Water System Board of Trustees, pursuant to Texas Government Code §551.071.

C. Consultation with attorneys regarding advice on legal matters in which the duty of the attorney to the governmental body under the Texas Disciplinary Rules of Professional Conduct of the State Bar of Texas clearly conflicts with the Texas Open Meetings Act, pursuant to Texas Government Code §551.071.

46. The Regular Session of the Regular Board Meeting of October 6, 2020, is hereby reconvened.

47. Adjournment. THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES MEETING OF OCTOBER 6, 2020, IS HEREBY ADJOURNED.
TO: San Antonio Water System Board of Trustees

FROM: Jelynne LeBlanc Burley, Chairwoman, San Antonio Water System Board of Trustees

SUBJECT: AMENDING RESOLUTION NO. 09-046 BY CREATING A COMPENSATION COMMITTEE OF THE BOARD AND MODIFYING THE MEETING FREQUENCY AND TIMES OF THE POLICY AND PLANNING MEETING OF THE BOARD OF TRUSTEES

Board Action Date: October 6, 2020

SUMMARY AND RECOMMENDATION:

The attached Resolution authorizes the creation of the Compensation Committee of the San Antonio Water System (the “System”) Board of Trustees (the “Board”) and amends Resolution No. 09-046 by modifying the frequency and times of the Policy and Planning Committee of the Board.

- Prior to 2006, the Board employed a Committee structure to assist them in the decision-making process in its management role on behalf of the System. On July 18, 2006, by Resolution No. 06-221, the Board dissolved the then existing Committee structure and replaced it with a structure comprised of three committees, being the Audit and Finance Committee, the Planning and Operations Committee and the Water Resources Committee.

- On February 10, 2009, by Resolution 09-046, the Board dissolved the then existing three Committee structure of the Board, established the Policy and Planning Meeting structure in its place, and created a new Audit Committee of the Board. The Board also authorized the Chairman of the Board to designate Board Members to head up Board Task Forces, among other things.

- On August 15, 2017, the Chairman of the Board created the CEO Compensation Task Force to review and recommend to the Board an annual performance appraisal and compensation process for the President and Chief Executive Officer, and engage consultants for assistance. The Chairman of the Board later expanded the duties of the CEO Compensation Task Force to continue to serve as the Board’s liaison with the consultants engaged to develop the Annual Incentive Plan (AIP), to review the results and calculations of the balanced score card, to review and update market compensation data, to recommend to the Board adjustments to base salary and incentives, and to facilitate development of performance metrics and key initiatives for future AIPs. It has been determined that the responsibilities of the CEO Compensation Task Force should be incorporated into a Compensation Committee of the Board, and the CEO Compensation Task Force can be dissolved.
• Beginning in 2015, to improve the efficiency of the Board, the Policy and Planning Meetings were incorporated into the regular meetings of the Board. It has been determined that while the Policy and Planning Meeting is still necessary and valuable, Resolution No, 09-046 should be amended to allow for flexibility of the frequency and meeting times of the Policy and Planning Meeting.

• In order to improve and maximize the effective use of the Board’s time and that of staff, it has been determined that the following changes are appropriate:

  o A new Compensation Committee of the Board would be created, as an advisory committee to the Board, to assume the responsibilities of the CEO Compensation Task Force, and also explore, plan and monitor succession planning for the role of the President and Chief Executive Officer. The Compensation Committee shall be an advisory committee to the Board.

  o The frequency and meeting times of the Policy and Planning Meeting would take place on an as-needed basis. All other provisions relating to the format, role and structure of the Policy and Planning Meeting established in Resolution 09-046 would remain unchanged.

It is recommended that the Board approve this resolution

**FINANCIAL IMPACT:**

There is no direct financial impact associated with the approval of this resolution.
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES AMENDING RESOLUTION NO. 09-046 BY CREATING THE COMPENSATION COMMITTEE OF THE BOARD OF TRUSTEES AND MODIFYING THE FREQUENCY AND TIMES OF THE POLICY AND PLANNING MEETING OF THE BOARD OF TRUSTEES; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS OF THE OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, by Resolution No. 09-046 dated February 10, 2009, the San Antonio Water System (the “System”) Board of Trustees (the “Board”) dissolved the then existing Board Committee structure and established the Policy and Planning Meeting structure in its place, created a new Audit Committee of the Board, and authorized the Chairman of the Board to designate Board Members to head up Task Forces of the Board, among other things; and

WHEREAS, on August 15, 2017, the Chairman of the Board created the CEO Compensation Task Force to review and recommend to the Board an annual performance appraisal and compensation process for the President and Chief Executive Officer and engage consultants for assistance, which duties were later expanded by the Chairman to serve as the Board's liaison with the consultants engaged to develop the Annual Incentive Plan (AIP), to review the results and calculations of the balanced score card, to review and update market compensation data, to recommend to the Board adjustments to base salary and incentives, and to facilitate development of performance metrics and key initiatives for future AIPs (collectively, the “Task Force Responsibilities”); and

WHEREAS, it has been determined that a Compensation Committee of the Board should be created as an advisory committee to the Board, to assume the Task Force Responsibilities also to explore, plan and monitor succession planning for the role of the President and Chief Executive Officer, and the CEO Compensation Task Force should be dissolved; and

WHEREAS, while the Policy and Planning meeting is still necessary and valuable, Resolution No. 09-046 should be amended to allow for flexibility in the frequency and meeting times of the Policy and Planning Meeting; and

WHEREAS, the San Antonio Water System Board of Trustees desires to (i) create the Compensation Committee of the Board as an advisory committee to the Board to assume the Task Force Responsibilities and also to explore, plan and monitor succession planning for the role of the President and Chief Executive Officer, and (ii) amend Resolution No. 09-046 to modify the frequency and meeting times of the Policy and Planning Meeting to take place on an as needed basis; now, therefore:
BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That the Compensation Committee of the Board is hereby created as an advisory committee to the Board to assume the Task Force Responsibilities and also to explore, plan and monitor succession planning for the role of the President and Chief Executive Officer.

2. That the CEO Compensation Task Force is hereby dissolved.

3. That Resolution No. 09-046 is hereby amended to modify the frequency and meeting times of the Policy and Planning Meeting to take place on an as needed basis. All other provisions relating to the format, role and structure of the Policy and Planning Meeting established in Resolution 09-046 remain unchanged.

4. It is officially found, determined, and declared that the meeting at which this resolution is adopted was open to the public, and that public notice of the time, place and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

5. If any part, section, paragraph, sentence, phrase or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted with the portion held to be unconstitutional, illegal, invalid or ineffective.

6. This resolution shall take effect immediately from and after its passage.

PASSED AND APPROVED this 6th day of October, 2020.

________________________________________
Jelynne LeBlanc Burley, Chairwoman

ATTEST:

________________________________________
Secretary
MINUTES

MEETING OF THE
SAN ANTONIO WATER SYSTEM
BOARD OF TRUSTEES
August 4, 2020, 9:00 A.M.
6th Floor Board Room #609
Administrative Offices
2800 U. S. Hwy 281 North, San Antonio, Texas 78212

NOTICE TO THE PUBLIC. This meeting will be held in person at SAWS’ Headquarters, however, some Trustees may participate remotely by videoconference and their attendance will be counted. The public may attend the meeting in person in the board room and participate in the public comment portion of the meeting. However, SAWS will require that the public follow certain social distancing practices at the meeting, including, those related to the wearing of masks and spacing of attendees. SAWS may require attendees to view the meeting from another room if space within the board room cannot safely accommodate those in attendance.

Members of the public are also encouraged to watch the meeting live online at http://www.saws.org/live. All members of the public, and SAWS’ staff, are strongly encouraged to use this link to watch the meeting live online.

Finally, any member of the public who wants to participate in the public comment portion of the meeting, but does not wish to attend the meeting in person, may do so by submitting written comments by email at PublicComment@saws.org by 3:00 p.m. Monday, August 3rd. Please include your name and the number of the agenda item to which your comment applies. All comments must be limited to 300 words or less in total (not per item). All written public comments will be available to the Board prior to or at the beginning of the meeting and will become a part of the public record. The Board Chair may, in his discretion, have some or all of the submitted comments read aloud.
Board Members Present:
Berto Guerra, Jr., Chairman
Ron Nirenberg, Mayor
Pat Jasso, Vice Chair
Amy Hardberger, Secretary
Pat Merritt, Assistant Secretary
David P. McGee, Trustee
Eduardo Parra, Trustee

Board Members Absent:
None

1. MEETING CALLED TO ORDER.

The meeting of the San Antonio Water System Board of Trustees was held on August 4, 2020, and called to order at 9:20 a.m. by Chairman Berto Guerra.

2. Announcements.

A. The San Antonio Water System Board of Trustees will, during the Meeting, close the Meeting and hold an Executive Session pursuant to and in accordance with Chapter 551 of the Texas Open Meetings Act. The Board of Trustees may, at any time during the Meeting, close the Meeting and hold an Executive Session for consultation with its attorneys concerning any of the matters to be considered during the Meeting pursuant to Chapter 551 of the Texas Open Meetings Act.

3. Minutes.

A. Approval of the Minutes of the San Antonio Water System Board of Trustees Regular Board Meeting of June 9, 2020.

Chairman Guerra asked if there were any corrections to the minutes. Hearing none, he stated the minutes were approved as presented.


Robert Puente recognized Chairman Guerra and Trustees Pat Jasso and Pat Merritt for their service to SAWS and to the City of San Antonio. For nearly a decade, Chairman Guerra navigated SAWS through some of its most defining projects. He served as the chief negotiator for private-public Vista Ridge Pipeline that now delivers the largest non-Edwards Aquifer water supply, and provides up to 20 percent of the city’s water supply while protecting our ratepayers. This gives San Antonio water security for at least the next 60 years. Those meetings were open to the public and conducted with unprecedented transparency. During Chairman Guerra’s tenure, SAWS further diversified its water portfolio to include the H2Oaks Center, where water from three different sources were being produced, including from a brackish desalination plant that pumps slightly salty groundwater and filters it to drinking quality. It supplies water for up to 53,000 households each day. Also under the chairman’s leadership, SAWS achieved the highest bond ratings in SAWS
history, saving ratepayers millions of dollars annually. He emphasized how critical the chairman’s extensive business background was to all these accomplishments. Without Chairman Guerra’s professionalism, guidance and experience, he was not sure SAWS would be in such a positive position today. The fact that ten years ago we didn’t have to worry about changing direction in the middle of a project. Chairman Guerra gave us that ability and the understanding that if the Board at the time, whether it was 2011 or 2012, voted on something, that he was going to be there to make it go through its fruition. He stated he knew Berto back when he was at Southwestern Bell AT&T, and Berto was the same then as he was now. He thanked Berto for his service to SAWS, to the community, and above all else, for the service he provided to him, to his vice presidents and to the employees at SAWS.

Mr. Puente stated he also knew Vice Chair Pat Jasso from the 1990’s when she was working at Southwestern Bell AT&T and he was a legislator. They were from the same neighborhood, the same community. He was glad that Pat made it on to the Board. Pat’s pointed questions to our staff, eliciting information to make sure the residents of the South Side got the service that they so desperately needed and desired. One of the unique things about Pat was the attention she gave to women not only in the community at large, but particularly here at SAWS where she made sure that they were being taken care of. Pat made sure that they were mentored, and made sure that they joined certain organizations that allowed them to flourish and expand on their professional development. Pat was volunteer at heart and she volunteered for this position. He thanked Pat for all her service.

He stated Trustee Pat Merritt was our educator on the Board. Pat Merritt was from a little community on the East Side, and taught at some schools on the East Side. Pat actually taught at the middle school he went to, but they didn’t cross paths there at the time. Pat could asked those questions that our employees were starting to get used to and preparing for that kind of question. Her commitment to us and to the community was heartfelt. Ms. Merritt had the one-liners about going with a company that was less expensive. Pat always attended the Confluence at SAWS, and worked with the high school students to make sure their projects were what we would want as a utility. He also thanked Pat for her service to the community.

He asked staff to play a video to show the Trustees’ service during their tenure.

(2020 Video played.)

Mr. Puente introduced Mayor Castro, who wanted to say a few words.

Mayor Castro thanked Robert for inviting him to be part of a very special board meeting, as three great Members of the Board, including Chairman Guerra, end their tenure. He stated he couldn’t let the opportunity pass without just calling in to say thank you so much to all three of the Board Members. He wanted to say a special thanks to Berto who had been a friend now for just over 15 years. It was nine years ago now when he appointed Berto as SAWS Chairman. He had confidence in his ability to make sure that, along with Robert’s leadership, that SAWS could improve as an organization, could meet the challenge of meeting San Antonio’s water needs, embrace environmental responsibility and conservation, and also ensure that it improved Customer Service and its Affordability Programs. He stated that over these last nine years, Berto had been a phenomenal Board Chairman, better than he could have expected. He thanked the Board Members for all of the time, the energy, the creativity, the effort that they have put in along with the entire SAWS team because he knew
that this was a team effort having served on the Board. Over the last ten years, the EPA Consent Decree, Vista Ridge, the Affordability Programs, continued conservation needs, the growth of not just the city but the service area, all of those things, those challenges were being met on a daily basis because of the strong SAWS team. He acknowledged Robert for his leadership, and thanked Berto for stepping up nine years ago and for serving this out. It’s very much appreciated. Their work to make SAWS an even better organization served all of San Antonio as well and the citizens and the service area well for many, many years.

Mr. Puente stated Mayor Ivy Taylor did want to send a message, but was unable to stay on. As you all may know, she’s the President of the University now and was dealing with those transitions. He asked the three departing members to come to the front for a little presentation and photos.

(Presentation given; photos taken.)

Chairman Guerra stated what a journey this has been. Mayor Castro convinced him to join this Board, and by convince, he meant calling all his friends and family to get him to do it. He stated he knew nothing but what people told him was that this Board didn’t need a water expert. This utility was full of water experts. What it needed was someone with a business sense to steer towards the goal that had forever been out of the reach for San Antonio. That goal was water security that would take us decades into the future. At the beginning, he brought a servant with a heart and open ears to this position. He was pretty nervous when he sat here for the first time. He had never between to a SAWS Board Meeting, and he gaveled the meeting to order. Chairman Guerra stated he was as proud today as he was back then. He listened a lot, and when he saw the opportunity, Vista Ridge, he prayed hard. He knew that our staff probably didn’t like him too much at that time. Staff would say they needed two weeks, and he would say, okay, get it done by Monday, you have the whole weekend. Staff would get around the table and meet and work all weekend long to get it done. It didn't hurt that we had former City Councilman Reed Williams on the Board. He stated he and Williams would play bad cop and good cop. Williams agreed to be the bad cop, and we worked it together. He stated he fully believed time would show that Vista Ridge was the best decision San Antonio ever made to ensure that it remained the vibrant, economically attractive city that it had always been to fellow Board Members and staff. We, all of us, have accomplished that without damaging the bottom line. In fact, for several years now, SAWS has enjoyed the highest bond ratings in history, the highest bond ratings in history. He stated his servant’s heart also told him that there was no way this could have been done alone. This was not a one-man show. It took every single Board Member, and every staff member that rode out the waves with us. He saw the rest of the folks on this Board not as Trustees but as partners, as friends, and most importantly, as family. That’s the way that he saw Robert, the entire staff, the executive management team, and the entire Board. He recognized Ruben Barrera, the Board-appointed counsel, and thanked him for his counsel. He also recognized Pat Jasso and Pat Merritt. Trustee Jasso was a strong representative for the South Side. He worked with her at Southwestern Bell, and she did an outstanding job representing our company and representing our community. She asked pointed questions of staff to ensure ratepayers on the South Side were receiving quality service from SAWS throughout her term on this Board. She was a strong advocate for the customer assistance programs, which benefit the most vulnerable in our community. Ms. Jasso was known for always caring and always mentoring many young women in the community. She was always out there asking what else she could do to bring the strong
women into the leadership role. He thanked Trustee Jasso for her years of service, encouragement and guidance during these transformative years at SAWS. Trustee Merritt was a long-time educator, and the teacher in her came out all the time in our Board Meetings. When Ms. Merritt joined the Board, she made it a priority to attend the Confluence High School Summit put on by the SAWS Education Team each year. Once an educator, always an educator. Pat would talk to students about their water projects and encourage them to continue their passion into higher education. Trustee Merritt would even engage in some of the hands-on activities with the students. Pat was a strong and committed representative for East Side interests. She asked questions of staff at Board Meetings for clarification and always showed her appreciation of our hard-working staff. Like Pat Jasso, Trustee Merritt spent time volunteering as well. He thanked Ms. Merritt for the time she shared with SAWS. He also wanted to thank all of the SAWS team, all 1,700 members of our team. The culture that Robert and the executive management team created was second to none. From drought, to hurricane, to a pandemic, he had been awed by watching the employees step up to any challenge, no questions asked. He stated he was profoundly sad to leave, but was proud of what we had accomplished as a team and as a family together. He said instead of saying good-bye, he would rather say: Thank you. Gracias a todos.

Ms. Merritt thanked the chairman for his kind words, and thanked everyone for giving her the privilege to serve on this Board. It had genuinely been a learning experience. She reflected back on when she was teaching and some of the students would tell her that they just couldn’t get math. She told her students that everything they did, they learned to do. They learned to crawl, learned to walk, learned to skip, and learned to run. If she told them to go to the door, it didn’t matter whether they skipped, crawled, ran, or hopped as long as they got to the door. And that gave many of them confidence in what she was talking about. Then one day, they did learn math. She stated that when she came to the SAWS Board, she knew nothing. The only thing she knew about water was the water cycle from doing science. But just like Chairman Guerra, she was willing to learn. She was skeptical at first about getting on this Board but she remembered, she could learn. Ms. Merritt thanked Mr. Puente and staff for answering all of her questions, and never getting tired of her asking all of those questions. She thanked the Board and Mayor Nirenberg for his leadership and all he had done for our city.

Ms. Jasso stated that 2013 to now had certainly been an experience. Serving with Mayor Castro and Mayor Ivy Taylor definitely was an experience that as servant leaderships and being part of a team was definitely one where she was able to blossom and appreciate. Most of her volunteering experience had been in nonprofit organizations, but to come into this organization was a different experience. Like Chairman Guerra, she had the opportunity to be at Southwestern Bell and AT&T, so she was very familiar what that culture, and this provided another learning experience. She echoed what Trustee Merritt said about always willing to help them learn more about water, and be so well versed that they could go into a congressional office in D&C and plead the case. And then, of course, she always made sure that women and people of color were represented in these leadership positions. This world was not going to get any better until there were at least half women in leadership positions to take care of the problems. She continued to be that advocate because time, after time things would get worse when women did not have a chair at the table, and to make sure that they’re taken care of equitably, pay and positions. The South Side had long been neglected, and she was delighted to be able to see all the development that’s happened. Again, the recommendations put forth by staff made her a better person. She stated when she listened
to the Public Comments that generally criticized what they were doing, and then they never sticking around to listen to what really happened and what the Board did for all of these issues. She reflected back on one of the most recent events that stuck with her with the demonstrators on expired term limits for two Board Members, and the posters outside depicting brown hands coming out of the toilet. Nobody got up in arms about that, and everyone needed to be aware of those perceptions because it colored what happened in this world. She stated she continued to be an advocate, to be a nation that’s inclusive of everyone because we only get better when we take care of the entire world, the entire community. This pandemic hadn’t shown something different. Those people that had been disenfranchised have always been disenfranchised. But at SAWS, we continued to help everyone. She stated it had truly been a pleasure working with Robert and the staff and it was a learning experience. She thanked Chairman Guerra and Pat Merritt for these past years, she loved that they had served together.

Chairman Guerra thanked Pat Jasso and Pat Merritt for their comments. He stated he saved his best comments for last. He needed to thank his better half, Tammy, his wife of 42 years for allowing him to serve and spend a lot of time away to serve our city. No one could do a job like this alone and without the support of their better half. He also thanked his children and their spouses: Kelly, Robert and their children, Easton, Avery, and Emerson; Christian, Sarah Elizabeth and their children, Gavin, Grant, Emerson and Evie; Michael and his girls; and Tammy, Bobby and their two boys. He thanked his family for giving him the support that he needed.

Mayor Nirenberg thanked the entire Guerra family for being there. He thanked Chairman Guerra, Trustee Merritt and Trustee Jasso for their service to the City of San Antonio. He commented on the last ten years at SAWS under Berto’s leadership. In the decade of the 2010’s, SAWS achieved what people for generations thought was impossible, long-term water security. Long-term water security had been the greatest pursuit for generations of San Antonians through the water wars, to the fights over the aquifer, to lost projects, and unfulfilled hopes of pipelines, et cetera. He discussed some of the projects that had been ground breaking and transformative for the city. The Brackish Water Desalination Plant was one of the largest desalination plants in the entire country, and had underscored the importance of us being environmental stewards as well as conscious about the need for diversified water supplies. The Seguin Water Pipeline provided the ability to go into another jurisdiction, understand that there’s infrastructure there that we work together and deliver water for our communities combined, even though we had different ratepayers showed a level of water diplomacy at the local level. The Aquifer Storage and Recovery (ASR) started with a goal of 30,000 to 60,000 acre-feet of water stored, which was a little savings bank for our community in the event of a drought. Now the ASR had upwards of 200,000 acre-feet of water in it, enough for a year’s worth of water supplies to allow life to be sustained here in San Antonio. The EPA Consent Decree, which required a significant skill set of diplomacy as well as understanding of federal government and a little bit of elbow grease from our staff, saved our ratepayers millions of dollars on an annual basis and potentially saved the entire water system from the troubles seen in other cities across the country. The additional ten years of the Edwards Aquifer Protection Program that now had protected in perpetuity over 160,000 acres of vital recharge land in the hill country. Ten years of sustained conservation of a regional resource stretching across the State of Texas that supplied our bedrock of water security and was one of the largest, if not the largest, single source aquifer in the entire world. And, of course, Vista Ridge. No water project in the State
of Texas was without controversy, and it certainly had its fair share and was very difficult. The book was still being written on it but in the end, was one elegant way of diversifying a water supply in a state that was largely rural but increasingly urban. He thanked Berto, Pat and Pat for taking some of the criticism not just in public form but also from the City Council, from him, and taking the challenge of answering all the direct questions and coming back to say that it was not enough for us to leave it to somebody else. In 2020, he was extremely proud to be mayor of a city, despite all the challenges that said here in Texas, where we were water secure if we did our part. Certainly, there was a lot of work ahead. We had to continue to protect the aquifer. We had to continue to be good stewards of ratepayers’ dollars. We had to continue to be regionally responsible with the sacred water that we had. The foundation had been set by them and this Board and this staff to do what most people thought was impossible in the State of Texas, which was to ensure long-term water security for our residents. He was excited about the next era. Those folks had big, big shoes to fill on this Board. The Mayor was thrilled when Berto had independently of him, but likewise in some kind of weird mind meld identified Jelynne LeBlanc Burley as being probably the best person to fill his shoes in our community. He thanked the Trustees on behalf of the entire city for the great work they had done over the last ten years. It had been an honor to work with them.

Chairman Guerra thanked the Mayor for his comments. He stated he would recess the meeting to take photos with his family, the Mayor and the Board.

The meeting was recessed at 10:20 am; the meeting was reconvened at 10:30 am.

Mr. McGee stated he was sorry that he could not be there in person because it’s such a great day to honor some really fantastic people. He wanted to thank all three of the Board Members for what they had accomplished for the city. They were three of the most honorable people he had ever known, and their impact in this community would be a blessing for generations to come. He gave three words to describe Pat Merritt: elegant, tough, and fair. Pat would let all the rest of us talk, and then, she would get right to the heart of the matter almost every time. He was very grateful to Trustee Jasso for her enormous patience. Their working relationship was a testimony that if people with different perspectives would just open their ears and listen to each other with an open mind, they could usually get to the right decisions. He thanked Chairman Guerra for his tireless leadership. Every time the chairman sat behind this dais, he did it with humility, with respect for our entire community, and seeking wisdom from the Lord himself and the wise counsel of many. He thanked all three of the Trustees for their leadership and service.

Chairman Guerra stated Army Hardberger had some comments but in the interest of time, she asked not to speak.

5. Public Comment.

Reinette King stated she was a former federal contracting officer and price manager, and frequently dealt with public information requests. She stated she sent a public information request to SAWS for the amount of water discharged into Mud Creek and the dates, and was notified that it would cost $2,540.00. She was awaiting an answer as to whether the documents would be in searchable format so that she could actually use the information,
information that should be readily available to the public. She stated she was told that testing of Vista Ridge was completed April 8, and in June, all of San Antonio saw on television that SAWS was dumping millions of gallons of Vista Ridge water into Mud Creek. No one had contested projections that at least a half billion gallons were dumped. Now, she was being told a fairy tale that SAWS was testing the lines and blending the water for water quality purposes, and that they needed this much water every day for at least 58 days to do so. At the same time, SAWS was already sending water for consumption to Stone Oak. She stated the Post Oak Savannah Groundwater Conservation District estimated the amount of water dumped in Mud Creek was enough water to supply a community of 5,000 people for a year. As a public utility, SAWS had an obligation to disclose how much water was dumped in that creek and its cost to ratepayers. She asked SAWS to be honest and simply own up to the fact that 10 million gallons a day was not needed but had to be taken and paid for because of the construction delays and the fact that the private contract partners forced SAWS to take water before SAWS was ready for it. She told the Board it was time to admit the failings of this so-called miraculous Vista Ridge Project, and their biggest mistake, but only the first of many mistakes, was allowing Mr. Puente to push for signing a convoluted contract in 30 days involving billions of ratepayer dollars without an independent audit. She stated she volunteered with the SAWS Act Pact, which had begun petitioning for a public vote for the SAWS Accountability Act. She reminded the Board of the economic crisis unfolding as tens of thousands of people who live in the fourth largest metro area in the entire country line up at the food banks.

Ellen Berky stated she was a registered architect with a call to action of the SAWS Board of Trustees with interest for the past six years. In the minutes of the June Board Meeting, Mr. Evanson reported on the status of Vista Ridge water made available, and focused on Trustee McGee’s question about how much Vista Ridge groundwater was unavailable due to reduced pumping. She referenced Mr. Evanson’s estimate of $60 million for 10,000 acre-feet of water, to calculate that millions, if not billions of gallons of water, was pumped and then dumped as the waters rise in San Antonio. The total amount of Vista Ridge water pumping through the pipeline from Burleson to Bexar for 58 days prior to the board meeting was only 40 percent of the designed capacity of the pipeline and had about the quality that was still in arrival in San Antonio. Mary Bailey of SAWS said the actual cost of delivery of Vista Ridge water was about a third more than the capital cost disclosed by Mr. Evanson in June. Pumping water from the Post Oak well field was a huge energy expense. Once this water was in the SAWS distribution system, energy must be extended to keep the water pressurized and pumping, thus avoiding stagnant water. If you have lifted a gallon of water into your car, you are aware of how much of your muscles’ energy that takes. Now, imagine the energy required to pump billions and billions of gallons of Vista Ridge water through thousands of miles of Bexar County pipes, all on top of the energy required to push the water uphill 143 miles from a remote well field. The Post Oak Groundwater District Board had unanimously deplored the product made of Milam and Burleson County’s resources over the past month. She asked the Board to go to the Post Oak website and view the correspondence from fellow Texans.

Chairman Guerra stated two emails were received for public comment, and asked Anne Hayden to read the emails for the record.

Ms. Hayden read the first email from Stan Mitchell. Stan Mitchell stated he was one of scores of citizens who had vigorously opposed the Vista Ridge Project over a long period.
Most recently, he expressed that opposition in the July 20, 2020 letter to Chairman Guerra and copied Mayor Nirenberg. In the video record of the October 1, 2019 Board Meeting, CFO Evanson referred to the cost of Vista Ridge water at $1,606 per acre-foot, offset by some increased power costs higher than were expected and a couple of other things. The video of the next meeting on November 5, 2019, recorded Mary Bailey’s use of the approximate Vista Ridge price per acre-foot of water at $2,150. He stated he shared Mayor Nirenberg’s embarrassment that the estimated cost of Vista Ridge water jumped from $1,606 to $2,150 per acre-foot, by 34 percent in just one month. He recited modern management pioneer Henry Fayol, “In an undertaking: control consists in verifying whether everything occurs in conformity with the plan adopted...” He stated with a 34 percent miss, Vista Ridge was, by Fayol’s definition, out of control. It’s now nine months later. He asked, what was today’s cost of Vista Ridge water that was fixed for the next 30 years, the commitment published by Mr. Puente on October 30, 2014?

Ms. Hayden read the second email from Terry Burns, M.D. Adios to our three finally departing Trustees. Term limits don't mean much but thank you for not departing at your personal expiration. Whereas the City Council has failed its responsibility to provide proper oversight of SAWS, causing unreasonable water rate hikes and threats to the protection and conservation of both the Edwards Aquifer and the source aquifer for the Vista Ridge pipeline, we petition to amend the City Charter to include the following: One. General manager salary and benefits shall be fixed annually by the City Council and shall not exceed an amount equal to 10 times that of the lowest paid full-time SAWS employee. Two. Trustees are limited to two four-year terms and may not hold over or otherwise continue in office more than 30 days after term expiration. Three. No one at SAWS shall directly or indirectly lobby or advocate for legislation or regulatory policies absent prior approval from the Council. Four. The SAWS Board and general manager are subject to federal, state, and local ethics requirements as applicable and may be removed by the City Council for violations. Five. Existing and future projects that individually or in combination exceed $1 billion shall undergo an independent performance audit. A performance audit shall conform to Generally Accepted Government Auditing Standards; GAGAS include, one, a management audit and, two, an economic impact audit. The management audit shall determine the extent to which the project's governance and management structure creates risks to the City, SAWS or SAWS ratepayers and the extent to which these risks have been mitigated by insurance bonds or other means. The economic impact audit shall include bindings regarding the costs and benefits associated with the project including, without limitations, long-term environmental impacts, reliability of the particular source of supply, and impacts on communities that depends upon that supply.

CONSENT AGENDA ITEMS

Items  6 – 13

ITEMS CONCERNING THE PURCHASE OF EQUIPMENT, MATERIALS AND SUPPLIES

6.  A Resolution accepting recommendations regarding the contracting for certain services, equipment, materials, and supplies, and authorizing the acceptance of bids as follows:  (DOUG EVANSON – YVONNE TORRES)

   A.       Award of New One Time Purchases of Materials, Equipment and Services.
1. Approving a one-time purchase from Urcore Companies, LLC dba Core Electrical Group to provide: Salient rack mount servers, Bid No. 20-20066, for a total of $334,294.00.

B. Award of New and Renewal Annual Goods & Services Requirement Contract and Maintenance Agreements. Estimated annual purchases are based on unit prices bid. Actual totals and quantities may vary from the estimate.

1. Acceptance of the bid of Core and Main, LP to provide: annual contract for PVC pipe series (C900), (C905) and (C909), Bid No. 20-0069, for a total of $593,160.00.

2. Acceptance of the best value bid of Pace Analytical Services, LLC to provide: annual contract for the purchase of environmental laboratory services accredited under the National Environmental Laboratory Accreditation Program (NELAP), Bid No. 20-14123, for a total of $117,892.00.

3. Acceptance of the bid of San Antonio Armature Works, Inc. to provide: annual contract for repair services for electric and small motors (up to 10-250HP), Bid No. 20-8073A, for a total of $496,527.00.

4. Acceptance of the bid of Praxair Distribution, Inc. to provide: annual contract for liquid carbon dioxide (99.5%), Bid No. 20-20050, for a total of $1,598,952.27.

5. Acceptance of the bid of Western Material & Design, LLC to provide: annual contract for Type B ultra-rapid setting cement mix, Bid No. 20-20047, for a total for $793,100.00.

CAPITAL IMPROVEMENT CONTRACTS

PROJECTS INVOLVING IMPROVEMENTS, EXTENSIONS AND ADDITIONAL CAPACITY

Water and Sewer Line Improvements

7. A Resolution awarding a construction contract to T Construction, LLC in an amount not to exceed $1,184,719.55 in connection with the Ellerman at S San Marcos Sewer Replacement Project. (ANDREA BEYMER – GAIL HAMRICK-PIGG)

REPLACEMENT AND ADJUSTMENT PROJECTS

Governmental Relocations and Replacements

8. A Resolution approving expenditures in an amount not to exceed $248,867.00 for the adjustment of water and sewer facilities by the City of San Antonio in connection with the 2017 Bond Program Pedestrian Mobility & Streets Task Order Contract Package 7. (ANDREA BEYMER – GAIL HAMRICK-PIGG)
9. A Resolution approving expenditures in an amount not to exceed $194,500.00 for the adjustment of water and sewer facilities by the City of San Antonio in connection with the 2019-2020 Task Order Contract for Storm Water Projects Package B. (ANDREA BEYMER – GAIL HAMRICK-PIGG)

10. A Resolution approving expenditures in an amount not to exceed $152,455.50 for the adjustment and replacement of water and sewer facilities by the City of San Antonio in connection with the Downtown Streets Commerce: St. Mary’s to Santa Rosa Project. (ANDREA BEYMER – GAIL HAMRICK-PIGG)

MISCELLANEOUS ITEMS

11. A Resolution authorizing the purchase of insurance policies with Standard Insurance Company in an amount not to exceed $1,190,908.88 for the period of January 1, 2021 to December 31, 2021 in connection with basic life, accidental death and dismemberment, voluntary life insurance, and long-term disability for the System’s Employee Benefits Program. (SHARON DE LA GARZA)

12. A Resolution awarding a construction contract to Facilities Rehabilitation, Inc. in an amount not to exceed $1,451,600.00 in connection with the 2020 Annual Water Distribution Leak Repairs Contract - Package 5. (MICHAEL BRINKMANN – LEAMON ANDERSON)

13. A Resolution awarding a construction contract to Facilities Rehabilitation, Inc. in an amount not to exceed $1,389,100.00 in connection with the 2020 Annual Water Distribution Leak Repairs Contract - Package 6. (MICHAEL BRINKMANN – LEAMON ANDERSON)

Chairman Guerra asked if there were any other items in the Consent Agenda that should be pulled for individual discussion or consideration.

Ms. Jasso made a motion to approve the Consent Agenda Items 6 – 13. Ms. Merritt seconded the motion.

Consent Agenda Items 6 – 13, were unanimously approved. Voice vote.

ITEMS FOR INDIVIDUAL CONSIDERATION

CAPITAL IMPROVEMENT CONTRACTS

PROJECTS INVOLVING IMPROVEMENTS, EXTENSIONS AND ADDITIONAL CAPACITY

Developer Customer Contracts

14. A Resolution approving Utility Service Agreements to provide water and/or wastewater service to the tracts listed below requiring potential oversizing of mains (OVR), and/or are located outside the San Antonio Water System water and/or wastewater Certificate of Convenience and Necessity (CCN). (ANDREA BEYMER – TRACEY LEHMANN)
Tracey Lehmann presented Item 14, approval of the Utility Service Agreements (USA). There were two USAs for residential tracts; one was located on the northwest side and one towards the center of the service area.

The Monument Oak 8915 Tract was a residential development located on the northwest side, east of IH-10 and south of Fair Oaks Parkway. The existing residential development had existing SAWS water service. The request was for a half-acre tract that was currently serviced with a septic system to be able to tie into an existing SAWS wastewater main. A portion of the tract was within the City of Fair Oaks. While the majority of the tract was within SAWS water and wastewater CCN, a small northern corner of the tract was outside of the CCN. The property was over the contributing zone and within the five-mile radius of Camp Bullis. The tract was an existing customer for water and were connected to the water main along Monument Oak. SAWS has an existing 10-inch wastewater main flowing through the City of Fair Oaks Ranch to convey flows north of the City of Fair Oaks Ranch down to the southern portion of SAWS CCN. The developer was requesting to connect to the existing 10-inch wastewater main and get off their existing septic system.

The St. George Subdivision Tract was a residential development located just west of downtown and north of Highway 90. The developer was requesting 15 water and wastewater equivalent dwelling units for the 1.64 acre tract. The tract was within the wastewater CCN, but was in a gap in the CCN from when SAWS and BexarMet joined together. The tract was within the five-mile radius of several military bases. He reviewed a map of the location to the existing SAWS water CCN. There was existing infrastructure throughout the area, and the developer would connect to the water main in front of the tract for service. For wastewater, the developer would connect to the existing 8-inch gravity sewer main in front of the tract for service.

Staff recommended approval of the USAs for the Monument Oak 8915 Tract and the St. George Subdivision Tract, which both included service outside of the water or wastewater CCN.

Ms. Merritt made a motion to approve Item 14. Ms. Jasso seconded the motion.

Mr. Parra asked how the gaps in the CCN could be fixed so others would not have to go through the expenses or delay in getting service. Mr. Lehmann replied staff would need to go through the lengthy process of submitting to the PUC, Public Utility Commission. SAWS did have a way to serve these folks through the use of the USAs because SAWS could serve by contract inside the ETJ. If there were any plans to expand or adjust the CCN in the future, these items would be included at that time, but there was no intent to do this immediately.
Mr. Parra asked if the cost was different for people applying for a USA not in the CCN than it would cost if they were in the CCN. Mr. Lehmann responded there was no additional cost from SAWS. There was the additional engineering services to submit the USA application to go through the process and, of course, the time delay.

Ms. Jasso stated she still was not clear if there was a cost to the customer. Mr. Lehmann responded SAWS did not charge any fees, but the developer would have to pay their engineer to make the submittal for the USA and go through the process.

MR. PARRA commented on the St. George tract with 15 units that was located in a gap in the area that needed to be fixed. This was infill development, which we want. Whoever was developing in those areas had to go through the additional step of hiring somebody to prepare the plans and submit it, and then wait for bids. He stated it did not seem fair. Mr. Puente stated the fact they were not in the CCN did not cost any more money. Regardless of the CCN, the developer still had to hire an engineer. The fact that they were not in the CCN did not cause them any more time, any more money. Maybe a little bit more of a delay, but not necessarily money.

Ms. Hardberger inquired about how there was a gap in the CCN. Mr. Lehmann stated the southern portion was BexarMet and the northern portion to the east was SAWS original CCN. SAWS actually did serve in the gap with existing water mains at the time. There was a clear delineation between SAWS and BexarMet at the time. It could just be a drawing error originally and a discrepancy back when the CCNs were initially drawn in this area.

Ms. Hardberger asked if we were servicing them before, why was a USA required. Mr. Lehmann replied this was an older area before USAs were in place. Most of this was developed, and this was actually a redeveloping area. In this location, the developer was increasing to 15 EDUs. So, it was a new development and, therefore, the developer was required to do the new procedures for service.

Ms. Hardberger commented the development was highlighting the gap that it was not officially either part of a CCN or captured within a USA. Mr. Lehmann stated that was correct.

After no further discussion, Item 14 was unanimously approved. Verbal voting.

**Water and Sewer Line Improvements**

15. **A Resolution awarding a construction contract to S.J. Louis Construction of Texas, Ltd. in an amount not to exceed $10,142,520.41 in connection with E-16 Wurzbach Parkway Sewer at Highway 281 Project.**

   **(ANDREA BEYMER – GAIL HAMRICK-PIGG)**

Gail Hamerick-Pigg presented Item 15, the award of a construction contract for the E-16 Wurzbach Parkway Sewer Pipeline at Highway 281 Project. This was another one of the Consent Decree projects and was a signature project. The project was the last project in a series of projects that was going to finally resolve the capacity constraint on the eastern sewershed. The project included an in-line retention component, and would replace and
upsize approximately 1.4 miles of gravity sewer main with 36-inch and 78-inch mains.

She discussed the in-line retention component on the project. The 78-inch pipe and 36-inch pipe would operate normally and drain 99 percent of the time. If there was a wet weather event, the pipe would fill up and slowly release the flow in that wet weather event so the downstream pipe would not see that big slug of water. It would prevent surcharging and SSOs and the like downstream. The anticipated frequency of use for this would be maybe five to eight times a year. Of course, it would depend on how many rain events. Otherwise, the main would operate as a regular gravity line. The project because of this unique component, would allow a downstream project to be deferred for up to ten years.

She reviewed a map of a series of capacity constraints within the eastern watershed along Salado Creek. The capacity constraints were located along a trunk line sewer main that receives flow from the highly-developed dense area. She noted the locations of the public notices that were located along the trunk line, and the four individual projects that were being completed to eliminate the capacity constraint that included the E-16 project. There had been 51 public notice SSOs in the last ten years. The E-16 project, along with the E-19 Segment 1, E-19 Segment 2, and E-20 Segment 1, would eliminate the capacity constraints. The E-19 Segment 1 would be completed in September. The E-19 Segment 2 was 80 percent complete and would be complete by April 2021. The E-20 Segment 1 would be complete by April 2022. In 2016, field operations installed the Wurzbach Parkway Emergency Bypass that had been successful in minimizing the SSOs. The emergency bypass would be in service throughout the completion of the E-20 project.

Staff used the competitive sealed proposal method for procurement due to the CD schedule, the complex construction, and coordination with stakeholders. There were a lot of stakeholders within the City. Specifically, the Senior Activity Center Bond Project was an upstream project, and staff worked closely with the City to minimize any disruption to their project. The evaluation criteria was used to determine the best value for this project, and consisted of nonmonetary as well as the price component, which was worth 30 percent, and the Small Minority and Woman-Owned Business Participation that was 10 percent. Four proposals were received. The contractor that was recommended based on the best value proposal was S.J. Louis Construction of Texas with a bid in the amount of $10,142,520.41. The design engineer was Kimley-Horn & Associates, and the cost represents a 37.9 percent decrease from the engineer's estimated construction cost. The total SMWVB was 22.18 percent, and the construction duration would be two years.

She discussed Trustee Merritt’s questions and concerns. This was a situation where the low cost was also the best value. When staff was reviewing the non-monetary criteria, staff did not know the price yet. Staff would have a conversation with the contractor to make sure they understood the scope of the project. The contractor was forthright with the reasons for the estimate being so much lower than their bid. The first thing out of their mouth was that desperate times calls for desperate measures. SAWS had experience with this contractor. In fact, the contractor was constructing the E-19 Segment 2 and E-20 Segment 1 projects. The contractor was already there, they’re mobilized, so that showed in their reduced mobilization cost and preparation of right-of-way cost. The contractor had a large excavator out in the area. Any other contractor would have to move in for the project and it was a significant excavator that had to do deep cuts and rock and such. The contractor’s office was five minutes away, and they just continued to stress that they had the resources. The contractor’s
subs were the same subs that were on the other projects and were already mobilized. The contractor did not want to miss out on getting this work secured for whatever comes on the economic side in the future.

Staff recommended the award of a construction contract to S.J. Louis Construction of Texas, Ltd. as the best value to the System, and approve funds in an amount not to exceed $10,142,520.41 for the construction contract.

Ms. Merritt made a motion to approve Item 15. Mr. Parra seconded the motion.

Ms. Merritt inquired about when the company was used before, if they had the necessary equipment and wherewithal to complete the job in the appropriate time limit. Ms. Hamerick-Pigg confirmed the contractor had the resources and would bring the extra resources into San Antonio as well as their local contractor. The contractor had done these types of projects, very similar. They were working on the projects that were downstream, and were just going to keep moving up Salado Creek.

Ms. Merritt asked if the work was done satisfactorily and in an appropriate time. Ms. Hamerick-Pigg confirmed the contractor was on schedule. The contractor had gotten projects done on time, and they had even stepped in and gotten projects done that other contractors could not complete.

Ms. Merritt stated she was just skeptical of the cheapest thing. A $5 pair of shoes didn’t last as well as the $10 pair.

Mr. Parra stated he appreciated the use of a best value contractor, since this seemed to be a complicated project. And SAWS was also saving some money, which was doubly excellent. He also appreciated that the contractor would exceed the participation of minority firms at a rate of 22 percent.

After no further discussion, Item 15 was unanimously approved. Verbal voting.

**Production, Transmission and Treatment Improvements**

**16. A Resolution awarding a construction contract to Alterman, Inc. in an amount not to exceed $5,513,300.00 in connection with the Leon Creek Water Recycling Center (WRC) Electrical System Improvements – Phase 1 Project.**

(ANDREA BEYMER – JUAN GOMEZ)

Juan Gomez presented Item 16, the award of a construction contract for the Leon Creek Water Recycling Center Electrical System Improvements Phase 1 Project. The project was located in south central Bexar County. A few years back, an in-house assessment of the electrical infrastructure was conducted across the wastewater facilities. The focus was to look at the age of equipment, exposure to environmental conditions, and compliance with codes. As a result of that assessment, staff decided to move forward with a phased approach for implementation of the project to address all the recommended improvements. The project was broken into two phases to minimize impact to operations. He reviewed a photo of the existing plant switch gears that were obviously outdoors. The equipment was vintage 1987, and the normal useful life of this type of equipment was about 20 years, so it was time to
upgrade and build a new system.

He discussed the two phases on the project and pictures from construction of similar work at the Clouse facility. Basically the two phases in this approach would simply allow staff to manage the improvements, manage impacts to operations, and to set the blueprint for future phases of the work. Phase 1 was critical and would lay the foundation for the work in Phase 2. Phase 2 would take care of replacement of motor control centers and also medium to low voltage equipment. He referenced the timeline for the overall project. The construction for Phase 1 was under consideration in today’s item. Duration would be about 487 days. Staff planned to design Phase 2 in 2021, and construction in 2022. The estimated cost of construction for Phase 2 was about $5 million, and design was somewhere around $500,000.00 or $600,000.00. Again, Phase 1 was very critical because it would lay the foundation for future work. Phase 1 included the replacement of the existing outdoors switch gears, a new building to house that equipment, replace all the feeders from that new switch gear to all the different units processes throughout the plant, and the civil, mechanical, structural, instrumentation and controls, and other related work. He reviewed photos of the new building that was built at the Clouse facility, which would be more or less what the facility would look like at Leon Creek WRC.

Staff used the low bid method for invitation for bids. Two bids were received on the project. The lowest responsible bidder was deemed to be Alterman, Incorporated, with a bid of $5,513,300.00, which represents about 4.5 percent decrease from the engineer's estimate. The design engineer was Gupta & Associates. Construction duration would be about 60 months or 487 days. The SMWVB participation was about 9.6 percent.

Staff recommended the award of construction contract to Alterman, Incorporated, and to approve funds in an amount not to exceed $5,513,300.00 for the construction contract.

Ms. Merritt made a motion to approve Item 16. Ms. Jasso seconded the motion.

After no further discussion, Item 16 was unanimously approved. Verbal voting.

Mr. Gomez stated SAWS had done work with this contractor as well. The contractor had done a job for us in the past.

**MISCELLANEOUS ITEM**

17. **A Resolution consenting to a change in control of Vista Ridge LLC and approving a Seventh Amendment to the Vista Ridge Water Transmission and Purchase Agreement between the City of San Antonio, Texas, acting by and through the San Antonio Water System Board of Trustees and Vista Ridge LLC, and addressing other matters relating to the foregoing, including approval of execution of ancillary agreements to which SAWS is a party. (DONOVAN BURTON)**

Donovan Burton presented Item 17, consent to a change in control of Vista Ridge, LLC and the Seventh Amendment to the Vista Ridge Water Transmission and Purchase Agreement (WTPA). The change in control would be from Garney Construction to Ridgewood Infrastructure. Garney stepped in and really saved the project in 2016, but they also said from the very beginning they would construct the project and would eventually look to move
on to continue being a construction company. An equity partner would come in and hopefully take over the long-term leadership of the project. Garney worked methodically over the last couple of years together with a group called Ridgewood. Garney brought in a lot of improvements to the project and made it just a better project going forward. Garney put a five-year pipe leak warranty on the project. SAWS worked with Garney on some cost savings in the Stone Oak area, and they transferred ownership of their tank to SAWS. They upgraded a whole lot of materials, including stainless steel internal tank components. These were all things that would make the project work longer, when the project was turned over to SAWS. Upgrades to the pumps to variable speed controls would give the project a lot more variability and ability to deal with changes throughout the life of the project. Garney also put in an impressed current cathodic protection process that would improve the pipeline protection and reliability for the long term. Garney had done a whole lot and spent a whole lot of additional money, but were ready to move on and continue working construction, again, the discipline of their company.

Ridgewood Infrastructure, also called RI-VR Holdings, was an asset manager founded in 1982, with a little over $5 billion worth of assets. Ridgewood Infrastructure, part of the Ridgewood family, had some water investments, including Vista Ridge, and had been a key player on the Vista Ridge Project since 2017. In January, representatives from Ridgewood came and addressed the Board, along with representatives from EPCOR, the operating service provider. Ridgewood led the operating service provider’s selection that ultimately led to EPCOR, and they were leading the charge in terms of refinancing. Ridgewood was out of New York, and knew the whole refinancing process. They would continue to lead the refinancing process for the Project Company in Vista Ridge. They also had invested in some smaller scale water utilities within Texas, so they had a big presence in Texas. Undine and it’s several small utilities, mostly around the Houston, Woodlands, and some of those areas. Ridgewood had some energy investments as well. One of the bigger ones was Neptune: Electricity Transmission Main. Their focus was mainly on water infrastructure and electric infrastructure.

He discussed the parties that would be in charge of the project and had the holdings in the project. RI-VR Holdings would own 75 percent of the project going forward. EPCOR, USA became the operating service provider, they bought into the project. EPCOR wanted to make sure that they had a stake in the project, so they have a five percent stake as well as being the operator of the project. And then, Abengoa owned 20 percent of the holdings as well. The equity would be 75, 20 and 5 going forward, but the ongoing leadership would be Ridgewood and EPCOR. EPCOR again was the day-to-day, the operators that work with Jeff Haby every day about which pump to turn on and which pump to turn off.

Amendment No. 7 to the WTPA would conform the changes throughout the body of the WTPA to effectuate the change in control to show that Ridgewood would be the owner of the equity stake and control of it. The amendment would also update some of the ancillary documents. There was a standby deed of trust and the project real conveyance agreement that worked in tandem. These were focused on the Central Texas Water Supply Corporation and making sure whenever those assets were transferred to SAWS, that those were done the right way. There was a whole lot of legal implications to conveyance of those assets. The amendment would update those documents and bring them up to speed since 2017. The project had evolved some since 2017. The groundwater supply agreement was about the second 30 years of the project, when ultimately Ridgewood and EPCOR would all go away.
and SAWS would own the project after 30 years. SAWS would still have the agreement with Blue Water and the groundwater supply agreement. The amendments did not really have substantive changes, but would update these agreements to where we stand today in the project.

Staff recommended the consent to change in control, and approval of the WTPA Amendment No. 7 and the ancillary documents.

Ms. Jasso made a motion to approve Item 17. Ms. Merritt seconded the motion.

Mr. McGee inquired about the membership for the project company board and Ridgewood’s influence in terms of their voting power. Mr. Burton replied they have a member on the project company board. He thought it was one out of seven board members.

Ms. Hardberger stated she was a little concerned that they were talking about assigning the contract. She recognized Ridgewood came in January, but they certainly had not made any kind of presentation. She stated she did speak to Nancy Belinsky and Mr. Puente about her concerns, and they had very good things to say about the companies. She did defer to staff in interactions. However, we didn’t have a great track record. When we first started with Abengoa, there were a lot of positive comments about them as well, and that didn’t go very well. She stated this was not something that she could support just because of the process of it. This was an enormous project with lots of legal, potential legal issues as we saw with the groundwater district lenders and things like that. She stated it would be helpful to have a lot more information about companies before making amendments that were this large in this short period of time without any sort of personal knowledge about the company.

Mayor Nirenberg stated he shared Ms. Hardberger’s concern because this was not a small thing. He wanted to make sure that we were properly addressing the contract issues. He asked Ms. Belinsky to address the issues because his concern with any kind of amendment like this to make sure that the protections for the ratepayers remain in place, the obligations for SAWS remain in place, and the risks that were borne on the project company in lieu of SAWS ratepayers because that’s the basis for this entire arrangement. Ms. Belinsky commented the questions were related to the continued ownership and control and operation of the project.

Mayor Nirenberg stated he wanted to be assured, and this was more for peace of mind because as our attorney she should be, on behalf of the ratepayers, dotting every I in this contract. The nature of this agreement, which SAWS was purchasing water from the project company with a premium so they bear all the risk with the 60-year venture, did not change as it relates to the change of ownership. He also wanted to make sure that they knew what they were doing here as a Board, which was consenting to the arrangement as a party of the contract, not as the owner but as the party of this particular water deal. Ms. Belinsky responded the project company remains the project company responsible for all of the risks that have been undertaken contractually. The change in ownership of the project company, the entity that was controlling it did not change any of the risk allocation that exists in the contract. And so, all of that continued to stay exactly the same. To the extent the project company was unable to control or the project company was unable to perform under the contract, the remedies to SAWS stayed exactly the same. SAWS would be unaffected by that particular change in control of the project company. Again, the key aspect at this point,
as all of the risk that was undertaken by the project company, the majority of it had been completed. The design, the construction, the right-of-way acquisition, all of those were things that the project company had already completed. The focus now, of course, was on the operator, which was EPCOR. EPCOR was our key partner that we were continuing to work with every day through the operation of the project. And again, that did not change as a result of this change in control. EPCOR was contractually committed to operate the project for the term of the contract, and they also had an equity interest in the project as well. Ridgewood made a significant capital investment as well. And so, apart from all of the remedies and the performance rights that we have under the contract, Ridgewood was a private equity firm who had absolutely invested in the belief that this was a successful and profitable project for them.

Mayor Nirenberg recognized that this was also a new era for this project. We were entering into now the delivery phase of the Vista Ridge pipeline. It’s important that as we were crossing a threshold into that phase, he I wanted to make sure that she was able to articulate that as our attorney. He stated his interest, again, was not only that we were getting affordable water long-term, but that the risks associated with that kind of project were again borne on the Project Company because that was the goal of the entire arrangement.

Mr. Puente responded to Trustee Hardberger’s comment about we all thought Abengoa was a very good company until we found out some of their inner workings and their financials, we learned from our lessons. And because of that, we did our due diligence investigating Ridgewood. He asked Ms. Belinsky to give some details about the investigation, the due diligence to get to know these people and the company, and whether or not they were someone we would want to have this long-range 30-year relationship with.

Ms. Belinsky commented staff did learn there was a need to make sure that this was an entity that we want to be partners with for the next 30 years with this project. There was an extensive amount of due diligence that we undertook evaluating the quality of the company, Ridgewood Investments, again, the private equity investors, and the people that were comprised of running Ridgewood. One of the things that they did that really added some value was they recognized they needed expertise. Ridgewood hired individuals in the organization that brought specific expertise to not only water experience but water experience in Texas. We were a little here in the regulatory environment. She thought that would add some real value to the project company going forward with the team that they had amassed, both financial expertise, operational expertise, and candidly, water regulation expertise. We think those were good hires and a commitment by the project company to move forward. Those were things we looked at in our due diligence to ensure that we were comfortable with this recommendation to the Board for the future of this project.

Mr. McGee commented Ridgewood and EPCOR were highly credentialed and capable folks to run this project. His concern was to be sure that a minority shareholder could not have more influence over the Board, so he supported the item.

Chairman Guerra thanked Nancy for her due diligence on checking out Ridgewood Infrastructure Holdings because as Mr. Puente stated, we did learn from our experience. But even when we were negotiating with Abengoa, we thought there was a possibility that they might struggle. We didn’t know exactly if they would or not, but we prepared our negotiations in a way that we had Option B. He thanked Nancy and her team and Robert and
his team for making sure that we had Option B. Same thing with Ridgewood Infrastructure, we have vetted them, we have studied them, we have asked questions, we have met with them, and they were by far the best out there.

After no further discussion, Item 17 was approved. Jasso, Merritt, McGee, Parra, Nirenberg and Guerra voted in favor of Item 17; Hardberger voted against Item 17. Roll Call Voice Vote.

18. **BRIEFING SESSION.**

A. Briefing and deliberation regarding the Vista Ridge Project

Item 17 on the consent to change in control and the Seventh Amendment to the WTPA served as the briefing for the Vista Ridge Project.

B. Briefing and deliberation regarding the Sanitary Sewer Overflow Reduction Program

Jeff Haby provided an update on the Sanitary Sewer Overflow (SSO) Reduction Program. He thanked Chairman Guerra, Vice Chairman Jasso and Trustee Merritt for being a vital part of the Consent Decree (CD) and SSO Reduction Program during their service. CD negotiations and reducing SSOs was a part of the EPA’s national enforcement initiative. There were more than 35 cities, both large and small, in the U.S. addressing SSOs as part of their CDs. There were even more cities under discussion with the EPA and Department of Justice at this time. Many of the CDs have come with tremendous cost that have put many cities in a very difficult financial situation. Even though the $1.1 billion SAWS negotiated on the CD was a tremendous amount of money, it could have been much worse. For example, the City of Baltimore signed their original CD in the early 2000’s. In 2017, the City of Baltimore had to negotiate additional time because they missed numerous deadlines, and their CD right now was sitting at $2.6 billion. Houston’s CD was advertised last year at about $2 billion, but was a small portion of what it would be in the end. The City of St. Louis’s Consent Decree was $4.5 billion, and Corpus Christi was still under negotiations on their CD. Staff had worked hard to be transparent and maintain positive communications with the EPA throughout the negotiations and continued today. Because of our open communications and good relationship with the EPA, the outcomes had been very positive.

SAWS began negotiations with the EPA in 2007, and continued into 2013, when the Board approved the CD. The CD was subsequently lodged July 23, and entered October 15, 2013. The CD term was 10 years to complete all compliance requirements, with the exception of large diameter pipe work involved real estate requirements that could be completed in 12 years. There were numerous compliance requirements associated with the CD, which staff met every compliance requirement thus far. Of course, with the CD there was a tremendous amount of reporting that must be submitted to comply with the terms. Staff had not missed a reporting deadline to date.

One of the biggest issues was managing costs. With $175 million worth of contracts and all the capital improvement expenditures for construction as well as new combo trucks, new CCTV vans to make things more successful for the team over the last seven years. One of
the first items the Board approved for the program was a program manager to help get the program started on the right track. The integrated program management model was used where consultants actually sat in our offices working side by side. With this model, it allowed for tremendous amounts of knowledge transfer between the program manager staff and SAWS staff. The program manager brought a vast amount of experience from working on other SSO reduction programs across the country, and developed a tremendous amount of synergy. He reviewed the firms that participated in the program management contract, with HDR leading the effort. Once the knowledge transfer was complete and best practices were established, the contract ended with the program manager and SAWS continued to execute the program on our own using the best practices established.

He discussed the accomplishments during the assessment phase. One of the big parts of the CD was to figure out the condition of the system. He recognized the Distribution and Collection (D&C) crews that helped in this effort, and did a tremendous job helping close out some of the CCTV in very tough areas. There was well over 10,000 miles of pipe cleaned, over 86,000 manholes inspected, close to 5,000 miles of pipe inspected through the system. He again thanked the D&C crews for being an integral part of the work. He reviewed photos of the work done under the assessment phase that included a frogman entering a sewer siphon crossing the San Antonio River off Mission Road, a contractor entering sewer mains to set cameras and/or pull out debris, Councilperson Manny Pelaez and Mr. Puente in the W-31 tunnel on the north side of town, Vice Chair Jasso and Chairman Guerra at one of the treatment plants, and Mayor Nirenberg at the grand opening of the Southwest Bexar Sewer Pipeline Project. He noted this was the event that the toilet fell over, and Pat Jasso was the one that held it up. Mr. Haby also discussed the project on Cesar Chavez, next to the Federal Courthouse. Through today’s board meeting, the Board had approved $880 million worth of capital improvement projects. At the last board meeting, the approval of the W-6 Phase 5 and 6 project that would go around Lackland Air Force Base was when he felt they were on the downhill side of the CD and rehab program. The program was still on track to spend about $1.2 to $1.3 billion. It was very fortunate to have received competitive bids, not only on the E-16 Project but also on the W-6 Project. 2020 was a big year on the CD because over $300 million worth of work would be committed this year.

He showed a map of the project that touched the entire city, and highlighted some of the projects approved by the Board in the last seven years of the CD. The first project was the C-12 Project in the Donaldson area over by Jefferson High School. Since the project was completed, there were no more SSOs in that area. The next project was the C-13 Project, just north of downtown along Broadway and Avenue B. The project was critical to prevent SSOs in a rapidly redeveloping area down Broadway. The project had a number of challenges, but was being completed. The next project was the C-5/C-28 Project on the near west side of downtown along Alazan Creek. As part of the projects, SAWS was partnering to build a walking trail along the creek. The next projects were on the east side of San Antonio, E-16, E-19 and E-20 projects. The sewer mains were rebuilt from Fort Sam all the way down almost to the treatment plant in the early 2000’s. The area along the east side had been redone all the way past Hwy 281, all the way to Blanco. He recognized Gail Hamrick-Pigg, who had actually worked on the preliminary project for the E-19 Project. The W-31 Project was an area with tremendous growth. The Falcon Center Lift Station close to Boerne Stage Road was limited on capacity and during major rain events had SSOs. The new line was operating very well. The W-6 Project actually consisted of six phases. Phases 1 through 4 were completed since 2013, at a cost of about $29.5 million. The W-1 Project
basically runs from north of Highway 90 to just inside Loop 410 at Hwy 151 was under construction. The W-6 Project was really a big hurdle in the Consent Decree at $167.7 million. He discussed a photo from August 7, 2019, of Mayor Nirenberg at a signing ceremony of the memorandum agreement with the United States Air Force allowing SAWS to proceed with the project.

He discussed the purpose of the SSO Program to reduce SSOs. There were a lot of things staff could not control such as what people put in the sewer mains, the weather, people damaging and vandalizing the sewer mains, and contractors dropping stuff into the sewer mains. The SSO metric was doing fantastic this year, thanks to the efforts of the staff and the Board’s support. In fact, in July there were three SSOs, which was an all-time record. He reviewed a graph of the SSOs by sewershed. The most challenging was the central sewershed, which was the older part of the city and in the downtown area. More spills happen in that sewershed than any other sewershed. Gail had done a tremendous amount of rehab in the central sewershed to drive down SSOs. Staff would continue best practices going forward well beyond the CD to maintain and monitor the pipe. If any issues were found with the condition or the hydraulic capacity, then staff would perform a performance analysis and figure out how to fix the pipe.

He emphasized the four steps in the CD. First, staff had to assess the pipe to determine any capacity constraints or any capacity issues. Then staff had to plan how to fix the condition and capacity issues. Of course, staff had to report to the EPA all along the process. There were two major deliverables, the Assessment Reports and the Remedial Measures Reports. These reports were done and approved by the EPA. And finally, staff would have ongoing rehab of the system. He mentioned SAWS was on the downhill side of the program with the approval of the W-6 Project at the last board meeting. Staff would need ongoing Board support to complete the requirements of the CD. There was major modification work on the CD with the W-9 and W-52 projects and some other projects staff was working on at this time. He reviewed photos of an overflow on Holbrooke Road along Salado Creek and the work along E-19 Segment to address the SSOs. He stated the entire SAWS family and the citizens of San Antonio owed Chairman Guerra, Vice Chair Jasso, and Trustee Merritt a huge thank you for making a difference in our community.

Chairman Guerra thanked Jeff for being the leader and getting everything executed. The Board did the administrative portion, the voting, the approval, the negotiations, but Mr. Haby and his team were the one who executed and managed the projects at SAWS.

Ms. Jasso commented on the projects that had happened during her tenure, and specifically learning about the CD from Jeff, Gail and the team and seeing something that actually made a difference. To be able to see it come to fruition in the numbers, she was so glad to be a part of that by supporting the CIP projects that helped make this happen. And the headaches from the beginning with the W-6 Project really made her proud to have served. She thanked Jeff for educating the Board, for making her a better citizen, and making her aware of what a great job we do at SAWS.

Mr. Parra commented that under Chairman Guerra, SAWS achieved being one of the best places to work in San Antonio. One of the most satisfying aspects of being on the Board was seeing all the passion that everyone at SAWS brings to all the initiatives. Having Jeff knowing that he owns these SSOs and it’s a personal deal for him, it’s very rewarding to be
on the Board. He commended Jeff and his team of all the great work done in the CD. The Chairman and the Board had put so much effort on making sure that this was a priority. Everyone likes talking about water, and wastewater was just so important. He appreciated how the team had been able to replace so many of the original pipes in San Antonio and some others that were out of capacity in a cost effective way and achieving single digit SSOs. He especially looked forward to the completion of the W-6 Project.

Ms. Merritt thanked the SAWS team for a wonderful job and the diligence that they put into doing these jobs. She also thanked Mr. Puente for keeping all of that together because it’s a mammoth job to do so, but it took the whole village to make it work.

Chairman Guerra commented that what Jeff and his team have accomplished was unbelievable. It was such a good feeling to know that we were reducing SSOs. He thanked Jeff for his service to the City, for his team’s service to the City and for his diligence.

19. Inquiries of the Board of Trustees for future briefings and/or follow-up action.

None

At this point in the meeting, an Executive Session was held. The time was 12:18 p.m.

20. The Regular Session of the August 4, 2020 Regular Board Meeting is hereby recessed to hold an Executive Session and discuss the matters listed pursuant to Sections §551.071 and §551.074 of the Texas Open Meetings Act.

21. EXECUTIVE SESSION.

A. Consultation with attorneys regarding legal matters concerning the Vista Ridge Regional Water Supply Project pursuant to Texas Government Code Section §551.071.

B. Deliberation and consultation with attorneys regarding the annual evaluation, performance objectives and duties of the President/Chief Executive Officer pursuant to Texas Government Code §551.074 and §551.071, respectively.

C. Consultation with attorneys regarding advice on legal matters in which the duty of the attorney to the governmental body under the Texas Disciplinary Rules of Professional Conduct of the State Bar of Texas clearly conflicts with the Texas Open Meetings Act, pursuant to Texas Government Code §551.071.

22. The Regular Session of the Regular Board Meeting of August 4, 2020, is hereby reconvened.

The meeting reconvened at 2:04 p.m. The Chairman stated that no decisions were made in Executive Session.

23. Deliberation and possible action regarding the compensation for Robert R. Puente, President/Chief Executive Officer.

(BERTO GUERRA, JR., CHAIRMAN, BOARD OF TRUSTEES)
Chairman Guerra stated this was a bittersweet moment for him. For the final time as Chairman of this Board, he would report the results of the annual performance evaluation of our President/CEO, Robert Puente. As he has every year since he took on this role, Robert had done an excellent job in service to the entire community. Three years ago at the request of Mayor Nirenberg, we hired two nationally-recognized consultants to come up with a transparent, accountable process to set Robert’s pay fairly. The consultants, Scott Madden and Paradox, reported directly to David McGee and Pat Merritt, who he had appointed as the compensation task force. He thanked Trustees McGee and Merritt for all of the hard work they put into this project.

The results of Robert’s 2019 report card were extraordinary. On seven of the ten tier one metrics, Robert scored outstanding that meant he didn't just meet, he exceeded the targets set for his rating, as confirmed by Scott Madden was 115. In any other year, that meant Robert would be eligible for his entire bonus, which had traditionally been $100,000.00. The Board had one-hundred percent discretion as to what they were going to award, but this was no ordinary year. The pandemic had put an unprecedented stress on our community. With so many people out of work, so many people facing uncertain futures, the Board decided to adjust Robert’s salary to keep him somewhat competitive with his peers and decided not to award any bonus.

He stated he asked Mayor Nirenberg and the chair of the compensation task force, David McGee, to relook at bringing Robert up to where he was still competitive throughout the country with his peers on something that two professional companies, ScottMadden and Paradox agreed on. SAWS was a model utility with a culture that many private sector companies would love to have. If this were a privately-held company, Robert would be getting his bonus. He would be treated fairly in making him competitive because we would not want to lose him. Robert loves our city, he loves SAWS, the executive management team, and all 1,700 employees.

In 2019, SAWS was named one of the City’s Top Work Places, which was the seventh time SAWS had earned the distinction during Robert’s tenure. That meant that the 1,700 employees not only love but they respect SAWS, and wanted to continue their careers here. JD Power did their own survey and found residential customer satisfaction was at an impressive 73.5 percent. He discussed his company, Avanzar, which earned seven JD Power Awards for the highest quality seats in the nation. Avanzar competed with huge companies all over the country for the award. A survey of area residents by Mike Baselice, the state’s top pollster, gave SAWS a 79 percent rating on reputation management. Area residents were asked if they approved or disapproved of the job SAWS was doing managing the City’s water supply. Numbers like that would be phenomenon under any circumstance, but were particularly impressive considering SAWS was working through some monumental challenges, like the Federal Consent Decree, the integration of Vista Ridge water, and the biggest capital programs in SAWS history.

Chairman Guerra recommended that the Board not give a bonus, but that the Board give Robert Puente, President/CEO of SAWS a four percent increase in his base salary.

Mr. McGee made a motion to approve a four percent increase in base salary for Robert Puente, President/CEO. Ms. Merritt seconded the motion.
Mr. McGee stated the Chairman’s comments were spot on for the many accomplishments that happened under the leadership of Robert Puente for the last year. He reminded everyone the Board was measuring performance for 2019, and these were incredible accomplishments. Any one of the accomplishments that he achieved, together with the rest of his leadership team, would have been grounds for a very significant increase in compensation. This was a rigorous process that we have gone through with very clear objectives. These objectives were in alignment with the directives of the Board and in alignment with the goals for meeting the objectives. Robert far exceeded our vigorous standards and objectives in 2019. He stated while he was happy to offer the four percent increase, he regrets that we could not do more at this time. He looked forward to reviewing this again in a year when things were a little more settled down in our community and things were a little more stable.

After no further discussion, Item 23 was unanimously approved. Verbal voting.


The San Antonio Water System Board of Trustees Meeting of August 4, 2020, adjourned at 2:17 p.m.

_________________________________
Jelynne LeBlanc Burley, Chairwoman

ATTEST:

__________________________________
Secretary
The attached resolution accepts bids and awards contracts for services, equipment and supplies as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>This Board Meeting</th>
<th>Year-to-Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Contracts</td>
<td>Estimated Amount</td>
</tr>
<tr>
<td></td>
<td>(SMWB)</td>
<td>(SMWB)</td>
</tr>
<tr>
<td>A. Award of New One Time Purchases of Materials, Equipment or Services</td>
<td>1</td>
<td>463,125.00</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>B. Award of New and Renewal of Annual Goods &amp; Services Requirements Contracts and Maintenance Agreements</td>
<td>1</td>
<td>636,600.00</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>636,600.00</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>$1,099,725.00</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>636,600.00</td>
</tr>
<tr>
<td>SMWB Purchasing Contracts (percentage)</td>
<td>50.00%</td>
<td>57.89%</td>
</tr>
</tbody>
</table>
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES ACCEPTING BIDS AND AWARDING CONTRACTS FOR THE PROCUREMENT OF CERTAIN SERVICES, EQUIPMENT, MATERIALS AND SUPPLIES; AUTHORIZING EXPENDITURES TO PROCURE THE SAID SERVICES, EQUIPMENT, MATERIALS AND SUPPLIES; AUTHORIZING THE DIRECTOR OF THE PURCHASING DIVISION, OR HER DESIGNEE, TO EXECUTE DOCUMENTS RELATED THERETO; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, the Director of the Purchasing Division of the San Antonio Water System (the “System”) has recommended certain bids be accepted, that certain contracts be awarded, and that certain other actions be taken to procure services, equipment, materials and supplies which are necessary for the operation of the System; and

WHEREAS, the said recommendations are fully set out in "Attachment I" which is attached hereto and made a part hereof, and said recommendations have been approved by the System’s President/Chief Executive Officer; and

WHEREAS, the appropriate bidding procedures regarding the procurement of goods and services have been adhered to in the compiling of the attached recommendations, as reflected in administrative records supporting this resolution; and

WHEREAS, funds are available in the System’s budget to pay for the required services, equipment, materials and supplies; and

WHEREAS, the Board of Trustees of the San Antonio Water System desires (i) to accept the bids and award the contracts as recommended, (ii) to authorize from available funds of the System the expenditures necessary to carry out the recommended procurements, and (iii) to authorize the Director of the Purchasing Division or her designee to execute all contracts and other documents necessary to carry out the recommended procurements; now, therefore:

BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That the bids are accepted and the contracts are awarded for procurement of the services, equipment, materials and supplies listed in Attachment I, as recommended by the Director of the Purchasing Division.

2. That the expenditure of the necessary funds from the appropriate budget fund of the System for the procurement of the said services, equipment, materials and supplies is hereby authorized.
3. That the Director of the Purchasing Division, or her designee, is hereby authorized to notify bidders of the acceptance of bids, to execute contracts and other documents, and to carry out all other actions necessary to procure the said services, equipment, materials and supplies.

4. It is officially found, determined and declared that the meeting at which this resolution is adopted was open to the public, and that public notice of the time, place and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

5. If any part, section, paragraph, sentence, phrase or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid or ineffective.

6. This resolution becomes effective immediately upon its passage.

PASSED AND APPROVED this the 6th day of October, 2020

Jelynne LeBlanc Burley, Chairwoman

ATTEST:

____________________________
Secretary
Award of New one-time Purchases of Materials, Equipment or Services

A. The following items will establish price and delivery for the one-time purchase of Materials, Equipment and Services. These items are included in the current budget. Payment will be made from the applicable fund.

<table>
<thead>
<tr>
<th>VENDOR</th>
<th>DESCRIPTION</th>
<th>ITEM NO(s.)</th>
<th>ESTIMATED TOTAL PURCHASES</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>JCS Industries, Inc.</td>
<td>One Time Purchase of Automatic Valve Shutoff Control Panels and Chlorine Cylinder Shutoff Valves Bid No. 20-20089</td>
<td>All</td>
<td>$ 463,125.00</td>
<td>This is a one-time purchase of automatic valve shutoff control panels and chlorine cylinder shutoff valves. These control panels and shutoff valves are used on the chlorine system for our water and wastewater facilities.</td>
</tr>
</tbody>
</table>

*Indicates vendor is an SMWB, unless otherwise noted vendor is non minority.
Award of New and Renewal Annual Goods & Services Requirement Contracts and Maintenance Agreements

B. The following items will establish estimated quantities, unit price and delivery for the Service and Supply Contracts and their extensions. These items are included in the current budget. Payment will be made from the applicable fund. Estimated annual purchase is based on unit price bid; actual total and quantities, may vary from the estimate.

<table>
<thead>
<tr>
<th>VENDOR</th>
<th>DESCRIPTION</th>
<th>NO(s.)</th>
<th>PURCHASES</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>J &amp; S Materials, LLC dba Madden Materials (MBE)</td>
<td>Annual Contract for the Hauling of Spoil Materials</td>
<td>All</td>
<td>$636,600.00</td>
<td>This is a new contract. This contract will be utilized by System for hauling of spoil material. This contract will be effective Date of Award (October 6, 2020) through September 30, 2021. If determined that an extension is favorable to the system, price and service considered, the award includes the availability of three (3) additional one-year options to extend as provided for, and approved for in future years budgets.</td>
</tr>
</tbody>
</table>

*Indicates vendor is an SMWB unless otherwise noted vendor is non minority.

Board Date: Oct. 6, 2020
## SAN ANTONIO WATER SYSTEM
**TABULATION OF BIDS**

**FOR:**
Purchase of Automatic Valve Shutoff Control Panels and Chlorine Cylinder Shutoff Valves

**TIME & DATE:**
3:00 p.m., August 20, 2020

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>DESCRIPTION AND APPROXIMATE QUANTITY</th>
<th>UNIT PRICE</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Panel up to 6 Actuators</td>
<td>18,240.00</td>
<td>72,960.00</td>
</tr>
<tr>
<td>2.</td>
<td>RCP004UXLIO Remote Control Panel, up to 4 Actuators</td>
<td>14,915.00</td>
<td>104,405.00</td>
</tr>
<tr>
<td>3.</td>
<td>RCP002UPSIO Remote Control Panel, up to 2 Actuators</td>
<td>5,890.00</td>
<td>23,560.00</td>
</tr>
<tr>
<td>4.</td>
<td>U150-LD-CL2 Model U150 Actuator for 150# Cylinder</td>
<td>4,370.00</td>
<td>262,200.00</td>
</tr>
</tbody>
</table>

**TOTAL**

<table>
<thead>
<tr>
<th>UNIT</th>
<th>PRICE</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>463,125.00</td>
</tr>
<tr>
<td>Net</td>
<td>1%</td>
<td>487,500.00</td>
</tr>
</tbody>
</table>

**Terms**

- 30 days
- 10 days
- 1/4%

**Delivery Days**

- 75 days
- 93 days
- 20-40 weeks

**LOW BIDDER**

**BID INVITATIONS WERE E-MAILED TO AND/OR PICKED UP BY:**

- Alterman, Inc.
- CAPP, Inc.
- Denora
- EI2
- Global Treat
- JCS Industries, Inc.
- Macaulay Controls Co.
- Moody Bros.
- Technology International, Inc.
- TII-USA
- Valve Industries Inc.
## TABULATION OF BIDS

**PROPOSAL:** Annual Contract for Hauling of Spoil Material  
**FOR:** Time & (October 1, 2020 through September 30, 2021)  
**DATE:** 3:00 p.m., August 14, 2020

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>DESCRIPTION AND APPROXIMATE QUANTITY</th>
<th>UNIT</th>
<th>PRICE</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1A.</td>
<td>Contractor Loaded East Side Operations Center</td>
<td>1,000 CY</td>
<td>17.50</td>
<td>17,500.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>14.72</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>16.40</td>
</tr>
<tr>
<td>1B.</td>
<td>Contractor Loaded East Side Operations Center - Weighed</td>
<td>1,000 TN</td>
<td>17.50</td>
<td>17,500.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>13.08</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>11.85</td>
</tr>
<tr>
<td>2A.</td>
<td>SAWS Loaded East Side Operations Center</td>
<td>1,000 CY</td>
<td>8.25</td>
<td>8,250.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10.12</td>
</tr>
<tr>
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<td></td>
<td></td>
<td>14.50</td>
</tr>
<tr>
<td>2B.</td>
<td>SAWS Loaded East Side Operations Center - Weighed</td>
<td>20,000 TN</td>
<td>8.25</td>
<td>165,000.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10.00</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9.95</td>
</tr>
<tr>
<td>3A.</td>
<td>Contractor Loaded - Northeast Reclamation Site</td>
<td>1,000 CY</td>
<td>14.80</td>
<td>14,800.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12.77</td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
<td>10.90</td>
</tr>
<tr>
<td>3B.</td>
<td>SAWS Loaded - Northeast Reclamation Site</td>
<td>21,000 CY</td>
<td>5.50</td>
<td>115,000.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9.27</td>
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<td></td>
<td></td>
<td>9.00</td>
</tr>
<tr>
<td>4A.</td>
<td>Contractor Loaded - Westside Operations Center</td>
<td>1,000 CY</td>
<td>17.50</td>
<td>17,500.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>14.74</td>
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<tr>
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<td></td>
<td></td>
<td></td>
<td>16.40</td>
</tr>
<tr>
<td>4B.</td>
<td>Contractor Loaded - Westside Operations Center - Weighed</td>
<td>1,000 TN</td>
<td>17.50</td>
<td>17,500.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>13.10</td>
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<td></td>
<td></td>
<td>11.65</td>
</tr>
<tr>
<td>5A.</td>
<td>SAWS Loaded - Westside Operations Center</td>
<td>1,000 CY</td>
<td>8.25</td>
<td>8,250.00</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>9.92</td>
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<td></td>
<td></td>
<td>14.50</td>
</tr>
<tr>
<td>5B.</td>
<td>SAWS Loaded - Westside Operations Center - Weighed</td>
<td>11,000 TN</td>
<td>8.25</td>
<td>90,750.00</td>
</tr>
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<td></td>
<td>9.91</td>
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<td></td>
<td></td>
<td>9.75</td>
</tr>
<tr>
<td>6A.</td>
<td>Contractor Loaded - Westside Operations Center</td>
<td>1,000 CY</td>
<td>17.85</td>
<td>17,850.00</td>
</tr>
<tr>
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<td>14.72</td>
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<td></td>
<td></td>
<td>16.40</td>
</tr>
<tr>
<td>7A.</td>
<td>SAWS Loaded - North Side Operations Center</td>
<td>1,000 CY</td>
<td>8.60</td>
<td>8,600.00</td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
<td>10.04</td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
<td>12.50</td>
</tr>
<tr>
<td>8B.</td>
<td>SAWS Loaded - North Side Operations Center - Weighed</td>
<td>16,000 TN</td>
<td>8.60</td>
<td>137,600.00</td>
</tr>
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<td>9.92</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>16.35</td>
</tr>
</tbody>
</table>

**TOTAL PRICE**  
**TOTAL**  
**636,600.00**  
**775,610.00**  
**785,950.00**

**EXTENSION 1**  
**636,600.00**

**EXTENSION 2**  
**636,600.00**

**EXTENSION 3**  
**636,600.00**

Terms  
2%  
Net  
15 days  
30 days  
Net  
30 days
## SAN ANTONIO WATER SYSTEM

**P. O. BOX 2449**  
SAN ANTONIO, TEXAS  78298-2449  

### TABULATION OF BIDS

**PROPOSAL:** Annual Contract for Hauling of Spoil Material  
**FOR:** (October 1, 2020 through September 30, 2021)  
**DATE:** 3:00 p.m., August 14, 2020  

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>DESCRIPTION AND APPROXIMATE QUANTITY</th>
<th>BID INVITATIONS WERE E-MAILED TO AND/OR PICKED UP BY:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>9/0 Transprt &amp; Sales</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A&amp;I Transport</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ADR Trucking</td>
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<tr>
<td></td>
<td></td>
<td>Alcon Transport &amp; Siteworks</td>
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<td></td>
<td></td>
<td>All American Trucking</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Blackjack Solutions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BOR Transportation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Brittan Camden</td>
</tr>
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<td></td>
<td></td>
<td>C&amp;C Alcoser Trucking</td>
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<td></td>
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<td>C&amp;C Trans</td>
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<tr>
<td></td>
<td></td>
<td>C&amp;D Trucking</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Casares Sand Pit &amp; Trucking</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chase Hall</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cole Field Services</td>
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<td></td>
<td></td>
<td>FAASS Trucking</td>
</tr>
<tr>
<td></td>
<td></td>
<td>J5 Services</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Jett Transport &amp; Materials</td>
</tr>
<tr>
<td></td>
<td></td>
<td>KD Williams Construction</td>
</tr>
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<td></td>
<td></td>
<td>Lozano Trucking Co.</td>
</tr>
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<td>Madden Materials</td>
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<td>Madden Materials</td>
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<tr>
<td></td>
<td></td>
<td>New England Transport</td>
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<td>Panther Creek Transport</td>
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<td></td>
<td></td>
<td>PC Zamora Trucking</td>
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<td></td>
<td></td>
<td>Valmor Transportation</td>
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<tr>
<td></td>
<td></td>
<td>Xtreme Site Services</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Zamco Trucking</td>
</tr>
</tbody>
</table>

*LOW BIDDER*

<table>
<thead>
<tr>
<th>BID INVITATIONS WERE E-MAILED TO AND/OR PICKED UP BY:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cole Field Services</td>
</tr>
<tr>
<td>FAASS Trucking</td>
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<tr>
<td>J5 Services</td>
</tr>
<tr>
<td>Jett Transport &amp; Materials</td>
</tr>
<tr>
<td>KD Williams Construction</td>
</tr>
<tr>
<td>Lozano Trucking Co.</td>
</tr>
<tr>
<td>Madden Materials</td>
</tr>
<tr>
<td>Madden Materials</td>
</tr>
<tr>
<td>New England Transport</td>
</tr>
<tr>
<td>Panther Creek Transport</td>
</tr>
<tr>
<td>PC Zamora Trucking</td>
</tr>
<tr>
<td>Valmor Transportation</td>
</tr>
<tr>
<td>Xtreme Site Services</td>
</tr>
<tr>
<td>Zamco Trucking</td>
</tr>
</tbody>
</table>
AGENDA ITEM NO. __9___

TO: San Antonio Water System Board of Trustees

FROM: Tracey B. Lehmann, P.E., Director, Development, and Andrea L.H. Beymer, P.E., Vice President, Engineering and Construction

THROUGH: Robert R. Puente, President/Chief Executive Officer

SUBJECT: AWARD OF CONSTRUCTION CONTRACT IN CONNECTION WITH THE CHAVANEAX SUBDIVISION UNIT 1 OFF-SITE WATER AND SEWER PROJECT

Board Action Date: October 6, 2020

SUMMARY AND RECOMMENDATION:

The attached resolution awards a construction contract to Longhorn Tejas Property Builders, LLC in the amount of $298,452.46 on a Developer Customer construction contract, and authorizes the expenditure of funds in the amount of $72,195.65 for associated construction fees to Longhorn Tejas Property Builders, LLC and reimbursements of $7,219.57 for associated design fees to HK Chavaneaux, LLC (the “Developer”), in connection with the Chavaneaux Subdivision Unit 1 Off-Site Water and Sewer Project.

- On March 12, 2019, by Resolution No. 19-079, the San Antonio Water System’s (the “System”) Board of Trustees approved a Utility Service Agreement to provide water and/or wastewater services to a tract of land known as Chavaneaux Place Subdivision, an approximately 92 acre tract, being developed by HK Real Estate Development, LLC and the oversizing of approximately 1,800 feet of water main and 2,600 feet of wastewater main, in order to conform with the San Antonio Water System Master Plan.

- The Developer is required to construct an 8-inch water main and an 8-inch wastewater main. System staff recommends oversizing the 8-inch water main to a 12-inch water main and the 8-inch wastewater main to a 12-inch wastewater main. The Developer is responsible for 75.81 percent of the oversizing of the 8-inch water and wastewater mains to 12-inch water and wastewater mains for an estimated $226,256.81 ($83,161.86 for water, $143,094.95 for sewer) of the project costs. The System is responsible for 24.19 percent of the oversizing of the 8-inch mains to 12-inch mains for an estimated amount of $72,195.65 ($26,535.88 for water, $45,659.77 for sewer).

- The System solicited bids for the construction of the oversize water and wastewater mains. Upon Board authorization of the construction contract, the Developer will enter into a contract with both the Contractor and the System.
This project consists of the oversize construction of approximately 1,101 feet of 12-inch water main and 2,670 feet of 12-inch sewer main. The Chavaneaux Subdivision Unit 1 Off-Site Water and Sewer Project is within the City of San Antonio limits and is located within the System’s water and wastewater CCN.

Longhorn Tejas Property Builders, LLC has submitted the lowest responsible bid of $298,452.46 for the construction of the project.

The System will pay Longhorn Tejas Property Builders monthly, for the construction costs for the oversize project. The Developer will pay the System prior to beginning construction for the Developer’s proportionate share of the construction cost for the oversize project.

Staff recommends that the Board approve this resolution.

**FINANCIAL IMPACT:**

The Project Fund will finance this expenditure included in the CY 2020 Capital Improvement Program. This project is included in the Water Delivery Core Business, Mains New Category, and Water Main Oversizing budget line item under job number 20-1108, and Wastewater Core Business, Mains New Category, and Wastewater Main Oversizing budget line item under job number 20-1561. The applicable water main and wastewater main oversize payment will be made monthly to Longhorn Tejas Property Builders, LLC in accordance with the Utility Service Regulations. The applicable design fees payment will be made to the Developer. The System will pay $72,195.65 for construction costs and $7,219.57 for associated design fees for a total cost of $79,415.22. The Developer will pay $226,256.81 of the construction costs and the remainder of the design fees.

Upon completion of construction, the cost of the project will be recorded as a Developer contribution along with an allowance for reimbursement.
SUPPLEMENTARY COMMENTS:

Bids for this project were opened on September 10, 2020 at 9:00 AM. The following bids were submitted:

<table>
<thead>
<tr>
<th>Bidder</th>
<th>Bid Amount</th>
<th>Local/SMWVB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Longhorn Tejas Property Builders, LLC*</td>
<td>$298,452.46</td>
<td>Local/MBE-Hispanic</td>
</tr>
<tr>
<td>Engineer’s Estimate</td>
<td>$306,022.50</td>
<td></td>
</tr>
<tr>
<td>HJD Capital Electric, Inc.</td>
<td>$416,122.24</td>
<td>Local/MBE-Hispanic</td>
</tr>
<tr>
<td>Wauters Engineering, LLC</td>
<td>$439,272.00</td>
<td>Local/SBE</td>
</tr>
<tr>
<td>Pronto Sandblasting &amp; Coating &amp; Oil-Field</td>
<td>$472,530.00</td>
<td>Local/MBE-Hispanic</td>
</tr>
<tr>
<td>Services Co., Inc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R.L. Jones, LP</td>
<td>$498,682.00</td>
<td>SBE</td>
</tr>
</tbody>
</table>

*Lowest Responsible Bidder

The bid amount represents a 2.47 percent decrease from the engineer’s estimated construction cost. The contract provides for the completion of this project within 120 calendar days.

Additionally, the overall SMWB analysis is shown in the following table:

<table>
<thead>
<tr>
<th>Chavaneaux Subdivision Unit 1 Off-Site Water and Sewer Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Longhorn Tejas Property Builders, LLC</td>
</tr>
<tr>
<td>SMWB Analysis – Board Award</td>
</tr>
<tr>
<td>SBE</td>
</tr>
<tr>
<td>MBE – African American</td>
</tr>
<tr>
<td>MBE – Asian</td>
</tr>
<tr>
<td>MBE – Hispanic</td>
</tr>
<tr>
<td>MBE – Other</td>
</tr>
<tr>
<td>WBE – Minority</td>
</tr>
<tr>
<td>WBE – Non–Minority</td>
</tr>
<tr>
<td>SMWB Total</td>
</tr>
</tbody>
</table>

Attachments:
1. Project Area Map
2. Project Site Map
CHAVANEAX SUBDIVISION PHASE 1
OFF-SITE SEWER AND WATER
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES AWARDING A CONSTRUCTION CONTRACT TO LONGHORN TEJAS PROPERTY BUILDERS, LLC IN AN AMOUNT NOT TO EXCEED $298,452.46 IN CONNECTION WITH THE CHAVANEAX SUBDIVISION UNIT 1 OFF-SITE WATER AND SEWER PROJECT; AUTHORIZING THE EXPENDITURE OF FUNDS IN THE AMOUNT OF $72,195.65 FOR THE SYSTEM'S PROPORTIONATE SHARE OF THE PROJECT WORK; AUTHORIZING THE EXPENDITURE OF FUNDS IN THE AMOUNT OF $7,219.57 FOR THE SYSTEM'S PROPORTIONATE SHARE OF THE ENGINEERING DESIGN FEES; AUTHORIZING A TOTAL AMOUNT NOT TO EXCEED $29,189.48 FROM SYSTEM'S WATER CORE BUSINESS, MAINS NEW CATEGORY, AND WATER MAIN OVERSIZING AND $50,225.74 FROM SYSTEM'S WASTEWATER CORE BUSINESS, MAINS NEW CATEGORY, AND WASTEWATER MAIN OVERSIZING FOR THE SYSTEM'S PROPORTIONATE SHARE OF THE PROJECT WORK AND ENGINEERING FEES RELATED TO THE PROJECT WORK; AUTHORIZING THE PRESIDENT/CHIEF EXECUTIVE OFFICER OR HIS DULY APPOINTED DESIGNEE TO EXECUTE A CONTRACT WITH HK CHAVANEAX, LLC AND LONGHORN TEJAS PROPERTY BUILDERS, LLC, AND PROVIDE PAYMENT IN AN AMOUNT NOT TO EXCEED $72,195.65 TO LONGHORN TEJAS PROPERTY BUILDERS, LLC AND REIMBURSEMENTS OF $7,219.57 TO HK CHAVANEAX, LLC FOR THE SYSTEM'S PROPORTIONATE SHARE OF THE COST TO OVERSIZE THE PROPOSED WATER AND WASTEWATER MAINS; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, by Resolution No. 19-079, the San Antonio Water System’s (the “System”) Board of Trustees approved a Utility Service Agreement to provide water and/or wastewater services to a tract of land known as Chavaneaux Place Subdivision, an approximately 92-acre tract, being developed by HK Real Estate Development, LLC (the “Developer”), and the oversizing of approximately 1,800 feet of water main and 2,600 feet of wastewater main, in order to conform with the San Antonio Water System Master Plan; and
WHEREAS, the Developer is required to construct an 8-inch water main and an 8-inch wastewater main; and

WHEREAS, the System has elected to oversize approximately 1,800 feet of the 8-inch water main to a 12-inch water main and 2,600 feet of the 8-inch wastewater main to a 12-inch wastewater main; and

WHEREAS, the System has solicited bids for the Chavaneaux Subdivision Unit 1 Off-Site Water and Sewer Project (the “project work”); and

WHEREAS, the project work includes the oversize construction of approximately 1,101 feet of 8-inch water main to 12-inch water main and 2,670 feet of 8-inch wastewater main to 12-inch wastewater main; and

WHEREAS, Longhorn Tejas Property Builders, LLC, a local, MBE-Hispanic firm, submitted the bid of $298,452.46 for construction of the project, and this bid is determined to be the lowest responsible bid; and

WHEREAS, HK Chavaneaux, LLC is responsible for funding their proportionate share of the construction of the project; and

WHEREAS, HK Chavaneaux, LLC is responsible for 75.81 percent of the project costs for approximately 1,101 feet of 8-inch water main oversized to a 12-inch water main and 2,670 feet of 8-inch wastewater main oversized to a 12-inch wastewater main; the System is responsible for 24.19 percent of the project costs for approximately 1,101 feet of 8-inch water main oversized to a 12-inch water main and 2,670 feet of 8-inch wastewater main oversized to a 12-inch wastewater main; and

WHEREAS, the System will pay to Longhorn Tejas Property Builders, LLC monthly, for the System’s proportionate share of the cost to oversize the water and wastewater mains in accordance with the Board Regulations; and

WHEREAS, the amount of $29,189.48 is available in the System’s Water Main Oversizing, Mains New Category, Water Delivery Core Business Program, and the amount of $50,225.74 is available in the System’s Wastewater Core Business, Mains New Category, and Wastewater Main Oversizing for the System’s proportionate share of the project work costs and engineering fees related to oversizing the water and wastewater main extensions; and

WHEREAS, the San Antonio Water System Board of Trustees desires (i) to award a construction contract to Longhorn Tejas Property Builders, LLC in the amount of $298,452.46 in connection with the Chavaneaux Subdivision Unit 1 Off-Site Water and Sewer Project, (ii) to authorize System funds in the amount of $72,195.65 for the project work, (iii) to authorize System funds in the amount of $7,219.57 for design fees, (iv) to make available a total amount not to exceed $29,189.48 from the System’s Water Main Oversizing, Mains New Category, Water Delivery Core Business Program and $50,225.74 from the System’s Wastewater Core Business, Mains New Category, and Wastewater Main Oversizing for the System’s proportionate share of
the project work and engineering fees related to oversizing the proposed off-site water and wastewater mains, and (v) to authorize the President/Chief Executive Officer or his duly appointed designee to execute a contract with HK Chavaneaux, LLC and Longhorn Tejas Property Builders, LLC for the project work, and to provide payment in an amount not to exceed $298,452.46 to Longhorn Tejas Property Builders, LLC and reimbursements in an amount not to exceed $7,219.57 to HK Chavaneaux, LLC for the System’s cost to oversize the proposed off-site water and wastewater mains; now, therefore:

BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That a construction contract in the amount of 298,452.46 is hereby awarded to Longhorn Tejas Property Builders, LLC, who is determined to be the lowest responsible bidder, in connection with the Chavaneaux Subdivision Unit 1 Off-Site Water and Sewer Project.

2. That the expenditure of System funds in the amount of $72,195.65 for the System's proportionate share of the project work is hereby approved.

3. That the expenditure of System funds in the amount of $7,219.57 for the System’s proportionate share of engineering design fees associated with the project work is hereby authorized and approved.

4. That a total amount not to exceed $29,189.48 consisting of the System’s proportionate share of the project work costs and engineering fees related to the 12-inch oversized (8-inch required) water main is hereby made available and is to be expended from the System’s Water Main Oversizing, Mains New Category, Water Delivery Core Business Program, and a total amount not to exceed $50,225.74 consisting of the System’s proportionate share of the project work costs and engineering fees related to the 12-inch oversized (8-inch required) wastewater main is hereby made available and is to be expended from the System’s Wastewater Core Business, Mains New Category, and Wastewater Main Oversizing Business Program.

5. That the President/Chief Executive Officer or his duly appointed designee, is hereby authorized to execute a contract with HK Chavaneaux, LLC and Longhorn Tejas Property Builders, LLC, and to provide payment in an amount not to exceed $298,452.46 for the cost to oversize and construct the water and wastewater mains to Longhorn Tejas Property Builders, LLC, and reimbursements in an amount not to exceed $7,219.57 to HK Chavaneaux, LLC in accordance with the Utility Service Regulations in connection with the Chavaneaux Subdivision Unit 1 Off-Site Water and Sewer Project.

6. It is officially found, determined and declared that the meeting at which this resolution is adopted was open to the public, and that public notice of the time, place and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

7. If any part, section, paragraph, sentence, phrase or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon
any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid or ineffective.

8. This resolution becomes effective immediately upon its passage.

PASSED AND APPROVED on this 6th day of October, 2020.

________________________________
Jelynne LeBlanc Burley, Chairwoman

ATTEST:

________________________________
Secretary
TO: San Antonio Water System Board of Trustees

FROM: Gail A. Hamrick-Pigg, P.E., Director, Pipelines, and Andrea L.H. Beymer, P.E., Vice President, Engineering and Construction

THROUGH: Robert R. Puente, President/Chief Executive Officer

SUBJECT: AWARD OF CONSTRUCTION CONTRACT IN CONNECTION WITH THE ROOSEVELT AVE. 36-INCH SEWER ABANDONMENT PROJECT

Board Action Date: October 6, 2020

SUMMARY AND RECOMMENDATION:

The attached resolution awards a construction contract to Facilities Rehabilitation, Inc., a local, MBE-Hispanic contractor, in the amount of $420,730.00 in connection with the Roosevelt Ave. 36-inch Sewer Abandonment Project.

- The Roosevelt Ave. 36-inch Sewer Abandonment Project is required to ensure that the San Antonio Water System (the “System”) is able to remove downstream existing sewer main from proposed development while ensuring customer service continues to be provided.

- The contract will construct a project that includes the abandonment and installation of sewer facilities. The existing 36-inch system has minimal flows that will be diverted via the new 8-inch sewer main into another existing 60-inch system near Grove Street; thus, abandoning the existing 36-inch main along Roosevelt.

- The sewer abandonment work will include approximately 1,115 feet of 36-inch sewer main.

- The sewer installation work will include approximately 743 feet of 8-inch sewer main.

- Facilities Rehabilitation, Inc. has submitted the lowest responsible bid of $420,730.00.

Staff recommends that the Board approve this resolution.

FINANCIAL IMPACT:

The Project Fund will finance this expenditure included in the CY 2020 Capital Improvement Program. The wastewater work is included in the Wastewater Core Business, Governmental Wastewater Category, and Governmental Wastewater Replacements budget line item. The amount is $420,730.00 for sewer related work. The job number is 20-5524.
SUPPLEMENTARY COMMENTS:

Civil Tech., PLLC prepared the bid proposal and specifications for this project. The engineer’s estimated construction cost for this project is $523,861.65.

A bid opening was held on September 2, 2020 at 1:00 PM. The following bids were submitted:

<table>
<thead>
<tr>
<th>Bidder</th>
<th>Bid Amount</th>
<th>Local/SMWVB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facilities Rehabilitation, Inc.*</td>
<td>$420,730.00</td>
<td>Local/MBE-Hispanic</td>
</tr>
<tr>
<td>D Guerra Construction, LLC</td>
<td>$437,400.00</td>
<td>Local/MBE-Hispanic</td>
</tr>
<tr>
<td>Cruz Tec, Inc.</td>
<td>$510,667.85</td>
<td>Local/MBE-Hispanic</td>
</tr>
<tr>
<td>Longhorn Tejas Property Builders, LLC</td>
<td>Non-Responsive</td>
<td>Local/MBE-Hispanic</td>
</tr>
<tr>
<td>Engineer’s Estimate</td>
<td>$523,861.65</td>
<td></td>
</tr>
<tr>
<td>Pronto Sandblasting &amp; Coating &amp; Oil-Field Services Co., Inc.</td>
<td>$751,415.00</td>
<td>Local/MBE–Hispanic</td>
</tr>
</tbody>
</table>

*Lowest Responsible Bidder

The bid amount represents a 20 percent decrease from the estimated construction cost.

Additionally, the overall SMWB analysis is shown in the following table:

<table>
<thead>
<tr>
<th>Roosevelt Ave. 36-inch Sewer Abandonment</th>
<th>SMWB Analysis – Board Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facilities Rehabilitation, Inc.</td>
<td></td>
</tr>
<tr>
<td>SBE</td>
<td>10.11%</td>
</tr>
<tr>
<td>MBE – African American</td>
<td>0.00%</td>
</tr>
<tr>
<td>MBE – Asian</td>
<td>0.00%</td>
</tr>
<tr>
<td>MBE – Hispanic</td>
<td>85.14%</td>
</tr>
<tr>
<td>MBE – Other</td>
<td>0.00%</td>
</tr>
<tr>
<td>WBE – Minority</td>
<td>4.75%</td>
</tr>
<tr>
<td>WBE – Non–Minority</td>
<td>0.00%</td>
</tr>
<tr>
<td>Total SMWB</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

Attachments:
1. Project Area Map
2. Project Site Map
SAN ANTONIO WATER SYSTEM
PROJECT SITE MAP
ATTACHMENT II

ROOSEVELT AVE 36-INCH
SEWER ABANDONMENT

LEGEND
PROJECT LIMITS
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES AWARDING A CONSTRUCTION CONTRACT TO FACILITIES REHABILITATION, INC. IN AN AMOUNT NOT TO EXCEED $420,730.00 IN CONNECTION WITH THE ROOSEVELT AVE. 36-INCH SEWER ABANDONMENT PROJECT; APPROVING THE EXPENDITURE OF FUNDS AND MAKING AVAILABLE AN AMOUNT NOT TO EXCEED $420,730.00 FROM THE PROJECT FUND FOR THE PROJECT WORK; AUTHORIZING THE PRESIDENT/CHIEF EXECUTIVE OFFICER OR HIS DULY APPOINTED DESIGNEE TO EXECUTE A CONSTRUCTION CONTRACT WITH FACILITIES REHABILITATION, INC., AND TO PAY FACILITIES REHABILITATION, INC. AN AMOUNT NOT TO EXCEED $420,730.00 FOR THE PROJECT WORK; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, the construction projects of other agencies may require the replacement, abandonment or installation of certain sewer facilities (the “project work”) of the San Antonio Water System (the “System”); and

WHEREAS, the Roosevelt Ave. 36-inch Sewer Abandonment Project provides an alternate to conventional design-bid-build construction of individual projects in order to expedite project completion; and

WHEREAS, the System has solicited bids for the project work; and

WHEREAS, Facilities Rehabilitation, Inc., a local, MBE-Hispanic contractor, has submitted a bid in an amount not to exceed $420,730.00 for the project work and this bidder has been determined to be the lowest responsible bidder; and

WHEREAS, System funds in an amount not to exceed $420,730.00 are required for the project work; and

WHEREAS, the amount of $420,730.00 is available from the Project Fund for the project work; and

WHEREAS, the San Antonio Water System Board of Trustees desires (i) to award a construction contract to Facilities Rehabilitation, Inc. in an amount not to exceed $420,730.00 in connection with the Roosevelt Ave. 36-inch Sewer Abandonment Project, (ii) to approve the
expenditure of funds and make available an amount not to exceed $420,730.00 from the Project Fund for the project work, and (iii) to authorize the President/Chief Executive Officer or his duly appointed designee to execute a construction contract with Facilities Rehabilitation, Inc., and to pay Facilities Rehabilitation, Inc. an amount not to exceed $420,730.00 for the project work; now, therefore:

BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That a construction contract in an amount not to exceed $420,730.00 is hereby awarded to Facilities Rehabilitation, Inc., who is determined to be the lowest responsible bidder, in connection with the Roosevelt Ave. 36-inch Sewer Abandonment Project.

2. That the expenditure of funds in an amount not to exceed $420,730.00 for the project work is hereby approved and made available from the Project Fund.

3. That the President/Chief Executive Officer or his duly appointed designee is hereby authorized to execute a construction contract with Facilities Rehabilitation, Inc., and to pay Facilities Rehabilitation, Inc. an amount not to exceed $420,730.00 in connection with the Roosevelt Ave. 36-inch Sewer Abandonment Project.

4. It is officially found, determined and declared that the meeting at which this resolution is adopted was open to the public, and that public notice of the time, place and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

5. If any part, section, paragraph, sentence, phrase, or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid or ineffective.

6. This resolution becomes effective immediately upon its passage.
PASSED AND APPROVED this 6th day of October, 2020.

__________________________
Jelynne LeBlanc Burley, Chairwoman

ATTEST:

__________________________
Secretary
TO: San Antonio Water System Board of Trustees

FROM: Juan D. Gomez, Ph.D., P.E., Director, Plants and Major Projects, and Andrea L.H. Beymer, P.E., Vice President, Engineering and Construction

THROUGH: Robert R. Puente, President/Chief Executive Officer

SUBJECT: AWARD OF CONSTRUCTION CONTRACT IN CONNECTION WITH THE MICRON PUMP STATION WELL PUMP NO. 4 PROJECT

Board Action Date: October 6, 2020

SUMMARY AND RECOMMENDATION:

The attached resolution awards a construction contract to Pesado Construction Company, a local, SBE contractor, in an amount not to exceed $2,528,600.00 in connection with the Micron Pump Station Well Pump No. 4 Project (the “Project”).

- The Micron Primary Pump Station is located near the intersection of Micron Drive and Van Ness Drive and serves customers in the west and northwest areas of the city. Additional water supplies from the Micron Primary Pump Station are required to supplement the current sources from the Anderson Pump Station and to help meet peak customer demands in the rapidly growing area of far west Bexar County.

- The existing pump station includes three wells, one 5 million gallon ground storage tank, high service pumps, a disinfection system, and associated electrical equipment. The previous Micron Pump Station Well Drilling Project consisted of drilling a fourth well at Micron Pump Station. The Micron Pump Station Well Pump No. 4 Project will equip this fourth well.

- The Project involves the installation of a 10 million-gallon per day well pump, well head infrastructure and appurtenances, connection piping, a motor control center, electrical, instrumentation and controls equipment, and associated facility access improvements.

- The project also includes the plugging of Well No. 1 at the Carlisle Pump Station located near the intersection of Carlisle Avenue and Orey Avenue in south central Bexar County. The well has reached its useful life and cannot be economically rehabilitated. In addition, underground drainage piping will be installed at Carlisle Well No. 2 to allow for the flushing of the well.

- Pesado Construction Company has submitted the lowest responsible bid of $2,528,600.00.

Staff recommends that the Board approve this resolution.
FINANCIAL IMPACT:

The Project Fund will finance this expenditure included in the CY 2019 Capital Improvement Program. This project is included in the Water Delivery Core Business, Production Category, Micron Additional Well and Pump budget line item. The amount is $2,528,600.00 for water related construction work. The job number is 19-6011.

SUPPLEMENTARY COMMENTS:

WSP USA, Inc. prepared the plans and specifications for the project. The engineer’s estimated construction cost is $2,715,000.00.

A bid opening was held on August 6, 2020 at 10:00 AM. The following bids were submitted:

<table>
<thead>
<tr>
<th>Bidder</th>
<th>Bid Amount</th>
<th>Local/SMWVB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pesado Construction Company*</td>
<td>$2,528,600.00</td>
<td>Local/SBE</td>
</tr>
<tr>
<td>Engineer's Estimate</td>
<td>$2,715,000.00</td>
<td></td>
</tr>
<tr>
<td>Payton Construction, Inc.</td>
<td>$2,864,952.00</td>
<td>Non-Local/SBE</td>
</tr>
<tr>
<td>Keystone Construction Services, LP</td>
<td>$2,984,995.00</td>
<td>Non-Local/Non-SMWVB</td>
</tr>
</tbody>
</table>

*Lowest Responsible Bidder

The bid amount represents a 6.87 percent decrease from the engineer’s estimated construction cost.

Additionally, the overall SMWB analysis is shown in the table below:

<table>
<thead>
<tr>
<th>Micron Pump Station Well Pump No. 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pesado Construction Company</td>
</tr>
<tr>
<td>SMWB Analysis – Board Award</td>
</tr>
<tr>
<td>SBE</td>
</tr>
<tr>
<td>MBE – African American</td>
</tr>
<tr>
<td>MBE – Asian</td>
</tr>
<tr>
<td>MBE – Hispanic</td>
</tr>
<tr>
<td>MBE – Other</td>
</tr>
<tr>
<td>WBE – Minority</td>
</tr>
<tr>
<td>WBE – Non–Minority</td>
</tr>
<tr>
<td>SMWB Total</td>
</tr>
</tbody>
</table>

Attachments:
1. Project Area Map
2. Project Site Maps
SAN ANTONIO WATER SYSTEM
PROJECT SITE MAP
ATTACHMENT II

MICRON PUMP STATION
WELL PUMP NO. 4

LEGEND
PROJECT SITE
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES AWARDING A CONSTRUCTION CONTRACT TO PESADO CONSTRUCTION COMPANY IN AN AMOUNT NOT TO EXCEED $2,528,600.00 IN CONNECTION WITH THE MICRON PUMP STATION WELL PUMP NO. 4 PROJECT; APPROVING THE EXPENDITURE OF FUNDS AND MAKING AVAILABLE AN AMOUNT NOT TO EXCEED $2,528,600.00 FROM THE PROJECT FUND FOR THE PROJECT WORK; AUTHORIZING THE PRESIDENT/CHIEF EXECUTIVE OFFICER OR HIS DULY APPOINTED DESIGNEE TO EXECUTE A CONSTRUCTION CONTRACT WITH PESADO CONSTRUCTION COMPANY, AND TO PAY PESADO CONSTRUCTION COMPANY AN AMOUNT NOT TO EXCEED $2,528,600.00 FOR THE PROJECT WORK; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, this contract will construct proposed improvements to the project site facilities for the Micron and Carlisle Pump Stations; and

WHEREAS, the San Antonio Water System (the “System”) has solicited bids for the project work; and

WHEREAS, Pesado Construction Company, a local, SBE contractor, has submitted a bid of $2,528,600.00 for the project work and has been determined to be the lowest responsible bidder; and

WHEREAS, System funds in the amount of $2,528,600.00 are required for the project work; and

WHEREAS, the total amount of $2,528,600.00 is available from the Project Fund for the project work; and

WHEREAS, the San Antonio Water System Board of Trustees desires (i) to award a construction contract to Pesado Construction Company in an amount not to exceed $2,528,600.00 in connection with the Micron Pump Station Well Pump No. 4 Project, (ii) to approve the expenditure of funds and make available an amount not to exceed $2,528,600.00 from the Project Fund, and (iii) to authorize the President/Chief Executive Officer or his duly appointed designee to execute a construction contract with Pesado Construction Company, and to pay Pesado Construction Company an amount not to exceed $2,528,600.00 for the project work; now,
therefore:

**BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:**

1. That a construction contract in an amount not to exceed $2,528,600.00 is hereby awarded to Pesado Construction Company, who is determined to be the lowest responsible bidder, in connection with the Micron Pump Station Well Pump No. 4 Project.

2. That the expenditure of funds in an amount not to exceed $2,528,600.00 for the project work is hereby approved and made available from the Project Fund.

3. That the President/Chief Executive Officer or his duly appointed designee is hereby authorized to execute a construction contract with Pesado Construction Company, and to pay Pesado Construction Company an amount not to exceed $2,528,600.00 in connection with the Micron Pump Station Well Pump No. 4 Project.

4. It is officially found, determined, and declared that the meeting at which this resolution is adopted was open to the public, and that the public notice of the time, place, and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

5. If any part, section, paragraph, sentence, phrase or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid or ineffective.

6. This resolution becomes effective immediately upon its passage.

PASSED AND APPROVED this 6th day of October, 2020.

___________________________________
Jelynne LeBlanc Burley, Chairwoman

ATTEST:

___________________________________
Secretary
TO: San Antonio Water System Board of Trustees

FROM: Juan D. Gomez, Ph.D., P.E., Director, Plants and Major Projects, and Andrea L.H. Beymer, P.E., Vice President, Engineering and Construction

THROUGH: Robert R. Puente, President/Chief Executive Officer

SUBJECT: AWARD OF CONSTRUCTION CONTRACT IN CONNECTION WITH THE WATER PRODUCTION FACILITIES UPGRADES PHASE II PROJECT

Board Action Date: October 6, 2020

SUMMARY AND RECOMMENDATION:

The attached resolution awards a construction contract to Associated Construction Partners, Ltd., a local, WBE-non-minority contractor, in an amount not to exceed $2,669,250.00 in connection with the Water Production Facilities Upgrades Phase II Project (the “Project”).

- The CY 2020 Capital Improvement Program includes the construction of the Water Production Facilities Upgrades Phase II Project. This project includes the rehabilitation of two former Bexar Metropolitan Water District facilities located in northeast area of the City of San Antonio.

- Phase II evaluates the Montgomery and Gibbs-Sprawl Pump Stations for safety features, condition of fluoride and disinfection systems, pavement, fencing, reliability and condition of the electrical system, compliance with current City codes, and compliance with the Texas Commission on Environmental Quality rules and regulations.

- This project includes the construction of new concrete driveways, site fencing and grading, lighting improvements, replacement of valves, upgrades to fluoride and disinfection systems, new canopy covering electrical equipment, new electrical distribution systems, replacement of electrical switchgear and associated wiring, instrumentation and controls improvements, and automation programming for the facilities and the control center.

- Associated Construction Partners, Ltd. has submitted the lowest responsible bid of $2,669,250.00.

Staff recommends that the Board approve this resolution.

FINANCIAL IMPACT:

The Project Fund will finance this expenditure included in the CY 2019 Capital Improvement Program. This project is included in the Water Delivery Core Business, Production Category, Water Production Facilities Upgrades Phase II budget line item. The amount is $2,669,250.00 for
water related construction work. The job number is 17-6002.

SUPPLEMENTARY COMMENTS:

Grubb Engineering Inc. prepared the plans and specifications for the project. The engineer’s estimated construction cost is $2,192,255.00.

A bid opening was held on September 10, 2020 at 10:00 AM. The following bids were submitted:

<table>
<thead>
<tr>
<th>Bidder</th>
<th>Bid Amount</th>
<th>Local/SMWVB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineer’s Estimate</td>
<td>$2,192,255.00</td>
<td></td>
</tr>
<tr>
<td>Associated Construction Partners, Ltd. *</td>
<td>$2,669,250.00</td>
<td>Local/WBE-Non-Minority</td>
</tr>
<tr>
<td>Payton Construction, Inc.</td>
<td>$3,123,000.00</td>
<td>Non-Local/SBE</td>
</tr>
<tr>
<td>Archer Western Construction, LLC</td>
<td>$3,279,600.00</td>
<td>Local/Non-SMWVB</td>
</tr>
</tbody>
</table>

*Lowest Responsible Bidder

The bid amount represents a 21.76 percent increase from the engineer’s estimated construction cost.

Additionally, the overall SMWB analysis is shown in the following table:

<table>
<thead>
<tr>
<th>Water Production Facilities Upgrades Phase II Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associated Construction Partners, Ltd.</td>
</tr>
<tr>
<td>SMWB Analysis – Board Award</td>
</tr>
<tr>
<td>SBE</td>
</tr>
<tr>
<td>MBE – African American</td>
</tr>
<tr>
<td>MBE – Asian</td>
</tr>
<tr>
<td>MBE – Hispanic</td>
</tr>
<tr>
<td>MBE – Other</td>
</tr>
<tr>
<td>WBE – Minority</td>
</tr>
<tr>
<td>WBE – Non– Minority</td>
</tr>
<tr>
<td>SMWB Total</td>
</tr>
</tbody>
</table>

Attachments:
1. Project Area Map
2. Project Site Map
SAN ANTONIO WATER SYSTEM
PROJECT SITE MAP
ATTACHMENT II

WATER PRODUCTION FACILITIES UPGRADES PHASE II

LEGEND
PROJECT SITE

Gibbs Sprawl Pump Station
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES AWARDING A CONSTRUCTION CONTRACT TO ASSOCIATED CONSTRUCTION PARTNERS, LTD. IN AN AMOUNT NOT TO EXCEED $2,669,250.00 IN CONNECTION WITH THE WATER PRODUCTION FACILITIES UPGRADES PHASE II PROJECT; APPROVING THE EXPENDITURE OF FUNDS AND MAKING AVAILABLE AN AMOUNT NOT TO EXCEED $2,669,250.00 FROM THE PROJECT FUND FOR THE PROJECT WORK; AUTHORIZING THE PRESIDENT/CHIEF EXECUTIVE OFFICER OR HIS DULY APPOINTED DESIGNEE TO EXECUTE A CONSTRUCTION CONTRACT WITH ASSOCIATED CONSTRUCTION PARTNERS, LTD., AND TO PAY ASSOCIATED CONSTRUCTION PARTNERS, LTD. AN AMOUNT NOT TO EXCEED $2,669,250.00 FOR THE PROJECT WORK; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, this contract will construct proposed improvements to the project site facilities for the Montgomery and Gibbs Sprawl Pump Stations; and

WHEREAS, the San Antonio Water System (the “System”) has solicited bids for the project work; and

WHEREAS, Associated Construction Partners, Ltd., a local, WBE-non-minority contractor, has submitted a bid of $2,669,250.00 for the project work and has been determined to be the lowest responsible bidder; and

WHEREAS, System funds in the amount of $2,669,250.00 are required for the project work; and

WHEREAS, the total amount of $2,669,250.00 is available from the Project Fund for the project work; and

WHEREAS, the San Antonio Water System Board of Trustees desires (i) to award a construction contract to Associated Construction Partners, Ltd. in an amount not to exceed $2,669,250.00 in connection with the Water Production Facilities Upgrades Phase II Project, (ii) to approve the expenditure of funds and make available an amount not to exceed $2,669,250.00 from the Project Fund, and (iii) to authorize the President/Chief Executive Officer or his duly
appointed designee to execute a construction contract with Associated Construction Partners, Ltd., and to pay Associated Construction Partners, Ltd. an amount not to exceed $2,669,250.00 for the project work; now, therefore:

BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That a construction contract in an amount not to exceed $2,669,250.00 is hereby awarded to Associated Construction Partners, Ltd., who is determined to be the lowest responsible bidder, in connection with the Water Production Facilities Upgrades Phase II Project.

2. That the expenditure of funds in an amount not to exceed $2,669,250.00 for the project work is hereby approved and made available from the Project Fund.

3. That the President/Chief Executive Officer or his duly appointed designee is hereby authorized to execute a construction contract with Associated Construction Partners, Ltd., and to pay Associated Construction Partners, Ltd. an amount not to exceed $2,669,250.00 in connection with the Water Production Facilities Upgrades Phase II Project.

4. It is officially found, determined, and declared that the meeting at which this resolution is adopted was open to the public, and that the public notice of the time, place, and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

5. If any part, section, paragraph, sentence, phrase or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid or ineffective.

6. This resolution becomes effective immediately upon its passage.

PASSED AND APPROVED this 6th day of October, 2020.

___________________________________
Jelynne LeBlanc Burley, Chairwoman

ATTEST:

___________________________________
Secretary
THROUGH: Robert R. Puente, President/Chief Executive Officer

SUBJECT: AWARD OF CONSTRUCTION CONTRACT IN CONNECTION WITH THE 2021 SMP PACKAGE II (GUADALAJARA, MINUTEMAN, VILLAGE HAVEN)

Board Action Date: October 6, 2020

SUMMARY AND RECOMMENDATION:

The attached resolution awards a construction contract to Pronto Sandblasting & Coating & Oil-Field Services Co., Inc., a local, MBE-Hispanic contractor, in the amount of $936,378.67 in connection with the 2021 SMP Package II (Guadalajara, Minuteman, Village Haven).

- The City of San Antonio (the “City”) proposes to construct street improvements as part of the 2021 Street Maintenance Program (SMP) as illustrated on the attached maps.
- The 2021 SMP Package II (Guadalajara, Minuteman, Village Haven) is required to ensure that the San Antonio Water System (the “System”) is able to meet the construction schedules of other agencies.
- The contract will construct projects that include the replacement, adjustment, or installation of water and sewer facilities.
- The water work will include approximately 2,888 feet of 8-inch through 12-inch water main.
- The sewer work will include approximately 1,172 feet of 8-inch sewer main.
- Pronto Sandblasting & Coating & Oil-Field Services Co., Inc. has submitted the lowest responsible bid of $936,378.67.

Staff recommends that the Board approve this resolution.

FINANCIAL IMPACT:

The Project Fund will finance this expenditure included in the CY 2020 Capital Improvement Program. The water work is included in the Water Delivery Core Business, Governmental–Water Category, and Governmental Water Replacements budget line item. The amount is $612,957.20.
Award of Construction Contract
2021 SMP Package II (Guadalajara, Minuteman, Village Haven)

for water related work. The job number is 20-5008.

The wastewater work is included in the Wastewater Core Business, Governmental Wastewater Category, and Governmental Wastewater Replacements budget line item. The amount is $323,421.47 for sewer related work. The job number is 20-5508.

SUPPLEMENTARY COMMENTS:

LNV, LLC prepared the bid proposal and specifications for this project. The engineer’s estimated construction cost for this project is $1,636,075.52.

A bid opening was held on August 31, 2020 at 11 AM. The following bids were submitted:

<table>
<thead>
<tr>
<th>Bidder</th>
<th>Bid Amount</th>
<th>Local/SMWVB</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pronto Sandblasting &amp; Coating &amp; Oil-Field Services Co., Inc.</strong>*</td>
<td><strong>$936,378.67</strong></td>
<td><strong>Local/MBE-Hispanic</strong></td>
</tr>
<tr>
<td>Atlas Construction, Corp.</td>
<td>$1,052,595.75</td>
<td>Local/MBE-Hispanic</td>
</tr>
<tr>
<td>R.L. Jones, LP</td>
<td>$1,335,606.45</td>
<td>Local/SBE</td>
</tr>
<tr>
<td>D Guerra Construction, LLC</td>
<td>$1,371,042.80</td>
<td>Local/MBE–Hispanic</td>
</tr>
<tr>
<td>Cruz Tec, Inc.</td>
<td>$1,443,917.97</td>
<td>Local/MBE–Hispanic</td>
</tr>
<tr>
<td>Wauters Engineering, LLC</td>
<td>$1,481,634.14</td>
<td>Local/SBE</td>
</tr>
<tr>
<td>Bartek Construction Co.</td>
<td>$1,543,840.61</td>
<td>Local/SBE</td>
</tr>
<tr>
<td><strong>Engineer's Estimate</strong></td>
<td><strong>$1,636,075.52</strong></td>
<td></td>
</tr>
<tr>
<td>Facilities Rehabilitation, Inc.</td>
<td>$1,643,142.38</td>
<td>Local/MBE–Hispanic</td>
</tr>
</tbody>
</table>

*Lowest Responsible Bidder

The bid amount represents a 43 percent decrease from the estimated construction cost.
Additionally, the overall SMWB analysis is shown in the following table:

<table>
<thead>
<tr>
<th>2021 SMP Package II (Guadalajara, Minuteman, Village Haven)</th>
<th>Pronto Sandblasting &amp; Coating &amp; Oil-Field Services Co., Inc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMWB Analysis – Board Award</td>
<td></td>
</tr>
<tr>
<td>SBE</td>
<td>0.00%</td>
</tr>
<tr>
<td>MBE – African American</td>
<td>0.00%</td>
</tr>
<tr>
<td>MBE – Asian</td>
<td>0.00%</td>
</tr>
<tr>
<td>MBE – Hispanic</td>
<td>100.00%</td>
</tr>
<tr>
<td>MBE – Other</td>
<td>0.00%</td>
</tr>
<tr>
<td>WBE – Minority</td>
<td>0.00%</td>
</tr>
<tr>
<td>WBE – Non–Minority</td>
<td>0.00%</td>
</tr>
<tr>
<td><strong>Total SMWB</strong></td>
<td><strong>100.00%</strong></td>
</tr>
</tbody>
</table>

Attachments:

1. Project Area Map
2. Project Site Map
SAN ANTONIO WATER SYSTEM
PROJECT SITE MAP
ATTACHMENT II

GUADALAJARA DR: ALAMO BLANCO TO EL SENDERO

LEGEND

- PROJECT SITES
- EDWARDS AQUIFER RECHARGE ZONE
MINUTEMAN DR: E VALLEY FORGE AVE TO CUL DE SAC

LEGEND

- **PROJECT SITES**
- **EDWARDS AQUIFER RECHARGE ZONE**
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES AWARDING A CONSTRUCTION CONTRACT TO PRONTO SANDBLASTING & COATING & OIL-FIELD SERVICES CO., INC. IN AN AMOUNT NOT TO EXCEED $936,378.67 IN CONNECTION WITH THE 2021 SMP PACKAGE II (GUADALAJARA, MINUTEMAN, VILLAGE HAVEN); APPROVING THE EXPENDITURE OF FUNDS AND MAKING AVAILABLE AN AMOUNT NOT TO EXCEED $936,378.67 FROM THE PROJECT FUND FOR THE PROJECT WORK; AUTHORIZING THE PRESIDENT/CHIEF EXECUTIVE OFFICER OR HIS DULY APPOINTED DESIGNEE TO EXECUTE A CONSTRUCTION CONTRACT WITH PRONTO SANDBLASTING & COATING & OIL-FIELD SERVICES CO., INC., AND TO PAY PRONTO SANDBLASTING & COATING & OIL-FIELD SERVICES CO., INC. AN AMOUNT NOT TO EXCEED $936,378.67 FOR THE PROJECT WORK; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, the construction projects of other governmental agencies may require the replacement, adjustment or installation of certain water and sewer facilities (the “project work”) of the San Antonio Water System (the “System”); and

WHEREAS, the 2021 SMP Package II (Guadalajara, Minuteman, Village Haven) provides an alternate to conventional design-bid-build construction of individual projects in order to expedite project completion; and

WHEREAS, the System has solicited bids for the project work; and

WHEREAS, Pronto Sandblasting & Coating & Oil-Field Services Co., Inc., a local, MBE-Hispanic contractor, has submitted a bid in an amount not to exceed $936,378.67 for the project work and this bidder has been determined to be the lowest responsible bidder; and

WHEREAS, System funds in an amount not to exceed $936,378.67 are required for the project work; and

WHEREAS, the amount of $936,378.67 is available from the Project Fund for the project work; and
WHEREAS, the San Antonio Water System Board of Trustees desires (i) to award a construction contract to Pronto Sandblasting & Coating & Oil-Field Services Co., Inc. in an amount not to exceed $936,378.67 in connection with the 2021 SMP Package II (Guadalajara, Minuteman, Village Haven), (ii) to approve the expenditure of funds and make available an amount not to exceed $936,378.67 from the Project Fund for the project work, and (iii) to authorize the President/Chief Executive Officer or his duly appointed designee to execute a construction contract with Pronto Sandblasting & Coating & Oil-Field Services Co., Inc., and to pay Pronto Sandblasting & Coating & Oil-Field Services Co., Inc. an amount not to exceed $936,378.67 for the project work; now, therefore:

BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That a construction contract in an amount not to exceed $936,378.67 is hereby awarded to Pronto Sandblasting & Coating & Oil-Field Services Co., Inc., who is determined to be the lowest responsible bidder, in connection with the 2021 SMP Package II (Guadalajara, Minuteman, Village Haven).

2. That the expenditure of funds in an amount not to exceed $936,378.67 for the project work is hereby approved and made available from the Project Fund.

3. That the President/Chief Executive Officer or his duly appointed designee is hereby authorized to execute a construction contract with Pronto Sandblasting & Coating & Oil-Field Services Co., Inc., and to pay Pronto Sandblasting & Coating & Oil-Field Services Co., Inc. an amount not to exceed $936,378.67 in connection with the 2021 SMP Package II (Guadalajara, Minuteman, Village Haven).

4. It is officially found, determined and declared that the meeting at which this resolution is adopted was open to the public, and that public notice of the time, place and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

5. If any part, section, paragraph, sentence, phrase, or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid or ineffective.
6. This resolution becomes effective immediately upon its passage.

PASSED AND APPROVED this 6th day of October, 2020.

______________________________
Jelynne LeBlanc Burley, Chairwoman

ATTEST:

______________________________
Secretary
TO: San Antonio Water System Board of Trustees

FROM: Gail A. Hamrick-Pigg, P.E., Director, Pipelines, and Andrea L.H. Beymer, P.E., Vice President, Engineering and Construction

THROUGH: Robert R. Puente, President/Chief Executive Officer

SUBJECT: AWARD OF CONSTRUCTION CONTRACT IN CONNECTION WITH THE 2021 SMP PACKAGE III (GORMAN ST, WYOMING ST, PAUL ST, NW 20TH ST)

Board Action Date: October 6, 2020

SUMMARY AND RECOMMENDATION:

The attached resolution awards a construction contract to Pronto Sandblasting & Coating & Oil-Field Services Co., Inc., a local, MBE-Hispanic contractor, in the amount of $1,536,021.40 in connection with the 2021 SMP Package III (Gorman St, Wyoming St, Paul St, NW 20th St).

- The City of San Antonio (the “City”) proposes to construct street improvements as part of the 2021 Street Maintenance Program (SMP) as illustrated on the attached maps.
- The 2021 SMP Package III (Gorman St, Wyoming St, Paul St, NW 20th St) is required to ensure that the San Antonio Water System (the “System”) is able to meet the construction schedules of other agencies.
- The contract will construct projects that include the replacement, adjustment, or installation of water and sewer facilities.
- The water work will include approximately 3,771 feet of 6-inch through 12-inch water main.
- The sewer work will include approximately 2,352 feet of 8-inch and 10-inch sewer main.
- Pronto Sandblasting & Coating & Oil-Field Services Co., Inc. has submitted the lowest responsible bid of $1,536,021.40.

Staff recommends that the Board approve this resolution.

FINANCIAL IMPACT:

The Project Fund will finance this expenditure included in the CY 2020 Capital Improvement Program. The water work is included in the Water Delivery Core Business, Governmental–Water Category, and Governmental Water Replacements budget line item. The amount is $779,499.00
for water related work. The job number is 20-5009.

The wastewater work is included in the Wastewater Core Business, Governmental Wastewater Category, and Governmental Wastewater Replacements budget line item. The amount is $756,522.40 for sewer related work. The job number is 20-5509.

SUPPLEMENTARY COMMENTS:

K-Friese & Associates, Inc. prepared the bid proposal and specifications for this project. The engineer’s estimated construction cost for this project is $1,884,852.94.

A bid opening was held on August 31, 2020 at 1:00 PM. The following bids were submitted:

<table>
<thead>
<tr>
<th>Bidder</th>
<th>Bid Amount</th>
<th>Local/SMWVB</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pronto Sandblasting &amp; Coating &amp; Oil-Field Services Co., Inc.</strong>*</td>
<td><strong>$1,536,021.40</strong></td>
<td>Local/MBE-Hispanic</td>
</tr>
<tr>
<td>D Guerra Construction, LLC</td>
<td>$1,748,704.70</td>
<td>Local/MBE–Hispanic</td>
</tr>
<tr>
<td>Bartek Construction Co.</td>
<td>$1,794,596.60</td>
<td>Local/SBE</td>
</tr>
<tr>
<td><strong>Engineer’s Estimate</strong></td>
<td><strong>$1,884,852.94</strong></td>
<td></td>
</tr>
<tr>
<td>Atlas Construction, Corp.</td>
<td>$1,988,680.00</td>
<td>Local/MBE-Hispanic</td>
</tr>
<tr>
<td>R.L. Jones, LP</td>
<td>$2,052,503.00</td>
<td>Local/SBE</td>
</tr>
<tr>
<td>Cruz Tec, Inc.</td>
<td>$2,187,541.49</td>
<td>Local /MBE-Hispanic</td>
</tr>
<tr>
<td>Facilities Rehabilitation, Inc.</td>
<td>$2,275,589.00</td>
<td>Local/MBE–Hispanic</td>
</tr>
<tr>
<td>Wauters Engineering, LLC</td>
<td>$2,401,258.00</td>
<td>Local/SBE</td>
</tr>
<tr>
<td>Ella SA Contracting, LP</td>
<td>$2,737,324.34</td>
<td>Local /SBE</td>
</tr>
</tbody>
</table>

*Lowest Responsible Bidder

The bid amount represents a 19 percent decrease from the estimated construction cost.
Additionally, the overall SMWB analysis is shown in the following table:

<table>
<thead>
<tr>
<th>SMWB Analysis – Board Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBE</td>
</tr>
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<tr>
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</tr>
<tr>
<td>WBE – Minority</td>
</tr>
<tr>
<td>WBE – Non–Minority</td>
</tr>
<tr>
<td><strong>Total SMWB</strong></td>
</tr>
<tr>
<td><strong>100.00%</strong></td>
</tr>
</tbody>
</table>

Attachments:
1. Project Area Map
2. Project Site Map
SAN ANTONIO WATER SYSTEM
PROJECT SITE MAP
ATTACHMENT II

GORMAN ST: N PINE ST TO N PALMETTO ST

LEGEND

- PROJECT SITES
- EDWARDS AQUIFER RECHARGE ZONE
SAN ANTONIO WATER SYSTEM
PROJECT SITE MAP
ATTACHMENT II

WYOMING ST: S WALTERS ST TO S GRIMES ST

LEGEND

- PROJECT SITES
- EDWARDS AQUIFER RECHARGE ZONE
SAN ANTONIO WATER SYSTEM
PROJECT SITE MAP
ATTACHMENT II

NW 20TH: W POPLAR ST TO RIVAS ST

LEGEND

- PROJECT SITES
- EDWARDS AQUIFER RECHARGE ZONE
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES AWARDING A CONSTRUCTION CONTRACT TO PRONTO SANDBLASTING & COATING & OIL-FIELD SERVICES CO., INC. IN AN AMOUNT NOT TO EXCEED $1,536,021.40 IN CONNECTION WITH THE 2021 SMP PACKAGE III (GORMAN ST, WYOMING ST, PAUL ST, NW 20TH ST); APPROVING THE EXPENDITURE OF FUNDS AND MAKING AVAILABLE AN AMOUNT NOT TO EXCEED $1,536,021.40 FROM THE PROJECT FUND FOR THE PROJECT WORK; AUTHORIZING THE PRESIDENT/CHIEF EXECUTIVE OFFICER OR HIS DULY APPOINTED DESIGNEE TO EXECUTE A CONSTRUCTION CONTRACT WITH PRONTO SANDBLASTING & COATING & OIL-FIELD SERVICES CO., INC., AND TO PAY PRONTO SANDBLASTING & COATING & OIL-FIELD SERVICES CO., INC. AN AMOUNT NOT TO EXCEED $1,536,021.40 FOR THE PROJECT WORK; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, the construction projects of other governmental agencies may require the replacement, adjustment or installation of certain water and sewer facilities (the “project work”) of the San Antonio Water System (the “System”); and

WHEREAS, the 2021 SMP Package III (Gorman St, Wyoming St, Paul St, NW 20th St) provides an alternate to conventional design-bid-build construction of individual projects in order to expedite project completion; and

WHEREAS, the System has solicited bids for the project work; and

WHEREAS, Pronto Sandblasting & Coating & Oil-Field Services Co., Inc., a local, MBE-Hispanic contractor, has submitted a bid in an amount not to exceed $1,536,021.40 for the project work and this bidder has been determined to be the lowest responsible bidder; and

WHEREAS, System funds in an amount not to exceed $1,536,021.40 are required for the project work; and

WHEREAS, the amount of $1,536,021.40 is available from the Project Fund for the project work; and
WHEREAS, the San Antonio Water System Board of Trustees desires (i) to award a construction contract to Pronto Sandblasting & Coating & Oil-Field Services Co., Inc. in an amount not to exceed $1,536,021.40 in connection with the 2021 SMP Package III (Gorman St, Wyoming St, Paul St, NW 20th St), (ii) to approve the expenditure of funds and make available an amount not to exceed $1,536,021.40 from the Project Fund for the project work, and (iii) to authorize the President/Chief Executive Officer or his duly appointed designee to execute a construction contract with Pronto Sandblasting & Coating & Oil-Field Services Co., Inc., and to pay Pronto Sandblasting & Coating & Oil-Field Services Co., Inc. an amount not to exceed $1,536,021.40 for the project work; now, therefore:

BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That a construction contract in an amount not to exceed $1,536,021.40 is hereby awarded to Pronto Sandblasting & Coating & Oil-Field Services Co., Inc., who is determined to be the lowest responsible bidder, in connection with the 2021 SMP Package III (Gorman St, Wyoming St, Paul St, NW 20th St).

2. That the expenditure of funds in an amount not to exceed $1,536,021.40 for the project work is hereby approved and made available from the Project Fund.

3. That the President/Chief Executive Officer or his duly appointed designee is hereby authorized to execute a construction contract with Pronto Sandblasting & Coating & Oil-Field Services Co., Inc., and to pay Pronto Sandblasting & Coating & Oil-Field Services Co., Inc. an amount not to exceed $1,536,021.40 in connection with the 2021 SMP Package III (Gorman St, Wyoming St, Paul St, NW 20th St).

4. It is officially found, determined and declared that the meeting at which this resolution is adopted was open to the public, and that public notice of the time, place and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

5. If any part, section, paragraph, sentence, phrase, or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid or ineffective.
6. This resolution becomes effective immediately upon its passage.

PASSED AND APPROVED this 6th day of October, 2020.

______________________________
Jelynne LeBlanc Burley, Chairwoman

ATTEST:

______________________________
Secretary
TO: San Antonio Water System Board of Trustees

FROM: Gail A. Hamrick-Pigg, P.E., Director, Pipelines, and Andrea L.H. Beymer, P.E., Vice President, Engineering and Construction

THROUGH: Robert R. Puente, President/Chief Executive Officer

SUBJECT: AWARD OF CONSTRUCTION CONTRACT IN CONNECTION WITH THE 2021 SMP PACKAGE V (HILARY RD, DELAWARE, WHITEFIELD)

Board Action Date: October 6, 2020

SUMMARY AND RECOMMENDATION:

The attached resolution awards a construction contract to Pronto Sandblasting & Coating & Oil-Field Services Co., Inc., a local, MBE-Hispanic contractor, in the amount of $1,191,482.00 in connection with the 2021 SMP Package V (Hilary Rd, Delaware, Whitefield).

- The City of San Antonio (the “City”) proposes to construct street improvements as part of the 2021 Street Maintenance Program (SMP) as illustrated on the attached maps.

- The 2021 SMP Package V (Hilary Rd, Delaware, Whitefield) is required to ensure that the San Antonio Water System (the “System”) is able to meet the construction schedules of other agencies.

- The contract will construct projects that include the replacement, adjustment, or installation of water and sewer facilities.

- The water work will include approximately 2,531 feet of 6-inch through 12-inch water main.

- The sewer work will include approximately 2,749 feet of 8-inch sewer main.

- Pronto Sandblasting & Coating & Oil-Field Services Co., Inc. has submitted the lowest responsible bid of $1,191,482.00.

Staff recommends that the Board approve this resolution.

FINANCIAL IMPACT:

The Project Fund will finance this expenditure included in the CY 2020 Capital Improvement Program. The water work is included in the Water Delivery Core Business, Governmental–Water Category, and Governmental Water Replacements budget line item. The amount is $524,034.00 for water related work. The job number is 20-5012.
The wastewater work is included in the Wastewater Core Business, Governmental Wastewater Category, and Governmental Wastewater Replacements budget line item. The amount is $667,448.00 for sewer related work. The job number is 20-5511.

SUPPLEMENTARY COMMENTS:

Lockwood Andrews & Newnam, Inc. prepared the bid proposal and specifications for this project. The engineer’s estimated construction cost for this project is $2,012,689.76.

A bid opening was held on September 1 at 1:00 PM. The following bids were submitted:

<table>
<thead>
<tr>
<th>Bidder</th>
<th>Bid Amount</th>
<th>Local/SMWVB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pronto Sandblasting &amp; Coating &amp; Oil-Field Services Co., Inc.*</td>
<td>$1,191,482.00</td>
<td>Local/MBE-Hispanic</td>
</tr>
<tr>
<td>R.L. Jones, LP</td>
<td>$1,239,223.00</td>
<td>Local/SBE</td>
</tr>
<tr>
<td>D Guerra Construction, LLC</td>
<td>$1,268,217.20</td>
<td>Local/MBE-Hispanic</td>
</tr>
<tr>
<td>Facilities Rehabilitation, Inc.</td>
<td>Non-Responsive</td>
<td>Local/MBE-Hispanic</td>
</tr>
<tr>
<td>Bartek Construction Co.</td>
<td>$1,532,463.00</td>
<td>Local/SBE</td>
</tr>
<tr>
<td>Cruz Tec, Inc.</td>
<td>Non-Responsive</td>
<td>Local/MBE-Hispanic</td>
</tr>
<tr>
<td>Engineer’s Estimate</td>
<td>$2,012,689.76</td>
<td></td>
</tr>
</tbody>
</table>

*Lowest Responsible Bidder

The bid amount represents a 41 percent decrease from the estimated construction cost.

Additionally, the overall SMWB analysis is shown in the following table:

<table>
<thead>
<tr>
<th>2021 SMP Package V (Hilary Rd, Delaware, Whitefield)</th>
<th>Pronto Sandblasting &amp; Coating &amp; Oil-Field Services Co., Inc.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SMWB Analysis – Board Award</strong></td>
<td></td>
</tr>
<tr>
<td>SBE</td>
<td>0.00%</td>
</tr>
<tr>
<td>MBE – African American</td>
<td>0.00%</td>
</tr>
<tr>
<td>MBE – Asian</td>
<td>0.00%</td>
</tr>
<tr>
<td>MBE – Hispanic</td>
<td>100.00%</td>
</tr>
<tr>
<td>MBE – Other</td>
<td>0.00%</td>
</tr>
<tr>
<td>WBE – Minority</td>
<td>0.00%</td>
</tr>
<tr>
<td>WBE – Non–Minority</td>
<td>0.00%</td>
</tr>
<tr>
<td><strong>Total SMWB</strong></td>
<td><strong>100.00%</strong></td>
</tr>
</tbody>
</table>

Attachments:
1. Project Area Map
2. Project Site Map
SAN ANTONIO WATER SYSTEM
PROJECT SITE MAP
ATTACHMENT II

HILARY RD: PIONEER RD TO DEAD END

LEGEND

- PROJECT SITES
- EDWARDS AQUIFER RECHARGE ZONE
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES AWARDED A CONSTRUCTION CONTRACT TO PRONTO SANDBLASTING & COATING & OIL-FIELD SERVICES CO., INC. IN AN AMOUNT NOT TO EXCEED $1,191,482.00 IN CONNECTION WITH THE 2021 SMP PACKAGE V (HILARY RD, DELAWARE, WHITEFIELD); APPROVING THE EXPENDITURE OF FUNDS AND MAKING AVAILABLE AN AMOUNT NOT TO EXCEED $1,191,482.00 FROM THE PROJECT FUND FOR THE PROJECT WORK; AUTHORIZING THE PRESIDENT/CHIEF EXECUTIVE OFFICER OR HIS DULY APPOINTED DESIGNEE TO EXECUTE A CONSTRUCTION CONTRACT WITH PRONTO SANDBLASTING & COATING & OIL-FIELD SERVICES CO., INC., AND TO PAY PRONTO SANDBLASTING & COATING & OIL-FIELD SERVICES CO., INC. AN AMOUNT NOT TO EXCEED $1,191,482.00 FOR THE PROJECT WORK; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, the construction projects of other governmental agencies may require the replacement, adjustment or installation of certain water and sewer facilities (the “project work”) of the San Antonio Water System (the “System”); and

WHEREAS, the 2021 SMP Package V (Hilary Rd, Delaware, Whitefield) provides an alternate to conventional design-bid-build construction of individual projects in order to expedite project completion; and

WHEREAS, the System has solicited bids for the project work; and

WHEREAS, Pronto Sandblasting & Coating & Oil-Field Services Co., Inc., a local, MBE-Hispanic contractor, has submitted a bid in an amount not to exceed $1,191,482.00 for the project work and this bidder has been determined to be the lowest responsible bidder; and

WHEREAS, System funds in an amount not to exceed $1,191,482.00 are required for the project work; and

WHEREAS, the amount of $1,191,482.00 is available from the Project Fund for the project work; and
WHEREAS, the San Antonio Water System Board of Trustees desires (i) to award a construction contract to Pronto Sandblasting & Coating & Oil-Field Services Co., Inc. in an amount not to exceed $1,191,482.00 in connection with the 2021 SMP Package V (Hilary Rd, Delaware, Whitefield), (ii) to approve the expenditure of funds and make available an amount not to exceed $1,191,482.00 from the Project Fund for the project work, and (iii) to authorize the President/Chief Executive Officer or his duly appointed designee to execute a construction contract with Pronto Sandblasting & Coating & Oil-Field Services Co., Inc., and to pay Pronto Sandblasting & Coating & Oil-Field Services Co., Inc. an amount not to exceed $1,191,482.00 for the project work; now, therefore:

BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That a construction contract in an amount not to exceed $1,191,482.00 is hereby awarded to Pronto Sandblasting & Coating & Oil-Field Services Co., Inc., who is determined to be the lowest responsible bidder, in connection with the 2021 SMP Package V (Hilary Rd, Delaware, Whitefield).

2. That the expenditure of funds in an amount not to exceed $1,191,482.00 for the project work is hereby approved and made available from the Project Fund.

3. That the President/Chief Executive Officer or his duly appointed designee is hereby authorized to execute a construction contract with Pronto Sandblasting & Coating & Oil-Field Services Co., Inc., and to pay Pronto Sandblasting & Coating & Oil-Field Services Co., Inc. an amount not to exceed $1,191,482.00 in connection with the 2021 SMP Package V (Hilary Rd, Delaware, Whitefield).

4. It is officially found, determined and declared that the meeting at which this resolution is adopted was open to the public, and that public notice of the time, place and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

5. If any part, section, paragraph, sentence, phrase, or word of this resolution is for any reason held to be unconstitutional, illegal, inoperable or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid or ineffective.
6. This resolution becomes effective immediately upon its passage.

PASSED AND APPROVED this 6th day of October, 2020.

Jelynne LeBlanc Burley, Chairwoman

ATTEST:

_____________________________________
Secretary
TO: San Antonio Water System Board of Trustees
FROM: Gail A. Hamrick-Pigg, P.E., Director, Pipelines, and Andrea L.H. Beymer, P.E., Vice President, Engineering and Construction
THROUGH: Robert R. Puente, President/Chief Executive Officer
SUBJECT: AWARD OF CONSTRUCTION CONTRACT IN CONNECTION WITH THE 2021 SMP PACKAGE VI (HALE, KERNAN DR, HOOVER AVE)

Board Action Date: October 6, 2020

SUMMARY AND RECOMMENDATION:

The attached resolution awards a construction contract to D Guerra Construction, LLC, a local, MBE-Hispanic contractor, in the amount of $1,092,181.50 in connection with the 2021 SMP Package VI (Hale, Kernan Dr, Hoover Ave).

- The City of San Antonio (the “City”) proposes to construct street improvements as part of the 2021 Street Maintenance Program (SMP) as illustrated on the attached maps.
- The 2021 SMP Package VI (Hale, Kernan Dr, Hoover Ave) is required to ensure that the San Antonio Water System (the “System”) is able to meet the construction schedules of other agencies.
- The contract will construct projects that include the replacement, adjustment, or installation of water and sewer facilities.
- The water work will include approximately 3,124 feet of 6-inch and 8-inch water main.
- The sewer work will include approximately 1,791 feet of 8-inch sewer main.
- D Guerra Construction, LLC has submitted the lowest responsible bid of $1,092,181.50.

Staff recommends that the Board approve this resolution.

FINANCIAL IMPACT:

The Project Fund will finance this expenditure included in the CY 2020 Capital Improvement Program. The water work is included in the Water Delivery Core Business, Governmental–Water Category, and Governmental Water Replacements budget line item. The amount is $589,995.00 for water related work. The job number is 20-5013.

The wastewater work is included in the Wastewater Core Business, Governmental Wastewater Category, and Governmental Wastewater Replacements budget line item. The amount is $502,186.50 for sewer related work. The job number is 20-5512.
**SUPPLEMENTARY COMMENTS:**

Lockwood Andrews & Newnam, Inc. prepared the bid proposal and specifications for this project. The engineer’s estimated construction cost for this project is $1,720,782.93.

A bid opening was held on September 1, 2020 at 3:00 PM. The following bids were submitted:

<table>
<thead>
<tr>
<th>Bidder</th>
<th>Bid Amount</th>
<th>Local/SMWVB</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>D Guerra Construction, LLC</strong>*</td>
<td>$1,092,181.50</td>
<td>Local/MBE-Hispanic</td>
</tr>
<tr>
<td>Pronto Sandblasting &amp; Coating &amp; Oil-Field Services Co., Inc.</td>
<td>$1,107,890.00</td>
<td>Local/MBE-Hispanic</td>
</tr>
<tr>
<td>Bartek Construction Co.</td>
<td>$1,109,236.50</td>
<td>Local/SBE</td>
</tr>
<tr>
<td>Wauters Engineering, LLC</td>
<td>$1,182,858.25</td>
<td>Local/SBE</td>
</tr>
<tr>
<td>Facilities Rehabilitation, Inc.</td>
<td>$1,199,782.00</td>
<td>Local/MBE-Hispanic</td>
</tr>
<tr>
<td>Atlas Construction, Corp.</td>
<td>$1,374,894.00</td>
<td>Local/MBE-Hispanic</td>
</tr>
<tr>
<td>Cruz Tec, Inc.</td>
<td>Non-Responsive</td>
<td>Local/MBE-Hispanic</td>
</tr>
<tr>
<td>Ella SA Contracting, LP</td>
<td>Non-Responsive</td>
<td>Local/SBE</td>
</tr>
<tr>
<td><strong>Engineer’s Estimate</strong></td>
<td><strong>$1,720,782.93</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Lowest Responsible Bidder

The bid amount represents a 37 percent decrease from the estimated construction cost.

Additionally, the overall SMWB analysis is shown in the following table:

<table>
<thead>
<tr>
<th>2021 SMP Package VI (Hale, Kernan Dr., Hoover Ave.)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>D Guerra Construction, LLC</strong></td>
</tr>
<tr>
<td>SMWB Analysis – Board Award</td>
</tr>
<tr>
<td>SBE</td>
</tr>
<tr>
<td>MBE – African American</td>
</tr>
<tr>
<td>MBE – Asian</td>
</tr>
<tr>
<td>MBE – Hispanic</td>
</tr>
<tr>
<td>MBE – Other</td>
</tr>
<tr>
<td>WBE – Minority</td>
</tr>
<tr>
<td>WBE – Non–Minority</td>
</tr>
<tr>
<td><strong>Total SMWB</strong></td>
</tr>
</tbody>
</table>

Attachments:

1. Project Area Map
2. Project Site Map
SAN ANTONIO WATER SYSTEM
PROJECT SITE MAP
ATTACHMENT II

HALE: DULLYE TO POWELL

LEGEND

- PROJECT SITES
- EDWARDS AQUIFER RECHARGE ZONE
SAN ANTONIO WATER SYSTEM
PROJECT SITE MAP
ATTACHMENT II

KERNAN DR: HUNT LN TO BERRY HILL

LEGEND

- PROJECT SITES
- EDWARDS AQUIFER RECHARGE ZONE
SAN ANTONIO WATER SYSTEM
PROJECT SITE MAP
ATTACHMENT II

HOOVER AVE: JENNINGS AVE TO ZARZAMORA ST

LEGEND

- PROJECT SITES
- EDWARDS AQUIFER RECHARGE ZONE
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES AWARDING A CONSTRUCTION CONTRACT TO D GUERRA CONSTRUCTION, LLC IN AN AMOUNT NOT TO EXCEED $1,092,181.50 IN CONNECTION WITH THE 2021 SMP PACKAGE VI (HALE, KERNAN DR, HOOVER AVE); APPROVING THE EXPENDITURE OF FUNDS AND MAKING AVAILABLE AN AMOUNT NOT TO EXCEED $1,092,181.50 FROM THE PROJECT FUND FOR THE PROJECT WORK; AUTHORIZING THE PRESIDENT/CHIEF EXECUTIVE OFFICER OR HIS DULY APPOINTED DESIGNEE TO EXECUTE A CONSTRUCTION CONTRACT WITH D GUERRA CONSTRUCTION, LLC, AND TO PAY D GUERRA CONSTRUCTION, LLC AN AMOUNT NOT TO EXCEED $1,092,181.50 FOR THE PROJECT WORK; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, the construction projects of other governmental agencies may require the replacement, adjustment or installation of certain water and sewer facilities (the “project work”) of the San Antonio Water System (the “System”); and

WHEREAS, the 2021 SMP Package VI (Hale, Kernan Dr, Hoover Ave) provides an alternate to conventional design-bid-build construction of individual projects in order to expedite project completion; and

WHEREAS, the System has solicited bids for the project work; and

WHEREAS, D Guerra Construction, LLC, a local, MBE-Hispanic contractor, has submitted a bid in an amount not to exceed $1,092,181.50 for the project work and this bidder has been determined to be the lowest responsible bidder; and

WHEREAS, System funds in an amount not to exceed $1,092,181.50 are required for the project work; and

WHEREAS, the amount of $1,092,181.50 is available from the Project Fund for the project work; and

WHEREAS, the San Antonio Water System Board of Trustees desires (i) to award a construction contract to D Guerra Construction, LLC in an amount not to exceed $1,092,181.50 in connection with the 2021 SMP Package VI (Hale, Kernan Dr, Hoover Ave), (ii) to approve the
expenditure of funds and make available an amount not to exceed $1,092,181.50 from the Project Fund for the project work, and (iii) to authorize the President/Chief Executive Officer or his duly appointed designee to execute a construction contract with D Guerra Construction, LLC, and to pay D Guerra Construction, LLC an amount not to exceed $1,092,181.50 for the project work; now, therefore:

BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That a construction contract in an amount not to exceed $1,092,181.50 is hereby awarded to D Guerra Construction, LLC, who is determined to be the lowest responsible bidder, in connection with the 2021 SMP Package VI (Hale, Kernan Dr, Hoover Ave).

2. That the expenditure of funds in an amount not to exceed $1,092,181.50 for the project work is hereby approved and made available from the Project Fund.

3. That the President/Chief Executive Officer or his duly appointed designee is hereby authorized to execute a construction contract with D Guerra Construction, LLC, and to pay D Guerra Construction, LLC an amount not to exceed $1,092,181.50 in connection with the 2021 SMP Package VI (Hale, Kernan Dr, Hoover Ave).

4. It is officially found, determined and declared that the meeting at which this resolution is adopted was open to the public, and that public notice of the time, place and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

5. If any part, section, paragraph, sentence, phrase, or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid or ineffective.

6. This resolution becomes effective immediately upon its passage.
PASSED AND APPROVED this 6th day of October, 2020.

______________________________
Jelynne LeBlanc Burley, Chairwoman

ATTEST:

______________________________
Secretary
TO:                         San Antonio Water System Board of Trustees

FROM:                  Gail A. Hamrick-Pigg, P.E., Director, Pipelines, and Andrea L. H. Beymer, P.E.,
                         Vice President, Engineering and Construction

THROUGH:            Robert R. Puente, President/Chief Executive Officer

SUBJECT:  AUTHORIZATION TO REIMBURSE THE CITY OF SAN ANTONIO IN
          CONNECTION WITH THE BROADWAY STREET: E. HOUSTON STREET
          TO IH-35 PROJECT

Board Action Date: October 6, 2020

SUMMARY AND RECOMMENDATION:

The attached resolution authorizes the President/Chief Executive Officer to reimburse the City of San Antonio (the “City”) an amount not to exceed $1,811,066.81 for the joint construction of sewer facility adjustments and replacements in connection with the Broadway Street: E. Houston Street to IH-35 Project.

- This project is a City Capital Improvement Program project included in the 2017-2022 Bond Program. The City proposes to reconstruct the roadway with curbs, sidewalks, driveways, drainage and other improvements in the project area illustrated on the attached maps. The City’s improvement work is estimated to cost $26,516,250.00.

- The City has elected to use the Design Build delivery method. The Design Build selection process is a two-tier process in which proposals are reviewed based on qualification in the first tier; and proposals from the shortlisted firms were then reviewed and interviewed in the second tier. The San Antonio Water System (the “System”) was engaged in this process and participated as a member of the selection committee in the review, interview, and selection of the best value team.

- The City received two statements of qualifications from qualified teams and both were shortlisted after the first tier selection; Sundt Construction, Inc. and Jordan Foster Construction. After the second tier interviews and evaluations were completed, it was determined that Sundt Construction, Inc. (“Sundt”) was the best value team for this project and was awarded the contract.

- Sundt has elected to construct the System facilities within this project in two packages. The Sewer Construction Package and Water Construction Package will seek separate board approval due to large periods of time between the project work. This Board Item seeks approval for the Sewer Construction Package. The Water Construction Package work is anticipated to take place in fall of 2021.
The existing sewer mains within the Broadway Street: E. Houston Street to IH-35 Project limits require adjustment to avoid conflicts with the City’s improvements and replacement to meet the System’s current standards.

The sewer work will consist of the adjustment of approximately six manholes and the replacement of approximately 2,652 feet of 8-inch through 10-inch sewer mains and the replacement of 11 manholes.

Sundt provided five bids for the System work on August 21, 2020. All five bids were evaluated based solely on price. Based on the scoring matrix submitted by Sundt, the System is in agreement with the recommendation of WPM Construction, as the lowest responsive bidder with a bid amount of $809,562.70.

Based on the lowest responsive bidder, Sundt has submitted a Fixed Price Proposal of $1,811,066.81. This price consists of fees for the project work and also includes all allowable allowances and markups per the City contract.

Staff recommends that the Board approve this resolution.

**FINANCIAL IMPACT:**

The Project Fund will finance this expenditure included in the CY 2020 Capital Improvement Program. The sewer work is included in the Wastewater Core Business, Governmental - Wastewater Category, and Governmental Wastewater Replacements budget line item. The amount is $1,811,066.81 for sewer work. The job number is 18-5536.

**SUPPLEMENTARY COMMENTS:**

Time allowed for total construction of this package is 106 calendar days.

Water Construction Package for this project, Broadway Street: E. Houston Street to IH-35 Project, is currently under design and is anticipated to begin construction in fall 2021. Following the best value bid selection, Board approval to reimburse the City will be requested prior to construction for this phase.

Attachments:
1. Project Area Map
2. Project Site Map
SAN ANTONIO WATER SYSTEM
PROJECT SITE MAP
ATTACHMENT II

BROADWAY STREET: E. HOUSTON STREET TO IH-35

LEGEND
PROJECT LIMITS
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF
TRUSTEES APPROVING THE EXPENDITURE OF FUNDS
IN AN AMOUNT NOT TO EXCEED $1,811,066.81 FOR THE
ADJUSTMENT AND REPLACEMENT OF SEWER
FACILITIES BY THE CITY OF SAN ANTONIO IN
CONNECTION WITH THE BROADWAY STREET: E.
HOUSTON STREET TO IH-35 PROJECT; APPROVING AN
AMOUNT NOT TO EXCEED $1,811,066.81 BE MADE
AVAILABLE AND EXPENDED FROM THE PROJECT
FUND FOR THE PROJECT WORK; AUTHORIZING THE
PRESIDENT/CHIEF EXECUTIVE OFFICER OR HIS DULY
APPOINTED DESIGNEE TO PAY TO THE CITY OF SAN
ANTONIO AN AMOUNT NOT TO EXCEED $1,811,066.81
FOR THE PROJECT WORK; FINDING THE RESOLUTION
TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS
GOVERNING OPEN MEETINGS; PROVIDING A
SEVERABILITY CLAUSE; AND ESTABLISHING AN
EFFECTIVE DATE

WHEREAS, the City of San Antonio (the “City”) intends to construct the
Broadway Street: E. Houston Street to IH-35 Project as part of its 2017-2022 Bond Program; and

WHEREAS, the City’s Broadway Street: E. Houston Street to IH-35 Project will
require the adjustment and replacement of certain sewer facilities (the “project work”) of the San
Antonio Water System (the “System”); and

WHEREAS, the City has received a Fixed Price Proposal for the project work
within the Sewer Construction Package from Sundt Construction, Inc. in the amount of
$1,811,066.81; and

WHEREAS, System funds in an amount not to exceed $1,811,066.81 are required
for the project work; and

WHEREAS, the amount of $1,811,066.81 is available from the Project Fund for
the project work; and

WHEREAS, the San Antonio Water System Board of Trustees desires (i) to
approve the expenditure of funds in an amount not to exceed $1,811,066.81 for the adjustment and
replacement of sewer facilities by the City of San Antonio in connection with the Broadway Street:
E. Houston Street to IH-35 Project, (ii) to approve and make available an amount not to exceed
$1,811,066.81 from the Project Fund to reimburse the City of San Antonio for the project work,
and (iii) to authorize the President/Chief Executive Officer or his duly appointed designee to pay
an amount not to exceed $1,811,066.81 to the City of San Antonio for the project work; now, therefore:

BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That the expenditure of funds in an amount not to exceed $1,811,066.81 for the adjustment and replacement of sewer facilities by the City in connection with the Broadway Street: E. Houston Street to IH-35 Project is hereby approved.

2. That an amount not to exceed $1,811,066.81 to reimburse the City for the project work costs is hereby made available and is to be expended from the Project Fund.

3. That the President/Chief Executive Officer or his duly appointed designee is hereby authorized to pay the City an amount not to exceed $1,811,066.81 for the adjustment and replacement of sewer facilities by the City in connection with the Broadway Street: E. Houston Street to IH-35 Project.

4. It is officially found, determined and declared that the meeting at which this resolution is adopted was open to the public, and that public notice of the time, place and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

5. If any part, section, paragraph, sentence, phrase, or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid or ineffective.

6. This resolution becomes effective immediately upon its passage.

PASSED AND APPROVED this 6th day of October, 2020.

Jelynne LeBlanc Burley, Chairwoman

ATTEST:

________________________________________
Secretary
TO: San Antonio Water System Board of Trustees

FROM: Gail A. Hamrick-Pigg, P.E., Director, Pipelines, and Andrea L.H. Beymer, P.E., Vice President, Engineering and Construction

THROUGH: Robert R. Puente, President/Chief Executive Officer

SUBJECT: AUTHORIZATION TO REIMBURSE THE CITY OF SAN ANTONIO IN CONNECTION WITH THE BYNUM AVE.: W. GERALD AVE. TO S.W. MILITARY PROJECT

Board Action Date: October 6, 2020

SUMMARY AND RECOMMENDATION:

The attached resolution authorizes the President/Chief Executive Officer to reimburse the City of San Antonio (the “City”) an amount not to exceed $802,333.93 for the joint construction of water and sewer facility adjustments and replacements in connection with the Bynum Ave.: W. Gerald Ave. to S.W. Military Project.

- This project is a City Capital Improvement Program project included in the 2017-2022 Bond Program. The City proposes to reconstruct Bynum Ave. from W. Gerald to S.W. Military, including curbs, sidewalks, driveways, and drainage improvements in the project area illustrated on the attached maps. The City’s improvement work is estimated to cost $6,380,445.79.

- Due to the street and drainage improvements within the Bynum Ave.: W. Gerald Ave. to S.W. Military Project limits, the existing water mains require adjustment to avoid conflict with the City’s improvements and replacement to meet the San Antonio Water System’s (the “System”) current standards.

- The existing sewer mains within the Bynum Ave.: W. Gerald Ave. to S.W. Military Project limits require adjustment to avoid conflict with the City’s improvements and replacement to meet the System’s current standards.

- The water work will consist of the adjustment and replacement of approximately 2,180 feet of 6-inch through 12-inch water mains.

- The sewer work will consist of the adjustment and replacement of approximately 710 feet of 8-inch sewer main and 9 manholes.

Staff recommends that the Board approve this resolution.
FINANCIAL IMPACT:

The Project Fund will finance this expenditure included in the CY 2020 Capital Improvement Program. The water work is included in the Water Delivery Core Business, Governmental - Water Category, and Governmental Water Replacements budget line item. The amount is $639,793.21 for water work. The job number is 17-5066.

The sewer work is included in the Wastewater Core Business, Governmental - Wastewater Category, and Governmental Wastewater Replacements budget line item. The amount is $162,540.72 for sewer work. The job number is 17-5555.

SUPPLEMENTARY COMMENTS:

The City received four bids for this project on July 17, 2020. The lowest qualified, responsive bidder for this project is Austin Bridge & Road, LP, a non-local, non-SMWVB contractor. City Council approved the construction contract on September 17, 2020, and construction is expected to begin October 2020. Time allowed for total construction is 445 calendar days. The request for reimbursement is requested after City Council approves the award of the construction contract to ensure that the contract is awarded, to determine which contractor was awarded the project, to give the System’s staff time to review the bids and establish the reimbursement amount based on the awarded bid.

Attachments:
1. Project Area Map
2. Project Site Map
SAN ANTONIO WATER SYSTEM
PROJECT SITE MAP
ATTACHMENT II

BYNUM AVE.: W. GERALD AVE. TO S.W. MILITARY

LEGEND
PROJECT LIMITS
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES APPROVING THE EXPENDITURE OF FUNDS IN AN AMOUNT NOT TO EXCEED $802,333.93 FOR THE ADJUSTMENT AND REPLACEMENT OF WATER AND SEWER FACILITIES BY THE CITY OF SAN ANTONIO IN CONNECTION WITH THE BYNUM AVE.: W. GERALD AVE. TO S.W. MILITARY PROJECT; APPROVING AN AMOUNT NOT TO EXCEED $802,333.93 BE MADE AVAILABLE AND EXPENDED FROM THE PROJECT FUND FOR THE PROJECT WORK; AUTHORIZING THE PRESIDENT/CHIEF EXECUTIVE OFFICER OR HIS DULY APPOINTED DESIGNEE TO PAY TO THE CITY OF SAN ANTONIO AN AMOUNT NOT TO EXCEED $802,333.93 FOR THE PROJECT WORK; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, the City of San Antonio (the “City”) intends to construct the Bynum Ave.: W. Gerald Ave. to S.W. Military Project as part of its 2017-2022 Bond Program; and

WHEREAS, the City’s Bynum Ave.: W. Gerald Ave. to S.W. Military Project will require the adjustment and replacement of certain water and sewer facilities (the “project work”) of the San Antonio Water System (the “System”); and

WHEREAS, the City has received a bid for the project work from Austin Bridge & Road, LP, and this bidder has been determined to be the lowest responsible bidder; and

WHEREAS, System funds in an amount not to exceed $802,333.93 are required for the project work; and

WHEREAS, the amount of $802,333.93 is available from the Project Fund for the project work; and

WHEREAS, the San Antonio Water System Board of Trustees desires (i) to approve the expenditure of funds in an amount not to exceed $802,333.93 for the adjustment and replacement of water and sewer facilities by the City of San Antonio in connection with the Bynum Ave.: W. Gerald Ave. to S.W. Military Project, (ii) to approve and make available an amount not to exceed $802,333.93 from the Project Fund to reimburse the City of San Antonio for the project work, and (iii) to authorize the President/Chief Executive Officer or his duly appointed designee
to pay an amount not to exceed $802,333.93 to the City of San Antonio for the project work; now, therefore:

BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That the expenditure of funds in an amount not to exceed $802,333.93 for the adjustment and replacement of water and sewer facilities by the City in connection with the Bynum Ave.: W. Gerald Ave. to S.W. Military Project is hereby approved.

2. That an amount not to exceed $802,333.93 to reimburse the City for the project work costs is hereby made available and is to be expended from the Project Fund.

3. That the President/Chief Executive Officer or his duly appointed designee is hereby authorized to pay the City an amount not to exceed $802,333.93 for the adjustment and replacement of water and sewer facilities by the City in connection with the Bynum Ave.: W. Gerald Ave. to S.W. Military Project.

4. It is officially found, determined and declared that the meeting at which this resolution is adopted was open to the public, and that public notice of the time, place and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

5. If any part, section, paragraph, sentence, phrase, or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid or ineffective.

6. This resolution becomes effective immediately upon its passage.

PASSED AND APPROVED this 6th day of October, 2020.

____________________________
Jelynne LeBlanc Burley, Chairwoman

ATTEST:

____________________________
Secretary
TO: San Antonio Water System Board of Trustees

FROM: Gail A. Hamrick-Pigg, P.E., Director, Pipelines, and Andrea L.H. Beymer, P.E., Vice President, Engineering and Construction

THROUGH: Robert R. Puente, President/Chief Executive Officer

SUBJECT: AUTHORIZATION TO REIMBURSE THE CITY OF SAN ANTONIO IN CONNECTION WITH THE WEST COMMERCE STREET: FRIO STREET TO COLORADO STREET PROJECT

Board Action Date: October 6, 2020

SUMMARY AND RECOMMENDATION:

The attached resolution authorizes the President/Chief Executive Officer to reimburse the City of San Antonio (the “City”) an amount not to exceed $1,446,060.63 for the joint construction of water and sewer facility adjustments and replacements in connection with the West Commerce Street: Frio Street to Colorado Street Project.

- This project is a City Capital Improvement Program project included in the 2017-2022 Bond Program. The City proposes roadway, drainage, pedestrian, bike facilities, and lighting improvements along Commerce St. in the project area illustrated on the attached maps. The City’s improvement work is estimated to cost $10,384,984.94.

- Due to the street and drainage improvements within the West Commerce Street: Frio Street to Colorado Street Project limits, the existing water mains require adjustment to avoid conflict with the City’s improvements and replacement to meet the San Antonio Water System’s (the “System”) current standards.

- The existing sewer mains within the West Commerce Street: Frio Street to Colorado Street Project limits require adjustment to avoid conflict with the City’s improvements and replacement to meet the System’s current standards.

- The water work will consist of the adjustment and replacement of approximately 3,970 feet of 6-inch through 12-inch water mains.

- The sewer work will consist of the adjustment and replacement of approximately 1,235 feet of 8-inch sewer main and 11 manholes.

Staff recommends that the Board approve this resolution.
FINANCIAL IMPACT:

The Project Fund will finance this expenditure included in the CY 2020 Capital Improvement Program. The water work is included in the Water Delivery Core Business, Governmental - Water Category, and Governmental Water Replacements budget line item. The amount is $908,503.80 for water work. The job number is 17-5038.

The sewer work is included in the Wastewater Core Business, Governmental - Wastewater Category, and Governmental Wastewater Replacements budget line item. The amount is $537,556.83 for sewer work. The job number is 17-5531.

SUPPLEMENTARY COMMENTS:

The City received four bids for this project on July 21, 2020. The lowest qualified, responsive bidder for this project is Harper Brothers Construction, LLC, a non-local, non-SMWVB contractor. City Council approved the construction contract on September 10, 2020, and construction is expected to begin October 2020. Time allowed for total construction is 517 calendar days. The request for reimbursement is requested after City Council approves the award of the construction contract to ensure that the contract is awarded, to determine which contractor was awarded the project, to give the System’s staff time to review the bids and establish the reimbursement amount based on the awarded bid.

Attachments:
1. Project Area Map
2. Project Site Map
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF
TRUSTEES APPROVING THE EXPENDITURE OF FUNDS
IN AN AMOUNT NOT TO EXCEED $1,446,060.63 FOR THE
ADJUSTMENT AND REPLACEMENT OF WATER AND
SEWER FACILITIES BY THE CITY OF SAN ANTONIO IN
CONNECTION WITH THE WEST COMMERCE STREET:
FRIO STREET TO COLORADO STREET PROJECT;
APPROVING AN AMOUNT NOT TO EXCEED $1,446,060.63
BE MADE AVAILABLE AND EXPENDED FROM THE
PROJECT FUND FOR THE PROJECT WORK;
AUTHORIZING THE PRESIDENT/CHIEF EXECUTIVE
OFFICER OR HIS DULY APPOINTED DESIGNEE TO PAY
TO THE CITY OF SAN ANTONIO AN AMOUNT NOT TO
EXCEED $1,446,060.63 FOR THE PROJECT WORK;
FINDING THE RESOLUTION TO HAVE BEEN
CONSIDERED PURSUANT TO THE LAWS GOVERNING
OPEN MEETINGS; PROVIDING A SEVERABILITY
CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, the City of San Antonio (the “City”) intends to construct the West
Commerce Street: Frio Street to Colorado Street Project as part of its 2017-2022
Bond Program; and

WHEREAS, the City’s West Commerce Street: Frio Street to Colorado Street
Project will require the adjustment and replacement of certain water and sewer facilities (the
“project work”) of the San Antonio Water System (the “System”); and

WHEREAS, the City has received a bid for the project work from Harper Brothers
Construction, LLC, and this bidder has been determined to be the lowest responsible bidder; and

WHEREAS, System funds in an amount not to exceed $1,446,060.63 are required
for the project work; and

WHEREAS, the amount of $1,446,060.63 is available from the Project Fund for
the project work; and

WHEREAS, the San Antonio Water System Board of Trustees desires (i) to
approve the expenditure of funds in an amount not to exceed $1,446,060.63 for the adjustment and
replacement of water and sewer facilities by the City of San Antonio in connection with the West
Commerce Street: Frio Street to Colorado Street Project, (ii) to approve and make available an
amount not to exceed $1,446,060.63 from the Project Fund to reimburse the City of San Antonio
for the project work, and (iii) to authorize the President/Chief Executive Officer or his duly
appointed designee to pay an amount not to exceed $1,446,060.63 to the City of San Antonio for
the project work; now, therefore:

BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF
TRUSTEES:

1. That the expenditure of funds in an amount not to exceed $1,446,060.63 for the adjustment
and replacement of water and sewer facilities by the City in connection with the West Commerce
Street: Frio Street to Colorado Street Project is hereby approved.

2. That an amount not to exceed $1,446,060.63 to reimburse the City for the project work
costs is hereby made available and is to be expended from the Project Fund.

3. That the President/Chief Executive Officer or his duly appointed designee is hereby
authorized to pay the City an amount not to exceed $1,446,060.63 for the adjustment and
replacement of water and sewer facilities by the City in connection with the West Commerce
Street: Frio Street to Colorado Street Project.

4. It is officially found, determined and declared that the meeting at which this resolution is
adopted was open to the public, and that public notice of the time, place and subject matter of the
public business to be conducted at such meeting, including this resolution, was given to all as
required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

5. If any part, section, paragraph, sentence, phrase, or word of this resolution is for any reason
held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon
any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective,
the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted
without the portion held to be unconstitutional, illegal, invalid or ineffective.

6. This resolution becomes effective immediately upon its passage.

PASSED AND APPROVED this 6th day of October, 2020.

____________________________
Jelynne LeBlanc Burley, Chairwoman

ATTEST:

____________________________
Secretary
TO: San Antonio Water System Board of Trustees

FROM: Gail A. Hamrick-Pigg, P.E., Director, Pipelines, and Andrea L.H. Beymer, P.E., Vice President, Engineering and Construction

THROUGH: Robert R. Puente, President/Chief Executive Officer

SUBJECT: APPROVING AN INTERLOCAL AGREEMENT AND AUTHORIZING EXPENDITURES TO THE ALAMO REGIONAL MOBILITY AUTHORITY IN CONNECTION WITH THE CANDLEMEADOW: BINZ-ENGLERMAN TO FOSTER RD. PROJECT

Board Action Date: October 6, 2020

SUMMARY AND RECOMMENDATION:

The attached resolution authorizes the President/Chief Executive Officer to execute an Interlocal Agreement with the Alamo Regional Mobility Authority (the “Authority”), and authorizes expenditures to the Authority in an amount not to exceed $1,291,703.01 for the joint construction of water and sewer facility adjustments in connection with the Candlemeadow: Binz-Engleman to Foster Rd. Project.

- The Authority proposes to construct drainage improvements in the area illustrated on the attached maps. The Authority’s improvement work was estimated to cost $3,271,720.05.

- Due to the reconstruction and other improvements within the Candlemeadow: Binz-Engleman to Foster Rd. Project, the existing water mains require adjustment to avoid conflict with the Authority’s improvements.

- The existing sewer mains within the Candlemeadow: Binz-Engleman to Foster Rd. Project limits require adjustment to avoid conflict with the Authority’s improvements.

- The water work will consist of the adjustment of approximately 4,209 feet of 6-inch through 12-inch water mains and three valve box adjustments.

- The sewer work will consist of the adjustment of approximately 55 feet of 8-inch sewer main, six manholes and reconstruction of two manholes.

- The Authority approved the bid of E-Z Bel Construction, LLC for construction of this project on September 16, 2020. As part of joint bidding, advanced approval for funding and for the execution of an Interlocal Agreement is required by the Authority prior to issuing a notice to proceed on construction.
Approval of an Interlocal Agreement and Authorization for Expenditure of Funds to Alamo Regional Mobility Authority for the Candlemeadow: Binz-Engleman to Foster Rd. Project

- Funds as determined by the amount bid will be transferred to the Authority following the execution of the Interlocal Agreement.

Staff recommends that the Board approve this resolution.

**FINANCIAL IMPACT:**

The Project Fund will finance this expenditure included in the CY 2020 Capital Improvement Program. The water work is included in the Water Delivery Core Business, Governmental – Water Category, and Governmental Water Replacements budget line item. The amount is $1,171,613.68 for water work. The job number is 17-5105.

The sewer work is included in the Wastewater Core Business, Governmental – Wastewater Category, and Governmental Wastewater Replacements budget line item. The amount is $120,089.33 for sewer work. The job number is 17-5587.

Attachments:
1. Project Area Map
2. Project Site Map
SAN ANTONIO WATER SYSTEM
PROJECT SITE MAP
ATTACHMENT II

CANDLEMEADOW: BINZ-ENGLEMAN TO FOSTER RD.

LEGEND
- PROJECT LIMITS
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES APPROVING AN INTERLOCAL AGREEMENT WITH THE ALAMO REGIONAL MOBILITY AUTHORITY AND AUTHORIZING THE PRESIDENT/CHIEF EXECUTIVE OFFICER OR HIS DULY APPOINTED DESIGNEE TO EXECUTE THE INTERLOCAL AGREEMENT FOR THE ADJUSTMENT OF WATER AND SEWER FACILITIES BY THE ALAMO REGIONAL MOBILITY AUTHORITY IN CONNECTION WITH THE CANDLEMEADOW: BINZ-ENGLEMAN TO FOSTER RD. PROJECT; AUTHORIZING THE EXPENDITURE OF FUNDS IN AN AMOUNT NOT TO EXCEED $1,291,703.01 FOR THE PROJECT WORK; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, Alamo Regional Mobility Authority (the “Authority”) proposes to construct the Candlemeadow: Binz-Engleman to Foster Rd. Project; and

WHEREAS, the Candlemeadow: Binz-Engleman to Foster Rd. Project will require the adjustment of certain water and sewer facilities (the “project work”) of the San Antonio Water System (the “System”); and

WHEREAS, to increase the efficiency and effectiveness of local governments the Authority has requested that the System execute an Interlocal Agreement and pay for the System’s share of the project work costs; and

WHEREAS, System funds in an amount not to exceed $1,291,703.01 are required for the project work; and

WHEREAS, the amount of $1,291,703.01 is available from the Project Fund for the project work; and

WHEREAS, the San Antonio Water System Board of Trustees desires (i) to approve an Interlocal Agreement with the Authority for the adjustment of water and sewer facilities by the Authority in connection with the Candlemeadow: Binz-Engleman to Foster Rd. Project and to authorize the President/Chief Executive Officer or his duly appointed designee to execute an Interlocal Agreement, and (ii) to authorize the expenditure of funds in an amount not to exceed $1,291,703.01 for the System’s share of the project work; now, therefore:
BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF
TRUSTEES:

1. That an Interlocal Agreement with the Authority substantially in the form of the agreement attached hereto is hereby approved and the President/Chief Executive Officer or his duly appointed designee is hereby authorized to execute the Interlocal Agreement with the Authority in connection with the Candlemeadow: Binz-Engleman to Foster Rd. Project.

2. That the expenditure of funds in an amount not to exceed $1,291,703.01 for the adjustment of water and sewer facilities by the Authority in connection with the Candlemeadow: Binz-Engleman to Foster Rd. Project is hereby approved.

3. It is officially found, determined and declared that the meeting at which this resolution is adopted was open to the public, and that public notice of the time, place, and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

4. If any part, section, paragraph, sentence, phrase or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid, or ineffective.

5. This resolution becomes effective immediately upon its passage.

PASSED AND APPROVED this 6th day of October, 2020.

_________________________________
Jelynne LeBlanc Burley, Chairwoman

ATTEST:

_________________________________
Secretary
This Interlocal Agreement (the “Agreement”) is made and entered into this ___ day of ________, 2020, by and between the ALAMO REGIONAL MOBILITY AUTHORITY, a political subdivision of the State of Texas (“AUTHORITY”), and the SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES, a political subdivision of the State of Texas (“SAWS”) (also, individually, a “Party” or, collectively, the “Parties), pursuant to the Interlocal Cooperation Act, Chapter 791 of the Government Code.

PURPOSE

1.01 The purpose of this Agreement is to facilitate the AUTHORITY’s improvement of the Candlemeadow: Binz-Engleman to Foster Rd. (the “Project”) by including certain necessary SAWS adjustments in the AUTHORITY’s Specifications for the Project, thus assuring the coordination of the AUTHORITY’s road and drainage improvements with SAWS’s adjustments.

1.02 As part of its Project development activities, the Authority will include in its procurement of construction services the development and construction of the SAWS Work (as defined below).

SERVICES

2.01 The AUTHORITY agrees to include in the AUTHORITY Specifications for the Project the plans and specifications for SAWS Water Job No. 17-5105 and SAWS Sewer Job No. 17-5587 (the “SAWS Work”), which SAWS has prepared and delivered to the AUTHORITY and is incorporated by reference herein, and to contract for the performance of SAWS Work.

2.02 Immediately after tabulating all of the bids received for the Project, the AUTHORITY will notify SAWS in writing of the name of the contractor selected by the AUTHORITY for the Project (the “Contractor”) and the bid amount for the SAWS Work (the “Original Bid”). SAWS acknowledges that the Contractor selected by the AUTHORITY for the Project may not be the proposer which offered the lowest bid on the SAWS Work.

2.03 The AUTHORITY agrees to use its best efforts to enforce all of its rights and remedies against the Contractor for the SAWS Work.

2.04 The AUTHORITY agrees to allow SAWS access to the Project site to (i) inspect and witness testing of the SAWS Work and to determine if the SAWS Work is in conformity with the plans, specifications and special provisions applicable thereto and is in good working order, and (ii) verify all quantities used in connection with the SAWS Work, the AUTHORITY does not guarantee the performance of the Contractor in the performance of the SAWS Work, and SAWS will be responsible for inspecting and accepting the SAWS Work.

FEE

3.01 Not later than thirty (30) days after the execution of the Agreement by SAWS, SAWS shall
deliver to the AUTHORITY good and sufficient funds (the “Funds”) for the Original Bid and a two percent (2%) contingency (the “Contingency”). The Funds to be provided by SAWS are further described in Exhibit A attached hereto.

3.02 For materials and construction used in the SAWS Work, SAWS agrees to pay to the AUTHORITY the amount of One Million, Two Hundred Ninety-One Thousand, Seven Hundred Three Dollars and One Cent ($1,291,703.01), which includes the Original Bid amount and the Contingency.

3.03 If the cost of performing the SAWS Work exceeds the Original Bid, the following provisions shall apply:

(a) Contractor-Initiated Change Orders. Use of the Contingency. In the event the AUTHORITY receives a proposed change order from the Contractor indicating that additional funds exceeding the Original Bid will be needed for SAWS Work, the AUTHORITY will notify SAWS in writing of the proposed change order. Unless SAWS objects within ten (10) business days of receipt of the written notification of the proposed change order, the AUTHORITY will proceed with SAWS Work and utilize the Contingency for payment to the Contractor. In the event the amount of the proposed change order exceeds the Contingency amount, the AUTHORITY will authorize work up to the amount of the available Contingency, and will authorize the remaining work once a commitment, in writing, is received from an authorized representative of SAWS that the required additional funding (in excess of the available Contingency amount) will be remitted to the AUTHORITY prior to such time that payment for the work is due to the Contractor.

(b) SAWS-Initiated Change Orders. If change orders are requested by SAWS under this Agreement, SAWS will submit a change order request to the AUTHORITY, including all necessary documentation to prepare the change order.

(c) Authority-Initiated Change Orders. If the AUTHORITY requires a change order that affects the SAWS Work, the change order will be submitted to SAWS staff for approval. Notwithstanding the time period to reject a proposed change order under subsection (a), SAWS staff agrees to use good faith efforts to respond to change orders within ten (10) business days after SAWS staff’s receipt of request, or such additional period of time as may be reasonably necessary under the circumstances based on the complexity of the change order. SAWS staff is under no obligation to approve any change orders, and in no event shall SAWS be responsible for costs or expenses under Authority-Initiated Change Orders that are not approved by SAWS staff.

(d) If a SAWS Initiated Change Order or an Authority-Initiated Change Order results in total costs exceeding the amount stated in §3.02, the AUTHORITY will send copies of invoices covering the additional amounts authorized by a change order approved by SAWS staff, and SAWS shall pay the AUTHORITY the additional amounts in the approved change order within fifteen (15) days after the approval of the Board of Trustees, unless further time is required for Board action to appropriate funds. In the event Board action is needed, SAWS agrees to present the request at the next regular or special Board meeting. A change order under §3.03(d) approved in writing and signed by authorized SAWS staff shall, upon the Board action to appropriate the funds for the change order, have the automatic effect of
amending §3.02 to increase the total amount in §3.02 by the total change order amount.

(e) A change order that results in total costs reducing the amount stated in §3.02 and that is approved in writing and signed by authorized SAWS staff shall have the automatic effect of amending §3.02 to decrease the total amount in §3.02 by the total change order amount.

3.04 If the cost of performing the SAWS Work is less than the amount actually paid by SAWS for SAWS Work under this Agreement, AUTHORITY agrees to refund the overpayment to SAWS within thirty (30) days of determination of same.

3.05. Not later than thirty (30) days after the AUTHORITY’s final recapitulation with the Contractor, the AUTHORITY will refund SAWS for any surplus Funds.

3.06 The Parties acknowledge that the financial commitments stated in this Agreement are independent of the necessary operating and maintenance expenses that are SAWS’s responsibilities.

SAWS’S RESPONSIBILITY

4.01 SAWS agrees to accept full responsibility for inspection and acceptance of work performed as the SAWS Work, and acknowledges that the AUTHORITY is not responsible for the quality or performance of the SAWS Work by the Contractor.

4.02 Following Substantial Completion of SAWS Work, SAWS shall be responsible for all costs associated with operating and maintaining SAWS Work. Substantial Completion is the date, certified by the AUTHORITY, the AUTHORITY’s design professional and SAWS (including SAWS design professional) that the Contractor has reached that stage of completion when SAWS and the AUTHORITY accept use of SAWS Work for its intended purposes, recognizing that certain punch-list and/or clean-up items that do not preclude use of the SAWS Work for its intended purpose may be required.

ENTIRE AGREEMENT

5.01 This Agreement, along with the specifications for the SAWS Work, supersedes any and all other agreements, either oral or in writing, and no other agreement, statement, or promise relating to the subject matter of this Agreement that is not contained herein shall be valid or binding.

ATTORNEY’S FEES

6.01 If any action at law or in equity is brought to enforce or interpret the provisions of this Agreement, to the extent allowed by law, the prevailing Party shall be entitled to reasonable attorney’s fees in addition to any other relief to which the prevailing Party may be entitled.

TEXAS LAW TO APPLY

7.01 This Agreement is performable in Bexar County, Texas and the validity of any of its terms or provisions, as well as the rights and duties of the Parties, shall be governed by the laws of the State of Texas.
SEVERABILITY

8.01 If any one or more of the provisions contained in the Agreement is for any reason be held to be invalid, illegal, or unenforceable in any respect, that invalidity, illegality, or unenforceability will not affect any other provision and this Agreement will be construed as if the invalid, illegal, or unenforceable provision had never been contained herein.

AMENDMENT

9.01 No amendment, supplementation, modification, or alteration of the terms hereof will be binding unless it is in writing, dated subsequent to the date hereof and duly executed by the Parties.

THIRD PARTY BENEFICIARY

10.01 SAWS shall be considered a third party beneficiary under the AUTHORITY’s contract for the Project; provided, however, that prior to final completion of the work under the contract for the Project, SAWS shall not enforce any remedies against the Contractor without the prior written consent of the AUTHORITY, which consent may be withheld if the AUTHORITY reasonably believes that enforcement would have an adverse effect on final completion of the Project. Prior to final completion of the work under the contract for the Project, the AUTHORITY shall cooperate in the prosecution of any action against the Contractor, to the extent consistent with the terms of the Project Contract Documents, which SAWS may reasonably determine to be necessary to undertake in connection with the SAWS Work done by the Contractor or its subcontractors.

INDEMNIFICATION

11.01 The AUTHORITY agrees to include SAWS in the list of parties being indemnified by the Contractor, so that SAWS receives the benefit of all indemnities under the contract documents with respect to the SAWS Work. Neither party to this Agreement waives, or intends to waive, their governmental immunity in connection with this Agreement, the Project, or the SAWS Work.

INSURANCE

12.01 In all contracts entered into by the AUTHORITY for SAWS Work, the AUTHORITY shall include provisions reflecting:

(a) With regard to insurance coverage during the construction phase of the Project, the AUTHORITY shall require all consultants, contractors, subcontractors and suppliers to maintain insurance coverage limits that are sufficient to compensate the AUTHORITY and SAWS for their respective interests in the Project with regard to any liability a third party may have due to the services, equipment, or materials provided for construction of the Project. SAWS shall be named as an additional insured on all policies naming the AUTHORITY as an additional insured. The AUTHORITY shall provide SAWS with copies of the completed Certificates of Insurance which Certificates shall be completed by an agent authorized to bind the named underwriters and their companies to the coverage limits and termination provisions shown thereon. SAWS reserves the right to review the insurance requirements during the effective period of this Agreement, and any extension or renewal hereof, and to modify insurance coverage and limits when deemed necessary and
prudent by SAWS’s Risk Manager based upon changes in statutory law or court decisions. If SAWS requests a coverage modification which results in an increased cost, SAWS shall be responsible for the increased cost and the AUTHORITY shall have no obligation to request a coverage modification until SAWS submits payment to cover the increased cost. The AUTHORITY will not allow any modifications to the insurance coverage through which SAWS may incur increased risks.

(b) The AUTHORITY shall require the Contractor to maintain statutory worker’s compensation insurance for all of their employees with a waiver of subrogation in favor of the AUTHORITY and SAWS.

(c) The AUTHORITY will require the Contractor, and any subcontractors to provide all statutorily-required payment and performance bonds at no additional cost to the Parties. On services for which performance bonds are not statutorily required, the AUTHORITY shall determine whether to require performance bonds.

**CURRENT REVENUES**

13.01 In accordance with Section 791.011(d)(3) of the Texas Government Code, the party paying for the performance of governmental functions or services, if any, must make those payments from current revenues available to the paying party.

**EXECUTED IN DUPLICATE ORIGINALS, EACH OF WHICH WILL HAVE FULL FORCE AND EFFECT ON THIS ________ DAY OF ______________________, 2020.**

**ALAMO REGIONAL MOBILITY AUTHORITY**  **SAN ANTONIO WATER SYSTEM**

By: ________________________________  By: ________________________________

David Smith  
Executive Director  

Robert R. Puente  
President/Chief Executive Officer
### Exhibit “A”

Bid Amount and Funds Committed by SAWS

<table>
<thead>
<tr>
<th>Cost Category</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Main Adjustment(^1)</td>
<td>$ 1,148,640.86</td>
</tr>
<tr>
<td>Sewer Main Adjustment(^2)</td>
<td>$ 117,734.64</td>
</tr>
<tr>
<td>Contingency (2% of Construction)</td>
<td>$ 25,327.51</td>
</tr>
<tr>
<td><strong>Total SAWS Contribution =</strong></td>
<td><strong>$ 1,291,703.01</strong></td>
</tr>
</tbody>
</table>

1. Approx. 4,209 LF of 6-inch to 12-inch PVC Water Pipe adjustment and 3 water valve adjustments

2. Approx. 55 LF of 8-inch Sewer Pipe adjustment, 6 manhole adjustments and 2 manhole reconstructions
TO: San Antonio Water System Board of Trustees

FROM: Gail A. Hamrick-Pigg, P.E., Director, Pipelines, and Andrea L.H. Beymer, P.E., Vice President, Engineering and Construction

THROUGH: Robert R. Puente, President/Chief Executive Officer

SUBJECT: APPROVING AN ADVANCE FUNDING AGREEMENT AND AUTHORIZING EXPENDITURES TO THE TEXAS DEPARTMENT OF TRANSPORTATION IN CONNECTION WITH THE FM 1535: HUEBNER ROAD TO LOOP 1604 TO PROJECT

Board Action Date: October 6, 2020

SUMMARY AND RECOMMENDATION:

The attached resolution authorizes the President/Chief Executive Officer to execute an Advance Funding Agreement with the Texas Department of Transportation (TxDOT) and authorizes expenditures to TxDOT in an amount not to exceed $297,873.40 for the joint construction of the water and sewer facility adjustments in connection with the FM 1535: Huebner Road to Loop 1604 Project.

- TxDOT intends to widen the roadway and construct drainage improvements along FM 1535 from Huebner Road to Loop 1604 as illustrated on the attached maps. The construction cost estimate for the TxDOT roadway and drainage work is $10,691,145.08.

- Due to the proposed TxDOT improvements within the FM 1535: Huebner Road to Loop 1604 Project, the existing water mains require adjustment to avoid conflicts with proposed TxDOT improvements.

- The existing sewer mains require adjustment to avoid conflicts with proposed TxDOT improvements.

- The water adjustment work will consist of approximately 192 feet of 12-inch water main, one fire hydrant adjustment, and one meter box adjustment.

- The sewer adjustment work will consist of approximately adjusting one manhole to the proposed finished roadway elevation.

- Funds authorized for this project will be transferred to TxDOT following the San Antonio Water System’s Board of Trustees approval and execution of the Advance Funding Agreement in an amount not to exceed $297,873.40.

- The bid opening is scheduled for January 2021.
Staff recommends that the Board approve this resolution.

**FINANCIAL IMPACT:**

The Project Fund will finance this expenditure included in the CY 2020 Capital Improvement Program. The water work is included in the Water Delivery Core Business, Governmental – Water Category, and Governmental Water Adjustments budget line item. The amount is $294,848.40 for water work. The job number is 20-5024.

The sewer work is included in the Wastewater Core Business, Governmental – Wastewater Category, and Governmental Wastewater Adjustments budget line item. The amount is $3,025.00 for sewer work. The job number is 20-5523.

Attachments:
1. Project Area Map
2. Project Site Map
FM 1535 SOUTH: LOOP 1604 TO HUEBNER

LEGEND

PROJECT LIMITS
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES APPROVING AN ADVANCE FUNDING AGREEMENT WITH THE TEXAS DEPARTMENT OF TRANSPORTATION AND AUTHORIZING THE PRESIDENT/CHIEF EXECUTIVE OFFICER OR HIS DULY APPOINTED DESIGNEE TO EXECUTE THE ADVANCE FUNDING AGREEMENT FOR THE ADJUSTMENT OF THE WATER AND SEWER FACILITIES BY THE TEXAS DEPARTMENT OF TRANSPORTATION IN CONNECTION WITH THE FM 1535: HUEBNER ROAD TO LOOP 1604 PROJECT; AUTHORIZING THE EXPENDITURE OF FUNDS IN AN AMOUNT NOT TO EXCEED $297,873.40 FOR THE PROJECT WORK; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, the Texas Department of Transportation (TxDOT) intends to widen the roadway and construct drainage improvements on the FM 1535: Huebner Road to Loop 1604 Project; and

WHEREAS, the FM 1535: Huebner Road to Loop 1604 Project will require the adjustment of certain water and sewer facilities (the “project work”) of the San Antonio Water System (the “System”); and

WHEREAS, TxDOT has requested that the System execute an Advance Funding Agreement and advance funds for the project work costs; and

WHEREAS, System funds in an amount not to exceed $297,873.40 are required for the project work; and

WHEREAS, the amount of $297,873.40 is available from the Project Fund for the project work; and

WHEREAS, the San Antonio Water System Board of Trustees desires (i) to approve an Advance Funding Agreement with TxDOT for the adjustment of water and sewer facilities in connection with the FM 1535: Huebner Road to Loop 1604 Project and to authorize the President/Chief Executive Officer or his duly appointed designee to execute the Advance Funding Agreement, and (ii) to authorize the expenditure of funds in an amount not to exceed $297,873.40 for the project work; now, therefore:
BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That an Advance Funding Agreement with TxDOT is hereby approved and the President/Chief Executive Officer or his duly appointed designee is hereby authorized to execute the Advance Funding Agreement with TxDOT in connection with the FM 1535: Huebner Road to Loop 1604 Project.

2. That the expenditure of funds in an amount not to exceed $297,873.40 for the adjustment of water and sewer facilities by TxDOT in connection with the FM 1535: Huebner Road to Loop 1604 Project is hereby authorized.

3. It is officially found, determined and declared that the meeting at which this resolution is adopted was open to the public, and that public notice of the time, place, and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

4. If any part, section, paragraph, sentence, phrase or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid, or ineffective.

5. This resolution becomes effective immediately upon its passage.

PASSED AND APPROVED this 6th day of October, 2020.

______________________________
Jelynne LeBlanc Burley, Chairwoman

ATTEST:

______________________________
Secretary
TO: San Antonio Water System Board of Trustees

FROM: Bruce A. Haby, Manager, Corporate Real Estate, and Nancy Belinsky, Vice President and General Counsel

THROUGH: Robert R. Puente, President/Chief Executive Officer

SUBJECT: ACCEPTING AN OFFER AND APPROVING A PURCHASE AGREEMENT WITH LORENZO MARQUEZ PUENTE FOR THE SALE OF APPROXIMATELY 4.298 ACRES LOCATED AT 19845 CLAYTON STREET, CITY OF SOMERSET, BEXAR COUNTY, TEXAS

Board Action Date: October 6, 2020

SUMMARY AND RECOMMENDATION:

The attached resolution accepts the offer of Lorenzo Marquez Puente of $110,000.00 for the sale of 4.298 acres (known as the Clayton Tank Site) located at 19845 Clayton Street in the City of Somerset, in Bexar County, Texas (the “Property”), and approves a Purchase Agreement (the “Agreement”) with Lorenzo Marquez Puente for the sale of this Property for the purchase price of $110,000.00.

- San Antonio Water System (SAWS) Board of Trustees (the “Board”) declared the Property surplus by Board Resolution No. 16-198, which was approved on August 2, 2016.

- On September 7, 2017, by Ordinance No. 2017-09-07-0629, the City Council of San Antonio declared the Property surplus, and authorized SAWS to sell the Property.

- SAWS’ real estate broker, Cano and Company, listed the Property on the MLS. The Property was marketed in excess of the required 30 day listing period.

- From March to August 2020, four offers were received ranging in value from $85,000.00 to $110,000.00. A purchase agreement, made expressly subject to Board approval, was executed with Lorenzo Marquez Puente, which provided the highest offer.

- The basic terms of Lorenzo Marquez Puente’s offer for the 4.298 acres is as follows:
  - Purchase Price – $110,000.00
  - Survey Cost – Buyer to pay for survey
  - Title Policy – SAWS to pay for title policy
  - Feasibility Period – 10 days from effective date
  - Independent Consideration for Feasibility Period – $100.00
  - Earnest Money – $1,000.00
  - Closing Date – To occur 60 days after the execution of the Agreement
SAWS’ Brokerage Agreement No. S-14-019-DB with Cano and Company, approved by the SAWS Board by Resolution No. 15-009, on January 6, 2015, authorizes SAWS to pay a commission of six percent of the sales price at the closing if closing occurs. If closing occurs, the six percent commission will be shared by Cano and Company with the buyer’s broker.

This resolution authorizes SAWS to pay, pursuant to the Agreement, closing costs not to exceed $5,000.00.

Staff recommends that the Board approve this resolution.

**FINANCIAL IMPACT:**

SAWS will receive $110,000.00 in cash upon the sale of the Property, less the related closing costs and real estate commissions. Total closing costs plus real estate commissions are not expected to exceed $5,000.00. Funds received will be deposited to the Renewal and Replacement Fund.
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM (THE “SYSTEM”) BOARD OF TRUSTEES ACCEPTING AN OFFER IN THE AMOUNT OF $110,000.00 FOR THE SALE OF APPROXIMATELY 4.298 ACRES LOCATED AT 19845 CLAYTON STREET IN THE CITY OF SOMERSET, BEXAR COUNTY, TEXAS (THE “PROPERTY”), AND APPROVING A PURCHASE AGREEMENT WITH LORENZO MARQUEZ PUENTE; AFFIRMING A SIX PERCENT COMMISSION TO BE PAID TO CANO AND COMPANY AT CLOSING AND AUTHORIZING PAYMENT OF CLOSING COSTS UP TO $5,000.00 AT CLOSING; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, the System met the requirements of City Ordinance No. 75686 and declared the Property surplus by Resolution No. 16-198, approved on August 2, 2016; and

WHEREAS, the City Ordinance No. 2017-09-07-0629 approved on September 7, 2017, declared the Property generally depicted on the area map attached as Attachment I hereto as surplus; and

WHEREAS, authorization to use Section 253.014 of the Texas Local Government Code, being the listing of a property on a multiple listing service rather than a sealed bid process, was approved by the System’s Board of Trustees (the “Board”) on February 10, 2014, Resolution 14-034; and

WHEREAS, the City Ordinance No. 2017-09-07-0629, approved on September 7, 2017, authorized the System to sell the property according to the Texas Local Government Code Section 253.014; and

WHEREAS, pursuant to Local Government Code Chapter 253.014, the System’s Broker, Cano and Company, has marketed the Property, and the highest offer in the amount of $110,000.00 was received from Lorenzo Marquez Puente; and

WHEREAS, the System’s Brokerage Agreement No. S-14-019-DB (the “Brokerage Agreement”) with Cano and Company, approved by the Board by Resolution No. 15-009, dated January 6, 2015, authorizes the System to pay a commission of six percent of the sales price to Cano and Company, which commission, pursuant to the Brokerage Agreement and the Purchase Agreement attached hereto as Attachment II (“Purchase Agreement”), will be split with buyer’s broker; and
WHEREAS, pursuant to the Purchase Agreement, the System seeks to authorize the payment of up to $5,000.00 in closing costs to Alamo Title Insurance Company; and

WHEREAS, the San Antonio Water System Board of Trustees desires to (i) accept the offer from Lorenzo Marquez Puente (the “Buyer”) in the amount of $110,000.00 for the Property and approve a Purchase Agreement with Buyer for the sale of the Property, (ii) affirm the payment of six percent commission to be paid to Cano and Company at closing pursuant to the Brokerage Agreement, if and only if closing occurs, with said amount to be split by Cano and Company with Buyer’s broker pursuant to the Brokerage Agreement and Purchase Agreement, (iii) authorize payment of up to $5,000.00 for closing costs payable to Alamo Title Insurance Company, and (iv) authorize the President/Chief Executive Officer or his duly appointed designee to execute all documents necessary to complete the sale of the Property, including contract amendments/extensions or assignments to related entities, that do not decrease the purchase price, and perform all the duties and obligations of the seller in said Purchase Agreement; now, therefore:

BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That the offer from Buyer in the amount of $110,000.00 for the Property is hereby accepted and a Purchase Agreement with Buyer for the sale of said Property is hereby approved as attached hereto as Attachment II and incorporated herein for all purposes.

2. That a commission of six percent of the sales price is hereby affirmed to be paid to Cano and Company at closing pursuant to the Brokerage Agreement, if and only if closing occurs, with said amount to be split by Cano and Company with Buyer’s broker pursuant to the Brokerage Agreement and Purchase Agreement.

3. That payment of up to $5,000.00 for closing costs, payable to Alamo Title Insurance Company, is hereby authorized.

4. That the President/Chief Executive Officer or his duly appointed designee is hereby authorized to execute all documents, including contract amendments/extensions and assignments to related entities, that do not decrease the purchase price, necessary to complete the sale of the Property and perform all duties of the Seller under said Purchase Agreement.

5. It is officially found, determined and declared that the meeting at which this resolution is adopted was open to the public, and that public notice of the time, place and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

6. If any part, section, paragraph, sentence, phrase or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted.
without the portion held to be unconstitutional, illegal, invalid or ineffective.

7. This resolution becomes effective immediately upon its passage.

PASSED AND APPROVED this 6th day of October, 2020.

_________________________________
Jelynne LeBlanc Burley, Chairwoman

ATTEST:

________________________________
Secretary

Attachments:
I   Area Map
II  Purchase Agreement
SURPLUS PROPERTY
4.298 ACRE TRACT
PURCHASE AGREEMENT
19845 Clayton, Somerset

This Purchase Agreement (the “Agreement”) is made by and between the CITY OF SAN ANTONIO, ACTING BY AND THROUGH ITS SAN ANTONIO WATER SYSTEM, hereinafter called “Seller”, and LORENZO MARQUEZ PUENTE, hereinafter called “Buyer”, and constitutes a contract for the purchase and sale of the described property, as follows:

1. Property. Subject to the terms and conditions of this Agreement, Seller agrees to convey to Buyer the tract of real property being the approximately 4.298 acre tract located in Bexar County, Texas and more particularly described in Exhibit A attached hereto (the “Property”), together with all rights and appurtenances thereto.

2. Consideration. The consideration for the conveyance shall be as follows:
   a. Purchase Price. The total purchase price (“Purchase Price”) for the Property shall be ONE HUNDRED TEN THOUSAND AND NO/100 DOLLARS ($110,000.00).
   b. Earnest Money. Buyer shall deposit ONE THOUSAND AND NO/100 DOLLARS ($1,000.00) with Alamo Title Company, Attn: Chris Varley, Senior Vice President, 2915 W. Bitters, Suite 301, San Antonio, TX 78248 (“Title Company”), as earnest money (“Earnest Money”). The Earnest Money shall be credited toward the Purchase Price at closing if the conveyance of the Property is closed or otherwise held and disbursed in accordance with the terms and provisions hereof. Title Company shall, immediately following receipt, deposit the Earnest Money in an interest bearing account and maintain such account until the Earnest Money is disbursed in accordance herewith.
   c. Independent Consideration. On or before this Date of this Agreement (hereinafter defined), Buyer shall pay to Seller by certified or cashier’s check the sum of ONE HUNDRED AND NO/100 DOLLARS ($100.00)(the “Independent Consideration”) as independent consideration for this Agreement and for Buyer’s termination rights under Section 8 hereinbelow. The Independent Consideration shall be non-refundable except in the event of a Seller default under this Agreement or if the SAWS Board of Trustees does not approve this Agreement as provided in Section 10 hereinbelow. The Independent Consideration shall be credited toward the Purchase Price at closing if the conveyance of the Property is closed.

3. Date of this Agreement. The Date of this Agreement shall be the date when a fully executed copy of this Agreement together with Buyer’s deposit of the Earnest Money is delivered to the Title Company, as evidenced by the date inserted by Title Company beneath its signature of receipt.

4. Title Commitment. Within seven (7) days following the Date of this Agreement, Title Company shall issue to Buyer a commitment for an Owner’s Policy Title Insurance for the Property (“Title Policy”) in the amount of the Purchase Price.

5. Survey. Any survey that Buyer wishes to obtain shall be at Buyer’s sole expense. Upon Seller’s approval of such survey (the “Survey”), the description of the Property in Exhibit A shall be replaced by the description in said Survey.

6. Property Information Documents. Any documents provided by Seller concerning the Property shall be referred to as “Property Information Documents.” If the Property Information Documents include a Phase I environmental assessment, Seller does not warrant whether it will qualify Buyer as an "innocent Buyer" under CERCLA, 42 USC 9601 et seq. and the Texas Solid Waste Disposal
Act, Texas Health and Safety Code Chapter 361 et seq., and Seller recommends that the Buyer conduct its own environmental assessment of the Property. Further, Seller does not represent or warrant that the Property Information Documents constitute all of the documents in Seller’s possession related to the Property.

NOTWITHSTANDING ANYTHING IN THIS PARAGRAPH TO THE CONTRARY, BUYER ACKNOWLEDGES AND UNDERSTANDS THAT SOME OR ALL OF THE PROPERTY INFORMATION DOCUMENTS HAVE BEEN PREPARED BY PARTIES OTHER THAN SELLER. SELLER MAKES NO REPRESENTATION OR WARRANTY WHATSOEVER, EXPRESS OR IMPLIED, AS TO THE QUALITY, COMPLETENESS, CONTENT OR ACCURACY OF THE PROPERTY INFORMATION DOCUMENTS.

7. Exceptions. The Property will be conveyed without warranty of title and subject to (i) all visible and apparent easements, (ii) all matters of record relating to the Property as shown in the Official Public Records of Bexar County, Texas, and (iii) all applicable zoning, platting and other governmental ordinances, laws, rules and regulations. The provisions of this paragraph shall survive Closing.

8. Feasibility Period. On or before 5:00 pm local San Antonio time on the day that is ten (10) days from the Effective Date (the “Feasibility Period”), the Buyer shall secure any required financing and shall conduct, at the Buyer’s sole cost, any inspections and environmental assessments on the Property that the Buyer may elect, subject to the indemnity and other provisions of Section 8 of this Agreement. If an Environmental Professional (as defined in 40 CFR Part 312.10(b)) desires to communicate with Seller, the communication must be in writing and delivered to SAWS at the address stated in Section 14, below. The Buyer may not conduct invasive tests, including boring and drilling, upon the Property, without SAWS’ prior written consent, a condition of which shall be SAWS approval, in SAWS reasonable discretion, of Buyer’s plan for conducting such invasive tests on the Property. Buyer shall promptly restore the Property to its original condition following any such invasive tests, which obligation shall survive termination of this Agreement.

If Buyer decides in its sole discretion not to proceed with the purchase of the Property, Buyer shall give Seller written notice of termination on or before the expiration of the Feasibility Period, in which event this Agreement shall terminate and be of no further force and effect, and Buyer shall receive back the Earnest Money, and Seller shall retain the Independent Consideration.

BUYER HEREBY RELEASES THE CITY OF SAN ANTONIO (“COSA”), SELLER AND THEIR OFFICERS, EMPLOYEES, AGENTS, TRUSTEES, ELECTED OFFICIALS AND FIDUCIARIES FROM ANY AND ALL DAMAGES, CLAIMS AND LOSSES OF ANY NATURE, INCLUDING THOSE ASSOCIATED WITH PROPERTY DAMAGE, PERSONAL INJURY, BODILY INJURY, OR DEATH, ATTORNEY’S FEES AND COURT COSTS, ARISING FROM BUYER’S PRESENCE ON OR USE OR INSPECTION OF THE PROPERTY OR THE CONDITION OF THE PROPERTY. THE PROVISIONS OF THIS PARAGRAPH SHALL OVERRIDE AND CONTROL ANY CONTRARY PROVISIONS IN THE TEXAS TORT CLAIMS ACT (TEXAS CIVIL PRACTICE AND REMEDIES CODE CHAPTER 101).

Buyer shall cause all third party surveyors, inspectors, Environmental Professionals or any other consultants or contractors of Buyer to submit to Seller an insurance certificate evidencing commercial general liability coverage in not less than $500,000 prior to and as a condition to entry upon the Property. All entries onto the Property by third parties shall be conditioned, at Seller request, upon such party’s execution of a release and indemnity agreement in favor of Seller.
9. AS-IS. THE PROPERTY WILL BE CONVEYED IN ITS PRESENT “AS IS” CONDITION. IF THE PURCHASE AGREEMENT CLOSES, BUYER ACCEPTS THE PROPERTY IN ITS PRESENT CONDITION. AS A MATERIAL PART OF THE CONSIDERATION FOR THE SALE OF THE PROPERTY, BUYER ACKNOWLEDGES THAT IT IS NOT RELYING UPON THE ACCURACY OR COMPLETENESS OF ANY REPRESENTATION, BROCHURE, RENDERING, PROMISE, STATEMENT OR OTHER ASSERTION OR INFORMATION (INCLUDING THE PROPERTY INFORMATION DOCUMENTS) WITH RESPECT TO THE PROPERTY MADE OR FURNISHED BY OR ON BEHALF OF, OR OTHERWISE_attributed TO, SELLER OR ANY OF ITS AGENTS, EMPLOYEES, OR REPRESENTATIVES, ANY AND ALL SUCH RELIANCE BEING HEREBY EXPRESSLY AND UNEQUIVOCALLY DISCLAIMED, BUT IS RELYING SOLELY AND EXCLUSIVELY UPON ITS OWN EXPERIENCE AND ITS INDEPENDENT JUDGMENT, EVALUATION AND EXAMINATION OF THE PROPERTY. BUYER FURTHER UNEQUIVOCALLY DISCLAIMS (I) THE EXISTENCE OF ANY DUTY TO DISCLOSE ON THE PART OF SELLER OR ANY OF ITS AGENTS, EMPLOYEES OR REPRESENTATIVES AND (II) ANY RELIANCE BY BUYER ON THE SILENCE OR ANY ALLEGED NONDISCLOSURE OF SELLER OR ANY OF ITS AGENTS, EMPLOYEES, OR REPRESENTATIVES, AND HEREBY RELEASES SELLER AND ITS AGENTS, EMPLOYEES OR REPRESENTATIVES FROM ANY CLAIM, DEMAND OR CAUSE OF ACTION BASED IN WHOLE OR IN PART UPON ANY RELIANCE UPON ANY ALLEGED SILENCE, REPRESENTATION OR NON-DISCLOSURE BY SELLER OR ANY OF ITS AGENTS, EMPLOYEES OR REPRESENTATIVES. BUYER TAKES THE PROPERTY UNDER THE EXPRESS UNDERSTANDING THAT THERE ARE NO EXPRESS OR IMPLIED WARRANTIES. BUYER EXPRESSLY WARRANTS AND REPRESENTS THAT NO PROMISE OR AGREEMENT WHICH IS NOT HEREIN EXPRESSED HAS BEEN MADE TO IT AND HEREBY DISCLAIMS ANY RELIANCE UPON ANY SUCH ALLEGED PROMISE OR AGREEMENT. THIS AGREEMENT CONSTITUTES THE ENTIRE AGREEMENT BETWEEN THE PARTIES. BUYER HAS AGREED TO DISCLAIM RELIANCE ON SELLER AND TO ACCEPT THE PROPERTY “AS-IS” WITH FULL AWARENESS THAT THE PROPERTY’S PRIOR USES OR OTHER MATTERS COULD AFFECT ITS CONDITION, VALUE, SUITABILITY OR FITNESS; AND BUYER CONFIRMS THAT BUYER IS HEREBY ASSUMING ALL RISK ASSOCIATED THEREWITH. BUYER UNDERSTANDS THAT THE DISCLAIMERS OF RELIANCE AND OTHER PROVISIONS CONTAINED HEREEIN COULD LIMIT ANY LEGAL RECOUENCE OR REMEDY BUYER OTHERWISE MIGHT HAVE. BUYER ACKNOWLEDGES THAT IT HAS SOUGHT AND HAS RELIED UPON THE ADVICE OF ITS OWN LEGAL COUNSEL CONCERNING THIS PROVISION. THE PROVISIONS OF THIS PARAGRAPH SHALL SURVIVE CLOSING AND SHALL NOT MERGE, AND ARE ALSO INCLUDED IN THE DEED WITHOUT WARRANTY.

10. Conditions to Closing. This Agreement is subject to the approval of the Board of Trustees of the San Antonio Water System on or before the Closing Date (hereinafter defined). In the event that this Agreement is not approved by the Board of Trustees of the San Antonio Water System on or before the Closing Date, notwithstanding any provision herein to the contrary, this Agreement shall automatically terminate and the Earnest Money and Independent Consideration shall be returned to Buyer, and neither party shall have any further rights or duties hereunder other than those rights or duties that expressly survive termination of this Agreement.

11. Closing. The conveyance of the Property to Buyer shall be closed ("Closing") at the office of the Title Company on the first business day to occur sixty (60) days after the Date of this Agreement (the “Closing Date”), or such earlier date as the parties may agree to. Seller may extend the Closing
Date by up to fifteen (15) days by written notice to Buyer in order to obtain approval of the Board of Trustees of the San Antonio Water System.

12. **Closing Documents.** The following documents shall be delivered at Closing:

   a. **Deed.** Seller and Buyer shall execute and acknowledge a deed without warranty conveying title to the Property to Buyer, substantially in the form of Exhibit B attached hereto (the "Deed").

   b. **Tax Certificates.** Seller shall deliver, at Seller’s expense, tax certificates showing there are no delinquent taxes levied or assessed against the Property as of Closing.

   c. **Settlement Statements.** Buyer and Seller shall execute customary settlement statements reflecting the Purchase Price and closing costs under this Agreement.

13. **Closing Costs and Prorations.** Closing costs and prorations shall be allocated as follows:

   a. **Taxes.** Seller is a tax-exempt entity. Buyer agrees to be responsible for all ad valorem real property taxes assessed against the Property for periods from and after the Closing Date. If this sale or Buyer’s use of the Property after Closing results in the assessment of additional taxes, penalties or interest, including without limitation “rollback taxes” (the “Assessments”) for periods prior to Closing, the Assessments will be the obligation of the Buyer. Buyer shall indemnify, defend and hold Seller harmless from and against any loss, cost, cause of action or claim related to the Assessments and all ad valorem real property taxes assessed against the Property for periods from and after the Closing Date. The provisions of this section shall survive Closing.

   b. **Title Insurance Premium.** Seller shall pay the cost of the basic Title Insurance premium and Buyer shall pay the cost of any deletions or endorsements Buyer elects to obtain.

   c. **Fees.** Any escrow fee charged by Title Company shall be divided equally between Seller and Buyer. Buyer shall pay the recording and/or filing fees for the Deed. Each party will pay its own attorney’s fees.

14. **Notices.** Any notice to be given hereunder shall be given by email or at the address shown below, and such notice shall be deemed to be received upon such emailing, placing in the mails, or personal delivery:

   **Seller:** San Antonio Water System  
   Attn: Bruce Haby, Manager, Corporate Real Estate  
   bruce.haby@saws.org

   **With a copy to:** San Antonio Water System  
   Attn: Mark E. Brewton, Corporate Counsel  
   mark.brewton@saws.org

   **Buyer:** Lorenzo Marquez Puente  
   5807 Sloan Drive  
   San Antonio, Texas 78228  
   cmarquez1998@yahoo.com
15. **Default.** In the event that Seller should fail to materially perform its obligations herein, except due to Buyer’s default, Buyer may, as its sole and exclusive remedy, terminate this Agreement, in which event, provided Buyer is not in default, the Earnest Money and Independent Consideration shall be forthwith returned to Buyer following Seller's receipt of notice of such termination whereupon neither party shall have any obligations hereunder other than those obligations in this Agreement that expressly survive termination. In no event shall any damages, rights or remedies be collectible, enforceable or available to Buyer other than as provided in this paragraph. In no event shall any trustee, officer, employee, agent or broker of Seller shall be liable, in any manner whatsoever, for any act, omission or obligation of Seller or its agents.

In the event Buyer should fail to close upon the purchase of the Property as required under this Agreement, Seller shall be entitled to terminate this Agreement and receive the Earnest Money whereupon neither party shall have any obligations hereunder other than those obligations in this Agreement that expressly survive termination, such sum being agreed upon as liquidated damages for the failure of Buyer to close as required by the terms and provisions of this Agreement and because of the difficulty, inconvenience and uncertainty of ascertaining actual damages. These provisions shall not be deemed to limit Seller’s remedies for indemnification or other Buyer obligations under this Agreement, and Seller retains all remedies at law or in equity in the event Buyer should fail to comply with the terms of this Agreement. In the event that Seller is entitled to receive the Earnest Money under this Section 14, and Buyer fails to cooperate with the release of the Earnest Money to Seller, Seller shall be entitled to recovery from Buyer of Seller’s attorneys’ fees in any suit to receive the Earnest Money.

16. **Real Estate Commission.** If and only if the sale from Seller to Buyer closes pursuant to this Agreement, Seller will pay at Closing a six percent (6%) brokerage fee (the “Commission”) to Cano & Company (“Seller’s Broker”) pursuant to a separate written agreement. If Buyer has engaged a broker (“Buyer’s Broker”) via written brokerage agreement, Seller’s Broker has agreed via such separate written agreement to share the Commission equally with Buyer’s Broker. To further memorialize such Commission splitting, Seller’s Broker and Buyer’s Broker shall execute the Broker’s Addendum attached hereto. The Buyer represents and warrants that no broker other than Buyer’s Broker as identified in the Broker’s Addendum represents Buyer and Buyer hereby agrees to defend, indemnify and hold harmless Seller for any claims for a brokerage fee or commission resulting from this transaction. The Buyer’s obligation to indemnify under this Section 15 shall survive Closing.

17. **Entire Agreement.** This Agreement contains all agreements between the parties regarding the Property, and no agreement not contained herein shall be recognized by the parties.

18. **Binding Effect.** This Agreement shall be binding upon and inure to the benefit of the parties and their respective heirs, legal representatives, successors and permitted assigns.

19. **Assignability.** Any assignments of this Agreement may not be made without the prior written consent of Seller, which consent may be given or withheld in Seller’s sole and absolute discretion.

20. **Time of Essence.** Time is of the essence of this Agreement.

21. **Legal Holidays.** Notwithstanding anything herein to the contrary, if the final date of any period, any date of performance or any deadline date which is set forth in this Agreement falls on a Saturday, Sunday, federal legal holiday, or other day in which Seller is closed for business then such date shall be extended to the next following date which is not a Saturday, Sunday, federal legal holiday or day in which Seller is closed for business.
22. **Counterparts.** This Agreement may be executed in one (1) or more counterparts, each of which when taken together shall constitute but one and the same Agreement. Pdf or electronically transmitted signatures shall constitute original signatures.

23. **Sale under Local Government Code Section 253.014.** Seller and Buyer acknowledge and agree that the transaction contemplated in this Agreement is being conducted under Texas Local Government Code Section 253.014.

24. **Disclosures.**

   a. **Notice Regarding Title.** THE TEXAS REAL ESTATE LICENSE ACT REQUIRES A REAL ESTATE AGENT TO ADVISE A BUYER THAT BUYER SHOULD HAVE AN ATTORNEY EXAMINE AN ABSTRACT OF TITLE TO THE PROPERTY BEING PURCHASED; OR A TITLE INSURANCE POLICY SHOULD BE OBTAINED. NOTICE TO THAT EFFECT IS HEREBY GIVEN TO BUYER.

   b. **Notice Regarding Possible Liability for Additional Taxes (Texas Property Code-Section 5.010).** If for the current ad valorem tax year the taxable value of the Property that is the subject of this Agreement is determined by a special appraisal method that allows for appraisal of the Property at less than its market value, the person to whom the Property is transferred may not be allowed to qualify the Property for that special appraisal in a subsequent tax year and the Property may then be appraised at its full market value. In addition, the transfer of the Property or a subsequent change in the use of the Property may result in the imposition of an additional tax plus interest as a penalty for the transfer or the change in the use of the Property. The taxable value of the Property and the applicable method of appraisal for the current tax year is public information and may be obtained from the tax appraisal district established for the county in which the Property is located.

   c. **Annexation Disclosures.** If the Property that is the subject of this Agreement is located outside the limits of a municipality, the Property may now or later be included in the extraterritorial jurisdiction of a municipality and may now or later be subject to annexation by the municipality. Each municipality maintains a map that depicts its boundaries and extraterritorial jurisdiction. To determine if the Property is located within a municipality’s extraterritorial jurisdiction or is likely to be located within a municipality’s extraterritorial jurisdiction, contact all municipalities located in the general proximity of the Property for further information.

   d. **Utility District.** Buyer agrees that if the Property is situated in any utility district, Buyer will sign and acknowledge at or prior to the Closing, a statutory notice as required under Section 50.301 of the Texas Water Code.

   e. **Notice of Water and Sewer Service.** The real property, described below, that you are about to purchase may be located in a certificated water or sewer service area, which is authorized by law to provide water or sewer service to the properties in the certificated area. There may be special costs or charges that you will be required to pay before you can receive water or sewer service. There may be a period required to construct lines or other facilities necessary to provide water or sewer service to the Property. You are advised to contact the applicable utility service provider to determine the cost that you will be required to pay and the period, if any, that is required to provide water or sewer service to the Property.
g. **Lead Paint Disclosure.** The Buyer agrees and acknowledges that the Property is not “residential real property” subject to any federally mandated lead paint disclosures.

25. **No Prohibited Persons/Entities.** Buyer represents and warrants to Seller that Buyer is not (i) an employee of the San Antonio Water System, (ii) the spouse or domestic partner of an employee of the San Antonio Water System or (iii) an entity in which an employee of the San Antonio System or spouse or domestic partner of an employee of the San Antonio Water System owns ten percent (10%) or more of the voting stock or fair market value of the entity. The violation of this provision or determination by Seller that the Buyer is a prohibited person/entity as set forth hereinabove shall render this Agreement voidable by the President/CEO or Board of Trustees of the San Antonio Water System.

(SIGNATURE PAGE FOLLOWS)
EXECUTED by Seller on _________________, 2020.

Seller:

CITY OF SAN ANTONIO, ACTING BY AND THROUGH THE SAN ANTONIO WATER SYSTEM

BY: _________________________________
   Nancy Belinsky
   Vice President and General Counsel

EXECUTED by Buyer on __________________, 2020.

Buyer:

______________________________
Lorenzo Marquez Puente
Lorenzo Marquez Puente

Exhibits:
Exhibit A: Property description
Exhibit B: Form of Deed
RECEIPT OF CONTRACT & EARNEST MONEY

Alamo Title Company ("Title Company") acknowledges receipt of $1,000.00 as Earnest Money under the foregoing Purchase Agreement. Title Company will promptly deposit the Earnest Money in an interest bearing account and hold the Earnest Money in escrow in accordance with the terms of the Purchase Agreement. The undersigned will promptly notify the parties if these instructions are for any reason not carried out.

Alamo Title Company

By: ____________________________

Date: ____________________________

GF#: ____________________________
BROKER’S ADDENDUM
TO PURCHASE AGREEMENT
19845 Clayton, Somerset

Cano & Company ("Seller’s Broker") will receive a 6% commission (the “Commission”) of the Purchase Price at Closing, if and only if Closing occurs, pursuant to a separate written agreement between Seller and Seller’s Broker.

If Seller’s Broker receives the Commission, Seller’s Broker shall, at Closing, split the Commission on a 50/50 basis with Ellianna Hernandez dba Homes with Elli ("Buyer’s Broker"), such that Buyer’s Broker shall receive from Seller’s Broker an amount equal to 3% of the Purchase Price.

Buyer’s Broker agrees to look solely to Seller’s Broker for a share of the Commission, and releases and agrees to hold harmless Seller for any claim for a brokerage commission or fee.

Cano & Company

By: ____________________________

Printed Name: Dennis Cano

Title: Broker

Ellianna Hernandez

Ellianna Hernandez
Broker License No. 665104
EXHIBIT A

All that certain tract of land containing 4.298 acres out of the Sam L. Wheeler original Survey No. 130, Abstract 792, County Block 4232, City of Somerset, Bexar County, Texas, and being more particularly described as follows:

Beginning at an iron pin set at the southwest corner of the Water Plant Tract, said point being S. 1° 08' 15" W., 169.45 feet from the SW corner of the 24.196 acre tract described by field notes in Volume 8249, Page 953 of the Deed Records of Bexar County, Texas;

Thence: along an existing fence, N. 1° 08' 15" W., 169.45 feet to an iron pin;

Thence: along an existing fence, N. 0° 46' 32" W., 299.94 feet to an iron pin set, for a corner of this tract;

Thence: along an existing fence, N. 89° 36' 12" E., 250.25 feet to an iron pin set, for a corner of this tract;

Thence: along an existing fence, S. 0° 48' 38" E., 299.86 feet to a fence corner, for a corner of this tract;

Thence: along an existing fence, N. 89° 02' 53" E., 127.63 feet to an iron pin set, for a corner of this tract;

Thence: S. 0° 31' E., 170.26 feet to an iron pin set, for the southeast corner of this tract;

Thence: along an existing fence and its extension, S. 89° 20' 38" W., 664.42 feet to the point of beginning and containing 4.298 acres of land.

DigiSign Verified: 75C76369-D30E-46DB-896D-28224E02E687
EXHIBIT B

Form of Deed

NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OF THE FOLLOWING INFORMATION FROM ANY INSTRUMENT THAT TRANSFERS AN INTEREST IN REAL PROPERTY BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.

STATE OF TEXAS

COUNTY OF BEXAR

DEED WITHOUT WARRANTY

Effective Date:

Grantor: City of San Antonio, acting by and through its San Antonio Water System

Grantor's Mailing Address: P.O. Box 2449, San Antonio, Texas 78298-2449

Grantee:

Grantee's Mailing Address:

Consideration: Ten Dollars ($10.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged.

Property (including any improvements thereon): The approximately 4.298 acre tract located in Bexar County, Texas and more particularly described in Exhibit A attached hereto together with all rights and appurtenances thereto.

Property Street Address: 19845 Clayton, Somerset, Bexar County, Texas 78069

Exceptions to Conveyance: All visible and apparent easements, all applicable zoning, platting and other governmental ordinances, laws, rules and regulations, and all matters of record relating to the Property as shown in the Official Public Records of Bexar County, Texas.

Grantor, for the Consideration, grants, sells, and conveys to Grantee the Property, together with all and singular the rights and appurtenances thereto in any way belonging, subject to Exceptions to Conveyance, to have and to hold it to Grantee and Grantee's successors and assigns forever, but without warranty of title or any other warranty of any kind or nature, and without limitation on such disclaimer of warranties, including but not limited to any warranties under Section 5.023 of the Texas Property Code.

By accepting this deed, Grantee acknowledges that the PROPERTY IS BEING CONVEYED IN ITS PRESENT "AS IS" CONDITION AND GRANTEE ACCEPTS THE PROPERTY IN ITS PRESENT CONDITION. GRANTEE ACKNOWLEDGES THAT IT IS NOT RELYING UPON THE ACCURACY OR COMPLETENESS OF ANY REPRESENTATION, BROCHURE, RENDERING,
PROMISE, STATEMENT OR OTHER ASSERTION OR INFORMATION WITH RESPECT TO THE PROPERTY MADE OR FURNISHED BY OR ON BEHALF OF, OR OTHERWISE ATTRIBUTED TO, GRANTOR OR ANY OF ITS AGENTS, EMPLOYEES OR REPRESENTATIVES, ANY AND ALL SUCH RELIANCE BEING HEREBY EXPRESSLY AND UNEQUIVOCALLY DISCLAIMED, BUT IS RELYING SOLELY AND EXCLUSIVELY UPON ITS OWN EXPERIENCE AND ITS INDEPENDENT JUDGMENT, EVALUATION AND EXAMINATION OF THE PROPERTY. GRANTEE FURTHER UNEQUIVOCALLY DISCLAIMS (I) THE EXISTENCE OF ANY DUTY TO DISCLOSE ON THE PART OF GRANTOR OR ANY OF ITS AGENTS, EMPLOYEES OR REPRESENTATIVES AND (II) ANY RELIANCE BY GRANTEE ON THE SILENCE OR ANY ALLEGED NONDISCLOSURE OF GRANTOR OR ANY OF ITS AGENTS, EMPLOYEES OR REPRESENTATIVES. GRANTEE TAKES THE PROPERTY UNDER THE EXPRESS UNDERSTANDING THAT THERE ARE NO EXPRESS OR IMPLIED WARRANTIES. GRANTEE EXPRESSLY WARRANTS AND REPRESENTS THAT NO PROMISE OR AGREEMENT WHICH IS NOT HEREIN EXPRESSED HAS BEEN MADE TO IT AND HEREBY DISCLAIMS ANY RELIANCE UPON ANY SUCH ALLEGED PROMISE OR AGREEMENT. GRANTEE HAS AGREED TO DISCLAIM RELIANCE ON GRANTOR AND TO ACCEPT THE PROPERTY “AS-IS” WITH FULL AWARENESS THAT THE PROPERTY’S PRIOR USES OR OTHER MATTERS COULD AFFECT ITS CONDITION, VALUE, SUITABILITY OR FITNESS; AND GRANTEE CONFIRMS THAT GRANTEE IS HEREBY ASSUMING ALL RISK ASSOCIATED THEREWITH. GRANTEE UNDERSTANDS THAT THE DISCLAIMERS OF RELIANCE AND OTHER PROVISIONS CONTAINED HEREIN COULD LIMIT ANY LEGAL RECOURSE OR REMEDY GRANTEE OTHERWISE MIGHT HAVE. GRANTEE ACKNOWLEDGES THAT IT HAS SOUGHT AND HAS RELIED UPON THE ADVICE OF ITS OWN LEGAL COUNSEL CONCERNING THIS PROVISION.

When the context requires, singular nouns and pronouns include the plural.

Signatures on following page
GRANTOR:

CITY OF SAN ANTONIO, ACTING BY AND THROUGH ITS SAN ANTONIO WATER SYSTEM:

By: ______________________________
Printed Name: Nancy Belinsky
Title: Vice President and General Counsel

STATE OF TEXAS §
COUNTY OF BEXAR §

This instrument was acknowledged before me on this ______ day of ________, 20__, by Nancy Belinsky, Vice President and General Counsel of the San Antonio Water System.

[Seal]

Notary Public, State of Texas
ACCEPTED BY GRANTEE:

[insert signature and notary blocks]

After recording, return to:
"Clayton Tank - Purchase Agreement" History

Document created by Patricia Gutierrez (patricia.gutierrez@saws.org)
2020-08-11 - 1:09:15 PM GMT - IP address: 99.98.39.164

Document emailed to Nancy Belinsky (nancy.belinsky@saws.org) for signature
2020-08-11 - 1:14:47 PM GMT

Email viewed by Nancy Belinsky (nancy.belinsky@saws.org)
2020-08-11 - 1:15:38 PM GMT - IP address: 173.175.119.41

Document e-signed by Nancy Belinsky (nancy.belinsky@saws.org)
Signature Date: 2020-08-11 - 1:29:17 PM GMT - Time Source: server - IP address: 173.175.119.41

Signed document emailed to Patricia Gutierrez (patricia.gutierrez@saws.org) and Nancy Belinsky (nancy.belinsky@saws.org)
2020-08-11 - 1:29:17 PM GMT
TO: San Antonio Water System Board of Trustees

FROM: Bruce A. Haby, Manager, Corporate Real Estate and Nancy Belinsky, Vice President, General Counsel

THROUGH: Robert R. Puente, President/Chief Executive Officer

SUBJECT: DECLARATION OF REAL PROPERTY IN THE CITY OF SAN ANTONIO, BEXAR COUNTY, TEXAS, AS SURPLUS TO THE NEEDS OF THE SAN ANTONIO WATER SYSTEM (THE “SYSTEM”)

Board Action Date: October 6, 2020

SUMMARY AND RECOMMENDATION:

The attached resolution declares an approximate 0.0679 acre tract (2,956 square feet) of land (the “Property”) being a portion of the 25.564 acre tract belonging to the City of San Antonio, for the use and benefit of the System, surplus to the needs of the System.

- City Ordinance No. 75686 requires all System assets be declared as surplus to the needs of the System prior to their disposition.

- The Property more particularly set out in Attachment II to the Resolution, owned by the City of San Antonio, for the use and benefit of the System, is surplus to the needs of the System.

- The System acquired fee simple interest in the 25.564 acre parent tract part of the Aquifer Storage and Recover (ASR) pipeline project.

- The Texas Department of Transportation (TXDOT) has requested the System sell the Property to expand the IH-10 right of way to make way for planned improvements to the roadway.

- System staff has determined that the Property is no longer necessary for the efficient operation of the System, but will reserve all rights necessary for its infrastructure located on the Property.

- TXDOT will obtain an appraisal of the Property, and Staff will negotiate a purchase price based on such appraisal, and any required adjustments. Any transaction above $50,000.00 will be brought back to the Board for approval.

Staff recommends that the Board approve this Resolution.
FINANCIAL IMPACT:

All funds received for the sale of the Property will be deposited in the Renewal and Replacement Fund.

SUPPLEMENTARY COMMENTS:

The Property is no longer necessary for the efficient operation of the System, such Property being more particularly described in Attachment II to the attached Resolution.
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM (THE “SYSTEM”) BOARD OF TRUSTEES DECLARING A 0.0679 ACRE TRACT OF LAND LOCATED ALONG THE SOUTHERN RIGHT OF WAY OF IH-10 EAST OF THE INTERSECTION OF FOSTER ROAD IN THE NORTHEAST QUADRANT OF BEXAR COUNTY, TEXAS (THE “PROPERTY”), AS SURPLUS TO THE NEEDS OF THE SYSTEM AS REQUIRED BY CITY ORDINANCE NO. 75686; AUTHORIZING THE PRESIDENT/CHIEF EXECUTIVE OFFICER OR HIS DULY APPOINTED DESIGNEE TO SELL THE PROPERTY TO THE STATE OF TEXAS FOR THE USE AND BENEFIT OF THE TEXAS DEPARTMENT OF TRANSPORTATION PURSUANT TO THE TEXAS LOCAL GOVERNMENT CODE AND APPLICABLE CITY OF SAN ANTONIO AND SYSTEM POLICIES AND PROCEDURES; FINDING THIS RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, City Ordinance No. 75686 requires all System assets be declared as surplus to the needs of the System prior to their disposition; and

WHEREAS, the Texas Department of Transportation (“TXDOT”) has made a request to purchase the Property for the expansion of IH-10; and

WHEREAS, staff has determined that this Property is no longer necessary for the efficient operation of the System, but will reserve all rights necessary for its existing infrastructure; and

WHEREAS, the San Antonio Water System Board of Trustees desires to (i) declare the Property as herein described surplus to the needs of the System as required by City Ordinance No. 75686, (ii) recommend to the Planning Commission and City Council to consent to the declaration as required by City Ordinance No. 75686, and (iii) authorize the President/Chief Executive Officer or his duly appointed designee to negotiate and execute an agreement to sell the Property to the State of Texas for benefit and use of TXDOT pursuant to the Texas Government Code and all applicable System and City of San Antonio policies and procedures, and execute all necessary documents in connection with such sale; now, therefore:

BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:
1. That this Property is hereby declared surplus to the needs of the System. Such real property is more thoroughly described in Attachment II, attached hereto and incorporated herein for all purposes.

2. That a recommendation is hereby made to the Planning Commission and City Council to consent to the declaration as required by City Ordinance No. 75686.

3. That the President/Chief Executive Officer or his duly appointed designee is hereby authorized to negotiate and execute an agreement to sell the Property to the State of Texas for the benefit and use of TXDOT pursuant to the Texas Local Government Code and all applicable System and City of San Antonio policies and procedures, and execute all necessary documents in connection with such sale.

4. It is officially found, determined and declared that the meeting at which this resolution is adopted was open to the public, and that public notice of the time, place and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

5. If any part, section, paragraph, sentence, phrase or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid or ineffective.

6. This resolution becomes effective immediately upon its passage.

   PASSED AND APPROVED this 6th day of October, 2020.

   Jelynne LeBlanc Burley, Chairwoman

ATTEST:

______________________________
Secretary

Attachments:
I. Area Map
II. Legal Description of Property
Subject Property

IH 10 E ACCESS RD

PALMYRA PARK DR

SURPLUS PROPERTY
0.0679 ACRE TRACT

LEGEND
- Subject Property
- Edwards Aquifer Recharge Zone
Property Description for Parcel 54A

Being a 0.0679 of an acre (2,956 square feet) tract of land situated in the C. Texada Survey 133, Abstract Number 743, Bexar County, Texas, and being out of and a part of a called 25.564 acre tract of land described in deed to San Antonio Water System executed June 2, 2005 as recorded in Volume 11434, Page 2054 of the Official Public Records of Bexar County, Texas, being more particularly described by metes and bounds as follows:

COMMENCING at a 1/2 inch iron rod with “KHA” cap found in the east line of said 25.564 acre tract for the southwest corner of ROSILLO CREEK COMMERCIAL UNIT 1 SUBDIVISION (Subdivision) as recorded on plat in Volume 9681, Page 163 of the Deed and Plat Records of Bexar County, Texas and the northwest corner of a remainder of a called 701.078 acre tract of land described in the deed to Rosillo Creek Development, Ltd. dated March 1, 2003 as recorded in Volume 9955, Page 2109 of the Official Public Records of Real Property of Bexar County, Texas;

THENCE, with the common line of said 25.564 acre tract and said Subdivision, North 20°12'49” West (North 20°12'51” West) a distance of 577.74 feet to a 1/2 inch iron rod with aluminum TxDOT ROW cap set ** in the proposed southerly right-of-way line of Interstate Highway 10 East (IH10E) (a variable width right-of-way) for the POINT OF BEGINNING (N:13,711,382.71, E:2,170,423.31) at Station 294+92.39, 179.07 feet right and being the southeast corner of the herein described tract of land;

1) THENCE, departing said common line with said proposed southerly right-of-way line of IH10E, over and across said 25.564 acre tract, South 69°46'55” West a distance of 150.00 feet to a 1/2 inch iron rod with aluminum TxDOT ROW cap set ** in the west line of said 25.564 acre tract and a east line of said 701.078 acre remainder tract for the southwest corner of the herein described tract of land;

2) THENCE, departing said proposed southerly right-of-way line of IH10E with the common line of said 25.564 acre tract and said 701.078 acre remainder tract, North 20°12'49” West (North 20°12'51” West) a distance of 19.71 feet to the northeast corner of said 701.078 remainder acre tract in the existing southerly right-of-way line of IH10E (a variable width right-of-way) as recorded in Volume 3931, Page 335 of the Deed Records of Bexar County, Texas for the northwest corner of said 25.564 acre tract and the herein described tract of land, from which a 1/2 inch iron rod with “OVERBY DESCAMPS” cap found bears South 20°12'49” East a distance of 0.90 feet;
County: Bexar
Highway: IH410
Project Limits: IH-10E
RCSJ No.: 0521-06-140

3) THENCE, departing said common line with said existing southerly right-of-way line of IH10E, North 69°47'02" East (North 69°47'09" East) a distance of 150.00 feet to a 1/2 inch iron rod with “OVERBY DESCHAMPS” cap found for the northwest corner of said Subdivision and the northeast corner of said 25.564 acre tract and the herein described tract of land;

4) THENCE, departing said existing southerly right-of-way line of IH10E with the common line of said 25.564 acre tract and said Subdivision, South 20°12'49" East (South 20°12'51" East) a distance of 19.70 feet to the POINT OF BEGINNING and containing 0.0679 acres (2,956 square feet) of land.

NOTE: All bearings shown herein are referenced to the Texas Coordinate System of 1983, South Central Zone (NAD83, 2011 Adjustment) based on TxDOT VRS network observations. All coordinates and distances are in U.S. Survey Feet displayed in surface values and may be converted to grid by applying the TxDOT combined scale factor for Bexar County of 1.00017. The project was surveyed on-the-ground between December 2017 and July 2019.

This property description was prepared in conjunction with a parcel plat of even date.

This survey was performed utilizing that certain title report prepared by First American Title Insurance Company, G.F. No. NCS-873242-68-SNANT (Issue Date: January 2, 2018, Effective Date: November 2, 2017) pursuant to Section 663.16(b) of the Professional Land Surveying Act (revised August, 2013) and reflects only those easements and encumbrances of record mentioned therein. Jones|Carter performed no additional research of the public records.

** The monument described and set may be replaced with a TxDOT Type II right-of-way marker upon completion of the construction project under the supervision of a Registered Professional Land Surveyor, either employed or retained by TxDOT.

Access is permitted to the highway facility from the remainder of the abutting property.
County: Bexar
Highway: IH410
Project Limits: IH-10E
RCSJ No.: 0521-06-140

I, Jibrael Ahmad, a Registered Professional Land Surveyor, do hereby certify that the property description hereon and the accompanying parcel plat of even date represent an actual on-the-ground survey made by me or under my supervision.

Jibrael K. Ahmad
Registered Professional Land Surveyor
Texas Registration Number 6183

Prepared by: Jones | Carter
4350 Lockhill-Selma Road, Suite 100
San Antonio, TX 78249
210.494.5511
TBPLS Firm Registration Number 10046105
TO:     San Antonio Water System Board of Trustees

FROM:  Tracey B. Lehmann, P.E., Director, Development, and Andrea L.H. Beymer, P.E., Vice President, Engineering and Construction

THROUGH:  Robert R. Puente, President/Chief Executive Officer

SUBJECT:  AWARD OF PROFESSIONAL SERVICES CONTRACT IN CONNECTION WITH THE EASTERN AND FAR WESTERN BASINS WASTEWATER COLLECTION SYSTEM MODEL UPDATE AND CALIBRATION PROJECT

Board Action Date: October 6, 2020

SUMMARY AND RECOMMENDATION:

The attached resolution awards a professional services contract to HDR Engineering, Inc., a local, non-SMWVB firm, and authorizes funds in an amount not to exceed $837,339.20 in connection with the Eastern and Far Western Basins Wastewater Collection System Model Update and Calibration Project (the “Project”).

- The San Antonio Water System (the “System”) operates and maintains a wastewater collection and transmission system (WCTS) comprised of more than 5,500 miles of pipeline serving 1.8 million people. It collects and conveys wastewater flows to water recycling centers capable of treating 217 million gallons per day (mgd). The expansive WCTS lies within five major basins identified as the far western, western, central, eastern and southern basins.

- On July 23, 2013, the System entered into a Consent Decree (CD) with the United States Environmental Protection Agency, the United States Department of Justice, and the State of Texas which outlines activities to be undertaken to reduce sanitary sewer overflows (SSO). In accordance with the CD, the System through its Capacity Management Program assesses the WCTS capacity and related remedial measures to manage capacity and reduce SSOs. To this end, the System maintains and operates hydraulic models of the WCTS for each of the five basins.

- This contract provides professional engineering services to update and calibrate hydraulic models of WCTS for two of the wastewater basins, the eastern and far western basins.

- The scope of work for the project will include an update of model geometry and population matching current assets and conditions. It will also include dry and wet weather calibrations based on wastewater flow and rainfall measurements. An assessment of system performance and capacity remedial measures are also a part of this project.
HDR Engineering, LLC will provide professional services for this project for the negotiated not to exceed amount of $837,339.20.

Staff recommends that the Board approve this resolution.

**FINANCIAL IMPACT:**

The System Fund will finance this expenditure included in the 2020 and 2021 O&M Funds. $237,339.20 will be available in 2020 and $600,000.00 will be available in 2021. The total amount is $837,339.20.

**SUPPLEMENTARY COMMENTS:**

This contract will be valid for one year and two months from the date of execution. Three firms responded to the Request for Qualifications. HDR Engineering, Inc. was selected through the System’s Architect and Engineer Selection Process as a qualified consultant. The submitting firms are as follows:

<table>
<thead>
<tr>
<th>Name of Firm</th>
<th>Local/SMWVB</th>
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</thead>
<tbody>
<tr>
<td>Freese and Nichols, Inc.</td>
<td>Local/Non-SMWVB</td>
</tr>
<tr>
<td>HDR Engineering, Inc.*</td>
<td>Local/Non-SMWVB</td>
</tr>
<tr>
<td>Kirst Kosmoski, Inc.</td>
<td>Non-Local/Non-SMWVB</td>
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</table>

*Selected Firm

HDR Engineering, Inc. proposes to use the following sub-consultants for services on this contract:

<table>
<thead>
<tr>
<th>Name of Firm</th>
<th>Percent of Fee</th>
<th>Local/SMWVB</th>
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<tr>
<td>JQ Infrastructure, LLC</td>
<td>25.00%</td>
<td>Local/MBE-Asian</td>
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<tr>
<td>Mendez Engineering, PLLC</td>
<td>4.00%</td>
<td>Local/MBE-Hispanic/VBE</td>
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<tr>
<td>Moreno Cardenas, Inc.</td>
<td>3.00%</td>
<td>Local/MBE-Hispanic</td>
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<tr>
<td>V&amp;A Consulting Engineers, Inc.</td>
<td>8.00%</td>
<td>Local/MBE-Hispanic</td>
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Additionally, the overall SMWB analysis is shown in the following table:

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<th>Eastern and Far Western Basins Wastewater Collection System Model Update and Calibration Project</th>
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<tr>
<td>HDR Engineering, Inc.</td>
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<tr>
<td>SMWB Analysis – Board Award</td>
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<tr>
<td>SBE</td>
</tr>
<tr>
<td>MBE – African American</td>
</tr>
<tr>
<td>MBE – Asian</td>
</tr>
<tr>
<td>MBE – Hispanic</td>
</tr>
<tr>
<td>MBE – Other</td>
</tr>
<tr>
<td>WBE – Minority</td>
</tr>
<tr>
<td>WBE – Non–Minority</td>
</tr>
<tr>
<td>SMWB Total</td>
</tr>
</tbody>
</table>

Attachments:
1. Project Area Map
San Antonio Water System
Project Area Map
Attachment I

Legend
- Edwards Recharge Zones
- Eastern Basin
- Far Western Basin

Eastern and Far Western Basins
Wastewater Collection System
Model Update and Calibration Project
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES AWARDING A PROFESSIONAL SERVICES CONTRACT TO HDR ENGINEERING, INC. IN AN AMOUNT NOT TO EXCEED $837,339.20 IN CONNECTION WITH THE EASTERN AND FAR WESTERN BASINS WASTEWATER COLLECTION SYSTEM MODEL UPDATE AND CALIBRATION PROJECT; APPROVING THE EXPENDITURE OF FUNDS AND MAKING AVAILABLE AN AMOUNT NOT TO EXCEED $837,339.20 FROM THE SYSTEM FUND FOR PROJECT ENGINEERING WORK; AUTHORIZING THE PRESIDENT/CHIEF EXECUTIVE OFFICER OR HIS DULY APPOINTED DESIGNEE TO EXECUTE A PROFESSIONAL SERVICES CONTRACT WITH HDR ENGINEERING, INC., AND TO PAY HDR ENGINEERING, INC. AN AMOUNT NOT TO EXCEED $837,339.20 FOR THE PROJECT ENGINEERING WORK; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE, AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, the San Antonio Water System (the “System”) requires professional services for the Eastern and Far Western Basins Wastewater Collection System Model Update and Calibration Project (the “Project”); and

WHEREAS, the System has solicited proposals for the required project engineering work in connection with the Project; and

WHEREAS, the System’s Architect and Engineer Selection Committee has selected HDR Engineering, Inc. to provide the required project engineering work in connection with the Project; and

WHEREAS, HDR Engineering, Inc., a local, non-SMWVB firm, is deemed to be the most highly qualified provider of these project engineering services on the basis of demonstrated competence and qualifications and for a fair and reasonable price; and

WHEREAS, HDR Engineering, Inc. has submitted a proposal in an amount not to exceed $837,339.20 to provide the required project engineering work for the Project; and

WHEREAS, System funds in an amount not to exceed $837,339.20 are required for the project engineering work; and

WHEREAS, the required amount not to exceed $837,339.20 is available from the
WHEREAS, the San Antonio Water System’s Board of Trustees desires (i) to award a professional services contract to HDR Engineering, Inc. in an amount not to exceed $837,339.20 in connection with the Eastern and Far Western Basins Wastewater Collection System Model Update and Calibration Project, (ii) to approve the expenditure of funds, and make available an amount not to exceed $837,339.20 from the System Fund for the project engineering work, and (iii) to authorize the President/Chief Executive Officer or his duly appointed designee to execute a professional services contract with HDR Engineering, Inc., and to pay HDR Engineering, Inc. an amount not to exceed $837,339.20 in connection with the project work; now, therefore:

BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That a professional services contract in an amount not to exceed $837,339.20 is hereby awarded to HDR Engineering, Inc. in connection with the Eastern and Far Western Basins Wastewater Collection System Model Update and Calibration Project.

2. That the expenditure of funds in an amount not to exceed $837,339.20 for the project engineering work is hereby approved and made available from the System Fund, and that subsequent expenditures are pursuant to and in contingent upon Board approval of the subsequent year’s budget with a line item for such expenditures.

3. That the President/Chief Executive Officer or his duly appointed designee is hereby authorized to execute a professional services contract with HDR Engineering, Inc., and to pay HDR Engineering, Inc. an amount not to exceed $837,339.20 in connection with the Eastern and Far Western Basins Wastewater Collection System Model Update and Calibration Project.

4. It is officially found, determined and declared that the meeting at which this resolution is adopted was open to the public, and that public notice of the time, place and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

5. If any part, section, paragraph, sentence, phrase or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative, or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid or ineffective.

6. This resolution becomes effective immediately upon its passage.
PASSED AND APPROVED this 6th day of October, 2020.

__________________________
Jelynne LeBlanc Burley, Chairwoman

ATTEST:

__________________________
Secretary
TO: San Antonio Water System Board of Trustees

FROM: Scott R. Halty, Director, Resource Protection and Compliance, and Donovan S. Burton, Vice President, Water Resources and Governmental Relations

THROUGH: Robert R. Puente, President/Chief Executive Officer

SUBJECT: APPROVAL OF A JOINT FUNDING AGREEMENT WITH THE UNITED STATES GEOLOGICAL SURVEY

Board Action Date: October 6, 2020

SUMMARY AND RECOMMENDATION:

The attached resolution approves the 2021 Joint Funding Agreement between the San Antonio Water System (SAWS) and the United States Geological Survey (USGS) for monitoring and studying groundwater water quality, surface/recharge water quality, and hydrogeologic studies of the Edwards Aquifer and SAWS water resource projects for the period of January 1, 2021 to December 31, 2021. It also authorizes the President/Chief Executive Officer or his duly appointed designee to execute the agreement for an amount not to exceed $495,487.00.

- Since 1992, SAWS has worked with USGS on collaborative research efforts to analyze methods of optimizing the Edwards Aquifer and protecting water quality.

- The 2021 Joint Funding Agreement is structured to cover the 12-month period covering January 1, 2021 to December 31, 2021.

- The proposed 2021 Work Program addresses several Water Quality activities that include continuation of analysis of the geology of the Edwards Aquifer, and an assessment of the quality of stormwater runoff (Attachment 1).

- The Recharge Zone Water Quality study collects baseline data on the quality of stormwater runoff recharging the aquifer in the Edwards Aquifer Recharge Zone. This is a monitoring program to collect baseline data at numerous surface water and water well sites which may be located on the Edwards Aquifer Recharge Zone, the Catchment Area, Transition Zone, and/or the Artesian Zone.

- The Continuous Water Quality Monitor study assesses stream quality below the entire San Antonio urban area for pH, temperature, dissolved oxygen and conductivity on a continuous, real-time basis at the San Antonio River near Elmendorf and is also part of the State Real-Time Program.

Staff recommends that the Board approve this resolution.
FINANCIAL IMPACT:

The item/services will be paid from system funds budgeted in the 2021 budget, pursuant to and contingent on the Board’s approval of the 2021 budget with a line item for such expenditures (Company: 1000, Accounting Unit: 5004700, Account: 511312, Total 2021 amount: $495,487.00).

<table>
<thead>
<tr>
<th>YEAR</th>
<th>SAWS O&amp;M BUDGET</th>
<th>USGS FUNDS</th>
<th>TOTALS</th>
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</thead>
<tbody>
<tr>
<td>2021</td>
<td>$495,487.00</td>
<td>$79,623.00</td>
<td>$575,110.00</td>
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</tbody>
</table>

SUPPLEMENTARY COMMENTS:

Work with the USGS has resulted in SAWS' ability to directly access USGS data. SAWS staff continues to participate in field sampling and educational assessments. Data from these USGS cooperative studies are vital to the development of Edwards Aquifer protective measures and efficient management of the Edwards Aquifer. Additionally, several of these studies are multi-year studies and this agreement is only for funding this fiscal year as stated in the agreement.

Attachment:
1. SAWS/USGS Studies – Cost Breakdown
San Antonio Water System  
21SJJFATX038000  
Resource Protection and Compliance Department

1 Edwards Aquifer Recharge Zone Water Quality Monitoring Program  
Brief Description of the Study:  
Implement a monitoring network for the Edwards aquifer that will provide long-term monitoring of the aquifer in order to address two primary objectives:

1. Characterize the sources of anthropogenic compounds (such as nutrients and pesticides from rural versus urban sources)

2. Characterization of the physical movement and the chemical transformation of contaminants within the aquifer system

Relation to SAWS Program:  
1. Determine if contaminants observed in the aquifer are from local, rural, or naturally occurring sources

2. Provide data so that appropriate remedial action can be applied to minimize aquifer contamination

3. Provide baseline measurements for future models.

<table>
<thead>
<tr>
<th></th>
<th>SAWS</th>
<th>USGS</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUBTOTAL</td>
<td>$451,108</td>
<td>$74,048</td>
<td>$525,156</td>
</tr>
</tbody>
</table>

2 Continuous Streamflow and Water-Quality Data Collection  
Brief Description of the Study:  
This effort monitors streamflow and stream water quality below the San Antonio urban area. Water quality parameters include: pH, temperature, dissolved oxygen, conductivity, and turbidity. Data are provided at least every four hours at the San Antonio River near Elmendorf  
Work Product:  
Available checked and reviewed data will be provided to SAWS during trimester progress meetings.

Monitoring:  
08181800: San Antonio River near Elmendorf, TX
5-parameter QW Monitor Station

Relation to SAWS Program:  
Provides basic data that can be used to monitor streamflow and stream water quality below the San Antonio urban area. These data may be used to aid the management of SAWS Water Recycling Centers (Sewage treatment facilities) as well as provide basic data to the State's real-time streamflow and water quality network.

<table>
<thead>
<tr>
<th></th>
<th>SAWS</th>
<th>USGS</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUBTOTAL</td>
<td>$44,379</td>
<td>$5,575</td>
<td>$49,954</td>
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## PROJECT SUMMARY

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<tr>
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<th>Project/Task Title</th>
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<th>USGS</th>
<th>TOTAL</th>
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<td>$525,156</td>
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<td>2</td>
<td>Continuous Streamflow and Water Quality Data Collection (00370)</td>
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<td>$5,575</td>
<td>$49,954</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL</strong></td>
<td><strong>$495,487</strong></td>
<td><strong>$79,623</strong></td>
<td><strong>$575,110</strong></td>
</tr>
</tbody>
</table>
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES APPROVING A JOINT FUNDING AGREEMENT BETWEEN THE SAN ANTONIO WATER SYSTEM AND THE UNITED STATES GEOLOGICAL SURVEY FOR MONITORING AND STUDYING GROUNDWATER WATER QUALITY, SURFACE/RECHARGE WATER QUALITY, AND HYDROGEOLOGIC STUDIES OF THE EDWARDS AQUIFER AND SAN ANTONIO WATER SYSTEM WATER RESOURCE PROJECTS FOR THE PERIOD OF JANUARY 1, 2021 TO DECEMBER 31, 2021; AUTHORIZING THE EXPENDITURE OF FUNDS IN AN AMOUNT NOT TO EXCEED $495,487.00 FOR FISCAL YEAR 2021 FROM THE SYSTEM FUND TO PAY FOR OBLIGATIONS INCURRED PURSUANT TO THE JOINT FUNDING AGREEMENT; AUTHORIZING THE PRESIDENT/CHIEF EXECUTIVE OFFICER OR HIS DULY APPOINTED DESIGNEE TO EXECUTE THE JOINT FUNDING AGREEMENT WITH THE UNITED STATES GEOLOGICAL SURVEY, AND TO PAY THE UNITED STATES GEOLOGICAL SURVEY AN AMOUNT NOT TO EXCEED $495,487.00 PURSUANT TO THE JOINT FUNDING AGREEMENT; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, the San Antonio Water System (the “System”) and the United States Geological Survey (the “USGS”) have entered into cooperative research and monitoring programs for over a decade; and

WHEREAS, the Joint Funding Agreement between the System and the USGS developed for the period covering January 1, 2021 to December 31, 2021, includes data collection, monitoring, and research on the Edwards Aquifer Recharge, Transition and Contributing Zones; and

WHEREAS, the Joint Funding Agreement also addresses the quality of the streams and rivers within the System’s service areas; and

WHEREAS, this Joint Funding Agreement is in the best interests of the System customers and all the citizens of San Antonio; and

WHEREAS, the San Antonio Water System Board of Trustees desires (i) to
approve a Joint Funding Agreement between the System and the USGS for the period of January 1, 2021 to December 31, 2021, (ii) to authorize the expenditure of funds in an amount not to exceed $495,487.00 for Fiscal Year 2021 from the System Fund to pay for obligations incurred pursuant to the Joint Funding Agreement, pursuant to and contingent upon the Board’s approval of the Fiscal Year 2021 budget with a line item for such expenditures, and (iii) to authorize the President/Chief Executive Officer or his duly appointed designee to execute the Joint Funding Agreement with the USGS, and to pay the USGS an amount not to exceed $495,487.00 pursuant to the Joint Funding Agreement; now, therefore:

BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That the Joint Funding Agreement between the System and the USGS for the period of January 1, 2021 to December 31, 2021, in an amount not to exceed $495,487.00 in substantially the form attached hereto as Attachment I is hereby approved.

2. That funds in an amount not to exceed $495,487.00 to pay for obligations incurred under the Joint Funding Agreement for Fiscal Year 2021 are available pursuant to the Board’s approval of the Fiscal Year 2021 budget and expenditure is hereby authorized from the System Fund.

3. That the President/Chief Executive Officer or his duly appointed designee is hereby authorized to execute the Joint Funding Agreement between the System and the USGS, and to pay the USGS an amount not to exceed $495,487.00 pursuant to the Joint Funding Agreement.

4. It is officially found, determined and declared that the meeting at which this resolution is adopted was open to the public, and the public notice of the time, place, and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

5. If any part, section, paragraph, sentence, phrase, or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid, or ineffective.
6. This resolution becomes effective immediately upon its passage.

PASSED AND APPROVED this 6\textsuperscript{th} day of October, 2020.

\begin{center}
Jelynne LeBlanc Burley, Chairwoman
\end{center}

ATTEST:

________________________
Secretary

Attachment:
1. SAWS/USGS Joint Funding Agreement
August 5, 2020

Mr. Kirk Nixon
Manager
San Antonio Water System
2800 US Hwy 281N
San Antonio, TX 78212

Dear Mr. Nixon:

Enclosed is one signed scan of our standard joint-funding agreement for the project(s) Oklahoma - Texas Water Science Center Water Resources Investigations, during the period January 1, 2021 through December 31, 2021 in the amount of $495,487 from your agency. U.S. Geological Survey contributions for this agreement are $79,623 for a combined total of $575,110. Please sign and return one fully-executed original to GS.WOT.OTAdmin@usgs.gov.

Federal law requires that we have a signed agreement before we start or continue work. Please return the signed agreement by January 1, 2021. If, for any reason, the agreement cannot be signed and returned by the date shown above, please contact Douglas Schnoebelen by phone number (210) 691-9262 or email dschnoebelen@usgs.gov to make alternative arrangements.

This is a fixed cost agreement to be billed quarterly via Down Payment Request (automated Form DI-1040). Please allow 30-days from the end of the billing period for issuance of the bill. If you experience any problems with your invoice(s), please contact Kandis Becher at phone number (682) 316-5051 or email at kxbecher@usgs.gov.

The results of all work performed under this agreement will be available for publication by the U.S. Geological Survey. We look forward to continuing this and future cooperative efforts in these mutually beneficial water resources studies.

Sincerely,

Timothy H. Raines
Timothy H. Raines
Director

Enclosure
21SIJFATX038000 (1)
THIS AGREEMENT is entered into as of the January 1, 2021, by the U.S. GEOLOGICAL SURVEY, Texas Water Science Center, UNITED STATES DEPARTMENT OF THE INTERIOR, party of the first part, and the San Antonio Water System party of the second part.

1. The parties hereto agree that subject to the availability of appropriations and in accordance with their respective authorities there shall be maintained in cooperation Water Resource Investigations (per attachment), herein called the program. The USGS legal authority is 43 USC 36C; 43 USC 50, and 43 USC 50b.

2. The following amounts shall be contributed to cover all of the cost of the necessary field and analytical work directly related to this program. 2(b) include In-Kind-Services in the amount of $0.00

(a) $79,623 by the party of the first part during the period January 1, 2021 to December 31, 2021

(b) $495,487 by the party of the second part during the period January 1, 2021 to December 31, 2021

(c) Contributions are provided by the party of the first part through other USGS regional or national programs, in the amount of: $0

Description of the USGS regional/national program:

(d) Additional or reduced amounts by each party during the above period or succeeding periods as may be determined by mutual agreement and set forth in an exchange of letters between the parties.

(e) The performance period may be changed by mutual agreement and set forth in an exchange of letters between the parties.

3. The costs of this program may be paid by either party in conformity with the laws and regulations respectively governing each party.

4. The field and analytical work pertaining to this program shall be under the direction of or subject to periodic review by an authorized representative of the party of the first part.

5. The areas to be included in the program shall be determined by mutual agreement between the parties hereto or their authorized representatives. The methods employed in the field and office shall be those adopted by the party of the first part to insure the required standards of accuracy subject to modification by mutual agreement.

6. During the course of this program, all field and analytical work of either party pertaining to this program shall be open to the inspection of the other party, and if the work is not being carried on in a mutually satisfactory manner, either party may terminate this agreement upon 60 days written notice to the other party.

7. The original records resulting from this program will be deposited in the office of origin of those records. Upon request, copies of the original records will be provided to the office of the other party.

8. The maps, records or reports resulting from this program shall be made available to the public as promptly as possible. The maps, records or reports normally will be published by the party of the first part. However, the party of the second part reserves the right to publish the results of this program, and if already published by the party of the first part shall, upon request, be furnished by the party of the first part, at cost, impressions suitable for purposes of reproduction similar to that for which the original copy was prepared. The maps, records or reports published by either party shall contain a statement of the cooperative relations between the parties. The Parties acknowledge that scientific information and data developed as a result of the Scope of Work (SOW) are subject to applicable USGS review, approval, and release requirements, which are available on the USGS Fundamental Science Practices website (https://www.usgs.gov/about/organization/science-support/science-quality-and-integrity/fundamental-science-practices).
9. Billing for this agreement will be rendered quarterly. Invoices not paid within 60 days from the billing date will bear interest, penalties, and administrative cost at the annual rate pursuant the Debt Collection Act of 1982, (codified at 31 U.S.C. § 3717) established by the U.S. Treasury.

USGS Technical Point of Contact

Name: Douglas Schnoebelen
Branch Chief - South Texas
Address: 5563 DeZavala Road Suite 290
San Antonio, TX 78249
Telephone: (210) 691-9262
Fax: (210) 691-9270
Email: dschnoebelen@usgs.gov

Customer Technical Point of Contact

Name: Kirk Nixon
Manager
Address: 2800 US Hwy 281N
San Antonio, TX 78212
Telephone: (210) 233-3523
Fax: (210) 233-4778
Email: knixon@saws.org

USGS Billing Point of Contact

Name: Kandis Becher
Budget Analyst
Address: 301 W. Felix Street Bldg 24
Fort Worth, TX 76116
Telephone: (817) 316-5051
Fax: (817) 316-5050
Email: kbecher@usgs.gov

Customer Billing Point of Contact

Name: Deandra DePozo
Senior Administrator
Address: 2800 US Highway 281 North TWR2 4th Floor
San Antonio, Texas 78212
Telephone: (210) 233-3533
Fax: (210) 233-5331
Email: deandra.depozo@saws.org

U.S. Geological Survey
United States Department of Interior

Signature

By ________________ Date: __________
Name: Timothy H. Raines
Title: Director

San Antonio Water System

Signatures

By ________________ Date: __________
Name: 
Title: 

By ________________ Date: __________
Name: 
Title: 

By ________________ Date: __________
Name: 
Title:
TO: San Antonio Water System Board of Trustees

FROM: Darren Thompson, Director, Water Resources, and Donovan Burton, Vice President, Water Resources and Governmental Relations

THROUGH: Robert R. Puente, President/Chief Executive Officer

SUBJECT: APPROVAL OF FIRST AMENDMENT TO THE WHOLESALE WATER SERVICE CONTRACT BETWEEN THE OAKS WATER SUPPLY CORPORATION AND SAN ANTONIO WATER SYSTEM

Board Action Date: October 6, 2020

SUMMARY AND RECOMMENDATION:

The resolution approves and authorizes the execution of the First Amendment to the Wholesale Water Service Contract between The Oaks Water Supply Corporation (“The Oaks”) and the San Antonio Water System (the “System”).

- The Oaks is the sole water provider for the Country Estates and Scenic Oaks Subdivisions with their primary supply of water coming from the Trinity Aquifer.

- Due to increased demands on the Trinity Aquifer and the severity of recent droughts, The Oaks began experiencing declining levels in their Trinity Aquifer wells and could no longer fully meet their water demands.


- The Oaks is billed at the Bexar County wholesale rate schedule in accordance with City of San Antonio Ordinance # 2015-06-18-0575.

- The Oaks has requested to adjust up the annual commitment for 2020 to 60 acre-feets of water per year subject to the terms of the Contract, to be taken or not on an annual basis.
  - The Oaks is requesting the increase due to low summer rainfall and lower than expected Trinity Aquifer levels reducing their ability to meet demand.

- As a result of the increase in the annual commitment, the System will sell an additional 15 acre-feet of wholesale water.

Staff recommends that the Board approve this resolution.
FINANCIAL IMPACT:

The Oaks agrees to a revised annual commitment of 60 acre-feet of water this year. Estimated 2020 revenue from the Contract will total $117,130.00, which will result in increased revenue of approximately $29,000.00.
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES APPROVING THE FIRST AMENDMENT TO THE WHOLESALE WATER SERVICE CONTRACT BETWEEN THE OAKS WATER SUPPLY CORPORATION AND THE SAN ANTONIO WATER SYSTEM; AUTHORIZING THE PRESIDENT/CHIEF EXECUTIVE OFFICER OR HIS DULY APPOINTED DESIGNEE TO EXECUTE THE FIRST AMENDMENT TO THE CONTRACT; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, effective January 1, 2016, the San Antonio Water System (the “System”) and The Oaks Water Supply Corporation (“The Oaks”) entered into that one certain Wholesale Water Service Contract pursuant to the System’s Resolution No. 16-042; and

WHEREAS, the System and The Oaks desire to amend Elmendorf’s annual water commitment within the contract; and

WHEREAS, pursuant to the amendment, The Oaks agrees to an annual commitment of 60 acre-feet per year, take or pay; and

WHEREAS, the San Antonio Water System Board of Trustees desires to (i) approve the First Amendment to the Wholesale Water Service Contract between The Oaks and the San Antonio Water System, and (ii) authorize the President/Chief Executive Officer or his duly appointed designee to execute the First Amendment to the Wholesale Water Service Contract; now, therefore:

BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That the First Amendment to the Wholesale Water Service Contract between The Oaks and the System attached hereto as Attachment A is hereby approved.

2. That the President/Chief Executive Officer or his duly appointed designee is hereby authorized to execute the First Amendment to the Wholesale Water Service Contract.

3. It is officially found, determined and declared that the meeting at which this resolution is adopted was open to the public, and that public notice of the time, place and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.
4. If any part, section, paragraph, sentence, phrase or work of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid or ineffective.

5. This resolution becomes effective immediately upon its passage.

PASSED AND APPROVED this 6th day of October, 2020.

_____________________________
Jelynne Le Blanc Burley, Chairwoman

ATTEST:

_____________________________
Secretary

Attachment:
A. First Amendment to Wholesale Water Service Contract
ATTACHMENT A

FIRST AMENDMENT
TO WHOLESALE WATER SERVICE CONTRACT
THE OAKS WATER SUPPLY CORPORATION

This First Amendment to Wholesale Water Service Contract The Oaks Water Supply Corporation ("First Amendment") is entered into by and between the San Antonio Water System Board of Trustees, a water, wastewater, and water reuse utility organized under Article 1115 V.A.T.S., and City Ordinance No. 75686 (the Indenture Ordinance), acting by and through its President and CEO, Robert R. Puente, pursuant to Board Resolution No. 16-042 ("System"), and The Oaks WSC ("The Oaks").

San Antonio Water System and The Oaks executed a Wholesale Water Service Contract effective January 1, 2016, wherein the System would provide water to the City. The Parties desire to amend the terms of the Wholesale Water Agreement as follows:

1. Paragraph 6.01 of the Wholesale Water Agreement is amended as follows:

The annual commitment is the quantity of water to be paid for, whether taken or not, on an annual basis, subject to critical period cutbacks as described in Section 6.02 ("Annual Commitment"). The Annual Commitment is the Base Use amount of water for which The Oaks will be billed, as described further in Section 6.04, including a reduction based on the actual cut-back percentage imposed by the EPA, if any.

The Oaks agrees to an Annual Commitment in the amount of no less than 25 acre-feet of water. The Annual Commitment may be adjusted as per the terms outlined below, but can never be less than 25 acre-feet during the 5 year term of this Contract.

The Oaks will adjust its Annual Commitment for Year 1 to purchase 55 acre-feet from the System. The Annual Commitment may also be adjusted for Years 2 and 3 of the term of this Contract, but cannot be less than 25 acre-feet. For year 2 of the term of this Contract, The Oaks must provide written notice to the System, received no later than December 15, 2016, of its intent to adjust the Annual Commitment for Year 2. For year 3 of the term of this Contract, The Oaks must provide written notice to the System, received no later than December 15, 2017, of its intent to adjust the Annual Commitment for Year 3. If written notice is not provided by The Oaks to the System by either of the aforementioned deadlines, the Annual Commitment will remain unchanged for the year the written notice was not provided. Adjustments to the Annual Commitment will become effective January 1st for the year the adjustment is requested. The Annual Commitment, as adjusted, will be subject to the take-or-pay terms and critical period reductions set out herein.

The Oaks will provide written notice to the System, received no later than December 15, 2018, if they intend to adjust the Annual Commitment ("Adjusted Annual Commitment")
for years 4 and 5 of the term of this Contract. The Adjusted Annual Commitment cannot be less than 25 acre-feet. The Adjusted Annual Commitment will remain unchanged and in effect for years 4 and 5 of the term of this Contract. The Adjusted Annual Commitment will be subject to the take-or-pay terms and critical period reductions set out herein.

The System and The Oaks agree that the annual commitment for 2020 calendar year is 60 acre-feet subject to the take-or-pay terms and critical period reductions set out herein.

2. No other terms, conditions, or provisions of the Wholesale Water Agreement are amended by this Third Amendment and all such other terms, conditions and provisions shall continue in full force and effect.

This First Amendment shall be effective as of January 1, 2020.

SAN ANTONIO WATER SYSTEM

By: Robert R. Puente
President/CEO

Date: ____________________________

THE OAKS WATER SUPPLY CORPORATION

By: ____________________________
Kay Day
President

Date: 9-25-2020
SUMMARY AND RECOMMENDATION:

The resolution approves and authorizes the execution of the Third Amendment to the Wholesale Water Service Contract between the City of Elmendorf (“Elmendorf”) and the San Antonio Water System (the “System”). Elmendorf had previously received its water supply from the Carrizo-Wilcox Aquifer, but experienced elevated levels of sulfates and total dissolved solids. A request was made to the System to provide wholesale water service to the City. The System and the City subsequently executed a Wholesale Water Service Contract (“1996 Contract”) on October 21, 1996, for a term of ten years. The 1996 Contract expired in 2006 and was not extended.

- Despite the expiration of the 1996 Contract, the System continued to provide water service to Elmendorf. Elmendorf continued to pay the outside city limits wholesale water monthly meter charge and outside city limits wholesale water usage fees for the four metered service connections.

  
  ○ Elmendorf contracted for an annual commitment of 350 acre-feet of water per year, subject to the terms of the 2015 Contract, to be taken or not on an annual basis for a term of three years. The 2015 Contract provided two renewals; a two-year renewal and a five-year renewal. The term of the second renewal would begin upon expiration of the two-year renewal. The total term of the 2015 Contract with renewals is ten years.

- The System and Elmendorf executed a First Amendment to Wholesale Water Service Contract on March 6, 2018 Resolution 18-067.
  
  ○ Amended Elmendorf’s annual water commitment down to 280 acre-feet of water per year, take or pay.
The System and Elmendorf executed a Second Amendment to Wholesale Water Service Contract on March 12, 2019, Resolution 19-078.

- Amended monthly meter reading procedure and renewal notification date

Elmendorf is billed at the Bexar County wholesale rate schedule in accordance with City of San Antonio Ordinance # 2015-06-18-0575.

Elmendorf has requested to adjust the annual commitment for 2020 and the final renewal to 240 acre-feet of water per year subject to the terms of the Contract, to be taken or not on an annual basis.


- The projected growth and development included in the identification of the requested water volume in the First Amendment has not occurred.

As a result of the reduction in the annual commitment, the System will add 40 acre-feet of water back into the overall water supply inventory available for the System’s retail customers.

Staff recommends that the Board approve this resolution.

**FINANCIAL IMPACT:**

Elmendorf agrees to a revised annual commitment of 240 acre-feet of water per year for the remainder of the term of the Contract. Estimated 2020 revenue from the Contract will total $546,609.00, which will result in reduced revenue of approximately $78,087.00.
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES APPROVING THE THIRD AMENDMENT TO THE WHOLESALE WATER SERVICE CONTRACT BETWEEN THE CITY OF ELMENDORF AND THE SAN ANTONIO WATER SYSTEM; AUTHORIZING THE PRESIDENT/CHIEF EXECUTIVE OFFICER OR HIS DULY APPOINTED DESIGNEE TO EXECUTE THE THIRD AMENDMENT TO THE CONTRACT; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE.

WHEREAS, effective January 1, 2016, the San Antonio Water System (the “System”) and the City of Elmendorf (“Elmendorf”) entered into that one certain Wholesale Water Service Contract pursuant to the System’s Resolution No. 15-178; and

WHEREAS, the System and Elmendorf desire to amend Elmendorf’s annual water commitment within the contract; and

WHEREAS, pursuant to the amendment, Elmendorf agrees to an annual commitment of 240 acre-feet per year, take or pay; and

WHEREAS, the San Antonio Water System Board of Trustees desires to (i) approve the Third Amendment to the Wholesale Water Service Contract between the Elmendorf and the System, and (ii) authorize the President/Chief Executive Officer or his duly appointed designee to execute the Third Amendment to the Wholesale Water Service Contract; now, therefore:

BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That the Third Amendment to the Wholesale Water Service Contract between the Elmendorf and the System attached hereto as Attachment A is hereby approved.

2. That the President/Chief Executive Officer or his duly appointed designee is hereby authorized to execute the Third Amendment to the Wholesale Water Service Contract.

3. It is officially found, determined and declared that the meeting at which this resolution is adopted was open to the public, and that public notice of the time, place and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.
4. If any part, section, paragraph, sentence, phrase or work of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid or ineffective.

5. This resolution becomes effective immediately upon its passage.

PASSED AND APPROVED this 6th day of October, 2020.

____________________________
Jelynne Le Blanc Burley, Chairwoman

ATTEST:

____________________________
Secretary

Attachment:
A. Third Amendment to Wholesale Water Service Contract
THIRD AMENDMENT
TO WHOLESALE WATER SERVICE CONTRACT
CITY OF ELMENDORF

This Third Amendment to Wholesale Water Service Contract City of Elmendorf ("Third Amendment") is entered into by and between the San Antonio Water System Board of Trustees, a water, wastewater, and water reuse utility organized under Article 1115 V.A.T.S., and City Ordinance No. 75686 (the Indenture Ordinance), acting by and through its President and CEO, Robert R. Puente, pursuant to Board Resolution No. 15-178 ("System"), and the City of Elmendorf ("City").

San Antonio Water System and the City of Elmendorf executed a Wholesale Water Service Contract effective January 1, 2016, wherein the System would provide water to the City. The Parties desire to amend the terms of the Wholesale Water Agreement as follows:

1. Paragraph 6.01 of the Wholesale Water Agreement is amended as follows:

The City agrees to an annual commitment to purchase from the System, two hundred forty (240) acre-feet per year of water, take-or-pay subject to terms set out herein. The annual commitment is the quantity of water to be paid for, whether taken or not, on an annual basis throughout the term of this contract, subject to critical period cutbacks as described in Section 6.02. The City may elect to increase, but not decrease, its annual commitment to purchase from the System the renewal of this contract as described in Section 10. Any increases to the annual commitment will be subject to the take-or-pay terms set out herein.

2. No other terms, conditions, or provisions of the Wholesale Water Agreement are amended by this First Amendment and all such other terms, conditions and provisions shall continue in full force and effect.

This Third Amendment shall be effective as of January 1, 2020.

SAN ANTONIO WATER SYSTEM

By: ____________________________
    Robert R. Puente
    President/CEO

Date: ____________________________

CITY OF ELMENDORF

By: ____________________________
    Michael J. Gonzales
    Mayor

Date: ____________________________
TO: San Antonio Water System Board of Trustees
FROM: Douglas P. Evanson, Senior Vice President/Chief Financial Officer
THROUGH: Robert R. Puente, President/Chief Executive Officer
SUBJECT: APPROVAL OF ENGAGEMENT LETTERS WITH MCCALL, PARKHURST & HORTON, LLP TO SERVE AS LEAD BOND COUNSEL AND ESCAMILLA & PONECK, LLP AND KASSAHN & ORTIZ, PC TO SERVE AS CO-BOND COUNSEL FOR DEBT RELATED LEGAL SERVICES FOR THE SAN ANTONIO WATER SYSTEM

Board Action Date: October 6, 2020

SUMMARY AND RECOMMENDATION:

The attached resolution authorizes the execution of Engagement Letters with the law firms of McCall, Parkhurst & Horton, LLP to serve as lead bond counsel, with Clay Binford serving as lead attorney, and Escamilla & Poneck, LLP and Kassahn & Ortiz, PC to serve as co-bond counsel, for debt-related legal services for the San Antonio Water System (the “System”).

- A partial list of the services performed by the lead bond counsel include the following:
  - Advice concerning the procedural and substantive legal requirements governing the issuance and sale of SAWS obligations and the security therefore;
  - Preparation and/or review of documents related to the authorization, issuance, sale and delivery of debt obligations including, but not limited to, resolutions, ordinances, indentures, agreements, notices, and official statements;
  - Acquisitions of approvals, permissions, and exemptions from other governmental authorities such as are necessary or appropriate in connection with the authorization, issuance, and delivery of debt obligations, including the approval by the Texas Attorney General, registration with the Texas Comptroller and any other required approvals or actions;
  - Rendering of an objective opinion with respect to any authorization and issuance of debt obligations;
  - Advice concerning the applicable requirements and compliance of federal tax laws and securities laws relating to the issuance and sale of debt obligations; and
  - Other related-bond counsel legal services, as requested.

- Co-Bond Counsel will perform the following debt related services:
  - Assist the lead bond counsel in providing advice concerning the procedural and substantive legal requirements governing the issuance and sale of System
obligations and the security therefore;
+ Assist the lead bond counsel in preparing and/or reviewing documents related to the authorization, issuance, sale and delivery of debt obligations including, but not limited to, resolutions, ordinances, indentures, agreements, notices, and official statements; and
  + Assist in other related-bond counsel legal services, as requested.

- The System solicited a Request for Qualifications for bond counsel legal services in June 2020, and received responses from nine firms.

- System staff evaluated the proposals pursuant to the criteria established in the Request for Qualifications to select the most qualified firm(s) to provide the required scope of service.

- The firm of McCall, Parkhurst & Horton, LLP, with Clay Binford serving as lead attorney, is recommended to serve as lead bond counsel, with Escamilla & Poneck, LLP and Kassahn & Ortiz, PC recommended to serve as co-bond counsel on a rotational basis.

- Should the lead attorney change firms, the System has the option to enter into an engagement letter with the lead attorney’s new firm for the remainder of the term of the engagement.

- The firms will each enter into an Engagement Letter with the System for a three-year period, with one two-year renewal option.

- The co-bond counsel participation rate is set at twenty percent (20%).

Staff recommends that the Board approve this resolution.

**FINANCIAL IMPACT:**

Fees for debt related legal services will be paid from bond proceeds which will be authorized by the Board of Trustees at the time of a bond issuance based on the fee schedule outlined in the Engagement Letter; fees for debt related work not directly related to the issuance of debt will only be authorized by the Senior Vice President/Chief Financial Officer or the Vice President/General Counsel of the System, and will be paid based on the hourly rate outlined in the Engagement Letter or a fixed fee determined reasonable by the Senior Vice President/Chief Financial Officer and/or the Vice President/General Counsel.

**SUPPLEMENTAL INFORMATION:**

A Request for Qualifications (RFQ) was issued on June 30, 2020. Nine responses were received. Using the selection criteria and weighting set forth in the RFQ, McCall, Parkhurst & Horton, LLP, with Clay Binford serving as lead attorney, was determined to be the most qualified firm to provide
the required services as lead bond counsel and Escamilla & Poneck, LLP and Kassahn & Ortiz, PC to serve as co-bond counsel.

The following firms responded to the RFQ:

<table>
<thead>
<tr>
<th>Name of Firm</th>
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<tbody>
<tr>
<td>Bracewell, LLP</td>
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<tr>
<td>Escamilla &amp; Poneck, LLP*</td>
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<tr>
<td>J. Cruz &amp; Associates, LLC</td>
<td>Non-Local/Non-SMWVB</td>
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<tr>
<td><strong>Kassahn &amp; Ortiz, PC</strong></td>
<td>Local/WBE-Hispanic</td>
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<td>LM Tatum, PLLC</td>
<td>Local/WBE-AABE</td>
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<tr>
<td>Locke Lord, LLP</td>
<td>Non-Local/Non-SMWVB</td>
</tr>
<tr>
<td><strong>McCall, Parkhurst &amp; Horton, LLP</strong></td>
<td>Local/Non-SMWVB</td>
</tr>
<tr>
<td>Norton Rose Fulbright US, LLP</td>
<td>Local/Non-SMWVB</td>
</tr>
<tr>
<td>Winstead, PC</td>
<td>Local/Non-SMWVB</td>
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</table>

*Selected Firms
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES AUTHORIZING ENGAGEMENT LETTERS WITH MCCALL, PARKHURST & HORTON, LLP TO SERVE AS LEAD BOND COUNSEL, AND ESCAMILLA & PONECK, LLP AND KASSAHN & ORTIZ, PC TO SERVE AS CO-BOND COUNSEL FOR DEBT RELATED LEGAL SERVICES FOR A THREE-YEAR TERM WITH ONE TWO-YEAR RENEWAL OPTION; DIRECTING THE PRESIDENT/CHIEF EXECUTIVE OFFICER OR HIS DULY APPOINTED DESIGNEE TO EXECUTE THE ENGAGEMENT LETTERS AND ANY DOCUMENTS RELATED THERETO; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, the San Antonio Water System (the “System”) solicited Request for Qualifications for debt-related legal services; and

WHEREAS, the System received nine responses to the Request for Qualifications for such services; and

WHEREAS, System staff reviewed the responses pursuant to the criteria established to select the firms most qualified to meet the needs of the System; and

WHEREAS, staff recommends the execution of Engagement Letters with McCall, Parkhurst & Horton, LLP to serve as lead bond counsel, with Clay Binford serving as lead attorney, and Escamilla & Poneck, LLP and Kassahn & Ortiz, PC to serve as co-bond counsel on a rotational basis; and

WHEREAS, should the lead attorney change firms, the System has the option to enter into an engagement letter with the lead attorney’s new firm for the remainder of the term of the engagement; and

WHEREAS, the fees for debt related legal services will be paid from bond proceeds which will be authorized by the Board of Trustees at the time of a bond issuance based on the fee schedule outlined in the Engagement Letters; fees for debt related work not directly related to the issuance of debt will only be authorized by the Senior Vice President/Chief Financial Officer or the Vice President/General Counsel of the System, and will be paid based on the hourly rate outlined in the Engagement Letters or a fixed fee determined reasonable by the Senior Vice President/Chief Financial Officer and/or the Vice President/General Counsel; and
WHEREAS, the San Antonio Water System Board of Trustees desires (i) to execute Engagement Letters with McCall, Parkhurst & Horton, LLP to serve as lead bond counsel, with Clay Binford serving as lead attorney, and Escamilla & Poneck, LLP and Kassahn & Ortiz, PC to serve as co-bond counsel on a rotational basis, all for a three-year term with one two-year renewal option; (ii) approve payment of fees in accordance with the terms and provisions of the Engagement Letters; (iii) provide that should the lead attorney change firms, the System has the option to enter into an engagement letter with the lead attorney’s new firm for the remainder of the engagement; and (iv) to further authorize the President/Chief Executive Officer or his duly appointed designee to execute such Engagement Letters and any other documents related thereto; now, therefore:

BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That an Engagement Letters to be entered into with McCall, Parkhurst & Horton, LLP to serve as lead bond counsel, with Clay Binford serving as lead attorney, and Escamilla & Poneck, LLP and Kassahn & Ortiz, PC to serve as co-bond counsel on a rotational basis, all to provide debt related legal services for a term of three years with one two-year renewal option is hereby authorized and approved.

2. That the payment of fees outlined in the Engagement Letters are hereby approved.

3. That should the lead attorney change firms, the System has the option to enter into an engagement letter with the lead attorney’s new firm for the remainder of the engagement.

4. That the President/Chief Executive Officer or his duly appointed designee is hereby authorized to execute Engagement Letters with McCall, Parkhurst & Horton, LLP to serve as lead bond counsel, with Clay Binford serving as lead attorney, and Escamilla & Poneck, LLP and Kassahn & Ortiz, PC to serve as co-bond counsel on a rotational basis and any other documents related thereto.

5. It is officially found, determined, and declared that the meeting at which this resolution is adopted was open to the public, and that the public notice of the time, place, and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

6. If any part, section, paragraph, sentence, phrase or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid or ineffective.

7. This resolution is effective immediately upon its passage.
PASSED AND APPROVED on the 6th day of October 2020.

____________________________________
Jelynne LeBlanc Burley, Chairwoman

Attest:

____________________________________
Secretary
AGENDA ITEM NO. 29

TO: San Antonio Water System Board of Trustees

FROM: Douglas P. Evanson, Senior Vice President/Chief Financial Officer

THROUGH: Robert R. Puente, President/Chief Executive Officer

SUBJECT: AWARD OF A CONTRACT FOR LOCKBOX SERVICES

Board Action Date: October 6, 2020

SUMMARY AND RECOMMENDATION:

The attached resolution awards a contract to JPMorgan Chase Bank, N.A. to provide Lockbox Services for the processing of customer water payments received through the mail for the San Antonio Water System (the “System”) for a one-year term from the implementation completion date, with three one-year extensions.

- The System offers multiple ways for customers to pay their water bills. These include online payments, automatic direct debit, paying in person or by phone, and by mail.

- The System has traditionally processed the payments received through the mail internally with equipment purchased in 1998 and 2003.

- With advances in payment solutions, the volume of payments received through the mail has decreased over time to approximately sixteen percent of total payments received.

- With the current equipment ending its useful life and changes in how customers pay their bills, the System solicited Request for Proposals to determine the optimal solution for SAWS of either purchasing new equipment or outsource the payment processing function.

- Based on the proposals received, it is recommended to outsource the payment processing function to a third party vendor.

- The Selection Committee evaluated the proposals pursuant to the criteria established in the Request for Proposal to determine the most qualified firm to provide the required scope of services, interviewing all five respondents to the Lockbox Services Request for Proposal.

- Based on the review of the proposals, interviews, and demonstration of each firm’s ability to provide the required scope of service, the Selection Committee recommends that JPMorgan Chase Bank, N.A. be awarded a contract to provide Lockbox Services to the System.

- The resolution also provides that the Senior Vice President/Chief Financial Officer and Treasurer are delegated by the Board of Trustees as authorized System representatives to
act on behalf of System in matters relating to the terms of the Lockbox Agreement.

Staff recommends that the Board approve this resolution.

**FINANCIAL IMPACT:**

Based on current volume, the fee associated with the Lockbox Services is estimated to be approximately $322,000.00 annually. These fees will to be partially offset by a reduction in Operating and Maintenance Expenses, for a net effect of approximately $147,000.00 annually. Fees associated with the Lockbox Services will be paid from System Funds and incorporate into future operating budgets.

**SUPPLEMENTAL INFORMATION:**

Five firms responded to the Request for Proposal. JPMorgan Chase Bank, N.A. was determined to be the most qualified firm to provide the required services.

The submitting firms are as follows:

<table>
<thead>
<tr>
<th>Name of Firm</th>
<th>Local/SMWVB</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIS Global</td>
<td>Non-Local/Non-SMWVB</td>
</tr>
<tr>
<td>Frost Bank</td>
<td>Local/Non-SMWVB</td>
</tr>
<tr>
<td>Kubra</td>
<td>Non-Local/Non-SMWVB</td>
</tr>
<tr>
<td><strong>JPMorgan Chase Bank, N.A.</strong>*</td>
<td><strong>Local/Non-SMWVB</strong></td>
</tr>
<tr>
<td>Wells Fargo Bank, N.A.</td>
<td>Local/Non-SMWVB</td>
</tr>
</tbody>
</table>

*Selected Firm
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES AUTHORIZING A CONTRACT WITH JPMORGAN CHASE BANK, N.A. TO PROVIDE LOCKBOX SERVICES FOR A TERM OF ONE YEAR WITH THREE ONE-YEAR RENEWAL OPTIONS FROM THE IMPLEMENTATION DATE; DIRECTING THE PRESIDENT/CHIEF EXECUTIVE OFFICER OR HIS DULY APPOINTED DESIGNEE TO EXECUTE A CONTRACT AND ANY DOCUMENTS RELATED THERETO; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, the San Antonio Water System (the “System”) offers its customers multiple ways to pay their water bill, to include online payments, automatic direct debit, paying in person or by phone, and by mail; and

WHEREAS, the System has traditionally processed the payments received through the mail internally with equipment purchased in 1998 and 2003; and

WHEREAS, with advances in payment solutions, the volume of payments received through the mail has decreased over time to approximately sixteen percent of total payments received; and

WHEREAS, with the current equipment ending its useful life and changes in how customers pay their bills, the System solicited Request for Proposals to determine the optimal solution for SAWS of either purchasing new equipment or outsourcing the payment processing function; and

WHEREAS, based on the proposals received, it is recommended to outsource the payment processing function to a third party vendor; and

WHEREAS, the Selection Committee evaluated the proposals pursuant to the criteria established in the Request for Proposal to determine the most qualified firm to provide the required scope of services, interviewing all five respondents to the Lockbox Services Request for Proposal; and

WHEREAS, based on the review of the proposals, interviews, and demonstration of each firm’s ability to provide the required scope of service, the Selection Committee recommends that JPMorgan Chase Bank, N.A. be awarded a contract to provide Lockbox Services to the System; and
WHEREAS, the Senior Vice President/Chief Financial Officer and Treasurer are delegated by the Board of Trustees as authorized System representatives to act on behalf of System in matters relating to the terms of the Lockbox Agreement; and

WHEREAS, the fee associated with the Lockbox Services is estimated to be approximately $322,000.00 annually. These fees will to be partially offset by a reduction in Operating and Maintenance Expenses, for a net effect of approximately $147,000.00 annually. Fees associated with the Lockbox Services will be paid from System Funds and incorporate into future operating budgets; and

WHEREAS, the San Antonio Water System Board of Trustees desires (i) to execute a contract with JPMorgan Chase Bank, N.A. to provide Lockbox Services for a one-year term with three one-year renewal options from the implementation completion date; (ii) approve payment of annual fees in the amount of $322,000.00; and (iii) authorize the President/Chief Executive Officer or his duly appointed designee to execute a contract and any other documents related thereto; now, therefore:

BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That a contract be entered into with JPMorgan Chase Bank, N.A. to provide Lockbox Services for a term of one year from the implementation completion date, with three one-year renewal options is hereby authorized and approved.

2. That the annual fee of $322,000.00 is hereby approved.

3. That the Senior Vice President/Chief Financial Officer and Treasurer are delegated by the Board of Trustees as authorized System representatives to act on behalf of System in matters relating to the terms of the Lockbox Agreement.

4. That the President/Chief Executive Officer or his duly appointed designee is hereby authorized to execute a contract with JPMorgan Chase Bank, N.A. to provide Lockbox Services and any other documents related thereto.

5. It is officially found, determined, and declared that the meeting at which this resolution is adopted was open to the public, and that the public notice of the time, place, and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

6. If any part, section, paragraph, sentence, phrase or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid or ineffective.

7. This resolution is effective immediately.
PASSED AND APPROVED on the 6th day of October, 2020.

______________________________
Jelynne LeBlanc Burley, Chairwoman

Attest:

______________________________
Secretary
TO: San Antonio Water System Board of Trustees

FROM: Douglas P. Evanson, Senior Vice President/Chief Financial Officer

THROUGH: Robert R. Puente, President/Chief Executive Officer

SUBJECT: REQUESTING CITY COUNCIL TAKE CERTAIN ACTIONS WITH RESPECT TO THE CASH REDEMPTION AND/OR DEFEASANCE OF CERTAIN OUTSTANDING DEBT OBLIGATIONS

Board Action Date: October 6, 2020

SUMMARY AND RECOMMENDATION:

The attached resolution requests City Council authorize the cash redemption and/or defeasance of certain outstanding debt obligations to reduce future debt service.

- The San Antonio Water System (the “System”) has sufficient cash on hand to redeem and/or defease outstanding debt to lower future debt service. The resolution authorizes a cash redemption and/or defeasance of up to $71,045,000.00 par value with an amount not to exceed $75,000,000.00 from the following series of bonds:
  - Junior Lien Series 2009A - $23,585,000.00
  - Senior Lien Series 2011 - $21,055,000.00
  - Junior Lien Series 2011 - $12,835,000.00
  - Junior Lien Series 2011A - $13,570,000.00

- The exact series of bonds to be redeemed and/or defeased with cash will be determined based on the market conditions at the time of redemption and/or defeasance as well as other considerations, however, the total cash redemption and/or defeasance will not exceed $71,045,000.00 par value with an amount not to exceed $75,000,000.00.

Staff recommends that the Board approve this resolution.

FINANCIAL IMPACT:

The redemption and/or defeasance with cash of outstanding debt obligations will lower future debt service. The exact amount will be determined at the time of execution.

SUPPLEMENTAL INFORMATION:

The System’s co-financial advisory team of Public Financial Management (PFM) and Estrada Hinojosa assisted staff in the formulation of this recommendation.
RESOLUTION NO.

A RESOLUTION BY THE BOARD OF TRUSTEES OF THE SAN ANTONIO WATER SYSTEM AUTHORIZING AND APPROVING THE DEFEASANCE AND REDEMPTION OF CERTAIN CURRENTLY OUTSTANDING CITY OF SAN ANTONIO, TEXAS WATER SYSTEM REVENUE OBLIGATIONS; RECOMMENDING AND REQUESTING THAT THE SAN ANTONIO CITY COUNCIL TAKE ACTION WITH RESPECT TO THE REDEMPTION OF SUCH OBLIGATIONS; AND AUTHORIZING OTHER MATTERS IN CONNECTION THEREWITH

WHEREAS, pursuant to the authority contained in (i) Chapter 1502, as amended, Texas Government Code, (ii) certain ordinances (the Senior Lien Bond Ordinances) previously adopted by the City Council (the City Council) of the City of San Antonio, Texas (the City) authorizing the issuance of the currently outstanding senior lien revenue bonds (the Previously Issued Senior Lien Bonds), (iii) certain ordinances (the Junior Lien Bond Ordinances) authorizing the issuance of the currently outstanding junior lien revenue bonds (the Previously Issued Junior Lien Bonds, and together with the Previously Issued Senior Lien Bonds, the Previously Issued Bonds), (iv) certain ordinances (the Subordinate Lien Bond Ordinances) previously adopted by the City Council authorizing the issuance of subordinate lien revenue bonds and obligations arising under a related credit agreement, and (v) an ordinance adopted by the City Council relating to the implementation of a commercial paper program (the Commercial Paper Ordinances) under which is issued from time to time subordinate lien commercial paper notes (the Commercial Paper Notes), the complete management and control of the water system (the System) of the City is vested in a Board of Trustees known as the San Antonio Water System (the Board), during the period of time any of such foregoing obligations are outstanding and unpaid; and

WHEREAS, the Board hereby determines that it is in the best interest of the System and its ratepayers to utilize a portion of System funds lawfully available for such purpose (the Defeasance Proceeds) to defease and redeem prior to their respective dates of stated maturity certain of the Previously Issued Bonds (such Previously Issued Bonds, the Defeased Obligations) to be selected from those Previously Issued Bonds identified in the schedule attached hereto as Exhibit A (such Previously Issued Bonds, the Defeasance Candidates); and

WHEREAS, the defeasance of the Defeased Obligations will result in the termination of the lien on and pledge of the net revenues of the System (the Net Revenues) securing their payment, discharging the same as City indebtedness payable from and secured by such Net Revenues; and

WHEREAS, the redemption of the Defeased Obligations prior to their respective dates of stated maturity requires action and approval by the City Council and it is, therefore, necessary and proper for the Board to formally request the City Council to authorize and approve the redemption of the Defeased Obligations pursuant to and in accordance with the provisions and the limitations set forth herein; and now, therefore,

BE IT RESOLVED BY THE BOARD OF TRUSTEES OF THE SAN ANTONIO WATER SYSTEM THAT:
1. Pursuant to Chapters 1207 and 1371, as amended, Texas Government Code, the Board hereby authorizes and approves the use of Defeasance Proceeds, in an amount not to exceed the Maximum Amount (defined herein), to accomplish the defeasance and redemption of the Defeased Obligations. With respect to such authorization and approval, the Board requests that the City Council, by adoption of a resolution (the City Resolution) in substantially the form attached hereto as Exhibit B (which City Resolution is incorporated herein for all purposes as if copied in full), record in its meeting minutes the determination to redeem prior to their stated maturity.

To accomplish the foregoing, there shall be established with the hereinafter-defined Escrow Agent, using the Defeasance Proceeds, an escrow fund or funds (the Escrow Fund) to be funded with cash and certain defeasance securities (as permitted by applicable law) that mature as to principal and interest in such amounts and at such times as will ensure the availability, without reinvestment, of sufficient money, together with any money deposited therewith, if any, to pay when due by reason of stated maturity or prior redemption the principal of, premium, if any, or interest on the Defeased Obligations. The Board, upon obtaining the advice from PFM Financial Advisors LLC and Estrada Hinojosa & Company, Inc. (the Co-Financial Advisors) and legal counsel, shall determine the defeasance securities and any appropriate escrow reinvestment agreements or other similar contractual agreements to effectuate each defeasance, subject in all respects, however, to the laws of the State of Texas and the applicable provisions of the City ordinances authorizing the issuance of the Previously Issued Bonds.

2. The Board hereby authorizes, appoints, and designates the President/Chief Executive Officer of the Board and/or the Senior Vice President/Chief Financial Officer of the Board (each, an Authorized Official) as a representative of the Board, to effectuate and implement the purpose and intent of this Resolution, including the selection of the Defeased Obligations from the Defeasance Candidates (which includes completion of Exhibit C evidencing such selection), use of Defeasance Proceeds in an amount not to exceed $75,000,000 (the Maximum Amount) to apply to Defeased Obligations, in the maximum permitted principal amount as determined by an Authorized Official to fund the Escrow Fund to accomplish the defeasance of the Defeased Obligations, and selection of investments in and manner and method of funding the Escrow Fund. At the time of establishing the manner and method of funding the Escrow Fund and selecting the Defeased Obligations from the Defeasance Candidates, an Authorized Official shall complete and execute an “Approval Certificate”, in substantially the form attached unto as Exhibit C, to evidence the final terms of the defeasance and redemption that is the subject of this Resolution.

3. The Board hereby authorizes the entry into one or more escrow agreements (an Escrow Agreement) with the appropriate paying agent/registrar or escrow agent for the Defeased Obligations (the Escrow Agent) in connection with the defeasance of the Defeased Obligations. Each Authorized Official is authorized to execute an Escrow Agreement on behalf of the System and as the act and deed of the Board.

4. The Board hereby authorizes each Authorized Official to select and appoint, as determined to be necessary or desirable, a firm of independent certified public accountants to serve as verification agent (the Verification Agent) for the purpose of verifying that the initial deposit to any escrow fund will be sufficient to accomplish a legal defeasance of the Defeased Obligations to their respective dates of early redemption or stated maturity.
5. This Resolution shall document the authorization to transfer Defeasance Proceeds in an amount not to exceed the Maximum Amount to effectuate the defeasance of the Defeased Obligations and provide evidence of each transaction to the System's independent auditors.

6. The Board hereby approves payment from lawfully available System funds of professional fees and expenses of Co-Bond Counsel, Co-Financial Advisors, the Escrow Agent, the Verification Agent, the paying agent/registrar for the Defeased Obligations, and any other party whose services have been determined by Board to be necessary to accomplish the purpose and intent of this Resolution.

7. Each Authorized Official is authorized to evidence adoption of this Resolution and to do any and all things necessary or convenient to effect the defeasance of the Defeased Obligations described herein and otherwise give effect to the intent hereof.

8. All orders and resolutions, or parts thereof, which are in conflict or inconsistent with any provision of this Resolution are hereby repealed to the extent of such conflict, and the provisions of this Resolution shall be and remain controlling as to the matters resolved herein.

9. The recitals contained in the preamble hereof are hereby found to be true, and such recitals are hereby made a part of this Resolution for all purposes and are adopted as a part of the judgment and findings of the Board.

10. This Resolution shall be construed and enforced in accordance with the laws of the State of Texas and the United States of America.

11. If any provision of this Resolution or the application thereof to any person or circumstance shall be held to be invalid, the remainder of this Resolution and the application of such provision to other persons and circumstances shall nevertheless be valid, and the Board hereby declares that this Resolution would have been enacted without such invalid provision.

12. It is officially found, determined, and declared that the meeting at which this Resolution is adopted was open to the public and public notice of the time, place, and subject matter of the public business to be considered at such meeting, including this Resolution, was given, all as required by Chapter 551, as amended, Texas Government Code.

13. This Resolution shall be in force and effect from and after its final passage, and it is so resolved.

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PASSED AND APPROVED this the 6th day of October, 2020.

Chair/Board of Trustees

Attest:

Secretary/Board of Trustees
EXHIBIT A

Defeasance Candidates

Not to exceed the amount set forth in Section 2 hereof in lawfully available funds of the System to defease:

(i) “City of San Antonio, Texas Water System Junior Lien Revenue Bonds, Series 2009A”, dated November 1, 2009, in the original principal amount of $35,000,000;


(iii) “City of San Antonio, Texas Water System Revenue Refunding Bonds, Series 2011”, dated March 15, 2011, in the original principal amount of $46,555,000; and


Identification of Defeased Obligations under a particular Escrow Agreement shall be determined by an Authorized Official and evidenced in an Approval Certificate.
EXHIBIT B

Resolution by the City Council of the
City of San Antonio, Texas
Authorizing the Redemption of the Deceased Obligations
TO: San Antonio Water System Board of Trustees
FROM: Douglas P. Evanson, Senior Vice President/Chief Financial Officer
THROUGH: Robert R. Puente, President/Chief Executive Officer
SUBJECT: RECOMMENDING AND REQUESTING SAN ANTONIO CITY COUNCIL APPROVE AN APPLICATION FOR FINANCIAL ASSISTANCE TO THE TEXAS WATER DEVELOPMENT BOARD FOR PARTICIPATION IN THE DRINKING WATER STATE REVOLVING FUND, AND ADOPTION OF A REIMBURSEMENT RESOLUTION

Board Action Date: October 6, 2020

SUMMARY AND RECOMMENDATION:

The attached resolution recommends and requests the San Antonio City Council take certain actions to approve and authorize an application for financial assistance to the Texas Water Development Board (TWDB) for participation in the Drinking Water State Revolving Fund Program in an amount not to exceed $21,613,000.00, and the adoption of a reimbursement resolution.

- The application is a request for financial assistance through TWDB’s Drinking Water State Revolving Fund (DWSRF). Projects must qualify for financial assistance through a needs assessment, and an environmental impact and engineering review.

- TWDB’s DWSRF Program provides subsidized loans for qualified projects.

- The project submitted for review and eligible to receive financial assistance through the DWSRF Program is listed in Attachment A. The financial assistance being requested is for the construction phase of the qualified project, estimated to be approximately $19,994,200.00, and funds to pay the cost of issuance and fund any Reserve Fund Requirement.

- The process to receive financial assistance under the DWSRF Programs consists of a submittal of an application for participation. No financial commitment on the San Antonio Water System’s (SAWS) part is made at the application stage. A financial commitment by SAWS is made at a later date when bond proceeds are received to finance the projects. SAWS will seek additional Board of Trustee and City Council approval prior to the issuance of any bonds under this program.

- The acceptance of the application by TWDB is a commitment by TWDB to provide financing for the eligible projects to SAWS. SAWS is not required to accept this funding;
however, if approved and accepted, SAWS must close on the loan within one year of TWDB’s approval of the application.

- A reimbursement resolution allows SAWS to reimburse itself with bond proceeds for eligible capital expenditures made 60 days prior to the adoption of the reimbursement resolution through the issuance of the bonds.

Staff recommends that the Board approve this resolution.

**FINANCIAL IMPACT:**

The submittal of the application has no financial impact to SAWS. Should SAWS’ application be approved and the issuance of debt be ultimately authorized, the benefit of participation in the DWSRF program is a reduction of 155 basis points or 1.55 percent below the market rate of interest when the bonds are issued.

Attachment:

A. Texas Water Development Board Project List - DWSRF
Artesia – Pump Station Rehabilitation Phase 5
The Artesia pump station serves Pressure Zone 828 (formerly PZ 3) across the southern half of the area inside Loop 410. This pump station has a capacity of producing over 50 million gallons per day of water, and also supplies water to the Aquifer Storage and Recovery site. The scope of this project is to evaluate and replace mechanical and electrical components of the pump station including pumps and motors. Artesia Pump Station was built in 1960. The electrical, mechanical, HVAC (heating, ventilation and air conditioning), and the instrumentation & controls of Artesia pump station are aging, and becoming difficult to maintain. These aging components could cause safety issues.

Estimated Construction Costs: $19,994,200.00
RESOLUTION NO.

A RESOLUTION OF THE BOARD OF TRUSTEES OF THE SAN ANTONIO WATER SYSTEM RECOMMENDING AND REQUESTING THAT THE SAN ANTONIO CITY COUNCIL TAKE CERTAIN ACTIONS WITH RESPECT TO AN APPLICATION TO THE TEXAS WATER DEVELOPMENT BOARD’S DRINKING WATER STATE REVOLVING FUND PROGRAM; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; RECOMMENDING THAT THE SAN ANTONIO CITY COUNCIL ADOPT A REIMBURSEMENT RESOLUTION; ESTABLISHING AN EFFECTIVE DATE; AND OTHER MATTERS IN CONNECTION THEREWITH

WHEREAS, the San Antonio Water System (the System) deems it necessary to apply to the Texas Water Development Board (TWDB) for financial assistance from the TWDB’s Drinking Water State Revolving Fund Program; and

WHEREAS, the System’s Board of Trustees (Board) desires to request financial assistance from the TWDB in an amount not to exceed $21,613,000 for the design and construction of improvements to the System’s utility system; and

WHEREAS, the Board has determined that the System should apply to the TWDB for financial assistance in an amount not to exceed $21,613,000 which will be evidenced by the issuance of one or more series of revenue and/or revenue and refunding bonds payable from and secured by a junior and inferior lien on and pledge of the net revenues of the System, by the City and purchased by the TWDB to provide funds to acquire, purchase, design, construct, improve, extend, enlarge, and repair the System pursuant to the TWDB’s programs, to reimburse itself for prior expenses (if any), to refund certain currently outstanding Commercial Paper (if any), and to pay certain costs of issuance; and

WHEREAS, by virtue of the authority and power vested in the Board with reference to the expenditure and application of the revenues of the System and to comply with the terms and conditions prescribed by the TWDB and in the City ordinances authorizing the issuance of currently-outstanding City bonds payable from and secured by a junior and inferior lien on and pledge of the net revenues of the System, which terms and conditions provide for the issuance of additional City bonds payable from and secured by a junior and inferior lien on and pledge of the net revenues of the System, it is necessary and proper for the Board to formally request the City Council of the City to approve the application for financial assistance to the TWDB; and

WHEREAS, in accordance with the rules and regulations of the Board, which govern the procedures in making such an application, the governing body of the System is required to pass a resolution to accompany such application; and

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF TRUSTEES OF THE SAN ANTONIO WATER SYSTEM THAT:
1. The City Council of the City of San Antonio, Texas is hereby formally requested to authorize and approve the application for financial assistance to the TWDB for designing and constructing improvements to the System, to reimburse itself for prior expenses (if any), to refund certain currently outstanding Commercial Paper (if any), and to pay the costs of issuing the revenue bonds and/or revenue and refunding bonds described in the preamble hereof by adopting a Resolution in substantially the form attached hereto as Exhibit A.

2. The Chair or Vice Chair, the President/Chief Executive Officer, and the Senior Vice President/Chief Financial Officer of the System are hereby authorized to execute and submit to the TWDB the application for such financial assistance, and the Chair or Vice Chair, and the President/Chief Executive Officer and the Senior Vice President/Chief Financial Officer of the System, together with the bond counsel (or co-bond counsel), co-financial advisors and consulting engineers named in such application, are authorized to appear before the TWDB in support of such application.

3. The Chair or Vice Chair of the System is further specifically authorized to make the required assurances to the Board in accordance with the rules, regulations, and policies of the Board.

4. A certified copy of this Resolution shall be attached to the application for financial assistance herein authorized to be prepared and submitted to the TWDB, and the Secretary of the System is authorized and directed to prepare and certify such number of copies of this Resolution as may be required for purposes of supporting the submission of such application to the TWDB.

5. The recitals contained in the preamble hereof are hereby found to be true, and such recitals are hereby made a part of this resolution for all purposes and are adopted as a part of the judgment and findings of the Board.

6. All resolutions, or parts thereof, which are in conflict or inconsistent with any provision of this Resolution are hereby repealed to the extent of such conflict, and the provisions of this Resolution shall be and remain controlling as to the matters resolved herein.

7. This Resolution shall be construed and enforced in accordance with the laws of the State of Texas and the United States of America.

8. If any provision of this Resolution or the application thereof to any person or circumstance shall be held to be invalid, the remainder of this Resolution and the application of such provision to other persons and circumstances shall nevertheless be valid, and the Board hereby declares that this Resolution would have been enacted without such invalid provision.

9. To permit the reimbursement for expenses incurred using proceeds of bonds to be issued, the Board hereby recommends that the City Council adopt the reimbursement resolution attached hereto as Exhibit B and incorporated by reference for all purposes to this Resolution.

10. It is officially found, determined, and declared that the meeting at which this Resolution is adopted was open to the public and public notice of the time, place, and subject matter of the public business to be considered at such meeting, including this resolution, was given, all as required by Chapter 551, as amended, Texas Government Code.
11. This Resolution shall be in force and effect from and after its passage on the date shown below.

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PASSED AND APPROVED this the 6th day of October, 2020.

________________________________________
Chair/Board of Trustees

Attest:

________________________________________
Secretary/Board of Trustees
EXHIBIT A

Application Resolution

See Tab No. __
EXHIBIT B

Reimbursement Resolution
AGENDA ITEM NO. __32__

TO: San Antonio Water System Board of Trustees

FROM: Douglas P. Evanson, Senior Vice President/Chief Financial Officer

THROUGH: Robert R. Puente, President/Chief Executive Officer

SUBJECT: REQUESTING CITY COUNCIL TAKE CERTAIN ACTIONS WITH RESPECT TO THE ISSUANCE AND SALE OF OBLIGATIONS DESIGNATED AS “CITY OF SAN ANTONIO, TEXAS WATER SYSTEM JUNIOR LIEN REVENUE BONDS, SERIES 2020D”

Board Action Date: October 6, 2020

SUMMARY AND RECOMMENDATION:

The attached resolution requests City Council authorize the issuance and sale of City of San Antonio, Texas Water System Junior Lien Revenue Bonds, Series 2020D (Bonds) to the Texas Water Development Board (TWDB) at subsidized interest rates.

- The funding for the Capital Improvements Program (CIP) includes funds from revenues, impact fees, and debt proceeds. A portion of the debt needed to fund the CIP will be issued through the TWDB at subsidized interest rates.

- San Antonio Water System (SAWS) has benefited from participation in the Clean Water State Revolving Fund of the TWDB for wastewater and recycle water projects, the Water Infrastructure Fund for water supply projects, and the Drinking Water State Revolving Fund (DWSRF) for water delivery projects. Since 1999, SAWS has placed over $875,000,000.00 in junior lien bonds with the TWDB under these programs. In February 2020, SAWS submitted an application for financial assistance under the DWSRF.

- In May 2020, TWDB authorized a loan in the amount of $11,805,000.00 under the DWSRF program to fund the project. The TWDB provides interest rate savings through subsidized interest rates at closing. A discount of 1.55 percent is provided under the DWSRF program.

Staff recommends that the Board approve this resolution.

FINANCIAL IMPACT:

The debt service for the bonds will be paid from revenues of SAWS and are included in the current budget.
SUPPLEMENTAL INFORMATION:

SAWS’ co-financial advisory team of PFM Financial Advisors and Estrada Hinojosa assisted staff in the formulation of this recommendation.

Attachment:

A. Texas Water Development Board Project List - DWSRF
Texas Water Development Board Project List
Drinking Water State Revolving Fund

**Highway 90 and General McMullen Pressure Zone Integration**
This project will install 12-inch water lines replacing the existing 6-inch water line along Brady Boulevard, connecting the existing 12-inch on Cupples Road to the existing 20-inch on Barclay Street. Additionally, the project will install two 12-inch water lines along General McMullen Drive connecting the existing 12-inch on Patton Boulevard to the existing 12-inch on General McMullen near Queretaro Street, as well as a second new 12-inch water line connecting the existing 12-inch on Morelia to the existing 12-inch on Castroville Road. Finally a new 12-inch water line connecting the existing 8-inch on Frio City Road to the existing 12-inch on Jennings Ave will also be installed.

**Estimated Construction Costs:** $4,762,139.00

**Dietrich Storage Tank**
This project will construct a 1.5 million gallon elevated storage tank for Pressure Zone (PZ) 828 (formerly PZ 3) to meet TCEQ capacity requirements for future growth.

**Estimated Construction Costs:** $6,104,058.00
RESOLUTION NO.

A RESOLUTION BY THE BOARD OF TRUSTEES OF THE SAN ANTONIO WATER SYSTEM RECOMMENDING AND REQUESTING THAT THE SAN ANTONIO CITY COUNCIL TAKE CERTAIN ACTIONS WITH RESPECT TO THE ISSUANCE AND SALE OF OBLIGATIONS TO THE TEXAS WATER DEVELOPMENT BOARD PURSUANT TO ITS DRINKING WATER STATE REVOLVING FUND PROGRAM AND DESIGNATED AS “CITY OF SAN ANTONIO, TEXAS WATER SYSTEM JUNIOR LIEN REVENUE BONDS”; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; ESTABLISHING AN EFFECTIVE DATE; AND OTHER MATTERS IN CONNECTION THEREWITH

WHEREAS, pursuant to the authority contained in (i) Chapter 1502, as amended, Texas Government Code, (ii) certain ordinances (the Senior Lien Bond Ordinances) previously adopted by the City Council (the City Council) of the City of San Antonio, Texas (the City) authorizing the issuance of the currently outstanding senior lien revenue bonds (the Previously Issued Senior Lien Bonds), (iii) certain ordinances (the Junior Lien Bond Ordinances) authorizing the issuance of the currently outstanding junior lien revenue bonds (the Previously Issued Junior Lien Bonds), (iv) certain ordinances (the Subordinate Lien Bond Ordinances) previously adopted by the City Council authorizing the issuance of subordinate lien revenue bonds and obligations arising under a related credit agreement, and (v) an ordinance adopted by the City Council relating to the implementation of a commercial paper program (the Commercial Paper Ordinances) under which is issued from time to time subordinate lien commercial paper notes (the Commercial Paper Notes), the complete management and control of the water system (the System) of the City is vested in a Board of Trustees known as the San Antonio Water System (the Board), during the period of time any of such foregoing obligations are outstanding and unpaid; and

WHEREAS, the Board has determined that approximately $11,805,000 in junior lien revenue bonds to be known as “City of San Antonio, Texas Water System Junior Lien Revenue Bonds, Series 2020D”, as may be further designated by letter or other identifier to distinguish such series (the Series 2020D Bonds) should now be issued by the City and sold to the Texas Water Development Board (the TWDB) pursuant to its Drinking Water State Revolving Fund Program, which Series 2020D Bonds the TWDB has committed to purchase by resolution of its governing body, to provide funds to (i) build, improve, extend, enlarge, equip, and repair the System, (ii) to fund the increase in the required reserve amount attributable to the issuance of such Series 2020D Bonds, and (iii) pay certain costs of their issuance; and

WHEREAS, by virtue of the authority and power vested in the Board with reference to the expenditure and application of the revenues of the System and to comply with the terms and conditions prescribed in the Senior Lien Bond Ordinances and Junior Lien Bond Ordinances, respectively, for the issuance of additional bonds payable from and secured by a junior and inferior lien on and pledge of the Net Revenues of the System, it is necessary and proper for the Board to formally request the City Council to authorize and sell the Series 2020D Bonds, consent to the
issuance of the same, approve the ordinance authorizing the Series 2020D Bonds, including the approval of the disclosure document relating thereto, along with approving, to the extent applicable or required, the manner of funding the Required Reserve Amount relating to the Series 2020D Bonds, with cash or debt proceeds (whether deposited to the Reserve Fund at transaction closing or over time), and agree to comply with all the terms and provisions of such ordinance, including, but not limited to, those relating to the operation of the System and the handling of the proceeds of the Series 2020D Bonds; and

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF TRUSTEES OF THE SAN ANTONIO WATER SYSTEM THAT:

1. The City Council is hereby formally requested to authorize and sell fixed rate junior lien revenue bonds, earlier defined herein as the Series 2020D Bonds, in a principal amount not to exceed the resultant amount upon application of the limitations described in the preamble hereof, payable from a junior and inferior lien on and pledge of the Net Revenues of the System; and the Board by the adoption of this Resolution hereby evidences its consent to the issuance and sale of such series of junior lien revenue bonds and the payment thereof from the Net Revenues of the System on the level of priority specified above, as well as its approval of an ordinance (the Ordinance) authorizing the issuance of the “City of San Antonio, Texas Water System Junior Lien Revenue Bonds, Series 2020D”, with any additional designations as deemed necessary thereto (as determined by a hereinafter-defined Authorized Official), substantially in the form attached to this Resolution as Exhibit A and incorporated herein by reference for all purposes, including delegation of the authority to finalize the terms of sale to each Authorized Official as set forth in the Ordinance; and the Board hereby agrees to comply with all of the terms and provisions of the Ordinance with relation to the administration and operation of the System and the disposition of the revenues therefrom.

2. The Board recommends that the City Council approve the sale of the Series 2020D Bonds to the TWDB at the purchase price of par, less the TWDB’s fee (as specified in the Ordinance), if any, and no accrued interest, and to authorize an Authorized Official to execute an “Approval Certificate” relating to the Series 2020D Bonds evidencing final terms of sale thereof, if such Authorized Official, based upon the advice of the officials, employees, consultants and other representatives of the System (including its co-financial advisors), determines that the interest rates offered by the TWDB are acceptable and within the limits authorized by, and as described in, the Ordinance and pursuant to Chapters 1371 and 1502, as amended, Texas Government Code.

3. The offering document relating to the Series 2020D Bonds (being a Private Placement Memorandum), substantially in the form presented at this meeting, is hereby approved, each Authorized Official is authorized to prepare or approve any changes or additions to these disclosure documents which shall be deemed appropriate or necessary, and the Chair or Vice Chair and Secretary of the Board is authorized to execute the final Private Placement Memorandum on behalf of the Board.

4. The Board recognizes that the section of the Ordinance relating to “Covenants to Maintain Tax Exempt Status” contains covenants of the City relating to the Series 2020D Bonds. Since the proceeds of the Series 2020D Bonds will be entirely within the control and disposition
of the Board, the Board specifically adopts the covenants to be made by the City Council in such section of the Ordinance.

5. The Board recognizes that the section of the Ordinance relating to “Continuing Disclosure Undertaking” contains covenants of the City relating to the Series 2020D Bonds. Since certain financial information, financial status, operating data, and annual audits of the System will be entirely within the control and disposition of the Board, the Board specifically adopts the covenants to be made by the City Council in such section of the Ordinance.

6. The Board approves the delegation to each Authorized Official and the authority to comply with the conditions precedent to the issuance of the Series 2020D Bonds, as authorized by the Ordinance and any other matter to effectuate the respective intent and purpose of the Ordinance.

7. The professionals appointed by the Board, PFM Financial Advisors LLC and Estrada Hinojosa & Company, Inc., as the co-financial advisors, and McCall, Parkhurst & Horton L.L.P. and any firm hereinafter designated as co-bond counsel, are authorized, upon consultation with System and City staff, to coordinate the legal and financial aspects relating to the transaction including, but not limited to, preparation of related bond documents, and to otherwise coordinate the legal and financial aspects of this matter with the national rating services to ensure that the System and the City receives the lowest possible interest rate for the issuance of the Series 2020D Bonds. In addition, the Board authorizes the payment of the national rating agency fees, and any and all professional fees and expenses associated with the issuance of the Series 2020D Bonds upon the approval of written invoices by any Authorized Officials or his or her designee.

8. In order to comply with various provisions of Texas law and for the interest on the Series 2020D Bonds to be tax-exempt, various certificates must be provided to Co-Bond Counsel and to the Attorney General for the State of Texas; therefore, upon obtaining the advice and consent of legal counsel, the Chair, Vice Chair, or Secretary of the Board, the President and Chief Executive Officer of the System, and the Senior Vice President/Chief Financial Officer (each, an Authorized Official) are authorized to execute any certificate (including but not limited to a Certificate of Tax Exemption relating to the Series 2020D Bonds), or other documents, relating to the issuance, sale, and delivery of the Series 2020D Bonds.

9. The Board delegates to each Authorized Official the authority to take any and all other actions consistent with the provisions of this Resolution and the Ordinance to effectuate the sale, issuance and delivery of the Series 2020D Bonds.

10. The recitals contained in the preamble hereof are hereby found to be true, and such recitals are hereby made a part of this Resolution for all purposes and are adopted as a part of the judgment and findings of the Board.

11. All resolutions, or parts thereof, which are in conflict or inconsistent with any provision of this Resolution are hereby repealed to the extent of such conflict, and the provisions of this Resolution shall be and remain controlling as to the matters resolved herein.

12. This Resolution shall be construed and enforced in accordance with the laws of the State of Texas and the United States of America.
13. If any provision of this Resolution or the application thereof to any person or circumstance shall be held to be invalid, the remainder of this Resolution and the application of such provision to other persons and circumstances shall nevertheless be valid, and the Board hereby declares that this Resolution would have been enacted without such invalid provision.

14. It is officially found, determined, and declared that the meeting at which this Resolution is adopted was open to the public and public notice of the time, place, and subject matter of the public business to be considered at such meeting, including this Resolution, was given, all as required by Chapter 551, as amended, Texas Government Code.

15. This Resolution shall be in force and effect from and after its final passage, and it is so resolved.

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PASSED AND APPROVED this the 6th day of October, 2020.

SAN ANTONIO WATER SYSTEM

__________________________________________
Chair, Board of Trustees

Attest:

__________________________________________
Secretary, Board of Trustees

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EXHIBIT A

Ordinance

See Tab No. 1
AGENDA ITEM NO. 33

TO: San Antonio Water System Board of Trustees

FROM: Douglas P. Evanson, Senior Vice President/Chief Financial Officer

THROUGH: Robert R. Puente, President/Chief Executive Officer

SUBJECT: AUTHORIZING THE EXECUTION OF AN AMENDED AND RESTATED CONTINUING DISCLOSURE AGREEMENT

Board Action Date: October 6, 2020

SUMMARY AND RECOMMENDATION:

The attached resolution authorizes the execution of an Amended and Restated Continuing Disclosure Agreement with the Guadalupe-Blanco River Authority (GBRA) in connection with the issuance of contract revenue bonds associated with the Western Canyon Regional Water Supply Project (the “Project”).

- The San Antonio Water System (SAWS) entered into a Water Supply Agreement with GBRA for SAWS to receive a minimum of 4,000 acre feet of water annually from the Canyon Lake Reservoir, with SAWS also receiving all water produced by the Project that is not used by other participants in the Project.

- GBRA issued tax-exempt contract revenue bonds in 2003 to finance the required infrastructure to deliver the contracted water. With the issuance of the GBRA contract revenue bonds in 2003, SAWS executed a Continuing Disclosure Agreement whereby SAWS agreed to provide to GBRA bondholders certain financial information and operating data annually with respect to SAWS operations. This is the same information SAWS is obligated to provide its own bondholders.

- GBRA subsequently refunded the 2003 bonds in 2013, and issued additional contract revenue bonds in 2017 for the installation of aeration equipment at the treatment plant.

- With some of the other participants in the Project being non-tax-exempt entities whose needs of the Project are increasing over time, and with taxable interest rates being close to tax-exempt rates, GBRA desires to refund the 2013 and 2017 bonds with 2020 Taxable Contract Revenue Bonds.

- The issuance of the 2020 Taxable Contract Revenue Bonds will generate debt service savings, which will be passed to the Project participants. Based on SAWS’ current participation rate in the Project, it is estimated that SAWS would save approximately $186,000.00 on average annually through 2037.
• GBRA requests that SAWS execute an Amended and Restated Continuing Disclosure Agreement primarily to incorporate changes in continuing disclosure rules under SEC Rule 15c2-12.

Staff recommends that the Board approve this resolution.

**FINANCIAL IMPACT:**

The current debt service is paid through Western Canyon Project – Water Options (Company 1000, Accounting Unit: 5006800, Account: 511261). Any reduction in debt service will reduce the amount of O&M expense paid by SAWS to GBRA.
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES AUTHORIZING THE EXECUTION OF AN AMENDED AND RESTATED CONTINUING DISCLOSURE AGREEMENT; AUTHORIZING THE PRESIDENT/CHIEF EXECUTIVE OFFICER OR HIS DULY APPOINTED DESIGNEE TO EXECUTE THE AMENDED AND RESTATED CONTINUING DISCLOSURE AGREEMENT; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, the San Antonio Water System (the “System”) entered into a Water Supply Contract with the Guadalupe-Blanco River Authority (the “GBRA”) for SAWS to receive a minimum of 4,000 acre feet of water annually from the Canyon Lake Reservoir, (the “Western Canyon Regional Water Supply Project” or the “Project”) with SAWS also receiving all water produced by the Project that is not used by other participants in the Project; and

WHEREAS, GBRA issued tax-exempt contract revenue bonds in 2003 to finance the required infrastructure to deliver the contracted water, at which time the System executed a Continuing Disclosure Agreement whereby the System agreed to provide to GBRA bondholders certain financial information and operating data annually with respect to the System’s operations; and

WHEREAS, GBRA subsequently refunded the 2003 bonds in 2013, and issued additional contract revenue bonds in 2017 for the installation of aeration equipment at the treatment plant; and

WHEREAS, with some of the other participants in the Project being non-tax-exempt entities whose needs of the Project are increasing over time, and with taxable interest rates being close to tax-exempt rates, GBRA desires to refund the 2013 and 2017 bonds with 2020 Taxable Contract Revenue Bonds; and

WHEREAS, the issuance of the 2020 Taxable Contract Revenue Bonds will generate debt service savings, and based on the System’s current participation rate in the Project, it is estimated that the System would save approximately $186,000.00 on average annually through 2037; and

WHEREAS, GBRA requests that the System execute an Amended and Restated Continuing Disclosure Agreement primarily to incorporate changes in continuing disclosure rules under SEC Rule 15c2-12; and
WHEREAS, the San Antonio Water System Board of Trustees desires (i) to execute an Amended and Restated Continuing Disclosure Agreement with the Guadalupe-Blanco River Authority; and (ii) to further authorize the President/Chief Executive Officer or his duly appointed designee to execute such Amended and Restated Continuing Disclosure Agreement; now, therefore:

BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That an Amended and Restated Continuing Disclosure Agreement with the Guadalupe Blanco River Authority is hereby authorized to be executed.

2. That the President/Chief Executive Officer or his duly appointed designee is hereby authorized to execute such Amended and Restated Continuing Disclosure Agreement.

3. It is officially found, determined, and declared that the meeting at which this resolution is adopted was open to the public, and that the public notice of the time, place, and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

4. If any part, section, paragraph, sentence, phrase or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid or ineffective.

5. This resolution is effective immediately upon its passage.

PASSED AND APPROVED on the 6th day of October, 2020.

____________________________________
Jelynne LeBlanc Burley, Chairwoman

Attest:

____________________________________
Secretary
TO: San Antonio Water System Board of Trustees

FROM: Tracey B. Lehmann, P.E., Director, Development, and Andrea L.H. Beymer, P.E., Vice President, Engineering and Construction

THROUGH: Robert R. Puente, President/Chief Executive Officer

SUBJECT: UTILITY SERVICE AGREEMENTS FOR WATER AND/OR WASTEWATER SERVICES FOR TRACTS REQUIRING THE SAN ANTONIO WATER SYSTEM’S FINANCIAL PARTICIPATION IN THE DEVELOPMENT OF INFRASTRUCTURE THROUGH OVERSIZING AND/OR IMPACT FEE CREDITS AND/OR ARE LOCATED OUTSIDE THE SAN ANTONIO WATER SYSTEM WATER AND/OR WASTEWATER CERTIFICATE OF CONVENIENCE AND NECESSITY

Board Action Date: October 6, 2020

SUMMARY AND RECOMMENDATION:

The attached resolution approves Utility Service Agreements (USA) to provide water and/or wastewater services to specified tracts of land requiring the San Antonio Water System’s (the “System”) financial participation in the development of infrastructure through oversizing and/or impact fee credits, and/or are located outside the System’s water and/or wastewater Certificate of Convenience and Necessity (CCN).

- This board item consists of three tracts, which total 28.88 acres; 200 water Equivalent Dwelling Units (EDUs); and 173 wastewater EDUs.

- Board approval is required since the tracts require the System’s financial participation in the development of infrastructure through oversizing and/or impact fee credits and/or are located outside the System’s water and/or wastewater CCN.

- The Vantage at Fair Oaks Tract is located inside the City of San Antonio Extra Territorial Jurisdiction, outside the System’s water CCN and outside the wastewater CCN. The USA provides 159 EDUs of water and 145 EDUs of wastewater services.

- The Rentz Dietz-Elkhorn Tract is located inside the City of Fair Oaks, outside the System’s water CCN and outside the wastewater CCN. The USA provides 22 EDUs of water and 22 EDUs of wastewater services.

- The QuikTrip (QT) Store #4065 Tract is located inside the City of San Antonio, inside the System’s water CCN and inside the wastewater CCN. The USA provides 19 EDUs of water and six EDUs of wastewater services and consists of oversized infrastructure and impact fee credits.
The Developer is required to install all necessary on-site facilities in accordance with the Board’s regulations and at the Developer’s total cost.

The Developer is responsible for the construction and engineering costs associated with all required water and/or wastewater mains to serve each tract (on-site and off-site).

Staff recommends that the Board approve this resolution.

<table>
<thead>
<tr>
<th>No.</th>
<th>Tract Name</th>
<th>Developer</th>
<th>Acres</th>
<th>W EDUs</th>
<th>WW EDUs</th>
<th>CoSA / CoSA ETJ / Outside</th>
<th>EARZ / CZ</th>
<th>JBSA</th>
<th>Board Reason</th>
<th>W CCN</th>
<th>WW CCN</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Vantage at Fair Oaks Tract</td>
<td>Clermont, LLC</td>
<td>22.34</td>
<td>159</td>
<td>145</td>
<td>CoSA ETJ</td>
<td>INSIDE</td>
<td>Y</td>
<td>CCN</td>
<td>OUTSIDE</td>
<td>OUTSIDE</td>
</tr>
<tr>
<td>2</td>
<td>Rentz Dietz-Elkhorn Tract</td>
<td>Gerald and Lisa Rentz</td>
<td>4.29</td>
<td>22</td>
<td>22</td>
<td>OUTSIDE</td>
<td>INSIDE</td>
<td>Y</td>
<td>CCN</td>
<td>OUTSIDE</td>
<td>OUTSIDE</td>
</tr>
<tr>
<td>3</td>
<td>QuikTrip (QT) Store #4065 Tract</td>
<td>QuikTrip (QT) Corporation</td>
<td>2.25</td>
<td>19</td>
<td>6</td>
<td>CoSA</td>
<td>OUTSIDE</td>
<td>Y</td>
<td>OVR / IFC</td>
<td>INSIDE</td>
<td>INSIDE</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>28.88</td>
<td>200</td>
<td>173</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Acronyms:
- EARZ = Edwards Aquifer Recharge Zone
- OVR = Oversizing
- CCN = Certificate of Convenience and Necessity
- CZ = Edwards Aquifer Contributing Zone
- WW = Wastewater
- IFC = Impact Fee Credits
- CoSA = City of San Antonio limits
- ETJ = Extraterritorial Jurisdiction
- JBSA = Joint Base San Antonio Buffer Zone

**EXTENT AND CONDITIONS OF UTILITY SERVICE AGREEMENTS:**

Upon approval by the System of this USA, the Developer Customer has 36 months to complete the required utility master plan and to start construction. If the Developer Customer fails to complete these requirements within the 36-month period, the USA will expire and a request for a new agreement must be submitted to the System. During the effective term of this USA, capacity in the System’s water and wastewater systems will be set aside. The Developer Customer is not guaranteed capacity until all required off-site infrastructure is built by the Developer, accepted by the System, and all impact fees are paid.
FINANCIAL IMPACT:

In compliance with the System’s Board of Trustees water extension policy, Developer Customer applicants are responsible for financing all required local benefit facilities and for payment of all applicable impact fees. The Developers will contribute all impact fees in effect at the time of plat recordation or the latest date allowable by law for each subdivision unit. The fees to be collected by the System will be recorded in the Service Recovery Account and are estimated as follows, based on current charges and full build out of the tracts:

<table>
<thead>
<tr>
<th>No.</th>
<th>Tract Name</th>
<th>Water Impact Fees</th>
<th>Wastewater Impact Fees</th>
<th>Total Impact Fees</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Vantage at Fair Oaks Tract</td>
<td>$810,423.00</td>
<td>$500,395.00</td>
<td>$1,310,818.00</td>
</tr>
<tr>
<td>2</td>
<td>Rentz Dietz-Elkhorn Tract</td>
<td>$112,134.00</td>
<td>$75,922.00</td>
<td>$188,056.00</td>
</tr>
<tr>
<td>3</td>
<td>QuikTrip (QT) Store #4065 Tract</td>
<td>$90,231.00</td>
<td>$12,438.00</td>
<td>$102,669.00</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>$1,012,788.00</strong></td>
<td><strong>$588,755.00</strong></td>
<td><strong>$1,601,543.00</strong></td>
</tr>
</tbody>
</table>

The System is responsible for providing access to existing general benefit facilities and/or financing the construction of additional general benefit facilities.

OVERSIZING AND/OR IMPACT FEE CREDITS:

The following USAs have recommendations for the System’s financial participation in the development of infrastructure through oversizing and/or impact fee credits and/or facilities based on the System’s Master Plan.

<table>
<thead>
<tr>
<th>No.</th>
<th>Tract Name</th>
<th>Oversize System</th>
<th>Oversize Developer</th>
<th>Oversize Total</th>
<th>Oversize Developer (%)</th>
<th>Oversize System (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>QuikTrip (QT) Store #4065 Tract 24-INCH W*</td>
<td>$56,160.00</td>
<td>$18,720.00</td>
<td>$74,880.00</td>
<td>25.00%</td>
<td>75.00%</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>$56,160.00</strong></td>
<td><strong>$18,720.00</strong></td>
<td><strong>$74,880.00</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: The Developer is eligible for impact fee credits for their share of the cost for the water and/or wastewater infrastructure.
The Developer is required to install all other necessary on-site facilities in accordance with the Board’s regulations at the Developer’s total cost.

Attachments: Table 1, Tract Information
<table>
<thead>
<tr>
<th>No.</th>
<th>Tract Name</th>
<th>Developer</th>
<th>Principal</th>
<th>CoSA / CoSA ETJ / Outside</th>
<th>EARZ / CZ</th>
<th>JBSA</th>
<th>PZ</th>
<th>Acres</th>
<th>Water EDU</th>
<th>WW EDU</th>
<th>Watershed</th>
<th>Board Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Vantage at Fair Oaks Tract</td>
<td>Clermont LLC</td>
<td>Chris Weigand</td>
<td>CoSA ETJ</td>
<td>INSIDE</td>
<td>Y</td>
<td>1610</td>
<td>22.34</td>
<td>159</td>
<td>145</td>
<td>Balcones Creek - Cibolo Creek</td>
<td>CCN</td>
</tr>
<tr>
<td>2</td>
<td>Rentz Dietz - Elkhorn Tract</td>
<td>Gerald and Lisa Rentz</td>
<td>Gerald and Lisa Rentz</td>
<td>OUTSIDE INSIDE</td>
<td>Y</td>
<td>1610</td>
<td>4.290</td>
<td>22</td>
<td>22</td>
<td></td>
<td>Balcones Creek - Cibolo Creek</td>
<td>CCN</td>
</tr>
<tr>
<td>3</td>
<td>QuikTrip (QT) Store #4065 Tract</td>
<td>QuikTrip (QT) Corporation</td>
<td>Matthew D. Miller</td>
<td>CoSA OUTSIDE</td>
<td>Y</td>
<td>930</td>
<td>2.25</td>
<td>19</td>
<td>6</td>
<td></td>
<td>Medio Creek</td>
<td>OVR/IFC</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>28.88</td>
<td>200</td>
<td>173</td>
<td></td>
<td></td>
<td><strong>Total</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Acronyms:**
- EARZ = Edwards Aquifer Recharge Zone
- CZ = Edwards Aquifer Contributing Zone
- CoSA = City of San Antonio limits
- OVR = Oversizing
- WW = Wastewater
- PZ = Pressure Zone
- ETJ = Extraterritorial Jurisdiction
- JBSA = Joint Base San Antonio Buffer Zone
- IFC = Impact Fee Credits
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES APPROVING UTILITY SERVICE AGREEMENTS TO PROVIDE WATER AND/OR WASTEWATER SERVICES TO THE SPECIFIED TRACTS OF LAND REQUIRING THE SAN ANTONIO WATER SYSTEM’S FINANCIAL PARTICIPATION IN THE DEVELOPMENT OF INFRASTRUCTURE THROUGH OVERSIZING AND/OR IMPACT FEE CREDITS AND/OR ARE LOCATED OUTSIDE THE SAN ANTONIO WATER SYSTEM’S WATER AND/OR WASTEWATER CERTIFICATE OF CONVENIENCE AND NECESSITY (CCN), SUBJECT TO THE EXPIRATION OF SUCH AGREEMENT IF NOT EXERCISED IN THIRTY-SIX MONTHS; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, the Developer Customer, specified in the table below, has requested the San Antonio Water System (the “System”) to provide water and/or wastewater service(s), and has satisfied the requirements of the Board’s Regulations for Developer Customer Applicant; and

<table>
<thead>
<tr>
<th>No.</th>
<th>Tract Name</th>
<th>Developer</th>
<th>Acres</th>
<th>W EDUs</th>
<th>WW EDUs</th>
<th>CoSA / CoSA ETJ / Outside</th>
<th>EARZ / CZ</th>
<th>JBSA</th>
<th>Board Reason</th>
<th>W CCN</th>
<th>WW CCN</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Vantage at Fair Oaks Tract</td>
<td>Clermont, LLC</td>
<td>22.34</td>
<td>159</td>
<td>145</td>
<td>CoSA ETJ</td>
<td>INSIDE</td>
<td>Y</td>
<td>CCN</td>
<td>OUTSIDE</td>
<td>OUTSIDE</td>
</tr>
<tr>
<td>2</td>
<td>Rentz Dietz-Elkhorn Tract</td>
<td>Gerald and Lisa Rentz</td>
<td>4.29</td>
<td>22</td>
<td>22</td>
<td>OUTSIDE</td>
<td>INSIDE</td>
<td>Y</td>
<td>CCN</td>
<td>OUTSIDE</td>
<td>OUTSIDE</td>
</tr>
<tr>
<td>3</td>
<td>QuikTrip (QT) Store #4065 Tract</td>
<td>QuikTrip Corporation</td>
<td>2.25</td>
<td>19</td>
<td>6</td>
<td>CoSA</td>
<td>OUTSIDE</td>
<td>Y</td>
<td>OVR/IFC</td>
<td>INSIDE</td>
<td>INSIDE</td>
</tr>
</tbody>
</table>

Total | 28.88 | 200 | 173 |

WHEREAS, the Developer Customer’s provisions to acquire water and/or wastewater services within the System’s jurisdiction is generally illustrated in the attached Project Site Maps; and

WHEREAS, the Developer Customer is obligated to pay the prescribed fees and to comply with other applicable requirements as set forth in the Regulations for Water and/or Wastewater Service; and

WHEREAS, the San Antonio Water System Board of Trustees desires (i) to approve the Utility Service Agreements and to provide water and/or wastewater services to tracts of land requiring the System’s financial participation in the development of infrastructure through oversizing and/or impact fee credits and/or are located outside the System’s water and/or
wastewater Certificate of Convenience and Necessity, and (ii) to provide that the Utility Service Agreement will be honored for a period of thirty-six months, and that if not exercised during this period, the Utility Service Agreement will expire; now, therefore:

BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That the System hereby approves the Utility Service Agreements and agrees to provide water and/or wastewater services to tracts of land requiring the System’s financial participation in the development of infrastructure through oversizing and/or impact fee credits and/or are located outside the System’s water and/or wastewater Certificate of Convenience and Necessity as generally illustrated in the attached Project Site Maps hereto, on a Developer Customer basis as provided for in the Board’s Regulations, applicable amendments to the Regulations, and any other applicable federal, state or local regulations.

2. That the Utility Service Agreement shall be honored for a period of thirty-six months, and if not exercised during this thirty-six-month period, the Utility Service Agreement will expire.

3. It is officially found, determined and declared that the meeting at which this resolution is adopted was open to the public, and that public notice of the time, place and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

4. If any part, section, paragraph, sentence, phrase or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid or ineffective.

5. This resolution becomes effective immediately upon its passage.

PASSED AND APPROVED this 6th day of October, 2020.

__________________________________
Jelynne LeBlanc Burley, Chairwoman

ATTEST:

__________________________________
Secretary

Attachments:
Location Map
Project Site Maps
Utility Service Agreements outside of SAWS water or wastewater CCN and/or with oversized infrastructure and/or impact fee credits

<table>
<thead>
<tr>
<th>Board Approved USA</th>
<th>Acreage</th>
<th>Water EDUs</th>
<th>Wastewater EDUs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Items Total:</td>
<td>28.88</td>
<td>200</td>
<td>173</td>
</tr>
<tr>
<td>Year-to-Date Total:</td>
<td>9,602.08</td>
<td>39,228</td>
<td>38,947</td>
</tr>
</tbody>
</table>
Tract is located:
- over the Edwards Aquifer Recharge Zone
- over the Edwards Aquifer Contributing Zone
- within the 5-Mile Camp Bullis Awareness Zone
- within the 5-Mile JBSA Buffer Zone

Legend
- Parcels Updated
- USA Tract
- Existing Sewer Main
- Existing Force Main
- LS 284
- City of Fair Oaks Ranch
- San Antonio Water System
- Project Location
Tract is Located:
- Within the 5-mile JBSA Buffer Zone

Proposed 12-inch main

Approximately 240 LF of oversized 24-inch main

QuikTrip (QT) Store #4065
19 Water EDUs
6 Sewer EDUs
2.25 Acres
USA-24796
Tract is Located:
-Within the 5-mile JBSA Buffer Zone

QuikTrip (QT) Store #4065
19 Water EDUs
6 Sewer EDUs
2.25 Acres
USA-24795

Attachment III:
USA-24074
"QuikTrip (QT) Store #4065" Tract
Proposed Sewer Infrastructure Map
2.25 Acres
AGENDA ITEM NO. 37

TO: San Antonio Water System Board of Trustees

FROM: Juan D. Gomez, Ph.D., P.E., Director, Plants and Major Projects, and Andrea L.H. Beymer, P.E., Vice President, Engineering and Construction

THROUGH: Robert R. Puente, President/Chief Executive Officer

SUBJECT: AWARD OF CONSTRUCTION CONTRACT IN CONNECTION WITH THE WATER RESOURCES INTEGRATION PROGRAM (WRIP) PHASE 2 PUMP STATIONS IMPROVEMENTS PROJECT

Board Action Date: October 6, 2020

SUMMARY AND RECOMMENDATION:

The attached resolution awards a construction contract to MGC Contractors, Inc., a local, non-SMWVB contractor, in an amount not to exceed $27,060,230.00 in connection with the Water Resources Integration Program (WRIP) Phase 2 Pump Stations Improvements Project (the “Project”).

- The San Antonio Water System (the “System”) identified the WRIP in the 2012 Water Management Plan Update. Upon completion, WRIP will provide the System with the operational flexibility to convey one of the three water sources from the H2Oaks Facility, to the rapidly growing far west area of Bexar County, thus providing added levels of reliability and redundancy.

- The WRIP consists of approximately 45 miles of transmission main beginning at the high service pump station located at the H2Oaks Desalination Facility in southeast Bexar County, to the Old Pearsall Road Pump Station, and terminating at the Anderson Pump Station.

- Phase 1 of the WRIP was completed in 2016, and included the construction of the H2Oaks West Pump Station and Old Pearsall Road Pump Station as well as installation of approximately 28 miles of water transmission main between the two pump stations.

- Phase 2 of the WRIP consists of an additional 17 miles of transmission main, beginning at the Old Pearsall Road Pump Station and terminating at the existing Anderson Pump Station, and will include upgrades to the H2Oaks West, Old Pearsall Road, and Anderson Pump Stations.

- The WRIP Phase 2 Pump Stations Improvements Project work consists of the following:
  - H2Oaks West Pump Station: Addition of pumps to existing booster pump station pad; addition of variable frequency drives (VFDs) associated with new pumps;
control valves, piping, electrical and instrumentation and controls equipment; replacement of existing transformers; and other associated site improvements.

- Old Pearsall Road Pump Station: Addition of pumps to existing high service pump station pad; a 55 million gallons per day booster pump station equipped with VFDs; hydro pneumatic surge tanks; a 7.5 million gallon ground storage tank; yard piping; electrical and instrumentation and controls equipment; additional transformers; concrete foundations; and other associated site improvements.

- Anderson Pump Station: Installation of yard piping and miscellaneous valves and connection to existing ground storage tanks, and electrical and instrumentation and controls upgrades.

- Request for Competitive Sealed Proposals procurement method was used to select the construction contractor. This method allows selection of a contractor based on proposals that offer the “best value” to the System. Best value is determined by score and ranked by weighted criteria published in the solicitation. MGC Contractors, Inc. submitted the best value proposal for $27,060,230.00.

Staff recommends that the Board approve this resolution.

**FINANCIAL IMPACT:**

The Project Fund will finance this expenditure included in the CY 2020 Capital Improvement Program. This work is included in the Water Delivery Core Business, Production Category budget line item for the WRIP Phase 2 Pump Stations Improvements Project. The amount is $27,060,230.00 for water related construction work. The job number is 16-8604 for construction.

**SUPPLEMENTARY COMMENTS:**

Tetra Tech, Inc. prepared the plans and specifications for the project. The engineer’s estimated construction cost was $39,165,600.00.

Competitive sealed proposals were received on July 16, 2020 at 10:00AM. MGC Contractors, Inc. provided the best value to the System based on the following evaluation criteria and weighting:

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team Qualifications and Experience</td>
<td>20%</td>
</tr>
<tr>
<td>Quality, Reputation, and Ability to Deliver Projects on Schedule and within Budget</td>
<td>25%</td>
</tr>
<tr>
<td>Project Approach, Schedule, and Availability</td>
<td>15%</td>
</tr>
<tr>
<td>Price</td>
<td>30%</td>
</tr>
<tr>
<td>SMWB</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>
The following proposals were submitted:

<table>
<thead>
<tr>
<th>Respondent</th>
<th>Bid Amount</th>
<th>Local/SMWVB</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGC Contractors, Inc.*</td>
<td>$27,060,230.00*</td>
<td>Local/Non-SMWVB</td>
</tr>
<tr>
<td>Archer Western Construction, LLC</td>
<td>$30,286,930.00</td>
<td>Local/SMWVB</td>
</tr>
<tr>
<td>PLW Waterworks, LLC</td>
<td>$30,626,796.00</td>
<td>Local/Non-SMWVB</td>
</tr>
<tr>
<td>Engineer’s Estimate</td>
<td>$39,214,946.00</td>
<td></td>
</tr>
</tbody>
</table>

*Best Value Proposal

The price proposal represents a 31.00 percent decrease from the engineer’s estimated construction cost. This contract has 660 days for construction completion.

Additionally, the overall SMWB analysis is shown in the following table:

<table>
<thead>
<tr>
<th>WRIP Phase 2 Pump Stations Improvements Project</th>
<th>MGC Contractors, Inc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMWB Analysis – Board Award</td>
<td></td>
</tr>
<tr>
<td>SBE</td>
<td>4.86%</td>
</tr>
<tr>
<td>MBE – African American</td>
<td>0.00%</td>
</tr>
<tr>
<td>MBE – Asian</td>
<td>0.00%</td>
</tr>
<tr>
<td>MBE – Hispanic</td>
<td>1.32%</td>
</tr>
<tr>
<td>MBE – Other</td>
<td>0.00%</td>
</tr>
<tr>
<td>WBE – Minority</td>
<td>29.19%</td>
</tr>
<tr>
<td>WBE – Non–Minority</td>
<td>0.00%</td>
</tr>
<tr>
<td>SMWB Total</td>
<td>35.37%</td>
</tr>
</tbody>
</table>

Attachments:
1. Project Area Map
2. Project Site Maps
SAN ANTONIO WATER SYSTEM
PROJECT AREA MAP
ATTACHMENT I

WATER RESOURCES INTEGRATION PROGRAM PHASE 2
PUMP STATION IMPROVEMENTS

LEGEND
★ PROJECT SITE
EDWARDS AQUIFER RECHARGE ZONE
SAN ANTONIO WATER SYSTEM
PROJECT SITE MAP
ATTACHMENT II

WATER RESOURCES INTEGRATION PROGRAM PHASE 2
PUMP STATION IMPROVEMENTS

LEGEND
PROJECT SITE

Old Pearsall Rd Pump Station
SAN ANTONIO WATER SYSTEM
PROJECT SITE MAP
ATTACHMENT II

WATER RESOURCES INTEGRATION PROGRAM PHASE 2
PUMP STATION IMPROVEMENTS

LEGEND
PROJECT SITE

H2Oaks West Pump Station
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES AWARDING A CONSTRUCTION CONTRACT TO MGC CONTRACTORS, INC. IN AN AMOUNT NOT TO EXCEED $27,060,230.00 IN CONNECTION WITH THE WRIP PHASE 2 PUMP STATIONS IMPROVEMENTS PROJECT; APPROVING THE EXPENDITURE OF FUNDS AND MAKING AVAILABLE AN AMOUNT NOT TO EXCEED $27,060,230.00 FROM THE PROJECT FUND FOR THE PROJECT WORK; AUTHORIZING THE PRESIDENT/CHIEF EXECUTIVE OFFICER OR HIS DULY APPOINTED DESIGNEE TO EXECUTE A CONSTRUCTION CONTRACT WITH MGC CONTRACTORS, INC., AND TO PAY MGC CONTRACTORS, INC. AN AMOUNT NOT TO EXCEED $27,060,230.00 FOR THE PROJECT WORK; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, this contract will be used to construct proposed improvements to the H2Oaks West, Old Pearsall Road, and Anderson Pump Stations; and

WHEREAS, the San Antonio Water System (the “System”) has solicited competitive sealed proposals for the project work; and

WHEREAS, MGC Contractors, Inc., a local, non-SMWVB contractor, has submitted a price proposal in the amount of $27,060,230.00 for the project work and this proponent has been determined to be the most qualified; and

WHEREAS, System funds in the amount of $27,060,230.00 are required for the project work; and

WHEREAS, the total amount of $27,060,230.00 is available from the Project Fund for the project work; and

WHEREAS, the San Antonio Water System Board of Trustees desires (i) to award a construction contract to MGC Contractors, Inc. in an amount not to exceed $27,060,230.00 in connection with the WRIP Phase 2 Pump Stations Improvements Project, (ii) to approve the expenditure of funds and make available an amount not to exceed $27,060,230.00 from the Project Fund for the project work, and (iii) to authorize the President/Chief Executive Officer or his duly appointed designee to execute a construction contract with MGC Contractors, Inc., and to pay
MGC Contractors, Inc. an amount not to exceed $27,060,230.00 for the project work; now, therefore:

BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That a construction contract in an amount not to exceed $27,060,230.00 is hereby awarded to MGC Contractors, Inc., who is determined to be the most qualified, in connection with the WRIP Phase 2 Pump Stations Improvements Project.

2. That the expenditure of funds in an amount not to exceed $27,060,230.00 for the project work is hereby approved and made available from the Project Fund.

3. That the President/Chief Executive Officer or his duly appointed designee is hereby authorized to execute a construction contract with MGC Contractors, Inc., and to pay MGC Contractors, Inc. an amount not to exceed $27,060,230.00 in connection with the WRIP Phase 2 Pump Stations Improvements Project.

4. It is officially found, determined and declared that the meeting at which this resolution is adopted was open to the public, and that public notice of the time, place, and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

5. If any part, section, paragraph, sentence, phrase or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid or ineffective.

6. This resolution becomes effective immediately upon its passage.

PASSED AND APPROVED this 6th day of October, 2020.

Jelynne LeBlanc Burley, Chairwoman

ATTEST:

______________________________
Secretary
TO:         San Antonio Water System Board of Trustees
FROM: Jose De La Cruz, Director, Customer Service and Mary E. Bailey, Vice President, Customer Experience and Strategic Initiatives
THROUGH: Robert R. Puente, President/Chief Executive Officer
SUBJECT: AWARD OF ADVANCED METERING INFRASTRUCTURE SOLUTION CONTRACT IN CONNECTION WITH THE CONNECTH2O PROGRAM

SUMMARY AND RECOMMENDATION:

The attached resolution awards a high technology goods and services contract to Itron, Inc. ("Itron"), a local, non-SMWVB firm, for an advanced metering infrastructure system (the “AMI System”), professional services and the purchase of ultrasonic meters in connection with the ConnectH2O Program (collectively, the “AMI Solution”) (the “Contract”). The terms of this Contract cover both the Pilot and Full System Wide Deployment (FSWD) Phases of the ConnectH2O Program; however, once the Pilot Phase is completed, future Board authorization will be required in order for the FSWD Phase of the ConnectH2O Program to proceed under the Contract.

- San Antonio Water System (the “System”) ConnectH2O Program utilizes advanced metering infrastructure (AMI) to (a) significantly enhance the customer experience by providing near real-time information to customers about their water usage, (b) enhance analytics and reporting that will improve operational efficiencies and reduce costs, and (c) improve resiliency and security by optimizing the distribution system and its assets.

- In 2017, System staff conducted an AMI Business Case, which concluded that the cost of implementing an AMI system will be substantially or entirely offset by a combination of revenue associated with improved accuracy of meter registration, cost savings associated with operational efficiencies, the deferral of the cost of future meter replacements, and the associated conservation benefit from the expected reduction in customer water usage.

- In November 2019, under the direction of the President/Chief Executive Officer, the System initiated a Request for Competitive Sealed Proposals (RFCSP) to pilot up to two AMI Solutions during the Pilot Phase with the intent to implement one AMI Solution for the FSWD Phase. An Evaluation Committee reviewed the proposals pursuant to the criteria established in the RFCSP, conducted interviews, asking follow-up questions, and received input from Staff on the results of contract negotiations. Based on its findings from the foregoing, the Evaluation Committee recommends to the Board that Itron be awarded the Contract as it has determined that Itron is the responsible offeror whose proposal was determined to be the most advantageous to the System, considering the relative importance
of price and the other evaluation factors as included in the RFCSP.

- Itron is a global leader, with a proven history, in delivering AMI solutions for utilities looking to transform their operations. Itron has worked with energy, gas and water utilities for more than 20 years on the installation and operation of advanced metering systems.

- The AMI System will consist of the network, communications endpoints and the headend software.
  - The network will be provided in a network-as-a-service (NaaS) format where Itron, through CPS Energy, will operate and maintain the network for the System. The CPS Energy network is a mesh network that is currently transmitting the interval meter reads on CPS Energy’s approximately 1.3 million electric and gas meters. The communication devices installed on the water meters will utilize those electric and gas meters to transmit the interval water meter reads.
  - The headend software will receive the stream of meter data and will be provided in a software-as-a-service (SaaS) format, hosted by Itron, that will be integrated into a separate Meter Data Management System.

- In addition to the AMI System, this Contract also includes the purchase of ultrasonic meters for the AMI System during the Pilot; the System has its choice of two kinds of meters available for purchase under the Contract: the Diehl Hydrus ultrasonic static meters for meter sizes two inches and below and Honeywell EvoQ4 electromagnetic meters for meters larger than two inches. Following the Pilot, if the System elects to take the AMI System to FSWD, on twelve months’ prior written notice to Itron, the System may elect to purchase ultrasonic meters for the AMI System from a third party other than Itron (the “Limited Right to Self-Procure Meters”). Ultrasonic water meters are different than the positive displacement meters primarily used by the System today because they do not have any moving parts. Some of the benefits of ultrasonic water meters include the ability to more accurately measure lower flows of water and increased durability and life of the meter.

- The Pilot Phase of the ConnectH2O Program will begin upon Board approval of this contract and is expected to end in late 2021. The Pilot Phase will include approximately 2,500 water services in three pilot test areas. The System will retrofit a portion of existing positive displacement meters in the pilot test areas with an AMI communications endpoint to automatically read the meter once every hour, transmitting those reads to the head-end system four times per day. In addition, since the System has not historically used ultrasonic meters on a wide-scale basis, the System will also install new ultrasonic meters along with an AMI communications endpoint for the remaining meters in the pilot test areas to test the capabilities of the ultrasonic meters and gather information necessary for staff to make a recommendation regarding their long-term use.

- The cost of the AMI Solution during the Pilot Phase is $935,144.13. At the conclusion of
the Pilot Phase, the System staff will present the findings to the Board with a recommendation on whether to proceed with the FSWD Phase of the ConnectH2O Program. If the Board approves proceeding with FSWD Phase of the ConnectH2O Program, the System will receive a credit in the amount of $277,600.00 under the terms of the contract, to be utilized to offset costs during the FSWD Phase.

- The FSWD Phase will include the purchase of communication endpoints; subject to the System’s Limited Right to Self-Procure Meters, the purchase of ultrasonic meters, and all network and headend system services for the entire 20 year contract term. Once this phase begins, staff estimates that it will take approximately four years to convert the System’s entire existing water service area to the AMI System. Total anticipated cost of the FSWD Phase for the AMI System is $170,517,629.34.

- The total cost of the contract for the AMI system for both phases is not to exceed $171,452,773.47.

Staff recommends that the Board approve this resolution.

**FINANCIAL IMPACT:**

This high technology goods and services contract provides the AMI Solution for a total of 20 years in an amount not to exceed $171,452,773.47 for services and equipment provided during both the Pilot Phase and the FSWD Phase of the ConnectH2O Program as shown in the following table.

<table>
<thead>
<tr>
<th></th>
<th>Pilot Phase</th>
<th>FSWD Phase</th>
<th>Total Contract</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication Modules*</td>
<td>$169,767.88</td>
<td>$56,705,418.04</td>
<td>$56,875,185.92</td>
</tr>
<tr>
<td>Ultrasonic Meters* ^</td>
<td>281,614.75</td>
<td>79,108,665.93</td>
<td>79,390,280.68</td>
</tr>
<tr>
<td>Network as a Service</td>
<td>3,018.00</td>
<td>14,397,515.53</td>
<td>14,400,533.53</td>
</tr>
<tr>
<td>Head End Software as a Service</td>
<td>124,172.00</td>
<td>16,310,841.88</td>
<td>16,435,013.88</td>
</tr>
<tr>
<td>Implementation Services, Project Management, Performance and Payment Bonds</td>
<td>356,571.50</td>
<td>3,995,187.97</td>
<td>4,351,759.47</td>
</tr>
<tr>
<td>All Equipment and Services</td>
<td>$935,144.13</td>
<td>$170,517,629.34</td>
<td>$171,452,773.47</td>
</tr>
</tbody>
</table>

*Pricing after December 31, 2026 is tied to a percentage of list price and may vary from estimates provided

^SAWS may elect to procure static meters through a separate competitive process in the future upon providing twelve (12) months advanced written notice to Itron.

Total cost of the AMI Solution during the Pilot Phase of the ConnectH2O Program will be in an amount not to exceed $935,144.13. (Company: 1000; Accounting Unit: 1000000; Account: 115000; Job Number: 19-8604 Automated Meter Infrastructure).

The FSWD Phase of the Contract provides the AMI Solution for the remainder of the 20 year contract term, including the deployment of meters and communication endpoints across the
remainder of the System’s service territory over a period of approximately four years. Total cost of the AMI Solution during the FSWD Phase of the ConnectH2O Program will be an amount not to exceed $170,517,629.34. Future Board authorization is required to proceed with the FSWD Phase of the ConnectH2O Program.

Total cumulative contract amount: $171,452,773.47

SUPPLEMENTARY COMMENTS:

The System issued a Request for Competitive Sealed Proposals (RFCSP) to acquire an AMI Solution. This approach has been used in the past and has been effective.

The evaluation teams were able to balance between price and qualifications in the selection of a contractor to perform these services.

All properly submitted proposals were reviewed by an Evaluation Committee. The Evaluation Criteria listed below have been considered and weighted as shown below.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compliance with Functional, Technical and Performance Requirements</td>
<td>30%</td>
</tr>
<tr>
<td>Background, Experience and Past Performance</td>
<td>25%</td>
</tr>
<tr>
<td>Compensation Proposal</td>
<td>20%</td>
</tr>
<tr>
<td>Project Approach and Team Experience</td>
<td>20%</td>
</tr>
<tr>
<td>SMWB Program Compliance</td>
<td>5%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Responses to this RFCSP were submitted on Wednesday, January 22, 2020. The System received proposals from the following companies:

<table>
<thead>
<tr>
<th>Name of Firm</th>
<th>Local/ SMWVB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Itron, Inc.*</td>
<td>Local/Non-SMWVB</td>
</tr>
<tr>
<td>Aclara Technologies, LLC</td>
<td>Non-Local/Non-SMWVB</td>
</tr>
<tr>
<td>Badger Meter, Inc.</td>
<td>Non-Local/Non-SMWVB</td>
</tr>
<tr>
<td>Core &amp; Main LP</td>
<td>Non-Local/Non-SMWVB</td>
</tr>
<tr>
<td>Sensus USA, Inc.</td>
<td>Local/Non-SMWVB</td>
</tr>
</tbody>
</table>

*Selected Firm

Staff recommends that the contract be awarded to Itron, Inc. as the contractor that is the responsible offeror whose proposal was determined the most advantageous to the System, considering the relative importance of price and the other evaluation factors as included in the RFCSP.
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES AWARDING THE AMI SOLUTION CONTRACT, A HIGH TECHNOLOGY GOODS AND SERVICES CONTRACT TO ITRON, INC. IN CONNECTION WITH PROVIDING THE AMI SOLUTION FOR THE CONNECTH2O PROGRAM FOR A PERIOD OF 20 YEARS IN AN AMOUNT NOT TO EXCEED $171,452,773.47; APPROVING THE EXPENDITURES OF FUNDS IN AN AMOUNT NOT TO EXCEED $935,144.13 FROM THE PROJECT FUND FOR THE PILOT PHASE OF THE CONNECTH2O PROGRAM; AUTHORIZING THE PRESIDENT/CHIEF EXECUTIVE OFFICER OR HIS DULY APPOINTED DESIGNEE TO EXECUTE THE AMI SOLUTION CONTRACT WITH ITRON, INC. IN AN AMOUNT NOT TO EXCEED $171,452,773.47 FOR BOTH THE PILOT PHASE AND THE FULL SYSTEM WIDE DEPLOYMENT PHASE OF THE CONNECTH2O PROGRAM, AND TO PAY ITRON, INC. AN AMOUNT NOT TO EXCEED OF $935,144.13 FOR THE PILOT PHASE OF THE CONNECTH2O PROGRAM; DIRECTING STAFF TO RETURN TO THE BOARD FOR AUTHORIZATION TO PROCEED WITH THE FULL SYSTEM WIDE DEPLOYMENT PHASE OF THE CONNECTH2O PROGRAM AND THE APPROVAL OF ADDITIONAL EXPENDITURES IN AN AMOUNT NOT TO EXCEED $170,517,629.34 FOR PROVIDING THE AMI SOLUTION IN THE EVENT THAT STAFF RECOMMENDS PROCEEDING WITH THE FULL SYSTEM WIDE DEPLOYMENT PHASE OF THE CONNECTH2O PROGRAM; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, the San Antonio Water System (the “System”) desires to implement the ConnectH2O Program, an advanced meter infrastructure (AMI) system including the network, communications endpoints, and the headend software (the “AMI System”), professional services, and the purchase of ultrasonic meters for the Pilot Phase and potentially for the Full System Wide Deployment Phase (collectively, the “AMI Solution”) in an effort to (a) significantly enhance the customer experience by providing more information to customers about their water usage, (b) enhance analytics and reporting that will improve operational efficiencies and reduce costs, and (c) improve resiliency and security by optimizing the distribution system and its assets; and
WHEREAS, the System conducted an AMI Business Case in 2017, which concluded that the cost of implementing an AMI system will be significantly or completely offset by a combination of revenue associated with improved accuracy of meter registration, cost savings associated with operational efficiencies, the deferral of the cost of future meter replacements, and the associated conservation benefit from the expected reduction in customer water usage; and

WHEREAS, November 2019, under the direction of the President/Chief Executive Officer, the System initiated a Request for Competitive Sealed Proposals (RFCSP) to pilot up to two AMI Solutions during the Pilot Phase with the intent to implement one AMI Solution for the Full System Wide Deployment Phase; and

WHEREAS, based on its review of proposals pursuant to the criteria established in the RFCSP, interviews it conducted, and input from staff on the results of contract negotiations, the Evaluation Committee recommended that Itron, Inc. (“Itron”) be awarded the AMI Solution Contract (as defined below) as it has determined that Itron is the responsible offeror whose proposal was determined to be the most advantageous to the System, considering the relative importance of price and the other evaluation factors as included in the RFCSP; and

WHEREAS, Itron is a global leader, with a proven history working with energy, gas and water utilities for more than 20 years on the installation and operation of advanced metering systems; and

WHEREAS, the AMI Solution will consist of the network, the headend software, communications endpoints and ultrasonic meters; and

WHEREAS, the network will be provided in a network-as-a-service (NaaS) format where Itron, through CPS Energy, will operate and maintain the network for the System and the headend software, that will receive the stream of meter data, will be provided in a software-as-a-service (SaaS) format by Itron that will be integrated into a separate Meter Data Management System; and

WHEREAS, the Itron agreement is a high technology goods and services contract to provide the AMI Solution for the Connect H2O Program for a 20 year term that consists of two phases: the Pilot Phase and the Full System Wide Deployment Phase (the “AMI Solution Contract”); and

WHEREAS, the Pilot Phase of the ConnectH2O Program will include approximately 2,500 meters in three pilot test areas while the Full System Wide Deployment Phase provides for the deployment of the AMI Solution to the remainder of the System’s service territory for the remainder of the 20 year contract term; and

WHEREAS, the AMI Solution Contract requires future Board authorization in order to proceed with the Full System Wide Deployment Phase of the AMI Solution Contract; and

WHEREAS, the San Antonio Water System Board of Trustees desires to (i) award
the AMI Solution Contract to Itron, Inc., a local, non-SMWVB firm, in connection with providing the AMI Solution for the ConnectH2O Program for a period of 20 years in an amount not to exceed $171,452,773.47 in a form substantially similar to Attachment 1 hereto, (ii) approving the expenditures of funds in an amount not to exceed $935,144.13 from the Project Fund for the Pilot Phase of the ConnectH2O Program, (iii) authorizing the President/Chief Executive Officer to execute the AMI Solution Contract with Itron, Inc. in an amount not to exceed $171,452,773.47 for both the Pilot Phase and the Full System Wide Deployment Phase of the ConnectH2O Program, and to pay Itron, Inc. an amount not to exceed $935,144.13 in connection with providing the AMI Solution during the Pilot Phase of the ConnectH2O Program, and (iv) directing staff to return to the Board for authorization to proceed with the Full System Wide Deployment Phase of the ConnectH2O Program and the approval of additional expenditures in an amount not to exceed $170,517,629.34 for providing the AMI Solution in the event that staff recommends proceeding with the Full System Wide Deployment Phase of the ConnectH2O Program; now, therefore:

BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That the AMI Solution Contract with Itron, Inc. for a period of 20 years in an amount not to exceed $171,452,773.47 in a form substantially similar to Attachment 1 attached hereto is hereby approved.

2. That the expenditure of funds in an amount not to exceed $935,144.13 for the Pilot Phase is hereby approved from the Project Fund.

3. That the President/Chief Executive Officer or his duly appointed designee is hereby authorized to execute the AMI Solution Contract with Itron, Inc. in an amount not to exceed $171,452,773.47 for both the Pilot Phase and the Full System Wide Deployment Phase of the ConnectH2O Program, and to pay Itron, Inc. an amount not to exceed $935,144.13 for providing the AMI Solution during the Pilot Phase of the ConnectH2O Program.

4. That staff is hereby directed to return to the Board for authorization to proceed with the Full System Wide Deployment Phase and approval of additional expenditures in an amount not to exceed $170,517,629.34 for providing the AMI Solution in the event that staff recommends proceeding with the Full System Wide Deployment Phase of the ConnectH2O Program.

5. It is officially found, determined and declared that the meeting at which this resolution is adopted was open to the public, and that public notice of the time, place and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

6. If any part, section, paragraph, sentence, phrase or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid or ineffective.
7. This resolution becomes effective immediately upon its passage.

PASSED AND APPROVED this 6\textsuperscript{th} day of October, 2020.

______________________________
Jelynne LeBlanc Burley, Chairwoman

ATTEST:

______________________________
Secretary
This AMI System Agreement (this “Agreement”) is made between an entity organized under the laws of the state of Washington having an address at 2111 N. Molter Road, Liberty Lake, WA 99019, USA (“Itron”) and San Antonio Water System, municipally-owned utility of the City of San Antonio in the State of Texas, established pursuant to the provisions of City Ordinance Number 75686, Texas Local Government Code Sections 552.141 et seq. and Chapter 1502, as amended, Texas Government Code, having an address at 2800 U.S. Hwy. 281 North, San Antonio, Texas 78212 (“Customer” or “SAWS”) on the date of the last signature below (“Effective Date”). Itron and Customer are collectively referred to as the Parties or a Party, as applicable.

1. Introduction

1.1. **Scope and Structure.** This Agreement applies to the AMI System and Services provided by Itron to Customer and consists of these General Terms and Conditions, Addenda, and Statements of Work.

1.2. **General Terms and Conditions.** These General Terms and Conditions contain terms and conditions that are generally applicable to all products and services provided by Itron to Customer under this Agreement.

1.3. **Addenda.** Addenda contain supplemental terms and conditions applicable to certain categories of products and services. Addenda incorporated into this Agreement on the Effective Date are identified on the Attachment Schedule, each of which is attached hereto and incorporated herein. The Parties may add Addenda to this Agreement by written amendment after the Effective Date.

1.4. **Order of Precedence.** In the event of a conflict between these General Terms and Conditions and an Addendum, the Addendum shall control. A Statement of Work shall control over any conflict with these General Terms and Conditions or an Addendum, as applicable.

1.5. **Purchase Order Requirement.** Customer may issue a purchase order or similar ordering document (“Purchase Order”) indicating specific products and services, Itron part numbers, quantity, unit price, total purchase price, shipping instructions, requested shipping dates, bill-to and ship-to addresses, tax exempt certifications, if applicable, and contract reference. No pre-printed legal terms contained on any Customer Purchase Order shall be binding upon Itron. Unless expressly agreed otherwise in writing, the terms of this Agreement shall apply, regardless of any additional or conflicting terms of any Purchase Order or other correspondence or documentation submitted by Customer to Itron, and any such additional or conflicting terms are deemed rejected by Itron.

1.6. **Internet-Based Project Management System.** Customer may administer Itron’s provision of the products and services under this Agreement through an Internet-Based Project Management System (hereafter referred to as “CPMS”). In such case, Itron shall conduct communication through CPMS and perform all Project-related functions utilizing CPMS, with the exception of Subcontractor payment monitoring activities, which shall be through the S.P.U.R. system. This includes any and all correspondence, submittals, requests for information, vouchers, compensation requests and processing, amendment, change orders and other administrative activities as may be required in the Agreement. Customer shall administer the CPMS software, shall provide CPMS training to Project Team members and shall make the software accessible via the Internet to all necessary Project Team members.

1.7. **No-Recourse.** Unless otherwise required by applicable laws, the sole source of any payment made or to be made by Customer in satisfaction of any obligations assumed by it or imposed on it under and by virtue of this Agreement shall be limited solely and exclusively to the revenues derived by Customer. Itron (including its successors in legal interest, assigns, or Affiliates) shall never have the right to demand payment of any amount due Itron under this Agreement, whether on account of the AMI System or Services, any termination payment, or for any payment or claim of any nature arising from the performance or non-performance of Customer’s obligations under this Agreement.
(including any defense or indemnity obligation), from any other source or fund of Customer or the City of San Antonio, including the general fund or general credit of the City of San Antonio (including the right to require the levy and collection of any tax, whether ad valorem or otherwise), or any other fund (including other enterprise funds), source of revenue, asset, instrument, or property of the City of San Antonio.

1.8. **No Electronic Interference.** Notwithstanding anything in this Agreement to the contrary, Itron agrees that in the event of any dispute with Customer regarding an alleged breach of this Agreement, Itron shall not use any type of electronic means to prevent or interfere with Customer’s authorized use of any portion of the AMI System or Services. Itron understands that a breach of this provision could foreseeably cause substantial harm to Customer and to numerous third parties having business relationships with Customer. For clarification, the above prohibition does not apply to Itron’s express rights under this Agreement to: (a) terminate Customer’s access to and use of the AMI System upon termination or expiration of this Agreement, or (b) suspend Customer’s access to and use of the AMI Subscription pursuant to Section 11 (Suspension or Restriction of Service) of Attachment 1 (AMI Subscription Addendum), or (c) suspend Customer’s access to and use of the AMI Subscription if Customer fails to pay all outstanding invoices that are not disputed by Customer in good faith pursuant to the Payment Addendum (Attachment 10) within three (3) months of receipt of Itron’s written notice of non-payment.

2. **Definitions.** The following defined terms are used throughout this Agreement. Additional terms may be defined in other sections of this Agreement or in the attached Addenda or Statements of Work.

2.1. **Affiliate** means any other legal entity that: (a) directly or indirectly controls or is controlled by Itron; or (b) is directly or indirectly controlled by a legal entity that also directly or indirectly controls Itron. A legal entity controls another legal entity if that first legal entity has the power to direct or cause the direction of the management of the other legal entity, whether directly or indirectly, through one or more intermediaries or otherwise, and whether by ownership of shares or other equity interests, the holding of voting rights or contractual rights, by being the general partner of a limited partnership, or otherwise.

2.2. **AMI (Advanced Metering Infrastructure) Subscription** means the SaaS and NaaS portions of the AMI System that Itron provides to Customer under Attachment 1 (AMI Subscription Addendum).

2.3. **AMI (Advanced Metering Infrastructure) System** means, collectively, the AMI Subscription (which includes the SaaS and NaaS), Equipment, and Software that are designed to provide an integrated system of smart meters, communications networks, and data management systems to enable two-way communication between utilities and customers to perform on-demand meter reads. The AMI System excludes meter installation.

2.4. “**Available [Endpoint]**” means an Endpoint i) that is not damaged or vandalized in such a way that prevents communication; ii) for which Customer has provided Itron with accurate and up-to-date installation information; iii) for which NaaS is properly functioning; and iv) that has registered and successfully provided a daily register reading.

2.5. **Change Order** means a written order issued by Customer to Itron authorizing additions, deletions, or revisions to the AMI System or Services to be performed by Itron within the scope of this Agreement substantially similar to the form attached as Attachment 18 (Change Order Addendum). This includes changes in price, scope, and time.

2.6. **Claim** means an unaffiliated third-party claim, proceeding, action, cause of action, suit, or demand for damages, costs, liens, losses, fines, penalties, liability, or expenses of any kind (including reasonable attorney’s fees), equitable relief, or other relief.

2.7. **Confidential Information** means Customer Data and any non-public information or material that is disclosed by the Disclosing Party (as defined in Section 12.1) to the Receiving Party (as defined in Section 12.1) during the Term and that is (i) marked “Confidential”; or (ii) should reasonably be known or understood to be confidential by an individual exercising reasonable commercial judgment in the circumstances. Subject to Chapter 552 of the Texas Government Code, as may be amended from time
to time, Confidential Information of Itron shall include the SaaS and its related Documentation, including any software code and algorithms, methods, techniques, and processes revealed or utilized therein, and its unit pricing. Confidential Information excludes information that: (a) is now or becomes generally available to the public through no fault or breach of the receiving Party; (b) is lawfully in the receiving Party's possession, or known by it, prior to its receipt from the disclosing Party; (c) is lawfully disclosed to the receiving Party by a third-party, free of any obligation of confidentiality; or (d) is developed by the receiving Party independently and without reference to the disclosing Party's Confidential Information. For clarification, Customer's Confidential Information shall include Customer Data and other information that is designated as “confidential” in writing that Itron receives from third parties on behalf of Customer (e.g., Customer’s other third party vendors) that is related to the AMI System or Services or any other rights or obligations under this Agreement.

2.8. **Customer Data** means all information, items, content, or data of any kind, in any form or medium, that is submitted, posted, or otherwise transmitted by or on behalf of Customer, Customer’s customers, or any other Authorized User through the AMI System. Such Customer Data may include, without limitation, any personally identifying information relating to an existing or prospective utilities customer, or any other information that, either individually or when combined with other information could be used to identify a particular existing, former, or prospective utilities customer.

2.9. **Customer Indemnified Parties** means Customer, including Customer’s Board of Trustees, and the City of San Antonio, and each of their agents, employees, officers, directors, trustees, and representatives.

2.10. **Data Security Requirements** means the data security requirements for Customer Data as set forth in Section 11 of this Agreement (Customer Data and Data Protection).

2.11. **Defended Party** means a Party (including, in the case of Customer, as applicable, the Customer Indemnified Parties) entitled to defense from the Defending Party under the express indemnity provisions in this Agreement, as applicable.

2.12. **Defending Party** means a Party obligated to provide defense to the Defended Party under the express indemnity provisions in this Agreement, as applicable.

2.13. **Deliverable** means a work product that is defined in a SOW and is to be delivered by Itron to Customer as part of the Services performed under this Agreement, but excluding Customer Work (as that term is defined in Section 6.2 (Customer Materials and Customer Work)).

2.14. **Integrated Master Schedule** means the mutually agreed upon delivery schedule for the AMI System as set forth in Attachment 12 (Integrated Master Schedule Addendum).

2.15. **Documentation** means user manuals, training materials, product descriptions and specifications, technical manuals, supporting materials and other information relating to products and services offered by Itron to Customer under this Agreement that Itron customarily makes available to its customers or that are prepared by Itron in connection with a SOW, including those that relate to shared components of the AMI System, including but not limited to the NaaS.

2.16. **Endpoint** means an Itron GenX 500W module or cellular 500W module.

2.17. **Equipment** means as that term is defined in Attachment 4 (Equipment Addendum).

2.18. **Fees** means all amounts payable to Itron by Customer for products and services provided under this Agreement as set forth in Attachment 10 (Fees Addendum) or Statement of Work.

2.19. **Firmware** means as that term is defined in Attachment 4 (Equipment Addendum).

2.20. **Force Majeure** means any cause that is beyond a delayed or non-performing Party's reasonable control and without the delayed or non-performing Party's fault or negligence, including, but not limited to, third party accidents (excluding a Party's subcontractors) to the extent not caused by a Party's negligence, riots, insurrections, acts of terrorists or any public enemy, acts of civil or military authorities, war, civil disturbances, governmental actions, epidemics, pandemics, fires, floods, earthquakes, severe weather, lightning, other acts of God, disruptions in the communications
between the Access Point and the HeadEnd, global shortages of materials required for manufacture or transportation of Equipment, embargoes, and strikes (but not by the affected Party’s employees). For clarification, the above examples of Force Majeure events are still required to meet the qualification that it is beyond the delayed or non-performing Party’s reasonable control and is without the delayed or non-performing Party’s fault or negligence.

2.21. **Intellectual Property Rights** mean all rights under U.S. and non-U.S. patents, copyright, trademark, trade secret, and other similar laws.

2.22. **Maintenance Services** means the maintenance and support services for the AMI System as described in Attachment 3 (Maintenance Services Addendum).

2.23. **Module/Meter Delivery Schedule** means the module and meter delivery schedule for the AMI as set forth in Attachment 14 (Module/Meter Delivery Schedule Addendum).

2.24. **NaaS or Network** means the portion of the AMI System that provides the wireless communications to transfer Customer Data to and from communications modules and the SaaS, as set forth in more detail in Attachment 1 (AMI Subscription Addendum).

2.25. **Optimized [Endpoint]** means an Endpoint that is within an Optimization Area, or the AMI System, as applicable, that has been accepted pursuant to Section 8.5 of the Statement of Work #1.

2.26. **Professional Services** mean the professional services that are to be performed by Itron for Customer pursuant to Statement of Work as more detailed in a Statement of Work and Attachment 2 (Professional Services Addendum), which is attached hereto and incorporated herein, such as installation services, implementation services, consulting services, and project management services, but excluding SaaS and Maintenance Services.

2.27. **Provisioned [Endpoint]** means an Available Endpoint that is in any of the following operational states within the Itron application: "active," "inactive," or "disconnected," and that has been Optimized, but is not: (i) in a "discovered," "installed," "initializing," "unreachable" or "init_failed" state; or (ii) considered to be in the process of being deployed or being replaced under warranty. The definitions for active, inactive, and disconnected, as such terms are used in this definition of “Provisioned” Endpoint are:

   "active” Endpoints can be read and have been read within the last 72 hours (configurable).
   
   "inactive” Endpoints are Endpoints for which there is no customer at the premise, but the device is still being read by UIQ. These will go into unreachable if reads fail.
   
   "disconnected” Endpoints are Endpoints in which service at the premise is suspended, but the device is still being read. These will go into unreachable state if reads fail.

2.28. **Security Procedures** means the security policies and procedures set forth in Attachment 7 (Security Procedures Addendum).

2.29. **Software** means the object code versions of all software provided to Customer as part of the AMI System, including, but not limited to, all software provided as a Software-as-a-Service, but excluding Firmware on Third-Party Equipment (as that term is defined in Attachment 4 – Equipment Addendum). Software includes any third party software embedded in the Software. Software is only provided in electronic form.

2.30. **Statement of Work or SOW** means any document between Itron and Customer describing Professional Services to be provided by Itron that is (a) attached hereto and identified as a Statement of Work on the Attachment Schedule on the Effective Date, or (b) any other document identified as a Statement of Work that references this Agreement and is executed by the Parties after the Effective Date.

2.31. **Service Level Requirements** mean the AMI Subscription Availability and Performance Metrics described in Attachment 16 (Service Level Requirements Addendum).
2.32. **Services** means the Professional Services and Maintenance Services provided to Customer under this Agreement.

2.33. **Software-as-a-Service or SaaS** means the service where Itron hosts or provides access to the Head-End System Software known as Temetra and UIQ on Itron Servers at an Itron data center as set forth in more detail in Attachment 1 (AMI Subscription Addendum).

2.34. **System Requirements** means the system performance specifications and requirements for the AMI System set forth in Attachment 9 (System Requirements Addendum).

2.35. “**Endpoint Specifications**” means Tab 3 of the System Requirements.

2.36. **Term** means, collectively, the Pilot Term, System Term, if elected, and any additional renewal terms agreed by the Parties in writing.

3. **Term.**

3.1 **Pilot Term.** Unless terminated earlier pursuant to the terms of this Agreement, this Agreement will begin on the date Customer’s Board of Trustees approves this Agreement (“**Pilot Start Date**”) and will continue until the earlier of: (a) the date Customer’s Board of Trustees selects the vendor for full deployment of the AMI System (“**Vendor Selection Date**”), or (b) the date of termination provided by Customer pursuant to Section 13.1 (Termination of Pilot) below (“**Pilot Term**”).

3.2 **System Term.** After the Pilot Term, if the Board of Trustees approves Itron as the selected vendor for the full deployment of the AMI System, the Term of this Agreement will continue until the expiration of 20 years after the Pilot Start Date unless terminated earlier pursuant to the terms of this Agreement or extended by mutual agreement of the Parties in writing (“**System Term**”). Any in-process Statements of Work and any accepted Purchase Orders as of the expiration date of this Agreement shall be completed by the Parties and the Term of this Agreement will be extended solely for that purpose until completion. For clarification, if Customer’s Board of Trustees selects a vendor other than Itron for the full deployment of the AMI System, the Term of this Agreement, if still then in effect, shall automatically terminate on the Vendor Selection Date.

This Section 3 is subject to Section 13 (“**Termination**”) of these General Terms and Conditions.

4. **AMI System.**

4.1. **Parties’ Obligations.** During the Term of this Agreement, Itron will develop, provide, implement, maintain, and support the AMI System as described in this Agreement pursuant to the terms set forth herein, including the Attachments, which are attached hereto and incorporated herein. Customer will use reasonable efforts to provide Itron with all documentation and information in the possession, or under the control, of Customer that is required to enable Itron to provide the AMI System, and Customer will cause its employees and agents to cooperate with Itron’s reasonable requests in order to assist Itron in providing the AMI System. Each Party’s roles and responsibilities under this Agreement are set forth in more detail in Attachment 8 (Roles and Responsibilities Addendum).

4.2. **Location of AMI System.** Itron shall provide the AMI System to Customer and its end users solely from data centers in the U.S. Subject to the terms of the Data Security Requirements, Itron may provide Maintenance Services using support in other countries in order to provide round-the-clock 24x7 support, unless otherwise prohibited in an Agreement.

4.3. **Change Orders.** Changes to the scope or delivery of the AMI System, and any related fee adjustments, including, but not limited to, changes to the System Requirements, Integrated Master Schedule, Module/Meter Delivery Schedule, or a SOW, shall be made through a Change Order. Itron shall have no obligation to commence work, and Customer shall have no obligation to pay any amount to Itron, in connection with any Change Order until the Change Order is fully executed by authorized representatives of both Parties. Once executed, as provided for herein, the terms of the Change Order will be deemed to supplement or modify, as applicable, the terms and conditions of the Agreement to which it pertains.
4.3.1. When either Party wishes to request a Change Order, it shall generate a proposed Change Order substantially in the form set out in Attachment 17 (Change Order Form Addendum) or any alternative form agreed between the parties in writing.

4.3.2. Each Party will use good faith efforts to negotiate the terms and respond to any Change Order request made by the other Party within a commercially reasonable period of time after receipt by means of providing a change control note.

4.3.3. If the Party requesting the Change Order wants to accept the proposal documented in the Change Order produced by the other Party, it shall counter-sign and return the Change Order to the other Party within a commercially reasonable period of time after receiving it from the other Party and this shall have the effect of modifying the Agreement as set out in the Change Order. If the requesting Party does not counter-sign and return the change note as aforesaid, the Agreement shall remain in force unchanged.

5. Warranties and Disclaimer.

5.1. AMI System Warranty. Upon Final System Acceptance and for a period of three years thereafter, Itron warrants that the AMI System shall substantially conform to the System Requirements, the following sections of SOW#1: Sections 9.2(E), 9.2(F), 9.2(G), 10.1(D), 10.1(E), 11.1(F), 11.1(H), 11.1(I), 11.1(J), 11.1(L), and Exhibit C (SAWS_Cloud_VTAQ-Lite), and Service Level Requirements (collectively, the “AMI System Warranty Requirements”). For clarity, this AMI System warranty applies to the overall AMI System performance. Warranties that apply to individual components of the AMI System are set forth in separate sections and Addendums to this Agreement. Subject to the express remedies available to Customer from Itron for claims unrelated to a breach of the foregoing warranty, Customer’s exclusive remedy and Itron’s entire liability for a breach of this warranty will be for Itron to promptly correct such breach through, as applicable, Itron’s obligations and Customer’s remedies set forth under Attachment 3 (Maintenance & Support Services Addendum), Itron’s obligations and Customer’s remedies under Attachment 16 (Service Level Requirements Addendum), Itron’s re-performance of Services by Itron within thirty (30) days of receipt of notice of non-conformance, and Itron’s obligations and Customer’s remedies set forth in the warranty terms applicable to such Equipment. Notwithstanding the foregoing or anything else in the Agreement to the contrary, to the extent a breach of this warranty is due solely to error(s) in Third-Party Equipment, Customer’s remedy is limited to the Third-Party Warranties as set forth in the Equipment Addendum - Attachment 4. Itron’s obligations of Maintenance Services under this Section 5.1 includes corrections of the AMI System to conform to the AMI System Warranty Requirements. If Itron fails to conform the AMI System to the warranty in this Section 5.1 as set forth above, then Customer shall have the right to terminate in whole or in part, pursuant to Section 13.2(c) below.

5.2. Anti-Bribery Warranty. Itron represents and warrants that it has not employed or retained any company or person other than a bona fide employee working solely for Itron, to solicit or secure this Agreement, and that it has not for the purpose of soliciting or securing this Agreement paid or agreed to pay any company or person, other than a bona fide employee working solely for Itron, any fee, commission, percentage, brokerage fee, gift, or any other consideration, contingent upon or resulting from the award or making of this Agreement. Upon a breach of this warranty, Customer shall have the right to immediately terminate this Agreement for cause in accordance with Section 13.2(c)(iv).

5.3. Illicit Code Warranty. Itron warrants that, unless authorized in writing by Customer, any software program or any other part or portion of the AMI System and Services, including components passed through to Customer by Itron from third parties under this Agreement but excluding Third Party Equipment, shall:

5.3.1. Not contain any hidden file;

5.3.2. Not replicate, transmit or activate itself without control of a human operating the computing equipment on which it resides except for reasonable exclusions (e.g., typically when you start a software system, one action starts many processes and pieces of code);

5.3.3. Not alter, damage or erase any data or computer programs without control of a human
operating the computing equipment on which it resides except for reasonable exclusions (e.g.,
often software will periodically clean up logs or other data (usually based on parameters in a
configuration file);

5.3.4. Not contain any key, node lock, time-out or other function, whether implemented by
electronic, mechanical or other means, that restricts or may restrict use or access to any
software programs, Services developed or data created under an Agreement, based on
residency on a specific equipment configuration, frequency of duration of use or other limiting
criteria; and

5.3.5. Not contain any virus, malicious, illicit or similar unrequested code, whether known or unknown
to Itron.

5.3.6. Customer’s exclusive remedy and Itron’s entire liability for a breach of the warranties in this
Section 5.3 will be for Itron to remove any such Illicit Code within a commercially reasonable
period of time at no additional cost to Customer.

5.4. Services Warranties. For a period of ninety (90) days after completion of the Services, Itron
represents and warrants that: (a) all Services performed under this Agreement shall be provided and
performed by qualified personnel in a timely, professional, workmanlike manner, in accordance with
usual and customary industry standards; (b) it shall use industry standard practices to fulfill its
obligations under such Services, and (c) all of such Services shall be under the direct supervision of
properly licensed professionals as appropriate for the project and work. Customer’s exclusive
remedy and Itron’s entire liability for a breach of the warranties in this Section 5.4 will be for Itron
to correct or re-perform the Services, in accordance with the requirements of the warranties set
forth above and any other applicable obligations under this Agreement, within 30 days of receipt of
notice of such breach.

5.5. Compliance with Laws Warranty. Itron represents and warrants that the AMI System (excluding Third
Party Equipment), Documentation, and Services shall comply with all applicable laws, consistent with
and to the extent the functions of the AMI System (excluding Third Party Equipment), Documentation,
and Services are subject to such laws.

5.6. Co-operation Warranty. Itron warrants that it will reasonably co-operate with Customer and
Customer’s third-party providers in order for Customer to use the AMI System as set forth in this
Agreement. To the extent such cooperation requires a material modification of the AMI System
beyond what is set forth in this Agreement, such modification may be subject to additional fees.

5.7. TWDB Terms and Conditions. Customer may apply for a loan from the Texas Water Development
Board (the “TWDB”). If the TWDB provides such loan to Customer, additional terms and conditions
may apply (“TWDB Terms and Conditions”). Customer will provide Itron with copies of any applicable
TWDB Terms and Conditions, which may be updated from time to time. To the extent that Itron
anticipates any of the TWDB Terms and Conditions (other than those that were set forth in the
solicitation) (“Modified TWDB Terms and Conditions”) would result in additional cost to Itron, Itron
may request, within thirty (30) calendar days following Itron being notified of the Modified TWDB
Terms and Conditions that Itron anticipates would lead to additional cost to Itron, an equitable
adjustment to fees under this Agreement pursuant to an agreed upon Change Order pursuant to
Section 4.3 (Change Orders). Itron shall not be obligated to comply with Modified TWDB Terms and
Conditions that lead to additional costs for Itron unless and until the Parties have agreed upon a
Change Order.

5.8. Mutual Warranties. Each party represents and warrants to the other that it (a) has the full right and
authority to enter into this Agreement, and (b) is not aware of any pending or threatened claim or
litigation that would prevent it from performing its obligations under this Agreement. A party shall
promptly notify the other party if at any time during the Term it determines that either (a) or (b) has
become inaccurate.

5.9. Itron Warranty. Itron warrants that, during the Term of this Agreement, it has the legal right and
authority to grant Customer the rights to the AMI System that are expressly granted to Customer in
5.10. **Additional Warranties.** Additional warranties relating to the various components of the AMI System and Services are set forth in the applicable Addendum or SOW. In the event of inconsistency or conflict between the warranties set forth in this Section 5 and any additional warranties set forth in an Addendum or SOW, or any other document executed by the parties related to this Agreement, the warranty providing the most protection to Customer, including the longest warranty period, shall apply.

5.11. **Warranty Disclaimers.** EXCEPT FOR THE EXPRESS WARRANTIES PROVIDED UNDER THIS AGREEMENT, INCLUDING ANY WARRANTIES PASSED THROUGH FROM THIRD PARTY SUPPLIERS (COLLECTIVELY, “WARRANTIES”), NEITHER PARTY MAKES ANY OTHER WARRANTY OF ANY KIND RELATING TO THIS AGREEMENT AND DISCLAIMS ALL IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION, (I) IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, (II) WARRANTIES OF TITLE AND AGAINST INFRINGEMENT, AND (III) WARRANTIES ARISING FROM A COURSE OF DEALING, USAGE OR TRADE PRACTICE. TO THE EXTENT ANY IMPLIED WARRANTY CANNOT BE EXCLUDED, SUCH WARRANTY IS LIMITED IN DURATION TO THE EXPRESS WARRANTY PERIOD. EXCEPT FOR ANY EXPRESS WARRANTIES PROVIDED UNDER THIS AGREEMENT, (A) ITRON MAKES NO WARRANTY RELATED TO TRANSMISSION OF DATA VIA WAN, CELLULAR, OR OTHER PUBLIC COMMUNICATIONS OR BROADBAND SYSTEMS (INCLUDING OUTAGES, DEVICE NON-REACHABILITY, LOSS OR INACCURATE READING), (B) ITRON AND ITS SUPPLIERS DO NOT WARRANT OR REPRESENT THAT PRODUCTS OR SERVICES WILL BE FREE FROM BUGS, ERRORS, OR THAT THEIR USE WILL BE UNINTERRUPTED OR ERROR-FREE, AND (C) NEITHER CUSTOMER NOR ITRON WARRANTS THAT CUSTOMER DATA WILL BE UNINTERRUPTED OR ERROR-FREE. THESE WARRANTY DISCLAIMERS WILL APPLY NOTWITHSTANDING ANY FAILURE OF THE ESSENTIAL PURPOSE OF ANY LIMITED REMEDY PROVIDED UNDER THIS AGREEMENT.

6. **Intellectual Property.**

6.1. **Pre-Existing Materials.** Subject to the limited rights expressly granted by each Party to the other Party under this Agreement, each Party shall retain all Intellectual Property Rights in and to the data, products, and materials owned by it (or its licensors or suppliers, and in the case of Customer, its customers) prior to the Effective Date of this Agreement or any applicable SOW. If such data or materials are used by a Party in the performance of this Agreement, such use shall not transfer ownership of such data, products, or materials to the other Party.

6.2. **Customer Materials and Customer Work.** Customer shall retain all Intellectual Property Rights in and to any and all data, products, and materials (including, but not limited to, Customer Data), regardless of the time of creation, that is received by, or otherwise made available to, Itron under this Agreement by Customer or on Customer’s behalf, including, but not limited to, Customer’s customers or Customer’s other vendors or suppliers, that relate to Customer, Customer’s customers, or Customer’s other suppliers or vendors, (collectively, “Customer Materials”) whether or not in the possession of Itron. No interest or right in or to such Customer Materials shall transfer to Itron even if such Customer Materials are included or embedded within work product that results from Services performed by Itron under this Agreement, subject to any express rights by Itron to access and use such Customer Materials as expressly set forth herein. Final work product and work papers that are specifically developed for and delivered to Customer by Itron in connection with the delivery of the AMI System and performance of Services pursuant to this Agreement (“Customer Work”) shall be the property of Customer whether or not in the possession of or created by Itron, for use and re-use by Customer, its agents, employees, contractors and consultants, as needed from time-to-time. Subject to the terms of this Agreement, Customer hereby grants to Itron a non-exclusive, royalty-free license during the Term to access, process, transmit, store, reproduce, and otherwise exploit Customer Materials and Customer Work for the sole purposes of providing the AMI System and Services under this Agreement. There are no implied rights to any Customer Materials, and Customer reserves all rights not expressly granted to Itron under this Agreement.

6.3. **Deliverables and Documentation.** Unless expressly granted to Customer elsewhere in this
Agreement, Itron shall retain Intellectual Property Rights in all Deliverables and Documentation excluding any and all Customer Materials and/or Customer Work contained or embedded within such Deliverables and Documentation, which remain the sole property of Customer. For clarification, the presence of Customer Materials and/or Customer Work in Deliverables or Documentation owned by Itron under this Section 6.3 does not affect such Itron ownership rights, and without Customer’s prior written consent, Itron may not use or disclose such Deliverables or Documentation that include Customer Materials and/or Customer Work beyond the scope of the license Customer grants to Itron to the Customer Materials and Customer Work that is provided in Section 6.2 above. Itron hereby grants Customer a non-exclusive, non-transferable license to access, copy, use such Documentation and Deliverables solely in connection with Customer’s use of the AMI System as provided by Itron under this Agreement. There are no implied rights to any Deliverables, Documentation, Services, or SaaS and Itron reserves all rights not expressly granted to Customer under this Agreement.

6.4. **Reservation of Rights.** All rights, titles, and interests not specifically and expressly granted by either Party hereunder are hereby reserved. Nothing in this Agreement will be understood to preclude or limit Itron from providing software, materials, or services for itself or other clients, irrespective of the possible similarity of such software, materials, or services to those delivered to Customer.

7. **Fees, Invoicing, Payment, and Taxes.**

7.1. **Fees.** Fees due by Customer to Itron under this Agreement are set forth in Attachment 10 (Fees Addendum) or a Statement of Work (collectively “Fees”). Fees are not subject to escalation unless expressly agreed otherwise in Attachment 10 (Fees Addendum).

7.2. **Invoicing and Payment.** Itron will invoice, and Customer will pay, for Fees in accordance with Attachment 10 (Fees Addendum) and Attachment 11 (Payment Terms Addendum). Fees may be subject to credits, offset, or withholding by Customer as provided in Attachment 11 (Payment Terms Addendum) or as expressly set forth elsewhere in this Agreement.

7.3. **Expenses.** All fees set forth in this Agreement are inclusive of any travel costs and expenses unless expressly stated otherwise. For any additional travel costs and expenses that are pre-approved by Customer in writing, Customer will reimburse Itron for all actual, reasonable and necessary travel costs and related expenses pursuant to the terms of Attachment 18 (Reimbursable Expense Policy Addendum).

7.4 **Freight and Taxes.** Except where expressly stated otherwise in Attachment 10 (Fees Addendum) or the applicable SOW, all prices are inclusive of all shipping insurance fees, but exclusive of any freight, handling, and shipping charges, taxes, fees and duties or other similar amounts, however designated, including without limitation value added, sales and withholding taxes which are levied or based upon the prices, charge or upon this Agreement. Customer is tax exempt, and Itron shall be solely responsible for payment of all taxes related to Itron’s provision of the AMI System and Services under this Agreement. Customer shall present to Itron upon execution of this Agreement a tax exempt certificate for provision of the AMI System and Services pursuant to the terms of this Agreement.

7.5 **No Deemed Acceptance.** Notwithstanding anything in this Agreement to the contrary, payments of any amounts by SAWS under the Agreement shall not constitute acceptance of the AMI System or any portion thereof.

8. **Bonds.**

8.1 **Performance Bond.** As of the first day of the System Term, and at Customer’s sole expense, Itron shall provide a performance bond for the AMI System and Services (the “Bonded Work”), for a period of five (5) years beginning on the first day of the System Term (“Bond Term”), in a form substantially similar to the form provided in Attachment 19 (Performance Bond Form Addendum), and in an amount equal to the estimated fees due by Customer during the first four years of the Bond Term as shown below:
### Bond Term Table

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<th>Bond Term</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Total</th>
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<td>Implementation Services &amp; Options</td>
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<td>Total</td>
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<td>$34,255,201.02</td>
<td>$29,573,461.72</td>
<td>$112,057,001.23</td>
</tr>
</tbody>
</table>

- **a)** guarantee the delivery and completion of the Bonded Work herein identified in conformity with the Agreement, and
- **b)** guarantee the Bonded Work against defects in workmanship and materials.

If any Performance Bond is in an amount in excess of ten (10%) percent of the Surety company’s capital and surplus, the San Antonio Water System shall require, as a condition to accepting the Performance Bond, written certification that the surety company has reinsured the portion of the risk that exceeds ten (10%) percent of the surety company’s capital and surplus with one or more reinsurers who are duly authorized, accredited, or trustee to do business in this state. The amount reinsured by any reinsurer may not exceed ten (10%) percent of the reinsurer’s capital and surplus.

If the amount of the Performance Bond exceeds $100,000, the surety must also:

(i) hold a certificate of authority from the United States secretary of the treasury to qualify as a surety on obligations permitted or required under federal law; or

(ii) have obtained reinsurance for any liability in excess of $100,000 from a reinsurer that is authorized and admitted as a reinsurer in this state and is the holder of a certificate of authority from the United States secretary of the treasury to qualify as a surety or reinsurer on obligations permitted or required under federal law.

If the Surety on any Performance Bond furnished by Itron to the Board is declared bankrupt or becomes insolvent, or has its right to do business revoked in the State of Texas, then Itron will have ten (10) days to substitute another Performance Bond and surety there for which shall be acceptable to Customer, and in such an event, Customer shall remain responsible for the cost of the bond, but Itron shall be responsible for any expenses incurred by either Party, excluding Customer’s attorney fees, due to the substitution.

#### 8.2 Payment Bond

As of the first day of the System Term, and at Customer’s sole expense, Itron shall provide a payment bond for the Bonded Work, in a form mutually agreed by the Parties substantially similar to the form provided in Attachment 20 (Payment Bond Form Addendum), for
the Bond Term, and in an amount equal to the Bond Amount.

The Payment Bond shall be security for the payment of all persons supplying labor and material in
the prosecution of the Bonded Work and the providing of Third-Party Equipment provided for in the
Agreement. The Payment Bond shall have corporate Sureties that are licensed to conduct business
in Texas. Itron agrees that the following shall apply to this Payment Bond provided by a Surety:

If any Payment Bond is in an amount in excess of ten (10%) percent of the Surety company's capital
and surplus, Customer shall require, as a condition to accepting the Payment Bond, written
certification that the surety company has reinsured the portion of the risk that exceeds ten (10%)
percent of the surety company’s capital and surplus with one or more reinsurers who are duly
authorized, accredited, or trusteed to do business in this state. The amount reinsured by any
reinsurer may not exceed ten (10%) percent of the reinsurer’s capital and surplus.

If the amount of the Payment Bond exceeds $100,000, the Surety must also:

a) hold a certificate of authority from the United States secretary of the treasury to qualify as a
surety on obligations permitted or required under federal law; or

b) have obtained reinsurance for any liability in excess of $100,000 from a reinsurer that is
authorized and admitted as a reinsurer in this state and is the holder of a certificate of authority
from the United States secretary of the treasury to qualify as a surety or reinsurer on obligations
permitted or required under federal law.

If the Surety on any Payment Bond furnished by Itron to the Board is declared bankrupt or becomes
insolvent, or has its right to do business revoked in the State of Texas, then Itron will have ten (10)
days to substitute another Payment Bond and Surety therefore which shall be acceptable to
Customer, and in such an event, Customer shall remain responsible for the cost of the bond, but
Itron shall be responsible for any expenses incurred by either Party, excluding Customer’s attorney
fees, due to the substitution.

9 Third-Party Claims.

9.1 Itron General Indemnity Claims. Itron shall, at its expense and at no additional cost to Customer,
indemnify, defend, and hold harmless the Customer Indemnified Parties, individually or collectively,
from and against Claims arising out of or related to Itron’s or any of its agents, officers, directors,
representatives, employees, consultants, contractors, sub-consultants, or subcontractors, and their
respective officers, agents, employees, directors, and representatives: (a) intentional
misrepresentation, negligence, gross negligence, willful misconduct, or fraud; (b) breach of Section 19.1 (Compliance with Laws), or (c) personal bodily injury, death, or damage to tangible personal
property or real property to the extent caused by the negligence or willful misconduct of Itron or any
of its agents, officers, directors, representatives, employees, consultants, contractors, sub-
consultants, or subcontractors, and their respective officers, agents, employees, directors, and representatives.

9.2 Customer Indemnity Claims. To the extent permitted by applicable law and subject to Section 1.7
(No-Recourse) above, Customer shall, at its expense and at no additional cost to Itron, indemnify,
defend, and hold harmless Itron, and its employees, officers, directors, consultants, and agents
(collectively, the “Itron Indemnified Parties”), individually or collectively, from and against Claims
arising out of or related to the negligence, gross negligence, or willful misconduct of Customer in
performing its installation of the Customer-installed Endpoints (provided, that where Customer – or
its subcontractors - performs such installation in accordance with Itron’s instructions, then
notwithstanding any interpretation to the contrary, Customer shall be deemed not to have been
“negligent” or “grossly negligent” or to have committed “willful misconduct” in performing such
installation).

9.3 Itron Infringement Claims. Itron shall, at its expense, indemnify, defend, and hold harmless the
Customer Indemnified Parties, individually or collectively, from and against, any and all Claims arising
out of or related to an allegation that the AMI System (or any component thereof), Services,
Documentation, Deliverables, or other materials supplied by Itron hereunder, or a Customer Indemnitee’s use or possession thereof, infringes or misappropriates the Intellectual Property Rights of any third party within the United States, Canada, and member countries of the Berne Convention (collectively or individually, as applicable, the “Affected Material(s)”). Additionally, if Itron receives notice of an alleged infringement by any products or services, or if Itron reasonably believes that an infringement Claim is likely, Itron may at its election and sole expense:

(a) obtain the right for Customer to continue use of the Affected Materials from the allegedly infringed party without any additional cost or expense to Customer,

(b) replace or modify the Affected Materials so that they are no longer alleged or believed to infringe but remain functionally equivalent or superior in performance and pay all costs and expenses reasonably necessary for Customer to implement such replaced or modified Affected Materials, including, but not limited to, modifications or replacements to other components of the AMI System or any third party applications or services that interoperate with the AMI System,

(c) direct Customer to modify its use of the Affected Materials within a commercially reasonable period of time given the scope and impact of the modification so that such use is no longer alleged or believed to infringe provided that: (i) such modified use does not materially, negatively impact: (A) any other rights Customer has under this Agreement, including its rights to use other portions of the AMI System or Services, or (B) Itron’s obligations under this Agreement, including System Requirements and Service Level Requirements, and (ii) Itron will pay all costs and expenses reasonably necessary for Customer to implement such modification of its use, including, but not limited to, impacts to other components of the AMI System or any third party applications or services that interoperate with the AMI System, or

(d) if neither of the foregoing options are available to Itron on commercially reasonable terms,

(i) terminate this Agreement as it relates to the Affected Materials, or any portion thereof, including the cancellation of any payment obligations by Customer under this Agreement that are related thereto, and

(ii) if such cancellation occurs:

(A) prior to Final System Acceptance, Itron will refund to Customer all amounts paid by Customer under this Agreement for the Affected Materials, or

(B) after Final System Acceptance, Itron will refund to Customer:

(1) to the extent the Affected Materials include the Saas, NaaS, Support Services, and/or Professional Services, or portions thereof, all pre-paid, unearned fees and/or expenses paid by Customer under this Agreement through the date of the cancellation that relate to the Affected Materials, and

(2) to the extent the Affected Materials include Equipment, the applicable remedies set forth in Exhibit 2 (Equipment Warranties) to Attachment 4 (Equipment Addendum) shall apply.

Notwithstanding the foregoing, if the termination of any Affected Materials pursuant to Section 9.3(d) above would materially impact Customer’s use of the AMI System, or any portion thereof: Customer shall have the right to immediately terminate the Agreement pursuant to Section 13.2(c)(iv) and receive the remedies set forth in Section 9.3(d) above with respect to the entire AMI System.

9.4 Third-Party Claim Procedures. As a condition to a Defending Party’s obligations under Section 9.1, Section 9.2, or Section 9.3 above and any other indemnity obligations under this Agreement, the Defended Party must: (a) promptly notify the Defending Party in writing of any matters in respect of which an indemnity may apply and of which the Defended Party has knowledge such that the
Defending Party is not materially prejudiced by the timing of such notice in its ability to defend against such claim; (b) give the Defending Party reasonable information and assistance, at the Defending Party’s cost and expense, in connection with the Claim; and (c) give Defending Party the full opportunity to solely control the defense and settle of the Claim, provided that the Defending Party shall not enter into any settlement of a Claim against a Defended Party without the Defended Party’s prior written consent unless: (aa) there is no admission of fault of the Defended Party; (bb) there is no injunctive or other non-monetary relief against the Defended Party; and, (cc) the settlement includes the claimant’s or plaintiff’s release of the Defended Party from all liability in respect of the Claim. Defended Parties may participate, at their own expense, in such defense and any settlement discussions directly or through counsel of their choice.

9.5 Exclusions to Infringement Claim Defense. Itron will have no obligation under Section 9.3 (Itron Infringement Claims) above for any infringement Claim to the extent that the Claim would have been avoided but for: (a) the combination, operation, or use of the Affected Materials with any product or service (including third-party software and equipment) that is not provided by Itron, is not approved in writing for use with the Affected Materials, or is not essential to the operation of the Affected Materials, (b) any modification to the Affected Materials made by anyone other than Itron or its Subcontractors or without Itron’s prior written consent, (c) Customer’s use of the Affected Materials not in accordance with and not in a manner contemplated or authorized by this Agreement and applicable Documentation, or (d) Itron’s compliance with any Customer-specific designs, specifications, or instructions provided by Customer. If Itron requests that Customer modify its use of the Affected Materials within a commercially reasonable period of time pursuant to Section 9.3(c) above, and Customer refuses, Itron shall not be liable to the extent enhanced or punitive damages could have been avoided or reduced but for such refusal by Customer.

9.6 EXCLUSIVE REMEDIES. SECTION 9.1 (ITRON GENERAL INDEMNITY CLAIMS), SECTION 9.3 (ITRON INFRINGEMENT CLAIMS), AND SECTION 11.5 (UNAUTHORIZED DISCLOSURES) STATE ITRON’S ENTIRE LIABILITY AND CUSTOMER’S SOLE AND EXCLUSIVE REMEDY AGAINST ITRON WITH RESPECT TO ANY THIRD-PARTY CLAIMS ARISING OUT OF OR RELATED TO THIS AGREEMENT. SECTION 9.2 (CUSTOMER GENERAL INDEMNITY CLAIMS) AND SECTION 3.4 (PROHIBITED CONTENT) OF ATTACHMENT 1 (AMI SUBSCRIPTION) STATE CUSTOMER’S ENTIRE LIABILITY, AND THE ITRON INDEMNIFIED PARTIES’ SOLE AND EXCLUSIVE REMEDY, WITH RESPECT TO ANY THIRD-PARTY CLAIMS ARISING OUT OF OR RELATED TO THIS AGREEMENT.

9.7 Nothing in this Agreement, including, but not limited to this Section 9, shall be interpreted to constitute a waiver of any governmental immunity available under Texas law or any available defenses under Texas law.

10 Insurance.

Itron shall maintain and keep in force for the duration of this Agreement such insurance as set forth on Attachment 5 (Insurance Addendum) of this Agreement, which is attached hereto and incorporated herein for all purposes as if fully set forth herein. Itron’s compliance with this Section, including Attachment 5 (Insurance Addendum), shall not relieve or decrease the liability of Itron in relation to this Agreement and shall not be construed to be a limitation of liability in favor of Itron.

11 Customer Data and Data Protection.

11.1 Customer Data. Customer Data is Confidential Information for all purposes under this Agreement, irrespective of whether such data is marked "Confidential". Itron will implement and establish reasonable security protocols for the protection and retention of Customer Data using security policies and procedures at least as stringent as those set forth in this Agreement. As between Customer and Itron, Customer will retain its rights in and to all Customer Data Itron shall limit access to the Customer Data to: (a) only those of Itron’s employees, Affiliates, and Subcontractors who are required to have such access for the sole purpose of Itron providing the AMI System and Services and only if such persons or entities are bound to Itron by confidentiality and nonuse obligations substantially similar as those set forth in this Agreement with respect to the Customer Data, or (b) Customer’s third party vendors as expressly agreed by Customer in writing (including as may be set
11.2 Protection of Customer Data. Protection of personal privacy and data shall be an integral part of the business activities of Itron to ensure there is no inappropriate or unauthorized use of Customer Data at any time. Therefore, without limiting the terms of any other part of Section 11, for so long as Itron has access to or possession of any Customer Data, Itron shall maintain, at its sole cost and expense, a formal security program that consists of reasonable and appropriate controls, processes, policies, procedures, and physical, technical, administrative, and organizational measures designed to: (a) ensure the security, confidentiality, integrity, and availability of the Customer Data; (b) protect against threats or hazards to the security, confidentiality, integrity, and availability of the Customer Data; and (c) prevent unauthorized access to or use, disclosure, or theft of the Customer Data. Such controls, processes, policies, procedures, technologies, and measures utilized by Itron will include: (i) maintaining an appropriate level of physical security controls over its data center, including appropriate alarm systems, fire suppression, and access controls (including off-hour controls); (ii) periodically testing its systems for security breach vulnerabilities; (iii) maintaining security breach monitoring services and technology; (iv) using then-current commercially reasonable efforts to protect its systems from unauthorized access, including the use of firewall and, where appropriate, data encryption technologies as applicable; (v) maintaining security procedures and controls designed to prevent unauthorized access to Customer Data in its buildings, computer facilities, and record storage facilities, including appropriate controls for the destruction of or disposal of Customer Data, that are consistent with then-current general industry standard practices; and (vi) encrypting all Customer Data at rest and in transit with controlled access (unless otherwise stipulated, Itron is responsible for encryption of the Customer Data in its control, custody, or possession). In the event that the then-current Cloud Security Alliance’s Cloud Control Matrix security requirements for hosted services or applications are more stringent than the terms of this Agreement, then Itron shall comply with the more stringent requirements. To the extent Itron does not own or control the data center facilities where Customer Data is housed or uses Subcontractors in the performance of this Agreement, Itron will ensure that the data center and such Subcontractors utilize controls consistent with the requirements of Section 11, as applicable. Subject to the terms of this Agreement, Itron shall be responsible for the acts and omissions of its data center provider and its Subcontractors relating to this Agreement as if Itron had performed such acts or omissions itself.

11.3 Location of Customer Data. All Customer Data shall be stored solely in data centers in the United States. Itron shall not allow its personnel or Subcontractors to store Customer Data on portable devices, including personal computers, except for devices that are used and kept only at its data centers in the United States. Itron shall permit its personnel and Subcontractors to access Customer Data remotely only as required to provide technical support. Itron may provide technical user support on a 24/7 basis using a support in other countries in order to provide round-the-clock support, unless otherwise prohibited in the Agreement.

11.4 Security Audits. Upon at least five business days’ prior written notice to Itron, Itron shall permit Customer, or a third party on Customer’s behalf, or any appropriate federal or state regulatory agencies, to perform an assessment, audit, examination, or review of Itron’s compliance with this Agreement, including Itron’s compliance with Section 11, as well as any applicable laws, regulations, and industry standards. Itron shall fully cooperate with such assessment by providing access to knowledgeable personnel, physical premises, documentation, infrastructure, and application software that processes, stores, or transports Customer Data. Itron may require that a third-party auditor (but not any regulatory agency) of Customer sign a reasonable non-disclosure agreement with Itron in a form mutually agreed by the Parties prior to Itron granting the third-party auditor access to Itron’s facilities and operations. For clarity, in any such inspection or examination, Itron will not be required to provide access to any information related to other customers of Itron or its Affiliates. In
addition, upon Customer’s request, Itron will provide Customer a copy of Itron’s then-current SSAE 18, ISO 27001, ISO 27002, or equivalent reports (or comparable industry-standard successor reports) prepared by Itron’s independent third-party auditor, and shall complete an internal control questionnaire provided by Customer relating to the subject matter of this Agreement. Each year during the Term, Itron will retain a nationally recognized public accounting firm to produce such an audit report relating to the AMI System and Services at Itron’s cost. Itron may update the scope of its audit from time to time provided that, during the Term, no update shall operate to materially reduce the security or change either party’s obligations or rights hereunder unless approved by Customer in advance in a signed writing.

11.5 Unauthorized Disclosures. Itron shall discuss Security Incidents with Customer on an urgent, as-needed basis as part of Itron’s communication and mitigation processes as mutually agreed upon or required by law. If either Party discovers any actual or reasonably likely loss, damage, unplanned unavailability, unauthorized use, or improper acquisition of Customer Data in Itron’s (including any data center provider’s or Subcontractor’s) possession or control (a “Security Incident”), Itron shall immediately notify (within 24 hours or sooner as required by applicable law) Customer by telephone and thereafter provide all relevant information on an ongoing basis. In addition, Itron shall promptly investigate such Security Incident, including conducting a root cause analysis and implementing a commercially reasonable corrective action plan. Itron shall promptly share the results of such root cause analysis and the implemented commercially reasonable corrective action plan with Customer following such incident and shall document responsive actions taken related to the Security Incident, including any post-incident review of events and actions taken to make changes in business practices in providing the AMI System and Services. The timeframe for Itron’s efforts under this Section 11.5 shall be determined by the severity of such Security Incident and shall occur as expeditiously as possible. Additionally, Itron shall reasonably assist Customer in remediating or mitigating any potential damage, including bearing all costs and expenses of (a) the investigation and resolution of the Security Incident; (b) notifications to individuals, regulators, or others required by applicable law; (c) a credit monitoring service required by applicable law; (d) establishing a website or a toll-free number and call center for affected individuals required by applicable law; (e) completing all corrective actions based on root cause; and (f) the reasonable recovery-related costs associated with lost, damaged, or impaired Customer Data, all only to the extent the Security Incident was caused by an act or omission of Itron or any of its data center providers or Subcontractors. Itron agrees to reasonably cooperate with Customer in connection with any third-party litigation or criminal investigations resulting from a Security Incident, as well as any communications with third parties regarding a Security Incident. Subject to the provisions of Section 9.4 (Third-Party Claim Procedures) above, Itron (the “Defending Party” for purposes of this Section 11.5) shall defend, indemnify, and hold harmless the Customer Indemnified Parties from and against any and all third-party claims for damages, costs, liabilities, expenses, attorney’s fees, equitable relief, or similar relief arising out of or related to a Security Incident resulting from breach of this Agreement by Itron or any of its data center providers or Subcontractors.

11.6 Business Continuity and Disaster Recovery. Itron will maintain disaster recovery services at a dedicated facility that is equipped to facilitate hosted operations, meter reading and interrogations, and NaaS communications in the event disaster recovery is needed. Upon mutual agreement, separate SOW and for identified cost, Itron can exercise the disaster recovery capabilities once per calendar year on Customer’s Production environments and provide the results of each such test to Customer. During a severity one incident, Itron will evaluate the scale of the incident, readily available mitigation plans, and the estimated time to recover. If it is apparent to Itron that an incident meeting the standards of a disaster has occurred with no possibility of mitigation, Itron will declare a disaster and begin the notification process. Itron will notify Customer of an event occurring that will result in service interruption or any declared disaster in excess of twelve (12) hours. Once a disaster has been declared, Itron’s responsibilities for SLAs will be temporarily suspended, subject to the maximum limits stated below for RPO and RTO, until which time Customer’s environment has been failed over and is operating in the secondary DR datacenter. The RPO for disaster recovery is four hours. The RTO for disaster recovery is twelve hours.
11.7 **Subcontractors.** If a Subcontractor has access to Customer Data, Itron shall include these Data Security Requirements above in all applicable Subcontractor agreements entered into in connection with this Agreement.

12 **Confidentiality.**

12.1 **Confidentiality and Nonuse Obligations.** Each Party receiving, possessing, accessing or otherwise acquiring Confidential Information of the other Party ("Receiving Party") acknowledges that the disclosing Party’s Confidential Information is the property of and confidential to, or a trade secret of, the disclosing Party ("Disclosing Party"). The Receiving Party: (a) must keep the disclosing Party’s Confidential Information confidential and may not directly or indirectly disclose, divulge, or communicate that Confidential Information to, or otherwise place that Confidential Information at the disposal of, any third party without the Disclosing Party’s prior written approval; (b) will use and retain such Confidential Information only as needed to exercise its rights or perform its obligations under this Agreement, (c) must take the same care with the Disclosing Party’s Confidential Information as it does with its own Confidential Information, but in no event less than a reasonable degree of care to secure and keep secure all Disclosing Party’s Confidential Information coming into its possession or control; (d) may not disclose any Confidential Information to anyone other than the Receiving Party’s employees (or in the case of Customer, its agents, contractors or subcontractors and professional advisors and in the case of Itron, approved Subcontractors) who need to know such Confidential Information; and (e) must ensure that any person to whom it discloses Confidential Information in accordance with this provision is subject to binding confidentiality obligations that are at least as restrictive as those set forth in this Agreement. The receiving Party shall be responsible for any breach of this Agreement by any of its agents, employees, Affiliates, contractors, or representatives. The receiving Party agrees, at its sole expense, to take reasonable measures to restrain its agents, employees, contractors, and representatives from prohibited or unauthorized disclosure or use of any of the Confidential Information. The foregoing agreements shall apply for as long after receipt as such item continues to be Confidential Information. Notwithstanding anything in the Agreement to the contrary, Itron may disclose Customer’s Confidential Information, including any Customer Data, to other third parties as expressly directed by Customer. Notwithstanding anything in the Agreement to the contrary, Itron understands that Customer intends to publish the entire Agreement, as referenced in Section 28.11 of this Agreement, with its request for Customer’s board’s approval of the Agreement, but Customer agrees that it shall redact Attachment 10 – Fees Addendum and Attachment 9 - System Requirements from such Agreement. Any request for information under Texas Government Code Chapter 552 for such redacted unit pricing or System Requirements would be subject to the procedures thereunder.

12.2 **Compelled Disclosures.** The Receiving Party may disclose the Disclosing Party’s Confidential Information if it is compelled by law to do so, provided the Receiving Party, to the maximum extent permitted by applicable law: (a) promptly provides the Disclosing Party prior written notice of such compelled disclosure to allow the Disclosing Party to seek a protective order or other appropriate remedy, (b) discloses only such Confidential Information as is required by law, and (c) reasonably cooperates with the Disclosing Party’s efforts to obtain confidential treatment for any Confidential Information so disclosed, all at the Disclosing Party’s cost. Customer acknowledges that under Itron’s obligations to comply with the U.S. Securities laws, Itron may be required to disclose the execution of this Agreement as part of its reporting requirements to the U.S. Securities and Exchange Commission and hereby consents to such disclosure.

12.3 **Equitable Remedies.** The parties acknowledge that a breach of any of the provisions contained in this Section may result in irreparable and continuing harm for which there may be no adequate remedy at law and that the non-breaching party shall be entitled to seek injunctive relief and/or a decree for specific performance without the necessity of posting a bond. Any legal action brought under this Section shall not be subject to the requirements of Section 16 (Disputes) below.

12.4 **Texas Public Information Act.** Notwithstanding anything in this Agreement to the contrary, Customer is a governmental entity subject to the Texas Public Information Act (Tex. Gov. Code §§552) ("TPIA") and, as such, will follow the procedures and requirements thereunder, including, but not limited to,
production of Confidential Information to a requestor under TPIA if the Attorney General of Texas determines the information is not protected from disclosure under TPIA. Upon receipt of a request for Itron’s Confidential Information obtained by Customer in connection with this Agreement, Customer shall promptly provide written notice to Itron of the request along with a copy of the request, and give Itron the opportunity to respond to the request prior to its release by Customer. Customer’s compliance with the TPIA shall not be a breach of this Agreement or subject Customer to any liability or damages under this Agreement. Customer has an interest in this Agreement and in the AMI System provided by Itron. Accordingly, and without limiting any other part of this Section 12.4, this Agreement, the AMI System and Services, and any information obtained by Itron through Customer in connection with the performance of the AMI System and Services shall not be disclosed by Itron to any third party. In the event Itron is subject to the TPIA, upon receipt of a request for any information obtained by Itron in the performance of this Agreement, Itron shall provide written notice to Customer of the request along with a copy of the request, and give Customer the opportunity to respond to the request prior to its release by Itron. In no event shall Itron or any of its employees, agents, Affiliates, or Subcontractors provide or participate in any public presentations or prepare or present any papers for public dissemination concerning this Agreement, or using information obtained in connection with the Agreement, without receiving the prior written approval from Customer, which approval may be withheld in Customer’s sole and absolute discretion.

12.5 **Return or Destruction of Confidential Information.** Subject to Section 13.7 (Transition Assistance; Winding Up; Destruction of Customer Data) below, upon termination or expiration of this Agreement, Customer shall purge or destroy all copies of any Confidential Information of Itron in its possession or custody or under its control, except as otherwise required under applicable law and except that Itron shall not be obligated to purge its backup records in order to comply with this Section (in either case, “Customer Retained Records”). Subject to Section 13.7 (Transition Assistance; Winding Up; Destruction of Customer Data) and Section 17.2 (Records Retention) below, upon termination or expiration of this Agreement or upon written request by Customer, Itron shall purge or destroy all Confidential Information of Customer (or upon Customer’s written request, a portion thereof) in Itron’s, including its Subcontractors’, possession or custody or under its control, except as otherwise required under applicable law and except that Itron shall not be obligated to purge its backup records in order to comply with this Section (in either case, “Itron Retained Records”) (collectively, Customer Retained Records and Itron Retained Records are referred to herein as “Retained Records”). Retained Records may not be accessed or used by the retaining Party in any manner or for any purpose except as expressly set forth in this Agreement, and such Retained Records shall be destroyed promptly when no longer legally required to be retained or in the normal course of the retaining Party’s record destruction policies. Upon written request from the other Party, each Party shall certify in writing its compliance with this Section within 30 days of the termination date.

13 **Termination.**

13.1 **Termination of Pilot.** Notwithstanding anything in this Agreement to the contrary, Customer may terminate the Agreement at any time and for any reason by providing written notice to Itron prior to the end of the Pilot Term.

13.2 **Termination for Cause.**

(a) **Insolvency.** Customer may terminate this Agreement by providing Itron with written notice if Itron becomes insolvent, executes a general assignment for the benefit of creditors, or becomes subject to bankruptcy or receivership proceedings.

(b) **Itron Termination for Cause.** Itron may terminate this Agreement by written notice if Customer commits a material breach of this Agreement that remains uncured for thirty (30) days following receipt of written notice from Itron of such breach. The written notice of breach must specify (a) the nature of the breach, and (b) the specific act or acts that Itron contends would correct such breach. For the avoidance of doubt, and subject to Customer’s rights to withhold and/or dispute invoices pursuant to Section 7 (Fees, Invoicing, Payment, and Taxes) above, Customer’s failure to pay invoices timely will be deemed a material breach
(c) **Customer Termination for Cause.** Customer may immediately terminate this Agreement by written notice upon (i) the neglect, breach, or inattention by Itron of its duties hereunder, and such neglect, breach, or inattention has not been cured within thirty (30) days after written notice thereof given by Customer to Itron, (ii) the engaging by Itron in wilful or fraudulent conduct that is injurious to Customer, monetarily or otherwise, (iii) the failure by Itron to otherwise perform its duties hereunder and such failure has not been cured within thirty (30) days after written notice thereof given by Customer to Itron, or (iv) Customer’s election to terminate this Agreement pursuant to any other express termination right provided under this Agreement. Any written notice under subsections (i) and (iii) above must specify (1) the nature of the neglect, breach, inattention, or failure, and (2) the specific act or acts that Customer contends would correct such breach. In the event termination for cause is not proper under this Section 13.2(c), the termination shall be deemed to constitute a termination for convenience as set forth in Section 13.3 (Termination for Convenience) below.

### Section 13.3 Termination for Convenience

During the System Term, Customer may terminate this Agreement at any time and for any reason by providing Itron at least ninety (90) days prior written notice. In the event of termination under this section during the System Term, and subject to Section 13.5(c) below, Customer will pay Itron for: (a) Services that have been performed and Equipment delivered and accepted prior to the effective date of such termination, (b) Services that have been partially completed but not delivered or accepted prior to the effective date of such termination, (c) unpaid fees for the AMI Subscription (NaaS and SaaS) through the remainder of the Term plus five percent (5%), the total of which is not to exceed ten percent (10%) of the contracted amount for the AMI Subscription Term, and (d) all reasonable and actual unavoidable costs Itron incurs as a result of any such termination without mark-up, including but not limited to manufacturer cancellation fees and early termination or cancellation fees for third party products or services.

### Section 13.4 Termination for Non-Appropriation

Itron agrees that Customer has projected costs for this Agreement and Customer expects to pay all obligations of this Agreement from projected revenues of Customer. All obligations of Customer are subject to annual appropriations by its Board of Trustees. Accordingly, notwithstanding anything in this Agreement to the contrary, in the event that Customer should fail to appropriate funds to pay any of Customer’s obligations under the terms of this Agreement, then Customer shall be deemed to have terminated this Agreement under Section 13.3 (Termination for Convenience).

### Section 13.5 Effects of Termination

Subject to Section 13.7 (Transition Assistance; Winding Up; Destruction of Customer Data) below, upon any termination or expiration of this Agreement for any reason:

(a) Unless otherwise expressly agreed in writing, all of the licenses granted and Services provided to Customer will immediately terminate upon termination or expiration of this Agreement for any reason. For clarification, licenses to any Firmware provided as part of Equipment shall remain unaffected by the termination of expiration of this Agreement;

(b) Customer will retain ownership of purchased Equipment and any work product that the Parties expressly agree in writing shall be owned by Customer, including Customer Work;

(c) Subject to Customer’s other rights and remedies under this Agreement, Customer shall pay Itron for undisputed invoices for Equipment delivered and for Services accepted prior to the effective date of termination;

(d) In the event of termination by Customer pursuant to Section 28.1 below (Force Majeure), and subject to Customer’s other rights and remedies under this Agreement, Itron may invoice Customer for: (i) Professional Services under a SOW that have been partially completed pursuant to the terms of this Agreement but not delivered or accepted prior to the effective date of such termination, and (ii) all reasonable and actual unavoidable costs Itron incurs as a result of any such termination without mark-up, including but not limited
to manufacturer cancellation fees and early termination or cancellation fees for third party products or services;

(e) Upon sending or receipt of any notice of termination, as applicable, Itron will make commercially reasonable efforts to minimize unavoidable costs and expenses related to this Agreement, including, but not limited to, repurposing or reselling equipment to other Itron customers.

13.6 Suspension.

(a) Customer reserves the right to suspend work, and any associated payment obligations related thereto, under this Agreement at any time for the convenience of the Customer by issuing a written notice of suspension, which notice outlines the reasons for the suspension and the estimated duration of the suspension, but in no way will guarantee the total number of days of suspension (“Suspension”). Notwithstanding the foregoing, a Suspension shall not apply to order, delivery, and payment obligations for: (a) Itron Equipment that has already been ordered and manufacturing of such Equipment has progressed to a point where the Equipment cannot be repurposed or resold to another customer, and (b) Third-Party Equipment that has been ordered and such order is no longer cancellable pursuant to the third-party manufacturers cancellation policies as of the date of Itron’s receipt of such notice of Suspension. The Suspension shall take effect immediately upon the date specified in the notice. Customer will use commercially reasonable efforts to provide Itron with as much prior notice as possible. Itron agrees to use good faith efforts to mitigate all Suspension-related costs and expenses. At Customer’s request, key Itron personnel will remain dedicated to the AMI System and Services during the Suspension provided that Customer will continue to pay the applicable rates for such personnel. During such Suspension, Itron may redeploy any other personnel at its discretion without an obligation to reassign them back to the AMI System and Services, provided that after the end of the Suspension period, Itron will add or reassign any personnel necessary to resume all obligations under this Agreement as of the first date after the Suspension ends. Any necessary adjustments to the Integrated Master Schedule, Meter/Module Delivery Schedule, fees, or any other suspension-related impacts on the scope of either Party’s obligations under this Agreement will be addressed through a Change Order pursuant to Section 4.3 of this Agreement (Change Orders).

(b) Notwithstanding the foregoing, except to the extent caused by a Force Majeure event, to the extent any Suspension is due to a safety hazard (“Safety Hazard Suspension”), Customer’s suspension rights will: (i) be limited to the scope to the applicable work affected by the safety hazard, and (ii) last no longer than necessary to resolve the safety hazard. In the event of a Safety Hazard Suspension, to the extent a Party is responsible for the safety hazard, such Party will use commercially reasonable efforts to take appropriate, timely, corrective actions to resolve the safety hazard.

13.7 Transition Assistance; Winding Up; Destruction of Customer Data.

(a) Winding Up. Subject to Sections 13.7(b)(Transition Period) and 13.7(c)(Customer Data Upon Termination) below, upon receipt of a written notice of suspension or termination, unless the notice otherwise directs, Itron shall immediately phase out and discontinue all Services in connection with the performance of this Agreement and shall proceed to promptly cancel all existing orders and contracts insofar as such orders and contracts are chargeable to Customer under this Agreement.

(b) Transition Period. Upon any termination of the Agreement, Itron shall, upon Customer’s request, continue to provide the AMI System and Services to Customer (except where Itron is enjoined) pursuant to the terms of this Agreement for a transitional period of up to 60 months and provide such cooperation and assistance as Customer may reasonably request to support an orderly transition to another provider of similar software, services, or to
Customer’s internal operations (the “Transition Period”). Access to the AMI System and Services during the Transition Period will be subject to the fees set forth in this Agreement. Other support, cooperation, assistance, and services provided by Itron to Customer during the Transition Period beyond those set out in the Agreement will be subject to a fee based on Itron’s time and materials at then-current rates for consulting services and such services will be specifically detailed in a Statement of Work attached to this Agreement.

(c) Customer Data Upon Termination. Upon termination or expiration of this Agreement (including the termination or expiration of any Trial Term or Transition Period), Itron will make all Customer Data available to Customer through the AMI System and Services on a limited basis solely for purposes of Customer retrieving Customer Data. Itron shall make such Customer Data available to Customer through the AMI System and Services promptly upon receipt of such request and shall continue to make such Customer Data available to Customer for a period of up to 30 days thereafter. After such thirty day period, Itron will have no obligation to maintain or provide any Customer Data and shall within ten business days thereafter, unless legally prohibited, delete all Customer Data in its systems or otherwise in its possession or under its control. Within ten business days of any written request from Customer, Itron shall deliver to Customer a signed written statement certifying that it has complied with its obligations in this Section with respect to the Customer Data. If Customer requires Itron’s assistance in obtaining the Customer Data during or after the Term (or Transition Period), Customer may acquire Itron’s consulting services at Itron’s then-current billing rates pursuant to a separately executed Statement of Work attached to this Agreement.

14 Survival.

In addition to any provisions that expressly survive termination or expiration of this Agreement the following sections of these General Terms & Conditions shall survive termination or expiration of this Agreement: 1 (Introduction), 2 (Definitions), 3 (Term), 5.11 (Warranty Disclaimer), 6 (Intellectual Property), 7 (Fees, Invoicing, Payment and Taxes), 8 (Bonds), 9 (Third-Party Claims), 10 (Insurance), 11 (Customer Data and Data Protection), 12 (Confidentiality), 13.3 (Termination for Convenience), 13.5 (Effects of Termination), 13.7 (Transition Assistance and Winding Up; Destruction of Customer Data), 14 (Survival), 15 (Limitation of Liability), 16 (Disputes), 17 (Audits and Records), 18 (Governing Law and Venue), 19 (Legal Compliance and Other Obligations), 20 (No Publicity or Use of Name), 22 (Sub-contractor and Outsourcer), 23 (Independent Contractor), 24 (No Waiver of Governmental Immunity or Available Defenses); the last two paragraphs of Section 26 (Liquidated Damages), 25 (Delays), 28 (Miscellaneous), Attachment 11 (Payment Terms Addendum), and Section 8.5.2(F) of SOW#1 (Attachment 15). An Addendum or SOW may also contain provisions that expressly survive termination or expiration of this Agreement.

15 Limitation of Liability.

15.1 Limitation, TO THE GREATEST EXTENT PERMITTED BY APPLICABLE LAW, THE ENTIRE AGGREGATE LIABILITY OF EACH PARTY AND ITS AFFILIATES (AND, IN THE CASE OF (a) ITRON, THE OTHER ITRON INDEMNIFIED PARTIES, OR (b) CUSTOMER, THE OTHER CUSTOMER INDEMNIFIED PARTIES), AND EACH OF THEIR RESPECTIVE DIRECTORS, OFFICERS, EMPLOYEES, AGENTS, REPRESENTATIVES, AND SHAREHOLDERS ARISING OUT OF OR RELATED TO THIS AGREEMENT FOR DAMAGES FOR ANY CAUSE AND REGARDLESS OF THE FORM OF ACTION, WHETHER IN CONTRACT OR IN TORT, INCLUDING FUNDAMENTAL BREACH OR NEGLIGENCE, SHALL BE LIMITED TO ACTUAL DIRECT AND PROVEN DAMAGES AND SHALL NOT EXCEED IN THE AGGREGATE THE GREATER OF:

(aa) AS APPLICABLE:

(i) $200,000 IF THE AGREEMENT IS TERMINATED PRIOR TO THE END OF THE PILOT TERM OR EXPIRES AT THE END OF THE PILOT TERM PURSUANT TO SECTION 3.1 (PILOT TERM), OR

(ii) $20,000,000 IF ITRON IS SELECTED FOR THE FULL DEPLOYMENT OF THE AMI SYSTEM FOR THE SYSTEM TERM PURSUANT TO SECTION 3.2 (SYSTEM TERM), OR
(bb) AS APPLICABLE:

(i) FOR CLAIMS ARISING DURING THE FIRST TWELVE (12) YEARS OF THE TERM, THE TOTAL OF ALL FEES PAID BY CUSTOMER PURSUANT TO THIS AGREEMENT, OR

(ii) FOR CLAIMS ARISING DURING YEAR THIRTEEN (13) OF THE TERM AND, THEREAFTER, THROUGH THE REMAINDER OF THE TERM, THE TOTAL OF ALL FEES PAID BY CUSTOMER PURSUANT TO THE AGREEMENT DURING THE PRECEDING SEVEN (7) YEARS OF THE OCCURRENCE GIVING THE RISE TO THE CLAIM.

15.2 Exclusions. TO THE GREATEST EXTENT PERMITTED BY APPLICABLE LAW, IN NO EVENT SHALL EITHER PARTY, OR ITS AFFILIATES (AND, IN THE CASE OF (a) ITRON, THE OTHER ITRON INDEMNIFIED PARTIES, OR (b) CUSTOMER, THE OTHER CUSTOMER INDEMNIFIED PARTIES), OR EACH OF THEIR RESPECTIVE DIRECTORS, OFFICERS, EMPLOYEES, AGENTS, REPRESENTATIVES, AND SHAREHOLDERS BE LIABLE, REGARDLESS OF THE FORM OF ACTION, WHETHER IN CONTRACT OR IN TORT, INCLUDING FUNDAMENTAL BREACH OR NEGLIGENCE, FOR ANY INDIRECT, PUNITIVE, CONSEQUENTIAL, INCIDENTAL, SPECIAL, OR EXEMPLARY DAMAGES WHATSOEVER, INCLUDING BUT NOT LIMITED TO LOST PROFITS, LOSS OF REVENUE, FAILURE TO REALIZE ANTICIPATED SAVINGS, LOSS OF GOODWILL, LOSS OF BUSINESS OPPORTUNITIES, LOSS OF REPUTATION, OR ANTICIPATED PROFITS OR SAVINGS ARISING OUT OF OR IN CONNECTION WITH THIS AGREEMENT, EVEN IF IT HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH POTENTIAL LOSS OR DAMAGES OR SUCH LOSSES OR DAMAGES ARE FORESEEABLE.

15.3 Exceptions. The limitations and exclusions in Sections 15.1 (Limitation of Liability) and 15.2 (Exclusions) shall not apply to: (a) either Party's indemnity obligations under Section 9 (Third-Party Claims) of the Agreement, (b) any damage to tangible property caused by either Party related in any way to the Parties' obligations under this Agreement, (c) any injury or death to persons caused by either Party related in any way to the Parties' obligations under this Agreement, (d) Customer's indemnity obligations under Attachment 1, Section 3.4 of the Agreement, (e) Itron's indemnity obligations under Section 11.5 (Unauthorized Disclosures) of the Agreement, (f) intentional misrepresentation, gross negligence, willful misconduct, or fraudulent conduct, or (g) any credits or payments due under Attachment 10 (Fees Addendum), as applicable.

15.4 Insurance Does Not Limit Liability. The insurance coverage obligations set out Section 10 (Insurance), including those in Attachment 5 (Insurance Addendum), does not alter either the limitations of Itron's liability under Section 15.1 (Limitations of Liability) or the exclusions under Section 15.2 (Exclusions).

15.5 No Release. Acceptance of the AMI System, or components thereof, by Customer shall not constitute or be deemed a release of the responsibility, obligations, or liability of Itron under this Agreement for any errors, omissions, or defects in the AMI System, including any design, drawings, specifications, documents, reports, or Services performed by Itron related thereto.

16 Disputes.

Except to the extent this Agreement explicitly states that this Section does not apply, each Party agrees to submit any claim, controversy, or dispute arising out of or relating to this Agreement, the AMI System and Services, or the relationship created by this Agreement (each a “Dispute”) to the other Party in accordance with this Section. Disputes will initially be considered by each party’s applicable project or business manager (each a “Manager”). The Manager of the Party raising the Dispute will provide written notice (e-mail is sufficient) to the other Party’s Manager identifying the dispute in reasonable detail (a “Dispute Notice”). Thereafter, the Managers will meet in person or by telephone to resolve the Dispute as soon as reasonably possible considering the nature and impact of the applicable issues. If a Dispute cannot be resolved by the Managers within 10 days after delivery of the Dispute Notice, then the Managers will refer the dispute to their respective vice presidents or equivalent level officers with sufficient authority to fully resolve the Dispute (each an “Executive”). If such Executives cannot resolve the Dispute within 20 days after delivery of the Dispute Notice, then the Parties agree to participate in good faith in a one-day non-binding mediation with representatives of each Party having all necessary authority to fully resolve the Dispute. The mediation is to
be conducted by either an individual mediator or a mediator appointed by mediation services mutually agreeable to the Parties. Such mediator shall be knowledgeable in software system agreements. The mediation shall take place in San Antonio, Texas at a time that is mutually agreeable; provided, however, that the mediation shall occur no later than 45 days after delivery of the Dispute Notice. Except for the costs and expenses of mediation (including compensation and expenses of the mediator), which shall be shared by the parties equally, each party shall bear its own costs and expenses of participating in the dispute resolution process and mediation described in this Section. If the Parties are unable to resolve the Dispute upon the earlier of the completion of the mediation or the expiration of 45 days after delivery of the Dispute Notice, then either Party may initiate a legal proceeding to resolve the Dispute. All applicable statutes of limitation will be tolled until the meetings and mediation specified in this Section have been completed. The Parties will take such action, if any, required to effectuate such tolling. Nothing in this Section shall inhibit a Party’s right to seek injunctive or other equitable relief at any time for Disputes concerning actual, alleged, or threatened violations of a party’s Confidential Information or intellectual property rights, for which the parties may immediately bring an action.

17 Audits and Records.

17.1 Itron agrees that the representatives of the Customer shall have access to, and the right to audit, examine, or reproduce, at Customer expense, during normal business hours and not more than twice annually, any and all records of Itron related to accounting and performance under this Agreement for a period of five (5) years after final payment on this Agreement or until all audit and litigation matters that the Customer has brought to the attention of Itron are resolved, whichever is longer. Itron agrees to refund to the Customer any overpayments disclosed by any such audit and Customer agrees to pay Itron any underpayments disclosed by such an audit.

17.2 Records Retention: Subject to any applicable requirements by law, rule, or regulation:

a) For purposes of Section 17, a “Record” means all books, accounts, reports, files, and other data recorded, created or stored by Itron in fulfillment of this Agreement, whether in digital or physical format, including but not limited to “contracting information” as defined by §552.003 of the Texas Government Code.

b) For the duration of the Agreement, Itron may not dispose of or destroy a Record without the Customer’s authorization and shall deliver the Records in a commercially reasonable format when requested by the Customer.

c) On completion or termination of this Agreement, at Itron’s election, Itron shall either provide Customer all Records in the custody or possession of Itron or preserve all Records for a period of up to seven (7) years after final payment on this Agreement or until all audit and litigation matters that Customer has brought to the attention of Itron are resolved, whichever is longer.

d) The requirements of Subchapter J, Chapter 552, Texas Government Code, may apply to this Agreement and Itron agrees that this Agreement can be terminated if Itron knowingly or intentionally fails to comply with a requirement of that subchapter. This right to terminate shall be subject to Section 13.2(c)(iv) of this Agreement.

17.3 Itron shall ensure Subcontractor compliance with or include Sections 17.2(a) and 17.2(b) above in all Subcontractor agreements entered into in connection with this Agreement.

18 Governing Law and Venue. This Agreement has been entered in, and shall be governed by and construed in accordance with the laws of the State of Texas, without regard to principles of conflict or choice of law. This Agreement is not be subject to any principle of law that would result in a law other than the laws of the State of Texas being applied to this Agreement, nor is it subject to the Uniform Commercial Code or the United Nations Convention on Contracts for the International Sale of Goods. ANY LEGAL SUIT, ACTION, OR PROCEEDING ARISING OUT OF OR RELATED TO THIS AGREEMENT WILL BE INSTITUTED IN THE STATE OR FEDERAL COURTS WITH JURISDICTION IN BEXR COUNTY, TEXAS, AND EACH PARTY IRREVOCABLY SUBMITS TO THE EXCLUSIVE JURISDICTION OF SUCH COURTS IN ANY SUCH SUIT, ACTION, OR PROCEEDING. In the event of any dispute arising out of or related to this Agreement, the prevailing Party shall be entitled to recover
its reasonable attorney's fees, expenses, and costs.

19 Legal Compliance and Other Obligations.

19.1 Compliance with Laws. In performing this Agreement, each Party agrees to comply with applicable laws and regulations, and to secure, pay for and comply with all permits, governmental fees, licenses, inspections, bonds, security or deposits necessary for proper execution and completion of its obligations under this Agreement. Each Party agrees to not make or permit to be made any improper payments, or to perform any unlawful acts.

19.2 Export. Each party shall comply with all export control laws that apply to it in its performance of this Agreement. For the avoidance of doubt, Itron’s products and services delivered under this Agreement are subject to the U.S. Export Administration Regulations (“EAR”; 15 CFR part 730 et seq.).

19.3 Equal Employment Opportunity/Minority Business Enterprise. Itron agrees not to engage in employment practices that have the effect of discriminating against any employee or applicant for employment; and, will take affirmative steps to ensure that applicants are employed and employees are treated during employment without regard to their race, color, religion, national origin, sex, age, disability, genetic information or political belief or affiliation.

19.4 No Boycotting Israel Verification. Itron agrees that, unless a) it is a sole proprietorship or b) it is a company with fewer than 10 full-time employees and the value of this Agreement is less than $100,000, it does not boycott Israel and will not do so during the term of this Agreement. This provision is in compliance with §2270.001 of the Texas Government Code. Customer agrees to comply with the United States and Texas Constitutions in consideration of whether to enforce this provision.

19.5 Interest in Water System Agreements Prohibited. No officer or employee of Customer or the City is permitted to have a financial interest, direct or indirect, in any Agreement with Customer, or shall be financially interested, directly or indirectly, in the sale to Customer of any land, materials, supplies or service, except on behalf of the City or Customer as an officer or employee. Any violation of this Section, with the knowledge, expressed or implied, of Itron contracting with Customer shall render this Agreement voidable by the Board of Trustees or the President/Chief Executive Officer of the Water System. To report suspected ethics violations impacting the San Antonio Water System, please call 1-800-687-1918.

19.6 Gift Policy. Customer employees are prohibited from soliciting, accepting, or agreeing to accept any gifts from outside sources; please see Section M. – Gifts or Benefits of Customer’s Code of Ethical Standards. Section M of Customer’s Code of Ethical Standards regarding Gifts or Benefits is available on Customer’s Business Center website.

20 No Publicity or Use of Name.

Itron shall not use Customer’s name or logos or refer to the City of San Antonio or Customer, either directly or indirectly, on or in any publicity, marketing, advertising, or other external materials or communications to any third party without Customer’s advance written consent, which Customer may withhold in its sole discretion. This restriction against publicity as it relates to the City of San Antonio applies solely in connection with this Agreement.

21 Nuclear Applications.

Customer acknowledges that products and services orderable under this Agreement are not designed or intended for use in the design, construction, operation or maintenance of any nuclear facility.

22 Subcontractor and Outsourcer.

22.1 Subcontractors. Itron may, upon prior written notice to Customer, which notice Itron may provide by updating Attachment 6 (Subcontractor Addendum) in writing, hire, engage, or retain the services of one or more Affiliates, subcontractors, and sub-consultants to perform any or all of its obligations related to its product development, network operations, and/or any portion of services provided under this Agreement (collectively “Subcontractors”). Notwithstanding the foregoing, Itron may not
hire, engage, retain the services of any Affiliates, subcontractors, and sub-consultants without the prior written consent of Customer to: (a) provide the NaaS, or any portion thereof, or (b) engage any outsourcing provider. If Customer approves use of any Affiliates, subcontractors, and sub-consultants as described in the sentence above, such approved Affiliate, or provider shall be deemed a “Subcontractor” as that term is used throughout this Agreement, and the name of such Subcontractor shall be expressly added to Attachment 6 (Subcontractor Addendum) in writing. Subject to the limitations of liability and other terms of the Agreement, Itron shall be responsible to Customer for the performance of, and all acts and omissions by, such Subcontractors as if Itron itself had performed such acts or made such omissions. Itron shall be solely responsible for payment to all Subcontractors. Subcontractors that have access to Customer Data will be bound by written obligations of confidentiality and data security requirements as restrictive as those required under this Agreement. Itron shall notify Customer of any requested change to a Subcontractor that requires prior approval and such change shall be subject to Customer’s prior written approval. Prior to subcontracting any obligations hereunder, Itron shall perform due diligence to ensure that such Subcontractor is capable of fulfilling its obligations, including the confidentiality and information and cybersecurity measures set forth herein. Itron shall periodically monitor and review its Subcontractors’ performance and report the results of such monitoring and review to Customer upon Customer’s request (not more than once per annum, absent circumstances that reasonably justify a more frequent request). Additionally, a list of all Subcontractors is set forth in Attachment 6 (Subcontractor Addendum).

22.2 Minority, Woman, and Veteran-owned Business (SMWVB) Policy. Itron acknowledges that the Water System Board of Trustees has adopted a Small, Minority, Woman, and Veteran-owned Business (SMWVB) Policy to establish and oversee a program that will support the inclusion of local small, minority, woman, and veteran-owned businesses (SMWVB). It is the policy of Customer that it will ensure that local small, minority, woman, and veteran-owned businesses have an equal opportunity to compete for, receive and participate in Water System contracts. Itron has completed and submitted a Good Faith Effort Plan as part of its response to Customer’s request for a proposal. Itron shall take all reasonable steps to maintain compliance with at least the minimum percentage of participation for SMWBs set out in Itron’s proposal to Customer. Itron shall be required to electronically report the actual payments to all Subcontractors, whether SMWVB or non-SMWVB, using the Subcontractor Payment and Utilization Reporting (S.P.U.R.) System, beginning with the first Customer payment for Services under the contract, and with every payment thereafter (for the duration of the contract). After Itron receives payment from SAWS, electronic submittals will require data entry of the amount paid to each Subcontractor, whether SMWVB or non-SMWVB, listed on Itron’s Good Faith Effort Plan. Data entry is required even if the actual payment amount is zero dollars and zero cents ($0.00). This information will be used for Subcontractor utilization tracking purposes. Any unjustified failure to comply with the committed SMWVB levels may be considered material breach of the Agreement. Electronic submittal of Subcontractor payment information will be accessed through a link on SAWS’ “Business Center” web page. Itron and all Subcontractors will be provided a unique log-in credential and password to access the Customer’s subcontractor payment reporting system. The link may also be accessed through the following internet address: [https://saws.smwbe.com](https://saws.smwbe.com). Itron may contact the SMWVB Program Manager at 210-233-3420 for assistance or clarification with issues specifically related to the Small, Minority, Woman, and Veteran-owned Business (SMWVB) Program, and S.P.U.R. System reporting. By entering into this Agreement, Customer approves the use of Subcontractors identified in Attachment 6 (Subcontractor Addendum), if any.

23 Independent Contractor. It is acknowledged and agreed that Itron is an independent contractor of Customer and not an employee or agent or fiduciary of Customer, and each of the Parties to this Agreement agrees to take actions consistent with the foregoing. This Agreement does not create a partnership, franchise, joint venture, agency, fiduciary, or employment relationship between the Parties. The Parties are independent contractors, and Itron is not being engaged to perform any fiduciary functions of Customer. Neither Party has any authority to act on behalf of, or to bind the other to any obligation.

24 No Waiver of Governmental Immunity or Available Defenses. Nothing in this Agreement, including in Section 9 (Third-Party Claims) above, shall be interpreted to constitute a waiver by any Customer Indemnified
Party of any governmental immunity available under Texas law or any available defenses under Texas law.

25 **Delays.** To the extent Customer’s failure to adhere to Customer’s responsibilities and requirements under this Agreement causes a delay in Itron’s ability to perform its obligations under this Agreement ("Delay"), Itron shall provide Customer with written notice of such failure in reasonable detail as promptly as possible under the circumstances, and Itron will be excused from such delay for as long as Customer’s failure continues. To the extent Customer’s failure to adhere to Customer’s responsibilities and requirements under this Agreement increases Itron’s costs in performing its obligations under this Agreement, the Parties will use good faith efforts to negotiate any corresponding, reasonable adjustment of fees through a Change Order pursuant to Section 4.3 of this Agreement (Change Orders). Itron will make commercially reasonable efforts to minimize such delays or increased costs to the extent practicable under the circumstances. For clarification, other than any additional fees agreed to in the applicable Change Order, or for a breach of this Section 25 by Customer, Itron shall not be entitled to any other compensation or recovery of damages in connection with a Delay, including consequential damages, lost opportunity costs, impact damages, or other similar remunerations.

26 **Liquidated Damages.** During the System Term, Itron agrees that time is of the essence and Itron will deliver the Equipment in accordance with the Module/Meter Delivery Schedule. If delivery of Equipment is delayed, to the extent such delay is not caused by Force Majeure, Customer, or third parties not under the direction or control of Itron, Itron shall apply as a credit towards amounts due by Customer to Itron under this Agreement not as a penalty but as liquidated damages, a sum as set forth below:

(a) For delays in achieving each monthly completion deadline by more than fourteen (14) days for the cumulative Equipment delivered (as determined by Customer) as specified in the Module/Meter Delivery Schedule, $0.72 per month/per Equipment delayed, and

(b) For delays in achieving the Final Delivery Date, $3,794.83 per calendar day beyond the Final Delivery Date. For purposes of this Section 26, “Final Delivery Date” is the final delivery deadline date for Equipment set forth in the Module/Meter Delivery Schedule plus fourteen (14) days.

For clarification, Itron’s obligations to deliver Equipment in accordance with the Module/Meter Delivery Schedule is subject only to the 14 day cure period provided in this Section 26 and is not subject to any other cure periods under this Agreement, including, but not limited to the 30 day cure periods under Section 13.2(c)(Customer’s Termination for Cause).

For clarity, Itron’s failure to meet applicable delivery or deployment milestones or deadlines in connection with the NaaS that results in delays of meter installations shall constitute a delayed delivery as contemplated by this Section 26, subject to the excused delays expressly set forth above.

THE PARTIES ACKNOWLEDGE AND AGREE THAT ANY LIQUIDATED DAMAGES ARE A GENUINE PRE-ESTIMATE OF THE LOSS THAT CUSTOMER IS LIKELY TO SUFFER AS A RESULT OF ANY ITRON DELAY IN MEETING A DELIVERY OR MILESTONE, AND ARE NOT A PENALTY. SUBJECT TO CUSTOMER’S RIGHTS TO: (A) RECEIVE BOND PAYMENTS PURSUANT TO SECTION 8 (BONDS) AND (B) TERMINATE THIS AGREEMENT AND SEEK A REFUND AS SET FORTH IN THE LAST PARAGRAPH OF THIS SECTION 26 BELOW, LIQUIDATED DAMAGES WILL BE CUSTOMER’S SOLE AND EXCLUSIVE REMEDY FOR ITRON’S DELAY AND/OR FAILURE TO MEET ANY DELIVERY OR MILESTONE DATE IN THE MODULE/METER DELIVERY SCHEDULE. A CLAIM FOR LIQUIDATED DAMAGES WILL NOT AFFECT CUSTOMER’S RIGHT TO TAKE ACTION OR SEEK DAMAGES FOR ADDITIONAL MATTERS UNRELATED TO THE DELAY. ITRON’S AGGREGATE LIABILITY UNDER THIS SECTION SHALL NOT EXCEED TWENTY PERCENT (20%) OF THE TOTAL AGGREGATE AMOUNTS PAID AND TO BE PAID UNDER THIS AGREEMENT BY CUSTOMER.

Notwithstanding the foregoing, if Itron’s delivery of Equipment in accordance with the Module/Meter Delivery Forecast is delayed by more than 6 months, Customer shall have the right to immediately terminate this Agreement under Section 13.2(c)(iv) (Termination for Cause) and Itron shall provide Customer with a refund of all pre-paid, unearned fees.

27 **Reserved.**

28 **Miscellaneous.**
28.1 Without relieving Itron of its obligations to comply with the business continuity and disaster recovery requirements set forth in Section 11.6 (Business Continuity and Disaster Recovery), no default, delay, or failure to perform on the part of either party shall be considered a breach of this Agreement to the extent such default, delay, or failure directly results from a Force Majeure event. Upon the occurrence of a Force Majeure event, the affected Party shall use reasonable efforts to notify the other party of the Force Majeure event as promptly as possible under the circumstances and will be excused from any further performance or observance of the affected obligation(s) ("Relieved Obligations") for as long as: (a) such circumstances prevail, (b) such party continues to use commercially reasonable efforts to mitigate the effects of such Force Majeure event, and (c) such Party continues to attempt to recommence performance or observance to the greatest extent possible without delay. Upon the conclusion of a Force Majeure event, the affected Party will promptly perform the Relieved Obligations, but only if performance remains possible and desirable by the unaffected Party following the Force Majeure Event. For so long as a Force Majeure event excuses Itron’s obligations pursuant to this Section 28.1, Customer shall be relieved from paying any pro-rata portion of fees for any component of the AMI System or Services that is materially, negatively impacted by the Relieved Obligations, and if such fees were paid in advance (such as fees due for the SaaS and NaaS or fees or Maintenance Services), Customer shall receive a prorata credit for any such unearned amounts. The foregoing notwithstanding, if a Force Majeure Event affecting Itron continues for more than 120 days, (aa) Itron will provide Customer with a reasonably detailed list of all costs that would be included under Section 13.5(d)(ii) within thirty (30) days of request and (bb) Customer may terminate this Agreement under Section 13.2(c)(Termination for Cause).

28.2 If any provision of this Agreement is found to be unenforceable by a court of competent jurisdiction, such provision shall be deemed modified and interpreted so as best to accomplish the objectives of the original provision to the fullest extent permitted by law and to the extent necessary in order to render such provision valid and enforceable, and the remaining terms will remain in full force and effect unless doing so would result in a frustration of purpose of this Agreement.

28.3 Section numbers and/or headings/captions in this Agreement are provided for convenience of reference and should not be used in the interpretation hereof. A reference to a section includes any subsections. Where context so indicates, a word in the singular form shall include the plural, a word in the masculine form the feminine, and vice-versa. The word “including” and similar constructions (such as “for example”, “such as”, and “e.g.”) shall mean "including, without limitation," throughout this Agreement.

28.4 The Parties agree that neither of them will be deemed the drafter of this Agreement and that no provision will be construed in favor of or against either Party by reason of the extent to which the Party or its professional advisors participated in the preparation of this Agreement.

28.5 The failure of a Party to assert its rights or to enforce at any time, or for any period of time, the provisions of this Agreement will not be interpreted as a waiver of those rights or provisions. Other than as expressly stated herein, the remedies provided herein are in addition to, and not exclusive of, any other remedies of a party at law or in equity.

28.6 This Agreement is not made for the benefit of any third parties. Except as expressly set forth herein, this Agreement shall not confer any rights or remedies upon any person other than the Parties and their respective successors and any permitted assigns.

28.7 Any notice required or permitted to be given to either Party to this Agreement shall be given in writing and shall be delivered either personally, by overnight courier with signature required, or by prepaid registered or certified mail, return receipt requested, to the appropriate address set out below. Any such notice shall be deemed to have been given and received on the day on which it is actually received or refused.

If to Customer: San Antonio Water System

2800 U.S. Hwy. 281 North

26 of 210
San Antonio, Texas 78212
Attn: Vice President, Customer Experience and Strategic Initiatives

With copy to: San Antonio Water System
2800 U.S. Hwy. 281 North
San Antonio, Texas 78212
Attn: General Counsel

If to Itron:  Itron, Inc.\(\text{Contractor Name}\)
2111 Molter Road
Liberty Lake, Washington 99019
Attn: General Counsel

28.8 This Agreement is in the English language only, which will be the governing language and controlling in all respects. All versions of this Agreement in any other language will be for accommodation only and are not binding upon the Parties. All communications and notices to be made or given pursuant to this Agreement must be in English.

28.9 Neither party may assign, transfer, or delegate, in whole or in part, this Agreement or any of its rights or obligations hereunder without the other Party’s prior written consent, except in connection with a merger, acquisition, reorganization, sale of all or substantially all the stock or assets of such Party, or other change of control, such consent not to be unreasonably withheld provided that the acquiring entity agrees to be bound by the terms and conditions of this Agreement. Subject to the foregoing, this Agreement will bind and inure to the benefit of the Parties and their respective legal representatives, heirs, devisees, legatees, or other successors and permitted assigns, but any assignment in violation of this provision will be void.

28.10 This Agreement may be executed and delivered in counterparts, including by a facsimile or by scan and electronic transmission, each of which will be deemed an original, and it shall not be necessary in making proof of this Agreement or its terms to produce or account for more than one of such counterparts. Any document generated by the Parties related to this Agreement may be imaged and stored electronically and introduced as evidence in any proceeding as if original business records.

28.11 This Agreement, including any attachments or future amendments thereto, including, but not limited to, any Addenda and Statements of Work, contains the complete and entire agreement between the Parties as to its subject matter, and replaces and supersedes any prior communications, representations, or agreements, whether oral or written with respect to such subject matter.

28.12 This Agreement may not be modified except by mutual written agreement signed by the Parties’ authorized representatives expressly modifying this Agreement. Electronic communications do not constitute a “written agreement” under this provision.

AGREED:

Itron, Inc.          San Antonio Water System

Signature                               Signature

Printed Name                          Printed Name

27 of 210
ATTACHMENT SCHEDULE

- Attachment 1 – AMI Subscription Addendum
- Attachment 2 – Professional Services Addendum
- Attachment 3 – Maintenance Services Addendum
- Attachment 4 – Equipment Addendum
- Attachment 5 – Insurance Addendum
- Attachment 6 – Subcontractor Addendum
- Attachment 7 – Security Procedures Addendum
- Attachment 8 – Roles and Responsibilities Addendum
- Attachment 9 – System Requirements Addendum
- Attachment 10 – Fees Addendum
- Attachment 11 – Payment Terms Addendum
- Attachment 12 – Integrated Master Schedule Addendum
- Attachment 13 – Solution Architecture Addendum
- Attachment 14 – Meter/Module Delivery Schedule Addendum
- Attachment 15 – Statement of Work #1
- Attachment 16 – Service Level Requirements Addendum
- Attachment 17 - Change Order Template Addendum
- Attachment 18 – Reimbursable Expense Policy Addendum
- Attachment 19 (Performance Bond Form Addendum)
- Attachment 20 (Payment Bond Form Addendum)
ATTACHMENT 1 – AMI SUBSCRIPTION ADDENDUM

1. Relationship to General Terms and Conditions. This Addendum is governed by the General Terms and Conditions and any other applicable terms of the Agreement (collectively, “the Agreement”).

2. Definitions. The following defined terms are in addition to those defined in the General Terms and Conditions:

2.1 “Authorized Users” means employees, consultants, and contractors authorized by SAWS to utilize the AMI Subscription. Subject to the limitations of liability and other terms of the Agreement, (a) Customer shall be responsible to Itron for the performance of, and all acts and omissions by, such Authorized Users as if Customer itself had performed such acts or made such omissions, and (b) any loss or damage incurred by any such Authorized User arising in connection with the subject matter of this Agreement shall be actionable only by Customer, as if such loss and damage were incurred by Customer, but shall not be actionable by the Authorized User directly against Itron (and Itron shall not assert lack of standing or any similar legal argument against Customer in relation to any such claim that is based on the fact that Customer was not the injured party).

2.2 “Commencement Date” means the date of the installation of the First Fifty Endpoints.

2.3 “First Fifty Endpoints” means the first 50 Provisioned Endpoints deployed as part of the Pilot.

2.5 “Server(s)” means the physical machine or computer on which SaaS Software will be installed.

3. AMI Subscription.

3.1. AMI Subscription License. Itron hereby grants to Customer, for the Term, a non-exclusive, non-transferable, non-assignable, limited right to access and use, for its business purposes, the AMI Subscription and any related Documentation subject to the terms of this Agreement and payment of applicable, undisputed fees, which are subject to the cure periods provided in Section 13.2(c) of the Agreement.

3.2. Restrictions on SaaS Use. Customer and its Authorized Users may not, except to the extent authorized by written agreement between Itron and Customer applicable law, rule, or regulation: (a) modify, translate or create derivative works of any SaaS Software or Software-as-a-Service; (b) copy, reproduce, distribute, republish, download, display, post or transmit any portion of the SaaS Software or Software-as-a-Service in any form or by any means; (c) sell, assign, transfer, lease, or sublicense any SaaS Software or Software-as-a-Service; (d) allow any third party, other than Authorized Users, to access any SaaS Software or Software-as-a-Service without Itron’s prior written consent; (e) use any SaaS Software or Software-as-a-Service to provide processing services to third parties, or otherwise use any SaaS Software or Software-as-a-Service on a “service bureau” or “timesharing” or subscription basis; (f) reverse engineer, disassemble, decrypt, extract, or otherwise reduce any SaaS Software or Software-as-a-Service to a human perceivable form or otherwise attempt to determine the source code or algorithms of any SaaS Software or Software-as-a-Service (except to the extent the foregoing restriction is expressly prohibited by applicable law); (g) misappropriate Itron trade secrets disclosed to Customer in connection with Itron’s performance under this Agreement; (h) conduct any benchmark tests on any Software or Service for the sole purpose of stressing the Software or Service in a way in which it wasn’t designed to be used to measure it’s performance without providing Itron the opportunity to participate in, review results of, and provide feedback on such testing (i) use any Software or Software-as-a-Service to engage in any fraudulent, illegal, or unauthorized act, where “unauthorized” means in a manner not intended or authorized by Itron in writing, including in this Agreement and any applicable SOW or Documentation; (j) remove, alter, or obscure any titles, product logo or brand name, trademarks, copyright notices, proprietary notices or other indications of Itron’s intellectual property rights, whether such notice or indications are affixed on, contained in, or otherwise connected to the Software or SaaS Software-as-a-Services; (k) knowingly attempt to gain unauthorized access to the
SaaS Software or Software-as-a-Service; (l) merge any Software or Software-as-a-Service with any other product or service not provided by Itron under this Agreement, without Itron’s prior written consent and the payment of any additional fees, if applicable, except: (i) as authorized by Itron in writing, including in this Agreement and any applicable SOW or Documentation, or (ii) a product or service that is essential to the operation of the Affected Materials; (m) knowingly access or use the Software-as-a-Service in order to build or support, and/or assist a third-party in building or supporting, products or services competitive to Itron; or (n) knowingly attempt to gain unauthorized access to Itron’s systems or networks. Customer will use commercially reasonable efforts to prevent the introduction into or transmit through any SaaS Software or Software-as-a-Service of any material containing software viruses, worms, trap doors, back doors, Trojan horses or other harmful or malicious computer code, files, scripts, agents or programs.

3.3. NaaaS Requirements.

(a) NaaaS Warranty. Beginning on the first day of the Term and continuing through the remainder of the Term, Itron warrants that the NaaaS shall substantially conform to the System Requirements, Exhibit C of SOW#1, and Service Level Requirements. Notwithstanding anything in the Agreement to the contrary, and subject to any other rights and remedies Customer has under this Agreement, if Itron breaches the warranty set forth in this Section 3.3(a):

(i) Customer shall have the right to terminate this Agreement pursuant to Section 13.2(c) of the Agreement, and

(ii) If the termination for breach of this NaaaS warranty, as specified in Section 3.3(a)(i), occurs:

(A) during the Pilot, Customer shall be entitled to a refund of all fees paid under the Agreement excluding fees paid for meters, or

(B) during the System Term, Customer shall be entitled to the undepreciated value of all Endpoints that have been purchased as of the date of such breach.

(b) NaaaS Requests for Information. Itron will:

(i) notify Customer in writing as soon as reasonably possible if Itron becomes aware, or has any reason to believe, there may be material changes to the NaaaS or Itron’s relationship with any Subcontractor providing any portion of the NaaaS (e.g., Itron takes ownership of the NaaaS from a Subcontractor or Itron replaces a Subcontractor who provides any portion of the NaaaS), and

(ii) use good faith efforts to provide Customer with answers to any requests by Customer for information related to the NaaaS and Itron’s use of Subcontractors for the provision of the NaaaS.

(c) Network Changes. Notwithstanding anything in the Agreement to the contrary, if there is any change in the entities providing the NaaaS, or any portion thereof, (a “NaaaS Change Event”), (i.e., Itron takes ownership of the NaaaS from a Subcontractor or Itron replaces a Subcontractor who provides any portion of the NaaaS):

(i) Itron may not seek any additional fees, costs, or expenses from Customer that results from a NaaaS Change Event,

(ii) Itron may not seek a Change Order to address any effects of a NaaaS Change Event,

(iii) if a NaaaS Change Event would result in any additional costs or expenses above Customer’s then-existing normal operation costs and expenses, including, but not limited to, costs and expenses associated with related third party applications, Itron will reimburse Customer for actual costs and expenses, and
(iv) Itron will provide Field Engineering support up to and including Endpoint remediation for Endpoints that stopped communicating as a result of the NaaS Change Event.

3.4. **Content Restrictions.** Customer and its Authorized Users may not distribute, download, or submit any Customer Data that: (a) Customer knows or has reason to believe infringes the intellectual property rights of any third party or violates any rights of publicity or privacy; (b) violates any applicable law, statute, or ordinance; (c) is defamatory, trade libelous, unlawfully threatening or unlawfully harassing; or (d) is obscene, pornographic or indecent (items (a) – (d) are collectively referred to as “Prohibited Content”). Itron reserves the right to remove any Prohibited Content from the Server and will provide Customer prior notice (where not prohibited by law) along with a reasonable description of the Prohibited Content that has been or will be removed and why. To the extent permitted by applicable law and subject to Section 1.7 of the Agreement (No-Recourse) and Section 9.4 of the Agreement (Third-Party Claim Procedures), Customer (the “Defending Party” for purposes of this Section 3.4) will indemnify, defend, and hold Itron harmless to the extent any Claim arises from any Prohibited Content. Customer will have no obligation to indemnify, defend, or hold Itron harmless under this Section 3.4 to the extent that the Claim would have been avoided but for Itron’s or its contractor’s or agent’s: (aa) breach of the Agreement, including misuse of Customer Data, (bb) violation of laws, rules, or regulations, or (cc) modification of Customer Data other than by Customer or its end users or contractors or without Customer’s written consent. Itron’s provision of the AMI Subscription shall be subject to the Data and Security Requirements.

4. **AMI Subscription Use Restrictions.**

4.1. **Limitations.** Customer’s use of the AMI Subscription shall be permitted as follows:

(a) **Conventional AMI Meter Use Cases.** Conventional AMI meter use cases include four (4) times daily retrieval of interval data, register data, alarm data, event data, and configuration data; near-real-time (aka on-demand) reading of register data, interval data, event data, alarm data, and configuration data; proactive communication of alarms; remote Firmware and configuration changes; and other actions necessary for the operation of the AMI System as proposed.

(b) **New Use Cases.** If Customer requests additional use cases, Itron or its contracted partner for the NaaS will review any request for new use cases, study the impact on network capacity and functionality and render a decision within 90 days of the request. If the requested additional use cases materially impact the scope of the System Specifications, Itron may request a Change Order pursuant to Section 4.3 of the Agreement (Change Orders).

5. **Fees and Term.**

5.1. **Invoicing and Payment.** Monthly fees for NaaS and SaaS, which are set forth in Attachment 10 – Fees Addendum, will be based on the projected Provisioned Endpoints to be deployed each month of the Term in accordance with the Meter/Module Delivery Schedule and will be invoiced by Itron annually in advance (“Annual AMI Subscription Fees”). Itron will invoice Customer for the first year of the Annual AMI Subscription Fees, as set forth in Schedule 13 (Fees Addendum), upon the Commencement Date. Itron will invoice the applicable Annual AMI Subscription Fees annually thereafter upon the anniversary of the Commencement Date. Within 30 days of each anniversary of the Commencement Date, Itron will compare, for each month during the prior year, the actual number of Provisioned Endpoints that were deployed against the number of Provisioned Endpoints that were invoiced, provide a true-up, and, as applicable, issue a credit to Customer or invoice such additional amounts to Customer.

6. **Reserved.**

7. **Reserved.**

8. **Reserved.**
9. **Application Upgrade and Fixes.** Itron will perform SaaS upgrades and SaaS hot fixes in accordance with Attachment 3 (Maintenance Services Addendum).

10. **Conditions on Use of the AMI Subscription.** Customer will use the AMI Subscription only in accordance with the Itron Documentation or other written materials provided by Itron hereunder, this AMI Subscription Addendum, and any other applicable terms of the Agreement. The rights of any Authorized User to access and use the AMI Subscription cannot be shared or used by more than one individual (unless such license is reassigned in its entirety to another Authorized User), and Customer shall make commercially reasonable efforts to prevent unauthorized third-parties from accessing the AMI Subscription.

11. **Suspension or Restriction of Service.** Itron may temporarily suspend or restrict delivery to all or a part of the Software-as-a-Service at any time solely, and only to the extent, to (a) Itron reasonably determines that such suspension or restriction is necessary in order to protect the integrity and security of Software-as-a-Service applications, Servers, platform, and systems (“Security Issue”), or (b) there is a threat of irreparable harm to the Software-as-a-Service due to a material breach by Customer of Section 3.2 (Restrictions on SaaS Use) or Section 3.4 (Content Restrictions)(“Breach”) (collectively, such suspended downtime is referred to herein as “Service Suspension”) provided that if reasonably feasible, Itron will give Customer prior written notice of such Service Suspension, including a reasonable description of the Security Issue or Breach, and any actions necessary by Customer to cure such Breach. Itron will use commercially reasonable efforts to resolve any Security Issue, and Customer will use commercially reasonable efforts to resolve the alleged Breach. Notwithstanding the foregoing, (i) any Service Suspension shall only apply to the applicable portion of the SaaS to which the Security Issue or Breach relates, (ii) Itron shall restore any affected access as soon as reasonably possible after the event giving rise to the Service Suspension is cured, and (iii) Customer shall have the right to immediately terminate the Agreement, or any portion thereof, for cause in accordance with Section 13.2(c)(iv) of the Agreement if a Service Suspension due to a Security Issue continues for more than 10 business days.

12. **Incident Management.** Itron will provide customer support and incident and problem management services, which include responding to alerts, tracking the issue, troubleshooting the problem remotely and escalating to Itron subject matter experts or third party vendors, in accordance with the Maintenance Services Addendum.

13. **Customer Technical Responsibilities.** Except as expressly agreed otherwise by the Parties in writing, Customer is responsible for selecting, acquiring, securing, and maintaining all equipment and ancillary services needed to connect to, access, or otherwise use and maintain compatibility with the Software-as-a-Service, at Customer’s sole expense.

14. **User IDs & Passwords.** Itron shall provide Customer with user identifications and passwords (“User IDs”) for each Authorized User to access the AMI Subscription. Customer shall use reasonable security and confidentiality measures in order to maintain the confidentiality of all User IDs assigned to Customer. User IDs may not be shared or used by more than one user.

15. **Survival.** The following sections of this Addendum shall survive termination or expiration of this Agreement or any Statement of Work: 1 (Relationship to General Terms and Conditions), Section 2 (Definitions), Section 3.3(a)(ii), Section 3.3(c)(Network Changes), the indemnity obligations in Section 3.4 (Content Restrictions), and 15 (Survival). Parts (a), (b), (f), (g), (k), (m) of Section 3.2 (Restrictions on SaaS Use) shall survive termination or expiration of this Agreement for a period of twenty (20) years following such termination or expiration.
ATTACHMENT 2 – PROFESSIONAL SERVICES ADDENDUM

1. **Relationship to General Terms and Conditions.** This Addendum is subject to the General Terms and Conditions and any other applicable terms of the Agreement.

2. **Professional Services.** Itron shall provide Customer with the Professional Services set forth in a SOW or otherwise mutually agreed upon in writing by the Parties. All Professional Services will be provided pursuant to the Data and Security Requirements and Security Procedures.

3. **Statement of Work Requirement.** Itron has no obligation to provide Professional Services in the absence of a Statement of Work agreed to by Itron and the Customer and a Purchase Order issued by Customer to purchase Professional Services under that Statement of Work. Customer shall order Professional Services by issuing a Purchase Order to Itron in accordance with this Agreement.

4. **Customer Responsibilities.** Customer shall timely perform all its assigned roles, responsibilities, and tasks under each Statement of Work using qualified personnel. Customer shall also provide Itron with reasonable cooperation with respect to the Professional Services, including for example, by providing Itron with reasonable access to Customer’s facilities, service territory, personnel, systems, and information that are necessary for Itron to perform the Professional Services.

5. **Reference Information.** If Customer provides Itron any designs, technical information, or other information required by Itron to provide Professional Services and/or related deliverables (collectively, “Reference Information”), Itron shall be entitled to rely on the accuracy of such information and documents. To the extent Customer failure to provide accurate and complete Reference Information results in any delay or increases Itron’s cost of performing Professional Services, the delay shall be addressed pursuant to Section 25 (Delays) of the Agreement. Customer’s approval of a Change Order negotiated in connection with this Section 5 shall not be unreasonably conditioned or withheld. Itron will provide Customer with reasonable evidence of its increases costs of performing the Professional Services and make commercially reasonable efforts to minimize any additional costs to the extent practicable under the circumstances.

6. **Project Deliverables.** Itron shall provide Customer with project-related Documentation and other Deliverables identified in the applicable Statement of Work.

7. **Survival.** The following sections of this Addendum shall survive termination or expiration of this Agreement or any Statement of Work: 1 (Relationship to General Terms and Conditions), and 7 (Survival).
ATTACHMENT 3 – MAINTENANCE SERVICES ADDENDUM

1. **Relationship to General Terms and Conditions.** This Addendum is governed by the General Terms and Conditions.

2. **Additional Definitions.** The following defined terms are in addition to those defined in the General Terms and Conditions:

   2.1 **Business Day** means Monday through Friday excluding Holidays.

   2.2 **Business Hours** means 8am-6pm CST on Business Days.

   2.3 **Client Services Guidelines Documents** means the following documents as they may be reasonably updated by Itron from time to time: “Product Contact Information Sheet”, “After Hours Support”, “Itron Equipment Repair Center Locations”, and “Working Effectively with Itron Global Services”. Itron will make available copies of the Client Services Guidelines Documents, which may be obtained by calling (877) 487-6602 or such other number or process provided by Itron to Customer. If there is a conflict between the Client Services Guidelines Documents and the terms of this Agreement, the terms of this Agreement shall control.

   2.4 **Covered Equipment** means Endpoints.

   2.5 **Covered Products** means Covered Software, Covered Equipment, and Third Party Covered Products. For clarification, Covered Products do not include Network devices.

   2.6 **Covered Software** means the Software for the AMI Subscription and Endpoint Firmware.

   2.7 **Covered Software Requirements** means, collectively, Itron Documentation, System Requirements, Endpoint Specifications as it relates to Endpoint Firmware, and Sections 8.6.1(I), 9.2(E), 9.2(F), 9.2(G), 10.1(D), 11.1(F), 11.1(H), 11.1(I), 11.1(J), and 11.1(L) of SOW#1.

   2.8 **Error** means a failure of Covered Software to comply with the Covered Software Requirements.

   2.9 **Fix** means a correction or workaround for an Error.

   2.10 **Global Support Services** means Maintenance Services provided by Itron technical representatives via telephone, email, website or other means to assist Customer’s Primary Service Contacts with questions or issues related to the operation of Covered Products.

   2.11 **Holidays** means holidays observed by Itron, which include the following eleven holidays: New Years’ Day, Martin Luther King Day, Memorial Day, Independence Day observed and an adjacent weekday, Labor Day, Veterans Day, Thanksgiving, the day after Thanksgiving, Christmas Day observed, and an adjacent weekday.

   2.12 **Improvement** means a modification, enhancement, and/or extension to Covered Software functionality that is included in a Software Release, excluding Fixes.

   2.13 **Primary Services Contacts** means Customer’s primary support staff who provides internal support to Customer’s operations personnel and who are key interface to Itron for all Maintenance Services.

   2.14 **Maintenance Service Levels** means the defined level of impact and associated response time, effort level, restoration requirements, and escalation path procedures and guidelines described in Exhibit 1 to this Addendum.
2.15 **Software Release** means a collection of Fixes and / or Improvements to Covered Software made available by Itron to Customer.

2.16 **Service Request** means an Itron tracked Customer request for Support Services.

2.17 **Third Party Covered Products** means Third-Party Equipment, including Firmware for such Third-Party Equipment.

3. **Reserved.**

4. **Primary Services Contacts.**

   4.1 **Designation by Customer.** Customer shall designate a minimum of one and not more than two Primary Services Contacts per system component to serve as administrative liaisons for all matters pertaining to Maintenance Services and shall provide their contact information to Itron’s customer account representative. Primary Services Contacts shall promptly report problems with Covered Software by submitting a Service Request for entry into Itron’s support tracking system. Although it is Customer’s sole right to choose its Primary Services Contacts, Customer and Itron acknowledge that each Primary Services Contact must have the appropriate technical skills and training for the position. If Customer replaces a Primary Services Contact, Customer will provide updated contact information to Itron’s customer account representative, and the new Primary Services Contact will be properly trained prior to interfacing with Itron support personnel.

   4.2 **Training of Primary Services Contacts.** Before a Primary Services Contact interfaces with Itron support personnel, he/she will attend training sessions offered by Itron, an Itron-approved trainer, or Customer’s training program approved by Itron to ensure that the Primary Services Contact is (i) knowledgeable about operation of the applicable Covered Products, and (ii) qualified to perform problem determination and remedial functions with respect to such Covered Products. Initial training will be provided by Itron for the training fees included as part of the Implementation Services fees, including any pre-approved travel costs and expenses in writing, which are set forth in Section 7 of the Fees Addendum – Attachment 10. In addition to the initial training provided, Customer may perform Itron-approved training or may engage Itron to perform training of Primary Services Contacts at Itron’s then current rates, or as mutually agreed by the Parties. As mutually agreed by the Parties, Itron will make training sessions available by remote video conference or training will be made available at a location or in a manner mutually agreed by the Parties. Customer shall be responsible for all Customer’s associated travel-related expenses, if any. The Primary Services Contacts must have the skills and capabilities to train other Customer personnel on Covered Products. Itron may update Covered Product training from time to time and, upon receiving notice of such updates from Itron, Customer shall promptly provide such training to its Primary Services Contacts in accordance with this Section.

5. **Global Support Services & Service Requests.**

   5.1 **Global Support Services.** All Maintenance Services will be provided pursuant to the Data Security Requirements and the Security Procedures. Itron will make support representatives available to provide technical support during Business Hours, and in accordance with the Maintenance Service Levels, as set forth in the Product Contact Information Sheet included within the Client Services Guidelines Document. Global Support Services include troubleshooting & problem diagnosis relating to Covered Products; release or system management consulting; and recommendations for fully utilizing Covered Products. Customer acknowledges and agrees that Global Support Services are not intended as a substitute for training of Customer personnel, field support, or Itron Professional Services. Nor will Customer use Global Support Services in lieu of having qualified and trained support personnel of its own.

   5.2 **Service Request Process.** Customer shall submit Service Requests in the manner required by the Client Services Guidelines Documents and the Maintenance Service Levels. Customer may submit Service Requests on a 24/7/365 basis, and Itron will respond to such Service Requests in accordance with the
Maintenance Service Levels. When Customer submits a Service Request, Customer will reasonably assess its urgency according to the appropriate Severity Level in Attachment A-1 to this Addendum. Itron will designate the initial Severity Level and the Parties will resolve any perceived gap regarding the Severity Level designation as soon as is reasonably practical.

6. **Covered Software Maintenance Services.**

   6.1 **Scope.** Software Maintenance Services covers support of the Covered Software.

   6.2 **Improvements.** Itron may make Improvements to Covered Software so long as: (a) such Improvements do not eliminate key, documented functionality provided by the most current System Release, and, (b) such Improvements are functionally equivalent or superior in performance, (c) the AMI System continues to function in accordance with Covered Software Requirements.

Itron will provide Improvements, if any, at no additional charge to Customer if such Improvements are made available to Itron customers generally at no charge. Improvements released as new, add-on modules, that are not part of Covered Software Requirements, may require additional licensing, support, or SaaS fees and will be made available by Itron at then current rates or as agreed otherwise by the Parties in writing.

6.3 **Fixes.** Itron shall respond to Service Requests and provide Fixes in accordance with the Maintenance Service Levels. Itron’s obligations with respect to Maintenance Service Levels are contingent upon Customer: (a) responding to reasonable requests made by Itron within the applicable Response Time, (b) assigning personnel with reasonable knowledge of the AMI System to help Itron address the Error, if necessary, and (c) providing all information, access, and assistance reasonably requested by Itron to address the Error.

6.4 **Software Operation.** Fixes and Improvements provided in a Software Release will not cause Customer to incur additional AMI System operating costs or expenses and will not require significant changes to the AMI System or associated AMI System interfaces/services which rely on AMI System output unless otherwise agreed by the Parties. This said, Customer remains responsible for costs and expenses associated with any regression testing necessary for Software Releases.

6.5 **Software Releases.**

   6.5.1 **Release Numbering Convention.** Fixes and/or Improvements are made available to Customer through periodic Software Releases. For informational purposes, Itron’s current practice (which may be changed by product, at any time in Itron’s discretion) is to provide Software Releases using the numbering guideline, "X.X.X.X". Itron will provide Customer with semi-annual forecasts of all Software Releases ("Forecasts") through Itron’s product information letters, Itron Access Website, and scheduled roadmap review meetings.

   (a) The first place, "X.X.X.X", in Itron’s numbering convention refers to a "Major Release", or “System Release”, which consists of a new version of Covered Software. A Major Release may include architectural changes, Improvements, Fixes and / or interfaces to new functional modules or platforms. A Major release may require infrastructure or component updates which affect compatibility with previous release versions.

   (b) The second place, "X.X.X", in Itron’s numbering convention refers to a "Minor Release", which is an update to a current Major Release. A Minor Release may include consolidation of previous Service Packs, Improvements, Fixes, platform / 3rd party updates. Minor Release are provided to Itron customers on a regularly scheduled basis.

   (c) The third place "X.X.X", in Itron’s numbering convention refers to a "Service Pack", which is an update to specific modules found in a current Major Release. A Service Pack may include Fixes to Severity 1 - Severity 4 issues for a specified Minor or Major Release.
(d) The fourth place, "X.X.X.X", in Itron’s numbering convention refers to a "Hot Fix," which is an un-scheduled release provided to one or more customers as a short-term, temporary fix to a critical Severity Level 1 Error. While not utilized by all Itron software product lines, Hot Fixes are not made available to Itron customers generally but may be included in the next scheduled Minor Release or Service Pack for general release.

6.6 Maintenance Services for SaaS. Itron will only provide Maintenance Services for Covered Software sold as a Software-as-a-Service subscription for the current Major Release and the latest Minor and Service Pack Release versions for the previous Major Release (collectively “Supported Versions”), if Customer: (i) is current on all applicable, undisputed fees for such Software-as-a-Service subscription and related Maintenance Services, and (ii) tests a Software Release as installed by Itron either in Customer’s production Software-as-a-Service environment or in Customer’s funded non-production Software-as-a-Service environment, prior to Customer’s full production use of the Software Release. Parties agree that testing of all Major, Minor, and Service Pack Software Releases that are provided in a Forecast will be completed by Customer as follows (“Testing Period Requirements”):

(a) for Major Releases, within 12 months of the applicable release date, and Customer will use commercially reasonable efforts to include any then-existing Minor Releases and Service Pack Releases for such current Major Release, and

(b) once Customer is on the most current Major Release in compliance with the requirements of Section 6.6(a) above, for Minor Releases and Service Pack Releases for the current Major Release, within 6 months of the later of: (i) the date the applicable Minor Release and Service Pack Release is made available to the Customer or (ii) the date Customer completes testing and installation of the current Major Release pursuant to Section 6.6(a) above, or as otherwise agreed by the Parties.

Provided that Customer complies with the Testing Period Requirements above, Itron will provide Support Services, and Customer will not incur any additional fees for Support Services.

6.6.1 Planned Maintenance. If available, Itron will release Major Releases (typically annually), Minor Releases, Service Packs, and other software changes as part of Maintenance Services (collectively “Planned Maintenance”). Planned Maintenance, whenever reasonably practicable will be performed during off-business hours between 6:30 p.m. to 12:00 a.m. Customer’s local time with as little disruption to Customer’s use of the Software-as-a-Service as possible.

6.6.2 Unplanned Maintenance. Hot Fixes under Maintenance Services (“Unplanned Maintenance”) will be performed as needed, at Itron’s sole discretion. Unplanned Maintenance, whenever reasonably practicable, will be performed during off-business hours between 6:30 p.m. and 12:00 a.m. Customer’s local time with as little disruption to Customer’s use of the Software-as-a-Service as possible.

6.6.3 Notice. Itron will provide Customer with notice of Planned Maintenance or Unplanned Maintenance that falls outside the times set forth in Sections 6.5.1 and 6.5.2 above as soon as reasonably practical. Itron will minimize Software-as-a-Service disruptions.

6.7 Maintenance Services for Endpoint Firmware. Itron may periodically provide Software Releases to Endpoint Firmware (“Firmware Release”), including Fixes or Improvements, required for the AMI System. Itron will notify Customer of such Firmware Release no less than thirty days prior to the availability of such Firmware Release. Parties will work cooperatively to define, schedule, and implement a test plan that validates the installation and operation of the Firmware Release. Upon successful completion of the Firmware Release test plan, Itron will download the Firmware Release for production use in the AMI System.

6.8 Support for Unsupported SaaS Software. At Customer’s request, Itron may elect to provide
Maintenance Services for SaaS Software Releases other than Supported Versions at its then-current rates.

7. **Customer Responsibilities.** The provision of Maintenance Services for Covered Products by Itron assumes that Customer will facilitate such services as follows:

   7.1 **Service Requests.** Customer will reasonably support Itron investigation and restoration efforts as defined in the Maintenance Service Level table and will act upon / implement support solutions and workarounds recommended by Itron in a timely fashion. When escalating a Service Request with Itron, Customer’s Primary Service Contact shall collect and provide all relevant data logs, findings, analysis, and any relevant forensic information pertaining to the issue as outlined in Client Services Guideline Documents.

   7.2 **Data Review.** If Itron determines that it is necessary to evaluate Customer Data to reproduce error conditions not reproducible with Itron’s standard test data sets, Customer will provide Itron with reasonable access to such Customer Data, subject to the terms of this Agreement related to such Customer Data. Itron shall not be liable for any delay or failure to resolve the problem to the extent such delay or failure results from Customer’s denial of access to such Customer data to Itron.

8. **Equipment Maintenance Services.**

   8.1 **Scope.** Equipment Maintenance Services includes support of the Covered Equipment.

   8.2 **Equipment Services.** Itron shall respond to Customer’s Equipment Maintenance Services Requests and provide investigation efforts in response to such Service Request in accordance with the Maintenance Service Levels. Itron’s obligations with respect to Equipment Service Requests include validation that a given Endpoint(s) is included in the AMI Network and a review of recent communication & reading history of the Endpoint against Customer’s collected data. The Parties agree that Equipment Maintenance Services are not a substitute for Customer’s tracking and field service responsibilities for the AMI System Meters and Endpoints, including pursuant to Section 8.4.1 of SOW#1, or for Itron’s obligations related to the NaaS as Set forth in the AMI Subscription Addendum (Attachment 1), and that such Equipment Maintenance Services will be utilized as supplemental information to Parties to manage and address Network and Data collection issues.

   8.3 **Equipment RMA Support.** Itron shall respond to Customer’s requests regarding Equipment Return Material Authorization (RMA) processes for Covered Equipment.

9. **Support for Third Party Covered Products.** Itron shall provide first tier Global Support Services for Third Party Covered Products by handling Customer inquiries, attempting to identify the component involved in the problem, and obtaining appropriate documentation of such inquiry or problem. Notwithstanding anything else to the contrary, issues and errors solely related to Third Party Covered Products, including Firmware provided as part of Third Party Covered Products, shall be resolved pursuant to the Third Party Equipment Warranties in the Equipment Addendum (Attachment 4).

10. **Survival.** The following sections of this Addendum shall survive termination or expiration of this Agreement: Section 1 (Relationship to General Terms and Conditions), 2 (Additional Definitions), and 7 (Survival).
## Exhibit 1 to Attachment 3 (Maintenance Services Addendum)

**– Maintenance Service Levels –**

<table>
<thead>
<tr>
<th>Severity Level</th>
<th>Response Times</th>
<th>Effort Level and Restoration</th>
<th>Escalation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Severity Level 1</strong>&lt;sup&gt;*&lt;/sup&gt;</td>
<td>During regular business-hours Itron will begin the Service Request process during Customer’s initial call. During after-hour periods, Itron will respond to a critical support voice messages within 15 minutes by a return call to Customer, to validate receipt of the critical support call and begin the Service Request process. Following the start of the Service Request process Itron will respond to Customer’s Service Request within two (2) hours with an investigation response. Itron will update Customer at three (3) hour intervals during each day the Service Request remains unresolved, or as otherwise agreed by the Parties. Customer will respond to an Itron inquiry or request within three (3) hours.</td>
<td>Itron will make diligent efforts on a 24x7 basis, or as otherwise agreed by the Parties, to: i) restore Covered Software with a change to eliminate root cause, or ii) provide a workaround that restores Covered Software and downgrades the Severity Level to S2, S3, S4 provided that such workaround: (a) is only temporary and a permanent solution is provided within a reasonable period of time. and (b) both Parties use commercially reasonable efforts to minimize any additional, material costs or expenses necessary for Customer to implement such workaround. Customer Support Staff must be available 24x7 to work cooperatively with Itron continuously until such time restoration is achieved.</td>
<td>An unresolved Service Request shall be escalated to Itron management as follows: <strong>After 30 minutes:</strong> Technical Customer Support Team Lead <strong>After 8 hours:</strong> Manager, Technical Client Services <strong>After 16 hours:</strong> Director, Global Support Services <strong>After 48 hours:</strong> Service Request, Vice President, Services and Delivery <strong>After 72 hours:</strong> President, Itron</td>
</tr>
<tr>
<td><strong>Business Impact:</strong> Critical Impact / System Down. A Production System Error for which there is no work-around, which causes Covered Product or a critical business function / process of said product to be unavailable such that system operation cannot continue. <strong>Example:</strong> a) Billing cannot be completed or billing window is significantly delayed, b) Major documented function not working c) System hung or completely down</td>
<td></td>
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</tr>
</tbody>
</table>

*Note: *Severity Level 1 requires immediate attention to prevent critical impacts on business operations. Customers experiencing issues at this level should contact Itron immediately for prompt resolution.*
<table>
<thead>
<tr>
<th>Severity Level</th>
<th>Response Times</th>
<th>Effort Level and Restoration</th>
<th>Escalation</th>
</tr>
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<tbody>
<tr>
<td><strong>Severity Level 2</strong>&lt;br&gt;<strong>Business Impact:</strong> Major impact, degraded Operation. An Error other than a Severity Level 1 Error, for which there is no work-around, that degrades or limits operation of major system functions causing Covered Software to miss required business interface or deadlines. Covered Software remains available for operation but in a highly restricted fashion.&lt;br&gt;<strong>Example:</strong> a) Major function is operating outside documented timing / term b) Covered Software operating slow, missing data, data delivery, daily mission.</td>
<td>During Business-Hours Itron will respond to Customer regarding Service Request within one (1) business day. While Service Request remains unresolved, Itron will update the Customer and the Service Request at least every other Business Day, or as otherwise agreed by the parties. Customer will respond to an Itron inquiry or request within one (1) Business Day.</td>
<td>Itron will make diligent efforts during Business Hours to i) restore Covered Software with a change to eliminate root cause, or ii) provide a workaround that restores Covered Software and downgrades the Severity Level to S3, S4 provided that such workaround (a) is only temporary and a permanent solution is provided within a reasonable period of time, and (b) both Parties use commercially reasonable efforts to minimize any additional, material costs or expenses necessary for Customer to implement such workaround.</td>
<td>An unresolved Service Request shall be escalated to Itron management as follows:&lt;br&gt;&lt;br&gt;&lt;strong&gt;After 1 hours:<strong>&lt;br&gt;Technical Customer Support Team Lead&lt;br&gt;&lt;br&gt;&lt;strong&gt;After 8 hours:</strong>&lt;br&gt;Manager, Technical Client Services&lt;br&gt;&lt;br&gt;&lt;strong&gt;After 24 hours:<strong>&lt;br&gt;Director, Global Support Services&lt;br&gt;&lt;br&gt;&lt;strong&gt;After 14 Days:</strong>&lt;br&gt;Vice President, Services and Delivery</td>
</tr>
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<td><strong>Severity Level 3</strong></td>
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<td><strong>Business Impact:</strong> Minor Business Impact, compromised operations.** An Error other than a Severity Level 1 or Severity Level 2 Error that has moderate impact on use or access, with low business impact, but not preventing Customer from performing daily activities.</td>
<td>During Business-Hours Itron will respond to Customer regarding Service Request within two (2) Business Days. While Service Request remains unresolved, Itron will update the Service Request weekly, or as otherwise agreed by the parties. Customer will respond to an Itron inquiry or request within two (2) Business Days.</td>
<td>Itron will use reasonable efforts during Business Hours to: i) restore Covered Software with a change to eliminate root cause, or ii) provide a workaround that restores Covered Software and downgrades the Severity Level to S4 and (b) both Parties use commercially reasonable efforts to minimize any additional, material costs or expenses necessary for Customer to implement such workaround</td>
<td></td>
</tr>
<tr>
<td>Business Impact: Standard Operations intact. ** A low or no-impact Error that is not a Severity Level 1, Severity Level 2, or Severity Level 3 Error, or a request for enhancement / new functionality</td>
<td>During Business-Hours Itron will respond to Customer regarding Service Request within three (3) Business Days.</td>
<td>Itron GSS Management Team will make commercially reasonable efforts during Business Hours to understand the Service Request and provide applicable recommendations as to when a Fix may be scheduled in a future release, or how to proceed with a formal enhancement request to Itron’s product and delivery teams.</td>
<td></td>
</tr>
</tbody>
</table>

* Severity Level 1 and Severity Level 2 must be reported by phone to insure they are addressed under the appropriate severity level response process. Service Requests entered by email or Web access are generally addressed as a Severity Level 3.

** Service Request opened on any non-production servers or testing servers / environments are entered as a Severity Level 3. Service Requests opened on Backup/Disaster Recovery environments are entered as Severity Level 2.
ATTACHMENT 4 – EQUIPMENT ADDENDUM

1 **Relationship to General Terms and Conditions.** This Addendum is governed by the General Terms and Conditions and any other applicable terms of the Agreement. This Addendum applies when Itron sells Equipment directly to Customer.

2 **Additional Definitions.** The following defined terms are in addition to those defined in the General Terms and Conditions:
   a. **Equipment** means Itron Equipment and Third-Party Equipment.
   b. **Firmware** means the object code version of software embedded in Equipment.
   c. **Itron Equipment** means Endpoints, as that term is defined in Section 2.16 of the Agreement.
   d. **Third-Party Equipment** means equipment for sale to Customer under this Agreement that is not manufactured by or on behalf of Itron, including, but not limited to, the Diehl Hydrus and Honeywell EVOQ4 meters. For clarification, Third-Party Equipment does not include positive displacement meters.
   e. **Warranty Period** means the applicable warranty period specified on Exhibit 2 (Equipment Warranties) to this Attachment 4.

3 **Ordering Equipment.** Customer shall order Equipment by issuing a Purchase Order to Itron in accordance with this Agreement. Notwithstanding anything in the Agreement to the contrary, after the Pilot Term and Customer’s election to use the Third-Party Equipment for the System Term, upon twelve (12) months’ prior written notice, Customer shall have the right to purchase Third-Party Equipment for the AMI System from third party vendors of Customer’s choice provided the selected Third-Party Equipment is compatible with the AMI System.

4 **Invoicing.** Itron will invoice Customer for Equipment upon the date of shipment or as otherwise agreed in Attachment 10 (Fees Addendum).

5 **Ordering, Lead Time & Ship Date.** Scheduled shipping dates will be as set forth in the Module/Meter Delivery Schedule or as mutually agreed otherwise by the Parties in writing. Upon Customer’s request, Itron will communicate current lead times. Itron will also communicate scheduled shipping dates in the order acknowledgment or on Itron’s customer portal. Unless Customer agrees to an earlier delivery in writing, Customer shall have the right to refuse any shipment of Equipment delivered more than five (5) business days ahead of the Meter/Module Delivery Schedule, and Customer shall not be responsible for any associated storage, return shipping, or re-delivery costs or expenses.

6 **Order Cancellation & Rescheduling.** Purchase Orders for Equipment may not be canceled or rescheduled by Customer, unless agreed to by Itron.

7 **Forecasts.** Each month Customer will provide Itron with a rolling, nonbinding, minimum 12-month forecast of Customer’s anticipated Equipment demand.

8 **Shipment, Title & Risk of Loss.** Itron will ship Equipment FOB Origin, production facility to the site designated by Customer ("Delivery Site"), including securing proper packaging and insurance to assure the safety of the Equipment. Equipment will be delivered export cleared to Customer at the Delivery Site. Customer will act as the Importer of Record (IOR) for Equipment and assumes costs associated with delivery of Equipment pursuant to Section 7.4 of the Agreement (Freight and Taxes). Itron will provide all necessary information required for Customer to import Equipment. Title to and risk of loss for Equipment passes to Customer upon tender to the carrier at the production facility provided that Itron shall be responsible to Customer for any and all loss and/or damage to Equipment during shipment from the production facility to the applicable Delivery Site. Title to software is not being transferred and the right to use Firmware included in the Equipment shall be licensed to
Customer pursuant to Section 10 (Equipment Firmware) below. Upon customer request, Itron will provide certificates of transit insurance for Itron Equipment.

9 Documentation. Itron will make its standard Documentation for Itron Equipment available via download. Itron will provide Customer with download instructions. Documentation for Third Party Equipment will be provided by Itron to Customer to the extent such is furnished by the Third Party Equipment manufacturer.

10 Equipment Firmware. The purchase of Itron Equipment includes a nonexclusive, perpetual license to use Firmware in Itron Equipment. The license to any Firmware in Third-Party Equipment purchased by Customer through Itron shall be between Customer and the manufacturer of the Third-Party Equipment. Itron shall provide Customer with any documentation relating to such license terms with the delivery of the applicable Equipment, including those set forth in Exhibit 3 (Third-Party Equipment Firmware Licenses) to this Attachment 4 (Equipment Addendum), which is attached hereto and incorporated herein.

11 Itron Equipment Returns. Except as provided under the express warranties set forth in this Agreement, Itron does not accept returns of Itron Equipment unless: (i) Itron shipped the Itron Equipment other than as specified in the Purchase Order, (ii) such Itron Equipment is unopened, and (ii) the product is returned in accordance with Itron’s RMA policy and procedures, which is attached hereto as Exhibit 1 (Itron RMA Policy) and incorporated herein. If there is a conflict between the terms of this Addendum 4 – Equipment Addendum and the terms of Exhibit 1 (Itron RMA Policy), the terms of this Addendum will control.

12 Title Warranty. Itron represents and warrants that it has good and indefeasible title to all Equipment furnished under this Agreement, and that Equipment is free and clear of all liens, claims, security interests, and encumbrances.

13 Additional Equipment Warranties. Additional warranties for the Equipment are set forth in Exhibit 2 (Equipment Warranty), which is attached hereto and incorporated herein.

14 Third-Party Equipment Warranties. Itron is not the manufacturer of the Third-Party Equipment and, except as to the warranties expressly provided in Section 5.1 of the Agreement (AMI System Warranty) and Section 12 of this Schedule Equipment Addendum (Title Warranty), makes no other representations or warranties whatsoever, directly or indirectly, express or implied, as to the suitability, durability, fitness for use, merchantability, condition, quality, performance or non-infringement of Third-Party Equipment. Itron hereby assigns and/or transfers to Customer, or will enforce on Customer’s behalf, the warranties for Third-Party Equipment acquired by Customer hereunder as set forth in Sections 3 and 4 of Exhibit 2, which is attached hereto and incorporated herein (“Third-Party Equipment Warranties”). Itron is an authorized reseller of the Third-Party Equipment. The RMA Policies for Third-Party Equipment are attached hereto, and incorporated herein, as Exhibit 4 (Third-Party Equipment RMA Policies) to this Addendum 4 (Equipment Addendum).

15 Return of Itron Equipment. Unless expressly agreed otherwise in Exhibit 2 (Equipment Warranties), (a) Customer will pay the cost of returning Itron Equipment to the Itron designated repair facility and Itron will pay the cost of returned repaired or replacement Itron Equipment to Customer, including applicable insurance and (b) Customer is responsible for any labor costs associated with removal or reinstallation of Itron Equipment. Repaired and replacement Itron Equipment will be warranted for the remainder of the Endpoint Warranty Period, or sixty (60) days from the ship date of the repaired or replaced Itron Equipment, whichever is longer.

16 Itron Equipment Warranty Exclusions. The warranties for Itron Equipment set forth in this Agreement will not apply to the extent the warranty failure is due to: (a) changes made to Itron Equipment by anyone other than Itron or its Subcontractors or without Itron’s prior written consent; (b) use with cables, mounting kits, antennas, battery backups and other devices, third party software or firmware that Itron has not provided to Customer or approved in writing for use with Itron Equipment; (c) physical damage or other abuse to the Itron Equipment by Customer or a third party.
for whom Itron is not responsible, (d) failure to install, test, handle, or operate Itron Equipment in accordance with its Documentation or as otherwise authorized by Itron; (e) a Force Majeure event; (f) use of the Itron Equipment by Customer in violation of the terms of the Agreement, or (g) incorrect data or data entry by Customer or a third party for whom Itron is not responsible. Warranty exclusions for Third Party Equipment are specified in the applicable Sections of attached Exhibit 2 (Equipment Warranties). Customer may request that Itron repair Itron Equipment damaged by any of the foregoing; if Itron agrees to make such repairs, Customer may be charged additional Fees.

17 Integration of Itron Equipment. If Customer purchases Itron Equipment for integration into third-party devices or other third-party hardware not provided by Itron hereunder, Customer must obtain warranty service for the Itron Equipment from the third-party integrated device provider.

18 Survival. The following sections of this Addendum shall survive termination or expiration of the Agreement: 1 (Relationship to General Terms and Conditions), 2 (Additional Definitions), 4 (Invoicing), 6 (Order Cancellation & Rescheduling), 8 (Shipment, Title & Risk of Loss), 10 (Equipment Firmware), 11 (Returns), 12 (Title Warranty), 14 (Third-Party Equipment Warranties), 16 (Warranty Exclusions) and 18 (Survival), Exhibit 2 (Equipment Warranties) as it applies to Third Party Equipment, Exhibit 3 (Third-Party Equipment Firmware Licenses), and Exhibit 4 (Third-Party Equipment RMA Policies).
ITRON RETURN MATERIALS AUTHORIZATION POLICY

Itron’s Global Warranty Claim Return Procedure
January 2020

The purpose of this Return Materials Authorization (“RMA”) procedure is to document the process by which SAWS (“Customer”) can return defective Endpoints for the purpose of a warranty claim.

SCOPE
The scope of this RMA procedure is limited to repairable Endpoints assembled and shipped to Customer from Itron-owned manufacturing centers around the globe that have failed within the warranty period.

PROCEDURES
1. Customer engages Itron to open a “Case” to obtain a Return Material Authorization (RMA) number prior to returning Endpoint for a valid warranty claim:
   a. Customer selects the appropriate Itron RMA Tool (see RMA portal descriptions under Tools below).
   b. If necessary, Customer may engage Itron Support Services for telephone assistance.
   c. Customer enters the required information into the RMA portal; sample information includes the following:
      i. Name, company, address, contact info
      ii. Product name, catalog number, and (if appropriate) MAC ID and Network ID
      iii. Each unit serial number
      iv. Description of the failure symptom experienced
   d. Itron provides the customer packaging, labeling and shipping instructions.
   e. Customer packages and ships the warranty claim RMA to the appropriate Itron facility.
2. Itron site Receiving personnel receive the RMA units and promptly route to the appropriate Work Cell.
3. The appropriate Work Cell promptly processes the Customer RMA per local procedures, which will include, as applicable, the following steps:
   a. Un-package and scan each unit into Itron’s system, triggering a communication to Customer that the RMA was received and is “in process.”
   b. Validate warranty entitlement for each unit; reject any unit that is not in warranty.
   c. Troubleshoot and repair each unit.
   d. Repaired units are tested and upon passing, are routed to Shipping for packaging and return to Customer.
   e. Customer symptom and repair data is captured in the Itron system for analysis.
   f. Units that are beyond economical repair are noted and units are scrapped. Itron Demand Planning/Order Management will calculate sales credit or generate a Sales Order for the appropriate replacement units.
   g. Replacement units (when applicable) are promptly processed for any Customer-specific configuration, tested, packaged and routed to Shipping for prompt shipment to Customer.
   h. The work cell will select a sampling of returned units and send them to site Reliability Team for Failure Analysis (FA) to the component level.
4. Itron Reliability Team will promptly perform FA to determine failure mode and cause.
EXHIBIT 2 TO ATTACHMENT 4 (EQUIPMENT ADDENDUM) - EQUIPMENT WARRANTIES

1. **New Equipment Warranty.** Except for Equipment repaired or replaced pursuant to the RMA process, Itron warrants that all Equipment shall be new merchandise and not used or reconditioned upon delivery.

2. **Endpoint Warranties**

   For a period of fifteen (15) years and six months from the date Itron ships an Endpoint ("**Initial Warranty Period**"), Itron warrants solely to Customer that all Endpoints (including batteries) supplied to Customer by Itron under the Agreement shall conform in all material respects to the Endpoint Specifications and Section 10.1(D) of SOW#1, under normal use and service, and shall be free from defects in workmanship and materials. As used in this Section, normal use and service means that the Endpoint is configured to the factory setting of six (6) transmissions per day, the communication of real-time alarms/events, the execution of up to one-hundred sixty five (165) on-demand reads per year, and the execution of up to five (5) Firmware downloads over the life of the Endpoint. As Customer’s sole and exclusive remedy for a breach of the foregoing warranty, Itron will, in a timely manner and using commercially reasonable efforts, at its option and expense: (i) repair or replace faulty Endpoints under warranty after it has been returned to an Itron-designated repair facility during the Initial Warranty Period in accordance with the Itron RMA policy and procedures attached to Exhibit 1 (RMA Policy) to Attachment 4 (Equipment Addendum), or (ii) provide Customer with a Firmware or software fix to correct the nonconformity, or (iii) if Itron determines (in its reasonable judgment) that it is unable to provide a remedy specified in item (i) or (ii) of this Section within sixty (60) days of breach of the warranty provided in this Section 2, Itron will provide Customer with a credit equal to the depreciated value of the purchase price for the applicable Endpoint in the next invoice to Customer.

   In addition, all Endpoints (including their batteries) supplied to Customer by Itron under the AMI Agreement shall substantially conform to their specifications set forth in the Endpoint Specifications and Section 10.1(D) of SOW#1, under normal use and service, and shall be free from defects in workmanship and materials for an additional period of five (5) years that commences upon the expiration of the Initial Warranty Period ("**Additional Warranty Period**"). For each breach of the foregoing warranty, Customer will be entitled to purchase a replacement Endpoint at 50% of Itron’s then-current list-price.

   The Initial Warranty Period and Additional Warranty Period shall collectively be referred to as the “**Endpoint Warranty Period**.”

3. **Diehl Hydrus Static Water Meter Warranties**

   Diehl Metering HYDRUS Ultrasonic water meters, sizes 5/8”, ¾” S (5/8” x ¾”), ¾” x 9” and 1”:
Limited Extended Warranty

Applicability
This Limited Extended Warranty (this “Limited Warranty”) is applicable to all Diehl Metering HYDRUS Ultrasonic water meters, sizes 5/8”, 3/4” 5 (5/8” x 3/4”), 3/4” x 9” and 1”, including HYDRUS System Components (Electronics, Battery, Transducers and Register) which are marked on the delivery note or the order confirmation as “Extended Warranty” (hereinafter referred to as a “Product”).

Warranty, Material and Workmanship
Diehl Metering GmbH (“Diehl Metering”) warrants, for a period of twenty (20) years from the date of delivery of the Products (the “Warranty Period”), that (a) at the date of delivery, Products comply with the applicable specifications and be free from defects in material and workmanship, and (b) Product housings are free from lead. Claims under this Limited Warranty are subject to the restrictions and conditions set forth herein and must be made in accordance with the procedures set forth under “Claim Handling” below.

Remedy
If Diehl Metering establishes that the Product has a defect that is covered by this Warranty, based on a claim submitted by a customer in compliance with the provisions set forth under “Claim Handling” below (“Covered Claim”), Diehl Metering will remedy such defect as set forth below:

- If the Covered Claim is received by Diehl Metering within the first 5 years of the Warranty Period, Diehl Metering will at its sole discretion repair or replace such Product free of charge and cover the reasonable costs for removal of the defective Product and installation of the repaired or replaced Product.
- If the Covered Claim is received by Diehl Metering after the 5th anniversary of the beginning of the Warranty Period and on or prior to the 10th anniversary thereof, Diehl Metering will, at its sole discretion, repair or replace such Product free of charge, and the customer shall bear the entire costs of the removal of the defective Product and installation of the repaired or replaced Product.
- If the Covered Claim is received by Diehl Metering after the 10th anniversary of the beginning of the Warranty Period and on or prior to the 14th anniversary thereof, Diehl Metering will sell to the customer a replacement Product at a discount of 60% of the then valid list price of such replacement Product.
- If the Covered Claim is received by Diehl Metering after the 14th of the beginning of the Warranty Period and on or prior to the 17th anniversary thereof Diehl Metering will sell to the customer a replacement Product at a discount of 40% of the then valid list price of such replacement Product.
- If the Covered Claim is received by Diehl Metering after the 17th anniversary of the beginning of the Warranty Period and on or prior to the 20th anniversary thereof, Diehl Metering will sell to the customer a replacement Product at a discount of 20% of the then valid list price.
If Diehl Metering elects to replace any defective Product, it may replace such Product with the same Product or a successor Product that may be new or refurbished. If Diehl Metering elects to repair any defective Product, it is free to determine the manner in which such repair is performed and may use new or reconditioned parts. Repaired or replaced Products remain covered under this Warranty until the later of the expiration of the original Warranty Period or 90 days from the date of the return shipment of the repaired or replaced Product to the customer.

Meter Accuracy
The Products will meet or exceed meter accuracy of +/-1.5% between the "minimum flow rate" to "maximum flow rate" for twenty (20) years from date of shipment:

- 5/8"
  - 0.1 - 20 gpm
- 3/4" (5/8" x 3/4") and 3/4" x 9"
  - 0.1 - 30 gpm
- 1"
  - 0.4 - 55 gpm

Claim Handling
To exercise its rights under this Warranty, the customer must notify Diehl Metering in writing at info-dmde@diehl.com and provide the name of the Product, the serial number, the specific defect, other relevant details, and customer's contact information. The customer may include test results, as long as such test results adhere to the standards set forth under "Testing" below. In case the customer does not include test results, the submission of a claim by the customer shall be deemed as the customer's consent to the performance of such tests by Diehl Metering, as Diehl Metering deems necessary or advisable, at the sole expense of the customer. Any claim submitted by customer under this Warranty shall include a copy of the applicable proof of purchase and delivery note.

At Diehl Metering's sole discretion, the defective Product shall be shipped by the customer prepaid F.O.B. to the nearest Diehl Metering factory or distribution center, as communicated by Diehl Metering from time to time (Incoterms 2010). Any return delivery has to be agreed and coordinated with Diehl Metering beforehand.

If requested by Diehl Metering, the customer shall furnish proof that the Products were installed by customer or an authorized installer in full compliance with the Product specifications, the installation manual, or any other written instructions by Diehl Metering, and provide Diehl Metering with any other information reasonably required by Diehl Metering.

Testing
Test results must be obtained according to AWWA standards and the HYDRUS Testing Instruction, which can be obtained from Diehl Metering.

General Provisions
This Warranty is not transferable and shall only apply to the original customer who bought the respective Products from Diehl Metering or the original customer of an authorized Diehl Metering reseller.
Warranty Limitations

This Warranty shall not apply

- to Products repaired, replaced modified, altered or tampered with by the customer or any other third party without the prior written approval from Diehl Metering,
- if the Products have not been installed in compliance with the Product's installation manual provided by Diehl Metering’s written instructions,
- if the Products have not been operated, used, stored, or maintained in accordance with the Product specifications, technical literature or any other written instructions provided by Diehl Metering with respect to the Products,
- to Products connected to, or integrated or combined with, another product without the prior written approval of Diehl Metering or used with substances other than potable water, or with water containing dirt, debris, deposits or other impurities,
- to Products that have been subjected to improper periodic testing or exposed to conditions other than those detailed in the Product specifications or any other written instructions with respect to the Product,
- if the defect is caused by damage or destruction resulting from the action or inaction of any person other than Diehl Metering, vandalism, accidents, chemical contamination or physical impact, exposure to inappropriate environments by acts of nature or other events beyond Diehl Metering’s control.

Descriptions of the Products and information regarding the Products, regardless of form or origin, shall not IMPLY any warranties. EXCEPT FOR THE WARRANTIES EXPLICITLY SET FORTH HEREIN, DIEHL METERING MAKES NO OTHER WARRANTIES WHATSOEVER, AND ANY AND ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT, ARE HEREBY EXPRESSLY DISCLAIMED.

This Warranty is the only warranty provided by Diehl Metering with respect to the Products. No representative, dealer or any other person is authorized to make any additional or different warranty, representation, condition or promise on behalf of Diehl Metering with respect to the Products. No terms or conditions other than those stated herein or provided by applicable law, and no oral or written agreement, understanding, promise, or commitment, may in any way modify this warranty without Diehl Metering's express prior written consent, and no such modification may be relied upon by any party or under any circumstances other than the party for which, and the circumstances under which, such modification is granted.

If the Products are consumer Products, federal law does not allow an exclusion of implied warranties. To the extent certain customers are entitled to implied warranties under federal law, to the extent permitted by applicable law, they are limited to the duration of this Warranty. Some states do not allow limitations or exclusions on implied warranties or on the duration of an implied warranty or on the limitation or exclusion of incidental or consequential damages, so the above limitation(s) or exclusion(s) may not apply to certain customers. This Warranty gives such customers specific legal rights. Certain customers may have other rights which may vary from state to state.
Liability Limitations
THE REMEDIES SET FORTH HEREIN SHALL BE THE CUSTOMER’S SOLE AND EXCLUSIVE REMEDY AND DIEHL METERING’S ENTIRE LIABILITY FOR ANY BREACH OF THIS WARRANTY.
THE LIABILITY OF DIEHL METERING FOR ANY CLAIMS, OBLIGATIONS AND WARRANTIES OUT OF OR IN CONNECTION WITH THE PRODUCTS SHALL BE LIMITED TO THE TOTAL AMOUNT PAID BY THE CUSTOMER FOR THE PRODUCT GIVING RISE TO THE RESPECTIVE CLAIM.
IN NO EVENT SHALL DIEHL METERING BE LIABLE EITHER IN TORT OR IN CONTRACT FOR ANY INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION LOST PROFITS, LOST REVENUE, LOSS OF USE, DIMINUTION IN VALUE, ARISING OUT OF OR RELATING TO ANY BREACH OF THIS WARRANTY, WHETHER OR NOT THE POSSIBILITY OF SUCH DAMAGES HAS BEEN DISCLOSED IN ADVANCE BY THE CUSTOMER OR COULD HAVE BEEN REASONABLY FORESEEN BY DIEHL METERING, REGARDLESS OF THE LEGAL OR EQUITABLE THEORY (CONTRACT, TORT OR OTHERWISE) UPON WHICH THE CLAIM IS BASED, AND NOTWITHSTANDING THE FAILURE OF ANY AGREED OR OTHER REMEDY OF ITS ESSENTIAL PURPOSE.

Unjustified Claims
In case of claims that are not covered by this Warranty, as determined by Diehl Metering, all costs for testing, repair, replacement and shipping incurred by Diehl Metering shall be reimbursed by the customer to Diehl Metering within a reasonable time after the customer has been notified by Diehl Metering.

Applicable Law
This Warranty shall solely be subject to the laws of the state of New York (United States) excluding any conflicts of laws provisions. In the event of a conflict with the general terms and conditions of either party, the delivery note or order confirmation, this Warranty shall prevail. All disputes arising out of or in connection with this Warranty shall be finally settled under the Rules of Arbitration of the International Chamber of Commerce (the “Rules”) by three arbitrators appointed in accordance with the Rules. The place of arbitration shall be New York City, New York. The arbitration shall be held in the English language.

Severability
If any provision contained in this Warranty is held by final judgment of a court of competent jurisdiction to be invalid, illegal or unenforceable, such invalid, illegal or unenforceable provision shall be severed from the remainder of this Warranty, and the remainder of this Warranty shall be enforced. In addition, the invalid, illegal or unenforceable provision shall be deemed to be automatically modified, and, as so modified, to be included in this Warranty, such modification being made to the minimum extent necessary to render such provision valid, legal and enforceable.
Diel Metering HYDRUS Ultrasonic water meters, sizes 1 ½" and 2":

**Limited Extended Warranty**

**Applicability**
This Limited Extended Warranty (this “Limited Warranty”) is applicable to all Diehl Metering HYDRUS Ultrasonic water meters, sizes 1 ½" and 2", including HYDRUS System Components (Electronics, Battery, Transducers and Register) which are marked on the delivery note or the order confirmation as "Extended Warranty" (hereinafter referred to as a "Product").

**Warranty, Material and Workmanship**
Diehl Metering GmbH (“Diehl Metering”) warrants, for a period of 10 (Ten) years from the date of delivery of the Products (the “Warranty Period”), that (a) at the date of delivery, Products comply with the applicable specifications and be free from defects in material and workmanship, and (b) Product housings are free from lead. Claims under this Limited Warranty are subject to the restrictions and conditions set forth herein and must be made in accordance with the procedures set forth under “Claim Handling” below.

**Remedy**
If Diehl Metering establishes that the Product has a defect that is covered by this Warranty, based on a claim submitted by a customer in compliance with the provisions set forth under “Claim Handling” below (“Covered Claim”), Diehl Metering will remedy such defect as set forth below:

- If the Covered Claim is received by Diehl Metering within the first 3 years of the Warranty Period, Diehl Metering will at its sole discretion repair or replace such Product free of charge and cover the reasonable costs for removal of the defective Product and installation of the repaired or replaced Product.
- If the Covered Claim is received by Diehl Metering after the 3rd anniversary of the beginning of the Warranty Period and on or prior to the 10th anniversary thereof, Diehl Metering will, at its sole discretion, repair or replace such Product free of charge, and the customer shall bear the entire costs of the removal of the defective Product and installation of the repaired or replaced Product.

If Diehl Metering elects to replace any defective Product, it may replace such Product with the same Product or a successor Product that may be new or refurbished. If Diehl Metering elects to repair any defective Product, it is free to determine the manner in which such repair is performed and may use new or reconditioned parts. Repaired or replaced Products remain covered under this Warranty until the later of the expiration of the original Warranty Period or 90 days from the date of the return shipment of the repaired or replaced Product to the customer.

**Meter Accuracy**
The Products will meet or exceed meter accuracy of +/-1.5% between the “minimum flow rate” to “maximum flow rate” for ten (10) years from date of shipment:

- 1 ½”
  - 0.8 - 100 gpm
- 2”
  - 0.8 - 160 gpm

**Claim Handling**
To exercise its rights under this Warranty, the customer must notify Diehl Metering in writing at info-dmde@dieleh.com and provide the name of the Product, the serial number, the specific defect, other relevant details, and customer’s contact information. The customer may include test results, as long as such test results adhere to the standards set forth under “Testing” below. In case the customer does not include test results, the submission of a claim by the customer shall be deemed as the customer’s consent to the performance of such tests by Diehl Metering, as Diehl Metering deems necessary or advisable, at the sole expense of the customer. Any claim submitted by customer under this Warranty shall include a copy of the applicable proof of purchase and delivery note.

At Diehl Metering’s sole discretion, the defective Product shall be shipped by the customer prepaid F.O.B. to the nearest Diehl Metering factory or distribution center, as communicated by Diehl Metering from time to time (Incoterms 2010). Any return delivery has to be agreed and coordinated with Diehl Metering beforehand.

Diehl Metering LLC
1813 N. Mill Street, Suite C
Naperville, Illinois 60563
If requested by Diehl Metering, the customer shall furnish proof that the products were installed by customer or an authorized installer in full compliance with the product specifications, the installation manual, or any other written instructions by Diehl Metering, and provide Diehl Metering with any other information reasonably required by Diehl Metering.

Testing
Test results must be obtained according to AWWA standards and the HYDRUS Testing Instruction, which can be obtained from Diehl Metering.

General Provisions
This Warranty is not transferable and shall only apply to the original customer who bought the respective products from Diehl Metering or the original customer of an authorized Diehl Metering reseller.

Warranty Limitations
This Warranty shall not apply
- to products repaired, replaced modified, altered or tampered with by the customer or any other third party without the prior written approval from Diehl Metering,
- unless the products have been installed in compliance with the product's installation manual provided by Diehl Metering's written instructions,
- unless the products have not been operated, used, stored, or maintained in accordance with the product specifications, technical literature or any other written instructions provided by Diehl Metering with respect to the products,
- if the products connected to, or integrated or combined with, another product without the prior written approval of Diehl Metering or used with substances other than potable water, or with water containing dirt, debris, deposits or other impurities,
- if the products that have been subjected to improper periodic testing or exposed to conditions other than those detailed in the Product specifications or any other written instructions with respect to the product,
- if the defect is caused by damage or destruction resulting from the action or inaction of any person other than Diehl Metering's, vandalism, accidents, chemical contamination or physical impact, exposure to inappropriate environments by acts of nature or other events beyond Diehl Metering's control.

Descriptions of the products and information regarding the products, regardless of form or origin, shall not imply any warranties. EXCEPT FOR THE WARRANTIES EXPRESSLY SET FORTH HEREIN, DIEHL METERING MAKES NO OTHER WARRANTIES WHATSOEVER, AND ANY AND ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT, ARE HEREBY EXPRESSLY DISCLAIMED.

This Warranty is the only warranty provided by Diehl Metering with respect to the products. No representative, dealer or any other person is authorized to make any additional or different warranty, representation, condition or promise on behalf of Diehl Metering with respect to the products. No terms or conditions other than those stated herein or provided by applicable law, and no oral or written agreement, understanding, promise, or commitment, may in any way modify this warranty without Diehl Metering's express prior written consent, and no such modification may be relied upon by any party or under any circumstances other than the party for which, and the circumstances under which, such modification is granted.

If the products are consumer products, federal law does not allow an exclusion of implied warranties. To the extent certain customers are entitled to implied warranties under federal law, to the extent permitted by applicable law, they are limited to the duration of this Warranty. Some states do not allow limitations or exclusions on implied warranties or on the duration of an implied warranty or on the limitation or exclusion of incidental or consequential damages, so the above limitation(s) or exclusion(s) may not apply to certain customers. This Warranty gives such customers specific legal rights. Certain customers may have other rights which vary from state to state.

Liability Limitations
THE REMEDIES SET FORTH HEREBIN SHALL BE THE CUSTOMER'S SOLE AND EXCLUSIVE REMEDY AND DIEHL METERING'S ENTIRE LIABILITY FOR ANY BREACH OF THIS WARRANTY.

THE LIABILITY OF DIEHL METERING FOR ANY CLAIMS, DELIGATIONS AND WARRANTIES OUT OF OR IN CONNECTION WITH THE PRODUCTS SHALL BE LIMITED TO THE TOTAL AMOUNT PAID BY THE CUSTOMER FOR THE PRODUCT GIVING RISE TO THE RESPECTIVE CLAIM.

IN NO EVENT SHALL DIEHL METERING BE LIABLE EITHER IN TORT OR IN CONTRACT FOR ANY INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION LOST PROFITS, LOST REVENUE, LOSS OF USE, DIMINUTION IN VALUE, ARISING OUT OF OR RELATING TO ANY BREACH OF THIS WARRANTY, WHETHER OR NOT THE POSSIBILITY OF SUCH DAMAGES HAS BEEN DISCLOSED IN ADVANCE BY THE CUSTOMER OR COULD HAVE BEEN REASONABLY FORESEEN BY DIEHL METERING, REGARDLESS OF THE LEGAL OR EQUITABLE THEORY (CONTRACT, TORT OR
OTHERWISE) UPON WHICH THE CLAIM IS BASED, AND NOTWITHSTANDING THE FAILURE OF ANY AGREED OR OTHER REMEDY OF ITS ESSENTIAL PURPOSE.

Unjustified Claims
In case of claims that are not covered by this Warranty, as determined by Diehl Metering, all costs for testing, repair, replacement and shipping incurred by Diehl Metering shall be reimbursed by the customer to Diehl Metering within a reasonable time after the customer has been notified by Diehl Metering.

Applicable Law
This Warranty shall solely be subject to the laws of the state of New York (United States) excluding any conflicts of law's provisions. In the event of a conflict with the general terms and conditions of either party, the delivery note or order confirmation, this Warranty shall prevail. All disputes arising out of or in connection with this Warranty shall be finally settled under the Rules of Arbitration of the International Chamber of Commerce (the "Rules") by three arbitrators appointed in accordance with the Rules. The place of arbitration shall be New York City, New York. The arbitration shall be held in the English language.

Severability
If any provision contained in this Warranty is held by final judgment of a court of competent jurisdiction to be invalid, illegal or unenforceable, such invalid, illegal or unenforceable provision shall be severed from the remainder of this Warranty, and the remainder of this Warranty shall be enforced. In addition, the invalid, illegal or unenforceable provision shall be deemed to be automatically modified, and, as so modified, to be included in this Warranty, such modification being made to the minimum extent necessary to render such provision valid, legal and enforceable.
ADDITION TO THE DIEHL EXTENDED WARRANTY

Diehl Metering LLC
1813 N. Mill Street, Suite C
Naperville, IL 60563

July 30, 2020

Please accept this letter extending the terms outlined below to the City of San Antonio, TX for HYDRUS meters purchased from Diehl Metering:

Flow specification added to the Diehl Extended Warranty:

The Products will meet or exceed meter accuracy of +1.5%/-10% between the “Extended low flow rate” to “minimum flow rate” for twenty (20) years from date of shipment:

5/8”, 3/4” S (5/8” x 3/4”) and 3/4” x 9”
0.05 - 0.1 gpm

1”
0.25 - 0.3 gpm

1 1/2”
0.5 - 0.6 gpm

2”
0.55 - 0.8 gpm

These additional flow rates in no way limit the terms of the Diehl Extended Warranty. Meters which are processed under these additional flow rates are subject to the full terms of the Diehl Extended Warranty.

Sincerely,

Danny Padron
Head of Customer Solutions Center
4. Honeywell EvoQ4 Static Water Meter (Meter) Warranties

Standard Utility Warranty for EvoQ4™ Electromagnetic Water Meters (Potable Water Applications)

Scope of Warranty
This warranty applies to Elster AMCO Water LLC ("Elster AMCO Water"), EvoQ4 Electromagnetic Water Meters (the "Product"), when used with potable water under 120°F (50°C), in ambient temperatures not to exceed an average of 85°F (30°C), and otherwise used, stored, installed, operated and maintained in accordance with Elster AMCO Water's guidelines, as may be amended from time to time, which include, but are not limited to, information contained in Elster AMCO's Terms and Conditions for Sale of Products and/or Services, specifications and installation instructions, user and maintenance manuals, and testing guides (the "Guidelines").

This warranty applies exclusively to the person (whether natural or legal) that purchases the Product directly from Elster AMCO Water (the "Purchaser"). Where the Purchaser is an Elster AMCO Water authorized distributor then this warranty may be extended by the authorized distributor to its own purchasers but Elster AMCO Water shall have no liability in relation to any additional warranty unless explicitly agreed to in writing.

To the fullest extent permitted by the applicable law, the warranties given in this document in respect of the Product are to the exclusion of any other guarantees or warranties whether express, implied by law, statute or otherwise incorporated (expressly or by implication) in any agreement between Elster AMCO Water and the Purchaser.

Materials and Workmanship
If stored, installed, operated, used and maintained as described herein and subject to the limitations contained in this document, Elster AMCO Water warrants the product to be free from defects in materials and workmanship for a period of five (5) years after shipment by Elster AMCO Water.

Accuracy
If used and installed as described above, Elster AMCO warrants products covered by this warranty (excluding auxiliary devices) to meet the in-service meter accuracy parameters as contained in Elster AMCO's document "EvoQ4 Test bench procedures for electronic utility meter testing" (revision E: 1 June 2016) (the "Test Procedures") for a period of five (5) years after shipment by Elster AMCO Water. Any accuracy determination testing shall be performed in accordance with Elster AMCO's Test Procedures. If a meter is claimed to breach the accuracy warranty as stated herein, the customer shall submit a certified copy of the test results at the time the meter is returned to Elster AMCO.

Communication Protocols
Without prejudice to anything else stated in this document or in the contract between Elster AMCO Water and the Purchaser, the Purchaser recognizes and agrees that Elster AMCO Water communication protocols are the sole property of Elster AMCO Water and/or its affiliates. While Elster AMCO Water may agree to allow the Purchaser to use Elster AMCO Water's, any such use is subject to the Purchaser entering into a separate confidentiality agreement with Elster AMCO Water. Furthermore, any right to use those protocols is non-exclusive, only for the purpose of using and reading the Products, and no guarantee or warranty is given by Elster AMCO Water as to the interoperability of its communications protocols and Products with any other products or equipment used by the Purchaser and Elster AMCO Water accepts no obligations in respect of any costs that may be incurred by the Purchaser or any other third party for changes needed to be made to enable integration and/or interface between the Products and the existing meter reading systems or any new/additional meter reading system.

Claims and Remedies
Any Product that fails to meet the terms of the warranty above will be repaired or replaced with equivalent or similar product, at the option of Elster AMCO Water, without additional charge to the Purchaser. The Purchaser is responsible for removing the Product from service, returning it to the factory service center designated by Elster AMCO Water, providing a written or electronic (facsimile or e-mail) claim notice, and for freight costs to and from the service center. The Purchaser is also responsible for reinstalling repaired or replaced product. Where the Purchaser is relying upon testing or equipment to test any Product to make a claim under this warranty then such facility, testing and method must be provided by or approved by Elster AMCO Water.

Optional Extended Warranty
Elster Water US Standard Warranty for EvoQ4
The following extended warranty is offered for purchase and applies if purchased by the Purchaser at the initial time of purchase of the Product covered by this warranty.

After the expiration of the five (5) year warranty period above but before the tenth anniversary of the date of shipment from Elster AMCO Water, for any Product that fails to perform material in accordance with the specifications in effect at the time of original product shipment, Elster AMCO Water will offer the Purchaser the option of purchasing, at a discount, a replacement Product or other meter with equivalent or substantially similar features in accordance with the following table with the Purchaser paying a percentage of the then applicable list price set forth in the column on the right that corresponds to the year from the date of shipment from Elster AMCO Water in which a claim is made hereunder set forth in the column on the left below:

<table>
<thead>
<tr>
<th>Years from Shipment</th>
<th>Percentage of Current List Price to be Paid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 6</td>
<td>30%</td>
</tr>
<tr>
<td>Year 7</td>
<td>35%</td>
</tr>
<tr>
<td>Year 8</td>
<td>40%</td>
</tr>
<tr>
<td>Year 9</td>
<td>50%</td>
</tr>
<tr>
<td>Year 10</td>
<td>50%</td>
</tr>
</tbody>
</table>

The Purchaser is responsible for removing the Product covered by the optional extended warranty from service, returning it to the factory service center designated by Elster AMCO Water, providing a written or electronic (facsimile or e-mail) claim notice, and for freight costs to the service center. The Purchaser is also responsible for reinstalling replaced Product.

This optional extended warranty offered herein shall not include, relate to or cover batteries that are incorporated into the Product.

**Limits of Liability**

The warranties set forth in this document shall not apply in the case of: (a) consumable parts, such as protective coatings that are designed to diminish over time, unless failure has occurred due to a defect in materials or workmanship; (b) cosmetic damage, including but not limited to scratches, dents and broken plastic on ports; (c) any failure, non-conformity or defect of the Product or component thereof caused by any particles in the water which affect their function outside the normal or standards generally acceptable in the industry, aggressive water or other environmental conditions (including submersion in contaminated ground water or foreign matter in the water or environment); (d) damage caused by use with another product; (e) damage caused by accident, abuse, vandalism, deliberate tampering, theft, mishandling, misapplication, misuse, fire, earthquake or other external cause; (f) improper installation and/or damage caused by operating the Product outside Elster AMCO Water’s published Guidelines; (g) damage caused by services (including but limited to upgrades, maintenance, repairs and expansions) performed by anyone who is not a representative of Elster AMCO Water or authorized by Elster AMCO Water to undertake such work; (h) a Product that has been modified to alter functionality or capability without the written permission of Elster AMCO Water; (i) defects caused by normal wear and tear or otherwise due to the normal aging of the Product; (j) negligent acts or omissions or malfeasance of the Purchaser or any third party; (k) damage to the Product caused by the Purchaser or any third party or other conditions beyond the control of Elster AMCO Water; (l) any serial number or security seals (in whole or in part) have been removed or defaced from the Product; (m) products and/or components provided by the Purchaser; (n) services enabled by the Purchaser; (o) in case of acts of God or other conditions or circumstances beyond the reasonable control of Elster AMCO Water; (p) a Product that has been immersed in water above 30°C; (q) a Product that has been immersed in water below 30°C to a depth in excess of 1 meter for a continuous period that exceeds 24 hours; or (r) if any equipment interrogates the Product, then the frequency of such interrogation is no more than once per hour.

Any description of the Product, whether in writing or made orally by Elster AMCO Water, its authorized distributor or its agents, specifications, samples, literature, models, bulletins, drawings, diagrams, engineering sheets or similar materials used in connection with any Purchaser's order are for the sole purpose of identifying product and shall not be construed as an express or implied warranty or guarantee. Any suggestions by Elster AMCO Water, its authorized distributor or its agents regarding use,
application or suitability of product shall not be construed as an express or implied guarantee or warranty unless confirmed to be such in writing by Elster AMCO Water.

The laws of the State of New York, excluding its conflicts of law rules shall exclusively govern this warranty. If any provision hereof, partly or completely, shall be held invalid or unenforceable, such invalidity or unenforceability shall not affect any other provision or portion hereof and these terms shall be construed as if such invalid or unenforceable provision or portion thereof had never existed.

THE FOREGOING EXPRESS WARRANTY IS IN LIEU OF ALL OTHER GUARANTEES OR WARRANTIES WHATSOEVER, WHETHER EXPRESS, IMPLIED OR STATUTORY (EXCEPT FOR WARRANTY OF TITLE), INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

CUSTOMER'S EXCLUSIVE REMEDY AND ELSTER AMCO'S AND ITS BUSINESS PARTNERS' SOLE LIABILITY ON ANY CLAIM, WHETHER IN TORT (INCLUDING STRICT LIABILITY), NEGLIGENCE, CONTRACT, WARRANTY OR OTHERWISE, FOR ANY METER OR REGISTER WHICH FAILS TO MEET THE TERMS OF THE WARRANTY STATED ABOVE, SHALL BE LIMITED TO REPAIR OR REPLACEMENT AS DESCRIBED ABOVE. IN NO EVENT SHALL ELSTER AMCO AND/OR ITS BUSINESS PARTNERS BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND, INCLUDING BUT NOT LIMITED TO LOSS OF PROFITS OR REVENUE, LOSS OF USE, COST OF CAPITAL, COST OF SUBSTITUTE EQUIPMENT, FACILITIES OR SERVICES, DOWNTIME COSTS, DELAYS AND CLAIMS OF CUSTOMERS OF THE CUSTOMER OR OTHER THIRD PARTIES.
Honeywell evoQ4™ Test Procedures

Revision: F
Document revision date: January 1st, 2020
Security level: For release to business partners

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Smart Energy
Elster AMCO Water, LLC
10 SW 49th Ave
Building 100
Ocala, FL 34474

T +1 352 369 6500
F +1 352 368 1950
# Test Parameters – Receiving Inspection

## 1.5” – 2” evoQ4 (Std, LF, FSM, RB) Accuracy Test

<table>
<thead>
<tr>
<th>Flow Rate (gpm)</th>
<th>Volume CF</th>
<th>Volume Gallons</th>
<th>Test Time (min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Med Q1</td>
<td>1.5</td>
<td>22</td>
<td>162</td>
</tr>
<tr>
<td>Slow Q0</td>
<td>0.25</td>
<td>4</td>
<td>27</td>
</tr>
<tr>
<td>Fast Q2</td>
<td>130</td>
<td>87</td>
<td>850</td>
</tr>
</tbody>
</table>

## 6” evoQ4 (Standard, RB, FSM) Accuracy Test

<table>
<thead>
<tr>
<th>Flow Rate (gpm)</th>
<th>Volume CF</th>
<th>Volume Gallons</th>
<th>Test Time (min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Med Q1</td>
<td>6</td>
<td>115</td>
<td>864</td>
</tr>
<tr>
<td>Slow Q0</td>
<td>4</td>
<td>56</td>
<td>432</td>
</tr>
<tr>
<td>Fast Q2</td>
<td>1000</td>
<td>666</td>
<td>5000</td>
</tr>
</tbody>
</table>

## 1.5” – 2” evoQ4 AL Accuracy Test

<table>
<thead>
<tr>
<th>Flow Rate (gpm)</th>
<th>Volume CF</th>
<th>Volume Gallons</th>
<th>Test Time (min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Med Q1</td>
<td>2</td>
<td>29</td>
<td>216</td>
</tr>
<tr>
<td>Slow Q0</td>
<td>0.5</td>
<td>7</td>
<td>54</td>
</tr>
<tr>
<td>Fast Q2</td>
<td>220</td>
<td>147</td>
<td>1100</td>
</tr>
</tbody>
</table>

## 8” evoQ4 (Standard, RB, FSM) Accuracy Test

<table>
<thead>
<tr>
<th>Flow Rate (gpm)</th>
<th>Volume CF</th>
<th>Volume Gallons</th>
<th>Test Time (min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Med Q1</td>
<td>16</td>
<td>231</td>
<td>1728</td>
</tr>
<tr>
<td>Slow Q0</td>
<td>8</td>
<td>115</td>
<td>864</td>
</tr>
<tr>
<td>Fast Q2</td>
<td>1000</td>
<td>666</td>
<td>5000</td>
</tr>
</tbody>
</table>

## 3” evoQ4 (Standard, RB, FSM) Accuracy Test

<table>
<thead>
<tr>
<th>Flow Rate (gpm)</th>
<th>Volume CF</th>
<th>Volume Gallons</th>
<th>Test Time (min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Med Q1</td>
<td>2</td>
<td>29</td>
<td>216</td>
</tr>
<tr>
<td>Slow Q0</td>
<td>0.6</td>
<td>9</td>
<td>65</td>
</tr>
<tr>
<td>Fast Q2</td>
<td>440</td>
<td>294</td>
<td>2200</td>
</tr>
</tbody>
</table>

## 10” evoQ4 (Standard, RB) Accuracy Test

<table>
<thead>
<tr>
<th>Flow Rate (gpm)</th>
<th>Volume CF</th>
<th>Volume Gallons</th>
<th>Test Time (min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Med Q1</td>
<td>30</td>
<td>722</td>
<td>5400</td>
</tr>
<tr>
<td>Slow Q0</td>
<td>32</td>
<td>462</td>
<td>3450</td>
</tr>
<tr>
<td>Fast Q2</td>
<td>1000</td>
<td>666</td>
<td>5000</td>
</tr>
</tbody>
</table>

## 4” evoQ4 (Standard, RB, FSM) Accuracy Test

<table>
<thead>
<tr>
<th>Flow Rate (gpm)</th>
<th>Volume CF</th>
<th>Volume Gallons</th>
<th>Test Time (min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Med Q1</td>
<td>4</td>
<td>56</td>
<td>432</td>
</tr>
<tr>
<td>Slow Q0</td>
<td>1.7</td>
<td>25</td>
<td>184</td>
</tr>
<tr>
<td>Fast Q2</td>
<td>500</td>
<td>334</td>
<td>2500</td>
</tr>
</tbody>
</table>

## 12” evoQ4 (Standard, RB) Accuracy Test

<table>
<thead>
<tr>
<th>Flow Rate (gpm)</th>
<th>Volume CF</th>
<th>Volume Gallons</th>
<th>Test Time (min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Med Q1</td>
<td>65</td>
<td>936</td>
<td>7020</td>
</tr>
<tr>
<td>Slow Q0</td>
<td>32</td>
<td>462</td>
<td>3450</td>
</tr>
<tr>
<td>Fast Q2</td>
<td>1000</td>
<td>666</td>
<td>5000</td>
</tr>
</tbody>
</table>

Test volumes represent ideal conditions. For typical test bench and tank limitations for slow and medium tests, divide test volume and time and perform several iterations of the test averaging the results.

Refer to appropriate product specification sheet (Standard, Low Flow, Alternate Length, Fire Service Meter, Replaceable Battery) version for accuracy performance data. (Slow: +/- 5%, Med & Fast: +/- 1.5%) Reclaimed Water versions may also be tested against the receiving inspection parameters for the underlying meter size and type. Honeywell does not operate separate testing equipment for reclaimed water products, and will not test returned, previously installed RW products in house.
## 2 Test Parameters – Inservice Testing

### 1.5 – 2” evoQ4 (Std, LF, FSM, AL, RB) Accuracy Test

<table>
<thead>
<tr>
<th>Flow Rate (gpm)</th>
<th>Volume CF</th>
<th>Volume Gallons</th>
<th>Test Time (min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Med C1</td>
<td>26</td>
<td>375</td>
<td>2808</td>
</tr>
<tr>
<td>Slow C0</td>
<td>4</td>
<td>58</td>
<td>432</td>
</tr>
<tr>
<td>Fast C2</td>
<td>130</td>
<td>87</td>
<td>650</td>
</tr>
</tbody>
</table>

### 8” evoQ4 (Std, RB, FSM) Accuracy Test

<table>
<thead>
<tr>
<th>Flow Rate (gpm)</th>
<th>Volume CF</th>
<th>Volume Gallons</th>
<th>Test Time (min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Med C1</td>
<td>180</td>
<td>2599</td>
<td>19440</td>
</tr>
<tr>
<td>Slow C0</td>
<td>30</td>
<td>433</td>
<td>3240</td>
</tr>
<tr>
<td>Fast C2</td>
<td>1000</td>
<td>668</td>
<td>5000</td>
</tr>
</tbody>
</table>

### 3” evoQ4 (Std, RB, FSM) Accuracy Test

<table>
<thead>
<tr>
<th>Flow Rate (gpm)</th>
<th>Volume CF</th>
<th>Volume Gallons</th>
<th>Test Time (min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Med C1</td>
<td>40</td>
<td>577</td>
<td>4320</td>
</tr>
<tr>
<td>Slow C0</td>
<td>6</td>
<td>87</td>
<td>648</td>
</tr>
<tr>
<td>Fast C2</td>
<td>400</td>
<td>267</td>
<td>2000</td>
</tr>
</tbody>
</table>

### 10” evoQ4 (Std, RB) Accuracy Test

<table>
<thead>
<tr>
<th>Flow Rate (gpm)</th>
<th>Volume CF</th>
<th>Volume Gallons</th>
<th>Test Time (min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Med C1</td>
<td>355</td>
<td>5125</td>
<td>38340</td>
</tr>
<tr>
<td>Slow C0</td>
<td>55</td>
<td>794</td>
<td>5940</td>
</tr>
<tr>
<td>Fast C2</td>
<td>1000</td>
<td>668</td>
<td>5000</td>
</tr>
</tbody>
</table>

### 4” evoQ4 (Std, RB, FSM) Accuracy Test

<table>
<thead>
<tr>
<th>Flow Rate (gpm)</th>
<th>Volume CF</th>
<th>Volume Gallons</th>
<th>Test Time (min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Med C1</td>
<td>55</td>
<td>794</td>
<td>5940</td>
</tr>
<tr>
<td>Slow C0</td>
<td>8</td>
<td>115</td>
<td>864</td>
</tr>
<tr>
<td>Fast C2</td>
<td>500</td>
<td>334</td>
<td>2500</td>
</tr>
</tbody>
</table>

### 12” evoQ4 (Std, RB) Accuracy Test

<table>
<thead>
<tr>
<th>Flow Rate (gpm)</th>
<th>Volume CF</th>
<th>Volume Gallons</th>
<th>Test Time (min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Med C1</td>
<td>440</td>
<td>6352</td>
<td>47520</td>
</tr>
<tr>
<td>Slow C0</td>
<td>66</td>
<td>953</td>
<td>7128</td>
</tr>
<tr>
<td>Fast C2</td>
<td>1000</td>
<td>668</td>
<td>5000</td>
</tr>
</tbody>
</table>

### 6” evoQ4 (Std, RB, FSM) Accuracy Test

<table>
<thead>
<tr>
<th>Flow Rate (gpm)</th>
<th>Volume CF</th>
<th>Volume Gallons</th>
<th>Test Time (min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Med C1</td>
<td>105</td>
<td>1516</td>
<td>11340</td>
</tr>
<tr>
<td>Slow C0</td>
<td>16</td>
<td>231</td>
<td>1728</td>
</tr>
<tr>
<td>Fast C2</td>
<td>1000</td>
<td>668</td>
<td>5000</td>
</tr>
</tbody>
</table>

Test volumes represent ideal conditions. For typical test bench and tank limitations for slow and medium tests, divide test volume and time and perform several iterations of the test averaging the results.

Test values are in accordance with ISO 4064-1 (5.2.3 and 5.2.4) / OIML R49-1 (3.2.2) and those inservice accuracy limits apply (Slow: +/- 10%; Med & Fast +/- 4%).
3 Test Procedures

1. Place up to 3 meters on C&I test bench with 36" spool piece the same nominal diameter as the meter in between each. If bench line size does not match meter size, use concentric reducers at each end of the group to fit meters into the line. Ensure spool same size as meter 5 diameters upstream of the first meter.

2. Seat each meter level, with the register face parallel to the floor (i.e. the meter not tilted or canted to either side).

3. Ground the meters and test bench – ensure electrical ground to prevent stray voltage spikes affecting test results. Many benches are not electrically grounded creating conditions unlike typical utility installations.


5. Condition meter to specific local water physical properties by allowing meter to stand filled for 30 minutes (this can also be accomplished in a tub of water from the same source prior to test). Refer to installation and handling instructions for water quality limits.

6. Wait for 2 minutes after discharge valve closes for meter reading to stabilize. Record initial reads.

7. Run Medium test.

8. Wait for 2 minutes after discharge valve closes for meter reading to stabilize. Record final reads for Med test.

9. Calculate Medium flow accuracies.

10. Run Slow test.

11. Wait for 2 minutes after discharge valve closes for meter reading to stabilize. Record final reads for Slow test.

12. Calculate Slow flow accuracies.

13. Run Fast test. Test volumes and flow rate for large meter fast flow tests may need to be altered to accommodate local test bench capabilities. Ensure at least 3 minute test duration, though 5 minutes is optimal. Shorter test durations may compound irregularities in test process, invalidating the test results.

14. Wait for 2 minutes after discharge valve closes for meter reading to stabilize. Record final reads for Fast test.

15. Calculate Fast flow accuracies.
evoQ Pro Electromagnetic Meter
Size 2" to 12"

Operation
The evoQ Pro is a battery powered electromagnetic water meter that is suitable for a wide range of metering applications. Using Faraday’s law of electromagnetic induction, two magnets provide a magnetic field within the pipe; two electrodes measure the induced voltage that is proportional to the flow of conductive water through the field in the pipe. Every 0.5 seconds the measurement is taken and the totalized volume is calculated and updated on the LCD display.

The meter is designed for 10 years of continuous operation with no battery changes necessary.

Application
The meter is for general use with potable cold water up to 120°F. The meter will typically register at ±0.75% accuracy at normal and high flows and better than 1.5% accuracy at extended low flows. The evoQ Pro product line is suited for metering utility customer services for potable water. With the addition of outputs described below, the meter can fulfill a number of distribution management roles as well.

Pulse or encoder output
The meter can be fitted with a pulse output device that can be attached to a radio transceiver module or a data logger. The pulse output can be programmed in the factory to meet the needs of the utility. For utilities preferring encoded output technologies, an encoder module is available for interface with AMR or AMI systems.

Remote display
The meter can be fitted with a remote display. A two channel readout can provide both forward and reverse pulses.

Connections
The evoQ Pro comes in AWWA C701 Class II Turbine meter lay lengths. The flanges are epoxy coated cast iron to reduce weight and prevent corrosion. The 2" comes with an oval flange and the 3"–12" come with a round flange. All flanges conform to ANSI B16.1 Class 125 standards. Allow for 5 pipe diameters of straight pipe upstream and 3 pipe diameters of straight pipe downstream for optimum performance.

FEATURES AND BENEFITS

- 10 year continuous life: No need for costly and time-consuming replacement.
- No moving parts: Maintenance free.
- 0.5 second sampling rate: Highest accuracy.
- Wide measuring range: Suitable for all commercial applications.
- Simple installation: No additional training required.
- Pulse or encoder connectivity: Pre-equipped or retrofitted for your AMR and telemetry needs.
- AWWA lay lengths: Simple changeout.
- IP68 sealed: Provides long, trouble-free life.
LCD
Bright, large and easy-to-read LCD incorporating totalized volume and a reference flow-rate indicator. Alarm functions provide in-situ status ensuring no loss in measuring continuity. An IP68 seal ensures the meter electronics are safely protected providing long term reliability.

Materials
Body: Stainless steel grade 304
Flow tube: Stainless steel grade 316
Liner: Polyethylene epoxy
Electrodes: Stainless steel grade 316
Flanges: Epoxy coated cast iron
Register: Stainless steel with glass lens
Register housing/id: UV-resistant plastic
Environmental class: IP68 hermetically sealed unit, waterproof to 30 ft depth

Dimensions and net weight

<table>
<thead>
<tr>
<th>Diameter</th>
<th>A (in)</th>
<th>B (in)</th>
<th>C (in)</th>
<th>Weight (oz)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2&quot;</td>
<td>10</td>
<td>25.40</td>
<td>11.26</td>
<td>28.45</td>
</tr>
<tr>
<td>3&quot;</td>
<td>12</td>
<td>30.48</td>
<td>12.27</td>
<td>33.71</td>
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<tr>
<td>4&quot;</td>
<td>15</td>
<td>38.10</td>
<td>13.22</td>
<td>43.06</td>
</tr>
<tr>
<td>6&quot;</td>
<td>20</td>
<td>50.80</td>
<td>15.71</td>
<td>93.70</td>
</tr>
<tr>
<td>8&quot;</td>
<td>25</td>
<td>63.50</td>
<td>17.78</td>
<td>138.43</td>
</tr>
<tr>
<td>10&quot;</td>
<td>30</td>
<td>76.20</td>
<td>19.05</td>
<td>182.88</td>
</tr>
</tbody>
</table>

Low-Battery
The indicator blinks when the meter has approximately 3 months working life remaining.

End of Life Battery
Measurement stopped. The indicator appears permanently when the meter life expires. Data is displayed for up to 9 months.

No-Water
The indicator blinks when there is an empty pipe condition.

Flow Rate
If water is flowing in the reverse direction a minus sign is displayed to the left of the value.

Net Volume
Any reverse flow is subtracted from the volume display. The top line displays billable units with the multiplier shown in upper right corner. Measurement resolution is provided in the lower right for testing.

Find Out More
WaterMeters@honeywell.com
www.water.mcs.honeywell.com

Honeywell Smart Energy
10 SW 48th Avenue, Suite 100
Ocala, FL 34474
T: 1-800-874-0890
F: 1-352-368-1950
1100 Walker’s Line, Suite 302
Burlington, Ontario, L7N 2G3
T: 800-703-7502
F: 905-634-6705
www.HoneywellSmartEnergy.com

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SUN J5 NAL VVQG T 08/2017
Supercedes revC0705111
5. **Excessive Failure Warranty.**

"Excessive Failure Threshold" means that during any rolling twelve (12) month consecutive period, three percent (3%) or more of the same model of installed Endpoints have failed to conform, during the Endpoint’s applicable Endpoint Warranty Period (as that term is defined in Section 2 (Endpoint Warranties) of this Attachment 4 (Equipment Addendum)), in all material respects to the Endpoint Specifications and Section 10.1(D) of SOW#1 with the same root cause, as verified by Itron. Customer must return failed installed Endpoints to Itron within 3 months of their failure provided that if the number of failed Endpoints exceeds 2,500 in any given month, Customer will use commercially reasonable efforts to return failed installed Endpoints to Itron within 3 months of their failure, but Customer’s inability to meet the 3-month deadline will not result in exclusion of those Endpoints from the calculation of the Excessive Failure Threshold in those months. Once these Endpoints are received by Itron and the root cause of failure is determined, Itron will update the Excessive Failure Threshold calculations as appropriate based on the date the meter was removed from service.

If, during the Endpoint Warranty Period, the number of deployed Endpoints that have failed to operate in accordance with the applicable specifications meets the Excessive Failure Threshold, and Itron has been unable to repair such Endpoints remotely, then for all defective installed Endpoints beyond the 3% threshold, Itron will either (i) remove the defective Endpoints and re-install replacement Endpoints at its own expense and no additional cost or expense to Customer, or (ii) reimburse Customer for its actual and reasonable removal and re-installation costs of replacement Endpoints supplied by Itron (provided that such removal and re-installation is done at the same time), up to $20 per defective Endpoint.
EXHIBIT 3 TO ATTACHMENT 4 (EQUIPMENT ADDENDUM) – THIRD-PARTY EQUIPMENT Firmware Licenses

Honeywell

ELSTER AMCO WATER LLC,
10 SW 4th Avenue, Building 100,
Oklahoma
Florida 34474
T: 1-952-369-6500
F: 1-619-823-3689
www.elsteramcowater.com

August 18, 2020

To Whom It May Concern,

Reference: evoQ4 water meter firmware license

In regards to the pricing proposal submitted to Itron on January 13, 2020, Elster AMCO Water LLC (“Honeywell”), has set forth the below statement contingent upon the acceptance of Honeywell’s terms and conditions in the Elster AMCO Water LLC Terms and Conditions attached, or as may otherwise be mutually agreed upon by the parties.

All information herein is considered Honeywell confidential information and is provided under the express condition that such information remain confidential, to the extent legally permissible. You may only share this information with those who have a need to know and who are under a similar duty to keep such information confidential.

The evoQ4 water meter contains firmware that is provided as part of the meter. In accordance with Sections 1.5 and 1.10 of the Elster AMCO Water LLC Terms and Conditions, this firmware is provided with perpetual license for use by the end purchaser San Antonio Water System.

Sincerely,

Alex Watson
Senior Offering Manager - Water

Elster Water Metering Limited  Registered in England and Wales  Registration number: 08624958
Registered office: Honeywell House, Skimped Hill Lane, Bracknell, Berks, RG12 1EB, United Kingdom
The Diehl HYDRUS Ultrasonic version 1.3 water meter currently uses Firmware version F06-06. The Firmware controls the Ultrasonic measurement and function for the HYDRUS 1.3 meter. The Diehl HYDRUS 1.3 Meter has a daughter board (Hardware rev layout 10220) used to run the encoder with Firmware version 2.2.6.

Diehl Metering does not require a license to utilize the firmware in the HYDRUS Ultrasonic Water meter. Diehl Metering, LLC grants San Antonio Water System (SAWS) permission to utilize the HYDRUS Ultrasonic Water meter's current firmware version, and future firmware versions, for purchased HYDRUS meters, in perpetuity.

Sincerely,

Danny Padron
Head of Customer Solutions Center
1813 N. Mill Street, Suite C | Naperville, IL 60563
Cell: +1 469 971 9211
August 18, 2020

To Whom It May Concern,

Reference: evoQ4 water meter firmware license

In regards to the pricing proposal submitted to Itron on January 13, 2020, Elster AMCO Water LLC ("Honeywell"), has set forth the below statement contingent upon the acceptance of Honeywell’s terms and conditions in the Elster AMCO Water LLC Terms and Conditions attached, or as may otherwise be mutually agreed upon by the parties.

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Sincerely,

[Signature]

Alex Watson
Senior Offering Manager - Water
Diehl Metering LLC
1813 N. Mill Street, Suite C
Naperville, IL 60563

July 21, 2020

The Diehl HYDRUS Ultrasonic version 1.3 water meter currently uses Firmware version F08-06. The Firmware controls the Ultrasonic measurement and function for the HYDRUS 1.3 meter. The Diehl HYDRUS 1.3 Meter has a daughter board (Hardware rev layout 10220) used to run the encoder with Firmware version 2.2.6.

Diehl Metering does not require a license to utilize the firmware in the HYDRUS Ultrasonic Water meter. Diehl Metering, LLC grants San Antonio Water System (SAWS) permission to utilize the HYDRUS Ultrasonic Water meter’s current firmware version, and future firmware versions, for purchased HYDRUS meters, in perpetuity.

Sincerely,

[Signature]

Danny Padron
Head of Customer Solutions Center
1813 N. Mill Street, Suite C | Naperville, IL 60563
Cell: +1 630 971 9211
1. HONEYWELL RMA PROCESS

RMA Process

As stated in the price list, Honeywell Products can be returned during the first 12 months after date of delivery, or as may otherwise have been agreed upon in the Agreement. In the event Products need to be returned, please contact Libby Morgan with the required information by email at: Elizabeth.morgan@honeywell.com

The data required when requesting an RMA is:

- Serial number(s) of each device
- Reason for the return of each device
- Length of time each device has been in service
- Reported failure symptoms per device
- All additional data points from the customer or end user on what is being experienced

The two main types of returns are:

1. Return of Product due to wrong Product being ordered.
   - In the event that the requested return was as a result of incorrect information provided by the customer, all Products must be returned in new and re-saleable condition (no missing parts or damage). All devices will be inspected upon return to the Honeywell facility. If accepted after inspection, a 30% restocking could apply.

2. Return of Product due to a reported product warranty claim.

If the device being returned is an evoQ4 meter, there is an additional form that will be sent to the customer that must be filled out in addition to the RMA information already required by Honeywell.

Information submitted will be reviewed and Product warranty verified prior to issuing any RMA numbers. Only those devices approved on the RMA can be returned to Honeywell. Any Product sent to Honeywell that has not been approved could result in additional fees and the Product being returned in an as-is condition.

The customer is responsible for shipping charges into the identified Honeywell facility for all approved RMA material and Honeywell is responsible for shipping charges back to the customer for all returned RMA material, unless otherwise agreed upon in the Agreement.

All approved Product being returned must be packed carefully to avoid the potential for any damage during the return. Failure to properly packaged the returned Product could result in the warranty becoming null and void.

All returned Product will be inspected and evaluated. For any Products returned to Honeywell where the reported failure cannot be identified or replicated, the Product will be returned to the customer. For any Products where a failure has been confirmed and identified, Honeywell will move forward with the appropriate resolution.
2. DIEHL RMA PROCESS

Diehl Metering
RMA Process

Objective
To provide a clear and simple method for customers to facilitate a warranty replacement. This process will be supported by the Customer Solutions Center (CSC) under a quality Return Materials Authorization (RMA) process for the United States (US) market.

What is an RMA?
Return Material Authorization (RMA) is the process in which customers return product back into the Diehl Metering supply chain. The process must outline all the information regarding the order, the product, and any issues or defects. A solid RMA program will reduce the impact of order discrepancies, product issues and waste. At the same time increasing customer service/support and the speed in which product issues can be resolved.

Standards
RMA process will follow specifications outlined within the applicable warranty of the product sold.

Expected Reasons for RMA’s
The RMA process must account for any issues/defects with the product that would eliminate the product from being shipped back out as good/new product. Within each shipment, customers are provided a user’s manual that explains the features and functions of the product, the HYDRUS ultrasonic water meter, and the proper installation and operation of the HYDRUS. Issues that could trigger possible RMS action are, as follows:

1. Error code from the HYDRUS
2. Damaged from shipping
3. Failed customer bench testing
4. No communication from encoder cable
5. Battery fail within warranty period
6. Optical interface inoperative
7. Complete meter fail – no display
8. Incorrect order
9. Customer requested replacement

Examples of Issues that may **not** qualify for a warranty replacement under the RMA process:

1. Meter had damage from installation (broken glass, broken body, brass damaged)
2. Meter was used improperly which caused a failure
3. Water temperature was out of specifications causing damage
ATTACHMENT 5 - INSURANCE & CERTIFICATE OF LIABILITY INSURANCE REQUIREMENTS ADDENDUM

1. **Commercial Insurance Specifications (“Specifications”):**

   a. Commencing on the date of this Agreement, Itron shall, at his own expense, purchase, maintain and keep in force such lines of insurance coverage as will protect him and Customer and the City of San Antonio (“the City”) and their employees and agents from claims, which may arise out of or result from Itron’s operations under this Agreement, whether such operations are by himself, or by anyone for whose acts any of them may be liable, including, without limitation, the following lines of insurance coverage:

1) **Workers’ Compensation (WC)** insurance that will protect Itron from claims under statutory Workers’ Compensation laws, disability laws or such other employee benefit laws and that will fulfill the requirements of the jurisdiction in which the work is to be performed.

   The minimum policy limits of liability for this line of insurance coverage shall be statutory limits.

   This line of insurance coverage shall be endorsed to provide a **Waiver of Subrogation** in favor of SAWS and the City with respect to both this insurance coverage and the Employers’ Liability (EL) insurance (as specified immediately below in section 1.a.2)).

2) **Employers’ Liability (EL)** insurance (Part 2 under the standard Workers’ Compensation insurance policy) that will protect Itron, for damages because of bodily injury, sickness, disease of vendor’s employees apart from that imposed by Workers’ Compensation laws.

   The EL line of insurance coverage shall have minimum policy limits of liability of not less than:

   - $1,000,000.00 Bodily Injury by Accident
   - 1,000,000.00 Bodily Injury by Disease - Each Employee
   - 1,000,000.00 Bodily Injury by Disease - Policy Limit

3) **Commercial General Liability (CGL)** insurance that will protect Itron, SAWS and the City from claims for damages because of bodily injury, personal and advertising injury or death and insurance that will protect Itron, SAWS and the City from claims for damages to or destruction of tangible property of others, including loss of use thereof.

   This line of insurance coverage shall:

   - Cover independent contractors;
   - Not include any exclusions relating to blasting, explosion, collapse of buildings or damage to underground property;
   - Afford coverage for Products Liability and/or Completed Operations and, Contractual Liability.

   The minimum policy limits of liability for this line of insurance coverage shall be:

   - $5,000,000.00 Occurrence Limit
   - 5,000,000.00 Products/Completed Operations Aggregate
   - 5,000,000.00 Personal and Advertising Injury
This line of insurance coverage shall be endorsed:

- Naming SAWS, and the City as an **Additional Insured** for both ongoing and completed operations; and
- To provide a **Waiver of Subrogation** in favor of SAWS and the City.

4) **Commercial/Business Automobile Liability (AL)** insurance that will protect Itron, SAWS and the City from claims for damages arising out of the maintenance, operation, or use of Itron owned, non-owned or hired vehicles.

Minimum policy limits of liability for this line of insurance coverage for bodily injury and property damage **combined** shall be not less than $1,000,000.00 per each occurrence.

This line of insurance coverage shall be endorsed:

- Naming SAWS, and the City as an **Additional Insured**; and
- To provide a **Waiver of Subrogation** in favor of SAWS and the City.

5) **Professional Liability (PL)** (Technology errors and omissions) insurance with minimum coverage limits of $5,000,000 per claim, and if this line of coverage is written on a “Claims Made” form, Itron must maintain this line of insurance coverage for a period of at least twenty-four (24) months after the date of Agreement termination or shall purchase an extended reporting period, or “tail coverage”, or purchase a new policy with a retroactive date prior to the start of this agreement, if necessary to comply with this requirement.

**NOTE** - For Professional Liability, include in writing on the **Certificate of Liability Insurance** (“Certificate”) the coverage form under which the respective line of coverage is written – either:

- **Claims-made form;** if the coverage form declared on the Certificate is the Claims-made form, the “**Retroactive-date**” for this line of coverage must also be included on the Certificate as well; or
- **Occurrence basis – no additional wording required.**

6) **Security and Privacy Liability** (Cyber Risk) insurance to defend and cover the information security and privacy liability exposures (financial loss, penalties, and defense costs) covering the Itron work under this Agreement with minimum coverage limits of $5,000,000 per claim, $5,000,000 in the aggregate.

The Security and Privacy Liability insurance shall provide the following coverage:

- Broad coverage for the expenses associated with an incident, including:
  - Compliance with data breach notification laws;
  - Securing legal counsel to advise on incident response;
  - Providing credit file monitoring to victims;
  - Hiring forensic experts to investigate the breach; Paying regulatory defense and penalties from privacy law violations; and
  - Coverage for HIPAA related claims.
  - Coverage for legal liabilities including those arising from failure to comply with state or federal breach notification laws or privacy policies and/or to administer a government-mandated identity theft prevention program.
If Security and Privacy Liability line of coverage is written on a “Claims Made” form, Itron must maintain this line of insurance coverage for a period of at least twenty-four (24) months after the date of Agreement termination or shall purchase an extended reporting period, or “tail coverage”, or purchase a new policy with a retroactive date prior to the start of this agreement, if necessary to comply with this requirement.

NOTE - For Security and Privacy Liability, include in writing on the Certificate of Liability Insurance (“Certificate”) the coverage form under which the respective line of coverage is written – either:

- Claims-made form; if the coverage form declared on the Certificate is the Claims-made form, the “Retro-date” for this line of coverage must also be included on the Certificate as well; or
- Occurrence basis- no additional wording required

b. Itron shall require all Subcontractors to carry lines of insurance coverage appropriate to their scope of Work and submit copies of Subcontractors’ Certificates of Liability Insurance upon request by SAWS.

c. Itron agrees that with respect to the above required lines of insurance, all insurance policies are to contain or be endorsed to the extent, not inconsistent with the requirements of the issuing insurance carrier, to provide for an endorsement that the "other insurance" clause shall not apply where SAWS and the CITY are an Additional Insured shown on the policy if such endorsement is permitted by law and regulations.

d. Itron shall, upon request of SAWS, provide copies of relevant insurance endorsements required under the Agreement at a mutually agreed upon time and place.

e. Itron is responsible for the deductibles under all lines of insurance coverage required by these Specifications.

f. The stated policy limits of each line of insurance coverage required by these Specifications are MINIMUM ONLY and it shall be Itron’s responsibility to determine what policy limits are adequate and the length of time each line of insurance coverage shall be maintained; insurance policy limits are not a limit of Itron’s liability.

g. These minimum limits required of each line of insurance coverage may be either basic policy limits of the WC, EL, CGL and AL or any combination of basic limits or umbrella (Umbrella form) or excess (Other Than Umbrella form) limits.

h. SAWS acceptance of Certificate(s) that in any respect, do not comply with these Specifications, does not release Itron from compliance herewith.

i. Each line of insurance coverage that is specified under these Requirements with the exception of Professional Liability and Security and Privacy Liability, shall be so written so as to provide SAWS and the City thirty (30) calendar days advance written notice directly of cancellation or non-renewal of coverage, and not less than ten (10) calendar days advance written notice for nonpayment of premium. Itron will provide thirty (30) calendar days advance written notice of cancellation or non-renewal of coverage of Professional Liability and Security and Privacy Liability.

j. Within five (5) calendar days of cancellation or non-renewal of any required line of insurance coverage, Itron shall provide SAWS a replacement Certificate with all applicable endorsements included. SAWS shall have the option to suspend Itron’s performance should there be a lapse in
coverage at any time during this Agreement.

k. Failure to provide and to maintain the required lines of insurance coverage shall constitute a material breach of this contract.

l. In addition to any other remedies, SAWS may have, upon Itron’s failure to provide and maintain any insurance or policy endorsements to the extent and within the time herein required, SAWS shall have the right to order Itron to stop performing services hereunder and/or withhold any payment(s) which become due to Itron hereunder until Itron demonstrates compliance with the Specifications hereof.

m. Nothing herein contained shall be construed as limiting, in any way, the extent to which Itron may be held responsible for payments for damages to persons or property resulting from Itron’s or its sub-CONTRACTOR’s performance of the services covered under this Agreement.

n. It is agreed that Itron’s Commercial General Liability and Automobile Liability insurance shall be deemed primary and non-contributory with respect to any insurance or self-insurance carried by SAWS, the City and their employees and agents for liability arising out of operations under this Agreement.

o. Itron agrees that all lines of insurance coverage required by these Specifications shall be with insurance companies, firms or entities that have an A.M. Best rating of "A- ("A"- minus)" and a Financial Size Category of a "VII" or better. All lines of insurance coverage shall be of an "Occurrence" type except for the Professional Liability and Security and Privacy Liability line of insurance coverage.

SAWS will accept worker’s compensation insurance coverage written by the Texas Mutual Insurance Company.

p. Customer reserves the right to review the above stated insurance specifications during the effective period of this Agreement and any extension or renewal hereof and to request modification of lines of insurance coverage and their respective liability limits when deemed necessary and prudent by SAWS’s Risk Manager and Legal Department based upon changes in statutory law, court decisions, or circumstances surrounding this Agreement. Upon such request, Itron will use commercially reasonable efforts to secure such modification to lines of insurance subject to an amendment of this Agreement.

In no instance will SAWS and the City allow modification whereupon SAWS and the City may incur increased risk exposure.

2. **Certificate(s) of Liability Insurance (“Certificate”) Requirements**

Prior to the commencement of any Services under this Agreement and once notified by SAWS Contracting Official that your Company has been selected as the apparent successful Itron pursuant to a Request for Proposal selection process, pending Board final approval, and, a request is made for you to submit your Company’s Certificate of Liability Insurance, that Certificate must meet all of the following requirements:

a) The Itron shall have completed by its insurance agent(s), and submitted to SAWS Contracting Department within 10 business days, a **Certificate(s) of Liability Insurance** (“Certificate(s)”) providing evidence of the lines of insurance coverage pursuant to Section 1.a.1) through 1.a.5) above.

b) The original Certificate(s) or form must include the agent’s original signature, including the signer’s company affiliation, mailing address, Office and FAX phone numbers, email address,
and contact person’s name; and, be e-mailed, with copies of all applicable endorsements, directly from the insurer’s authorized representative in strictly compliance with sections 2i. (Certificate Holder) and 2.j. (Distribution of Completed Certificates) below.

c) Texas Insurance Code, Title 10, Subtitle A, Chapter 1811 requires all certificates of insurance forms to be filed with and approved by the Texas Department of Insurance before they can be used and prohibits the issuance of false or misleading certificates of insurance.

d) SAWS will not accept Memorandum of Insurance or Binders as proof of insurance.

e) SAWS shall have no duty to pay or perform under Consulting Services Agreement until such certificate(s) and applicable endorsements have been received, reviewed and deemed 100% compliant with the Insurance Specifications contained herein by SAWS’ Risk Management/Contract Services Department. No one other than SAWS Risk Manager shall have authority to waive any part of these requirements.

f) Additional Insured:

SAWS requires that the Automobile Liability ("AL") and the Commercial General Liability ("CGL") policies must be endorsed naming Certificate Holder (as per item 2. i. below) as an Additional Insured and, so noted in the DESCRIPTION OF OPERATIONS section of the Certificate;

Suggested wording to be placed on the Certificate is as follows:

EITHER use,

The AL and CGL policies include a blanket automatic Additional Insured endorsement that provides additional insured status to the Certificate Holder only when there is a written contract between the named Insured and the Certificate Holder that requires such status.

OR use,

The AL and CGL policies are endorsed naming the Certificate Holder as an Additional Insured.

NOTE: If the above wording cannot be placed in the DESCRIPTION OF OPERATIONS section of the Certificate, please provide SAWS with the completed Certificate, a copy of the specific AL and CGL Additional Insured endorsement documents or the policy wording from both the AL and CGL policies.

g) Waiver of Subrogation:

SAWS requires that the AL, CGL and Workers’ Compensation/Employer’s Liability ("WC/EL") policies must be endorsed with the Waiver of Subrogation in favor of Certificate Holder (as per item 2. i. below) and, so noted in the DESCRIPTION OF OPERATIONS section of the Certificate;

Suggested wording to be placed on the Certificate is as follows:

EITHER use,

The AL, CGL and WC/EL policies include a blanket, automatic Waiver of Subrogation endorsement that provides this feature only when there is a written contract between the named Insured, the Certificate Holder that requires such status.
OR use,

The AL, CGL and WC/EL policies are endorsed with the **Waiver of Subrogation** in favor of the Certificate Holder.

NOTE: If the above wording cannot be placed in the **DESCRIPTION OF OPERATIONS** section of the Certificate, please provide SAWS with the completed Certificate, a copy of the specific AL, CGL and WC/EL Waiver of Subrogation endorsements documents or the policy wording from each of the AL, CGL and WC/EL policies.

h) The SAWS Project/Contract number(s) along with its Descriptor Caption **must be included** in the Description of Operations section located in the bottom half of the standard ACORD Certificate forms.

i) **Certificate Holder** - SAWS shall be shown as the Certificate Holder in the Certificate Holder section located in the bottom half of the standard ACORD Certificate forms and formatted as follows:

San Antonio Water System  
c/o Ebix BPO  
PO Box 100085-ZD  
Ref. # 107-(Lawson Acct’s Payable Vendor #)-(SAWS Contract/Project #)*  
Duluth, GA 30096

*SAWS Contracting Official will include in the above address, the correct, complete Ref# in the written confirmation of your selection as a CONTRACTOR pending final Board approval.

**DO NOT BEGIN THE DISTRIBUTION OF ANY CERTIFICATE(S) BEFORE RECEIVING AND INSERTING THE COMPLETE REFERENCE NUMBER INTO THE CERTIFICATE HOLDER ADDRESS SHOWN ABOVE.**

j) **Distribution of Completed Certificates** - Completed **Certificates** shall be distributed by Itron as follows:

1) Send Original:
   a) By E-Mail: saws@ebix.com  
   b) By Fax: 1-770-325-6502

2) Send Copy to the following:

San Antonio Water System  
Attention: Contract Administration  
P.O. Box 2449  
San Antonio, TX 78298-2449

k) Itron shall be responsible for obtaining Certificates of Insurance from the first tier Subcontractor, and upon request furnish copies to SAWS.

3. **SURVIVAL**

Any and all representations, conditions and warranties made by Itron under this including, without limitation, the provisions of Section 1.a.2), 1.a.3) and 1.a.4) of these **Commercial Insurance Specifications and Certificates of Liability Insurance Requirements** are of the essence of this
Agreement and shall survive the execution and delivery of it, and all statements contained in any document required by SAWS whether delivered at the time of the execution, or at a later date, shall constitute representations and warranties hereunder.
ATTACHMENT 7 – SECURITY PROCEDURES ADDENDUM

If Services will be conducted on SAWS property, on a SAWS customer’s property, involve any SAWS networks or any SAWS facility, Itron shall ensure a Prime Contractor Data Form (PCDF) and a Background Screening Letter (provided by SAWS Security) is properly completed for all employees of SAWS or a Subcontractor (“Employees”) performing work under this Agreement and is on file with SAWS Security prior to Services commencement. Any Employee found to have an unacceptable background check will not be allowed to perform Services under this Agreement (A waiver may be given by SAWS Security for an unacceptable finding but must be signed off by the Director of SAWS Security). Subcontractors performing work must be listed on the PCDF and the Background Screening Letter. Itron shall be responsible for the accuracy of information on the PCDF and the Background Screening Letter, and for obtaining any and all required items (badges and parking tags) necessary to fulfilling the Services under this Agreement. The PCDF and Background Screening Letter must be sent electronically to securitygroup@saws.org. Itron shall advise the SAWS Project Manager/Inspector of any Employee terminations or changes to Employees performing Services under this Agreement, and Itron shall immediately turn in any and all badges and/or parking tags of Employees who are terminated or no longer performing Services under this Agreement. If there are any changes in the information contained in the PCDF or the Background Screening Letters, Itron shall immediately notify the SAWS Project Manager/Inspector and provide updated PCDF and Background Screening Letters, with copies to securitygroup@saws.org.

Employees shall obtain a SAWS photo identification badge (Contractor's Badge) and parking tag, prior to any work on SAWS property, which shall be used only for purposes necessary to perform the Services under this Agreement. SAWS Badge Office hours are Monday, Wednesday and Friday 8:00am to 12:00pm excluding SAWS holidays (hours are subject to change). Security staff can be contacted at (210) 233-3177 or (210) 233-3338. A replacement fee may be charged for lost or damaged badges or parking tags. Upon completion of the Services, Itron shall return all badges and parking tags to the Security Office.

SAWS facilities require a SAWS employee to physically escort Itron personnel at all times. SAWS may, in its sole discretion, waive the escort requirements if the PCDF and a “clean” Background Screening Letter, signed by an authorized representative of Itron are approved by SAWS Security.

Subcontractors must always be under escort of Itron while performing Services on any SAWS property. Subcontractors must display either a company photo badge, with name, or a valid driver’s license at all times while working on any SAWS property. Itron is solely responsible for the actions of its employees, agents, and Subcontractors.

Itron MUST be prepared for additional security requirements at Itron’s expense if violations of SAWS Security procedures are noted. Some examples of additional requirements include hiring of SAWS approved security guards, temporary fencing, mobile Closed Circuit Television Monitoring trailer(s), or extra lighting. Notwithstanding anything herein to the contrary, any provisions in these Security Procedures that may appear to give SAWS the right to direct Itron as to details of doing any Services under this Agreement or to exercise a measure of control over any security measures or such work shall be deemed to mean that Itron shall follow the desires of SAWS in the results of the Services or security measures only.

Advance coordination by Itron with SAWS Security for these security requirements is necessary to ensure no delays with timely performance of the Services. In the event Itron fails to comply with SAWS Security requirements, SAWS may, with no penalty or claim against SAWS:

- Issue a Work Stoppage Order until the security violation(s) are remedied
Ask any unidentified or improperly identified person or equipment to leave SAWS site immediately and not return until items are remedied.
ATTACHMENT 8 - ROLES AND RESPONSIBILITIES ADDENDUM

The table below lists the respective responsibilities of Customer and Itron as it relates to the AMI System and Services.

P=Primary responsibility
S=Support responsibility

<table>
<thead>
<tr>
<th>Description of Service or Deliverable</th>
<th>Itron</th>
<th>Customer</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Initial Deployment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project management – Itron-Customer activities</td>
<td>P</td>
<td>P</td>
</tr>
<tr>
<td>Project management – Itron activities</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>Endpoint procurement*</td>
<td>P</td>
<td>P</td>
</tr>
<tr>
<td>Business process updates, integration and testing</td>
<td>S</td>
<td>P</td>
</tr>
<tr>
<td>Customer training as described in SOW#1</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>Install incremental Network devices</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>Install Endpoints</td>
<td></td>
<td>P</td>
</tr>
<tr>
<td>Purchase and deploy network AP and Relay installations needed to fill out the NAN as required</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>Obtain mounting rights, concessions, approvals, or other rights necessary for the deployment of Network devices</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>Provide backhaul for any Network devices</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td><strong>Network Connectivity and Maintenance</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Design (update) and optimize the Network; including site surveys when required</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>Install, remove, move or replace the Network devices</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>Operate the AMI System, excluding Third-Party Equipment, in a manner that achieves the Service Level Requirements</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>Remotely monitor and troubleshoot Network device issues</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>Remotely execute Firmware upgrades</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>Conduct in field RF remediation of Network equipment</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>Task</td>
<td>Stage</td>
<td></td>
</tr>
<tr>
<td>------------------------------------------------------------------------------------------------</td>
<td>-------</td>
<td></td>
</tr>
<tr>
<td>Manage Network equipment procurement, inventory, warehousing and RMA</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>Backhaul management, including contracts with 3rd party cellular provider</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>Network Service Level Requirements reporting</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>Regression testing of SaaS software</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td><strong>SaaS Software</strong></td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>SaaS Software licensing and hosting</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>SaaS Software availability and monitoring</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>SaaS Software upgrades, monitoring and maintenance</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>Service Level Requirements Reporting</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>Submit user access requests for new Authorized Users and deletion notifications for users no longer involved with the SaaS.</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>Provide immediate notification in the event of an employee termination for those with access to the SaaS.</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>Monitor communications and support communications troubleshooting activities for the Software-as-a-Service.</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>Upgrade Software if and as required.</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>Manage SaaS interfaces</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td><strong>Endpoint Management</strong></td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>Add newly procured Endpoints in the SaaS Software</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>Remotely identify and triage, and report on, Endpoint issues-connectivity/communication, data integrity, endpoint malfunction, etc. - identified via flags, alarms, alerts, events, etc.</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>Remotely investigate issues</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>Conduct in-field investigations when required</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>Identify Endpoints that need to be replaced</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>Publish and review Endpoint management and SLR reports to identify trends or commonalities across global portfolio of deployments</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>Upgrade/update Endpoint Firmware to resolve Endpoint issue</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>Add, remove, replace or RMA Endpoints – meters or modules</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td><strong>Warehousing and inventory management of the Endpoints</strong></td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td><strong>Business Operations</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Create, test and maintain read schedules and billing calendars</td>
<td>P</td>
<td>S</td>
</tr>
<tr>
<td>Define and create Authorized User profiles; add/remove Authorized Users as needed</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>Setup SaaS Software reports and distribution lists to support business processes and decision making</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>Support internal budgeting, business planning, regulatory and reporting requirements and processes</td>
<td>P</td>
<td>P</td>
</tr>
<tr>
<td>Conduct user/analyst training</td>
<td>P</td>
<td>S</td>
</tr>
<tr>
<td>Support all internal and external enquiries related to billing, including Tier 1 consumer support / call center activities</td>
<td>S</td>
<td>P</td>
</tr>
<tr>
<td>Notify Customer of regression test and deployment schedule for Planned Maintenance</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>Notify Customer of major Outages that impact Endpoint communications</td>
<td>P</td>
<td></td>
</tr>
</tbody>
</table>

* Customer is responsible for initiating; all other aspects are responsibility of Itron
## ATTACHMENT 9 – SYSTEM REQUIREMENTS ADDENDUM

### 5.0 - Water Meter and Module Specifications

#### Positive Displacement Meters

<table>
<thead>
<tr>
<th>Model</th>
<th>Module Complete</th>
<th>AMI Head End System Complete</th>
<th>Other Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Badger Water - Recerty</td>
<td>Comp</td>
<td>Comp</td>
<td></td>
</tr>
<tr>
<td>Badger Water - LP/Profile</td>
<td>Comp</td>
<td>Comp</td>
<td></td>
</tr>
<tr>
<td>Elster AFRIO Water - New V4</td>
<td>Comp</td>
<td>Comp</td>
<td></td>
</tr>
<tr>
<td>Honeywell</td>
<td>Comp</td>
<td>Comp</td>
<td></td>
</tr>
<tr>
<td>Honeywell</td>
<td>Comp</td>
<td>Comp</td>
<td></td>
</tr>
<tr>
<td>Honeywell</td>
<td>Comp</td>
<td>Comp</td>
<td></td>
</tr>
</tbody>
</table>

#### Static Water Meters

<table>
<thead>
<tr>
<th>Model</th>
<th>Module Complete</th>
<th>AMI Head End System Complete</th>
<th>Other Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honeywell</td>
<td>Comp</td>
<td>Comp</td>
<td></td>
</tr>
</tbody>
</table>

---

### 3.1 Water Module Specifications - Overall

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Module Complete</th>
<th>AMI Head End System Complete</th>
<th>Other Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1.1 Water module shall comply with the codes and standards listed herein. All devices shall be 100% tested at the manufacturing facility and 100% tested within 24 hours of manufacture. Note that all requirements are met.</td>
<td>Comp</td>
<td>Comp</td>
<td></td>
</tr>
<tr>
<td>3.1.2 Water module shall comply with the codes and standards listed herein. All devices shall be 100% tested at the manufacturing facility and 100% tested within 24 hours of manufacture. Note that all requirements are met.</td>
<td>Comp</td>
<td>Comp</td>
<td></td>
</tr>
<tr>
<td>3.1.3 The system, all components, and all control systems shall be tested and certified as per applicable codes and standards.</td>
<td>Comp</td>
<td>Comp</td>
<td></td>
</tr>
<tr>
<td>3.1.4 All water meters shall support the M2M Protocol. Note that all requirements are met.</td>
<td>Comp</td>
<td>Comp</td>
<td></td>
</tr>
<tr>
<td>3.1.5 All water modules shall support the M2M Protocol. Note that all requirements are met.</td>
<td>Comp</td>
<td>Comp</td>
<td></td>
</tr>
<tr>
<td>3.1.6 All water modules shall support the M2M Protocol. Note that all requirements are met.</td>
<td>Comp</td>
<td>Comp</td>
<td></td>
</tr>
</tbody>
</table>

---

### 5.1.1 - Interval Length

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Module Complete</th>
<th>AMI Head End System Complete</th>
<th>Other Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1.1.1 - Interval length</td>
<td>Comp</td>
<td>Comp</td>
<td></td>
</tr>
<tr>
<td>5.1.1.2 - Events and Alarms</td>
<td>Comp</td>
<td>Comp</td>
<td></td>
</tr>
<tr>
<td>5.1.1.3 - Register OUt</td>
<td>Comp</td>
<td>Comp</td>
<td></td>
</tr>
</tbody>
</table>

---

### 3.1.7 - Events and Alarms

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Module Complete</th>
<th>AMI Head End System Complete</th>
<th>Other Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1.7.1 - Events and Alarms, battery health, and any other diagnostic data</td>
<td>Comp</td>
<td>Comp</td>
<td></td>
</tr>
</tbody>
</table>

---

### 3.1.8 - Water Module Battery Life Time

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Module Complete</th>
<th>AMI Head End System Complete</th>
<th>Other Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1.8.1 - Water module battery life time</td>
<td>Comp</td>
<td>Comp</td>
<td></td>
</tr>
</tbody>
</table>

---

### 3.1.9 - Water Module Battery Life Time

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Module Complete</th>
<th>AMI Head End System Complete</th>
<th>Other Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1.9.1 - Water module battery life time</td>
<td>Comp</td>
<td>Comp</td>
<td></td>
</tr>
</tbody>
</table>

---

### 3.1.10 - Water Module Battery Life Time

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Module Complete</th>
<th>AMI Head End System Complete</th>
<th>Other Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1.10.1 - Water module battery life time</td>
<td>Comp</td>
<td>Comp</td>
<td></td>
</tr>
</tbody>
</table>

---

## TABLE 3.0.6.4A – Water End Events

<table>
<thead>
<tr>
<th>Event</th>
<th>Module Complete</th>
<th>AMI Head End System Complete</th>
<th>Other Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Comp</td>
<td>Comp</td>
<td></td>
</tr>
</tbody>
</table>

---

68 of 210
### 3.6 - Water Meter and Module Specifications

<table>
<thead>
<tr>
<th>Positive Displacement Meters</th>
<th>Static Water Meters</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Draeger Meter</strong></td>
<td><strong>Draeger Meter</strong></td>
</tr>
<tr>
<td><strong>Buderus Meter</strong></td>
<td><strong>Buderus Meter</strong></td>
</tr>
<tr>
<td><strong>Siemens Meter</strong></td>
<td><strong>Siemens Meter</strong></td>
</tr>
<tr>
<td><strong>Emerson Meter</strong></td>
<td><strong>Emerson Meter</strong></td>
</tr>
<tr>
<td><strong>Eaton Meter</strong></td>
<td><strong>Eaton Meter</strong></td>
</tr>
<tr>
<td><strong>Siemens Meter</strong></td>
<td><strong>Siemens Meter</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Meter</th>
<th>Module Complies</th>
<th>AMI Head End System Complies</th>
<th>Offerer Comments</th>
<th>Meter</th>
<th>Module Complies</th>
<th>AMI Head End System Complies</th>
<th>Offerer Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.6.10</td>
<td>All Water Modules shall utilize non-volatile memory for storing metering data. Data shall be retained without loss on reconfiguration without communication with the remote host and the meter.</td>
<td>Comply</td>
<td>Not Applicable</td>
<td>The SOW water module store 160 100 hours of current data in non-volatile memory. This data is transferred off-site using the field tools.</td>
<td>Comply</td>
<td>Not Applicable</td>
<td>The SOW water module store 160 100 hours of current data in non-volatile memory. This data is transferred off-site using the field tools.</td>
</tr>
<tr>
<td>3.6.11</td>
<td>The water shall be designed and be capable of accommodating meter to meter data transfer between the AMI head end system and the single location or computer meter set.</td>
<td>Comply</td>
<td>Comply</td>
<td>For a single register compound meter, the SOW will report the total meter data to the remote host. This is unique to each register compound meter. For the use of 8 SOW devices, the data is collected through the head office software.</td>
<td>Comply</td>
<td>Comply</td>
<td>For a single register compound meter, the SOW will report the total meter data to the remote host. This is unique to each register compound meter. For the use of 8 SOW devices, the data is collected through the head office software.</td>
</tr>
<tr>
<td>3.6.12</td>
<td>Offerer’s technology shall be capable of a maximum of 8 different legal units, allowing for data storage and display. These eight legal units are:</td>
<td>Comply</td>
<td>Comply</td>
<td>Take the attached electronic copy of the form that is compatible with the AMI Head End System.</td>
<td>Comply</td>
<td>Comply</td>
<td>Take the attached electronic copy of the form that is compatible with the AMI Head End System.</td>
</tr>
<tr>
<td>3.6.13</td>
<td>Describe the limitations for the attached electronic copy of the form that is compatible with the AMI Head End System.</td>
<td>Comply</td>
<td>Comply</td>
<td>For a single register compound meter, the SOW will report the total meter data to the remote host. This is unique to each register compound meter. For the use of 8 SOW devices, the data is collected through the head office software.</td>
<td>Comply</td>
<td>Comply</td>
<td>For a single register compound meter, the SOW will report the total meter data to the remote host. This is unique to each register compound meter. For the use of 8 SOW devices, the data is collected through the head office software.</td>
</tr>
<tr>
<td>3.6.14</td>
<td>Provide a detailed explanation of how the Water Meter data is transmitted to the head end and is communicated.</td>
<td>Comply</td>
<td>Modules communications allow AES 256 AES encryption. Security of the form data is not utilized in the YMAC.</td>
<td>Comply</td>
<td>Modules communications allow AES 256 AES encryption. Security of the form data is not utilized in the YMAC.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 3.2 Water Module and Meter Specifications - AMI System

<table>
<thead>
<tr>
<th>3.2.1</th>
<th>If the AMI meter (new M) mode of the Offerer’s programmable meter has been integrated and tested using Offerer’s test setup and solution, the Customer will:</th>
<th>Comply</th>
<th>Comply</th>
<th>For a single register compound meter, the SOW will report the total meter data to the remote host. This is unique to each register compound meter. For the use of 8 SOW devices, the data is collected through the head office software.</th>
<th>Comply</th>
<th>Comply</th>
<th>For a single register compound meter, the SOW will report the total meter data to the remote host. This is unique to each register compound meter. For the use of 8 SOW devices, the data is collected through the head office software.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.2.2</td>
<td>Provide a list of modules, water meters, and systems manufactured and delivered when the Offerer’s programmable meter module has been integrated and used using Offerer’s test setup and solution, and the customer as to the condition of the meter.</td>
<td>Comply</td>
<td>Comply</td>
<td>For a single register compound meter, the SOW will report the total meter data to the remote host. This is unique to each register compound meter. For the use of 8 SOW devices, the data is collected through the head office software.</td>
<td>Comply</td>
<td>Comply</td>
<td>For a single register compound meter, the SOW will report the total meter data to the remote host. This is unique to each register compound meter. For the use of 8 SOW devices, the data is collected through the head office software.</td>
</tr>
</tbody>
</table>

**System Requirements**

| 3.3.1 | All supplied water meter equipment shall support the requirements of the same system. | Comply | Comply | For a single register compound meter, the SOW will report the total meter data to the remote host. This is unique to each register compound meter. For the use of 8 SOW devices, the data is collected through the head office software. | Comply | Comply | For a single register compound meter, the SOW will report the total meter data to the remote host. This is unique to each register compound meter. For the use of 8 SOW devices, the data is collected through the head office software. |

---

**Tables**

| DBA 81300 - Water EndPoints | 87 of 210 |
# 3.6 - Water Meter and Module Specifications

## Positive Displacement Meters

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Module</th>
<th>Compilable</th>
<th>ANSI Head</th>
<th>Other Comments</th>
<th>Module</th>
<th>Compilable</th>
<th>ANSI Head</th>
<th>Other Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.6.2</td>
<td></td>
<td>Comply</td>
<td></td>
<td>The installer will collect the necessary information and make it available for review upon installation</td>
<td></td>
<td>Comply</td>
<td></td>
<td>The installer will collect the necessary information and make it available for review upon installation</td>
</tr>
<tr>
<td>3.6.3</td>
<td></td>
<td>Comply</td>
<td></td>
<td>None</td>
<td></td>
<td>Comply</td>
<td></td>
<td>None</td>
</tr>
<tr>
<td>3.6.4</td>
<td></td>
<td>Comply</td>
<td></td>
<td>None</td>
<td></td>
<td>Comply</td>
<td></td>
<td>None</td>
</tr>
<tr>
<td>3.6.5</td>
<td></td>
<td>Comply</td>
<td></td>
<td>None</td>
<td></td>
<td>Comply</td>
<td></td>
<td>None</td>
</tr>
<tr>
<td>3.6.6</td>
<td></td>
<td>Comply</td>
<td></td>
<td>None</td>
<td></td>
<td>Comply</td>
<td></td>
<td>None</td>
</tr>
<tr>
<td>3.6.7</td>
<td></td>
<td>Comply</td>
<td></td>
<td>None</td>
<td></td>
<td>Comply</td>
<td></td>
<td>None</td>
</tr>
</tbody>
</table>

## Static Water Meters

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Module</th>
<th>Compilable</th>
<th>ANSI Head</th>
<th>Other Comments</th>
<th>Module</th>
<th>Compilable</th>
<th>ANSI Head</th>
<th>Other Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.6.8</td>
<td></td>
<td>Comply</td>
<td></td>
<td>None</td>
<td></td>
<td>Comply</td>
<td></td>
<td>None</td>
</tr>
<tr>
<td>3.6.9</td>
<td></td>
<td>Comply</td>
<td></td>
<td>None</td>
<td></td>
<td>Comply</td>
<td></td>
<td>None</td>
</tr>
<tr>
<td>3.6.10</td>
<td></td>
<td>Comply</td>
<td></td>
<td>None</td>
<td></td>
<td>Comply</td>
<td></td>
<td>None</td>
</tr>
<tr>
<td>3.6.11</td>
<td></td>
<td>Comply</td>
<td></td>
<td>None</td>
<td></td>
<td>Comply</td>
<td></td>
<td>None</td>
</tr>
</tbody>
</table>

## System Requirements

88 of 210
### 3.0 - Water Meter and Module Specifications

<table>
<thead>
<tr>
<th>Positive Displacement Meters</th>
<th>Static Water Meters</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Meter Module Compliance</strong></td>
<td><strong>AHRI Head End System Compliance</strong></td>
</tr>
<tr>
<td>Comply</td>
<td>Comply</td>
</tr>
<tr>
<td><strong>AHRI Module Compatibility</strong></td>
<td>Comply</td>
</tr>
<tr>
<td><strong>AHRI Module California</strong></td>
<td>Comply</td>
</tr>
<tr>
<td><strong>Positive Displacement Meters</strong></td>
<td>Comply</td>
</tr>
</tbody>
</table>

#### 3.1 Water Module Specifications - Flow Measurement and Identification

<table>
<thead>
<tr>
<th><strong>Water Module Specifications</strong></th>
<th><strong>Flow Measurement and Identification</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>The water module shall detect and report a flow using all known analysis for positive correlation.</td>
<td>Comply</td>
</tr>
<tr>
<td>The water module shall provide the capability to detect baseline flow (e.g., pressure flow), and it shall all known analysis.</td>
<td>Comply</td>
</tr>
<tr>
<td>The water module shall provide the capability to detect reverse flow or negative.</td>
<td>Comply</td>
</tr>
<tr>
<td>The water module shall detect and report on emergency lights.</td>
<td>No Application</td>
</tr>
</tbody>
</table>

#### 3.2 Water Module Specifications - Threshold Monitoring

<table>
<thead>
<tr>
<th><strong>Water Module Specifications</strong></th>
<th><strong>Threshold Monitoring</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>The water module shall be capable of monitoring and reporting the module's overall state, including power, and it shall all known analysis that are necessary for provided information.</td>
<td>Does Not Apply</td>
</tr>
<tr>
<td>The water module shall be capable of monitoring and reporting the module's overall state, including power, and it shall all known analysis that are necessary for provided information.</td>
<td>Does Not Apply</td>
</tr>
</tbody>
</table>

#### 3.3 Water Module Specifications - Battery Management

<table>
<thead>
<tr>
<th><strong>Water Module Specifications</strong></th>
<th><strong>Battery Management</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>The water module shall be capable of monitoring the battery state, including power, and it shall all known analysis that are necessary for provided information.</td>
<td>Comply</td>
</tr>
<tr>
<td>The water module shall be capable of monitoring the battery state, including power, and it shall all known analysis that are necessary for provided information.</td>
<td>Comply</td>
</tr>
</tbody>
</table>

#### 3.4 Water Module Specifications - CIM

<table>
<thead>
<tr>
<th><strong>Water Module Specifications</strong></th>
<th><strong>CIM</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>The water module shall be capable of monitoring the battery state, including power, and it shall all known analysis that are necessary for provided information.</td>
<td>Comply</td>
</tr>
<tr>
<td>The water module shall be capable of monitoring the battery state, including power, and it shall all known analysis that are necessary for provided information.</td>
<td>Comply</td>
</tr>
</tbody>
</table>

#### 3.5 Water Module Specifications - Pressure Sensing Circuits

<table>
<thead>
<tr>
<th><strong>Water Module Specifications</strong></th>
<th><strong>Pressure Sensing Circuits</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>The water module shall be capable of monitoring the battery state, including power, and it shall all known analysis that are necessary for provided information.</td>
<td>Comply</td>
</tr>
<tr>
<td>The water module shall be capable of monitoring the battery state, including power, and it shall all known analysis that are necessary for provided information.</td>
<td>Comply</td>
</tr>
</tbody>
</table>

---

*System Requirements:*
### 3.0 - Water Meter and Module Specifications

<table>
<thead>
<tr>
<th>Positive Displacement Meters</th>
<th>Static Water Meters</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DRAFT</strong></td>
<td><strong>DRAFT</strong></td>
</tr>
<tr>
<td><strong>90 of 210</strong></td>
<td><strong>90 of 210</strong></td>
</tr>
</tbody>
</table>

#### 3.1.1.1 Water Module shall have the capability to communicate with and report on mobile pressure monitoring equipment. | Comply | Not Applicable |
| **2.1.2.2** | The Water Module shall have the capability to communicate with and report on mobile pressure monitoring equipment. | Comply | Not Applicable |

#### 2.14 Water Module Specifications - Leak Detection Unit

| **2.1.4.1** Water Module shall have the capability to communicate with and report on mobile leak detection equipment. | Comply | Comply |
| **2.1.4.2** | The Water Module shall have the capability to communicate with and report on mobile leak detection equipment. | Comply | Comply |

#### 2.18 Water Module Specifications - Other Services

| **2.1.8.1** | The Water Module shall have the capability to communicate with and report on mobile leak detection equipment. | Comply | Comply |

### 4.0 - Water Module Specifications - Temperature Sensing

| **4.0.4** | The Water Module shall have the capability to communicate with and report on mobile leak detection equipment. | Comply | Comply |

---

### Notes:
- The Water Module shall have the capability to communicate with and report on mobile leak detection equipment.
- The Water Module shall have the capability to communicate with and report on mobile pressure monitoring equipment.
- The Water Module shall have the capability to communicate with and report on mobile leak detection equipment.
- The Water Module shall have the capability to communicate with and report on mobile leak detection equipment.
- The Water Module shall have the capability to communicate with and report on mobile leak detection equipment.
### 3.6 - Water Meter and Module Specifications

#### Positive Displacement Meters

<table>
<thead>
<tr>
<th>Meter</th>
<th>Module Complexity</th>
<th>AHE Head End System Complexity</th>
<th>Other Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Configuration</td>
<td>Comply</td>
</tr>
</tbody>
</table>

The positive displacement meters capture the flow rate and volume of water accurately. This information is essential for billing purposes.

#### Static Water Meters

<table>
<thead>
<tr>
<th>Meter</th>
<th>Module Complexity</th>
<th>AHE Head End System Complexity</th>
<th>Other Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Configuration</td>
<td>Comply</td>
</tr>
</tbody>
</table>

Static water meters provide a constant flow rate and are often used for industrial applications.

#### Water Meter Specifications - Type

- **4.19**: Other shall be listed, type-tested, and tested in accordance with NIST standards.

#### Water Meter Specifications - Water Flow

- **4.19.1**: All meters shall meet the requirements of ANSI/AMWA-AWWA C109-16 for water flow to the nearest 0.01 gpm, and comply with ANSI/AMWA-AWWA C109-16 for water flow to the nearest 0.0001 gpm.

#### Water Meter Specifications - Metering Rate

- **4.19.4**: All meters shall comply with the requirements of ANSI/AMWA-AWWA C109-16.

#### Water Meter Specifications - Serial Number

- **4.20.1**: The serial number shall be clearly marked on the outer case as well as on the register box cover.

#### Water Meter Specifications - Manufacturer Testing

- **4.22**: The manufacturer's system receives the shipment and tests the meter in accordance with ANSI/AMWA-AWWA C109-16.

#### Water Meter Specifications - Accuracy - NIST

- **4.23.1**: The meter shall meet the requirements of ANSI/AMWA-AWWA C109-16 for water flow to the nearest 0.0001 gpm.

### Static Water Meters Specifications

<table>
<thead>
<tr>
<th>Meter</th>
<th>Module Complexity</th>
<th>AHE Head End System Complexity</th>
<th>Other Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Configuration</td>
<td>Comply</td>
</tr>
</tbody>
</table>

These meters are commonly used in residential and commercial settings for accurate water measurement.

#### Water Meter Specifications - Installation

- **Installation Instructions**: Ensure the meter is installed in a horizontal position and protected from freezing.

#### Water Meter Specifications - Maintenance

- **Regular Maintenance**: Conduct regular maintenance to ensure optimal performance.

#### Water Meter Specifications - Safety

- **Safety Precautions**: Follow all safety guidelines to prevent accidents while handling and installing water meters.

---

System Requirements

The 3.S.W.A.T Water Endpoints

91 of 210
### Positive Displacement Meters

<table>
<thead>
<tr>
<th>Meter</th>
<th>Module</th>
<th>Components</th>
<th>ANSI Head</th>
<th>Other Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meter</td>
<td>Module</td>
<td>Systems</td>
<td>10</td>
<td>40</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Meter</th>
<th>Module</th>
<th>Components</th>
<th>ANSI Head</th>
<th>Other Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meter</td>
<td>Module</td>
<td>Systems</td>
<td>10</td>
<td>40</td>
</tr>
</tbody>
</table>

### Static Water Meters

<table>
<thead>
<tr>
<th>Meter</th>
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<th>Components</th>
<th>ANSI Head</th>
<th>Other Comments</th>
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<tbody>
<tr>
<td>Meter</td>
<td>Module</td>
<td>Systems</td>
<td>10</td>
<td>40</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Meter</th>
<th>Module</th>
<th>Components</th>
<th>ANSI Head</th>
<th>Other Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meter</td>
<td>Module</td>
<td>Systems</td>
<td>10</td>
<td>40</td>
</tr>
</tbody>
</table>

### 3.0 - Water Meter and Module Specifications

**3.23.1** - Meets 80% of the test.

**3.24 Water Meter Specifications - Accuracy - 1.0**

- Meter: Modem
- Module: Systems
- ANSI Head: 10
- Other Comments: See ANSI System Agreement for accuracy variability provisions.

**3.24.1** - Meets the accuracy standard for a period of 15 years from the date of manufacture.

**3.24.2** - When the water meters are returned to the manufacturer for repair or replacement, they must meet the accuracy standards set forth in the latest revision.

**3.24.3** - Manufacturer's name is registered with ISO 9001, recognized quality systems.

### 3.26 Water Meter Specifications - Efficiency

**3.26.1** - Meets 80% of the test.
### 4.0 - AMI Network

<table>
<thead>
<tr>
<th>Network Equipment</th>
<th>Head End System</th>
<th>Offerer's NaaS</th>
<th>Offerer Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network Equipment shall have the ability to reach all endpoints and backhaul take-out points regardless of location. Offerer shall ensure that SANS endpoints locations can include hard to reach areas including:</td>
<td>Comply</td>
<td>Comply</td>
<td>The propagation analysis was run with the current installed SANS trees. This is not recommended for deployment. Backhaul will be identified as necessary.</td>
</tr>
<tr>
<td>- Interior building locations</td>
<td>Comply</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>- Multiple building locations (Multi-rates etc.)</td>
<td>Comply</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>4.1.2.3 - Multi-End Locations</td>
<td>Comply</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>4.1.2.4 - Utility locations</td>
<td>Comply</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>4.1.2.5 - The Borrower</td>
<td>Comply</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>4.1.3 - SANS does not anticipate purchasing or providing new meter boxes. Network equipment shall have the ability to reach all endpoints regardless of meter box locations. See Appendix E - SANS Meter Box Licensor Information for future details.</td>
<td>Comply</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>4.1.4 - SANS anticipates adding additional devices to its AMI network. Offerer shall quantify the number of endpoints that can be added without adding incremental network while still achieving the solution performance metrics (Section 4). Offerer shall provide assumptions about network characteristics, traffic, and existing infrastructure.</td>
<td>Comply</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>4.1.5 - The SANS system is comprised of a growth plan for increased density and geographic expansion. Offerer shall describe the process used to design, implement, and maintain an augmented AMI network in the case of increased density and network capacity expansion.</td>
<td>Comply</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>4.1.6 - All Network shall support full two-way communications between water meter endpoints and AMI Head End System.</td>
<td>Comply</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>4.1.7 - Offerer shall provide an AMI network solution designed to be functional for a minimum period of 20 years after deployment.</td>
<td>Comply</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>4.1.8 - Offerer shall describe:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- The Support for the SNIP Standard</td>
<td>Comply</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>- The different types of messages and packets transmitted across the network</td>
<td>Comply</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>- The size of such messages and data packets</td>
<td>Comply</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>4.1.9 - The frequency of occurrence of such transmission</td>
<td>Comply</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>4.1.10 - Offerer shall program and configure network communication equipment prior to handing over network communication equipment.</td>
<td>Comply</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>4.1.11 - Offerer shall provide a description of how the network infrastructure is to be managed by the Offerer.</td>
<td>Comply</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>4.1.12 - Offers specific functions to include the capability required to test and control network devices within the AMI system (such as not limited to):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.1.13 - Terminal Consoles</td>
<td>Comply</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>4.1.14 - Terminal Consoles</td>
<td>Comply</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>4.1.15 - The SANS Network access methodology includes the description of how the new network infrastructure is to be managed by the Offerer.</td>
<td>Comply</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>4.1.16 - The SANS Network access methodology includes the description of how the new network infrastructure is to be managed by the Offerer.</td>
<td>Comply</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>4.1.17 - The SANS Network access methodology includes the description of how the new network infrastructure is to be managed by the Offerer.</td>
<td>Comply</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>4.1.18 - The SANS Network access methodology includes the description of how the new network infrastructure is to be managed by the Offerer.</td>
<td>Comply</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>4.0 - AMI Network</td>
<td>Offender's NaaS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------</td>
<td>----------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Network Equipment</strong></td>
<td><strong>Head End System</strong></td>
<td><strong>Offender Comments</strong></td>
<td></td>
</tr>
<tr>
<td>Comply</td>
<td>Comply</td>
<td>At the network equipment level from a security approach, securing the possibility of a network-wide malware attack by restricting any possible threat to the breached device. Board-level security features include restricting access to flash sites, securing key and housing access to provide key material in the chip and zeroizing data that are stored in the secure memory (such as encryption keys (KTP)) upon any access attempts via JTAG.</td>
<td></td>
</tr>
<tr>
<td>Comply</td>
<td>Comply</td>
<td>During transmission, the data is protected via the HIP transform using the AES-256 and insulated with SHA-256 for integrity protection of all link layer and application layer traffic.</td>
<td>Standard X.509 format certificates for authentication between devices.</td>
</tr>
<tr>
<td><strong>4.1.17.1</strong></td>
<td><strong>Network Communication Equipment</strong></td>
<td><strong>Endurance materials options and enclosure options.</strong></td>
<td></td>
</tr>
<tr>
<td>Comply</td>
<td>Comply</td>
<td>See API spec sheet provided separately.</td>
<td></td>
</tr>
<tr>
<td><strong>4.2 Implementation Services - Network Planning &amp; Design</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>4.2.1</strong></td>
<td><strong>Network Planning &amp; Design</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>4.2.1.1</strong></td>
<td><strong>Network Planning &amp; Design</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>4.2.1.1.1</strong></td>
<td><strong>Network Planning &amp; Design</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>4.2.1.1.2</strong></td>
<td><strong>Network Planning &amp; Design</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>4.2.1.2</strong></td>
<td><strong>Network Planning &amp; Design</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>4.2.1.3</strong></td>
<td><strong>Network Planning &amp; Design</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>4.2.1.4</strong></td>
<td><strong>Network Planning &amp; Design</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>4.2.1.5</strong></td>
<td><strong>Network Planning &amp; Design</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>4.2.2</strong></td>
<td><strong>Network Planning &amp; Design</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>4.2.3</strong></td>
<td><strong>Network Planning &amp; Design</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>4.2.4</strong></td>
<td><strong>Network Planning &amp; Design</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>4.2.5</strong></td>
<td><strong>Network Planning &amp; Design</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>4.3.4</strong></td>
<td><strong>Network Planning &amp; Design</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**System Requirements:**

**TAIL 4.0 AMI - Network**
### 4.0 - AMI Network

<table>
<thead>
<tr>
<th>Task</th>
<th>Network Equipment Comments</th>
<th>Other End System Comments</th>
<th>Offeree Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>4.2.6.2</strong></td>
<td>Describe who is responsible for the ordering, warehousing and the inventory management of network equipment.</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
<tr>
<td><strong>4.2.6.3</strong></td>
<td>If proposing an unlicensed solution, describe the process to identify and mitigate interference from competing wireless communications.</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
<tr>
<td><strong>4.2.6.4</strong></td>
<td>Once the Offeree has been selected and contracting completed, the Offeree shall supply the following:</td>
<td>Comply</td>
<td>Comply</td>
</tr>
<tr>
<td><strong>4.2.6.1</strong></td>
<td>Site surveys to determine the suitable locations which meet SAWS installation standards.</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
<tr>
<td><strong>4.2.6.2</strong></td>
<td>Network traffic simulation and/or propagation studies showing the networks devices required to achieve performance and functionality requirements stated in the RFP.</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
<tr>
<td><strong>4.2.6.3</strong></td>
<td>Site the proposed attachment configurations to SAWS for approval prior to commencement of installation activities.</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
<tr>
<td><strong>4.2.6.4</strong></td>
<td>Submit load studies of any towers or facilities it proposes to utilize for attachment of its devices. Such studies shall follow industry and SAWS accepted practices for load studies.</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
<tr>
<td><strong>4.2.6.5</strong></td>
<td>If use of non-SAWS facilities is required, the Offeree shall detail how they will manage the identification of additional locations and the logistics of obtaining necessary leases, permits, approvals and rights on behalf of SAWS.</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

#### 4.1 - Network Installation

<table>
<thead>
<tr>
<th>Task</th>
<th>Network Equipment Comments</th>
<th>Other End System Comments</th>
<th>Offeree Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>4.1.2</strong></td>
<td>The Offeree shall configure network equipment and provide all necessary specialized purpose equipment, tools, and software to install all required network equipment.</td>
<td>Comply</td>
<td>Comply</td>
</tr>
<tr>
<td><strong>4.1.3</strong></td>
<td>The Offeree shall be responsible for the installation network equipment including necessary custom cabling and directional antenna install to meet the specified system performance.</td>
<td>Comply</td>
<td>Not Applicable</td>
</tr>
<tr>
<td><strong>4.1.4</strong></td>
<td>The Offeree shall be responsible for the installation of necessary custom cabling and directional antenna install to meet the specified system performance.</td>
<td>Comply</td>
<td>Not Applicable</td>
</tr>
<tr>
<td><strong>4.1.6</strong></td>
<td>The Offeree shall be responsible for traffic control requirements, and secure necessary permits where required for any work during network install.</td>
<td>Comply</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

#### 4.2 - Network - Label and Shipping

<table>
<thead>
<tr>
<th>Task</th>
<th>Network Equipment Comments</th>
<th>Other End System Comments</th>
<th>Offeree Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>4.2.1</strong></td>
<td>The Offeree shall label network equipment prior to ensure error free installation and maintenance.</td>
<td>Comply</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

#### 4.3 - Network - Equipment

<table>
<thead>
<tr>
<th>Task</th>
<th>Network Equipment Comments</th>
<th>Other End System Comments</th>
<th>Offeree Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>4.3.1</strong></td>
<td>All network equipment shall comply with all FCC certification standards.</td>
<td>Comply</td>
<td>Not Applicable</td>
</tr>
<tr>
<td><strong>4.3.2</strong></td>
<td>Offerer shall commit to less than 10% annualized failure rate for all network equipment over the required operating life of the system from year 1 through installation.</td>
<td>Comply</td>
<td>Not Applicable</td>
</tr>
<tr>
<td><strong>4.3.3</strong></td>
<td>All network communications equipment shall meet the Operating and Storage Temperature of -40 degrees Celsius to 45 degrees Celsius.</td>
<td>Comply</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

System Requirements

TAR 4.0 AMI - Network

95 of 210
<table>
<thead>
<tr>
<th>4.0 - AMI Network</th>
<th>Offeror’s NaaS</th>
<th>Network Equipment</th>
<th>Offeror Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.0.1 All network communications equipment shall support local (on-site) and remote (Head End System) non-intrusive diagnostic capability of detecting any abnormal operating parameters including, but not limited to:</td>
<td>Complete</td>
<td>Not Applicable</td>
<td>All network equipment are capable of this functionality, however, since the NaaS model, SEVMS will not manage these processes. See attached spec sheet.</td>
</tr>
<tr>
<td>4.0.1.1 Network communications</td>
<td>Complete</td>
<td>Not Applicable</td>
<td></td>
</tr>
<tr>
<td>4.0.1.2 Memory leaks</td>
<td>Complete</td>
<td>Not Applicable</td>
<td></td>
</tr>
<tr>
<td>4.0.1.3 Power supply degradation</td>
<td>Complete</td>
<td>Not Applicable</td>
<td></td>
</tr>
<tr>
<td>4.0.1.4 Microprocessor failures (e.g., Computer Operating Properly watchdog events)</td>
<td>Complete</td>
<td>Not Applicable</td>
<td></td>
</tr>
<tr>
<td>4.0.1.5 Firmware/software problems</td>
<td>Complete</td>
<td>Not Applicable</td>
<td></td>
</tr>
<tr>
<td>4.0.1.6 Excessive device temperature</td>
<td>Complete</td>
<td>Not Applicable</td>
<td></td>
</tr>
<tr>
<td>4.0.1.7 Internal fans status</td>
<td>Complete</td>
<td>Not Applicable</td>
<td></td>
</tr>
<tr>
<td>4.0.2 Offeror shall supply a detailed listing (in a separate attachment) of all network equipment and system diagnostic, alarms and events that are supported by network equipment, retrievable by the AMI Head End and available via the SNMP Standards, listing should include event name, description, etc.</td>
<td>Complete</td>
<td>Not Applicable</td>
<td></td>
</tr>
<tr>
<td>4.0.3 Offeror shall ensure access to data held in environments without network communications equipment</td>
<td>Complete</td>
<td>Not Applicable</td>
<td></td>
</tr>
<tr>
<td>4.0.4 All network communications equipment shall have the capability to receive and respond to requests from the Head End System for any data stored in the network equipment</td>
<td>Complete</td>
<td>Not Applicable</td>
<td></td>
</tr>
<tr>
<td>4.0.5 All network communications equipment shall have the capability to receive and respond to requests via SNMP Protocol for any data stored in the network equipment</td>
<td>Complete</td>
<td>Not Applicable</td>
<td></td>
</tr>
<tr>
<td>4.0.6 All network communications equipment shall have the ability to receive and respond to the request for power status (e.g., power loss, utility of battery, etc.) upon request from the Head End System.</td>
<td>Complete</td>
<td>Not Applicable</td>
<td></td>
</tr>
<tr>
<td>4.0.7 All network communications equipment shall have the ability to receive and respond to a request for power status (e.g., power loss, utility of battery, etc.) upon request via SNMP Protocol</td>
<td>Complete</td>
<td>Not Applicable</td>
<td></td>
</tr>
<tr>
<td>4.1.1 All network communications equipment shall be capable of connecting to a main voltage, street light or secondary service source from</td>
<td>Complete</td>
<td>Not Applicable</td>
<td></td>
</tr>
<tr>
<td>4.1.1.1 — 180V-240V</td>
<td>Complete</td>
<td>Not Applicable</td>
<td></td>
</tr>
<tr>
<td>4.1.1.2 — 277V for Substrate 277/480v only.</td>
<td>Complete</td>
<td>Not Applicable</td>
<td></td>
</tr>
<tr>
<td>4.1.1.3 — 480V only.</td>
<td>Complete</td>
<td>Not Applicable</td>
<td></td>
</tr>
<tr>
<td>4.1.2 All network communications equipment shall have battery backup that lasts for 4 hours during loss of electrical network power supply</td>
<td>Complete</td>
<td>Not Applicable</td>
<td></td>
</tr>
<tr>
<td>4.1.3 All network communications equipment shall have battery backup that has a battery lifespan of 4 years.</td>
<td>Complete</td>
<td>Not Applicable</td>
<td></td>
</tr>
</tbody>
</table>
| 4.1.4 The network communications equipment shall provide the power consumption | Complete | Not Applicable | Access Points and Relays are 96 to 237, Electric Meters are either 130VAC or 120-240VAC commercial.
## 5.0 - AMI Head End System

<table>
<thead>
<tr>
<th>Subsection</th>
<th>SaaS Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>5.1  Head End System - Solutions Architecture</strong></td>
<td></td>
</tr>
<tr>
<td><strong>5.1.1  SAWIS prefers a SaaS solution</strong></td>
<td>Comply Iron is bidding iron-hosted headend software.</td>
</tr>
<tr>
<td><strong>5.1.2  Provide a system architecture diagram (i.e., a VISO diagram, ideally adhering to UML standards) showing all of the components that support the requirements contained in this RFP. Please also include relationships between the components as well as data flow. Include the recommended hardware, operating system, and database platform. Provide a table that describes each component/product. Offeror should provide this as an appendix to Offeror's proposal.</strong></td>
<td>Comply Please refer to the Solution Overview that immediately follows this document.</td>
</tr>
<tr>
<td><strong>5.1.3  Describe the technical design of the Head End System with recommended hardware. The technical design should include a diagram with description of the software and hardware recommended for SAWIS's instance of the Head End System including:</strong></td>
<td>Comply The HES will be part of the Iron SaaS environment. Iron will be responsible for sizing the hardware properly to accommodate the data needs of SAWIS. SAWIS will access the HES through a secure internet connection. Please refer to the Solution Overview that immediately follows this document.</td>
</tr>
<tr>
<td><strong>5.1.3.1  Disaster Recovery Environment</strong></td>
<td>Comply The DR environment will be designed to fit the needs of SAWIS DR requirements. Iron's standard is to accommodate failover between the Production and Disaster Recovery environments which means an RTO of 48 hours and an RPO of four hours. However, Iron's current pricing includes a &quot;hot failover&quot; disaster recovery system which is done by duplicating hardware and replicating data between two data centers. Immediate failover takes place with the data center IP scheme.</td>
</tr>
<tr>
<td><strong>5.1.3.2  Production Environment</strong></td>
<td>Comply Please refer to the Solution Overview that immediately follows this document.</td>
</tr>
<tr>
<td><strong>5.1.3.3  QA Environment</strong></td>
<td>Comply Please refer to the Solution Overview that immediately follows this document.</td>
</tr>
<tr>
<td><strong>5.1.3.4  Test Environment</strong></td>
<td>Comply Please refer to the Solution Overview that immediately follows this document.</td>
</tr>
<tr>
<td><strong>5.1.3.5  Development Environment</strong></td>
<td>Comply Please refer to the Solution Overview that immediately follows this document.</td>
</tr>
<tr>
<td><strong>5.1.4  Provide a conceptual data model for the Head End System.</strong></td>
<td>Comply Please refer to the Solution Overview that immediately follows this document.</td>
</tr>
<tr>
<td><strong>5.1.5  Describe the availability of the Head End System. Please explain the technical design needed to achieve the stated availability (i.e., server failover, load-balancing, database replication, etc.) in the Performance Metric section.</strong></td>
<td>Comply High Availability (HA) is achieved using a number of replication, virtualization and business continuity tools. The server component is designed and deployed in an &quot;Active-Passive&quot; configuration with a warm spare server immediately available for manual failover. The database component is designed and deployed in an &quot;Active-Passive&quot; configuration using Oracle Data Guard for local and remote (for Disaster Recovery) data replication and a manual failover process to activate the backup database server.</td>
</tr>
<tr>
<td><strong>5.1.6  SAWIS may choose to implement a Meter Data Management System (MDMS) via a SaaS model. Offeror shall describe how AMI HES integration is enabled with the SaaS MDMS.</strong></td>
<td>Comply The Iron HES can be integrated to any MDMS system with a variety of options. The most common option we implement is the passing of data files from the HES to the MDMS containing all of the data for the meters in the network.</td>
</tr>
<tr>
<td><strong>5.2  Solutions Architecture - Road Map</strong></td>
<td></td>
</tr>
<tr>
<td><strong>5.2.1  The Offeror shall provide a roadmap, including a brief explanation of each roadmap item, of modifications and enhancements scheduled for release over the next 18 months as related to this proposal. Upon award the Offeror shall commit to providing a rolling roadmap every 6 months (12 months, 24 month and 36 month vision).</strong></td>
<td>Comply Please refer to the Solution Roadmap attachment.</td>
</tr>
<tr>
<td><strong>5.2.2  Offeror shall describe how incremental SaaS HES capabilities implemented for other clients are made available to SAWIS.</strong></td>
<td>Comply Under the SaaS model Iron will maintain the hosted headend including installing all releases and patches.</td>
</tr>
<tr>
<td><strong>5.3  Head End System (HES) Operations - General</strong></td>
<td></td>
</tr>
<tr>
<td><strong>5.3.1  System Days for all AMI components is defined as 24-hour periods from 12:00 Midnight Central Time of one day to 12:00 Midnight Central Time of the subsequent day.</strong></td>
<td>Comply Understood</td>
</tr>
<tr>
<td><strong>5.3.2  The HES shall support the ability to timestamp all data, events and alarms etc. in GMT and/or UTC time standard.</strong></td>
<td>Comply</td>
</tr>
<tr>
<td><strong>5.3.3  Supply a detailed description of how the water meter data collection process works for a utility of similar size to SAWIS. For example, does collection occur once daily? Twice daily? etc. Also explain if this is configurable with the system.</strong></td>
<td>Comply Data collection is scheduled on the network to be collected 3x per day. This is a configurable option. The Iron Services team will work with SAWIS to build the most efficient read schedule for SAWIS business needs.</td>
</tr>
<tr>
<td><strong>5.3.4  At all times and on all measured AMI end points, the solution must maintain the clock time within ± 30 second variance from the system time. The Head End System and network equipment shall follow NTP time standard.</strong></td>
<td>Comply The system time is managed closely and complies to this requirement.</td>
</tr>
</tbody>
</table>
## 5.0 - AMI Head End System

<table>
<thead>
<tr>
<th>Subsection</th>
<th>AMI Head End System Compliance</th>
<th>SaaS Solution Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.3.5</td>
<td>Comply</td>
<td>Please refer to the electronic copy of the attached document AMI Events.</td>
</tr>
</tbody>
</table>
| 5.3.5.1 Water Module | Comply | The Gen 6 500V ERT Module sends:  
> Leak flag  
> Tamper alarms  
> Low battery alarm  
The 500V also relays extended meter alarms provided by solid state and electronic meters. These alarms include:  
> Empty Pipe  
> Temperature  
> High/Low Pressure  
> High Flow  
> Meter Low Battery  
> Meter Tampering  
> Reverse Flow  
> Zero Consumption |
| 5.3.5.2 Water Meter | Comply | Complies with both Diehi and Honeywell meters. |
| 5.3.5.3 Network equipment | Comply | Please refer to the electronic copy of the attached document AMI Events. |
| 5.3.6 Daily and Scheduled Read Performance for water modules | Comply | Please refer to the attached document Temetra Monitoring and Reporting. |
| 5.3.8.1 Network Equipment | Comply | Details captured in Statement of Work. |
| 5.3.8 The Head End System shall support bi-directional communication with all AMI Devices | Comply | The HES support this communication with all water devices within SAWIS. |
| 5.3.8.2 Offeror shall ensure encryption of data at rest in and transmitted to and from Offeror’s AMI Head End System | Comply | By default all events and data are returned to the HES. If a metenomodule is taken out of service, we can change status to remove it from reporting and alarming. |
| 5.3.10 Describe in detail the ability for the AMI Head End System to ingest meter data (i.e. registers, interval, alarms and events) from an external source for the following; | Does Not Comply | |
| 5.3.10.1 Manual input | Does Not Comply | |
| 5.3.10.2 Hand Held Device | Does Not Comply | |
| 5.3.11.1 Modules serial number | Comply | Iron will work with SAWIS upon selection to define this file criteria. |
| 5.3.11.2 Radio ID | Comply | |
| 5.3.11.3 Part number | Comply | |
| 5.3.11.5 Hardware revision | Comply | |
| 5.3.11.6 Firmware revision | Comply | |
| 5.3.11.7 Date of manufacturing | Comply | |
| 5.3.11.8 Battery serial number and lot | Comply | |
| 5.3.11.9 Other relevant asset information needed by the utility to install, operate and maintain these assets | Comply | |

### 5.4 Head End System (HES) Operations - Equipment Life-Cycle Management

<table>
<thead>
<tr>
<th>Subsection</th>
<th>AMI Head End System Compliance</th>
<th>SaaS Solution Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.4.1</td>
<td>Comply</td>
<td>Please refer to the attached document Equipment Life-Cycle Management 5.4.</td>
</tr>
<tr>
<td>5.4.1.1 Water Meter</td>
<td>Comply</td>
<td>Same as 5.4.1.</td>
</tr>
<tr>
<td>5.4.1.2 Water Module</td>
<td>Comply</td>
<td>Same as 5.4.1.</td>
</tr>
<tr>
<td>5.4.1.3 Network equipment</td>
<td>Comply</td>
<td>Same as 5.4.1.</td>
</tr>
<tr>
<td>5.4.1.4 Describes the Head End System's ability to log an error if any step of the life-cycle process for AMI system components (water meters / communications devices, network equipment etc.) fails for troubleshooting purposes.</td>
<td>Comply</td>
<td>By default, all events and alarms are returned to the HES and stored for reporting and analysis.</td>
</tr>
</tbody>
</table>

### 5.5 Head End System (HES) Operations - Calendar & Time Changes
## 5.0 - AMI Head End System

<table>
<thead>
<tr>
<th>SaaS Solution</th>
<th>AMI Head End System Complies</th>
<th>ISO 9001 Compliance Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>5.5.1</strong></td>
<td>The Head End System shall be capable of accommodating local time display, leap years, Daylight Savings Time (DST) changes, and recurring and new holidays with no impact to billing and operations.</td>
<td>Comply</td>
</tr>
<tr>
<td><strong>5.5.1</strong></td>
<td>The Head End System shall be capable of accommodating local time display, leap years, Daylight Savings Time (DST) changes, and recurring and new holidays with no impact to billing and operations.</td>
<td>The time zone, etc. are defined upon installation of the HES.</td>
</tr>
<tr>
<td><strong>5.6</strong></td>
<td>Head End System (HES) Operations - Configurability and Over the Air (OTA) Firmware Management</td>
<td>Comply</td>
</tr>
<tr>
<td><strong>5.6.1</strong></td>
<td>The AMI Head End System shall support the management and reporting of the air firmware upgrades through the AMI head-end for individual devices and batches. There shall be no loss of billing data during firmware upgrades for the following equipment:</td>
<td>Comply</td>
</tr>
<tr>
<td><strong>5.6.1.1</strong></td>
<td>= Water Endpoint</td>
<td>Comply</td>
</tr>
<tr>
<td><strong>5.6.1.2</strong></td>
<td>= Network equipment</td>
<td>Through the Naas agreement the Network equipment will be maintained and working to provide the agreed upon SLAs for the network.</td>
</tr>
<tr>
<td><strong>5.6.2</strong></td>
<td>Describe experiences in performing over the air firmware upgrades (e.g. reporting of successful/failures, average number of devices updated per day, week and month) in production environments for the end point devices described in Section 3.</td>
<td>Comply</td>
</tr>
<tr>
<td><strong>5.6.3</strong></td>
<td>Please describe in detail the AMI Head End System ability to display and report the current firmware versions for end point devices described in Section 3.</td>
<td>Comply</td>
</tr>
<tr>
<td><strong>5.6.4</strong></td>
<td>The AMI Head End System shall support the ability to change interval configurations by individual meter, and batches of meters, remotely within eight (8) hours of initiation with no loss of data for the following:</td>
<td>Comply</td>
</tr>
<tr>
<td><strong>5.6.4.1</strong></td>
<td>= Interval Length</td>
<td>Comply</td>
</tr>
<tr>
<td><strong>5.6.4.2</strong></td>
<td>= Interval recording channels</td>
<td>Comply</td>
</tr>
<tr>
<td><strong>5.6.5</strong></td>
<td>The AMI Head End System shall provide the ability for the firmware download process to be suspended and/or canceled after it has commenced, prior to activation within the device.</td>
<td>Comply</td>
</tr>
<tr>
<td><strong>5.6.6</strong></td>
<td>Describe the ability of the AMI Head End System to provide the status of and communicate with a radio (endpoint and/or network) where transmission has been disabled.</td>
<td>Does Not Comply</td>
</tr>
<tr>
<td><strong>5.7</strong></td>
<td>Head End System (HES) Operation - Network Monitoring and Maintenance</td>
<td>Comply</td>
</tr>
<tr>
<td><strong>5.7.1</strong></td>
<td>Describe in detail how your Head End System monitors, maintains, controls and reports on the network equipment capabilities including:</td>
<td>As part of the Naas agreement the network is maintained and managed for SAWS. The reports are available for viewing by SAWS but no interaction is needed to maintain or support the network.</td>
</tr>
<tr>
<td><strong>5.7.1.1</strong></td>
<td>=Alarms and Events</td>
<td>Comply</td>
</tr>
<tr>
<td><strong>5.7.1.2</strong></td>
<td>=Device Health (Power Status, battery back-up life etc.)</td>
<td>Comply</td>
</tr>
<tr>
<td><strong>5.7.1.3</strong></td>
<td>=Device Performance (Data throughput)</td>
<td>Comply</td>
</tr>
<tr>
<td><strong>5.7.1.4</strong></td>
<td>=Communication (PNG and/or battery Verification)</td>
<td>Comply</td>
</tr>
<tr>
<td><strong>5.7.1.5</strong></td>
<td>=Network Diagnostics (URR, WAN status and health, RSSI etc.)</td>
<td>Comply</td>
</tr>
<tr>
<td><strong>5.7.1.6</strong></td>
<td>=Relationship of end-points and network communication equipment</td>
<td>Comply</td>
</tr>
<tr>
<td><strong>5.7.1.7</strong></td>
<td>=Network Power Status (up/down time, remote power cycle capabilities etc.)</td>
<td>Comply</td>
</tr>
<tr>
<td><strong>5.7.1.8</strong></td>
<td>=Software versions</td>
<td>Comply</td>
</tr>
<tr>
<td><strong>5.7.1.9</strong></td>
<td>=Firmware versions</td>
<td>Comply</td>
</tr>
<tr>
<td><strong>5.7.2</strong></td>
<td>Describe any other network capabilities that the head end system monitors, maintains, controls and reports on</td>
<td>Comply</td>
</tr>
<tr>
<td><strong>5.8</strong></td>
<td>Head End System (HES) Operations - Schedule Reads</td>
<td>Comply</td>
</tr>
<tr>
<td><strong>5.8.1</strong></td>
<td>The Offer’s AMI System shall have the ability to schedule periodic reads for Water devices for the following:</td>
<td>Comply</td>
</tr>
<tr>
<td><strong>5.8.1.1</strong></td>
<td>= Register (CF, CCP or Gallons)</td>
<td>The standard read schedule can be changed to accommodate change in business needs for SAWS. An on-demand read can also be set for these one-off operations.</td>
</tr>
<tr>
<td><strong>5.8.1.2</strong></td>
<td>= Interval Data - one (1), five (5), fifteen (15), thirty (30), and sixty (60) minute</td>
<td>Same as 5.8.1.1</td>
</tr>
<tr>
<td><strong>5.8.2</strong></td>
<td>Describe the ability of the Head End System to schedule the retrieval of all historical data saved on AMI Devices including:</td>
<td>Comply</td>
</tr>
<tr>
<td><strong>5.8.2.1</strong></td>
<td>= Water module</td>
<td>Same as 5.8.2.1</td>
</tr>
<tr>
<td>5.0 - AMI Head End System</td>
<td>SaaS Solution</td>
<td></td>
</tr>
<tr>
<td>---------------------------</td>
<td>--------------</td>
<td></td>
</tr>
<tr>
<td><strong>5.9 Head End System (HES) Operations - On Demand Read (Off-Cycle Reads)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>5.9.1</strong> The Offeror’s AMI System shall have the ability to request ad hoc and receive within a 60 secs the following information for water and network equipment including:</td>
<td>Does Not Comply</td>
<td>The timing of an on-demand request is 60-120 seconds.</td>
</tr>
<tr>
<td><strong>5.9.1.1</strong> – Register (CF, CID or Gallons)</td>
<td>Does Not Comply</td>
<td>See 5.9.1</td>
</tr>
<tr>
<td><strong>5.9.1.2</strong> – Interval Data – one (1), five (5), fifteen (15), thirty (30), and sixty (60) minute</td>
<td>Does Not Comply</td>
<td>Depending on the amount of data requested, the packets would be split and therefore all data would not be received in the timeframe.</td>
</tr>
<tr>
<td><strong>5.9.2</strong> The Offeror’s AMI System shall have the ability to request ad hoc, within a 60 secs, a PING of the water module.</td>
<td>Does Not Comply</td>
<td>The timing of an on-demand request is 60-120 seconds.</td>
</tr>
<tr>
<td><strong>5.9.3</strong> The Offeror’s AMI System shall have the ability to request ad hoc, within a 60 secs, the reading of events and alarm data for the following devices:</td>
<td>Does Not Comply</td>
<td>The timing of an on-demand request is 60-120 seconds.</td>
</tr>
<tr>
<td><strong>5.9.3.1</strong> – Water Endpoint</td>
<td>Does Not Comply</td>
<td>The timing of an on-demand request is 60-120 seconds.</td>
</tr>
<tr>
<td><strong>5.9.3.2</strong> – Network equipment</td>
<td>Comply</td>
<td>As part of the SaaS agreement, the network is maintained for SAWS.</td>
</tr>
<tr>
<td><strong>5.9.4</strong> The Head End System shall be able to log failed (date/timestamp) on-demand requests.</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td><strong>5.9.5</strong> On-demand communications status verification requests shall automatically time-out after a Utility configurable duration.</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td><strong>5.9.6</strong> For failed responses to on-demand requests, the system shall log and confirm that the host system did in fact initiate a successful on-demand request to the network, thereby eliminating this initial step as a potential source of failure.</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td><strong>5.9.7</strong> The Head End System shall have the ability to request, On-Demand, all historical data saved on the AMI Devices including:</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td><strong>5.9.7.1</strong> – Water endpoint. If this is not the case please describe were the ODR obtains a reading and how is this different to encoder/register as it relates to timestamps</td>
<td>Comply</td>
<td>The water endpoint is pinged directly during the on-demand read process. It receives the request then reads the meter and sends that current data over the network.</td>
</tr>
<tr>
<td><strong>5.9.7.2</strong> – Network equipment</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td><strong>5.10 Head End System (HES) Operations - GPS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>5.10.1</strong> The Head End System shall be able to store, manage and report on GPS data for the following devices:</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td><strong>5.10.1.1</strong> – Water endpoint</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td><strong>5.10.1.2</strong> – Network equipment</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td><strong>5.10.2</strong> GPS data shall be captured and provided in the following formats:</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>- Projected Coordinate System: NAD_1983_StatePlane_Texas_South_Central_FIPS_420 4_Feet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Projection: Lambert_Conformal_Conic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- False_Easting: 1996800.00000000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- False_Northing: 13123333.33333333</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Central_Meridian: -99.0000000000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Standard_Parallel_1: 29.36333333</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Standard_Parallel_2: 30.26333333</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Latitude_Of_Origin: 27.83333333</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Linear_Unit: Foot_US</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Geographic Coordinate System: GCS_North_American_1983</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Datum: D_North_American_1983</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Prime_Meridian: Greenwich</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Angular_Unit: Degree</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>5.11 Head End System (HES) Operations - Flow Detection and Notification (Water)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>5.11.1</strong> The Head End System shall detect and report continuous usage at a metered endpoint as an indicator of potential leakage</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td><strong>5.11.2</strong> Initially: The Head End System shall provide the capability to detect backflow (e.g. reverse flow) conditions at a metered endpoint</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td><strong>5.11.3</strong> The Head End System shall provide the capability to detect excess flow or &quot;burst&quot; at a metered endpoint</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>5.0 - AMI Head End System</td>
<td>SaaS Solution</td>
<td></td>
</tr>
<tr>
<td>---------------------------</td>
<td>--------------</td>
<td></td>
</tr>
<tr>
<td><strong>5.11.4</strong> The Head End System shall detect and report on Empty Pipe at a metered endpoint.</td>
<td>AMI Head End System Complies</td>
<td>Comply</td>
</tr>
<tr>
<td><strong>5.12</strong> Head End System (HES) Operations - Device Module Battery Health</td>
<td>Offeror Comments</td>
<td>Comply</td>
</tr>
<tr>
<td><strong>5.13</strong> Head End System (HES) Operations - Threshold Monitoring (Water)</td>
<td>Iron offers options for pressure monitoring and other events. We have several options through our partner program for these features and will work with SAWS upon selection to meet the needs for the use cases SAWS is trying to solve. Iron offers partner devices that communicate over the GenX network. They are capable of interfacing with many commercially available pressure, temperature and other monitoring devices. These devices are roadmapped to offer pump control and other automated features. Iron and our partner U53 offer reliable and quick communication of additional data over the proposed network for San Antonio Water System. The U53 IOT device enables SAWS to monitor additional points in the distribution network for pressure variances that could result in damage to underground infrastructure. The device (which is not currently included in our pricing) does not require a metering endpoint and can be installed in underground vaults or pumping stations. Through the partnership we also offer temperature and water quality sensing of the water in the distribution network. Other services we can offer include Stormwater monitoring, Sewer overflow monitoring and Sewer SSD monitoring. Upon selection Iron would like to review with how these capabilities can benefit SAWS.</td>
<td></td>
</tr>
<tr>
<td><strong>5.13.1</strong> The Head End System shall have the capability to set Utility defined pressure thresholds for monitoring of customer consumption.</td>
<td>Does Not Comply</td>
<td></td>
</tr>
<tr>
<td><strong>5.13.1.1</strong> The Head End System shall have the capability to provide alerts (e.g. alarms, events) when such thresholds are exceeded.</td>
<td>Does Not Comply</td>
<td>Iron offers options for pressure monitoring and other events. We have several options through our partner program for these features and will work with SAWS upon selection to meet the needs for the use cases SAWS is trying to solve. Iron offers partner devices that communicate over the GenX network. They are capable of interfacing with many commercially available pressure, temperature and other monitoring devices. These devices are roadmapped to offer pump control and other automated features. Iron and our partner U53 offer reliable and quick communication of additional data over the proposed network for San Antonio Water System. The U53 IOT device enables SAWS to monitor additional points in the distribution network for pressure variances that could result in damage to underground infrastructure. The device (which is not currently included in our pricing) does not require a metering endpoint and can be installed in underground vaults or pumping stations. Through the partnership we also offer temperature and water quality sensing of the water in the distribution network. Other services we can offer include Stormwater monitoring, Sewer overflow monitoring and Sewer SSD monitoring. Upon selection Iron would like to review with how these capabilities can benefit SAWS.</td>
</tr>
<tr>
<td><strong>5.14</strong> Head End System (HES) Operations - Temperature Sensing</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>5.14.1</strong> The Head End System shall provide the capability to detect and report on temperature and temperature variations.</td>
<td>Does Not Comply</td>
<td>Iron offers options for temperature monitoring and other events. We have several options through our partner program for these features and will work with SAWS upon selection to meet the needs for the use cases SAWS is trying to solve.</td>
</tr>
<tr>
<td><strong>5.15</strong> Head End System (HES) Operations - Hydrant Monitoring</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

System Requirements
<table>
<thead>
<tr>
<th>5.0 - AMI Head End System</th>
<th>SaaS Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AMI Head End System Complies</strong></td>
<td><strong>Offeror Comments</strong></td>
</tr>
<tr>
<td><strong>5.15.1</strong> The Head End System shall provide the capability to detect and report on hydrant monitoring events.</td>
<td>Does Not Comply</td>
</tr>
<tr>
<td><strong>5.16.1</strong> The Head End System shall provide the capability to detect and report on Pressure and Pressure variations.</td>
<td>Does Not Comply</td>
</tr>
<tr>
<td><strong>5.17</strong> Head End System (HES) Operation - Integrations</td>
<td></td>
</tr>
<tr>
<td><strong>5.17.1</strong> Describe in detail how the proposed AMI Solution is able to integrate into the SAWS suite of systems described in Appendix 1: SAWSS IT Solution Architecture for each of the following functionality:</td>
<td>Comply</td>
</tr>
<tr>
<td><strong>5.17.1.1</strong> – Scheduled Reads (On-Cycle)</td>
<td>Comply</td>
</tr>
<tr>
<td><strong>5.17.1.2</strong> – On-Demand Reads (Off-Cycle)</td>
<td>Configuration</td>
</tr>
<tr>
<td><strong>5.17.1.4</strong> – PING (e.g. Module)</td>
<td>Does Not Comply</td>
</tr>
<tr>
<td><strong>5.17.1.6</strong> – Provisioning</td>
<td>Configuration</td>
</tr>
<tr>
<td><strong>5.17.2</strong> Describe in detail how the AMI Head End System utilizes incremental extract files and Application Program Interfaces (API) to provide the following data to the external systems defined in the system context diagram (see Appendix 1: SAWSS IT Solution Architecture):</td>
<td>Comply</td>
</tr>
<tr>
<td><strong>5.17.2.1</strong> – Register Reads</td>
<td>Comply</td>
</tr>
<tr>
<td><strong>5.17.2.2</strong> – Interval Reads</td>
<td>Comply</td>
</tr>
<tr>
<td><strong>5.17.2.3</strong> – Events and Alarms</td>
<td>Comply</td>
</tr>
<tr>
<td><strong>5.17.3</strong> Describe in detail how the proposed solution has been Service Oriented Architecture (SOA) enabled, indicate actual experience in implementing the proposed solution at a utility in an SOA environment, including the types of services that have been implemented.</td>
<td>Comply</td>
</tr>
<tr>
<td>5.0 - AMI Head End System</td>
<td>SaaS Solution</td>
</tr>
<tr>
<td>---------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td><strong>5.17.4</strong> Describe in detail the suite of application program interfaces (e.g. WSDL, JMS, CIM, Multiplex etc.) and catalog of message types that are currently provided by the AMI Head End System to support the functionality described herein.</td>
<td>Comply</td>
</tr>
</tbody>
</table>

**5.18 Data Analytics**

| 5.18.1 Describe in detail the capabilities of the AMI Head End System to analyze module alarms/events, register data and interval data to determine. | Comply | Please refer to the attached document Temetra Monitoring and Reporting |
| 5.18.1.1 - Non-revenue water | Comply | See 5.18.1. |
| 5.18.1.2 - Distribution leak detection | Comply | See 5.18.1. |
| 5.18.1.3 - Customer Premises leak detection | Comply | See 5.18.1. |
| 5.18.1.4 - Theft detection | Comply | See 5.18.1. |
| 5.18.1.5 - Distribution pressure anomalies | Comply | See 5.18.1. |
| 5.18.1.6 - Customer Premises pressure variations | Comply | See 5.18.1. |
| 5.18.1.7 - Backflow | Comply | See 5.18.1. |

| 5.18.2 Describe in detail the capabilities of the AMI Head End System to prioritize and/or filter the analysis of module alarms and events. | Comply | All readings are assembled into schedules, that can be manipulated to drive sophisticated workflows and bill runs. The idea workflow for billing is the billing engine to send requests to Temetra for readings within a specified time window, and Temetra will then respond with specific responses to these requests, irrespective of collection type or availability. Rules can be defined in the response to determine exact output to billing. When readings are unavailable or fall outside validation (unread, skip, estimated index, customer-supplied read etc.). |

| 5.18.3 Describe in detail the capabilities of the AMI Head End System to support any other reactive analytics. | Comply | See 5.18.2. |

| 5.18.4 Describe in detail the capabilities of the AMI Head End System to support any pro-active analytics. | Comply | See 5.18.2. |

| 5.18.5 Describe any additional data sources to which the AMI Head End System can be integrated that support additional reactive or pro-active analytics. For each additional data source, explain how it supports the additional reactive or pro-active analytic. | Comply | See 5.18.2. |

| 5.18.6 Describe the user interface utilized to view the outputs of reactive and pro-active analytics. | Comply | Please refer to the attached document Temetra Monitoring and Reporting |

| 5.18.7 Describe the ability to data-mine or create ad-hoc reports utilizing the Offeror's analytics solution. | Comply | See 5.18.2. |

| 5.18.8 Provide a roadmap of data analytics and a brief explanation of each that Offeror plans to implement over the next 18 months. | Comply | See attached solution roadmap. |

| 5.18.9 Describe the process that Offeror will utilize to make data analytics developed for other Offeror customers available to SAVS. | Comply | SAVS will be provided non-proprietary software updates. |
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104 of 210


### 6.0 - AMI Non-Functional Requirements (NFR)

<table>
<thead>
<tr>
<th>Requirement</th>
<th>AMI Solution Compliance</th>
<th>Officer AMI Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.2.3 Provide your standard disaster recovery plan. Offer should provide this as an appendix to Offeror’s proposal.</td>
<td>Comply</td>
<td>Iron has established formal policies and procedures to ensure that all key processes within the company have the requisite internal controls in place. This includes a disaster recovery plan so that all critical operations will have appropriate redundancy, failover, and restoration capabilities. Recovery of client environments is an optional component of Iron's standard hosting offering. When a customer buys a disaster recovery solution, the plans are exercised jointly, annually based on the terms of the services contract. For customers who have purchased the Disaster Recovery option, if Iron declares, pursuant to the Disaster Recovery Plan, that an event causing a significant loss of a production system functionality and/or inability to access or read production data is a &quot;disaster,&quot; for a prolonged period of time Iron will provide fallover between the production and disaster recovery environments in a manner that meets the agreed upon RTO and RPO. Iron will restore the production environment in accordance with the Disaster Recovery Plan.</td>
</tr>
<tr>
<td>6.2.4 The disaster recovery plan will be reviewed and revised (as needed) on an annual basis.</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>6.2.5 Are any disaster recovery locations inside the SAWIS data zone?</td>
<td>Does Not Comply</td>
<td></td>
</tr>
</tbody>
</table>

#### 6.3 Non-Functional Requirements (NFR) - Monitoring, Logging & Auditing

<table>
<thead>
<tr>
<th>Requirement</th>
<th>AMI Solution Compliance</th>
<th>Officer AMI Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.3.1 The solution shall provide monitoring, audit logging and reporting of system events, including but not limited to security events, user events, etc.</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>6.3.2 The solution shall support the use of SNMP v3 for monitoring.</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>6.3.3 The solution shall support monitoring of system logs from all hardware and software components at a centralized logging server.</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>6.3.4 The solution shall support periodic synchronization of system clocks with a centralized clock using NTP for all components.</td>
<td>Comply</td>
<td>The network and HES are time-synchronized to within 30s of NIST.</td>
</tr>
<tr>
<td>6.3.5 The solution’s system clocks shall be periodically synchronized to minimize drift.</td>
<td>Comply</td>
<td>See above.</td>
</tr>
<tr>
<td>6.3.6 The solution’s retention period for all log repositories shall meet business and regulatory requirements and be no less than one year.</td>
<td>Comply</td>
<td>This is available through the SaaS agreement.</td>
</tr>
<tr>
<td>6.3.7 The solution shall integrate with standard security incident and event management tools.</td>
<td>Comply</td>
<td>Can be done as an integration part of the project.</td>
</tr>
</tbody>
</table>

#### 6.4 Non-Functional Requirements (NFR) - IS Standards

<table>
<thead>
<tr>
<th>Requirement</th>
<th>AMI Solution Compliance</th>
<th>Officer AMI Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.4.1 The solution shall support SAWIS IS standards and Preferences contained within this RFP. Highlight any areas of non-compliance.</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>6.4.2 The solution shall support application interoperability Multiplexing standard.</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>6.4.3 The solution shall utilize ISF approved encryption modes and algorithms.</td>
<td>Comply</td>
<td>We can configure the HES to support the Multiplexing export.</td>
</tr>
<tr>
<td>6.4.4 The solution must be SOX compliant.</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>6.4.5 The solution shall be able to support the central time zone for time-sensitive meter read data elements such as meter usage data, meter events, remote meter commands, firmware updates, weather, temperature, etc.</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>6.4.6 The solution shall have the ability to properly handle daylight savings, including the double hour in the fall, the missing hour in the spring, internal and user interface representation, and representation in interfaces to other applications.</td>
<td>Comply</td>
<td></td>
</tr>
</tbody>
</table>

#### 6.5 Non-Functional Requirements (NFR) - General Security (Account Management - User Authentication)

<table>
<thead>
<tr>
<th>Requirement</th>
<th>AMI Solution Compliance</th>
<th>Officer AMI Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.5.1 Does the solution support ESSO through integration with other authentication and authorization systems such as AD?</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>6.0 - AMI Non-Functional Requirements (NFR)</td>
<td>AMI Solution Complies</td>
<td>Other AMI Comments</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>-----------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>6.5.2 The solution shall have configurable technical controls to enforce password length and complexity to meet SANS standards.</td>
<td>Comply</td>
<td>The RBAC security capabilities include all functions to authenticate (who and what is allowed onto the system), authorize (given your role, what you can do), and encrypt (prevent snooping of content) communications across the SANS system. These capabilities span from the application in the back office to each and every device in the field. The SANS leverages hardware-based mechanisms to secure and accelerate these functions, and uses Public Key Infrastructure (PKI) for its security certificates. We also use a Certificate Authority which acts as a trusted anchor for every device communicating on the SANS network. No device is allowed to &quot;self-sign&quot; its security certificate, so we prevent man-in-the-middle and other spoofing attacks.</td>
</tr>
<tr>
<td>6.5.2.1 All passwords must be at least 8 characters</td>
<td>Comply Same as 6.5.2</td>
<td></td>
</tr>
<tr>
<td>6.5.2.2 Must contain characters from 3 categories of either lower case character, upper case letter, number, and, special character</td>
<td>Comply Same as 6.5.2</td>
<td></td>
</tr>
<tr>
<td>6.5.3 The solution shall have the ability to ensure passwords shall not be embedded in source code, scripts, and tools.</td>
<td>Comply Same as 6.5.2</td>
<td></td>
</tr>
<tr>
<td>6.5.4 The solution shall ensure password / passphrase length, complexity, and aging requirements.</td>
<td>Comply Same as 6.5.2</td>
<td></td>
</tr>
<tr>
<td>6.5.5 The solution shall support remaining built-in default account identifiers, passwords, and authorizations</td>
<td>Comply Same as 6.5.2</td>
<td></td>
</tr>
<tr>
<td>6.5.6 The solution shall have the ability to ensure all credentials shall be encrypted while at rest and in transit.</td>
<td>Comply Same as 6.5.2</td>
<td></td>
</tr>
<tr>
<td>6.5.7 The solution shall enforce a defined number of consecutive invalid access attempts by a user during a pre-determined time period.</td>
<td>Comply Same as 6.5.2</td>
<td></td>
</tr>
<tr>
<td>6.5.8 The solution shall automatically lock the account/handle for a pre-determined period, or until reviewed by an administrator when the maximum number of unsuccessful attempts is exceeded.</td>
<td>Comply Same as 6.5.2</td>
<td></td>
</tr>
<tr>
<td>6.5.9 The solution shall prevent further access to the system by initiating a session lock that remains in effect until the user reestablishes access using appropriate identification and authentication procedures.</td>
<td>Comply Same as 6.5.2</td>
<td></td>
</tr>
<tr>
<td>6.5.10 The solution shall manage user identifiers by: (i) uniquely identifying each user; (ii) verifying the identity of each user; (iii) ensuring that the user identifier is issued to the intended party; (iv) disabling user identifiers after a pre-determined period of inactivity; and (v) archiving user identifiers.</td>
<td>Comply Same as 6.5.2</td>
<td></td>
</tr>
<tr>
<td>6.5.11 The solution shall ensure a network connection at the end of a session or after a pre-determined period of inactivity.</td>
<td>Comply Same as 6.5.2</td>
<td></td>
</tr>
<tr>
<td>6.5.12 The solution shall restrict access, with appropriate permissions, to raw AMI data, VEE formatted data, and manually edited data.</td>
<td>Comply Same as 6.5.2</td>
<td>The HES does not perform VEE but it will control access to all data in the network.</td>
</tr>
<tr>
<td>6.5.13 The solution must have controls in place to prevent unauthorized access; this includes but is not limited to people, processes or transactions that can change data, invoke remote commands, etc.</td>
<td>Comply Same as 6.5.2</td>
<td></td>
</tr>
<tr>
<td>6.5.14 The solution shall restrict access to actively trigger work order service requests for appropriate utility systems to authorized individuals by role.</td>
<td>Comply Same as 6.5.2</td>
<td></td>
</tr>
<tr>
<td>6.5.15 The solution shall restrict access to update or cancel pending pickup lead reports to authorized individuals by role.</td>
<td>Comply Same as 6.5.2</td>
<td></td>
</tr>
<tr>
<td>6.5.16 The solution shall allow each user (ID) to be assigned to one or more user roles.</td>
<td>Comply Same as 6.5.2</td>
<td></td>
</tr>
<tr>
<td>6.5.17 The solution shall allow primary users to have the ability to remove secondary users.</td>
<td>Comply Same as 6.5.2</td>
<td>Configuration Currently Admin users have the authority to control users.</td>
</tr>
<tr>
<td>6.5.18 The solution shall allow &quot;super users&quot; to create, modify, and assign user roles for viewing and updating data on a per screen basis.</td>
<td>Comply Same as 6.5.2</td>
<td>Configuration</td>
</tr>
<tr>
<td>6.5.19 The solution shall allow a supervisor the ability to temporarily reassign work to a single alternate analyst based upon analyst work load or availability.</td>
<td>Comply Same as 6.5.2</td>
<td>Does Not Comply The HES does not directly make calls to the Work Order Management system.</td>
</tr>
<tr>
<td>6.5.20 The solution shall allow a supervisor to delegate the ability to reassign work to a named authorized solution user.</td>
<td>Comply Same as 6.5.2</td>
<td>Does Not Comply The HES is not a Work Order Management system.</td>
</tr>
<tr>
<td>6.5.21 The solution shall have role-based authorization with administrative capability to grant a user authorization as well as assign a user to roles.</td>
<td>Comply Same as 6.5.2</td>
<td></td>
</tr>
<tr>
<td>6.5.22 The solution shall have the ability to assign multiple user IDs to a single user role via a single transaction.</td>
<td>Comply Same as 6.5.2</td>
<td></td>
</tr>
<tr>
<td>6.5.23 The solution shall have the ability to prevent unauthorized parties from accessing data.</td>
<td>Comply Same as 6.5.2</td>
<td></td>
</tr>
<tr>
<td>6.5.24 The solution shall enforce assigned authorizations for controlling access to the system using Role Base Access Control (RBAC).</td>
<td>Comply Same as 6.5.2</td>
<td></td>
</tr>
<tr>
<td>6.5.25 The solution shall ensure that access to security functions (deployed in hardware, software, and firmware) and information are restricted to authorized personnel (e.g., security administrators).</td>
<td>Comply Same as 6.5.2</td>
<td></td>
</tr>
<tr>
<td>6.5.26 The solution shall maintain audit logs for at a minimum: user login, user logout, actions performed, and source IP address.</td>
<td>Comply Yes as part of the SaaS agreement.</td>
<td></td>
</tr>
<tr>
<td>6.5.27 The solution shall not allow users to edit any entry in the audit log.</td>
<td>Comply Same as 6.5.2</td>
<td></td>
</tr>
<tr>
<td>The solution shall provide the ability to establish and update both permanent and temporary security access assignments.</td>
<td>Comply Same as 6.5.2</td>
<td></td>
</tr>
</tbody>
</table>

System Requirements: 106 of 210
<table>
<thead>
<tr>
<th>6.0 - AMI Non-Functional Requirements (NFR)</th>
<th>AMI Solution Complies</th>
<th>Offeror AMI Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.5.28 The solution shall enforce assigned authorizations for controlling the flow of information within the system and between interconnected systems via Access Control List or Firewall.</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>6.5.29 The solution shall support the authentication of connections between sender and receiver</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>6.5 AMI Non-Functional Requirements (NFR) - General Security (Network)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.6.1 The solution shall support a proxy server or equivalent behind the internetwork firewall to ensure that all internetwork traffic is monitored and filtered.</td>
<td>Comply</td>
<td>This is part of the SaaS solution. No software is installed physically on site at SaaS. All data and firewalls are managed in the datacenter.</td>
</tr>
<tr>
<td>6.6.2 The solution shall support and require authentication of devices and parameters</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>6.6.3 The solution shall support being deployed in a network with different security zones.</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>6.6.4 The solution shall have no restrictions on network segmentation.</td>
<td>Comply</td>
<td>The endpoints under the network can be segregated into different groups, routes, boxes for reporting and reading purposes.</td>
</tr>
<tr>
<td>6.6.5 The solution shall ensure application interfaces shall be protected with TLS or SSL.</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>6.6.6 The solution shall support the exchanges of business information with external parties through encryption using SSL or equivalent to ensure data privacy on the public network.</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>6.6.7 The solution shall implement cryptographic protections for data in transit using DES or AES algorithms that comply with industry standards.</td>
<td>Comply</td>
<td>The connection between AMI and any back-office server (e.g., database) implements either a Transport Layer Security (TLS) or SSL connection. Both ends of the connection may be authenticated, e.g., both server and clients present a digital certificate. It is recommended that the key pair used at each end to establish the TLS connection be stored in a HSM local to the device. This prevents insider attacks where passwords are shared. Only connections attempted with the correct client certificates will be permitted. TLS provides confidentiality, authentication, and integrity protection of the connection.</td>
</tr>
<tr>
<td>6.6.8 The solution shall protect the confidentiality and integrity of critical information at rest using a combination of cryptographic protections, physical, personnel, management, and operational mechanisms and procedures.</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>6.6.9 The solution shall remove or disable all unused network ports and protocols.</td>
<td>Comply</td>
<td>This is part of the SaaS agreement.</td>
</tr>
<tr>
<td>6.6.10 The solution shall remove all unused configuration files.</td>
<td>Comply</td>
<td>Routine cleanup is done as part of the SaaS agreement.</td>
</tr>
<tr>
<td>6.6.11 The solution shall disable or remove all unused media drives/ports.</td>
<td>Comply</td>
<td>Same as 6.6.10.</td>
</tr>
<tr>
<td>6.6.12 The solution shall be capable of being configured with least privilege account access for hardware and software.</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>6.6.13 The solution shall only enable ports and services required for normal operations, and shall disable all other ports and services. In those cases where unused ports and services cannot be disabled due to technical limitations, compensating measures must be applied and documented to mitigate risk exposure.</td>
<td>Comply</td>
<td>This is part of the SaaS agreement.</td>
</tr>
<tr>
<td>6.7 Non-Functional Requirements (NFR) - General Security (Application Security)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.7.5 The solution software components affected by software flaws discovered as a result of continuous monitoring shall be identified and fixed by the solution builder in a timely manner.</td>
<td>Comply</td>
<td>This is part of the SaaS agreement.</td>
</tr>
<tr>
<td>6.7.6 All global support access to solution shall be identified along with corresponding security controls.</td>
<td>Comply</td>
<td>This is part of the SaaS agreement.</td>
</tr>
<tr>
<td>6.7.7 The solution shall ensure sensitive information such as mail and model of product and/or software or firmware versions shall not be displayed before successful authentication is completed.</td>
<td>Comply</td>
<td>This is part of the SaaS agreement.</td>
</tr>
<tr>
<td>6.7.8 The solution shall employ automated mechanisms to assist in the tracing of security incidents and in the collection and analysis of incident information.</td>
<td>Comply</td>
<td>This is part of the SaaS agreement.</td>
</tr>
<tr>
<td>6.7.9 The solution shall implement automated alerts for detected Cyber Security incidents.</td>
<td>Comply</td>
<td>This is part of the SaaS agreement.</td>
</tr>
<tr>
<td>6.7.10 The solution shall employ tools and techniques to monitor events on the system, detect attacks, and provide identification of unauthorized use of the system (e.g., anti-virus and host firewall).</td>
<td>Comply</td>
<td>This is part of the SaaS agreement.</td>
</tr>
<tr>
<td>6.7.11 The solution shall detect unauthorized changes to software and information. Solution shall support standard integrity mechanisms such as parity checks, cyclical redundancy checks, or cryptographic hashes to verify files, patches and firmware.</td>
<td>Comply</td>
<td>This is part of the SaaS agreement.</td>
</tr>
<tr>
<td>6.7.12 The solution software shall eliminate common errors that affect security with respect to input data validation and buffer management.</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>6.7.13 The solution shall identify potentially security-related error conditions; generate error messages that provide information necessary for corrective actions without revealing sensitive or potentially harmful information (error log output validation).</td>
<td>Comply</td>
<td>This is part of our monitoring under the SaaS contract.</td>
</tr>
</tbody>
</table>
## 6.0 - AMI Non-Functional Requirements (NFR)

### 6.7.10
The solution shall be fully compatible with standard anti-virus software.

**Comply**

The data center is protected by virus detection software and constantly monitored with the highest security in mind. The interface to SWAG is over a secured connection to the data. All antivirus software will be compatible with the web interface.

### 6.7.11
The solution production components shall not require internet access to obtain updates.

**Comply**

As part of the SaaS and HaaS contracts, IBM is responsible for maintaining the components of the network.

### 6.7.12
The solution shall provide software updates or workarounds to mitigate all identified vulnerabilities within ten business days.

**Comply**

Iron conducts security assessments as part of our overall software development process. The process includes vulnerability assessments and selected penetration testing of iron products by a dedicated team of internal security experts or by third-party organizations. Internal testing is performed outside of the product development and quality assurance organizations to help ensure the rigor of test cases and the independence of their findings.

Iron maintains a vulnerability discovery and assessment group. It is led by the InfoSec department, with members from product development, deployment, and operations, with the expressed purpose of discovering and processing vulnerability information. The InfoSec department has modeled the vulnerability management process after NIST SP 108-40 version 2.

Regular vulnerability scans are performed using a commercial vulnerability scanner (Qualys). Scheduling is dependent on customer requirements. However, all hosted customer environments are assessed at least once a quarter. Golden Image systems, from which customer environments are deployed, are assessed weekly.

Any critical or severe vulnerability that is reported is assessed for risk to the environment and corrective actions are performed, as appropriate, to mitigate the risks.

### 6.8
Non-Functional Requirements (NFR) - General Security / Vulnerability Management

#### 6.8.1
The solution shall conduct vulnerability assessments and remediate all findings in their products/solutions at least annually.

**Comply**

Iron conducts security assessments yearly on the system components. Last assessment was completed in March 2019.

#### 6.8.2
When was the last systems and applications third-party security assessment performed?

**Comply**

Yes

#### 6.8.3
Are your systems and applications scanned for vulnerabilities prior to release?

**Comply**

We will scan the system using a software scanner.

#### 6.8.4
The solution shall use a creditable entity to perform vulnerability assessments.

**Comply**

Iron 500V is manufactured in the USA at our Watseka, MN factory.

#### 6.8.5
The solution shall include integrity and authenticity checking when updates are downloaded.

**Comply**

Iron 500V is manufactured in the USA at our Watseka, MN factory.

#### 6.8.6
The solution shall ensure all identified bidder supply chain vulnerabilities will be mitigated.

**Comply**

Iron 500V is manufactured in the USA at our Watseka, MN factory.

#### 6.8.7
The solution bidder shall notify and mitigate international supply chain risks for any hardware, software, or components manufactured, programmed, or developed outside of the United States.

**Comply**

Iron 500V is manufactured in the USA at our Watseka, MN factory.

#### 6.8.8
Security Update & Notification: bidder shall provide software updates or workarounds to mitigate all identified vulnerabilities with the following targets:
- High threat resolved immediately (or work around provided within 2 hours)
- Medium threat resolved within ten business days

**Comply**

Security Update & Notification: bidder shall provide software updates or workarounds to mitigate all identified vulnerabilities with the following targets:
- High threat resolved immediately (or work around provided within 2 hours)
- Medium threat resolved within ten business days

#### Note 1
Threat level descriptions for high, medium, and low security events are as follows:
- **High**
  - Security issues that allow immediate remote or local access, or immediate execution of code or commands, with unauthorized privileges. Examples: Most buffer overflows, backdoors, default or no password, and bypassing security on firewalls or other relevant components.
- **Medium**
  - Security issues that have the potential of granting access or allowing code execution with complex or lengthy exploit procedures. These issues can be low risk issues applied to major Internet components. Examples: Cross-site scripting, man-in-the-middle attacks, SQL injection, denial of service of major applications, and denial of service resulting in system information disclosure (such as core files).
- **Low**
  - Security issues that deny service or provide non-system information that could be used to formulate structured attacks on a target, but not directly gain unauthorized access. Examples: Denial of service attacks, non-system information disclosure (like configurations and paths), and denial of service attacks.

**Comply**

This is part of the SaaS agreement.
<table>
<thead>
<tr>
<th>10.0 - AMI Implementation Services</th>
<th>Offerer Complies</th>
<th>Offerer Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.1.1 Offerer shall describe their corporate support organization that will provide support to this project team.</td>
<td>Comply</td>
<td>To support our seasoned expert project team, Itron has a worldwide organization of nearly 6,500 employees dedicated to the utility industry. Itron's corporate expertise includes subject matter experts from our engineering, consulting and manufacturing divisions. Itron produces comprehensive, professional technical documentation for Itron's hardware and software products. In addition, during the deployment, a variety of project-specific documents will be produced. Itron looks forward to engaging with DAWD's project team to create and customize the appropriate set of documents. Following is an example list of documentation provided throughout a typical project: - Project Plans - Project Risks Register - Project Issues Register - Project Change Control Register - Project Status Reports - Technical Architecture Installation and Configuration Guide - Development Environment Setup - Training Approach - Training Needs Matrix - Training Curriculum - Training Course Standards, Environments and Templates - Communication Materials (management / project updates) - As-built documentation - Unit Test Results - Test plan, test cases, and documentation of expected and actual results. - Test Plan for Field Trial (FT) - Test Lab setup - Signed-off Test Results for User Acceptance Test (UAT)</td>
</tr>
<tr>
<td>10.1.2 Offerer shall list and describe project documents and tools that are standard to their project implementation.</td>
<td>Comply</td>
<td>The list of potential risks for this project includes: - Performance to functional requirements - Performance to schedule - Performance to budget - Managing subcontractor performance to the three items above</td>
</tr>
</tbody>
</table>
| 10.1.3 Offerer shall provide typical risk areas and the "common" issues that routinely arise during installation and implementation. | Comply | Itron follows a formal risk management process. "Risk" is defined as any potential problem that would have an impact on the project if it were to occur. Risk management attempts to identify risks that would have the greatest impact and develop ways to deal with them so that the project has its greatest chance of success. Risks are considered at the outset of a project. Regular reviews are held throughout the life of the project to assess risks previously identified and to identify new risks. The Risk Management process includes: 1. Risk Management Planning (the work instruction) 2. Risk Identification 3. Qualitative/Quantitative Risk Analysis 4. Risk Response Planning 5. Risk Monitoring and Control Identifying and mitigating project risks are core competencies that drive project success. All project members and project stakeholders need to participate in risk management.
## 10.0 - AMI Implementation Services

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
<th>Comply Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.1.4</td>
<td>Offeror shall describe the process used to identify, report, and address issues identified by SAWs related to the proposed AMI solution. Description should include channels of communication, expected response time, and any tools utilized to track and monitor issues.</td>
<td>Comply</td>
</tr>
<tr>
<td></td>
<td>During the deployment phase of the project, Itron personnel will be onsite to provide technical support. Itron’s project manager is an onsite resource who also has access to whatever other resources may be required from Itron during the implementation of the system. During the final phase of the project, support is transitioned to Itron’s Technical Support Services (TSS) group. Itron customers can obtain assistance on almost any issue through Itron’s TSS group. Support services include system operator assistance, troubleshooting, sales order inquiries, service questions, etc. Calls are routed by system type so they can be immediately directed to personnel trained on the customer’s specific system. Itron’s goal is to resolve reported problems during the first telephone call. For calls that require additional assistance, Itron’s System Support personnel acts as a “second line” of resources. They investigate and resolve issues that require effort outside of the Help Desk. In those cases where an issue requires a higher level of technical support, Itron Customer Support personnel will coordinate and track support until resolution. Technical Support Services is staffed from 5:00 a.m. through 5:00 p.m. Pacific time, Monday through Friday. Customers experiencing a critical service issue outside of Technical Support Services staffing hours may page an after-hours staff member on standby. Itron has 15 dedicated resources to respond to technical questions or requests from Itron customers. There are five primary TSS locations in North America, Liberty Lake, WA and Raleigh, NC. Customers have access to TSS resources via telephone – 1-877-437-6602, email – <a href="mailto:support@itron.com">support@itron.com</a>, and web submission – <a href="http://support.itron.com">http://support.itron.com</a>, for assistance in resolving customer issues. All issues are logged in our call tracking system (TalkForce.com) for accuracy, metrics, accountability, and closure of customer issues.</td>
<td></td>
</tr>
<tr>
<td>10.1.5</td>
<td>Offeror shall describe its ability to accommodate notifications to the deployment timeline based on SAWS Board feedback for items such as:</td>
<td>Comply</td>
</tr>
<tr>
<td>10.1.5.1</td>
<td>Expecting of deployment</td>
<td>Comply</td>
</tr>
<tr>
<td>10.1.5.2</td>
<td>Interruption of deployment</td>
<td>Comply</td>
</tr>
<tr>
<td></td>
<td>Itron’s project team will stay in continuous communication with the SAWS team, including weekly update meetings. The project schedule is monitored and any necessary changes – and their effects – will be reviewed, mitigated, and implemented.</td>
<td></td>
</tr>
<tr>
<td>10.1.6</td>
<td>Offeror shall provide their recommended best practice and experience to support SAWS' change management activities through the AMI implementation.</td>
<td>Comply</td>
</tr>
<tr>
<td></td>
<td>Itron fully appreciates the need in a project of this scope to manage the unforeseen issues that may arise over the course of a deployment. The Itron Change Control Process consists of the following steps:</td>
<td></td>
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<tr>
<td></td>
<td>Step 1: Request the change. Itron or Customers may propose a change by submitting a Project Change Request Form that describes the proposed change and the reasons for the change in reasonable detail.</td>
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<tr>
<td></td>
<td>Step 2: Respond to the request. Itron will reasonably and in good faith consider and discuss the proposed change and reply within twenty days. If Itron believes that the requested change will increase the fees or lengthen the project schedule, a proposal for the extra expense will be generated, and if applicable, an extension request to the project schedule. If Itron believes that a change requested by a Customer will impair its ability to fulfill its warranties or contractual obligations, Itron may propose that Customers modify or waive such warranties or obligations under the Master Services Agreement. Customers will respond within ten calendar days by accepting or rejecting the proposal. If Itron and a Customer are unable to agree to the proposed changes, both companies will continue to perform the obligation under the existing Project documents.</td>
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<td>Step 3: Document the change. To be effective, an operational change to the project must be documented using the Project Change Request Form, and the form must be executed by the project manager from Itron and the Customer. Project changes that modify the terms of the Master Services Agreement require the signature of authorized officers or executives from Itron and the Customer.</td>
<td></td>
</tr>
<tr>
<td>10.1.7</td>
<td>Offeror shall describe their change control process. This process should address identification, assessment, tracing, escalation, and resolution of issues related to software and firmware.</td>
<td>Comply</td>
</tr>
<tr>
<td></td>
<td>With Itron’s cloud-based Stack offering, we require Change Control authorization for all application upgrades and Hot Fixes. Itron employs a Change Control Process to all systems in a production state. Any proposed change to a production system must complete the following process before that change is allowed:</td>
<td></td>
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<tr>
<td></td>
<td>- Submit formal written description of the proposed change. The submission requires a detailed description of change, reason, and timing for the change request, and preventative and contingency action plans.</td>
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<tr>
<td></td>
<td>- Submitted change control requests are reviewed and approved during weekly scheduled Change Control Board meetings.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Submitted change control requests are managed by the Change Control Board Administrator. Change requests are archived for one year.</td>
<td></td>
</tr>
<tr>
<td><strong>10.0 - AMI Implementation Services</strong></td>
<td><strong>Offerer Comments</strong></td>
<td></td>
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<tr>
<td>--------------------------------------</td>
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<td></td>
</tr>
<tr>
<td><strong>19.1.8</strong> Offerer shall provide risk management, quality assurance, and quality control management activities as part of its implementation processes.</td>
<td>Comply Before execution of project, the Risk Management Plan will be developed. This is to identify the areas of risk so that actions can be taken to minimize or eliminate their likelihood of occurrence. The Project Manager and project team members should identify the areas of high risk. Iron's approach in risk management is to quantify risk events using Risk Assessment Guide to qualify prospective program events in terms of probability/likelihood and consequence/impact and the prioritization stage of determining the order of importance. The risk events are prioritized based on the risk rating. Mitigation and contingent actions are planned for each risk event. Please refer to the attached Iron Project Methodology document for additional details.</td>
<td></td>
</tr>
<tr>
<td><strong>19.1.9</strong> Offerer shall describe in detail the support provided and needed for a SaaS Head End Systems implementation.</td>
<td>Comply For an overview of Iron's project methodology please refer to the attached document Iron Project Methodology. From a project perspective, a SaaS headend deployment means that the Design, Build, and Deploy phases can be shortened as opposed to an on-premises installation. This is in addition to the operational benefits. Please refer to the attached Iron Sample Project Plan.</td>
<td></td>
</tr>
<tr>
<td><strong>19.1.10</strong> Offerer shall describe in detail the support provided and needed for a HeadEnd Implementation.</td>
<td>Comply For an overview of Iron's project methodology please refer to the attached document Iron Project Methodology. From a project perspective, Iron's NEA solution proposal for SAWS utilizing the existing CPS Energy network means a much shorter time to deploy, reduced risk, and the opportunity to focus on business operations improvements. Please refer to the attached Iron Sample Project Plan.</td>
<td></td>
</tr>
<tr>
<td><strong>10.2 Implementation Services - Transition to Operations (TTO)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>10.2.1</strong> Offerer shall be responsible for operation and maintenance of the AMI solution until the system acceptance by SAWS.</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td><strong>10.2.2</strong> Offerer shall be responsible for operation and maintenance of the AMI solution until the system acceptance by SAWS.</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td><strong>19.2.2.1</strong> - Network Maintenance (Warehouse, End-User and Field)</td>
<td>Comply Under Iron's proposed SaaS-HeadEnd solution, responsibilities for recovery largely fall on Iron rather than SAWS.</td>
<td></td>
</tr>
<tr>
<td><strong>19.2.2.2</strong> - Network Maintenance (Warehouse, End-User and Field)</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td><strong>19.2.2.3</strong> - Network Maintenance (Warehouse, End-User and Field)</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td><strong>19.2.2.4</strong> - Network Maintenance (Warehouse, End-User and Field)</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td><strong>19.2.3</strong> Offerer shall provide a detailed plan to SAWS in order to perform Disaster Recovery exercises.</td>
<td>Configurable Disaster recovery support will be customized to SAWS business needs. Appropriate training for SAWS will then be defined and provided. Under Iron's proposed SaaS-HeadEnd solution, responsibilities for recovery largely fall on Iron rather than SAWS.</td>
<td></td>
</tr>
<tr>
<td><strong>19.2.4</strong> Offerer shall provide detailed AMI System Integration collateral (e.g. AMI System &lt;-&gt; External Applications).</td>
<td>Comply Iron uses standard APIs interfacing with utility systems. Iron will provide the format of definitions for export of billing data as well as the import format for sending configuration/install data into the system. The customer will then adopt those interfaces in their systems to allow communication to Tamtex. Iron's implementation services include support for this process.</td>
<td></td>
</tr>
<tr>
<td><strong>19.2.5</strong> Offerer shall provide all necessary special purpose equipment, tools, and software to enable SAWS to install all required to configure and install all network equipment.</td>
<td>Comply Not applicable. SAWS does not need to install or maintain any network equipment.</td>
<td></td>
</tr>
<tr>
<td><strong>19.2.6</strong> Offerer shall provide an estimate of SAWS resource (FTEs) required to support steady-state system operations.</td>
<td>Comply Iron will provide recommendations upon meeting nas working with the staff. The FTEs would need to understand the use of the FOM software and basic endpoint troubleshooting and installation procedure.</td>
<td></td>
</tr>
<tr>
<td><strong>19.2.7</strong> Offerer shall provide documentation about monitoring of the AMI communications network, preventive and/or predictive measures be employed, and what level of field support is required to perform any necessary on-site monitoring activities. Offerer should provide this as an appendix to Offerer's proposal.</td>
<td>Comply Not applicable. Iron will provide network monitoring and preventative maintenance; SAWS will not be responsible.</td>
<td></td>
</tr>
<tr>
<td><strong>19.2.8</strong> Offerer shall provide documentation around the optimization methodology use to tune and verify its AMI solution performance and the support provided for the optimization methodology needed to meet the included AMI solution performance metrics (see Tab 8.0 Performance Metrics (SLAs) ). Offerer should provide this as an appendix to Offerer's proposal.</td>
<td>Comply Not applicable. Iron will be responsible for ensuring that the network is performing at a level that satisfies all SLAs; SAWS will not be responsible. Iron utilizes an antennas variant to remedy this to hear devices. Iron also offers a cellular endpoint solution that offers coverage to the locations that are not covered by the network. If network gear is required Iron will add this gear to maintain the SLAs at no adjustment to the Nasal fee for SAWS.</td>
<td></td>
</tr>
</tbody>
</table>

**System Requirements**

**TAB 10.0 AMI Impl Services**

111 of 210
<table>
<thead>
<tr>
<th>10.0 - AMI Implementation Services</th>
<th>Offerer Complies</th>
<th>Offerer Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.3.1 Offeror shall provide all necessary collateral deemed appropriate to oversee successful installation and sustained operation of system components including head-end software specifications and operating manual.</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>16.3.2 Collateral provided to SAWS by Offeror shall include:</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>16.3.2.1 A complete list of all system documentation including a Table of Contents and Index for each document.</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>16.3.2.2 AMI Solution Architecture Documents (i.e. Water meters, Network Equipment, Backhaul components and Head-End System).</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>16.3.2.3 User Manuals, describing the functions of the Water meters, Network Equipment, Backhaul components and Head-End System.</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>16.3.2.4 Application Guides, describing the processes and steps for the operation of each of head-end applications</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>16.3.2.5 AMI System Administration Manuals, including user account management, levels of authority, backup and restore procedures, troubleshooting procedures, etc.</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>16.3.2.6 Database Management System Manuals for the AMI System (Production, Disaster Recovery and Lower) including data load, incremental update, troubleshooting guide, data backup and restore procedures</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>16.3.2.7 Configuration manuals for meters, communications network equipment, and Head End System.</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>16.3.2.8 A complete list of all system documentation including a Table of Contents and Index for each document.</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>16.3.3 Offeror shall acknowledge that SAWS shall have the right to make and distribute as many paper and digital copies of all documentations as it deemed necessary for internal SAWS use.</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>16.3.4 Offeror shall provide SAWS new and updated manuals as they become available during the implementation process.</td>
<td>Comply</td>
<td></td>
</tr>
<tr>
<td>16.3.5 Offeror shall customize documentation to specifically addresses SAWS's implemented AMI solution.</td>
<td>Comply</td>
<td></td>
</tr>
</tbody>
</table>
### 14.0 Future Considerations

#### 14.1 Future Considerations - SCADA

<table>
<thead>
<tr>
<th>Subsection</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.1.1.1 If offered shall describe the capabilities of the proposed AMI solution to monitor and control Water SCADA devices - including pressure points, pressure relief valves, controlling/aflooding pumps, and any other capabilities.</td>
<td>These devices are connected to the water SCADA devices - including pressure points, pressure relief valves, controlling/aflooding pumps, and any other capabilities. They can be used to monitor and control these devices.</td>
</tr>
<tr>
<td>14.1.2 Offeror shall identify Supervisory Control and Data Acquisition (SCADA) solutions that Offeror has integrated with peers to integrate with its Head End System.</td>
<td>Offeror has integrated with peers to integrate with its Head End System. Offeror will welcome the opportunity to to how integration has been done upon selection.</td>
</tr>
<tr>
<td>14.2 Future Considerations - Pressure</td>
<td></td>
</tr>
<tr>
<td>14.2.1 Offeror shall describe the capabilities of the proposed AMI solution to monitor and control like hydraulic pressures.</td>
<td>These devices are connected to offer pump control and other automated features. Offeror offers a network that can be integrated with the network. These devices are connected to offer pump control and other automated features.</td>
</tr>
<tr>
<td>14.2.2 Offeror shall describe the capabilities of the proposed AMI solution to monitor existing distribution system pressures.</td>
<td>Offeror offers a network that can be integrated with the network. These devices are connected to offer pump control and other automated features.</td>
</tr>
<tr>
<td>14.2.3 Offeror shall describe the capabilities of the proposed AMI solution to utilize SAWIS pressure data in Offeror analytics.</td>
<td>Offeror offers a network that can be integrated with the network. These devices are connected to offer pump control and other automated features.</td>
</tr>
</tbody>
</table>

#### 14.3 Future Considerations - Outage

<table>
<thead>
<tr>
<th>Subsection</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.3.1 Offeror shall describe the capabilities of the proposed AMI solution to enable monitoring of water service outages.</td>
<td>Offeror offers a network that can be integrated with the network. These devices are connected to offer pump control and other automated features.</td>
</tr>
<tr>
<td>14.3.2 Offeror shall describe the capabilities of the proposed AMI solution to include location and mapping of water outages.</td>
<td>Offeror offers a network that can be integrated with the network. These devices are connected to offer pump control and other automated features.</td>
</tr>
<tr>
<td>14.3.3 Offeror shall describe the capabilities of the proposed AMI solution to enable internal and external notification of water outages.</td>
<td>Offeror offers a network that can be integrated with the network. These devices are connected to offer pump control and other automated features.</td>
</tr>
</tbody>
</table>

#### 14.4 Future Considerations - Conservation

<table>
<thead>
<tr>
<th>Subsection</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.4.1 Offeror shall describe conservation program algorithms enabled by the AMI solution.</td>
<td>Offeror offers a network that can be integrated with the network. These devices are connected to offer pump control and other automated features.</td>
</tr>
</tbody>
</table>

#### 14.5 Future Considerations - Flow

<table>
<thead>
<tr>
<th>Subsection</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.5.1 Offeror shall describe the capabilities of the proposed AMI solution to enable flow rate analysis.</td>
<td>Offeror offers a network that can be integrated with the network. These devices are connected to offer pump control and other automated features.</td>
</tr>
<tr>
<td>14.6.1 Offeror shall describe the capabilities of the proposed AMI solution to enable remote demand information of water service.</td>
<td>Offeror offers a network that can be integrated with the network. These devices are connected to offer pump control and other automated features.</td>
</tr>
</tbody>
</table>

#### 14.6 Future Considerations - AMI Solution Monitoring

<table>
<thead>
<tr>
<th>Subsection</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.6.1.1 Offeror shall describe the capabilities of the proposed AMI solution to assess and communicate the occurrence of magnetic fields and the &quot;tail effect&quot; on electromagnetic flow meter readouts.</td>
<td>Offeror offers a network that can be integrated with the network. These devices are connected to offer pump control and other automated features.</td>
</tr>
</tbody>
</table>

#### 14.7 Future Considerations - Apparent Losses

<table>
<thead>
<tr>
<th>Subsection</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.7.1 Offeror shall describe the capabilities of the proposed AMI solution to assess and communicate the occurrence of magnetic fields and the &quot;tail effect&quot; on electromagnetic flow meter readouts.</td>
<td>Offeror offers a network that can be integrated with the network. These devices are connected to offer pump control and other automated features.</td>
</tr>
<tr>
<td>14.7.2 Offeror shall describe the capabilities of the proposed AMI solution to assess apparent loss of larger meters.</td>
<td>Offeror offers a network that can be integrated with the network. These devices are connected to offer pump control and other automated features.</td>
</tr>
</tbody>
</table>
ATTACHMENT 10 – FEES ADDENDUM

This Fees Addendum sets forth the pricing for the AMI System and Services to be supplied by Itron to SAWS pursuant to the Agreement. All quantities shown represent SAWS’ current estimate of its requirements assuming full deployment of meters and modules in accordance with the Module/Meter Delivery Schedule and do not constitute binding commitments by SAWS for any purchase quantities. Actual quantities will be specified in individual Purchase Orders issued under the Agreement.

1. **500W GenX Water Module ("Module") Endpoint**

<table>
<thead>
<tr>
<th>Meter Size</th>
<th>Module quantity</th>
<th>Unit Price Module</th>
<th>Unit Price Freight (estimated)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>PILOT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5/8&quot;</td>
<td>2,188</td>
<td>$67.50</td>
<td>$0.38</td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>163</td>
<td>$67.50</td>
<td>$0.38</td>
</tr>
<tr>
<td>1&quot;</td>
<td>70</td>
<td>$67.50</td>
<td>$0.38</td>
</tr>
<tr>
<td>1 1/2&quot;</td>
<td>39</td>
<td>$67.50</td>
<td>$0.38</td>
</tr>
<tr>
<td>2&quot;</td>
<td>28</td>
<td>$67.50</td>
<td>$0.38</td>
</tr>
<tr>
<td>3&quot;</td>
<td>5</td>
<td>$67.50</td>
<td>$0.38</td>
</tr>
<tr>
<td>4&quot;</td>
<td>4</td>
<td>$67.50</td>
<td>$0.38</td>
</tr>
<tr>
<td>6&quot;</td>
<td>2</td>
<td>$67.50</td>
<td>$0.38</td>
</tr>
<tr>
<td>8&quot;</td>
<td>1</td>
<td>$67.50</td>
<td>$0.38</td>
</tr>
<tr>
<td>10&quot;</td>
<td>1</td>
<td>$67.50</td>
<td>$0.38</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>2,501</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**FULL DEPLOYMENT**

<table>
<thead>
<tr>
<th>Meter Size</th>
<th>Module quantity</th>
<th>Unit Price Module</th>
<th>Unit Price Freight (estimated)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/8&quot;</td>
<td>532,088</td>
<td>$67.50</td>
<td>$0.38</td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>39,646</td>
<td>$67.50</td>
<td>$0.38</td>
</tr>
<tr>
<td>1&quot;</td>
<td>16,972</td>
<td>$67.50</td>
<td>$0.38</td>
</tr>
<tr>
<td>1 1/2&quot;</td>
<td>9,423</td>
<td>$67.50</td>
<td>$0.38</td>
</tr>
<tr>
<td>2&quot;</td>
<td>6,666</td>
<td>$67.50</td>
<td>$0.38</td>
</tr>
<tr>
<td>3&quot;</td>
<td>1,256</td>
<td>$67.50</td>
<td>$0.38</td>
</tr>
<tr>
<td>4&quot;</td>
<td>888</td>
<td>$67.50</td>
<td>$0.38</td>
</tr>
<tr>
<td>6&quot;</td>
<td>469</td>
<td>$67.50</td>
<td>$0.38</td>
</tr>
<tr>
<td>8&quot;</td>
<td>135</td>
<td>$67.50</td>
<td>$0.38</td>
</tr>
</tbody>
</table>
Itron will use commercially reasonable efforts to minimize freight costs and expenses.

Unit price includes warranties as stated in Exhibit 2 (Equipment Warranties) to Attachment 4 (Equipment Addendum).

Pricing is fixed until December 31, 2025. Thereafter, Customer may purchase Itron-supplied Equipment at 50% off of then-current list price.

Itron will prepay freight and add those costs, without markup, to the applicable invoice for delivered Equipment.

2. In-line connectors

Itron standard in-line connector

<table>
<thead>
<tr>
<th>Length</th>
<th>Unit Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 foot</td>
<td>$5.50</td>
</tr>
</tbody>
</table>

Pricing is fixed until December 31, 2025. Thereafter, Customer may purchase Itron-supplied Equipment at 50% off of then-current list price.

Itron standard in-line connector extension

<table>
<thead>
<tr>
<th>Length</th>
<th>Unit Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 foot</td>
<td>$17.25</td>
</tr>
</tbody>
</table>

Pricing is fixed until December 31, 2025. Thereafter, Customer may purchase Itron-supplied Equipment at 50% off of then-current list price.

3. Diehl Hydrus static water meter

<table>
<thead>
<tr>
<th>Meter Size</th>
<th>Meter Manufacturer</th>
<th>Meter Quantity</th>
<th>Unit Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>PILOT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5/8&quot;</td>
<td>Diehl - HYDRUS 5/8&quot; x ¾&quot;</td>
<td>2,188</td>
<td>$89.59</td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>Diehl - HYDRUS ¾&quot; (7 ½&quot;)</td>
<td>35</td>
<td>$89.59</td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>Diehl - HYDRUS ¾&quot; (9&quot;)</td>
<td>128</td>
<td>$93.09</td>
</tr>
<tr>
<td>1&quot;</td>
<td>Diehl - HYDRUS 1&quot;</td>
<td>70</td>
<td>$141.16</td>
</tr>
<tr>
<td>1 1/2&quot;</td>
<td>Diehl - HYDRUS 1 1/2&quot; X 13&quot;</td>
<td>39</td>
<td>$392.72</td>
</tr>
<tr>
<td>Size</td>
<td>Make</td>
<td>Quantity</td>
<td>Unit Price</td>
</tr>
<tr>
<td>------</td>
<td>-------</td>
<td>----------</td>
<td>------------</td>
</tr>
<tr>
<td>2&quot;</td>
<td>Diehl HYDRUS 2&quot; X 17&quot;</td>
<td>28</td>
<td>$512.89</td>
</tr>
<tr>
<td>5/8&quot;</td>
<td>Diehl HYDRUS 5/8&quot; x ¾&quot;</td>
<td>532,088</td>
<td>$89.59</td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>Diehl HYDRUS ¾&quot; (7 ½&quot;)</td>
<td>8,500</td>
<td>$89.59</td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>Diehl HYDRUS ¾&quot; (9&quot;)</td>
<td>31,146</td>
<td>$93.09</td>
</tr>
<tr>
<td>1&quot;</td>
<td>Diehl HYDRUS 1&quot;</td>
<td>16,972</td>
<td>$141.16</td>
</tr>
<tr>
<td>1 1/2&quot;</td>
<td>Diehl HYDRUS 1 1/2&quot; X 13&quot;</td>
<td>9,423</td>
<td>$392.72</td>
</tr>
<tr>
<td>2&quot;</td>
<td>Diehl HYDRUS 2&quot; X 17&quot;</td>
<td>6,666</td>
<td>$512.89</td>
</tr>
</tbody>
</table>

**Total:** 604.795

Unit price includes warranties as stated in Exhibit 2 (Equipment Warranties) to Attachment 4 (Equipment Addendum).

Pricing is fixed until December 31, 2025.

Unit price includes Itron’s standard in-line connector at $5.50 each.

Unit price does not include Itron 500W GenX Water Module.

Unit price includes freight and all insurance costs sufficient to fully insure the Equipment during delivery to the Delivery Site.

### 4. Honeywell EvoQ4 static water meter (Meter) warranties

<table>
<thead>
<tr>
<th>Meter Size</th>
<th>Meter Manufacturer</th>
<th>Meter Quantity</th>
<th>Unit Price</th>
<th>Freight Estimated</th>
</tr>
</thead>
<tbody>
<tr>
<td>PILOT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3&quot;</td>
<td>Honeywell EVoQ4 3x12 Q4</td>
<td>5</td>
<td>$1,255.50</td>
<td>$50.00 per meter</td>
</tr>
<tr>
<td>Size</td>
<td>Model</td>
<td>Quantity</td>
<td>Unit Price</td>
<td>Per Meter Price</td>
</tr>
<tr>
<td>------</td>
<td>-------</td>
<td>----------</td>
<td>------------</td>
<td>----------------</td>
</tr>
<tr>
<td>4&quot;</td>
<td>Honeywell EVOQ4 4x14 Q4</td>
<td>4</td>
<td>$1,482.77</td>
<td>$50.00 per meter</td>
</tr>
<tr>
<td>6&quot;</td>
<td>Honeywell EVOQ4 6x18 Q4</td>
<td>2</td>
<td>$3,187.32</td>
<td>$110.00 per meter</td>
</tr>
<tr>
<td>8&quot;</td>
<td>Honeywell EVOQ4 8x20 Q4</td>
<td>1</td>
<td>$4,323.68</td>
<td>$110.00 per meter</td>
</tr>
<tr>
<td>10&quot;</td>
<td>Honeywell EVOQ4 10x17.75 Q4</td>
<td>1</td>
<td>$8,073.68</td>
<td>$125.00 per meter</td>
</tr>
</tbody>
</table>

**Total:** 13

**FULL DEPLOYMENT**

<table>
<thead>
<tr>
<th>Size</th>
<th>Model</th>
<th>Quantity</th>
<th>Unit Price</th>
<th>Per Meter Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>3&quot;</td>
<td>Honeywell EVOQ4 3x12 Q4</td>
<td>1,256</td>
<td>$1,255.50</td>
<td>$50.00 per meter</td>
</tr>
<tr>
<td>4&quot;</td>
<td>Honeywell EVOQ4 4x14 Q4</td>
<td>888</td>
<td>$1,482.77</td>
<td>$50.00 per meter</td>
</tr>
<tr>
<td>6&quot;</td>
<td>Honeywell EVOQ4 6x18 Q4</td>
<td>469</td>
<td>$3,187.32</td>
<td>$110.00 per meter</td>
</tr>
<tr>
<td>8&quot;</td>
<td>Honeywell EVOQ4 8x20 Q4</td>
<td>135</td>
<td>$4,323.68</td>
<td>$110.00 per meter</td>
</tr>
<tr>
<td>10&quot;</td>
<td>Honeywell EVOQ4 10x17.75 Q4</td>
<td>34</td>
<td>$8,073.68</td>
<td>$125.00 per meter</td>
</tr>
</tbody>
</table>

**Total:** 2,782

Unit price includes warranties as stated in Exhibit 2 (Equipment Warranties) to Attachment 4 (Equipment Addendum).

Pricing is fixed until December 31, 2025.

Unit price includes Itron’s standard in-line connector at $5.50 Each.

Unit price does not include Itron 500W GenX Water Module.

Itron will prepay freight and add those costs, without markup, to the applicable invoice for delivered Equipment. Freight includes insurance costs sufficient to fully insure the Equipment during delivery to the Delivery Site.

5. **Network as a Service (NaaS)**

Itron will invoice annually in advance for providing NaaS to SAWS at $0.10 per Endpoint per month, based on projected number of Provisioned Endpoint according to the Meter/Module Deployment Schedule. Pricing will be fixed for the Term.
6. **Software as a Service (SaaS)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Test/Development Environment</th>
<th>QA Environment</th>
<th>Disaster Recovery/Backup Environment</th>
<th>Production Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PILOT</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Set Up</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>$51,255</td>
</tr>
<tr>
<td>Price per environment</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>$52,917</td>
</tr>
</tbody>
</table>

**FULL DEPLOYMENT**

| Set Up        | $0                           | $0             | $0                                    | $70,255                 |
| Annual price per environment | $10,000                  | $10,000        | n/a                                   | n/a                     |
| Annual per Provisioned Endpoint price per environment | n/a                     | n/a            | $0.24                                 | $1.08                   |

“Set Up” pricing for Pilot will be due upon the Pilot Start Date (as that term is defined in Section 3.1 of the Agreement (Pilot Term)).

“Pilot price per environment” will be due upon environment availability to SAWS.

“Set Up” pricing for Full Deployment will be due upon first day of the System Term.

“Annual price per environment” for Full Deployment will be invoiced by Itron upon the first day of the System Term and, thereafter, on each subsequent anniversary.

“Annual per Provisioned Endpoint price per environment” will be invoiced annually in advance in accordance with Section 5 of Attachment 1 (AMI Subscription Addendum).

Prices do not escalate over the Term of the Agreement.

7. **Implementation Services**

<table>
<thead>
<tr>
<th>Year</th>
<th>Implementation Services Price</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>PILOT</td>
<td>$267,783</td>
<td>Pilot Start Date</td>
</tr>
<tr>
<td>Full Deployment Year 1*</td>
<td>$450,300</td>
<td>Start of System Term</td>
</tr>
<tr>
<td>Full Deployment Year 2</td>
<td>$360,200</td>
<td>** See note below</td>
</tr>
<tr>
<td>Full Deployment Year 3</td>
<td>$360,200</td>
<td>Second anniversary of System Term</td>
</tr>
<tr>
<td>------------------------</td>
<td>----------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>Full Deployment Year 4</td>
<td>$360,200</td>
<td>Third anniversary of System Term</td>
</tr>
<tr>
<td>Full Deployment Year 5</td>
<td>$270,200</td>
<td>***See note below</td>
</tr>
</tbody>
</table>

Pricing is fixed until the later of December 31, 2025 or the conclusion of the scope of deployment.

*If selected for the System Term, Itron will credit SAWS $277,600, and such credit will be applied against the full deployment year 1 implementation services price.

**Itron shall strive to achieve Optimization Area Acceptance for all Optimization Areas. For the first Optimization, which Customer and Itron shall mutually identify, payment of Full Deployment Year 2 Implementation Services (as set forth in Attachment 10 (Fees Addendum) shall occur only after Optimization Area Acceptance is achieved.

***Itron shall strive to achieve Final System Acceptance. Payment of Full Deployment Year 5 Implementation Services shall occur only after Final System Acceptance is achieved.

8. Travel Expenses.

Estimated travel expenses during the Pilot Term: $34,971.50

Estimated travel expenses for the period of time beginning on the first day of the System Term and continuing through the date of Final System Acceptance: $265,722.00
ATTACHMENT 11 – PAYMENT ADDENDUM

1. **General Payment Terms for Services**
   1.1. No initial payment shall be paid to Itron prior to delivering the AMI System or rendering the Services.
   1.2. Invoices shall be submitted separately through the CPMS for each individual project assignment on a monthly basis to the Project Manager.
   1.3. Payment by Customer of undisputed amounts is due within thirty (30) days after receipt of the applicable invoice. If Customer disputes any amount invoiced by Itron, including any credits due pursuant to the Service Level Requirements Addendum – Attachment 16, credits due pursuant to Section 8.5.2(E) of SOW#1, or liquidated damages pursuant to Section 26 of the Agreement (Liquidated Damages), it shall so notify Itron in writing within 30 days of receipt of the applicable invoice, and the Parties shall submit the dispute to the dispute resolution procedure set forth in Section 16 of the Agreement. If payment of the undisputed amounts due, or any portion thereof, is not made as described above, interest on the unpaid balance thereof will accrue at the lesser rate of 6 percent per annum (0.5 percent per month) or the maximum lawful rate under Section 271.005 (c) of the Texas Local Government Code until such payment is made, unless delay in payment is due to improper invoicing procedures followed by Itron.
   1.4. Itron’s payment to any Subcontractors is due within ten calendar days after receipt of payment from Customer.
   1.5. For fees billed on an hourly rate basis, Itron’s invoice shall show the name of all employees, titles, charging time to the project, the amount of time billed, the hourly rates, and the activity or activities performed by all employees. Payroll time sheets shall be provided on request of Customer.
   1.6. For fees billed on a lump sum basis, Itron’s invoice shall include a detailed summary of the progress and completion of tasks to substantiate the percentage of completion of the AMI System as rendered during the previous month.

2. **Payment for Additional Goods and Services**

Payments for Itron’s additional goods and services shall show the same information required in Sections 1.2 through 1.6 above dependent upon the type of compensation and other evidence of expenses.

3. **Payments Withheld**

Customer may offset or reject any request for payment by Itron under the following conditions:

3.1 Itron’s failure to provide adequate documentation for reimbursable expenses.

3.2 Itron’s failure to invoice as required in Sections 1.2 through 1.6 above.

3.3 Errors or mistakes in Itron’s invoice and/or defects, errors and omissions in the documents prepared by Itron or Itron’s Subcontractors that are the basis for the payment request.

3.4 Customer’s receipt of evidence that Itron’s Subcontractors have not been duly paid for their services in connection with this Agreement subsequent to Customer having disbursed compensation to Itron in consideration of and stemming from the efforts extended by the Subcontractor.

If any of these conditions exist, then interest charges will not be applicable. Customer shall provide Itron with written notice of its intention to offset or reject any request for payment by Itron. Upon written request by Itron to Customer made within ten (10) days after the date of notice sent by Customer, representatives of Customer will meet with representatives of Itron at a mutually agreed time to discuss the
circumstances surrounding the determination to offset or reject any request for payment by Itron. For clarification, this Section 3 does not in any way limit Customer’s right to credits due pursuant to the Service Level Requirements Addendum (Attachment 16), credits due pursuant to Section 8.5.2(E) of SOW#1, or liquidated damages pursuant to Section 26 of the Agreement (Liquidated Damages).
<table>
<thead>
<tr>
<th>ID</th>
<th>Task Name</th>
<th>Duration</th>
<th>Start Date</th>
<th>Finish Date</th>
<th>Resource Names</th>
<th>Predecessor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PHASE 1: PROGRAM INFRASTRUCTURE &amp; REQUIREMENTS GATHERING</td>
<td>60 days</td>
<td>Wed 7/11/19</td>
<td>Sat 7/11/19</td>
<td></td>
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<tr>
<td>2</td>
<td>PHASE 2: METS/M2M COLLABORATION</td>
<td>60 days</td>
<td>Mon 6/10/19</td>
<td>Thu 6/13/19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>PHASE 3: DAS/M2M COLLABORATION</td>
<td>60 days</td>
<td>Mon 6/10/19</td>
<td>Thu 6/13/19</td>
<td></td>
<td></td>
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<tr>
<td>4</td>
<td>PHASE 4: DASH-A SAFETY</td>
<td>60 days</td>
<td>Mon 6/10/19</td>
<td>Thu 6/13/19</td>
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**ConnectH2O - Integrated Master Schedule (IMS) - October Board Meeting**
<table>
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<tr>
<th>ID</th>
<th>Task Name</th>
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<th>Start</th>
<th>Finish</th>
<th>Resource Names</th>
<th>Predecessor</th>
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<tr>
<td>446</td>
<td>Test AB</td>
<td>3 days</td>
<td>Wed 1/26/21</td>
<td>Sat 1/29/21</td>
<td>SAWA, VASS, AM</td>
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<tr>
<td>447</td>
<td>Develop Functional Specifications for Interfaces needing during the AMI Pilot</td>
<td>28 days</td>
<td>Wed 2/9/21</td>
<td>Wed 3/9/21</td>
<td>SAWA, VASS, AM</td>
<td>435</td>
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<tr>
<td>448</td>
<td>Document Technical Design Specifications will be developed to document a</td>
<td>21 days</td>
<td>Wed 2/9/21</td>
<td>Wed 3/9/21</td>
<td>SAWA, VASS, AM</td>
<td>435</td>
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<tr>
<td>449</td>
<td>Field Testing</td>
<td>43 days</td>
<td>Thu 2/11/21</td>
<td>Sat 3/20/21</td>
<td>SAWA, VASS, AM</td>
<td>435</td>
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<tr>
<td>450</td>
<td>Integrations (Code, Text and Implement)</td>
<td>45 days</td>
<td>Thu 2/11/21</td>
<td>Sat 3/20/21</td>
<td>SAWA, VASS, AM</td>
<td>435</td>
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<tr>
<td>451</td>
<td>R3.1, R3.2, Biling Request/Response (MDM+IP, Prod. &amp; Dev.)</td>
<td>3 days</td>
<td>Fri 1/22/21</td>
<td>Sat 1/23/21</td>
<td>SAWA, VASS, AM</td>
<td>435</td>
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<tr>
<td>452</td>
<td>R3.1, R3.2, Meter/Device (MDM+IP, Prod. &amp; Dev.)</td>
<td>3 days</td>
<td>Fri 1/22/21</td>
<td>Sat 1/23/21</td>
<td>SAWA, VASS, AM</td>
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<tr>
<td>453</td>
<td>R3.1, R3.2, Meter Read &amp; Interval Data (MDM+AM, AMI-Vendor 1 &amp; 2)</td>
<td>3 days</td>
<td>Fri 1/22/21</td>
<td>Sat 1/23/21</td>
<td>SAWA, VASS, AM</td>
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<tr>
<td>454</td>
<td>R3.1, R3.2, R1.1 &amp; R1.2, 4 Meter Provisioning (MDM+AM, AMI-Vendor 1 &amp; 2)</td>
<td>3 days</td>
<td>Fri 1/22/21</td>
<td>Sat 1/23/21</td>
<td>SAWA, VASS, AM</td>
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<tr>
<td>455</td>
<td>R3.1, R3.2, Provisioning (IP, Prod.)</td>
<td>3 days</td>
<td>Fri 1/22/21</td>
<td>Sat 1/23/21</td>
<td>SAWA, VASS, AM</td>
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<tr>
<td>456</td>
<td>R5: Enable Metering, Estimating, and Billing (EE); Pre-Processing and Testing of Business Rules</td>
<td>2 days</td>
<td>Fri 1/22/21</td>
<td>Sat 1/23/21</td>
<td>SAWA, VASS, AM</td>
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<tr>
<td>457</td>
<td>Day 01 Pilot (BTW)</td>
<td>10 days</td>
<td>Wed 2/3/21</td>
<td>Wed 2/13/21</td>
<td>SAWA, VASS, AM</td>
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<tr>
<td>458</td>
<td>Preparation of SFA</td>
<td>10 days</td>
<td>Wed 2/3/21</td>
<td>Wed 2/13/21</td>
<td>SAWA, VASS, AM</td>
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<tr>
<td>459</td>
<td>Function acceptance testing (On-going)</td>
<td>8 days</td>
<td>Wed 2/3/21</td>
<td>Wed 2/10/21</td>
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<tr>
<td>460</td>
<td>Day 1 Pilot (BTW)</td>
<td>3 days</td>
<td>Fri 2/5/21</td>
<td>Sat 2/6/21</td>
<td>SAWA, VASS, AM</td>
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<tr>
<td>461</td>
<td>Day 2 Pilot (BTW)</td>
<td>3 days</td>
<td>Fri 2/5/21</td>
<td>Sat 2/6/21</td>
<td>SAWA, VASS, AM</td>
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<tr>
<td>462</td>
<td>Day 3 Pilot (BTW)</td>
<td>3 days</td>
<td>Fri 2/5/21</td>
<td>Sat 2/6/21</td>
<td>SAWA, VASS, AM</td>
<td>435</td>
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</tbody>
</table>
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125 of 210


<table>
<thead>
<tr>
<th>ID</th>
<th>WBS</th>
<th>Task Name</th>
<th>Duration</th>
<th>Start Date</th>
<th>Finish Date</th>
<th>Resource Names</th>
<th>Predecessor</th>
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<tbody>
<tr>
<td>431</td>
<td>2.3.3.3</td>
<td>Review, refine, and update Technology Blueprint Documents</td>
<td>210 days</td>
<td>Mon 6/1/12</td>
<td>Wed 4/29/13</td>
<td>SAVS, VASS, AM, EPI, EM, EM</td>
<td>405, 406, 416</td>
</tr>
<tr>
<td>432</td>
<td>2.3.3.3.3</td>
<td>Review, refine, and update Technology Capacity Plan</td>
<td>210 days</td>
<td>Mon 6/1/12</td>
<td>Wed 4/29/13</td>
<td>SAVS, VASS, AM, EPI, EM, EM</td>
<td>405, 406, 416</td>
</tr>
<tr>
<td>433</td>
<td>2.3.3.4</td>
<td>Review, refine, and update Environmental Landscape</td>
<td>210 days</td>
<td>Mon 6/1/12</td>
<td>Wed 4/29/13</td>
<td>SAVS, VASS, AM, EPI, EM, EM</td>
<td>405, 406, 416</td>
</tr>
<tr>
<td>434</td>
<td>2.3.4</td>
<td>Provide Site-Going Corrective Action, Issue Resolution &amp; Technical Support</td>
<td>325 days</td>
<td>Mon 4/11/12</td>
<td>Wed 4/28/12</td>
<td>SAVS, VASS, AM, EPI, EM, EM</td>
<td>405, 406, 416</td>
</tr>
<tr>
<td>435</td>
<td>2.3.4.1</td>
<td>Monitor Progress in accordance with Program Management Plans</td>
<td>325 days</td>
<td>Mon 4/11/12</td>
<td>Wed 4/28/12</td>
<td>SAVS, VASS, AM, EPI, EM, EM</td>
<td>405, 406, 416</td>
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<tr>
<td>436</td>
<td>2.3.4.2</td>
<td>Provide Corrective Action for Deviations from RFP</td>
<td>325 days</td>
<td>Mon 4/11/12</td>
<td>Wed 4/28/12</td>
<td>SAVS, VASS, AM, EPI, EM, EM</td>
<td>405, 406, 416</td>
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<tr>
<td>437</td>
<td>2.5</td>
<td>Support Meter Asset Management</td>
<td>120 days</td>
<td>Wed 10/1/10</td>
<td>Fri 2/28/11</td>
<td>SAVS, VASS, AM, EPI, EM, EM</td>
<td>405, 406, 416</td>
</tr>
<tr>
<td>438</td>
<td>2.5.1.1</td>
<td>Understand existing Asset Management Policies and Process</td>
<td>4 days</td>
<td>Wed 10/7/10</td>
<td>Tue 10/13/10</td>
<td>SAVS, VASS, AM, EPI, EM, EM</td>
<td>405, 406, 416</td>
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<tr>
<td>439</td>
<td>2.5.2.1</td>
<td>Develop Asset Management Strategy</td>
<td>4 days</td>
<td>Wed 10/7/10</td>
<td>Tue 10/13/10</td>
<td>SAVS, VASS, AM, EPI, EM, EM</td>
<td>405, 406, 416</td>
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<tr>
<td>440</td>
<td>2.5.3.1</td>
<td>Develop &quot;To-do&quot; processes</td>
<td>4 days</td>
<td>Wed 10/7/10</td>
<td>Tue 10/13/10</td>
<td>SAVS, VASS, AM, EPI, EM, EM</td>
<td>405, 406, 416</td>
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<tr>
<td>441</td>
<td>2.5.4.1</td>
<td>Install, Configure and Integrate WMS</td>
<td>4 days</td>
<td>Wed 10/7/10</td>
<td>Tue 10/13/10</td>
<td>SAVS, VASS, AM, EPI, EM, EM</td>
<td>405, 406, 416</td>
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<tr>
<td>442</td>
<td>2.5.5.5</td>
<td>Test (RT and UAT)</td>
<td>4 days</td>
<td>Wed 10/7/10</td>
<td>Tue 10/13/10</td>
<td>SAVS, VASS, AM, EPI, EM, EM</td>
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<tr>
<td>443</td>
<td>2.5.6.6</td>
<td>Begin tracking of assets</td>
<td>4 days</td>
<td>Wed 10/7/10</td>
<td>Tue 10/13/10</td>
<td>SAVS, VASS, AM, EPI, EM, EM</td>
<td>405, 406, 416</td>
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<tr>
<td>444</td>
<td>3.1</td>
<td>Provide AMP - Pilot Performance Reporting</td>
<td>210 days</td>
<td>Tue 6/14/12</td>
<td>Tue 9/12/12</td>
<td>SAVS, VASS, AM, EPI, EM, EM</td>
<td>405, 406, 416</td>
</tr>
<tr>
<td>445</td>
<td>3.1.1</td>
<td>Provide Pilot Performance Reporting</td>
<td>210 days</td>
<td>Tue 6/14/12</td>
<td>Tue 9/12/12</td>
<td>SAVS, VASS, AM, EPI, EM, EM</td>
<td>405, 406, 416</td>
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<tr>
<td>446</td>
<td>3.1.1.1</td>
<td>Start/Contact Testing</td>
<td>100 days</td>
<td>Tue 6/14/12</td>
<td>Tue 9/12/12</td>
<td>SAVS, VASS, AM, EPI, EM, EM</td>
<td>405, 406, 416</td>
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<tr>
<td>447</td>
<td>3.1.1.4</td>
<td>Analyze, Report &amp; Approve Pilot Results</td>
<td>100 days</td>
<td>Tue 6/14/12</td>
<td>Tue 9/12/12</td>
<td>SAVS, VASS, AM, EPI, EM, EM</td>
<td>405, 406, 416</td>
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<tr>
<td>448</td>
<td>3.1.2</td>
<td>Field Acceptance Testing</td>
<td>100 days</td>
<td>Tue 6/14/12</td>
<td>Tue 9/12/12</td>
<td>SAVS, VASS, AM, EPI, EM, EM</td>
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<tr>
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<td>3.1.3</td>
<td>Manage Field Acceptance Testing</td>
<td>100 days</td>
<td>Tue 6/14/12</td>
<td>Tue 9/12/12</td>
<td>SAVS, VASS, AM, EPI, EM, EM</td>
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<tr>
<td>450</td>
<td>4.1</td>
<td>Benefit Realization</td>
<td>5 days</td>
<td>Thu 8/12/12</td>
<td>Tue 8/17/12</td>
<td>SAVS, VASS, AM, EPI, EM, EM</td>
<td>405, 406, 416</td>
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<tr>
<td>451</td>
<td>4.1.1.3</td>
<td>Perform Benefit Analysis</td>
<td>5 days</td>
<td>Thu 8/12/12</td>
<td>Tue 8/17/12</td>
<td>SAVS, VASS, AM, EPI, EM, EM</td>
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<td>452</td>
<td>4.1.4</td>
<td>Cost Assessment</td>
<td>5 days</td>
<td>Thu 8/12/12</td>
<td>Tue 8/17/12</td>
<td>SAVS, VASS, AM, EPI, EM, EM</td>
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<td>Perform Cost Assessment</td>
<td>5 days</td>
<td>Thu 8/12/12</td>
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<td>454</td>
<td>4.2</td>
<td>Provide Performance Reporting</td>
<td>100 days</td>
<td>Wed 6/14/12</td>
<td>Wed 9/12/12</td>
<td>SAVS, VASS, AM, EPI, EM, EM</td>
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<td>455</td>
<td>4.2.1</td>
<td>Provide Project Status Reports</td>
<td>100 days</td>
<td>Wed 6/14/12</td>
<td>Wed 9/12/12</td>
<td>SAVS, VASS, AM, EPI, EM, EM</td>
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<td>456</td>
<td>4.2.2</td>
<td>Closeout Successful Pilot</td>
<td>0 days</td>
<td>Thu 8/12/12</td>
<td>Thu 8/12/12</td>
<td>SAVS, VASS, AM, EPI, EM, EM</td>
<td>405, 406, 416</td>
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<tr>
<td>457</td>
<td>4.3.1</td>
<td>Closeout Successful Pilot</td>
<td>0 days</td>
<td>Tue 8/12/12</td>
<td>Tue 8/12/12</td>
<td>SAVS, VASS, AM, EPI, EM, EM</td>
<td>405, 406, 416</td>
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<tr>
<td>458</td>
<td>4.3.2</td>
<td>Pilot Completed &amp; Successful</td>
<td>0 days</td>
<td>Tue 8/12/12</td>
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<td>SAVS, VASS, AM, EPI, EM, EM</td>
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<tr>
<td>459</td>
<td>4.3.3</td>
<td>Select AM/PM Vendor</td>
<td>0 days</td>
<td>Tue 8/12/12</td>
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<td>SAVS, VASS, AM, EPI, EM, EM</td>
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<tr>
<td>460</td>
<td>4.3.4</td>
<td>Finalize AM/PM Selection</td>
<td>0 days</td>
<td>Tue 8/12/12</td>
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<td>001</td>
<td>BS.5.42</td>
<td>Business Release 5.4</td>
<td>130 days</td>
<td>Wed 8/3/22</td>
<td>Wed 11/30/22</td>
<td>SAWS, VASS, AM, EP, VEND</td>
<td>BS.4.4</td>
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<td>002</td>
<td>BS.5.42</td>
<td>Design</td>
<td>60 days</td>
<td>Wed 8/3/22</td>
<td>Sat 9/1/22</td>
<td>SAWS, VASS, AM, EP, VEND</td>
<td>BS.4.4</td>
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<tr>
<td>003</td>
<td>BS.5.42</td>
<td>Build</td>
<td>90 days</td>
<td>Mon 10/3/22</td>
<td>Mon 10/3/22</td>
<td>SAWS, VASS, AM, EP, VEND</td>
<td>BS.4.4</td>
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<tr>
<td>004</td>
<td>BS.5.42</td>
<td>Test</td>
<td>90 days</td>
<td>Tue 11/22</td>
<td>Mon 10/3/22</td>
<td>SAWS, VASS, AM, EP, VEND</td>
<td>BS.4.4</td>
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<tr>
<td>005</td>
<td>BS.5.43</td>
<td>Business Release 5.3</td>
<td>330 days</td>
<td>Thu 12/1/22</td>
<td>Thu 9/30/23</td>
<td>SAWS, VASS, AM, EP, VEND</td>
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<tr>
<td>006</td>
<td>BS.5.43</td>
<td>Design</td>
<td>60 days</td>
<td>Thu 12/22</td>
<td>Sat 1/3/23</td>
<td>SAWS, VASS, AM, EP, VEND</td>
<td>BS.4.4</td>
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<tr>
<td>007</td>
<td>BS.5.43</td>
<td>Build</td>
<td>30 days</td>
<td>Mon 1/23</td>
<td>Tue 2/22</td>
<td>SAWS, VASS, AM, EP, VEND</td>
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<td>008</td>
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<td>Test</td>
<td>90 days</td>
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<td>009</td>
<td>BS.5.44</td>
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<td>330 days</td>
<td>Fri 3/31/23</td>
<td>Fri 7/28/23</td>
<td>SAWS, VASS, AM, EP, VEND</td>
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<td>010</td>
<td>BS.5.44</td>
<td>Design</td>
<td>60 days</td>
<td>Mon 3/30/23</td>
<td>Wed 5/26/23</td>
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<td>011</td>
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<td>30 days</td>
<td>Thu 5/26/23</td>
<td>Thu 7/5/23</td>
<td>SAWS, VASS, AM, EP, VEND</td>
<td>BS.4.4</td>
</tr>
<tr>
<td>012</td>
<td>BS.5.44</td>
<td>Test</td>
<td>90 days</td>
<td>Thu 5/26/23</td>
<td>Thu 7/5/23</td>
<td>SAWS, VASS, AM, EP, VEND</td>
<td>BS.4.4</td>
</tr>
<tr>
<td>013</td>
<td>BS.5</td>
<td>Mobilize AMI &amp; EPI Vendors</td>
<td>330 days</td>
<td>Wed 1/5/22</td>
<td>Wed 6/4/22</td>
<td>SAWS, VASS, AM, EP, VEND</td>
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<tr>
<td>014</td>
<td>BS.5</td>
<td>Mobilize AMI Vendor</td>
<td>130 days</td>
<td>Wed 1/5/22</td>
<td>Wed 5/4/22</td>
<td>SAWS, VASS, AM, EP, VEND</td>
<td>BS.5.3</td>
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<tr>
<td>015</td>
<td>BS.5</td>
<td>Order &amp; Receive Network Equipment</td>
<td>130 days</td>
<td>Wed 1/5/22</td>
<td>Wed 5/4/22</td>
<td>SAWS, VASS, AM, EP, VEND</td>
<td>BS.5.3</td>
</tr>
<tr>
<td>016</td>
<td>BS.5</td>
<td>Order &amp; Receive Meters &amp; MUI</td>
<td>130 days</td>
<td>Wed 1/5/22</td>
<td>Wed 5/4/22</td>
<td>SAWS, VASS, AM, EP, VEND</td>
<td>BS.5.3</td>
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<tr>
<td>017</td>
<td>BS.5</td>
<td>Mobile &amp; Train End Point Installation (EPI) Workforce</td>
<td>130 days</td>
<td>Wed 1/5/22</td>
<td>Wed 5/4/22</td>
<td>SAWS, VASS, AM, EP, VEND</td>
<td>BS.5.3</td>
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<tr>
<td>018</td>
<td>BS.5.5</td>
<td>Start Field Installation Activities</td>
<td>130 days</td>
<td>Thu 5/6/22</td>
<td>Mon 1/15/23</td>
<td>SAWS, VASS, AM, EP, VEND</td>
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<td>019</td>
<td>BS.5.51</td>
<td>Start Network Installation</td>
<td>130 days</td>
<td>Thu 5/6/22</td>
<td>Fri 5/6/23</td>
<td>SAWS, VASS, AM, EP, VEND</td>
<td>BS.5.3</td>
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<tr>
<td>020</td>
<td>BS.5.51</td>
<td>Start Meter &amp; Multiplexing</td>
<td>130 days</td>
<td>Thu 5/6/22</td>
<td>Fri 5/6/23</td>
<td>SAWS, VASS, AM, EP, VEND</td>
<td>BS.5.3</td>
</tr>
<tr>
<td>021</td>
<td>BS.5.5</td>
<td>Support Meter Asset Management</td>
<td>130 days</td>
<td>Thu 5/6/22</td>
<td>Fri 5/6/23</td>
<td>SAWS, VASS, AM, EP, VEND</td>
<td>BS.5.3</td>
</tr>
<tr>
<td>022</td>
<td>BS.6</td>
<td>Provide AMI Performance Monitoring</td>
<td>130 days</td>
<td>Thu 5/6/22</td>
<td>Thu 5/6/23</td>
<td>SAWS, VASS, AM, EP, VEND</td>
<td>BS.5.3</td>
</tr>
<tr>
<td>023</td>
<td>BS.6.1</td>
<td>Perform Project Validation</td>
<td>130 days</td>
<td>Thu 5/6/22</td>
<td>Mon 1/19/23</td>
<td>SAWS, VASS, AM, EP, VEND</td>
<td>BS.5.3</td>
</tr>
<tr>
<td>024</td>
<td>BS.6.2</td>
<td>Provide Performance Reporting &amp; Maintain Electronic Dashboard</td>
<td>130 days</td>
<td>Thu 5/6/22</td>
<td>Mon 1/19/23</td>
<td>SAWS, VASS, AM, EP, VEND</td>
<td>BS.5.3</td>
</tr>
<tr>
<td>025</td>
<td>BS.6.3</td>
<td>Release Final Program Report &amp; Wind Down Project</td>
<td>130 days</td>
<td>Thu 5/6/22</td>
<td>Thu 5/6/23</td>
<td>SAWS, VASS, AM, EP, VEND</td>
<td>BS.5.3</td>
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</tbody>
</table>
San Antonio Water System (SAWS) ConnectH2O

AMI Solution Architecture

August, 2020
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Phased Solution Architecture and Roadmap</td>
<td>3</td>
</tr>
<tr>
<td>2. Proposed Phased Implementation and Architecture Components</td>
<td>11</td>
</tr>
<tr>
<td>3. Assumptions</td>
<td>27</td>
</tr>
</tbody>
</table>
1. Phased Solution Architecture and Roadmap

This section of the document describes a phased approach to implementing AMI, MDMS and EPI applications and integrations at an enterprise level within SAWS. This “strategic architectural roadmap” provides specifics on a simple and feasible, building-block approach towards full implementation. Please note that this is a living document and that the solution architecture will be reviewed and further refined as the program progresses. Additionally, once AMI, MDMS, and EPI vendor solutions have been finalized, more detailed design sessions around the various architectural components identified will be performed.

1.1 Solution Architecture by Phases

The following is a high-level summary of each of the phases:

**Phase 1 – Planning and Requirements**

The phase where these initial artifacts are produced from an IT, PMO, and program planning perspective. **This phase is complete.**

**Phase 2 – Pilot**

This phase focuses on getting two Pilot AMI solutions up and running, balancing two factors – to not have a great disruption on IS and affect IPS production systems, but still have enough functionality to evaluate the pilot results and demonstrate the value of AMI to the enterprise.

**Phase 3. – Business Release 1**

This phase is the start of AMI full deployment and focuses on getting additional applications and integrations up and running in production mode and emphasizing the full Meter to Cash process. It is highly recommended that SCP be enhanced to support business requirements around customer presentation of the granular consumption data. More customer self-service, personalization, and advanced alerting and customer communications through the outbound communications gateway. It is also recommended to implement a Mobile Workforce Management (MWFM) solution and integrate this to IPS to aid in AMI deployment and accelerate the AMI program benefits.

**Phase 3. – Business Release 2**

The primary focus of this Phase centers around Business Intelligence, namely analytics, dashboards, and reporting from the non-production, SAWS replicated MDMS database instance using a preferred visualization and reporting tool such as Tableau. Another more minor component is to interface MDMS to the EOC Water Outage Map application to aid Operations in visualization of specific MDMS-generated alarm, alerts, and events that would aid in water trouble and leak management operations.
Phase 3. – Business Release 3

This Business Release concentrates in efforts on introducing the Conservation Salesforce CRM into the program. Depending on business requirements and functionality desired around customer enrollment and customer program management, integration to the Enhanced SCP would be required, and also potentially to MDMS.

Phase 3. – Business Release 4

The major component of this phase is adding IVR for customer self service transactions related to MDMS information (e.g. querying on daily consumption, signing up for specific alerts, etc.) and the necessary integration to the Enhanced SCP, Conservation Salesforce CRM, and IPS. A minor component of this phase is also interfacing the Trimble Fire Hydrant Pressure system to the EOC Water Outage Map, or alternative passing the hydrant pressure through the AMI network and leveraging the MDMS to Water Outage Map integration that was implemented in Business Release 2.

Phase 3. – Full Deployment

The final phase of the program represents the full deployment of the AMI network and replacement of SAWS meters with Smart Meters. Some other significant initiatives are also recommended – specifically, expanding the Conservation Salesforce CRM to an enterprise CRM, re-architecting the Data Warehouse from an enterprise perspective with a data model, revised schemas, and a standard ETL tool to obtain data from a variety of data sources, including MDMS. As MDMS data storage requirements continue to increase, it is also recommended to implement some Archiva/Purge solution to optimize performance and reduce storage costs, while still meeting data retention requirements.
2. Proposed Phased Implementation and Architecture Components

The phased strategy depicted in the previous diagrams builds upon the base functionality in Pilot Phase 2 and grows incrementally with Phase 3 Business Releases 1-4, ending with Full Deployment.

Within each phase, a series of strategic “components” are defined and described in the following tables. The impact of each of the strategic components is assessed in more detail by outlining the business impact or business benefit, describing the IT impact, and then proposing any recommendation, justification, and other considerations for including this component in this Phase. An “R” is used to denote a required component and is referenced in both the diagrams and the tables. An “O” is used to denote an optional component and is referenced in both the diagrams and the tables. “BR” is used to denote the specific business release and is referenced in the diagrams and the tables.
<table>
<thead>
<tr>
<th>REF#</th>
<th>Architecture Component</th>
<th>Business Benefit/Impact</th>
<th>IT Impact</th>
<th>Recommendation/Justification</th>
</tr>
</thead>
</table>
| R1   | End Point asset data (e.g. static meters and AMI communication modules) from each AMI vendor uploaded to:  
• IPS PROD  
• IPS DEV 2 | Provision of the necessary meter and module asset data required by IPS prior to meter and module installation. | Use IPS standard meter upload file formats | Although the number of records uploaded during Pilot is minimal, if an opportunity exists to automate the data upload, it would be beneficial, as it can be applied throughout deployment. Meter sample testing and Meter Release processes are yet to be defined. Depending on the processes defined, additional meter statuses in IPS may be defined to indicate if a meter has been released for install or still in sample testing. |
| R2   | End point data transfers between EPI WCOMS and IPS PROD and IPS DEV 2. The integrations include:  
• R2.1 One-time extract of master data such as Premises, Meter, Meter configuration, Last read, dates etc. from IPS PROD to establish EPI dataset for meter/module installation planning  
• R2.2 Ongoing updates of above data from IPS PROD to keep EPI dataset in sync during installation  
• R2.3 Meter Exchanges and/or module installation – Daily export from EPI to Premise/customer location data provided to EPI vendor. | As the EPI installs Meters and modules and all the required completion information is provided to IPS, IS will export only the master data related to meters/premises chosen to be included in the pilot. May 2020: R2.1 and R2.2 will be flat file exports from CIS. SAWIS will send the export file with the pilot meters every day instead of capturing just the changes. | Can look at automating the WCOMS upload process into IPS via Web Services or FTP. Only a subset of the integrations will be connected to IPS DEV 2 as PROD is the prime system of record for EPI. For example, meter data updates from IPS to EPI will only be sent from IPS PROD. However, order completion data will be integrated with both PROD and DEV. Full Deployment: SAWIS will move towards API integration (away from file exports). |
<table>
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<tr>
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<th>Architecture Component</th>
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</tr>
</thead>
<tbody>
<tr>
<td>IPS</td>
<td>Providing details of the meters exchanged and/or the modules installed, (release and complete process)</td>
<td>R2.3 RTU – Any meter exchanges that were unsuccessful by EPI vendor (for various reasons determined during EPI implementation) The RTUs can be included within the Meter exchange data. In that case, no separate integration is required.</td>
<td>R2.3 GIS Coordinates – The coordinates can be included in the Meter Exchange data. In that case no separate integration is required.</td>
<td>Field Pictures – Photo evidence from field installations</td>
</tr>
<tr>
<td>R3</td>
<td>Integration between MDMS and IPS DEV 2 to support Billing. The integrations may include:</td>
<td>Synchronization between IPS DEV 2 and MDMS</td>
<td>MDMS to IPS DEV 2 integration using Web Services/API</td>
<td>Bulk data transfer from MDMS to IPS will most likely be a batch process, but aggregated monthly reads will be real-time via Web Services</td>
</tr>
<tr>
<td></td>
<td>One-line extract of master data such as Premises, Meter, meter configurations etc. to establish MDMS dataset</td>
<td>Ongoing updates from IPS DEV 2 on meter data changes</td>
<td></td>
<td></td>
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<tr>
<td>REF #</td>
<td>Architecture Component</td>
<td>Business Benefit/Impact</td>
<td>IT Impact</td>
<td>Recommendation/Justification</td>
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<tr>
<td>R4</td>
<td></td>
<td>A request issued from IPS DEV 2 for a read (for a specific date or range of dates)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>A response sent from MDM with the read and read date</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>AMI/AMR flag sync (TBD)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R5</td>
<td>Manual process of both Read and Bill Comparison and Reconciliation during Pilot period</td>
<td>Better understanding of the impact of AMI/MDMIS as it relates to billing. Ability to configure various business rules with VEE and then see its impact on the customer bill. This also gives SAWS the insight into the estimation rate in the current system and how AMI helps improve it.</td>
<td>Standing up IPS DEV 2 environment and integrating to MDMIS Producing “mock bills” from DEV for comparison and reconciliation</td>
<td>If actually producing bills from IPS DEV 2 is too cumbersome, then comparing the aggregate monthly consumption from MDMIS to what is produced in IPS PRGO may be sufficient.</td>
</tr>
<tr>
<td>R6</td>
<td>AMI Network Considerations</td>
<td>Data Encryption Security at Backhaul System and Network Monitoring DMZ/Firewall</td>
<td>Various security options need to be evaluated, including any “overhead” that encryption or other processes introduce. Communicate to customers and business areas that the data is secure, possibly encrypted, and protected via a variety of security mechanisms on the AMI Network. Recommend bringing an external resource to perform penetration testing on AMI Infrastructure</td>
<td>Minimal, as these considerations are transparent</td>
</tr>
<tr>
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<tr>
<td>R7</td>
<td>Enable very selected Direct Departmental Access to MDMS during Pilot</td>
<td>Allows “supervisors” to test MDMS functionality during pilot period, including VEE processing. Allows other users in view only mode to see the functionality and data stored in MDMS. (High Bill complaints is a good use case to begin using MDMS for).</td>
<td>Configure read/write access for selected individuals/departments. Monitor performance/latency of MDMS during peak access.</td>
<td>Negotiate with vendor near an Enterprise site license, especially for read only access. Strongest negotiation position is at start of program.</td>
</tr>
<tr>
<td>R8</td>
<td>Leverage Native Analytics and Reporting off of MDMS and Head End</td>
<td>Especially in the Pilot stage, the built-in reports and analytics of the AMI systems will give users some business insight into the value of the customer consumption data.</td>
<td>Minimal, as no customization of the reports and analytics engines is required.</td>
<td>Manage expectations around native reports, which may be very limited. Use this opportunity to determine the true analytics and reporting requirements for BRI and beyond.</td>
</tr>
<tr>
<td>R9</td>
<td>AMI Head End to MDMS Integrations. This includes, * R8.1 Daily Register Reads * R8.2 Interval Consumption * R8.3 Real-Time Events * R8.4 Non-Real-Time Events * R8.5, R8.6 Meter communications such as on-demand Reads</td>
<td>Enables MDMS to create bill determinants. Monitor the health of the metering systems. Frequent reads from meter than once a month.</td>
<td>Supported by vendor - demonstration point for IS should be MDMS. AMI Vendor 1 confirmed Batch file transfers for Daily Reads, Interval Reads, events. Yet to confirm with AMI vendor 2.</td>
<td>Leverage any pre-built integration from MDMS to Head End. CMEP?</td>
</tr>
<tr>
<td>R10</td>
<td>(not used)</td>
<td></td>
<td></td>
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<tr>
<td>R11</td>
<td>Provisioning between MDMS, AMI Headends: Provisioning is the extension of Premise-Meter relationship in the Master Data across the three systems – IPS, MDMS and AMI Headends.</td>
<td>Keep MDMS, AMI Headends, and PROD in sync on Premise-Meter relationships for accurate billing data to be sent to IPS</td>
<td>Support new integrations to be built between AMI Headends, MDMS, and PROD.</td>
<td>Most AMI systems may not store premise information. In that case, the integration could be the relationship between meter and end point. This integration needs to be discussed in detail with the AMI vendors before beginning design.</td>
</tr>
<tr>
<td>R12</td>
<td>Analytics Tool integration with AMI Headends</td>
<td>Validates that the performance of each AMI solution achieves contractual service level agreements.</td>
<td>Support new integrations between AMI headends and Analytics Tool</td>
<td></td>
</tr>
<tr>
<td>R13</td>
<td>GPS location data captured during installation of Pilot meters and modules is provided to ESRI GIS. R2.3 Inputs the Lat/Lon into IPS GeoAdministrator may facilitate this synchronization.</td>
<td>More accurate locational awareness of meters and modules.</td>
<td>Tool already exists that syncs asset in IPS Asset module with action in ESRI. Need to add action fields for endpoint assets.</td>
<td></td>
</tr>
<tr>
<td>R14</td>
<td>End Point asset data (e.g. static meters and AMI communication modules) from each AMI vendor uploaded to . EPI vendor database</td>
<td>Provision of the necessary meter and module asset data required by EPI prior to meter and module installation.</td>
<td>Although the number of records uploaded during Pilot is minimal, if an opportunity exists to automate the data upload, it would be beneficial, as it can be applied throughout deployment.</td>
<td>Meter sample testing and Meter Release processes are yet to be defined.</td>
</tr>
<tr>
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<td>R15</td>
<td>VEE Pre-Processing and testing of business rules for validation and estimation</td>
<td>Allows SAWAS to test VEE processing and define the initial business rules for validation and estimation (missing reads)</td>
<td>Modifications to IPS DEV 2 may be required and then tested extensively to ensure it has not affected other areas.</td>
<td>Although it is recommended to shift VEE pre-processing to MCMIS, SAWAS does have the option to continue performing these functions in IPS and have MCMIS only send the aggregated monthly reads. For Pilot, it may be best not to modify IPS DEV 2 and have the extra complexity of removing certain pre-processing routines.</td>
</tr>
<tr>
<td>R16</td>
<td>Provisioning between IPS PROD and MCMIS. Provisioning is the extension of the Premise-Meter relationship in the Master Data across the three systems – IPS, MCMIS, and AMI</td>
<td>Keep MCMIS, AMI Headends, and PROD in sync on Premise-Meter relationships for accurate billing data to be sent to IPS</td>
<td>Support new integrations to be built between AMI Headends, MCMIS, and PROD.</td>
<td>This is to keep premise – meter relationship and meter status in sync between IPS and MCMIS based on results of service orders such as Meter install, Meter removal, Meter exchange and Meter on or Meter turn off.</td>
</tr>
<tr>
<td>R17</td>
<td>Base Map Data from ESRI to MCMIS</td>
<td>Required to display dashboards in the MCMIS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R18</td>
<td>MTU Programming Data from MTU Programmer to AMI (AclaraONE) (Specific integration only for Aclara AMI Integration)</td>
<td>Required to establish the meter configuration programmed at the MTUs in AclaraONE</td>
<td></td>
<td>The MTU programming files have to be sent via FTP from Vanguard’s location to AO.</td>
</tr>
<tr>
<td>REF #</td>
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</table>
| O3    | Expand and test IPS DEV 3 and PROD data models to support additional Smart Meter requirements:  
  - Firmware Tracking  
  - MIU Characteristics  
  - Meter Attributes  
  - GPS Coordinates  
  - Service Point Interconnection  
  - MDMS Pre-processing and Billing Co-ponent | More extensive meter information in IPS, especially GPS coordinates and Service Point interconnection, may streamline some future business processes | Expanding the data model in IPS to support the required new fields and attributes  
Enhancing the IPS to GIS integration to support certain data transfers (e.g. GPS) |  |
| O4 (NOT INCLUDED IN PILOT PHASE; TO BE ASSIGNED TO FUTURE RELEASE) | Presentation of Customer consumption information, down to the granularity that SAWS decides | Pilot Customers would be able to visually see their consumption history | 1. Minimize Production impact to IPS  
2. Integration of MDMS to either SCP or third-party solution | Evaluate two options to give pilot customers visual access to their consumption and smart meter data:  
  - Build into current SCP  
  - Third Party solutions like WaterSmart or Milestone ePortal  
If third party option selected, recommend integrating into current SCP via Prame or equivalent technology |
| O5 (NOT INCLUDED IN PILOT PHASE; TO BE ASSIGNED TO FUTURE RELEASE) | Smart Portal integration to selected Outbound Customer Communications Gateway | Enables personalization via alerts and notifications that the customer selects based on certain events (e.g. bill produced, unusual high consumption, etc.) | Support integration from embedded Smart Portal to selected customer communications gateway | Standardizing on a product solution for all outbound customer communications |
NOTE: Phases 3.1-3.X will be updated at a later date.

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<th>Recommendation/Justification</th>
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<tr>
<td>R1</td>
<td>End Point Asset Inventory data uploaded to IPS</td>
<td>Synchronization between the Supply Chain data in IPS and the vendor</td>
<td>Support the data upload into IPS</td>
<td>Can look at automating the Asset Inventory upload process into IPS</td>
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<td>R2</td>
<td>End Point Installation data from MDMS uploaded to IPS</td>
<td>As the EP installs assets, all the required data is synchronized in IPS</td>
<td>Support the data upload into IPS</td>
<td>Can look at automating the MDMS upload process into IPS via Web Services or FTP</td>
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<td>R3</td>
<td>Full integration between MDMS and IPS PROD</td>
<td>Ability for the business areas to see granular customer consumption data Supports future state business processes Can perform &quot;actionable insight&quot; after analyzing data</td>
<td>Clear line of demarcation for support of MDMS, as vendor is responsible for AMI network to MDMS integration</td>
<td>Leverage any standardized product adapters if available Web Services integration is required approach Responsibility for MDMS to AMI Network Integration should be implemented and supported by vendor</td>
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<td>R4</td>
<td>FCS to MDMS Integration</td>
<td>Continued manual reading as the deployment process continues Supports business scenarios where manual reads and field visits are still required</td>
<td>FCS to IPS PROD may no longer be required, as it is shifted to MDMS via a standard adapters/API</td>
<td>Consolidates all usage data into MDMS</td>
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<td>R5</td>
<td>Continued modification and enhancements to IPS, related to VEE pre-processing and integration of AMI systems and Enhanced SCP to IPS</td>
<td>Configurable business rules and algorithms with VEE in MDMIS</td>
<td>Removing VEE and other pre-processing functionality in IPS</td>
<td>Although it is recommended to shift VEE pre-processing to MDMIS, SAWS does have the option to continue performing these functions in IPS and have MDMIS only send the aggregated monthly reads</td>
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<td>R8</td>
<td>Continue to provide Direct Departmental access to MDMIS (both view only and edit access) for a variety of scenarios.</td>
<td>Supports new business processes more effectively</td>
<td>Minimal, outside of the administrative process of configuring user access and monitoring system performance</td>
<td>Realize that giving users and departments access to MDMIS may require a fair amount of training, as the MDMIS vendor solutions have varying sophistication of their “user interface”</td>
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<tr>
<td>R7</td>
<td>May need to enhance ESRI GIS to reflect Smart Meter layer • Meter GPS location • Selected meter attributes • Service Line Interconnection Point</td>
<td>GIS users have access to more data on SAWS AMI network and selected meter attributes</td>
<td>Enhancing the GIS to IPS integration</td>
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<td>R17E</td>
<td>Extend integration of MDMIS with ESRI GIS for Connectivity Model</td>
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<tr>
<td>R8</td>
<td>Implement MNFM and integrate to IPS</td>
<td>Automation of Service Requests and Work Orders</td>
<td>IPS enhancements would be required, including integration to MNFM</td>
<td>Integrate with AVL already in vehicles for better dispatching</td>
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<td>Allows SPWMC or generated by CDR Portal to also have field automation</td>
<td>AMI alarms and events processed by MDMS automatically generated service requests and work orders and sent to IPS</td>
<td>Helps automate with meter related field activities and ensures data integrity as deployment continues over 3-year period. Therefore, recommend in 1st business release, even though added integration to IPS is required.</td>
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<td>Evaluate INFOT’s product solution, and determine best fit, as third-party solutions present another option.</td>
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<td>R9</td>
<td>Presentment of Customer consumption data and level of functionality in Enhanced Portal</td>
<td>1. Transparency of consumption data 2. More effectiveness in conservation programs 3. Ability to personalize customer experience with alerts and notifications (potential High BPA) 4. Built in Analytics allows SAWS to see if customers are using Smart Portal functionality</td>
<td>Requires development of functionality (or pursuing third-party option) and Web Services integration to MDMS</td>
<td>Enhanced SCP may involve a series of incremental functionality via Business Releases.</td>
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<td>If SAWS elects to implement the more advanced customer-facing features (such as consumption “sliders”, bill “projection”, and leak “detection”), then more time must be allocated to develop and test this functionality.</td>
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<td>BR2</td>
<td>Integration between AMI systems and EOC Water Outage Map application</td>
<td>EOC can visually see appropriate alarms, alerts, and other sensor information on the Water Outage map.</td>
<td>Need to process relevant alarms and alerts from AMI into EOC Water Outage map. Need to consider “thresholds” to limit false positives/negatives.</td>
<td>Consideration of pressure and leak sensors on SAWS Distribution Network. Need to determine if some type of “processing” or transformation needs to be performed on the AMI data before being presented on the Water Outage Map.</td>
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<tr>
<td>BR2</td>
<td>Develop Tableau (or other tool) Analytics and Dashboards to address gaps in native analytics/reporting functionality included in AMI MDM/MS</td>
<td>• Non-Revenue Water Analytics • Conservation Analytics • Consumption Analytics • High Bill/Consumption Analytics • Leak and Pressure Analytics • Other Analytics Eventually may be able to perform ad-hoc analytics by the business.</td>
<td>Data analyst support to determine the correct back end schemas from the Date Warehouse to be presented in BI. Assist the business with the visualization aspect and how to get to the right data.</td>
<td>Development of Tableau Analytics and Dashboards can be spread throughout several Business Releases (BRs). Education on the Data Model to key Tableau front-end “super users”.</td>
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<tr>
<td>BR2</td>
<td>Tableau BI direct access to Reporting Database Instance where data has been replicated (1 day or older data) Or another clone of MDM Production for reporting purposes</td>
<td>Good performance of developed analytics, dashboards, and reports.</td>
<td>Data replication of MDM to SAWS Site. Bringing up separate MDM environment at Reporting Database instance.</td>
<td>Leverage Reporting instance of MDM to develop Analytics and Dashboards, minimizing the impact to IPS PROD. Since analytic and reporting requirements may be quite extensive, it may be beneficial to take an “agile-like” approach with incremental releases (e.g. BR2 1, BR2 2, BR2 3 etc.).</td>
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<tr>
<td>BR 3</td>
<td>Introduction of Salesforce CRM (Conservation only at this time)</td>
<td>Ability to process &quot;cases&quot; with complex process flows Improved Program Management to help Introduce and manage various customer-focused conservation efforts</td>
<td>Integration of Salesforce CRM, Enhanced SCP and IPS via Web Services May require integration between Salesforce CRM to MDMS, depending on functionality desired for future conservation efforts.</td>
<td>If integration between SCP and MDMS can be leveraged, then the integration between Salesforce CRM and MDMS would not be required (dashed arrow)</td>
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<td>BR 4</td>
<td>Consideration of IVR for self-service related to consumption and usage information from AMI systems</td>
<td>Some customers prefer to perform self service via the phone versus SCP May help promote special programs, such as conservation and leak detection</td>
<td>Would require configuration and enhancement to IVR, including menu and call flow design Would require integration of IVR to Enhanced SCP and Conservation CRM to provide self-service functionality</td>
<td>Although the current IVR solution in place may not be flexible enough to support these requirements, this BR is far enough in the future that a new IVR may be in production</td>
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<tr>
<td>BR 4</td>
<td>Integrate Stand-alone Trimble Fire Hydrant Pressure System with Water Outage Map application to show consolidated pressure data</td>
<td></td>
<td>Consolidated view of MDMS generated alarms and alerts with other pressure data Web services integration to EOC Water Outage Map</td>
<td>Allows EOC to see more data to aid in leak/trouble operations May want to consider bringing the fire hydrant pressure through the AMI network versus the current configuration. If so, then the integration would not be required as we can leverage the MDMS to Water Outage Map integration from the previous Business Release</td>
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<tr>
<td>R1</td>
<td>Continued modification and enhancements to IPS related to MDMIS integration, VEO pre-processing, and enhancements to SCP</td>
<td>Continued fine-tuning of VEO will produce more accurate bills and greater confidence in the interval data</td>
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<td>R2</td>
<td>FCS goes away – replaced by VWFM?</td>
<td>Addresses scenarios where SAWS may still require a non-AMI read as part of some field activity generated by IPS</td>
<td>FCS support no longer required for FCS to MDMIS integration no longer required</td>
<td>If VWFM is not implemented in previous BPR, then FCS would remain, as well as the integration to MDMIS. Several alternatives exist - depending on whether we want to consolidate all field generated SR’s, WO’s, or IPS and minimize the number of integrations (e.g., VWFM to MDMIS).</td>
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<tr>
<td>R3</td>
<td>Continued enhancements for direct Departmental Access</td>
<td>More structured access to MDMIS will allow departments to gain meaningful insights from the core AMI applications</td>
<td>Need to consider possible latency issues</td>
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<tr>
<td>R4</td>
<td>Continued enhancements to VEE, processing and business rules</td>
<td>Further refinement and application of business rules will improve the validation and estimation routines with interval consumption reading</td>
<td>If SAWS elects to perform VEE (preprocessing in IPS versus MDMIS) then this component would not be applicable.</td>
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<tr>
<td>O1</td>
<td>Enterprise Salesforce CRM integration</td>
<td>CRM to MDMIS Integration</td>
<td>Requires a well thought out strategy on how IPS, Enterprise CRM, SCP, and other customer-facing applications are all orchestrated to work with each other, and which is the “owner” for different types of transactions.</td>
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<td>O2</td>
<td>Re-architecture of Data Warehouse with Enterprise Data Models/Schemas</td>
<td>Supports more complex queries and analytics, giving the business areas more insight that is actionable. May impact current reports.</td>
<td>Standardize on ETL tool</td>
<td>This is a fairly significant effort and will require an enterprise-wide view of the data architecture. As it may impact current reports and analytics in production, expectations and communications with the business areas will need to be managed.</td>
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<tr>
<td>O3</td>
<td>Continued expansion of Tableau Analytics and Dashboards related to MDMS and other relevant data sources (SCADA, GIS, etc.)</td>
<td>1. Non-Revenue Water Analytics 2. Conservation Analytics 3. Consumption Analytics 4. High Bill Analytics 5. Leak and Pressure Analytics 9. Revenue Protection Analytics 7. Other Analytics</td>
<td>Tableau analytics and visualization evolved from MDMS as Reporting Instance to Enterprise Data Warehouse</td>
<td>Since analytic and reporting requirements may be quite extensive, it may be beneficial to take an “agile-like” approach with incremental releases.</td>
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<tr>
<td>O4</td>
<td>Feed Data Warehouse with multiple data sources using ETL tool</td>
<td>Data loading for: • MDMS • Fire Hydrant Pressure • Salesforce CRM • Water SCADA • MWM • IPS • GIS • Lawson • Other Systems?</td>
<td>Standard data model in DW allows for more complex analytics (e.g., taking SCADA info and correlating with AMI data for water distribution analysis and optimization?)</td>
<td>MDMS to DW is part of AMI program scope. All other data sources ETL and DW re-architecting is separate initiative.</td>
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<tr>
<td>O5</td>
<td>Data Archival/Purge Solution for MDMS</td>
<td>Improved performance for MDMS, but will require some technique to access data beyond the “archival point”</td>
<td>Support integration between MDMS and Archiving solution MDMS may have some pre-built ILM functionality that can be leveraged</td>
<td>Decision on how long to retain data in MDMS before performing archival and purge operations. Determines if partitioning and compression will help manage the archival and purge process.</td>
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<tr>
<td>OS</td>
<td>Evaluate Bill Redesign at end of Full Deployment?</td>
<td>Better granularity of smart meter consumption data on bill</td>
<td>Modifications to IPS and Bill Print process to support new bill re-design</td>
<td>Evaluate feasibility and appetite toward end of full deployment</td>
</tr>
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</table>
3. Assumptions

Pilot Phase:

1. A new IPS environment will be setup to support the AMI/MDM Integrations and Read validations. This environment may be referred to as IPS AMI. (Currently referred to in the drawings as IPS DEV 2)

2. IPS AMI environment will be treated close to Production as possible to enable clean data for read validation. The frequency of IPS AMI refresh is yet to be decided.

3. The team will use SAWS IT’s development methodology and development lifecycle process to develop all integrations.

4. The team will use the existing BRD document format (as reviewed on the call on 4/30/20) to document business requirements. The format of the BRD may be extended to accommodate the scope of the project as necessary (with SAWS IT’s approval).

5. All code developed and/or modified for this phase and subsequent phases will follow the regular SAWS IT established migration procedures before being deployed into IPS PROD and IPS AMI (IPS DEV 2)
ATTACHMENT 14 – MODULE/METER DELIVERY SCHEDULE ADDENDUM

[ATTACHED ON FOLLOWING PAGES]
<table>
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**AMI Communications Module and Static Meter Delivery Schedule - Summary**

Replacement of existing positive displacement meters aged 2013 and older with static meters

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*NOTE: No positive displacement Pilot meters are included in the forecast to replace with static meters*
Attachment 15 – AMI Statement of Work #1

SAN ANTONIO WATER SYSTEM

FOR

ADVANCED METERING INFRASTRUCTURE
Attachment 15 - Advanced Metering Infrastructure (AMI)
Statement of Work #1

1. Incorporation into Agreement:
This Statement of Work #1 ("SOW") is made part of and incorporated by reference into that certain AMI System Agreement by and between Itron, Inc. ("Itron") and San Antonio Water System ("SAWS" or "Customer") ("Agreement"). All capitalized terms used herein but not defined herein shall have the meaning given to them in the Agreement.

2. Advanced Metering Infrastructure Summary
SAWS and Itron wish to work together to deploy and utilize an Advanced Metering Infrastructure (AMI) System as seen in Error! Reference source not found. supporting the deployment quantities seen below in Figure 1 – Solution Overview.

SAWS intends to enable AMI communications to its entire water meter population (projected to be 607,575 water meters by the end of 2025). SAWS will either replace the existing water meter with a new static meter or will retrofit an AMI communications module to the existing water meter. Retrofit and replacement will occur in two phases. During the Pilot Term, approximately 2,500 water meters will be retrofit/replaced and the performance of the AMI System will be assessed. Upon completion of the Pilot Term, a single AMI System vendor will be selected and the remaining water meter population will be retrofit/replaced per the schedule in Attachment 14 – Module/Meter Delivery Schedule Addendum in the Agreement.

3. AMI, Engineering, and Operating Requirements
A. The AMI System will be designed, deployed, tested, and accepted in accordance with the requirements specified in this SOW, the System Requirements Addendum in Attachment 9 to the Agreement, the Solution Architecture Addendum in Attachment 13 of the Agreement, and the Service Level Requirements Addendum in Attachment 16 to the Agreement.
B. This SOW specifies the delivery and operation of the AMI System.
C. Itron shall comply with relevant SAWS engineering, operating, and other requirements specified in this SOW.
D. Itron shall deliver Equipment to SAWS’ facilities or the selected Endpoint Installation (EPI) vendor’s cross-dock.

4. Equipment
SAWS will make its best effort to purchase the estimated quantities of the Equipment listed and for the Fees specified in the Fees Addendum in Attachment 10 to the Agreement. It is agreed upon by the Parties that quantities may vary from those specified in the Fees Addendum in Attachment 10 to the Agreement.

5. Software
Licenses to the AMI System are set forth in the Agreement, including, but not limited to the AMI Subscription Addendum in Attachment 1 of the Agreement and the Equipment Addendum in Attachment 4 of the Agreement.

6. Services
The Parties shall execute their respective work in accordance with the tasks in this Statement of
Work.

7. Program Management

7.1 Itron Responsibilities. Itron, through its Itron Project Manager, shall manage the AMI System, Services, and Deliverables under this SOW during the Term, to include:

A. Working with SAWS to develop a comprehensive AMI System and related Services plan including all products and environments listed in Attachment 10 – Fees Addendum to the Agreement.

B. Participating in SAWS’ AMI System and related Services planning meetings.

C. Working with SAWS to develop a Deliverable review and acceptance process.

D. Creating, tracking and updating the Project Schedule utilizing Microsoft (MS) Project as set forth in Attachment 12 – Integrated Master Schedule Addendum in the Agreement.

E. Providing weekly status reports addressing the progress of the AMI System and related Services, including issues and outstanding action items.

F. Conducting weekly meetings as agreed to with SAWS’ project team to coordinate AMI System and related Services activities between the Parties.

G. Coordinating Itron Deliverables with SAWS and SAWS’ subcontractors.

H. Answering general questions and providing overall AMI System and related Services facilitation.

I. Maintaining updated Issues/Incident/Error reports with noted response times, agreed resolutions, and outstanding items, as described in Attachment 3 – Maintenance Services to the Agreement.

7.2 SAWS Responsibilities. SAWS shall perform each of the following tasks:

A. Designate a Project Manager to work with Itron to assist in the creation of efficient paths of communication with Itron, including prioritizing communication requests made to Itron and departments within SAWS.

B. Assist in maintaining efficient paths of communication with departments within SAWS.

C. Assist with the coordination of meetings with SAWS resources, as needed, to provide the optimal flow of information.

8. Deployment – Network

8.1 Itron will provide the Naas to SAWS by utilizing the existing CPS Energy Canopy, consisting of APs and relays, and the 500W GenX cellular module to enable AMI communications with all Endpoints. The CPS Energy Canopy is deployed and being maintained by CPS Energy and Itron. This will continue for the Term of the Agreement.

8.2 Field Network Design
8.2.1 **Itron Responsibilities.** Itron has provided an initial Field Network Design for SAWS, as shown in Exhibit A – Network Design Basis. Should that design require additional updates, then Itron shall provide additional Field Network Design Services to yield an updated, Final Field Network Design. Itron shall:

A. Develop updates, as required, to the initial Field Network Design utilizing SAWS provided data.

B. Develop a Final Field Network Design encompassing the following steps
   1. Rerun propagation studies, as required.
   2. Validate that propagation studies illustrate the network design meets or exceeds the Service Level Requirements documented in the Attachment 16 to the Agreement as required.
   3. Repeat steps 1-2 as needed to deliver the required performance, as required.

C. As part of the Agreement, Itron will deploy, monitor, operate, and maintain all Network devices and any associated equipment to meet agreed upon Service Level Requirements.

D. Itron will deploy additional Network infrastructure, either the CPS Energy Canopy or the 500W Gen X cellular module, to provide Endpoint coverage for areas of growth.
   1. If additional Network infrastructure is required, Itron will identify the needed sites, acquire the site, and prepare and install the Network device. Deployment activities include propagation studies, site identification, site preparations, site acquisition, device installation and device configuration.

8.2.2 **SAWS Responsibilities.** SAWS shall perform each of the following tasks.

A. Subject to prior written consent from SAWS, provide access to its facilities for the location of Network infrastructure devices needed to achieve Service Level Requirements.

B. Provide the most accurate data available for its facilities that can be used to determine where Network devices should be located, including the furnishing of documents, maps and other material that depict the location, address (including zip code, if available), elevation above/below ground, and latitude and longitude position coordinates.

C. Provide the specific placement criteria and installation techniques acceptable to SAWS for the installation of Network device’s on SAWS facilities.

D. Provide final approval of SAWS facilities locations and assist with alternate recommendations for installation locations and propose changes to these locations, if necessary.

E. Determine the method of power connection for Network devices at each SAS facility location as specified in the Network device site specific SOWs.

F. Review and approve Network device site specific SOWs for SAWS facility locations.

G. Provide the necessary data and field knowledge to Itron to complete the Network
8.3 Field Network Deployment Support

8.3.1 Itron Responsibilities. Itron shall perform each of the following tasks:

A. As part of the Naas, Itron will deploy, monitor, operate, and maintain all network devices and any associated equipment to meet the applicable Service Level Requirements.

8.3.2 SAWS Responsibilities. SAWS will perform each of the following tasks.

A. Work with Itron to define and approve a deployment schedule/plan to enable all necessary security capabilities of the Network equipment as mutually agreed between SAWS and Itron.

8.4 Endpoint Installation. SAWS will hire an End Point Installation (EPI) vendor to install the Equipment. Itron will work with EPI vendor to ensure successful installation of the Equipment.

8.4.1 Itron Responsibilities. Itron shall perform each of the following tasks:

A. Provide training to the EPI vendor on processes to install, configure, and activate the Equipment.

B. Deliver Equipment to the EPI vendor cross-dock/warehouse in accordance to a mutually agreed upon schedule as outlined in Attachment 14 – Meter/Module Delivery Schedule Addendum.

C. Receive any defective Equipment from the EPI vendor in accordance with applicable RMA policies.

D. Participate in AMI System and related Services planning and status meetings.

E. Provide periodic reporting of agreed to key performance indicators.

F. Provide periodic report of Provisioned Endpoints.

G. Troubleshoot and resolve any issues with the Equipment per the SAWS 500W Pit Installation Guide.

a. Identification and remediation steps to be completed by the Itron Field Engineer are:

i. Identify any 500W modules that are not communicating 24 hours after installation. Non-communicating modules will be identified by comparing the a "daily installation report provided by the EPI vendor to the Itron report detailing 500W modules that came online for the same time period.

ii. Initial back office validation to be completed in the second 24-hour period by the Itron Field Engineer to determine need for a field visit.

iii. Within 48 hours of identifying 500W modules needing a field visit to remediate, the Itron Field Engineer will visit the site and:

1. Use FDM tools to bring the device online;
2. Replace the device if it is non-functioning; or
3. If poor signal strength due to pit depth or lid interference, the Itron Field Engineer will replace the lid with a drilled unit and install a through the lid adapter to bring the 500W online.

8.4.2 **SAWS Responsibilities.** SAWS shall perform each of the following tasks:

A. Provide and maintain Attachment 14 – Module/Meter Delivery Schedule Addendum in the Agreement.

B. Troubleshoot and resolve any issues with the installation of the Equipment per the SAWS 500W Pit Installation Guide.

8.5 **Endpoint Optimization and Acceptance.**

8.5.1 **Optimization.**

A. Pursuant to this Section 8.5.1 and Exhibit D to this SOW#1 – Optimization Guidelines, which is attached hereto and incorporated herein ("Optimization Guidelines"), the Network and Endpoint configuration and implementation will be tested to confirm they conform to the requirements in the System Requirements Addendum in Attachment 9 to the Agreement and the Service Level Requirements Addendum in Attachment 16 to the Agreement (collectively, the "Optimization Criteria") ("Optimized" or "Optimization"). Subject to the timelines in Section 8.5.1(B) below and the responsibilities set forth in and the Optimization Guidelines, SAWS and Itron shall agree upon an overall Optimization schedule, including each Optimization area of the AMI System (each an "Optimization Area"), prior to beginning the initial Optimization effort. Optimization Areas will consist of approximately 50,000 Endpoints and be defined and agreed upon by SAWS and Itron.

B. After the applicable Optimization Area Start Date (as defined in Section 3.1(a) of the Optimization Guidelines), Itron shall have up to ninety (90) days to: (i) analyze the Optimization Area and perform testing on the Service Points / Endpoints based on the Optimization Criteria pursuant to the Optimization Guidelines, (ii) perform recommended Endpoint remediations, (iii) reassess area performance (iv) provide a written report for SAWS review and approval that: summarizes the pre-existing state of the Optimization Area, describes the work undertaken, and summarizes the final results of its Optimization activities, and (v) make such Optimization Area available for use or testing by SAWS pursuant to Sections 8.5.2 and 8.5.4 below.

8.5.2 **Optimization Area Acceptance.**
A. Once Optimization is complete for an Optimization Area pursuant to Section 3.3 of the Optimization Guidelines, Itron will make such Optimization Area available to SAWS, and SAWS will have thirty (30) days after each Optimization Area is made fully available by Itron for use or testing by SAWS to validate the Optimization Criteria has been met ("Optimization Acceptance Period"). Customer will, within fourteen (14) calendar days after the end of each Optimization Acceptance Period, send to Itron either a written notice of acceptance or a written notice of rejection that includes a reasonably detailed description of any non-conformities in Optimization Area meeting the Optimization Criteria ("Optimization Notice").

B. If SAWS rejects an Optimization Area for not meeting the Optimization Criteria, Itron shall have sixty (60) calendar days from receipt of the Optimization Notice (the "Optimization Remediation Period") to correct the nonconformities and mitigate the Endpoints as required in the Optimization Areas to meet the Optimization Criteria. The first consideration will be signal strength and coverage at the Endpoint. If signal strength is marginal, a through the lid mount kit would be installed to increase signal strength to an acceptable level of performance to meet the Optimization Criteria. If the signal strength is too weak to gain mitigation from a through the lid mount kit, a cellular 500W would be installed at this location. After the Optimization Remediation Period, the Optimization Acceptance Period shall then begin anew with respect to such Optimization Area.

C. Should SAWS fail to provide notice of acceptance or rejection as noted in Section 8.5.2(A) above, acceptance of Optimized Endpoints within an Optimization Area ("Optimization Area Acceptance") shall be deemed upon the earlier of: (i) SAWS’s Optimization Notice of acceptance for such Optimization Area, or (ii) such Optimization Area achieving Critical Performance Metrics as specified in the Service Level Requirements Addendum in Attachment 16 of the Agreement.

D. Repeat Tasks A through D for each subsequent Optimization Area.

E. If Itron fails to correct an Optimization Area after two (2) Optimization Remediation Periods, Itron shall apply as a credit towards amounts due by Customer to Itron under this Agreement, the following amounts: $.72 per month per Endpoint in the Optimization Area that does not meet the Optimization Criteria beginning on the first day of the third Optimization Remediation Period and continuing until the Optimization Area meets the requirements of Section 8.5.2(C) above. THE PARTIES ACKNOWLEDGE AND AGREE THAT THESE CREDIT AMOUNTS ARE A GENUINE REASONABLE ESTIMATE OF THE ADDITIONAL COSTS AND EXPENSES THAT CUSTOMER IS LIKELY TO INCUR AS A RESULT OF ANY ITRON DELAY IN OPTIMIZING SUCH AFFECTED OPTIMIZATION AREA, AND ARE NOT A PENALTY. THE CREDITS DUE BY ITRON UNDER THIS SECTION SHALL NOT EXCEED TWENTY PERCENT (20%) OF THE TOTAL AGGREGATE AMOUNTS PAID UNDER THIS AGREEMENT BY CUSTOMER.

i. In lieu of the above credits, SAWS may elect to have Itron provide mobile meter reading services for the duration of the time period needed to remediate the Optimization Area to support billing needs of the Endpoints not performing to Optimization Acceptance Criteria level.
If Itron fails to correct an Optimization Area after three (3) Optimization Remediation Periods, SAWS may elect to terminate the Agreement pursuant to Section 13.2(c) of the Agreement. Upon termination under this section, the damages Customer is entitled to receive due to Itron’s delay in Optimizing an Optimization Area, if any, shall be reduced by the aggregate of any credits received under Section 8.5.2(E), as applicable.

8.5.3 **SAWS Responsibilities.** SAWS shall perform each of the following tasks:

A. Use best efforts to install Endpoints in a contiguous manner to enable efficient Optimization.

B. Identify an individual to coordinate Optimization for SAWS. This individual will be responsible for scheduling and coordinating Optimization-related tests within SAWS’ organization.

C. Review Itron recommended locations for relocating or installing new network devices.

D. Review all Optimization reports pursuant to Section 8.5.2 above.

8.5.4 **Endpoint Usage.** SAWS may utilize all Endpoints for business purpose operations (i.e., billing) that are located within an Optimized Area, including Endpoints that have been identified as “Remediation Pending” or “Excluded.”

8.6 **Field Network and WAN Backhaul Monitoring and Management**

8.6.1 **Itron Responsibilities.** Itron shall perform each of the following tasks:

A. Monitor, configure, maintain, and operate network devices, the local area network, and WAN Backhaul circuits.
   
   a. Itron will maintain AP and Relay network equipment, including battery backups, and firmware and health checks.
   
   b. Itron will replace failing AP and Relay network gear

B. Monitor AMI System components and identify and resolve issues related to network reachability and network health.

C. Maintain and install Firmware Fixes and Modifications to all AMI System components.

D. Provide configuration management of all AMI System components.

E. Provide built-in reports regarding the health and performance of the AMI System and all Equipment and Endpoints therein outlined in Attachment 11 – System Requirements Addendum and Attachment 16 – Service Level Requirements to the Agreement. Reports include, but are not limited to, the Electric Meter Register Read Success report and Network Status reports.
   
   a. The Electric Meter Register Read Success report will show the electric meter register read rate for the previous 24 hour period, which shows availability of the Network to the SAWS 500W modules.
   
   b. Network Status reports include:
      
      i. Current operational status of Network gear (APs and Relays) in the Network.
ii. Proactive notification of Network outages and subsequent Network restorations

F. When an Error triggers an alert, Itron will communicate with SAWS as set forth in Attachment 3 – Maintenance Services to the Agreement, track the Error, troubleshoot the Error, escalate to Itron subject matter experts or third-party (3rd) vendors as needed, and resolve the Error, pursuant to the agreed to Error management process set forth in the Maintenance Services Addendum in Attachment 3 to the Agreement. SAWS will cooperate with reasonable requests that Itron makes as part of its efforts to respond to Errors.

G. For any planned or urgent AMI System change related to any aspect of monitoring and management of the LAN and WAN backhaul described in this Section 8.6, Itron will follow the established change management process set forth in Attachment 3 – Maintenance Services to the Agreement. Such change will be implemented during a Planned Maintenance window, or as the Parties otherwise agree.

H. Use reasonable best practices to determine how and when to remediate Endpoint performance issues in areas where the Network is still forming as a result of deployment.

8.6.2 SAWS Responsibilities. SAWS shall perform each of the following tasks:

A. Provide resources to reasonably assist Itron in resolving Errors.

8.7 Meter Growth. SAWS believes that its meter population may grow up to 2.2% per year.

8.7.1 Itron Responsibilities. Itron shall perform each of the following tasks:

A. Conduct annual Network design reviews based on growth plans provided by SAWS to determine if incremental Network communications infrastructure is required during the Term of the Agreement.

B. Based upon Network design, an action plan will be built and executed per current contracted terms for growth, including deployment of additional Network infrastructure necessary to achieve Service Level Requirements as defined in the Service Level Requirements Addendum in Attachment 16 to the Agreement.

8.7.2 SAWS Responsibilities. SAWS shall perform each of the following tasks:

A. Provide growth plans to Itron annually for conducting Network design reviews.

B. Continue to provide access to its facilities for the location of Itron Network infrastructure devices.
   a. Any SAWS infrastructure that is needed to achieve Service Level Requirements shall only be utilized with prior written consent from SAWS.

9 HES “SaaS” Application Deployment and Management

The HES is the centralized application that manages and runs the AMI System. The HES includes software that performs many duties, including specific capabilities associated with the acquisition and management of water metering data.
9.1 The HES will be deployed, owned, operated, and maintained by Itron for the Term of this Agreement. Itron will provide access to the HES as a Software as a Service (SaaS) to SAWS.

9.2 **Itron Responsibilities:**

A. **Plan and Design:** Engage in planning and design sessions with SAWS that will provide and collect information relevant to the integration and implementation of the HES into the SAWS IT enterprise systems, as detailed in Attachment 13 - Solution Architecture to the Agreement.

B. **Provide application deployment Services for the Production, QA, Disaster Recovery/Backup and Test/Development environments of the AMI head-end system as articulated in Attachment 1 – AMI Subscription Addendum to the Agreement and in Attachment 3 – Maintenance Services to the Agreement.

C. **Commission SaaS HES, setup users (Admin, Operations), ‘hand off’ HES to SAWS for sign on testing and training.**

D. **Operate and maintain the HES in a manner that achieves the requirements of the AMI System as outlined in Attachment 9 – System Requirements Addendum to the Agreement as well as the Service Level Requirements outlined in the Service Level Requirements Addendum in Attachment 16 to the Agreement.**

E. **Design and configure the AMI System for 60-minute interval data for 100% of the water meters. Design and configure the AMI System to retain a minimum of ninety (90) days of data backups in the Production and Disaster Recovery Systems.**

F. **Configure the HES to collect HES data and generate files for SAWS Meter Data Management System (MDMS) and SAWS third-party performance metrics evaluation tool.**

G. **Provide access to a “dashboard” view of Provisioned Endpoints performance such that SAWS can easily understand the general health of the Provisioned Endpoints, assess achievement of Service Level Requirements, and identify the occurrence of Endpoint alarms/events.**

H. **Supply and maintain all Software as specified in Attachment 1 – AMI Subscription Addendum to the Agreement, in Attachment 3 – Maintenance Services Addendum to the Agreement, and in Attachment 4 – Equipment Addendum.**

I. **Provide patches, updates, and upgrades to the HES. For any planned or urgent system changes related to any aspect of the HES, Itron will follow the established change management process described in implemented in Attachment 3 – Maintenance Services Addendum to the Agreement.**

J. **Provide Back-up and Disaster Recovery proven processes in accordance with Itron’s published disaster recovery plan for Temetra (Temetra High Availability Disaster Recovery _), Itron’s published disaster recovery plan for UIQ (CPS_SAWS DR plan draft), Exhibit C - SAWS_Cloud_VTAQ-Lite to this SOW and Attachment 9 – System Requirements Addendum to the Agreement. Ensure that no less than daily backup(s) of application configuration files and generated data from the Production environment are available for use in the Disaster Recovery System.**

K. **Identify and resolve problems with the HES components (Network, Endpoint and head-end system).**
L. Provide Error response and resolution in accordance with Attachment 3 – Maintenance Services Addendum to the Agreement.

M. Provide investigation results and mitigation steps to resolve application operational issues (e.g., meter reads, reports, alarms, etc.).

N. Maintain all hardware and software related to the SaaS HES solution.

O. Capacity Management. Before changing the configuration of existing AMI devices, or introducing any other non-AMI traffic into the LAN and/or WAN, or introducing any significant incremental non-SAWS AMI traffic, Itron will assist and gain approval from SAWS with: i) Determining whether the proposed changes to existing devices or introduction of non-AMI traffic will impact the available capacity of the LAN and WAN; ii) Assessing potential impacts to the Network Design, and iii) Assisting SAWS in planning for any such introduction to avoid interference with the agreed upon system performance as defined by the Performance Metrics/SLAs included in the Agreement.

9.3 SAWS Responsibilities:

A. Ensure that appropriate SAWS staff (or contractors) participate in relevant technology planning sessions to assist in making appropriate design decisions.

B. Coordinate, schedule, and review any changes to the AMI System proposed by Itron in accordance with agreed to configuration and change management procedures.

C. Execute its responsibilities as specified in approved configuration management and change management procedures.

D. Log Errors related to the HES Application with Itron in accordance with approved notification processes.

E. Create and manage user accounts.

10 AMI Communications Modules and Static Water Meters

Itron shall provide Equipment of sizes and volumes as set forth in Attachment 4 – Equipment Addendum to the Agreement, Attachment 9 – System Requirements Addendum to the Agreement, and as set forth below.

10.1 Itron Responsibilities:

A. Provide the 500W GenX AMI communications module for both retrofit to the existing SAWS meter population (Attachment 9 – System Requirements Addendum to the Agreement) and integration with new static water meters.

B. Provide the Diehl Hydrus static meter in sizes 5/8 in, ¾ in, 1 in, 1.50in, and 2 in.

C. Provide the Honeywell EVoQ4 electromagnetic flow meter in sizes 3 in, 4 in, 6 in, 8 in and 10 in.

D. Configure the static water meter and AMI communications modules to measure consumption in gallons.

E. Configure the static water meter and stand-alone registers to display and measure consumption to 8 digits of granularity.

F. Configure the meter and module to meet the requirements outlined in Attachment 9 – System Requirements Addendum to the Agreement.
11 Itron Application Integration.

Itron shall provide integration support and services to SAWS as specified in accordance with Attachment 13 – Solution Architecture Addendum to the Agreement. When completed, this integration work shall assure that the HES and the SAWS Enterprise Systems will be able to consistently and successfully conduct error free data exchanges between each other. The timeline of integrations is specified in Attachment 12 – Integrated Master Schedule Addendum in the Agreement.

11.1 Itron Responsibilities:

A. Develop a project plan for the HES integration. Initial high-level timelines are specified in Attachment 12 – Integrated Master Schedule Addendum in the Agreement.

B. Assign appropriate solution architecture and other technical resources to the integration work.

C. Participate in workshops with SAWS and other ConnectH2O vendor partners to update the existing Solution Architecture [Attachment 13 – Solution Architecture Addendum to the Agreement], which describes, at a high level, the scope of integration.

D. Provide input into SAWS system interface documentation that outlines the integration points to deliver the expected functionality to the expected SAWS business application. Documentation will include the environments, configurations, uses, and expectations of integrations within and between each HES environment and with SAWS Meter Data Management System (MDMS) and SAWS third-party performance metrics evaluation tool.

E. Assist with prototyping and testing of HES integrations.

F. Configure HES to meet the integration and configuration requirements as outlined in the system interface documentation.

G. Configure the Itron HES to receive account, service point, and meter configuration data for AMI communications modules and static water meters that have been installed in the field.

H. Configure the HES to generate, receive, and provide daily and periodic data transactions with the SAWS Meter Data Management System (MDMS) and SAWS third-party performance metrics evaluation tool as specified in Attachment 13 – Solution Architecture Addendum to the Agreement.

I. Provide published interfaces to make on-cycle and off-cycle billing determinants (register reads and interval data) available to SAWS Meter Data Management System (MDMS) and SAWS third-party performance metrics evaluation tool. Interfaces should deliver the configurations, uses, and expectations as outlined in the systems interface documentation.

J. Provide published interfaces to make events and alarms across the entire AMI communications module, static water meter, and Network device population including meter tamper, energy diversion, site diagnostics, and load diagnostics available to SAWS Meter Data Management System (MDMS) and SAWS third-party performance metrics evaluation tool.

K. Provide a complete listing of the events and alarms produced by the AMI communications module, static water meter, and Network devices with the corresponding product documentation.
L. Provide read data, associated flag data, and AMI communications module and static water meter diagnostics data necessary to meet the System Requirements outlined in Attachment 9 – System Requirements Addendum to the Agreement as well as the Service Level Requirements set forth in the Service Level Requirements Addendum in Attachment 16 in the Agreement.

M. Assist in troubleshooting and resolving HES configuration and integration issues.

N. Facilitate knowledge transfer about the HES with SAWS’ system integrator resources.

11.2 SAWS Responsibilities:

A. Coordinate meetings with Itron and internal resources, as needed, to provide the optimal flow of information.

B. Articulate requirements for testing and draft a functional test plan related to integration for Itron review and feedback.

C. Identify and confirm which of SAWS’ Enterprise Systems (currently identified as SAWS Meter Data Management System (MDMS) and SAWS third-party performance metrics evaluation tool) require integration with the HES to fulfill the AMI System requirements.

D. Create and maintain the systems interface documentation and update to reflect the HES and integrations between the HES and other systems.

E. Provide Itron with access to vendors and application subject matter experts as needed to complete the Itron Interface Diagram document.

F. Review and, if acceptable to SAWS, accept the Itron System Interface document within timely fashion.

12 Solution Security:

Itron shall provide an AMI System that is safe and secure, and that complies with industry standards and the requirements of this Agreement. SAWS specific security requirements can be identified in the following documents:

1. The Agreement
2. Attachment 15 – Statement of Work #1 to the Agreement
3. Attachment 9 – System Requirements Addendum to the Agreement
4. Attachment 3 – Maintenance Services Addendum to the Agreement
5. Exhibit C to this Attachment 15 – Statement of Work #1 to the Agreement, SAWS_Cloud_VTAQ-Lite

Itron and SAWS will provide the following Services listed in this section.

12.1 Itron Responsibilities:

A. Work with SAWS on security planning, assessments, threats, mitigations, architecture, design, test plans, test execution, standards, procedures, and reporting including device and user authentication, encryption, VPNs, firewalls, security appliances, intrusion detection, vulnerability scans, and penetration testing as needed to significantly mitigate threats at or above industry standard and achieving compliance with SAWS requirements and standards.

B. Lead an interactive session to provide an overview of Itron’s security model with SAWS,
including a review of the security technologies (including LAN and WAN security),
policies, processes, controls and features of the HES in preparation deployment.

C. Provide threat assessment documents that describe any known threats against the
HES and the mitigation actions taken to address these known threats for SAWS review.

D. If requested by SAWS, provide security threat assessment and penetration testing
support to SAWS. Resolve and remediate Errors found during penetration testing in
accordance with Attachment 3 – Maintenance Services Addendum to the Agreement.

E. Provide security architecture and configuration documentation that describes
recommended security architecture including the placement and configuration of the
security appliances.

F. Provide information and rules needed for SAWS firewall configuration for the SaaS
solution implementation.

12.2 SAWS Responsibilities:

A. Work with Itron on security planning, assessments, threats, mitigations, architecture,
design, test plans, test execution, standards, procedures, and reporting including
device and user authentication, encryption, VPNs, firewalls, security appliances,
intrusion detection, vulnerability scans, and penetration testing as needed to
significantly mitigate threats at or above industry standard and achieving compliance
with SAWS requirements and standards.

13 Training

Training is an integral part of any successful AMI System implementation.

13.1 Itron Responsibilities:

A. Provide the training described in Exhibit B, training to SAWS’ staff and vendor partners,
with a goal of providing sufficient knowledge to enable SAWS and vendor partner
resources to:
   a. Understand key management and operational topics concerning the AMI
      System.
   b. Train other SAWS employees in the use of the AMI System.

B. Collaborate with SAWS in development of an overall training plan in accordance with
Exhibit B, Training, and document accordingly in the Project Schedule as set forth in
Attachment 12 – Integrated Master Schedule Addendum in the Agreement.

C. Provide information regarding prerequisite knowledge, experience, and/or prior
coursework for each course offered.

D. Provide the necessary training or refresher training and software for SAWS personnel
to install and maintain AMI communications modules and static water meters.

E. Deliver each agreed upon training course at SAWS’ facilities in a structured classroom
training format using instructor (in-person or virtual) learning or web-based training in a
mutually agreed-upon training format.

F. Provide a minimum of four (4) weeks written notice prior to scheduling any training
courses, which would then be scheduled at a mutually convenient date and time.
13.2 SAWS Responsibilities:

A. Provide appropriate SAWS’ and vendor partner staff to receive training for the roles that they perform.

B. Work with Itron to determine needed equipment and environments (PC, Rooms, internet etc.) to conduct training.

14 System Testing

Over the course of the Deployment, SAWS intends to perform system testing in order to verify that the installed system meets or exceeds the requirements of this Agreement.

14.1 Testing Requirements & Methodology: The following testing efforts are required by SAWS to accept the selected AMI System. Execution of these testing efforts will require the setup of various testing and production environments. Acceptance shall consist of the following:

A. First Article Testing (FAT). SAWS will perform FAT testing and, at its completion, will have a Go/No-Go meeting to determine if the Endpoints have passed the Release for Meter Manufacturer (RMM) gate, which signifies Endpoints and Network equipment can be produced and deployed in the Lower Environments. FAT will consist of, but is not limited to: production documentation, nameplate verification, and programming verification. The 500W GenX water module will be FAT tested in the QA environment and also in the production environment. QA environment to be used for lab testing phase and production environment for Pilot Term and System Term.

B. System Unit Testing. System Unit Testing is defined as the testing that occurs within the confines of a specific component solution, such as within the AMI System itself, that validates that the updated coding and configuration for the respective system is functioning and properly delivering the specified outputs of the specific “requirement” for which such coding was performed. As each code module is developed, unit tests are generated and executed to validate each particular function / method handles the inputs and outputs correctly. The System Unit Testing will be done in the QA environment. Once System Unit Testing is completed a Go/No-Go meeting will be conducted to determine if the release for System Integration Testing can be conducted. System Unit Testing will consist of but is not limited to:

   a. Provisioning (SAWS MDMS<->AMI)
   b. Performance measurement (AMI<->SAWS Performance Measurement tool)
   c. Off/On Cycle Reads
   d. Events/Alarms
   e. Over-The-Air (OTA) FW Upgrades
   f. System Reporting
   g. Data File Generation for Meter Data

C. System Integration Testing (SIT). SIT is defined as testing performed to evaluate the complete system’s compliance with specified requirements. SIT also includes the testing that occurs between one or more existing enterprise systems, one or more vendor systems, or a combination of one or more enterprise and vendor systems. SIT is typically executed with contrived data and validates that integrated systems realize
the expected requirements. The System Integration Testing will be conducted in the QA environment. Once System Integration Testing is completed, a Go/No-Go meeting will be conducted to determine if the release for User Acceptance Testing can be conducted. SIT will consist of but is not limited to:

a. Provisioning (SAWS MDMS<->AMI)
b. Performance measurement (AMI<->SAWS Performance Measurement tool)
c. Off/On Cycle Reads
d. Events/Alarms
e. Over-The-Air (OTA) FW Upgrades
f. System Reporting
g. Data File Generation for Meter Data

D. **User Acceptance Testing (UAT).** To be conducted in QA environment by SAWS. Once UAT is completed, a Go/No-Go meeting will be conducted to determine if the deployment of end-point devices (Meters, Register and Modules) and Network equipment can commence. UAT will consist of the following, but not limited to:

a. Provisioning (WOMSSAWS MDMS<->AMI)
b. Performance measurement (AMI<->SAWS Performance Measurement tool)
c. Off/On Cycle Reads
d. Events/Alarms
e. Over-The-Air (OTA) FW Upgrades
f. System Reporting
g. Data File Generation for Meter Data

E. **Field Acceptance Testing.** Field Acceptance Testing is designed to verify that functional and technical capabilities of the solution under operating field conditions. Field Acceptance Testing will be conducted in both a lab setting and using deployed endpoints. The Field Acceptance Testing will be completed in the QA and production environments. In the case of the AMI System, Field Acceptance Testing is a critical prerequisite that must be passed prior to placing the solution into operation or releasing it for automated billing purposes.

F. **Final System Acceptance Testing (FSAT).** Final System Acceptance Testing (“FSAT”) will verify that the technical, functional, performance (SLR’s), information, and commercial requirements in this specification have been scaled and achieved as outlined in the Optimization Criteria. The timing and structure of the Final System Acceptance Test Plan shall be mutually agreed upon by Itron and SAWS. For clarification, the Parties have agreed that the Optimization Criteria set forth in this Agreement shall be used during the Final System Acceptance Test Plan. The Final System Acceptance Testing shall include a majority of Endpoints deployed across the entire AMI System. FSAT will be conducted in the production environment as described below:
a. Upon completion of Acceptance for all Optimization Areas of the AMI System pursuant to Section 8.5.2 above, or as otherwise mutually agreed by the Parties, SAWS will have thirty (30) days ("System Acceptance Period") to test the full AMI System as a whole to ensure it meets the Optimization Criteria.

b. SAWS shall, within fourteen (14) calendar days after the end of the System Acceptance Period, send to Itron either a written notice of acceptance or a written notice of rejection that includes a detailed description of any non-conformities ("System Notice").

c. If SAWS rejects the AMI System, Itron shall have sixty (60) calendar days (the "System Remediation Period") to correct the nonconformities and deliver a corrected version to SAWS. The System Acceptance Period shall then begin anew with respect to such corrected version.

d. Acceptance of the AMI System shall be deemed ("Final System Acceptance") only upon the earlier of: i) SAWS’s System Notice of AMI System acceptance, or ii) all Optimization Areas of the AMI System achieving Critical Performance Metrics as specified in the Service Level Requirements Addendum in Attachment 16 of the Agreement.

e. Notwithstanding in the Agreement to the contrary, if Itron fails to correct the AMI System after three (3) System Remediation Periods, SAWS shall have the right to terminate the Agreement pursuant to Section 13.2(c) of the Agreement.

14.2 Itron Responsibilities.

A. Provide subject matter expertise, guidance, and templates to assist SAWS in the development of the system testing plans.

B. Support the creation of testing documents according to the applicable testing activity and acceptance criteria inclusive of applicable test scripts to ensure that system performance, capacity, and functional requirements are satisfied.

C. Provide sample relevant test scripts previously developed by Itron.

D. Assist SAWS in conducting system testing activities.

E. Produce five (5) first article static water meters.

F. Resolve issues identified during first article testing and provide new first article static water meters for re-testing.

G. Ensure, as reviewed and approved by SAWS, that the Final System Acceptance Testing will include no less than 95% of Endpoints deployed across the SAWS service territory.

H. Adhere to the SAWS scheduled test Gates and Go/No-Go Meetings as specified in Attachment 12 – Integrated Master Schedule Addendum in the Agreement.

I. Assist SAWS with assigning each Error a service level based on SAWS’ then current service level classification system as outlined in Attachment 3 – Maintenance Services Addendum to the Agreement.

J. Provide troubleshooting and remediation support to SAWS during the execution of the test plans.
K. Provide all systems and field work necessary to correct items that fail testing so that SAWS can rerun and complete the required testing.

L. For documentation of test results, support the use of a Requirements Traceability Matrix (RTM) developed by SAWS.

M. Support the maintenance of the RTM by providing updates on no less than a weekly basis.

N. Support SAWS with regression test activities to re-validate system compliance after any system change, release, patch, firmware or hardware upgrade, etc.

O. Follow the established testing process requiring system changes to successfully complete testing in lower environments before promoting to Production and Disaster Recovery environments.

14.3 SAWS Responsibilities. SAWS will perform each of the following tasks:

A. Create, with Itron support, testing documentation in accordance with the applicable stage gate. Testing activities will be inclusive of applicable test documentation ensuring that system performance, capacity, and functional requirements are satisfied.

B. Develop an integrated testing schedule that encompasses the test use cases for each stage of testing.

C. Create and maintain the Requirements Traceability Matrix (RTM).

D. Use a defect tracking framework to maintain a comprehensive log of all Errors found, the status of such Errors, and the resolution plan and schedule therein.

E. Conduct regular regression test activities throughout the deployment period to re-validate system compliance after any system releases, patches, firmware, or hardware upgrades, etc.

14.4 Joint Responsibilities. The Parties will work together to perform each of the following tasks:

A. Participate in coordinated test activities.

15 Documentation

15.1 Itron Responsibilities

A. Deliver current and written documentation for all products, services, and technologies delivered under this Agreement

B. Installation Guides

C. Training Documentation

16 Solution Roadmap

The addition of new AMI System capabilities is important to SAWS. The provision of a solution roadmap will help SAWS to plan for changes to its AMI System capabilities.

Baseline roadmap is included in Attachment 9 – System Requirements Addendum to the Agreement.

16.1 Itron Responsibilities:

A. Provide an AMI System roadmap, including a brief explanation of each roadmap item,
of modifications and enhancements scheduled for release over the next 18 months as related to this proposal. Roadmap to be delivered electronically and a meeting will be scheduled to review and discuss.

B. Provide an update to the AMI System roadmap every 6 months. Roadmap to be delivered electronically and a meeting will be scheduled to review and discuss.

17 Pilot Period and Transition to Full Deployment

SAWS is utilizing the Pilot Term to determine which AMI vendor will be selected for implementation of its AMI solution for the entire SAWS service territory. During the Pilot Term, approximately 2500 water meters will be retrofit/replaced and the performance of the AMI System will be assessed. Upon completion of the Pilot Term, a single AMI vendor will be selected and that vendor's AMI solution will be implemented for the remaining water meter population over a 45 month period.

SAWS will utilize the following criteria, at its discretion, to select the AMI vendor for full implementation:

A. Achievement of the Service Level Requirements outlined in Attachment 16 – Service Level Requirements Addendum to the Agreement.

B. Achievement of the functional and technical requirements outlined in Attachment 9 – System Requirements Addendum to the Agreement.

C. Projected total cost of the AMI System over its lifetime.

D. Perceived capability to realize the SAWS AMI business case benefits.

Upon selection of the AMI solution for full deployment, SAWS anticipates a 4-6 month period of mobilization prior to beginning additional meter/module installations.
Itron offers SAWS a unique opportunity to avoid the time and expense of building, operating, and maintaining an AMI network. The existing smart metering AMI (GenX) network at CPS Energy covers 99.8% (533,906 out of 534,903) of SAWS’ water meters. Under this community-minded solution, using existing infrastructure owned by CPS Energy, Itron proposes to deploy Itron 500W radio frequency water endpoints on SAWS meters. These will then be read by CPS Energy’s existing and actively maintained GenX AMI network infrastructure.

For the approximately 997 (0.2%) of the SAWS water meters that are not covered by the existing CPS Energy GenX network, Itron will provide its cellular 500W solution.
Exhibit B – Training

This exhibit summarizes the training offered by Itron as part of the AMI System. The purpose of this training is to provide SAWS’ staff and vendor partners with sufficient knowledge to operate the various elements of the AMI System.

500W Installation Training
- Itron will provide on-site training for the Endpoint installation vendor chosen for the Pilot and Production deployments.
  - On-site training will consist of one “Train the Trainer” session to be held prior to Production deployment.
  - 500W Installation Training is not required prior to the Pilot installs beginning. The selected Pilot installers are familiar with the 500W installation procedure and have requested training for Production phase only.

FDM Tools
- Itron will provide on-site or remote training of the FDM tools suite.
  - Initial training will be supplemented with an online database of users guides and tutorials for use and access at any time.
  - Any updates made to FDM Tools will be documented and updated training materials will be available prior to the upgrade to Production.

Temetra
- Itron will provide one on-site or remote training of Temetra prior to Pilot deployment.
  - Initial training will be supplemented with an online database of users guides and tutorials for use and access at any time.
  - Any updates made to Temetra will be documented and updated training materials will be available prior to the upgrade to Production.
Sample Agendas

*The sample agenda below are for illustrative purposes only and are subject to change at the sole discretion of Itron as needed to provide all training required to support the AMI System provided that Itron will notify SAWS in writing of any changes to the agenda.

500W Installation Training

- About the GenX 500W ERT Module 9 – General Overview
  - Description
  - Related Documents
  - Itron Security Manager (ISM)
  - Battery Life
  - Low Battery
  - Transmission Modes
  - Operating Modes
  - Events and Alarms
  - Extended Alarm Flag

- Installing the GenX 500W ERT Pit Module – Detailed Installation Overview
  - Pit Module Mounting Accessories
  - Pit Modules with Integral Connectors
  - Through-lid Installation Commercial Installations
  - Required Tools and Hardware
  - Installing the Module in the Pit Lid
  - Rod Mount Installation Residential Installations
  - Required Tools and Hardware
  - Installing

- Initializing, Connecting, and Programming the Pit Module 23
  - Start Up
  - Extending the Cable
  - Encoder-type Meter Register Connections
  - Pulser-type Register Connections

- Connecting the Inline Connector
- Completing Gel-cap Connections Using the Itron Splice Kit 29

FDM Tools

- FDM Tools (Battery Powered Devices)
- Locate Functions/Information in the FDM Tools Server UI
- FDM Work Orders (Optional)
- Manage User Security in FDM Tools
- FDM Tools for OpenWay Riva Multi-Mode Capable Devices Command Log (User Activity)
- Basic 500G ERT Operating Characteristics
- Basic OpenWay Riva Water Module Operating Characteristics
- Field Deployment Manager (FDM) Tools for OpenWay Riva Multi-Mode Capable
Devices Overview
- Install OpenWay Riva Multi-Mode Capable Endpoints Using FDM Tools
- Day-in the-Life with FDM Tools with Battery Powered Devices (Gas Version)
- Day-in the-Life with FDM Tools with Battery Powered Devices (Water Version)

Temetra
- Introduction
  o Training Introduction and Objectives review
- Temetra Overview
  o Solution Overview
- Solution Components
  o Temetra Web Portal & Mobile Software Overview
- Concepts & Terminology
  o Temetra Concepts & Terminology Review
- Live Demo
- Network Administration
  o Temetra connection, Training Network setup, Users & Roles Administration
  o Basic Settings Review, Housekeeping
- Route Management
  o Route Creation, CSV Data Import, Route Upload
- Network Asset loading
  o How to initialize Temetra network with CIS data
  o How to keep Temetra in synch with CIS data
- Fixed Network data Management
  o Fixed Network daily data monitoring
  o Fixed network alarms tracking
- Schedule Management
  o Schedule Creation
  o Schedule Assignment
  o Billing data export
- Customer Web portal
  o How to setup a customer access
  o How to create notification alarms
Exhibit C - SAWS_Cloud_VTAQ-Lite

[SEE CHART ON NEXT 4 PAGES]
Cloud VTAQ - Lite

General Information

Under the terms of the service agreement, standard services, products, and/or services will be charged at the rates specified in the Statement of Work. Any variances in service rendered will be charged to the Customer or User. All statements of work are subject to change without notice.

DRAFT

Company Overview

Back to Top

Additional Information

Vendor Answers

Description:

Describe the business and environment, including all relevant and critical business objectives.

Software

Describe the software in use.

Hardware

Describe the infrastructure in use.

Security

Describe the security measures in place.

Other

Describe any other relevant information.

Additional Information

Vendor Answers

Description:

Describe the business and environment, including all relevant and critical business objectives.

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Hardware

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Security

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Additional Information

Vendor Answers

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Hardware

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Security

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Other

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Additional Information

Vendor Answers

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Hardware

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Security

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Other

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Additional Information

Vendor Answers

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Hardware

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Security

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Additional Information

Vendor Answers

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Additional Information

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Describe any other relevant information.

Additional Information

Vendor Answers

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Describe any other relevant information.

Additional Information

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Hardware

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Additional Information

Vendor Answers

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Describe the software in use.

Hardware

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Security

Describe the security measures in place.

Other

Describe any other relevant information.

Additional Information

Vendor Answers

Description:

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Software

Describe the software in use.

Hardware

Describe the infrastructure in use.

Security

Describe the security measures in place.

Other

Describe any other relevant information.
<table>
<thead>
<tr>
<th>ISSUE</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>110.1.01</td>
<td>Do you have existing public utility customers?</td>
</tr>
<tr>
<td>110.1.02</td>
<td>Have you used significant energy in the last 2 years?</td>
</tr>
<tr>
<td>110.1.03</td>
<td>Do you have a dedicated information security staff or office?</td>
</tr>
<tr>
<td>110.1.04</td>
<td>Do you have a dedicated software and systems development team (&gt;5) (e.g., Customer Support, Implementation, Product Management, etc.)?</td>
</tr>
<tr>
<td>110.1.05</td>
<td>Use this area to share information about your environment that will assist those who are assessing your capability (this should be your responsibility)</td>
</tr>
</tbody>
</table>

**Application/Service Security**

<table>
<thead>
<tr>
<th>Vendor Answers</th>
<th>Guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HA-AP-01</strong></td>
<td>Do you support role-based access control (RBAC) for end-users?</td>
</tr>
<tr>
<td><strong>HA-AP-02</strong></td>
<td>Do you provide access control for applications and users in your environment?</td>
</tr>
<tr>
<td><strong>HA-AP-03</strong></td>
<td>Do you employ access control data properly?</td>
</tr>
<tr>
<td><strong>HA-AP-04</strong></td>
<td>Does the system provide data input validation and error messages?</td>
</tr>
<tr>
<td><strong>HA-AP-05</strong></td>
<td>Do you provide support for web-based applications (e.g., e-commerce)?</td>
</tr>
</tbody>
</table>

**Authentication, Authorization, and Accounting**

<table>
<thead>
<tr>
<th>Vendor Answers</th>
<th>Guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HA-AU-01</strong></td>
<td>Can you leverage passphrases as an authentication method?</td>
</tr>
<tr>
<td><strong>HA-AU-02</strong></td>
<td>Do you have a comprehensive implementation of your authentication and authorization systems?</td>
</tr>
<tr>
<td><strong>HA-AU-03</strong></td>
<td>Does your application use a database and other authentication and authorization systems?</td>
</tr>
<tr>
<td><strong>HA-AU-04</strong></td>
<td>Does your company support an additional authentication method (e.g., multi-factor authentication)?</td>
</tr>
<tr>
<td><strong>HA-AU-05</strong></td>
<td>Are audit logs available that indicate AT LEAST ALL of the following: login, logout, sessions, processes, and cache searches?</td>
</tr>
</tbody>
</table>

**Business Continuity Plan**

<table>
<thead>
<tr>
<th>Vendor Answers</th>
<th>Guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HBC-PC-01</strong></td>
<td>Do you have a documented Business Continuity Plan (BCP)?</td>
</tr>
<tr>
<td><strong>HBC-PC-02</strong></td>
<td>Is there a documented communication plan in your BCP for impacted customer(s)?</td>
</tr>
<tr>
<td>Section</td>
<td>Question</td>
</tr>
<tr>
<td>---------</td>
<td>----------</td>
</tr>
<tr>
<td><strong>DRAFT-01</strong></td>
<td>Does the hosting provider have a SOC 2 Type 2 report available?</td>
</tr>
<tr>
<td><strong>DRAFT-02</strong></td>
<td>Is there a physical barrier? If yes, please describe the physical space preventing unauthorized physical contact with any of your devices?</td>
</tr>
<tr>
<td><strong>Disaster Recovery Plan</strong></td>
<td>Vendor Answers</td>
</tr>
<tr>
<td><strong>DRLP-01</strong></td>
<td>Do you have a Disaster Recovery Plan (DRP)?</td>
</tr>
<tr>
<td><strong>DRLP-02</strong></td>
<td>Is any disaster recovery solution in place (e.g., RPO, RTO)?</td>
</tr>
<tr>
<td><strong>Firewalls, IDS, IPS, and Networking</strong></td>
<td>Vendor Answers</td>
</tr>
<tr>
<td><strong>DRLP-01</strong></td>
<td>Are you using a web application firewall (WAF) and/ or a stateful application firewall?</td>
</tr>
<tr>
<td><strong>DRLP-02</strong></td>
<td>Do you have a documented policy for firewall change requests?</td>
</tr>
<tr>
<td><strong>DRLP-03</strong></td>
<td>Are you employing any non-redundant persistent threat (NRP) monitoring?</td>
</tr>
<tr>
<td><strong>DRLP-04</strong></td>
<td>Do you monitor for simulators in a (4x4/2/6) basis?</td>
</tr>
<tr>
<td><strong>Physical Security</strong></td>
<td>Vendor Answers</td>
</tr>
<tr>
<td><strong>DRLP-01</strong></td>
<td>Does your organization have physical security controls and policies in place?</td>
</tr>
<tr>
<td><strong>Policies, Procedures, and Processes</strong></td>
<td>Vendor Answers</td>
</tr>
<tr>
<td><strong>DPLP-01</strong></td>
<td>Can you share the organization chart, mission statement, and policies for your information security unit?</td>
</tr>
<tr>
<td><strong>DPLP-02</strong></td>
<td>Are information security principles designed into the product development lifecycle (PDL)?</td>
</tr>
<tr>
<td><strong>DPLP-03</strong></td>
<td>Do you have a formal incident response plan?</td>
</tr>
<tr>
<td><strong>DPLP-04</strong></td>
<td>Do you have a documented information security policy?</td>
</tr>
</tbody>
</table>

January 27, 2020

Page 4

18b
Exhibit D to SOW#1 - Optimization Guidelines

1. SUMMARY

The purpose of this document is to present a more detailed view of the Optimization process. Itron may revise the terms of this Exhibit 1 to SOW#1 – Optimization Guidelines throughout the Term and will notify Customer of these revisions in writing as soon as commercially reasonable. If a revision will have a material impact to Customer’s AMI System capabilities, performance metrics, or business (e.g., a revision could impact Customer’s data security) (a “Material Revision”), Itron will notify Customer in writing of the proposed Material Revision, discuss the purpose and potential impacts of this Material Revision with Customer, and implement it only if Customer signs a Change Request indicating its agreement to the Material Revision pursuant to Section 4.3 of the Agreement.

2. DEFINITIONS AND ASSUMPTIONS

2.1 “Service Point” means the actual location where a Endpoint is installed. A premise might contain multiple Service Points. Only one Endpoint is assigned to a Service Point.

2.2 “Service Point ID” means the unchanging identifier (typically a number or an alphanumeric string) that uniquely designates a Service Point. While an Endpoint is physically installed in a Service Point, the Endpoint Identifiers are linked in UIQ to the Service Point ID. Note that Service Point IDs remain unchanged even as Endpoints are replaced. A single premise might contain multiple Service Points. Only one Endpoint can be assigned to a given Service Point ID at any point in time.

2.3 “Provisioned” [Endpoint] is defined in the Agreement

2.4 “Optimization Endpoint List” is the list of Service Point IDs captured from UIQ at the start of Optimization. This is the list of Service Point IDs (and therefore Endpoints) that will be Optimized. The Initial Snapshot and all other Optimization activities are performed on Endpoints in this list.

3. TRACKING OPTIMIZED ENDPOINTS FOR SLA MEASUREMENTS

The Optimization process tracks “Service Points” as opposed to MAC addresses or Serial Numbers. This allows Endpoint replacements to be automatically added to the Service Level Requirements calculations, as the MAC address changes, but the Service Point ID stays constant.

3.1 When Optimization Starts for Optimization Areas

(a) Optimization of Endpoints / Service Points in each Optimization Area will begin within 14 days after the two requirements set forth in Section 8 below are met for such Optimization Area (“Optimization Area Start Date”).

(b) A maximum of four (4) Optimization Areas will undergo the Optimization process at any one time. The Optimization Area Start Date for additional Optimization Areas may be delayed if there are already four Optimization Areas undergoing Optimization.
The day Optimization starts for an Optimization Area, Itron will capture the Optimization Endpoint List. These Service Points will form the entire set of Endpoints analyzed during Optimization.

i) If additional Endpoints are deployed to Service Points in the Optimization Area after Optimization begins, these will be marked as “Excluded” and will be evaluated and Optimized pursuant to Note 2 of Section 3.3 below and

ii) If a Service Point ID is missing essential information, as mutually agreed by Itron and SAWS, the Service Point ID will be marked as “Excluded” and will be evaluated and Optimized pursuant to Note 2 of Section 3.3 below.

3.2 During Optimization of an Optimized Area

During the Optimization process of an Optimized Area, and pursuant to the timeframe set out in Section 8.5.1 (b) of SOW#1, Itron will perform tests to confirm that Service Point performance in the Optimized Area meets the Optimization Criteria.

During these Optimization evaluations, Itron will

(a) Identify Service Points / Endpoints for which performance meets the Optimization Criteria upon which the Parties have agreed (such Endpoints / Service Points would be considered "Optimized" [Endpoint])

(b) Identify Service Points/ Endpoints that do not meet Optimization Criteria so that they can be investigated and remediated pursuant to Section 4 below.

i. In that case those Endpoints will be marked as “Remediation Pending”.

Optimization may result in the placement of additional, or relocation of existing, Network devices (such as Access Points and Relays) or 500W cellular Endpoints in the Optimization Area. The criteria for selecting a cellular 500W Endpoint over the addition of Network infrastructure will relate to the signal strength the 500W has in its current environment. If the signal strength is fair (i.e., receiving 1 read message in 48 hrs), Itron will look to remediate with a through-the-lid adaptor or external antenna for the 500W GenX Endpoint. If the signal strength is poor (i.e., less than 1 message in 72hrs), Itron will remediate with a cellular Endpoint.

After the Endpoints are remediated and pass (or fail) the tests below they will be marked as Optimized (or Excluded) as during regular Optimization pursuant to Section 4 below.

Similarly, if Itron recommends as part of the Optimization tasks to perform field visits of a set of Endpoints (for example, to verify the Endpoints are working properly), those Endpoints will be marked “Remediation Pending” until the field visits are complete and the Endpoints remediated pursuant to Section 4 below.

In general, Itron expects that during an Optimization the majority fraction of proposed remediations will be completed in a short time, and most devices in the Optimization Area will be marked as Optimized. In addition, some small fraction of Endpoints might have pending field visits or some additional Network equipment (such as APs and Relays) or 500W cellular Endpoints might be pending installation. In this case, the Endpoints will be marked (temporarily) as “Remediation Pending”.

3.3 When Optimization of an Optimization Area Ends

Optimization of an Optimization Area is complete when each Service Point ID in the Optimization Service Point List for such Optimization Area is assigned to one of these categories and at least 98% of all Service Points are “Optimized”:

(a) "Remediation Pending" – an action is pending for the Endpoint at this Service Point.
(i) Examples: Endpoint is not active and awaiting a field visit, installation of an AP, Relay, or external antenna, etc.
(ii) These devices will be moved to Optimized or De-scoped after remediation is complete.

(b) “Optimized” – Service Point is used in the Service Level Requirements calculations as long as the Endpoint is Provisioned.

(c) “Excluded” – Endpoint at this Service Point is not considered during an Optimization.
   (i) Endpoints in areas awaiting additional Endpoint deployment in an adjacent Optimization area.
   (ii) Endpoint installed after Optimization has started.

(d) “Abandoned” – Endpoint at a Service Point that is flagged as “Abandoned” by SAWS as a result of a business decision by SAWS. SAWS will communicate any such designations to the Itron design team.

Note:
1. For clarity, Service Points / Endpoints marked as “Excluded” and Remediation Pending are not used in Service Level Requirements calculations.
2. Remediation Pending and Excluded Endpoints will be evaluated and Optimized in the Optimization Catch-Up process.

4. OPTIMIZATION CATCH-UP PROCESS

Service Points / Endpoints that are identified as “Excluded” or “Remediation Pending” will be re-evaluated for Optimization at least every two months (or a mutually agreeable frequency) (“Optimization Catch-Up”), to determine if such Service Points / Endpoints are eligible for being marked as Optimized. This process will cover Endpoints pending previous recommendations for any previous Optimizations regardless of area. Any Service Points / Endpoints identified as “Optimized” through the Optimization Catch-Up process will be included in the next month’s measurements for calculating Service Level Requirements. The initial Optimization Catch-up Process will begin 60 days from the date of the first Optimization Area Acceptance and be conducted every 60 days until notice of Final System Acceptance is received by Itron.

5. GLOBAL RE-OPTIMIZATION FOR ORGANIC GROWTH

Optimization of Endpoints / Service Points added after Final System Acceptance (“Organic Growth Endpoints”) is not included in the Optimization process set forth in SOW#1. Optimization of Organic Growth Endpoints will be subject to an additional fee to be mutually agreed between the Parties.

Typically, a utility deploys additional Endpoints as new buildings, sub-divisions, and other construction takes place, and removes Endpoints as buildings are torn down. Every year, we expect there will be an increase of approximately 2.2% of Organic Growth Endpoints from the previous year.

At SAWS request, and subject to a separate SOW, Itron will perform a “Global Optimization” for Organic Growth Endpoints to address all such Endpoints installed in all previously Optimized areas after their respective Optimizations. The Global Optimization will evaluate all newly created Service Points since the last Optimization and will also include all previous Service Points (for example, if an AP is now overloaded).
6. OPTIMIZATION PROCESS OVERVIEW

All timeframes below are typical durations and subject to change. Notwithstanding the foregoing, Itron will use commercially reasonable efforts to complete Optimization in a timely manner.

<table>
<thead>
<tr>
<th>Entry Criteria</th>
<th>What Happens</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Optimization Area reaches 95% of Endpoints installed</td>
<td>14 days of data gathering starts</td>
<td></td>
</tr>
<tr>
<td>2. UIQ attributes loaded pursuant to Section 8(2) below</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 days of data gathering complete</td>
<td>Optimization Starts</td>
<td>1. Optimization Endpoint List populated from UIQ</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Itron starts analysis</td>
</tr>
<tr>
<td>Initial assessment complete</td>
<td>Initial Assessment Delivered</td>
<td>1. Includes analysis and remediation recommendation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Update Optimization Endpoint List with categories (e.g. &quot;Remediation Pending&quot;)</td>
</tr>
<tr>
<td>List of Recommendations becomes available</td>
<td>Remediation Starts</td>
<td>1. All newly installed devices have to be Provisioned in UIQ</td>
</tr>
<tr>
<td>Recommendations implemented and/or postponed for this Optimization</td>
<td>Remediation phase Declared Complete for this Optimization</td>
<td></td>
</tr>
<tr>
<td>7 days after Recommendations are complete</td>
<td>Secondary Assessment Starts</td>
<td>1. Review performance after remediations</td>
</tr>
<tr>
<td>Secondary Assessment complete</td>
<td>Secondary Assessment Delivered</td>
<td>1. Includes analysis and remediation recommendation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Update Optimization Service Point List with categories (e.g. clear “Remediation Pending”)</td>
</tr>
<tr>
<td>Secondary Assessment Delivered and Reviewed</td>
<td></td>
<td>Typically runs for 7 days</td>
</tr>
<tr>
<td>Final Performance Assessment Complete</td>
<td>Generate Final Report</td>
<td>Typically takes 3-5 days</td>
</tr>
<tr>
<td>3 days after Final Performance Assessment Complete</td>
<td>Deliver Final Report and Review Results with SAWS</td>
<td></td>
</tr>
<tr>
<td>Final Report Reviewed</td>
<td>Update SLA List</td>
<td>Endpoints marked “Optimized” in the Optimization Endpoint List included in SLA computation</td>
</tr>
</tbody>
</table>

7. OPTIMIZATION ENTRANCE CRITERIA DETAILS

1) Endpoint Installations
   a. At least 95% of the Endpoints within an Optimization Area must be installed – the metric is the number of Endpoints associated with a Service Point in AMM divided by the number of Endpoints planned for installation in the offices that make up the Optimization Area
      i. Saturation report, provided by SAWS or its third-party installer, is used to validate the percentage complete of each Optimization Area. If an Optimization Area has less than 95% of Endpoints installed, Optimization in this area will not begin.
2) **Required Endpoint attributes must be loaded in Temetra**
   a. The list of required Endpoint attributes is:
      i. Mac address
      ii. Billing cycle
      iii. Region Code
      iv. Location Route ID
      v. Lat/Long
      vi. Full street address

SAWS will ensure all data is provided to HES via planned integrations
ATTACHMENT 16 – SERVICE LEVEL REQUIREMENTS ADDENDUM

1. **Relationship to General Terms and Conditions.** This Addendum is governed by the General Terms and Conditions and any other applicable terms of the Agreement. This Addendum applies to the AMI System.

2. **Service Level Requirements Measurement.** Provided Customer has paid all applicable, undisputed Subscription Fees, Itron agrees to meet the Service Level Requirements, as described in detail in Section 5 below, in connection with the AMI System, measured and reported monthly beginning in the first full calendar month following each Optimization Area Acceptance.

3. **Service Level Report.** Itron will provide reports of Service Level Requirements to Customer on a monthly basis, with such reports delivered to Customer by the twenty-fifth day of the month following the reported month. Such monthly reports will contain sufficient detail so that Customer may determine whether any credit is due for such month. All service level credits will be applied to Customer’s next monthly invoice, or if there is no additional invoice, then they will be paid to Customer within thirty days following delivery of the applicable service level report. Customer will be able to monitor Service Level Requirements daily through the Temetra head end system. Itron records and data will be the sole basis for all measurements and calculations used for calculating Service Level Credits below. During the Pilot Term, Customer will also use a third party performance measurement tool to assess Performance Metrics. Itron will use good faith efforts to investigate and resolve any discrepancies in assessments between internal measurements and calculations and third party performance measurement tools.

4. **Exclusions.** Itron shall not be liable for failing to meet a Service Level Requirements to the extent such failure is attributable to any one or more of the following: (i) Endpoints that are not Provisioned (ii) failures in external Internet or VPN configurations not managed by Itron; (iii) a Force Majeure event; (iv) reports of unavailability as a result of power outages; (iv) an act or omission of Customer or third parties (other than Itron’s Subcontractors, consultants, agents, or suppliers), including security incidents caused by such act or omission; (vi) failures of third-party equipment, hardware, software, or services not provided by Itron, including but not limited to the backhaul between the SaaS and the NaaS; (v) Customer’s delay in performing tasks designated as its responsibility in this Agreement; vi) or (v) to the extent the Service Level Requirements relate to the AMI Subscription: (A) Unplanned Maintenance up to 2 hours in any 24 hour period or up to 12 hours in any calendar month, and (B) Planned Maintenance up to 2 hours in any 24 hour period or, no more than 3 times per calendar month, up to 8 hours in any 24 hour period, for a collective total of up to 30 hours in any calendar month, or as the Parties mutually agree otherwise; (C) an event triggering a disaster recovery and for a twenty-four (24) hour period after the resumption of the AMI Subscription following such an event to allow the AMI Subscription to return to normal operating ranges; and (D) suspension or restriction of the AMI Subscription pursuant to Section 11 (Suspension or Restriction of Service) of Attachment 1 (AMI Subscription Addendum).

5. **Service Level Requirements.** The AMI System, and various components thereof, as applicable, will meet the following Service Level Requirements:

   (a) **Availability.** Itron shall strive to make the AMI Subscription available 24 hours a day, 7 days a week, 365 days a year 100% of the time to Customer. At a minimum, SaaS Availability will be at least 99.8%, measured and reported monthly beginning in the first full calendar month following Customer’s initial payment for the SaaS. “Availability” is determined by dividing the duration of Service Outages (defined below) by the total number of minutes in a calendar month and subtracting the resulting decimal number from 1.000.
Availability is measured by simulating a login to the SaaS user interface via: a) web browser client and; b) web services interface. To make these measurements, Itron will use the NodePing (or similar) service to simulate logins at 1-minute intervals over the entire month.

(i) **“Service Outage”** means any period of time, measured in minutes, that the SaaS or Customer Data is not available to Authorized Users for normal business operations pursuant to the terms of this Agreement, except as a result of Excused Outages. “**Excused Outages**” are those periods, measured in minutes, when the SaaS or Customer Data is not available to Authorized Users for normal business operations pursuant to the terms of this Agreement as a result of an exclusion as defined in Section 4 above (Exclusions). [NOTE: Non-Provisioned Endpoints, listed in the Exclusions section, should NOT be an exclusion when defining an “Excused Outage”.]

(ii) **Remedies.** As Customer’s sole and exclusive remedy for Itron’s failure to meet Availability of less than 99.8%, Customer will be entitled to the remedies set forth in this Subsection 5(a)(ii):

1. credits to be applied on the next month’s invoice as follows:

<table>
<thead>
<tr>
<th>Monthly Availability</th>
<th>Percentage of Monthly Payment of SaaS Fee Credited to Customer</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;=99.8%</td>
<td>0%</td>
</tr>
<tr>
<td>&gt;=98.5% to &lt;99.8%</td>
<td>5%</td>
</tr>
<tr>
<td>&gt;=97.5% to &lt;98.5%</td>
<td>10%</td>
</tr>
<tr>
<td>&gt;=95% to &lt;97.5%</td>
<td>20%</td>
</tr>
<tr>
<td>&gt;=90% to &lt;95%</td>
<td>30%</td>
</tr>
<tr>
<td>&gt;=75% to &lt;90%</td>
<td>40%</td>
</tr>
<tr>
<td>&lt;75%</td>
<td>50%</td>
</tr>
</tbody>
</table>

2. If the Availability level for any calendar month falls below 75%, Customer may provide Itron written notice of such failure, and Itron will have ninety (90) days from the date of such notice (“**Availability Cure Period**”) to restore the Availability to 99.8% or greater through either a temporary fix or a permanent solution, provided that if such remedy by Itron is temporary, Itron shall also provide Customer a detailed plan for permanent resolution to the failure (“**Excessive Availability Failure Resolution**”). If Itron fails to provide the Excessive Availability Failure Resolution within the Availability Cure Period, Customer shall have the right to terminate the Agreement pursuant to Section 13.2(c) of the Agreement by providing Itron with written notice of such termination date.

(b) **Performance Metrics.** The AMI System will meet the performance metrics set forth below (“**Performance Metrics**”). The following Performance Metrics apply only to a minimum of 10,000 Optimized and Provisioned Endpoints in the applicable month:

(i) **Water: Daily Register Delivery.** The AMI System shall provide a cumulative consumption (Gallons) register read, time stamped within the previous 24 hour period ending at midnight on the previous day, from no less than 97.50% of all Endpoint by 7:00AM local time. The AMI System shall provide the same data for the same group of meters for the same 24 hour period for no less than 99.00% of all
Endpoints by 7:00AM local time of the day following.

Illustration: By 7AM on 3/20/2020, a register read time-stamped at any time on 3/19/2020 should be obtained from at least 97.50% of all Endpoint. Further, by 7AM on 3/21/2020, a register read time-stamped at any time on 3/19/2020 should be obtained from at least 99.0% of all Endpoint.

(ii) **Water: Daily Interval Delivery.** By 7AM of each calendar day, the AMI System shall provide: (A) all Daily Interval Register Reads for the previous calendar day from no less than 97.50% of all Endpoints within the AMI System, and (B) all Daily Interval Register Reads for the calendar day that is two days prior from no less than 99.00% of all Endpoints within the AMI System. “Daily Interval Register Reads” means twenty-four 60-minute interval consumption (Gallons) Endpoint register reads that are time-stamped by midnight on the same calendar day such interval register reads are taken. For clarity, this metric will be reported monthly (i.e., the daily metric is reported on a monthly basis), however, Customer will have the ability to view such metrics on a daily basis at minimum and as configurable through the Temetra dashboard.

Illustration: By 7AM on 3/20/2020, all 24 interval consumption reads from 3/19/2020 should be obtained for at least 97.50% of all Endpoints. Further, by 7AM on 3/21/2020, all 24 interval consumption reads from 3/19/2020 should be obtained for at least 99.0% of Endpoints.

(iii) **Water: Consumption Data Delivery Per Billing Cycle.** SAWS uses a 3-day reading window to capture billing register reads for a bill cycle. The last day in the reading window is referred to as the Read Day. Any register read captured during the 3-day reading window can be used for billing. The following requirements apply to those Endpoints within their respective 3-day reading windows:

(a) The AMI System shall provide a cumulative consumption (Gallons) register read, time stamped on Read Day -2, from no less than 98.00% of all Endpoints by 7:00AM local time on Read Day -1

(b) The AMI System shall provide a cumulative consumption (Gallons) register read, time stamped on either Read Day -2 or Read Day -1, from no less than 99.00% of all Endpoints by 7:00AM local time on the Read Day

(c) The AMI System shall provide a cumulative consumption (Gallons) register read, time stamped on Read Day -2, Read Day -1, or the Read Day, from no less than 99.5% of all Endpoints by 4:00PM local time on the Read Day

Illustration: By 7AM on 3/19/2020, a register read time-stamped at any time on 3/18/2020 should be obtained for at least 98.0% of all Endpoints in the current bill cycle. By 7AM on 3/20/2020, a register read time-stamped at any time on 3/18/2020 or 3/19/2020 should be obtained for at least 99.0% of all Endpoints in the current bill cycle. By 4PM on 3/20/2020, a register read time-stamped at any time on 3/18/2020, any time on 3/19/2020 or before 4PM on 3/20/2020 should be obtained for at least 99.5% of all Endpoints in the current bill cycle.

(iv) **End-to-end completion time for firmware and configuration updates for**
endpoints (e.g., meter, register and module) shall not take more than 30 days for 98.5% of the Endpoints. This SLA will be reported to Customer within 30 days of each instance.

(v) **Water Meter - On-Demand Read:** The AMI System shall successfully execute on-demand Register/Interval data read (Gallons) requests issued to Endpoints in no more than one hundred and twenty (120) seconds at 98.5% success rate. An on-demand request is a single transaction to a single integrated Endpoint, initiated by a single user. An on-demand read request does not include batch read jobs targeted at multiple Integrated Endpoints. For the purposes of calculating this Service Level, multiple attempts to connect with a single device within a twenty (24) hour period will count as one failed attempt; on-demand read requests (single or batch) targeted at an integrated Endpoint which was not read in previous 24 hours will be excluded; failed attempts resulting from Endpoint outages are excluded; and on-demand read jobs initiated by system-level accounts ("root") will be excluded. This Water Meter – On-Demand Read Service Level Requirement applies only if there is a minimum of 500 on-demand requests in the applicable month.

(vi) **Performance Metric Remediation.** IF the AMI System fails to achieve any of the Performance Metrics, THEN Itron will use commercially reasonable efforts to address the deficient performance without any additional cost or expense to Customer and without any negative impact to the functionality or performance of AMI System, including, but not limited to, the requirements set forth in SOW#1 or the System Requirements, which may include:

(a) Identifying any needed sites for additional network infrastructure, acquire the site, and prepare and install the device so that the Performance Metrics are met. Deployment activities include propagation studies, site identification, site preparations, site acquisition, device installation and device configuration; or

(b) Using an alternate method (e.g., cellular) to establish connectivity if RF mesh connectivity is unavailable or undesirable so that the Performance Metrics are met.

(viii) **Performance Metric Credits.** IF after the Pilot Term, the AMI System fails to meet:

a) any two or more Critical Performance Metrics in a single calendar month; OR

b) any single Critical Performance Metric for two (2) consecutive calendar months (i.e., the same metric does not meet performance targets for two (2) consecutive months),

THEN Itron will provide the applicable Performance Metric Credit for each of the impacted calendar months per the following table. For purposes of this Section 5, “Critical Performance Metrics” means the Water: Daily Register Delivery, Water: Daily Interval Delivery, or Water: Consumption Data Delivery Per Billing Cycle Performance Metrics.

<table>
<thead>
<tr>
<th>Actual value of Critical Performance Metric Failure</th>
<th>Percentage of Monthly Payment of</th>
</tr>
</thead>
</table>

195
<table>
<thead>
<tr>
<th>Metric Misses Threshold</th>
<th>SaaS Fee Credited to Customer</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;=1.0% and &lt;=5.0% points</td>
<td>10%</td>
</tr>
<tr>
<td>&gt;5.0% and &lt;=10.0% points</td>
<td>20%</td>
</tr>
<tr>
<td>&gt;10.0% and &lt;=15.0% points</td>
<td>30%</td>
</tr>
<tr>
<td>&gt;15.0% and &lt;=25.0% points</td>
<td>40%</td>
</tr>
<tr>
<td>&gt;25.0% points</td>
<td>50%</td>
</tr>
</tbody>
</table>

Credits are not cumulative within any given month and Customer is entitled to the largest applicable credit. Credits will be applied on the next invoice.

*Illustration #1 – multi-metric/single-month:* If the AMI System, in the month of January:

- Provides a cumulative consumption (Gallons) register read, time stamped within the previous 24 hour period ending at midnight on the previous day, from 96.0% of all Endpoint by 7:00 AM local time (missing the Water: Daily Register Delivery metric target by 1.5% points)
- Provides all Daily Interval Register Reads for the previous calendar day from 94.0% of all Endpoints within the AMI System by 7:00 AM of each calendar day (missing the Water: Daily Interval Delivery metric target by 3.5% points)

THEN Customer is entitled to a credit equivalent to 10.0% of the monthly payment of the SaaS fee for January, per the above-mentioned Performance Metric Credits table.

*Illustration #2 – single-metric/multi-month:* If the AMI System, for two (2) consecutive months from January through February, each month provides a cumulative consumption (Gallons) register read, time stamped within the previous 24 hour period ending at midnight on the previous day, from 95.0% of all Endpoints by 7:00 AM local time (missing the Water: Daily Register Delivery metric target of 2.5% each month),

THEN Customer is entitled to a credit equivalent to 10.0% of the monthly payment of the SaaS fee for January and 10.0% of the monthly payment of the SaaS fee for February, per the above-mentioned Performance Metric Credits table.

6. **Monthly Credit Limit.** The cumulative Service Level Credit and Performance Metric Credits awarded to Customer in any single calendar month may not exceed fifty percent (50%) of the SaaS Fee (pro rata monthly equivalent of the annual SaaS Fee) for the month in question irrespective of the number of SLAs or Performance Metrics that may not have been met.

7. **Right to Terminate.** If the AMI System fails to achieve any of the Critical Performance Metrics by more than 25% points during any single calendar month, Customer may provide Itron written notice of such failure, and Itron will have ninety (90) days from the date of such notice ("Metrics Cure Period") to remedy such failures to the required levels of the Performance Metrics set forth in Section 5(b) above through either a temporary fix or a permanent solution, provided that if such
remedy by Itron is temporary, Itron shall also provide Customer a detailed plan for permanent resolution to the failure ("Metrics Failure Resolution"). If Itron fails to provide the Metrics Failure Resolution within the Metrics Cure Period, Customer shall have the right to terminate the Agreement pursuant to Section 13.2(c) of the Agreement by providing Itron with written notice of such termination date.
## ATTACHMENT 17 – CHANGE ORDER TEMPLATE ADDENDUM

**CHANGE ORDER #______**

<table>
<thead>
<tr>
<th>Document Title:</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of Originator:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Version:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Change Request Details** - To be completed by Originator.

<table>
<thead>
<tr>
<th>Proposed Change</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe scope and nature of change and how it should be incorporated into the current Project.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Reason for Change**

<table>
<thead>
<tr>
<th>Describe reason behind the proposed change</th>
<th></th>
<th></th>
</tr>
</thead>
</table>

**Impact on Statement of Work** - To be completed by Itron.

<table>
<thead>
<tr>
<th>Cost:</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe additional cost and payment terms, as applicable</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Remarks**

<table>
<thead>
<tr>
<th>Describe impact on AMI System, Services, timings, project risks, contingencies etc</th>
<th></th>
<th></th>
</tr>
</thead>
</table>

**Approvals**

<table>
<thead>
<tr>
<th>SAWS</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Date</td>
<td>Signature</td>
</tr>
<tr>
<td>------</td>
<td>------</td>
<td>-----------</td>
</tr>
<tr>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Itron</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Date</td>
<td>Signature</td>
</tr>
<tr>
<td>------</td>
<td>------</td>
<td>-----------</td>
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</tr>
</tbody>
</table>
ATTACHMENT 18 – REIMBURSABLE EXPENSE POLICY

1. GENERAL

1. Introduction

The Reimbursable Expense Policy should be used as a basis for submitting expenses relating to the Agreement. This policy also pertains to all reimbursable expenses by Subcontractors related to this Agreement.

2. Policy

Official reimbursable expenses shall be properly authorized, processed, conducted, reported, and reimbursed in accordance to this Policy.

Itron is expected to exercise good judgment in the type and amount of expense incurred.

Itron is responsible for becoming familiar with and adhering to the Policy as applicable for each reimbursable expense submitted.

For travel expenses, Itron is expected to plan in advance of the departure date to obtain lowest cost fares, rates and accommodations. In addition, Itron is encouraged to use all practical means, including internet discounters, to obtain the lowest cost fares, rates, and accommodations.

3. Definitions

The following definitions apply to this Policy:

Domestic Travel - Travel between business points within the continental United States (CONUS).

Actual and Reasonable Expenses - The specific, itemized expenses incurred, based on original receipts up to the amount judged by the SAWS Contracting Director to justifiable under the circumstances.

Official Travel Time - For computing per diem allowances, official travel starts at the day (time) the consultant leaves their home, office, or other authorized point and ends on the day (time) the consultant returns home, to the office, or other authorized point.
1. **GENERAL continued**

3. **Definitions continued**

   Travel Expenses - Includes meals, lodging, transportation and incidental expenses for less than 30 consecutive days.

   Extended Travel Expenses - Includes meals, lodging, transportation and incidental expenses for 30 or more consecutive days.

   Reimbursable expenses - those official expenses directly related to a project or assignment related to the Agreement.

4. **Reimbursements**

   Expenses incurred by Itron performed outside the scope of the Agreement will be denied. This includes, but is not limited to, expenses incurred:

   • Prior to the execution of the Agreement except for the travel expenses (a) expressly set forth in Section 8 (Travel Expenses) of Attachment 10 (Fees Addendum) or (b) expressly agreed to otherwise by the Parties in writing with reference to this Agreement;

     • After the expiration of the Agreement;

   • At a location not included in the Agreement;

   • At a cost in excess of those costs allowed within the Agreement and/or within this Policy.

   • In connection with other agreements Itron has with other clients.

   Only those expenses which are ordinary and necessary, and within the allowable budget, to accomplish the official business purpose are eligible for reimbursement.

   Entertainment expenses, including alcohol, are not reimbursable.

   Itron will be responsible for all unapproved travel and related expenses.

5. **Interrupted Itinerary**

   If official business travel is interrupted for personal convenience, any resulting expense shall be borne by Itron.
2. Transportation Expenses

1. Guideline

Itron must utilize the most economical mode of transportation and the most usually traveled route consistent with the business purpose of the trip.

2. Air Travel

*Lowest Available Airfare*

Airfare reimbursement shall not exceed the lowest practical, available cost of competing airfare. When all considerations are equal (e.g. travel time dates, times, destination, and work impacted by travel), Itron must choose the lowest fare available at that time, regardless of personal preferences for air carrier.

*Use of Business or First Class*

No reimbursement will be made for Business or First Class travel without advance written approval from the SAWS Contracting Director (or designee). (Note: Business or First Class accommodations obtained through use of frequent flyer programs or at Itron’s expense will not require advance approval. However, Itron must be able to the lowest available price of Coach accommodations in order to be reimbursed from that portion of the expense.)

First Class travel may be approved under the following circumstances:

- Required to accommodate a disability or special medical need (requires proof from a medical doctor);
- No other class of service (coach or business) is available within 24 hours of the proposed departure or arrival time.

Business Class travel may be approved under the following circumstances:

- No other class of service is provided on regularly scheduled flights between origin and destination.
- Required to accommodate a disability or special medical need.
- An overall savings (subsistence costs, overtime, lost productivity time) compared to waiting for coach class.

*Extended Travel to Save Costs*

The additional expenses associated with travel that includes an extended stay (e.g. Saturday night stay) may be reimbursed when the overall savings is at least $150 compared to the cost if the Consultant had not extended the trip.

The additional expenses that must be considered for the extended stay savings include but not limited to are, additional cost of lodging, rental car, meals and parking.
3. Travel by Private Automobile

*Reimbursement for Travel by Private Automobile*

When a private automobile is used *due to business necessity*, actual mileage will be reimbursed at the most current rate allowable by the Internal Revenue Service. The number of miles driven must be documented by Itron. No additional reimbursement is made for expenses related to the use of the automobile. Routine repairs, cleaning, detailing, tires, gasoline, or other automobile expense items are not reimbursed for privately owned automobiles.

When two or more persons share a privately owned automobile, only the driver may claim the reimbursement for mileage. Two or more persons traveling to the same destination, for the same purpose, and same or approximately the same time span on the same days or days shall be expected to share a privately owned automobile whenever possible.

Charges for parking and toll roads are allowed; however receipts must be provided.

*Reimbursement for Travel by Private Automobile in Lieu of Air Travel*

When a private automobile is used instead of available air travel for the personal convenience of Itron, reimbursement of transportation costs by private automobile shall not exceed the documented amount of airfare Itron would have paid had Itron traveled by air.

*Reimbursement for Travel To or From a Common Carrier Terminal*

When Itron drives a privately owned automobile to or from a common carrier terminal, the mileage and tolls for one round trip, plus parking for the duration of the trip may be claimed for reimbursement. Documented miles driven and receipts must be provided. Itron is expected to use the lowest, reasonable cost parking option available.

4. Rental Vehicles

Rental cars may be used for transportation to or from a common carrier terminal. Rental cars may also be used upon arrival at the official business destination when the use of public transportation or other transportation such as taxis is not practical when cost, number of miles to be traveled and other factors are taken into consideration. Only commercial agencies may be used. Itron is strongly encouraged to request the lowest available rate when making rental car reservations.
2. Transportation Expenses continued

4. Rental Vehicles continued

Reimbursement

Reimbursement is limited to standard sedans or a vehicle commensurate with the requirements of the trip. The cost of the rental car and gasoline will be reimbursed. Documented miles driven and receipts must be provided.

The car must be turned in promptly. Daily charges, outside Official Travel Time, will not be reimbursed.

Insurance

Itron assumes all risks and expenses associated with obtaining insurance deemed necessary when using a rental car. Car rental insurance, including collision damage waivers, is not reimbursable.

5. Ground Transportation

The following guidelines apply to ground transportation to or from a common carrier terminal at the business point.

Taxis

The cost of the taxi ride plus gratuity will be reimbursed. Receipts must be provided.

Airport Shuttle Service

The cost of the airport shuttle ride plus gratuity will be reimbursed. Receipts must be provided.

Local Buses and Subways

Local bus and subway fares are reimbursable; however, receipts are not required.
3. **Living Expenses**

1. **Lodging**

Lodging expenses for travel within the Continental United States (CONUS) are reimbursed at actual cost, up to the maximum rate established in the U. S. General Services Administration (GSA) Federal Travel Regulation Domestic Per Diem Rates. Lodging taxes, although not included in the GSA per diem rate for lodging, are additionally reimbursable. Consultants are strongly encouraged to request the lowest available rate when making the lodging reservations.

Hotel bills should show the hotel name and locations, dates room was occupied and the rate per day. Other items appearing on the hotel bill should be identified as to the business reason for the charges.

Itron will not be reimbursed for the following expenses appearing on the hotel bill:

- Alcohol (alone or part of meal)
- Entertainment
- Personal services in general
- Laundry/Dry cleaning if travel is less than five days

When accommodations are shared with other than an official consultant, reimbursement is limited to the cost that would have been incurred had the consultant been traveling alone.

2. **Non-Commercial Lodging**

Lodging in non-commercial facilities such as house trailers or field camping are reimbursed actual expenses up to the maximum applicable GSA lodging rate. No reimbursement for housing as a guest in a private home.

3. **Meals Expense**

Meals expense for travel within the Continental United States (CONUS) are reimbursed at actual cost, up to the maximum rate established in the U. S. General Services Administration (GSA) Federal Travel Regulation Domestic Per Diem Rates.
3. **Living Expenses continued**

3. **Meals Expense continued**

Meals expense for the first and last day of travel are reimbursed at the lower of actual costs or the pro-rated GSA per diem rate listed below:

<table>
<thead>
<tr>
<th>Beginning of &quot;Official Travel Time&quot; Date of Departure</th>
<th>Ending of &quot;Official Travel Time&quot; Date of Departure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior to 11:00 am</td>
<td>Prior to 11:00 am</td>
</tr>
<tr>
<td>100% per diem</td>
<td>33% per diem</td>
</tr>
<tr>
<td>11:01 am to 5:00 pm</td>
<td>11:01 am to 5:00 pm</td>
</tr>
<tr>
<td>66% per diem</td>
<td>66% per diem</td>
</tr>
<tr>
<td>After 5:00 pm</td>
<td>After 5:00 pm</td>
</tr>
<tr>
<td>33% per diem</td>
<td>100% per diem</td>
</tr>
</tbody>
</table>

For travel of more than 12 hours but less than 24 hours; meals are reimbursed at the pro-rated GSA per diem rates defined above.

Daily expenses incurred within the vicinity of the consultant's primary work site shall not be reimbursed.

4. **Incidental Expenses**

Payments for tolls, parking charges, cab fares can be reimbursed with proper documentation. Reasonable laundry and dry cleaning expenses will be allowed if travel is over a period of 5 consecutive days. Additionally, reasonable gratuities shall be reimbursed.

Expenses for entertainment and personal convenience items such as alcohol, in-room movies, reading materials and clothing are not reimbursable.

5. **Daily Allowance and Lodging Allowance for Extended Travel**

A consultant remaining at one location for 30 days or more but not more than six months shall be considered extended travel. The 30 days begins on the first day at the assignment location. The consultant's return home for weekends does not break the continuity of an extended travel assignment.

The maximum reimbursable rate for extended travel will be the lesser of actual costs of lodging (housekeeping, utilities and furniture rental), meals, and incidentals (as previously outlined above) or 60% of the maximum rate established in the U. S. General Services Administration (GSA) Federal Travel Regulation Domestic Per Diem Rates.

All extended travel must be approved in advance by the Contracting Director or designee prior to consultant committing to any extended lodging arrangement.
3. Living Expenses continued

5. Daily Allowance and Lodging Allowance for Extended Travel continued

Itron is encouraged to require employees to relocate to the primary work site, when practical, to avoid excessive Extended Travel and/or repetitive Travel for weekly commute to the primary work site from Itron or Itron’s employees’ or Subcontractor’s homes.
4. **Miscellaneous Expenses**

1. **General**

   Miscellaneous expenses that are ordinary and necessary to accomplish the official business purpose of the trip are reimbursable. Receipts are required for all miscellaneous expenses. The most common of these expenses are as follows:

   - Use of computers, printers, faxing machines, and scanners.
   - Postage and delivery.
   - Office supplies specific to the project.

   Expenses that will not be reimbursed will be items for personal use or items that do not have a direct business reason or benefit to the project. Examples of these expenses are:

   - Business gifts.
   - Snacks or other entertainment items for staff meetings and/or meetings with sub-consultants.
   - Mileage expense for purchase of items, where the direct project related item was purchased was not the sole reason for the trip.
   - Carrying cases for cell phones or computers.
   - Items that could be used on more than one project.

2. **Telephone Calls**

   Telephone calls should be made in the most economical method possible. Claims for phone call require a statement of the date, person called, phone number, and business reason for the call.

   Personal phone calls are not reimbursable.
5. Travel Expense Statements

1. Reimbursement

A travel expense statement must be prepared and submitted with the appropriate supporting documents. Expenses should be itemized chronologically according to the nature and type of travel expense (i.e. airfare, hotel, meals, etc.). The completed and supported travel expense statement should be submitted in the next billing cycle closest to the actual expense.
ATTACHMENT 19

PERFORMANCE BOND       Bond No. _________

KNOW ALL MEN BY THESE PRESENTS:

That «Company_Name» «Street_Address» «City_and_State» «Zip_Code» (hereinafter called "Principal"), as Principal, and «Surety_Name», a Corporation organized and existing under the laws of the State of «Surety_Sate», with its principal office in the City of «City_of_Surety_Principal_Office», and authorized under the laws of the State of Texas to act as surety on bonds for principals (hereinafter called "Surety"), are held and firmly bound unto THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES, San Antonio, Bexar County, Texas (hereinafter called "Owner/Obligee"), for the total amount of $112,057,001.23 for the payment whereof, Principal and Surety firmly bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, by these presents:

WHEREAS, Principal has entered into a certain written contract with the Owner/Obligee, dated the «Board_Date» day of «Board_Month», «Board_Year» (the “Contract Effective Date”), consisting of «Job_No»; «Project_Name» (hereinafter called "the Contract"), which Contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if Principal shall faithfully provide the AMI System and perform the Services (as defined in the Contract) in accordance with the Contract ("Bonded Work") and guarantee the Bonded Work against defects in workmanship and materials, then this obligation shall be void; otherwise to remain in full force and effect for a period of five (5) years following the first day of the System Term (as that term is defined in the Contract).

IN WITNESS THEREOF, Principal and Surety have signed and sealed this instrument on _____ day of __________________, 20___.

Principal

By ___________________________  By ___________________________
Title ___________________________  Title ___________________________
Address ___________________________  Address ___________________________

Surety

Name, Address and Telephone Number of Resident Agent of Surety:

________________________________________________________________________

209
ATTACHMENT 20

PAYMENT BOND              Bond No. ________

KNOW ALL MEN BY THESE PRESENTS:

That «Company_Name»«Street_Address»«City_and_State»«Zip_Code» (hereinafter called "Principal"), as Principal, and «Surety_Name», a corporation organized and existing under the laws of the State of «Suretys_State », with its principal office in the City of «City_of_Suretys_Principal_Office», and authorized under the laws of the State of Texas to act as surety on bonds for principals (hereinafter called "Surety"), are held and firmly bound unto THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES, San Antonio, Bexar County, Texas (hereinafter called "Owner/Obligee"), for the total amount of $112,057,001.23, for the payment whereof, Principal and Surety firmly bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, by these presents:

WHEREAS, Principal has entered into a certain written contract with the Owner/Obligee, dated the «Board_Date» day of «Board_Month», «Board_Year» ("Contract Effective Date") consisting of «Job_No» ; «Project_Name» (hereinafter called "the Contract"), which Contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if Principal shall faithfully pay in full all claimants supplying labor and material to Principal or to a subcontractor in the prosecution of the work provided for in the terms of the Contract, then this obligation shall be void; otherwise to remain in full force and effect for a period of five (5) years following the first day of the System Term (as that term is defined in the Contract)

IN WITNESS THEREOF, Principal and Surety have signed and sealed this instrument on the __ day of ________________, 20__.

By ________________________________    By ________________________________
Title ________________________________    Title ________________________________
Address ________________________________ Address ________________________________

Name, Address and Telephone Number of Resident Agent of Surety:

__________________________________________
TO: San Antonio Water System Board of Trustees

FROM: Jose De La Cruz, Director, Customer Service and Mary Bailey, Vice President, Customer Experience and Strategic Initiatives

THROUGH: Robert R. Puente, President/Chief Executive Officer

SUBJECT: AWARD OF AN INSTALLATION SERVICES CONTRACT IN CONNECTION WITH THE PILOT PHASE OF THE CONNECTH2O PROGRAM

Board Action Date: October 6, 2020

SUMMARY AND RECOMMENDATION:

The attached resolution awards an installation services contract to Vanguard Utility Service, Inc., a non-local, non-SMWVB firm, for meter and endpoint installation services related to the ConnectH2O Program (the “Installation Services Contract”). The Installation Services Contract covers the pilot and allows for a contract amendment for the Full System Wide Deployment Phase. The Pilot Phase will begin upon Board approval of the Installation Services Contract and is expected to end in late 2021. Once the Pilot Phase is completed, future Board authorization will be required to execute a contract amendment to the Installation Services Contract for the Full System Wide Deployment Phase.

- San Antonio Water System (the “System”) ConnectH2O Program utilizes advanced metering infrastructure (AMI) to (a) significantly enhance the customer experience by providing near real-time information to customers about their water usage, (b) enhance analytics and reporting that will improve operational efficiencies and reduce costs, and (c) improve resiliency and security by optimizing the distribution system and its assets.

- The meter and endpoint installation vendor will provide installation services for meters, AMI-ready registers, endpoints and other related equipment; operation of a call center to manage installation related phone calls and appointment management; operation of warehousing facilities necessary to manage the inventory of meters, endpoints and other equipment; and testing and verification of all installation activities.

- In 2017, System staff conducted an AMI Business Case, which concluded that the cost of implementing an AMI system will be significantly or completely offset by a combination of revenue associated with improved accuracy of meter registration, cost savings associated with operational efficiencies, the deferral of the cost of future meter replacements, and the associated conservation benefit from the expected reduction in customer water usage.

- In November 2019, under the direction of the President/Chief Executive Officer, the System initiated a Request for Competitive Sealed Proposals (RFCSP) for meter and endpoint installation services for the ConnectH2O Program (the “Installation Services”).
An Evaluation Committee reviewed the proposals to select the offeror that submitted the proposal that offered the best value for the System based on (1) the selection criteria in the RFCSP and the weighted value for those criteria in the RFCSP, and (2) its ranking evaluation. To make this determination, in addition to reviewing the proposal documentation, the Evaluation Committee also conducted interviews and took input from staff on the results of contract negotiations.

- Based on the foregoing, the Evaluation Committee recommends that Vanguard Utility Service, Inc. offers the best value for the System and should be awarded the Installation Services Contract.

- The Pilot Phase of the project will include Installation Services for up to approximately 2,500 water meters and endpoints across three pilot test areas for a total cost not to exceed $278,740.00. The term of the Pilot Phase of the contract is 302 days.

- The contract provides for a contract amendment to the Installation Services Contract in an amount not to exceed $33,938,419.00 for installation services during the Full System Wide Deployment Phase of the project. This phase will consist of the installation of approximately 567,050 meters and endpoints across the entire System’s service territory. At the conclusion of the Pilot Phase, staff will present the findings to the Board with a recommendation on whether to proceed with the Full System Wide Deployment Phase of the ConnectH2O Program.

Staff recommends that the Board approve this resolution.

**FINANCIAL IMPACT:**

This Installation Services Contract will be in an amount not to exceed $278,740.00 for the Pilot Phase of the project. (Company: 1000; Accounting Unit: 1000000; Account: 115000; Job Number: 19-8604 Automated Meter Infrastructure).

An option for Installation Services during the Full System Wide Deployment Phase of the project in an amount not to exceed $33,938,419.00 will require future Board approval.

Total cumulative contract amount (if the option for the Full System Wide Deployment Phase is elected and the Board approves the expenditure thereon): $34,217,159.00

**SUPPLEMENTARY COMMENTS:**

System staff prepared a Request for Competitive Sealed Proposals (RFCSP) to acquire the Installation Services. This approach has been used in the past and has been effective.

The evaluation teams were able to balance between price and qualifications in the selection of a
contractor to perform the Installation Services.

All properly submitted proposals were reviewed by an Evaluation Committee. The Evaluation Criteria listed below have been considered and weighted as shown below.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compensation Proposal</td>
<td>30%</td>
</tr>
<tr>
<td>Compliance with Functional, Technical and Performance Requirements</td>
<td>20%</td>
</tr>
<tr>
<td>Project Approach and Team Experience</td>
<td>20%</td>
</tr>
<tr>
<td>Background, Experience and Past Performance</td>
<td>20%</td>
</tr>
<tr>
<td>SMWB Program Compliance</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Responses to this RFCSP were submitted on Wednesday, January 22, 2020. The System received proposals from the following companies:

<table>
<thead>
<tr>
<th>Name of Firm</th>
<th>Local/SMWVB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vanguard Utility Service, Inc.*</td>
<td>Non-Local/Non-SMWVB</td>
</tr>
<tr>
<td>Grid One</td>
<td>Non-Local/Non-SMWVB</td>
</tr>
<tr>
<td>United Partners of America</td>
<td>Non-Local/Non-SMWVB</td>
</tr>
<tr>
<td>Utiliuse</td>
<td>Non-Local/Non-SMWVB</td>
</tr>
<tr>
<td>Aclara SGS</td>
<td>Non-Local/Non-SMWVB</td>
</tr>
<tr>
<td>Sensus</td>
<td>Non-Local/Non-SMWVB</td>
</tr>
</tbody>
</table>

*Best Value Proposal

Staff recommends that the contract be awarded to Vanguard Utility Service, Inc. as the contractor that will provide the Installation Services at the best value for the System.
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES AWARDING AN INSTALLATION SERVICES CONTRACT TO VANGUARD UTILITY SERVICE, INC. IN AN AMOUNT NOT TO EXCEED $278,740.00 IN CONNECTION WITH PROVIDING METER AND ENDPOINT INSTALLATION SERVICES FOR THE PILOT PHASE OF THE CONNECTH2O PROGRAM; APPROVING THE EXPENDITURES OF FUNDS IN AN AMOUNT NOT TO EXCEED $278,740.00 FROM THE PROJECT FUND FOR THE PILOT PHASE OF THE CONNECTH2O PROGRAM; AUTHORIZING THE PRESIDENT/CHIEF EXECUTIVE OFFICER OR HIS DULY APPOINTED DESIGNEE TO EXECUTE AN INSTALLATION SERVICES CONTRACT WITH VANGUARD UTILITY SERVICE, INC., AND TO PAY VANGUARD UTILITY SERVICE, INC. AN AMOUNT NOT TO EXCEED OF $278,740.00 FOR METER AND ENDPOINT INSTALLATION SERVICES DURING THE PILOT PHASE OF THE CONNECTH2O PROGRAM; DIRECTING STAFF TO RETURN TO THE BOARD FOR APPROVAL OF A CONTRACT AMENDMENT TO PROCEED WITH THE FULL SYSTEM WIDE DEPLOYMENT PHASE OF THE CONNECTH2O PROGRAM AND THE APPROVAL OF ADDITIONAL EXPENDITURES IN AN AMOUNT NOT TO EXCEED $33,938,419.00 FOR METER AND ENDPOINT INSTALLATION SERVICES IN THE EVENT THAT STAFF RECOMMENDS PROCEEDING WITH THE FULL SYSTEM WIDE DEPLOYMENT PHASE OF THE CONNECTH2O PROGRAM; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, the San Antonio Water System (the “System”) desires to implement the ConnectH2O Program, an Advanced Meter Infrastructure (AMI) system, in an effort to (a) significantly enhance the customer experience by providing more information to customers about their water usage, (b) enhance analytics and reporting that will improve operational efficiencies and reduce costs, and (c) improve resiliency and security by optimizing the distribution system and its assets; and

WHEREAS, the System conducted an AMI Business Case in 2017, which concluded that the cost of implementing an AMI system will be significantly or completely offset by a combination of revenue associated with improved accuracy of meter registration, cost savings
associated with operational efficiencies, the deferral of the cost of future meter replacements, and the associated conservation benefit from the expected reduction in customer water usage; and

WHEREAS, in November 2019, under the direction of the President/Chief Executive Officer, the System initiated a Request for Competitive Sealed Proposals (RFCSP) for meter and endpoint installation services for the ConnectH2O Program (the “Installation Services”) that will provide the best value for the System based on (1) the selection criteria in the RFCSP and the weighted value for those criteria in the RFCSP, and (2) its ranking evaluation; and

WHEREAS, an Evaluation Committee, after reviewing the proposal documentation pursuant to the criteria established in the RFCSP, conducting interviews and undergoing contract negotiations, recommended that Vanguard Utility Service, Inc. (“Vanguard”) be awarded the contract to provide the Installation Services as the offeror whose proposal provided the best value for the System; and

WHEREAS, Vanguard has submitted the best value bid in an amount not to exceed $278,740.00 for the Pilot Phase and $33,938,419.00 for the Full System Wide Deployment Phase; and

WHEREAS, the contract with Vanguard for the Pilot Phase of the ConnectH2O Program is for 302 days with an option to amend the contract to include the Full System Wide Deployment Phase of the program; and

WHEREAS, the Pilot Phase of the ConnectH2O Program will include Installation Services for approximately 2,500 customers in three pilot test areas while the optional contract amendment for the Full System Wide Deployment Phase will provide Installation Services for the rollout of the ConnectH2O Program to the remainder of the System’s service territory; and

WHEREAS, future Board authorization will be required to execute the contract amendment for the Full System Wide Deployment Phase; and

WHEREAS, the San Antonio Water System Board of Trustees desires to (i) award the Installation Services Contract to Vanguard Utility Service, Inc. in an amount not to exceed $278,740.00 in connection with providing meter and endpoint installation services for the Pilot Phase of the ConnectH2O Program (the “Installation Services Contract”) in a form substantially similar to Attachment 1 hereto, (ii) approving the expenditures of funds in an amount not to exceed $278,740.00 from the Project Fund for the Pilot Phase of the ConnectH2O Program, (iii) authorizing the President/Chief Executive Officer or his duly appointed designee to execute the Installation Services Contract with Vanguard Utility Service, Inc., and to pay Vanguard Utility Service, Inc. an amount not to exceed $278,740.00 for the Installation Services during the Pilot Phase of the ConnectH2O Program, and (iv) directing staff to return to the Board for approval of a contract amendment to the Installation Services Contract in order to proceed with the Full System Wide Deployment Phase of the ConnectH2O Program and the approval of additional expenditures in an amount not to exceed $33,938,419.00 for the Installation Services in the event that staff recommends proceeding with the Full System Wide Deployment Phase of the ConnectH2O
BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That the Installation Services Contract with Vanguard Utility Service, Inc. in an amount not to exceed $278,740.00 in connection with providing meter and endpoint installation services for the Pilot Phase of the ConnectH2O Program and in a form substantially similar to Attachment 1 hereto is hereby approved.

2. That the expenditure of funds in an amount not to exceed $278,740.00 for the Pilot Phase is hereby approved from the Project Fund.

3. That the President/Chief Executive Officer or his duly appointed designee is hereby authorized to execute the Installation Services Contract with Vanguard Utility Service, Inc., and to pay Vanguard Utility Service, Inc. an amount not to exceed $278,740.00 for the Installation Services during the Pilot Phase of the ConnectH2O Program.

4. That staff is hereby directed to return to the Board for the approval of a contract amendment to the Installation Services Contract in order to proceed with the Full System Wide Deployment Phase and approval of additional expenditures in an amount not to exceed $33,938,419.00 for Installation Services in the event that staff recommends proceeding with the Full System Wide Deployment Phase of the ConnectH2O Program.

5. It is officially found, determined and declared that the meeting at which this resolution is adopted was open to the public, and that public notice of the time, place and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

6. If any part, section, paragraph, sentence, phrase or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid or ineffective.

7. This resolution becomes effective immediately upon its passage.
PASSED AND APPROVED this 6th day of October, 2020.

______________________________
Jelynne LeBlanc Burley, Chairwoman

ATTEST:

______________________________
Secretary
Attachment 1

[INSERT ATTACHMENT 1 - DRAFT CONTRACT]
KNOW ALL MEN BY THESE PRESENTS:

That this Agreement made and entered into this 62nd day of October, A.D. 2020, by and between THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES, hereinafter called THE SAN ANTONIO WATER SYSTEM, COUNTY OF BEXAR, STATE OF TEXAS, Acting through its Contracting Officer, First Party, hereinafter termed the Owner, and Vanguard Utility Service, Inc. dba VUS, Inc., of the City of Owensboro, County of Daviess, State of KY, Second Party, hereinafter termed the Contractor.

WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned to be made and performed by said First Party, (Owner), the said Second Party, (Contractor), hereby agrees with the First Party to commence and complete the construction of certain improvements in the amount of Two Hundred Seventy-Eight Thousand Seven Hundred Forty and 00/100 Dollars ($278,740.00), for the San Antonio Water System Job No(s). 18-7703 and 19-8604, with Bid Opening dated January 22, 2020, the same being designated as San Antonio Water System Project End Point Installation Services for the ConnectH2O Program.

The Contractor shall perform all work shown on the Plans and described Specifications and shall meet all requirements of this Agreement, The General and Special Conditions of the Agreement; and such Orders and Agreements for Extra Work as may subsequently be entered by the above named parties to this Agreement.

The Contractor shall not offer, confer, or agree to confer any benefit or gift to any San Antonio Water System employee and Water System employees are prohibited from soliciting, accepting or agreeing to accept any gifts from outside sources; please see Section M. – Gifts or Benefits of the Water System’s Code of Ethical Standards. Section M of the Water System’s Code of Ethical Standards regarding Gifts or Benefits is available on the SAWS Business Center website.

The San Antonio Water System may not issue an Authorization to Proceed Letter until the San Antonio Water System has received the completed bid and contract document package.

The Contractor acknowledges to and for the benefit of the Owner (“Purchaser”) and the Texas Water Development Board (TWDB) that it understands the goods and services under this Agreement may be funded in the future with monies made available by the Clean Water State Revolving Fund and/or Drinking Water State Revolving Fund that have statutory requirements commonly known as “American Iron and Steel” that requires all of the iron and steel products used in the project to be produced in the United States (“American Iron and Steel Requirement”) including iron and steel products provided by the Contactor pursuant to this Agreement. To the extent that goods and services under this Agreement are funded in the future with monies made available by the Clean Water State Revolving Fund and/or Drinking Water State Revolving Fund, Contractor hereby represents and warrants to and for the benefit of the Owner and the TWDB that (a) the Contractor has reviewed and understands the American Iron and Steel Requirement, (b) all of the iron and steel products used in the project will be and/or have been produced in the United States in a manner that complies with the American Iron and Steel Requirement, unless a waiver of the requirement is approved, and (c) the Contractor will provide any further verified information, certification or assurance of compliance with this paragraph, or information necessary to support a waiver of the American Iron and Steel Requirement, as may be requested by the Owner or the TWDB. Notwithstanding any other provision of this Agreement, to the extent that goods and services under this Agreement are funded in the future with monies made available by the Clean Water State Revolving Fund and/or Drinking Water State Revolving Fund, any failure to comply with this paragraph by the Contractor shall permit the Owner to enforce this Agreement and recover as damages against the Contractor any loss, expense, or cost (including without limitation attorney’s fees) incurred by the Owner resulting from any such failure (including without limitation any impairment or loss of funding, whether in whole or in part, from the TWDB or any damages owed to the TWDB by the Owner). While the Contractor has no direct contractual privity with the TWDB, to the extent the TWDB is a lender to the Owner for the funding of its project, the Owner and the Contractor agree that the TWDB is a third-party beneficiary and neither this paragraph (nor any other provision of this Agreement necessary to give this paragraph force or effect) shall be amended or waived without the prior written consent of the TWDB.

The Contractor hereby agrees to commence work under this Contract on the date indicated in the SAWS written Authorization to Proceed. Under no circumstances shall the work commence prior to the Contractor's receipt of SAWS issued, written Authorization to Proceed. Computation of Contract Time will begin on the construction start date as indicated on the written Authorization to Proceed. All work specified in these Contract Documents shall be completed within 302 calendar days from
the construction start date indicated on the written Authorization to Proceed.

It is agreed and understood by the Owner and the Contractor that the provisions of Chapter 252, Texas Local Government Code, and/or Chapter 2269, Texas Government Code (as amended) apply to this contract. As applicable, the terms of the aforementioned state law are incorporated herein by reference. Contractor and Owner agree that pursuant to state law, Owner authorizes its duly designated administrative officer (Contracting Officer) to negotiate change orders up to and including the amount of $100,000.00. It is also agreed and understood that any change orders which increase the cost of the work provided under the contract in excess of 25% of the original contract price are prohibited. The cost of the work provided under the contract may be decreased over 25% of the original contract price with the consent of the Contractor.

The Owner agrees to pay the Contractor in current funds, and to make payments on account, for the performance of the work in accordance with the Contract, at the prices set forth in the Contractor's Proposal, subject to additions and deductions, all as provided in the General Conditions of the Agreement.

The following documents, together with this Contract, comprise the Agreement, and they are as fully a part thereof as if herein repeated in full:

The Request for Competitive Sealed Proposals
Instructions to Respondents
The Supplementary Instructions to Respondents
The EPI Pricing Workbook (Exhibit A)
The Payment Bond
The Performance Bond
The General Conditions of the Contract
The Special Conditions of the Contract
The Supplemental Conditions of the Contract
The Specifications
The Standard Drawings (if applicable)
The Integrated Master Schedule (Exhibit H)
The Water Deployment Plan (Exhibit I)
Addenda
Change Orders
Good Faith Effort Plan
If applicable, TWDB-0550: Texas Water Development Board Supplemental Contract Conditions for Clean Water State Revolving Fund (Equivalency) and Drinking Water State Revolving Fund (Revision 8/18)

The Plans, designated San Antonio Water System Project Job No. 18-7703 and 19-8604: End Point Installation Services for the ConnectH2O Program.

In witness thereof of the Parties of these presents have executed this Agreement in the year and day of first above written.

The individuals executing this Contract each represent and warrant to the other party that he/she has full authority to execute this Contract on behalf of his/her respective party.

SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES, OWNER

By: _______________________________
    Robert R. Puente
    President/Chief Executive Officer

Date: _______________________________

By: VANGUARD Utility Service, Inc. dba VUS, Inc.
    Contractor

By: _______________________________
    (Signature)
TO: San Antonio Water System Board of Trustees

FROM: Jose De La Cruz, Director, Customer Service and Mary Bailey, Vice President, Customer Experience and Strategic Initiatives

THROUGH: Robert R. Puente, President/Chief Executive Officer

SUBJECT: AWARD OF METER DATA MANAGEMENT SYSTEM CONTRACT AND METER DATA MANAGEMENT SYSTEM PROFESSIONAL SERVICES CONTRACT IN CONNECTION WITH THE CONNECTH2O PROGRAM

Board Action Date: October 6, 2020

SUMMARY AND RECOMMENDATION:

The attached resolution awards high technology services contracts to Harris SmartWorks (“SmartWorks”), a non-local, non-SMWVB firm, for a software-as-a-service (SaaS) meter data management system (MDMS) and for professional services thereon (“MDMS Services”) related to the ConnectH2O Program (collectively, the “MDMS and MDMS Services”). These contracts cover the MDMS and MDMS Services for both the Pilot and Full System Wide Deployment Phases of the ConnectH2O Program; however, once the Pilot Phase is completed, future Board authorization will be required in order for the Full System Wide Deployment Phase of the MDMS System and MDMS Services of the ConnectH2O Program to proceed.

- San Antonio Water System (the “System”) ConnectH2O Program utilizes advanced metering infrastructure (AMI) to (a) significantly enhance the customer experience by providing near real-time information to customers about their water usage, (b) enhance analytics and reporting that will improve operational efficiencies and reduce costs, and (c) improve resiliency and security by optimizing the distribution system and its assets.

- The MDMS provides a single repository for processing and managing meter data received from the AMI system, such as, reads, events and alarms. Staff is expecting to capture one-hour reads from every meter outfitted with an AMI communication endpoint. The MDMS will be able to help the System manage this increase in meter data and will integrate with existing information systems for the purposes of billing, displaying information through a customer portal and providing better operational insights to staff.

- Through the use of the MDMS, the System will be able to gather more meter reads for customers to track their daily usage, provide customers with proactive information around potential leaks on their property and increase customer’s knowledge on how to better conserve water. In addition, the data housed in the MDMS will significantly reduce the number of manual meter reads obtained monthly, reduce the number of truck rolls for investigations and ultimately decrease high bill complaints.
In 2017, System staff conducted an AMI Business Case, which concluded that the cost of implementing an AMI system will be significantly or completely offset by a combination of revenue associated with improved accuracy of meter registration, cost savings associated with operational efficiencies, the deferral of the cost of future meter replacements, and the associated conservation benefit from the expected reduction in customer water usage.

In November 2019, under the direction of the President/Chief Executive Officer, the System initiated a Request for Competitive Sealed Proposals (RFCSP) for the MDMS and MDMS Services. An Evaluation Committee reviewed the proposals pursuant to the criteria established in the RFCSP conducted interviews, and received input from Staff on the results of contract negotiations. Based on its findings from the foregoing, the Evaluation Committee recommends that SmartWorks be awarded the contracts to provide the MDMS and MDMS Services for the ConnectH2O Program as it has determined that SmartWorks is the responsible offeror whose proposal was determined to be the most advantageous to the System, considering the relative importance of price and the other evaluation factors as included in the RFCSP.

During the Pilot Phase of the Connect H2O Program, SmartWorks will provide the MDMS for two years to capture AMI-related data from the installed AMI communication endpoints and MDMS Services will include the installation and integration of SmartWorks Compass meter data management modules to include the MeterSense MDM and KPI Dashboard. Total cost of the MDMS and MDMS Services contracts for this phase will be an amount not to exceed $1,345,355.31.

In the Full System Wide Deployment Phase of ConnectH2O Program, if authorized by the Board, the MDMS Services will complete the integration of the remaining SmartWorks Compass meter data management modules of Rate and Revenue Analysis, Water Loss Analysis, Leak Detection and Notification and Targeted Messaging and provide the MDMS for the remainder of the eight year contract term. The MDMS contract provides for contract extensions after the initial eight year contract term. Total cost of MDMS and MDMS Services contracts for this phase will be an amount not to exceed $4,450,060.06 excluding contract extensions.

Staff recommends that the Board approve this resolution.

**FINANCIAL IMPACT:**

These high technology services contracts provide the MDMS and MDMS Services for a total of eight years in an amount not to exceed $5,795,415.37 for both the Pilot Phase and the Full System Wide Deployment Phase of the ConnectH2O Program as shown in the following table.
ConnectH2O Program

<table>
<thead>
<tr>
<th>Contract</th>
<th>Pilot (Years 1-2)</th>
<th>Full System Wide Deployment (Years 3-8)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDMS</td>
<td>$828,338.00</td>
<td>$3,941,249.37</td>
<td>$4,769,587.37</td>
</tr>
<tr>
<td>MDMS Services</td>
<td>$517,017.31</td>
<td>$508,810.69</td>
<td>$1,025,828.00</td>
</tr>
<tr>
<td>Total</td>
<td>$1,345,355.31</td>
<td>$4,450,060.06</td>
<td>$5,795,415.37</td>
</tr>
</tbody>
</table>

Total ConnectH2O Program Pilot Phase services for MDMS Services and the first two years of the MDMS, total an amount not to exceed $1,345,355.31 (Company: 1000; Accounting Unit: 1000000; Account: 115000; Job Number: 19-8604 Automated Meter Infrastructure).

Total ConnectH2O Program Full System Wide Deployment Phase services for MDMS Services and the remaining six years of the MDMS, total an amount not to exceed $4,450,060.06. Future Board authorization is required to proceed with the Full System Wide Deployment Phase of the ConnectH2O Program.

Total cumulative contract amount for the MDMS Contract: $4,769,587.37
Total cumulative contract amount for the MDMS Services Contract: $1,025,828.00
Total cumulative contract amount for the MDMS System Contract and MDMS Services Contract: $5,795,415.37

SUPPLEMENTARY COMMENTS:

The System issued a Request for Competitive Sealed Proposals (RFCSP) to acquire a MDMS and MDMS Services. This approach has been used in the past and has been effective.

The evaluation teams were able to balance between price and qualifications in the selection of a contractor to perform these services.

All properly submitted proposals were reviewed by an Evaluation Committee. The Evaluation Criteria listed below have been considered and weighted as shown below.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compliance with Functional, Technical and Performance Requirements</td>
<td>35%</td>
</tr>
<tr>
<td>Background, Experience and Past Performance</td>
<td>20%</td>
</tr>
<tr>
<td>Compensation Proposal</td>
<td>20%</td>
</tr>
<tr>
<td>Project Approach and Team Experience</td>
<td>15%</td>
</tr>
<tr>
<td>SMWB Program Compliance</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Responses to this RFCSP were submitted on Wednesday, January 22, 2020. The System received proposals from the following companies:
<table>
<thead>
<tr>
<th>Name of Firm</th>
<th>Local/ SMWVB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harris SmartWorks*</td>
<td>Non-Local/Non-SMWVB</td>
</tr>
<tr>
<td>Aclara</td>
<td>Non-Local/Non-SMWVB</td>
</tr>
<tr>
<td>Itron, Inc.</td>
<td>Local/Non-SMWVB</td>
</tr>
<tr>
<td>Sensus</td>
<td>Non-Local/Non-SMWVB</td>
</tr>
<tr>
<td>Utility Metering Solutions (UMS)</td>
<td>Non-Local/Non-SMWVB</td>
</tr>
</tbody>
</table>

*Selected Firm

Staff recommends that the contracts be awarded to Harris SmartWorks as the responsible offeror whose proposal for the MDMS and MDMS Services was determined to be the most advantageous to the System, considering the relative importance of price and the other evaluation factors as included in the RFCSP.
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES AWARDING A METER DATA MANAGEMENT SYSTEM (MDMS) CONTRACT AND A MDMS PROFESSIONAL SERVICES (“MDMS SERVICES”) CONTRACT, HIGH TECHNOLOGY GOODS AND SERVICES CONTRACTS, TO HARRIS SMARTWORKS IN CONNECTION WITH PROVIDING THE MDMS AND THE MDMS SERVICES FOR THE CONNECTh2O PROGRAM FOR A PERIOD OF EIGHT YEARS IN AMOUNTS NOT TO EXCEED $4,769,587.37 FOR THE MDMS AND $1,025,828.00 FOR MDMS SERVICES, FOR A TOTAL OF $5,795,415.37; APPROVING THE EXPENDITURES OF FUNDS IN AN AMOUNT NOT TO EXCEED $1,345,355.31 FROM THE PROJECT FUND FOR THE PILOT PHASE OF THE CONNECTh2O PROGRAM FOR MDMS AND MDMS SERVICES; AUTHORIZING THE PRESIDENT/CHIEF EXECUTIVE OFFICER OR HIS DULY APPOINTED DESIGNEE TO EXECUTE THE MDMS CONTRACT AND THE MDMS SERVICES CONTRACT WITH HARRIS SMARTWORKS IN AN AMOUNTS NOT TO EXCEED $4,769,587.37 FOR THE MDMS AND $1,025,828.00 FOR MDMS SERVICES FOR A TOTAL OF $5,795,415.37 FOR BOTH THE PILOT PHASE AND THE FULL SYSTEM WIDE DEPLOYMENT PHASE OF THE CONNECTh2O PROGRAM, AND TO PAY HARRIS SMARTWORKS AN AMOUNT NOT TO EXCEED OF $1,345,355.31 FOR MDMS AND MDMS SERVICES FOR THE PILOT PHASE OF THE CONNECTh2O PROGRAM; DIRECTING STAFF TO RETURN TO THE BOARD FOR AUTHORIZATION TO PROCEED WITH THE FULL SYSTEM WIDE DEPLOYMENT PHASE OF THE CONNECTh2O PROGRAM AND THE APPROVAL OF ADDITIONAL EXPENDITURES IN AN AMOUNT NOT TO EXCEED $4,450,060.06 FOR PROVIDING THE MDMS AND MDMS SERVICES IN THE EVENT THAT STAFF RECOMMENDS PROCEEDING WITH THE FULL SYSTEM WIDE DEPLOYMENT PHASE OF THE CONNECTh2O PROGRAM; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, the San Antonio Water System (the “System”) desires to implement the ConnectH2O Program, an advanced meter infrastructure (AMI) system, in an effort to (a)
significantly enhance the customer experience by providing more information to customers about their water usage, (b) enhance analytics and reporting that will improve operational efficiencies and reduce costs, and (c) improve resiliency and security by optimizing the distribution system and its assets; and

WHEREAS, the System conducted an AMI Business Case in 2017, which concluded that the cost of implementing an AMI system will be significantly or completely offset by a combination of revenue associated with improved accuracy of meter registration, cost savings associated with operational efficiencies, the deferral of the cost of future meter replacements, and the associated conservation benefit from the expected reduction in customer water usage; and

WHEREAS, in November 2019, under the direction of the President/Chief Executive Officer, the System initiated a Request for Competitive Sealed Proposals (RFCSP) for a meter data management system (MDMS) and MDMS professional services thereon (collectively, the “MDMS and MDMS Services”) from a responsible offeror whose proposal is determined to be the most advantageous to the System, considering the relative importance of price and the other evaluation factors as included in the RFCSP; and

WHEREAS, an Evaluation Committee, after reviewing the proposal documentation pursuant to the criteria established in the RFCSP, conducting interviews and undergoing contract negotiations, recommended that Harris SmartWorks be awarded the contracts to provide the MDMS and the MDMS Services as the responsible offeror whose proposal is determined to be the most advantageous to the System, considering the relative importance of price and other evaluation factors as included in the RFCSP; and

WHEREAS, the San Antonio Water System Board of Trustees desires to (i) award the MDMS System Contract and the MDMS Services Contract for the ConnectH2O Program to Harris SmartWorks for a period of eight years in amounts not to exceed $4,769,587.37 for the MDMS and $1,025,828.00 for MDMS services, for a total of $5,795,415.37, and in substantially the forms attached hereto as Attachment 1 and Attachment 2, respectively, (ii) approving the expenditures of funds in an amount not to exceed $1,345,355.31 from the Project Fund for the Pilot Phase of the ConnectH2O Program for the MDMS and MDMS Services, (iii) authorizing the President/Chief Executive Officer or his duly appointed designee to execute the MDMS contract and the MDMS Services Contract with Harris SmartWorks in an amounts not to exceed $4,769,587.37 for the MDMS and $1,025,828.00 for MDMS Services for a total of $5,795,415.37 for both the Pilot Phase and the Full System Wide Deployment Phase of the ConnectH2O Program, and to pay Harris SmartWorks an amount not to exceed of $1,345,355.31 for the Pilot Phase of the ConnectH2O Program for the MDMS and the MDMS Services, and (iv) directing staff to return to the Board for authorization to proceed with the Full System Wide Deployment Phase of the ConnectH2O Program and the approval of additional expenditures in an amount not to exceed $4,450,060.06 for providing the MDMS and the MDMS Services in the event that staff recommends proceeding with the Full System Wide Deployment Phase of the ConnectH2O Program; now, therefore:
BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That the high technology goods and services contracts for the MDMS and the MDMS Services with Harris SmartWorks for a period of eight years in amounts not to exceed $4,769,587.37 for the MDMS and $1,025,828.00 for MDMS services, for a total of $5,795,415.37, and in substantially the forms attached hereto as Attachment 1 and Attachment 2, respectively, are hereby approved.

2. That the expenditure of funds in an amount not to exceed $1,345,355.31 for the Pilot Phase of the Connect H2O Program for MDMS and the MDMS Services for is hereby approved from the Project Fund.

3. That the President/Chief Executive Officer or his duly appointed designee is hereby authorized to execute the MDMS Contract and the MDMS Services Contract with Harris SmartWorks in amounts not to exceed $4,769,587.37 for the MDMS and $1,025,828.00 for MDMS Services for a total of $5,795,415.37 for both the Pilot Phase and the Full System Wide Deployment Phase of the ConnectH2O Program, and to pay Harris SmartWorks an amount not to exceed $1,345,355.31 for the Pilot Phase of the ConnectH2O Program for the MDMS and the MDMS Services.

4. That staff is hereby directed to return to the Board for approval to proceed with the Full System Wide Deployment Phase and funding in an amount not to exceed approval of additional expenditures in an amount not to exceed $4,450,060.06 for providing the MDMS and the MDMS Services in the event that staff recommends proceeding with the Full System Wide Deployment Phase of the ConnectH2O Program.

5. It is officially found, determined and declared that the meeting at which this resolution is adopted was open to the public, and that public notice of the time, place and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.

6. If any part, section, paragraph, sentence, phrase or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid or ineffective.

7. This resolution becomes effective immediately upon its passage.
PASSED AND APPROVED this 6th day of October, 2020.

______________________________
Jelynne LeBlanc Burley, Chairwoman

ATTEST:

_____________________________
Secretary
Attachment 1

MDMS SYSTEM CONTRACT

[INSERT DRAFT SAAS]
Software as a Service Agreement

Meter Data Management for Advanced Metering Infrastructure

This Software as a Service Agreement (the “Agreement”), is entered into on XXXXXXX (the “Effective Date”) by and between the San Antonio Water System (“Customer”), established pursuant to the provisions of City of San Antonio Ordinance Number 75686, Texas Local Government Code Sections 552.141 et seq. and Chapter 1502, as amended, Texas Government Code, and N. Harris Computer Corporation, through its SmartWorks division (“SmartWorks”), having the respective principal places of business provided herein.

WHEREAS, SmartWorks delivers the SmartWorks SaaS, which consists of certain software-as-a service offerings for commodity meter data management described herein;

WHEREAS, Customer desires to access and use the SmartWorks SaaS, and SmartWorks desires to provide Customer access to and use of the SmartWorks SaaS, subject to the terms and conditions of this Agreement;

NOW THEREFORE, in consideration of the mutual covenants and obligations contained in this Agreement and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

ARTICLE I
INTERPRETATION

1.1 Definitions

The following terms shall have the meanings set out below; all other capitalized terms not defined in this Section shall have the meanings given to them elsewhere in the Agreement:

(a) “Affiliate” means any other legal entity that: (i) directly or indirectly controls or is controlled by SmartWorks; or (ii) is directly or indirectly controlled by a legal entity that also directly or indirectly controls SmartWorks. A legal entity controls another legal entity if that first legal entity has the power to direct or cause the direction of the management of the other legal entity, whether directly or indirectly, through one or more intermediaries or otherwise, and whether by ownership of shares or other equity interests, the holding of voting rights or contractual rights, by being the general partner of a limited partnership, or otherwise.

(b) “Annual Subscription Fees” means the annual subscription fees set out in Schedule A.

(c) “Authorized User” means an employee, contractor, or agent of Customer who has been authorized by Customer to access and use the SmartWorks SaaS under the rights granted to Customer pursuant to this Agreement.

(d) “Business Day” means every day, Monday through Friday, excluding both Customer holidays and SmartWorks holidays.

(e) “Change Order” means any duly executed change order between Customer and SmartWorks evidencing their agreement to add, subtract, or change particular aspects of the SmartWorks SaaS.

(f) “Confidential Information” means non-public information or material that is disclosed by the Disclosing Party to the Receiving Party during the Term and that is (i) marked “Confidential”; or (ii) should reasonably be known or understood to be confidential by an individual exercising reasonable commercial judgment in the circumstances. Subject to Chapter 552 of the Texas Government Code, as may be amended from time to time, Confidential Information of SmartWorks
shall include the SmartWorks SaaS and the Documentation, including any software code and algorithms, methods, techniques, and processes revealed or utilized therein, as well as its general pricing models, rates, and unit pricing. Customer intends to publish the entire Agreement, as referenced in Section 18.7, with its request for Customer’s board’s approval of the Agreement, but agrees that it shall redact the material set forth in Schedule M from such published version of the Agreement. SmartWorks understands that the Agreement, apart from any Confidential Information, is public information under Texas Government Code Chapter 552. Any request for information under Texas Government Code Chapter 552 for Confidential Information would be subject to the procedures thereunder. Confidential Information of Customer includes the Customer Data. Except as can be established using evidence that would be acceptable to a court of competent jurisdiction, Confidential Information does not include information to the extent that such information: (i) is or becomes generally known to the public by any means other than a breach of the obligations of a receiving party hereunder; (ii) was previously known to the receiving party; (iii) is rightly received by the receiving party from a third party who is not under an obligation of confidentiality; or (iv) is independently developed by the receiving party without reference to or use of the other party’s Confidential Information.

(g) “Customer Data” means all information, data, and other content, in any form or medium, that is submitted, posted, or otherwise transmitted by, to, or on behalf of Customer or any Authorized User through the SmartWorks SaaS or that is stored in or processed by the SmartWorks SaaS, including personal information or personally identifiable information of Customer’s customers.

(h) “Customer Indemnified Parties” means Customer and the City of San Antonio, and each of their members, agents, employees, officers, directors, trustees, and representatives.

(i) “Disclosing Party” means the party to this Agreement who discloses Confidential Information.

(j) “Documentation” means the SmartWorks user manuals, handbooks, guides, educational materials, product descriptions and specifications, technical manuals, and other information relating to the SmartWorks SaaS that are distributed in hard copy form or electronically to Customer or to any other customer of SmartWorks using the SmartWorks SaaS, provided such information is not specific to other customers of SmartWorks.

(k) “Malicious Code” means unwanted files or programs that can cause harm to a computer or compromise data stored on a computer, including viruses, worms, time bombs, Trojan horses, and other code, files, scripts, agents, or programs generally considered in the industry to constitute malicious code.

(l) “Minimum Requirements” means all of the functions, features, performance capabilities, and other characteristics specified in the attached Schedule F.

(m) “Professional Service(s)” means those services provided by SmartWorks pursuant the Professional Services Agreement, including training, consulting, custom development, custom configuration, and other similar services.

(n) “Professional Services Agreement” means the Professional Services Agreement between SmartWorks and Customer executed by the parties on the Effective Date.

(o) “Receiving Party” means the party to this Agreement who receives Confidential Information.

(p) “SmartWorks Indemnified Parties” means SmartWorks, its Affiliates, and the Third-Party IaaS/PaaS provider, if applicable, and each of their respective officers, directors, employees, and agents.

(q) “SmartWorks IP” means the SmartWorks SaaS, the Documentation, and any and all related intellectual property (including trademarks, logos, and names) provided by SmartWorks under this
Agreement to Customer or any Authorized User in connection with the SmartWorks SaaS or the Documentation. For clarity, SmartWorks IP includes any information, data, or other content derived from SmartWorks’s monitoring of Customer’s access to or use of the SmartWorks SaaS (“Monitoring Data”), but does not include Customer Data.

(r) “SmartWorks SaaS” means the SmartWorks software as a services offering for commodity meter data management, comprised of SmartWorks’ proprietary software and Third-Party Components, delivered to Customer through the Third-Party IaaS/PaaS as an integrated solution as further described in Schedule A.

(s) “Support Services” has the meaning ascribed to it in Schedule B.

(t) “Third-Party IaaS/PaaS” means the cloud infrastructure and/or platform provided by a third party and through which the SmartWorks SaaS are delivered.

(u) “Third-Party IaaS/PaaS Terms” means the terms and conditions that govern the use and access of the Third-Party IaaS/PaaS as such terms and conditions are revised by the Third-Party IaaS/PaaS provider from time to time.

(v) “Third-Party Components” means any products, content, software, services, information (in any form or medium), websites, or other materials that are owned by third parties and are incorporated into or accessible through the SmartWorks SaaS, but excluding any Third-Party Products, Third-Party IaaS/PaaS, and any Customer Data.

(w) “Third-Party Products” means the third-party software products or services that may be recommended by SmartWorks from time to time and that are set out in Schedule D.

1.2 Schedules

The following schedules are appended to and form an integral part of this Agreement:

Schedule A – SmartWorks SaaS and Annual Subscription Fees
Schedule B – Support Services
Schedule C – SmartWorks SaaS Availability
Schedule D – Third-Party Products
Schedule E – Insurance Terms
Schedule F – Solution Requirements
Schedule G – Security Procedures
Schedule H – Data Security
Schedule I – AMI Solution Architecture
Schedule J – Cloud Vendor Technology Assessment Questionnaire (VTAQ) Responses
Schedule K – SAWS IS Standards
Schedule L – Escrow Requirements
Schedule M – Material to be Redacted from Published Agreement
Schedule N – Connect H2O Integrated Master Schedule (IMS) – September Board Meeting

1.3 Headings and Wording; No Interpretation Against Drafter

Article, section, and/or paragraph headings used in this Agreement are for reference purposes only and shall not be used in the interpretation hereof. Where context so indicates, a word in the singular form shall include the plural, a word in the masculine form the feminine, and vice-versa. The word “including” and similar constructions (such as “for example”, “such as”, and “e.g.”) shall mean “including, without limitation,” throughout this Agreement. The parties agree that the terms and conditions of this Agreement are the result of negotiations between the parties and that this Agreement shall not be construed in favor of or against any party by reason of the extent to which the party or its professional advisors participated in the preparation of this Agreement.
ARTICLE II
SMARTWORKS SAAS

2.1 Access and Use

Subject to and conditioned upon Customer’s payment of the Annual Subscription Fees and being in compliance with all other terms and conditions of this Agreement, SmartWorks hereby grants Customer a revocable, non-exclusive, non-transferable, limited right to access and use the SmartWorks SaaS solely for use by Authorized Users in accordance with the terms and conditions of this Agreement. Such use is limited to Customer’s normal business operations.

2.2 Documentation License

SmartWorks hereby grants to Customer a non-exclusive, non-sub-licensable, non-transferable license to access, use, copy, modify, and create derivative works of the Documentation during the Term solely for the purposes of (a) supporting Customer's and its Authorized Users' access and use of the SmartWorks SaaS, and (b) creating and using internal training materials relating to the SmartWorks SaaS.

2.3 Reservation of Rights

SmartWorks and its licensors reserve all rights not expressly granted to Customer in this Agreement. Except for the limited rights and licenses expressly granted under this Agreement, nothing in this Agreement grants to Customer or any third party, by implication, waiver, estoppel, or otherwise, any intellectual property rights or other right, title, or interest in or to the SmartWorks IP.

2.4 Third-Party Products

The access and use rights granted under Section 2.1 and the Documentation license granted under Section 2.2 do not include the right to use any Third-Party Products. Third-Party Products are licensed to Customer by the applicable licensor or vendor of the applicable services listed in Schedule D and subject to the terms and conditions of the applicable license agreement or use terms for such Third-Party Products. Third-Party Products not listed on Schedule D on the Effective Date may only be added to such Schedule by way of mutual agreement evidenced by a written amendment between SmartWorks and Customer.

2.5 Third-Party IaaS/PaaS

Customer accepts that the Third-Party IaaS/PaaS is delivered by a third party and is integral to the SmartWorks SaaS. Customer accepts that SmartWorks is bound by Third-Party IaaS/PaaS Terms, and as such Third-Party IaaS/PaaS Terms are incorporated herein (but only as incorporated herein), Customer is also bound by those terms.

2.6 Suspension

Notwithstanding anything to the contrary in this Agreement, SmartWorks may temporarily suspend Customer’s access to any portion of or to all of the SmartWorks SaaS if: (a) SmartWorks reasonably determines that (i) there is a threat of attack or an actual attack on the SmartWorks SaaS; (ii) Customer's or any Authorized User’s use of the SmartWorks SaaS disrupts or poses a security risk to the SmartWorks SaaS or to any other customer or vendor of SmartWorks; (iii) Customer or any Authorized User is using the SmartWorks SaaS for fraudulent or illegal activities; (iv) SmartWorks’s provision of the SmartWorks SaaS to Customer or any Authorized User is prohibited by applicable law; or (v) there is a threat of irreparable harm to the SmartWorks SaaS as a result of a breach by Customer of Section 15.1 or Article V; or (b) in accordance with Section 12.2. Any suspension described in this Section is referred to as a “Service Suspension”. SmartWorks shall, when circumstances allow, provide advance written notice of any Service Suspension to Customer and regular updates regarding resumption of access to the SmartWorks SaaS following any Service Suspension. SmartWorks’s written notice of the Service Suspension will include notice of the actions Customer must take to reinstate access to the SmartWorks SaaS. SmartWorks shall restore any affected Authorized User’s access to the SmartWorks SaaS as soon as reasonably possible after the event giving rise to the Service Suspension is cured. SmartWorks will have no liability for any damage, liabilities,
losses (including any loss of data or profits), or any other consequences that Customer or any Authorized User may incur as a result of a Service Suspension permitted under this Section, provided that SmartWorks shall take commercially reasonable steps to mitigate against any the possibility of such damages, liabilities, losses, or other consequences occurring. Contemporaneously with a Service Suspension, SmartWorks may deliver a Default Notice under Section 12.1 and thereafter terminate this Agreement in accordance with Section 12.1 if the event giving rise to the Service Suspension is also a material breach of this Agreement and is not cured.

ARTICLE III
ANNUAL SUBSCRIPTION FEES AND PAYMENT; INTERNET-BASED PROJECT MANAGEMENT SYSTEM; SUBCONTRACTORS; AUDITS AND RECORDS

3.1 Annual Subscription Fees

In consideration of receiving the SmartWorks SaaS, the Support Services, and all other rights granted herein, Customer agrees to pay to SmartWorks the Annual Subscription Fees described in Schedule A, without setoff or deduction, except as permitted in Section 3.2. There are no reimbursable expenses allowed under this Agreement. All expenses are included in the Annual Subscription Fees. The Annual Subscription Fees in Schedule A may be amended in writing from time to time by mutual agreement through a Change Order. The Annual Subscription Fees are exclusive of taxes, duties, customs charges, levies, or fees imposed by a taxing authority. If Customer is tax exempt, it shall deliver a tax-exempt certificate to SmartWorks on the Effective Date or upon request thereafter. SmartWorks shall be solely responsible for payment of all taxes related to this Agreement for which it is responsible under applicable law.

3.2 Right to Apply Service Level Credit

If Customer is entitled to a Service Level Credit pursuant to Schedule C, Customer may apply such credit against amounts it owes to SmartWorks. For clarity, Customer does not have any other right of deduction or setoff under this Agreement.

3.3 Late Payments and Fee Disputes

If Customer disputes any amount invoiced by SmartWorks, it shall so notify SmartWorks in writing within 15 Business Days of receipt of the applicable invoice, and the parties shall submit the dispute to the dispute resolution procedure set forth in Section 18.2 below. For clarity, an invoice will be deemed to be undisputed unless Customer provides detailed written notice of its dispute within 15 Business Days of receipt of the applicable invoice in sufficient detail to allow SmartWorks to respond to such dispute. SmartWorks will respond to Customer’s written notice of dispute within 15 Business Days and, if the dispute is not resolved by the parties within 10 Business Days of SmartWorks’s response, then the invoice is deemed to be disputed. If Customer fails to make any payment of undisputed amounts when due, then, without limiting SmartWorks’ other rights and remedies, SmartWorks may in its sole discretion: (a) charge interest on the past due amounts at the rate of 1% per month (12% per annum), or the maximum rate permitted by law, whichever is lower, from the date such Annual Subscription Fees were due until the date paid, and (b) suspend Customer’s access to the SmartWorks SaaS pursuant to Section 12.2.

3.4 Potential Fee Increase for Acquisition

The Annual Subscription Fees are fixed throughout the Term, except that if Customer acquires additional utilities, then the parties will negotiate in good faith a change in the Annual Subscription Fee that reflects the increase in usage of the SmartWorks SaaS that is likely to occur as a result of such acquisition.

3.5 No-Recourse

Unless otherwise required by applicable laws, the sole source of any payment made or to be made by Customer in satisfaction of any obligations assumed by it or imposed on it under and by virtue of this Agreement shall be limited solely and exclusively to any gross revenues derived by Customer. SmartWorks (including its successors in legal interest, assigns, or Affiliates) shall never have the right to demand payment of any amount due SmartWorks under this Agreement, whether on account of the SmartWorks SaaS, any termination payment, or for any payment or
claim of any nature arising from the performance or non-performance of Customer’s obligations under this Agreement (including any defense or indemnity obligation), from any other source of revenue or fund of Customer or the City of San Antonio, including the general fund or general credit of the City of San Antonio (including the right to require the levy and collection of any tax, whether ad valorem or otherwise), or any other fund (including other enterprise funds), source of revenue, asset, instrument, or property of the City of San Antonio.

3.6 Internet-Based Project Management System

Customer utilizes an Internet-Based Project Management System ("CPMS"). SmartWorks shall conduct communication through CPMS and perform all Agreement-related functions utilizing CPMS, with the exception of any subcontractor payment monitoring activities, which shall be conducted through Customer’s Subcontractor Payment and Utilization Reporting system ("S.P.U.R."). This includes any and all correspondence, submittals, requests for information, vouchers, compensation requests and processing, amendment, change orders, and other administrative activities as may be required in the Agreement. Customer shall administer the CPMS software, shall provide CPMS training to SmartWorks’s employees, and shall make CPMS accessible via the Internet to all necessary SmartWorks’s employees. All invoices shall be submitted through the CPMS.

3.7 Subcontractors

Customer has adopted a Small, Minority, Woman, and Veteran-owned Business Policy to establish and oversee a program that will support the inclusion of local small, minority, woman, and veteran-owned businesses ("SMWVB"). The SMWVB is intended to ensure that local small, minority, woman, and veteran-owned businesses have an equal opportunity to compete for, receive, and participate in Customer’s contracts. SmartWorks shall take all reasonable steps to maintain compliance with at least the minimum percentage of participation for SMWVBs set out in SmartWorks’s proposal to Customer. SmartWorks shall be required to electronically report the actual payments to all subcontractors, whether SMWVB or non-SMWVB, using the S.P.U.R. system, beginning with the first Customer payment under this Agreement, and with every payment thereafter (for the duration of the contract). After SmartWorks receives payment from Customer, electronic submittals will require data entry of the amount paid to each subcontractor, whether SMWVB or non-SMWVB, listed on the Contractor’s Good Faith Effort Plan from its proposal to Customer. Data entry is required even if the actual payment amount is $0.00. This information will be used for subcontractor utilization tracking purposes. Any unjustified failure to comply with the committed SMWVB levels may be considered breach of contract. Electronic submittal of subcontractor payment information will be accessed through a link on Customer’s “Business Center” web page. SmartWorks and all subcontractors will be provided a unique log-in credential and password to access Customer’s subcontractor payment reporting system. The link may also be accessed through the following internet address: https://saws.smwbe.com. Respondents and/or their agents may contact Customer’s SMWVB Program Manager at 210-233-3420 for assistance or clarification with issues specifically related to the SMWVB Program and S.P.U.R. system reporting.

3.8 Audits and Records

SmartWorks agrees that Customer’s representatives, may, upon reasonable written notice and no more than once every calendar year, shall have access to, and the right to audit, examine, or reproduce, any and all Records of SmartWorks related to accounting and performance under this Agreement for a period of two years after final payment on this Agreement or until all audit and litigation matters that Customer has brought to the attention of SmartWorks are resolved, whichever is longer. The costs of such audits will be borne by Customer. SmartWorks agrees to refund to Customer any overpayments disclosed by any such audit. For purposes of this Section, “Record” means all books, accounts, reports, files, and other data recorded, created, or stored by SmartWorks in fulfillment of this Agreement, whether in digital or physical format, including “contracting information” as defined by §552.003 of the Texas Government Code. All Customer Data contained in the Records is the property of Customer. SmartWorks may not dispose of or destroy a Record without Customer’s authorization and shall promptly deliver the Records, in all requested formats and media, along with all finding aids and metadata, to Customer at Customer’s expense. On completion of this Agreement, at Customer’s election, SmartWorks shall either provide Customer all Records in the custody or possession of SmartWorks or preserve all Records for a period of two years after final payment on this Agreement or until all audit and litigation matters that Customer has brought to the attention of SmartWorks are resolved, whichever is longer. The requirements of Subchapter J, Chapter 552, Texas Government Code, may apply to this Agreement, and this Agreement can be terminated if SmartWorks knowingly
or intentionally fails to comply with a requirement of that subchapter. SmartWorks shall include the same requirements as are set forth in this Section in any agreements with subcontractors. Any audit, examination, or reproduction conducted by Customer under this Section 3.8 is subject to the confidentiality terms of this Agreement, and Customer will ensure that its representatives in respect of such audit, examination, or reproduction are bound by confidentiality obligations no less stringent than those contained in this Agreement.

ARTICLE IV
TERM

4.1 Term

Unless terminated earlier in accordance with the terms hereof or extended for the Transition Period (defined in Section 13.6 below), this Agreement shall commence on the Effective Date and shall continue for a period of eight years (the “Term”).

ARTICLE V
USE RESTRICTIONS

5.1 Use Restrictions

Customer shall not and shall not permit any other person to access or use the SmartWorks SaaS or Documentation except as expressly permitted by this Agreement. For purposes of clarity and without limiting the generality of the foregoing, except as this Agreement expressly permits, Customer shall not (and will not permit any Authorized User to):

(a) either directly or indirectly modify or create derivative works of the SmartWorks SaaS or the Documentation, in whole or in part;

(b) give away, rent, lease, lend, sell, re-sell, license, sublicense, assign, distribute, publish, transfer, or otherwise make available to a third party the rights granted under this Agreement to access and use the SmartWorks SaaS or the Documentation;

(c) remove any proprietary notices from the SmartWorks SaaS or the Documentation;

(d) use the SmartWorks SaaS or the Documentation in any manner or for any purpose that Customer knows or ought to have known infringes, misappropriates, or otherwise violates any intellectual property right or other right of any person;

(e) use the SmartWorks SaaS or the Documentation in any manner or for any purpose that violates any applicable law;

(f) reverse engineer, decompile, translate, or otherwise attempt to derive, or permit or help others to derive, the source code relating to all or any part of the software components of the SmartWorks SaaS, or attempt to otherwise convert or alter the software components of the SmartWorks SaaS into human readable code, except to the extent applicable law expressly prohibits the foregoing restriction;

(g) duplicate the Documentation;

(h) use the SmartWorks SaaS other than in accordance with the Documentation or as otherwise approved, recommended, or directed by SmartWorks in writing, including entering Customer Data other than through SmartWorks APIs or Authorized User interface;

(i) provide access to or use of the SmartWorks SaaS or the Documentation to any third party;

(j) copy, frame, or mirror any part or content of the SmartWorks SaaS;
(k) access the SmartWorks SaaS: (i) for the purpose of: (A) building a product or service that is competitive to the SmartWorks SaaS; or (B) copying any features, functionality, database, table schemas, architecture, or graphics of the SmartWorks SaaS (provided that this term shall not limit Customer’s access to the Customer Data for any purpose); or (ii) knowingly allow access to any third party who has a product or who may develop a product that competes with the SmartWorks SaaS;

(l) bypass or breach any security device or protection used by the SmartWorks SaaS or Documentation, or access or use the SmartWorks SaaS or Documentation other than by an Authorized User through the use of his or her own then-valid access credentials;

(m) transmit, upload, post, distribute, store, or otherwise publish, through use of the SmartWorks SaaS, any data, material, or information that: (i) Customer knows contains Malicious Code; (ii) is threatening, defamatory, libelous, harassing, abusive, deceptive, profane, an invasion of privacy, offensive, obscene, harmful, or promotes harmful activity; (iii) infringes or otherwise violates any patent, copyright, trademark, trade secret, or other intellectual property or proprietary right of any third party; (iv) violates any law, statute, ordinance, or regulation; (v) constitutes fraudulent activity; or (vi) includes unsolicited bulk e-mails, advertisements, or solicitations;

(n) evade filters or interfere with or disrupt SmartWorks SaaS or networks connected to SmartWorks SaaS;

(o) use the Third-Party IaaS/PaaS provided by SmartWorks for any purpose other than to use the SmartWorks SaaS;

(p) provide to any third party Customer’s results from using the SmartWorks SaaS for the purpose of such third party monitoring the SmartWorks SaaS’s availability, performance, or functionality, provided that Customer may provide such results to contractors in the normal course of Customer’s business, including to verify SmartWorks’s compliance with Schedule C, and to otherwise exercise Customer’s rights and seek available remedies under this Agreement, such as in litigation and pre-litigation.

ARTICLE VI
SERVICE AVAILABILITY

6.1 Service Availability

Subject to the terms and conditions of this Agreement, SmartWorks shall make the SmartWorks SaaS available in accordance with Schedule C. SmartWorks does not make any representations or guarantees regarding uptime or availability of the SmartWorks SaaS unless specifically identified in Schedule C. The remedies set out in Schedule C are Customer’s sole remedies and SmartWorks’s sole liability for a Service Level Failure (as defined in Schedule C).

6.2 Third-Party Availability

In order to provide the SmartWorks SaaS, SmartWorks may be required to: (a) purchase or subscribe to Third-Party Components; and/or (b) rely on Third-Party IaaS/PaaS. If any necessary Third-Party Components or Third-Party IaaS/PaaS are unavailable for any reason during the Term, then SmartWorks shall promptly modify, change, or replace the applicable Third-Party Components or Third-Party IaaS/PaaS, as applicable, so that the SmartWorks SaaS retains all of the same features, functions, accessibility, and performance capabilities as it had prior to the modification, change, or replacement of such Third-Party Component.
ARTICLE VII
PARTIES’ RESPONSIBILITIES

7.1 Reasonable Cooperation by Customer

Customer will reasonably cooperate with SmartWorks as required for SmartWorks to deliver the SmartWorks SaaS and the Support Services as set forth in this Agreement.

7.2 Customer Equipment

As between SmartWorks and Customer, Customer is responsible for obtaining, installing, and maintaining any equipment, hardware, network, Internet, direct telecommunications connections, software applications, or web browsers that must be installed at Customer’s facilities for Authorized Users to access and use the SmartWorks SaaS or receive the Support Services, including the quality, condition, and repair of such items. For the avoidance of doubt, any failure of Customer to comply with this Section 7.2 shall not be a breach of this Agreement by Customer, but rather will excuse SmartWorks from performing any matter under this Agreement that SmartWorks cannot perform as a result of Customer’s failure, and such failure to comply shall not relieve Customer of its responsibility for payment of the Annual Subscription Fees.

7.3 Security Policies and Procedures

Customer will comply with all security policies and procedures provided to Customer in writing by SmartWorks that govern Authorized Users’ access to the SmartWorks SaaS, as such policies and procedures may be amended in writing from time to time. Customer shall have a commercially reasonable period of time to comply with any written amendments to such security policies and procedures. Customer and its Authorized Users shall be responsible for managing security and confidentiality of all passwords and user IDs issues to an Authorized User. Customer will notify SmartWorks promptly in writing if it believes: (a) that a password or user ID assigned to an Authorized User has been stolen or might otherwise be misused; (b) there has been any unauthorized use of any password or user ID assigned to an Authorized User; (c) any Authorized Users’ action may affect the security of the SmartWorks SaaS or SmartWorks’s ability to provide the SmartWorks SaaS as contemplated by this Agreement; or (d) any other breach of security involving Customer or the Authorized Users in relation to the SmartWorks SaaS.

7.4 Authorized Users

The SmartWorks SaaS shall include functionality that permits Customer to create, maintain, and delete account credentials for the Authorized Users, including the issuance of passwords and user IDs. As a result, Customer, not SmartWorks, shall be responsible for creating and maintaining all Authorized User account information and for performing all other application level system administration function that are available within the SmartWorks SaaS and enabled for control by Customer. Customer is responsible for the actions of Authorized Users and to ensure that its Authorized Users use the SmartWorks SaaS in accordance with this Agreement.

7.5 Customer Data Security

Customer, not SmartWorks, is responsible for the security of the Customer Data prior to its receipt by SmartWorks or in the SmartWorks SaaS. Customer, not SmartWorks, is responsible for ensuring the accuracy, quality, integrity, reliability, appropriateness, or right to view or use the Customer Data. For the avoidance of doubt, but subject to Section 9.3, the foregoing does not relieve SmartWorks of any obligation to maintain the security, confidentiality, integrity, and availability of the Customer Data to the extent such Customer Data is stored, processed, or transmitted in or from the SmartWorks SaaS. For the avoidance of doubt, any failure of Customer to comply with this Section 7.5 shall not be a breach of this Agreement by Customer, but rather will excuse SmartWorks from performing any matter under this Agreement that SmartWorks cannot perform as a result of Customer's failure, and such failure to comply shall not relieve Customer of its responsibility for payment of the Annual Subscription Fees. WITHOUT IN ANY WAY LIMITING THEIR OBLIGATIONS OR LIABILITY UNDER THIS AGREEMENT, NEITHER SMARTWORKS NOR ITS LICENSORS OR SUPPLIERS: (a) GUARANTEE THE PRIVACY, SECURITY, AUTHENTICITY, OR NON-CORRUPTION OF ANY INFORMATION TRANSMITTED OR STORED IN ANY SYSTEM CONNECTED TO THE INTERNET; (b) SHALL BE RESPONSIBLE FOR ANY ADVERSE
CONSEQUENCES WHATSOEVER OF CUSTOMER’S OR THE AUTHORIZED USERS’ CONNECTIONS TO OR USE OF THE INTERNET; OR (c) SHALL BE RESPONSIBLE FOR ANY USE BY CUSTOMER OR ANY AUTHORIZED USER OF CUSTOMER’S INTERNET CONNECTION IN VIOLATION OF ANY LAW, RULE, OR REGULATION.

7.6 SmartWorks Subcontractors

SmartWorks will not use any subcontractors in the performance of this Agreement, except with Customer’s prior written approval. SmartWorks shall include terms no less restrictive than those in Article XV below in all permitted subcontractor agreements entered into in connection with this Agreement and shall be fully liable for all acts and omissions of any subcontractors as if SmartWorks had performed such acts or omissions itself.

7.7 Business Continuity

SmartWorks will comply throughout the Term with the business continuity and disaster recovery plan attached hereto as part of Schedule F.

7.8 Insurance Terms

SmartWorks will comply with the terms in Schedule E.

7.9 SmartWorks Compliance with Applicable Laws

SmartWorks will: (a) comply with applicable laws in its performance of this Agreement, (b) secure, pay for, and comply with all permits, governmental fees, licenses, inspections, bonds, security, or deposits necessary for its performance under this Agreement, and (c) not make or permit to be made any improper payments, nor will it perform any unlawful acts.

7.10 Malicious Code

SmartWorks will use at least commercially reasonable means and practices to detect, remove, and destroy Malicious Code and will not knowingly deliver Malicious Code to Customer or any Authorized User.

7.11 Interruption

In the event of any dispute with Customer regarding an alleged breach of this Agreement, SmartWorks shall not use any type of electronic means to prevent or interfere with Customer’s use of any portion of the SmartWorks SaaS, unless permitted by this Agreement.

7.12 Functionality During the Term

The SmartWorks SaaS shall comply with the Minimum Requirements throughout the Term. SmartWorks will not materially decrease the functionality, features, accessibility, and performance capabilities of the SmartWorks SaaS during the Term.

7.13 Reasonable Cooperation by SmartWorks

SmartWorks will reasonably cooperate with Customer and Customer’s third-party providers as required for Customer to use the SmartWorks SaaS and Support Services as set forth in this Agreement in association with such hardware, software, and services provided by such third parties, provided, however, that should the time required of SmartWorks for such assistance become unreasonable, the parties shall execute a Change Order and any required statement of work for Professional Services regarding the required assistance.
7.14 Compliance with Applicable Laws

SmartWorks shall ensure that the SmartWorks SaaS shall comply with all applicable laws, consistent with and to the extent the functions of the SmartWorks SaaS are subject to such laws.

7.15 Security Procedures

SmartWorks will comply with the terms of Schedule G.

7.16 Baseline, Architecture, and VTAQ

Subject to Sections 6.2 and 11.1, the SmartWorks SaaS will be delivered according to the dates in Schedule N consistent with the diagrams in Schedule I and consistent with SmartWorks’s responses in Schedule J.

7.17 IS Standards

Subject to Section 7.2, SmartWorks will comply with the terms of Schedule K.

7.18 Escrow

The parties will comply with the terms of Schedule L.

ARTICLE VIII
SUPPORT SERVICES

8.1 Support Services

SmartWorks shall provide the Support Services in accordance with Schedule B. SmartWorks may provide additional Support Services or may improve the standards by which it supplies the Support Services, but shall not reduce the services or standards included in Schedule B.

8.2 Manner of Performance

SmartWorks shall perform the Support Services in an efficient, competent, and timely manner and will exercise reasonable care, skill, and diligence in the performance thereof. SmartWorks shall determine in its sole discretion the manner and means by which the Support Services shall be performed, provided that the Support Services are performed in accordance with the terms of Schedule B and with due consideration of the requirement to provide adequate knowledge transfer to Customer’s personnel. At all times in performing the Support Services, SmartWorks will communicate openly with Customer in its methodology, manner, and means.

ARTICLE IX
REPRESENTATIONS AND WARRANTIES

9.1 SmartWorks’s Representations and Warranties

(a) SmartWorks represents and warrants that it is the owner of the SmartWorks IP, and of each component thereof, or the recipient of a valid license thereto, and that it has and will maintain the full power and authority to grant the rights granted in this Agreement throughout the Term without the further consent of any third party required. SmartWorks's representations and warranties in the preceding sentence do not apply to use by Customer of the SmartWorks IP in combination with hardware or software not provided by SmartWorks; not required, recommended, or approved by SmartWorks for use with the SmartWorks IP; and not reasonably necessary for use by Customer of the SmartWorks IP for its intended purpose. In the event of a breach of the warranty in this Section 9.1(a), SmartWorks, at no cost to Customer, shall promptly take the following actions: (i) secure for Customer the right to continue using the SmartWorks IP; or (ii) replace or modify the SmartWorks IP to make it non-infringing, but without reducing the functions, features, accessibility,
or performance of the SmartWorks SaaS prior to such replacement or modification; or (iii) if neither of the preceding actions is feasible, then SmartWorks may remove the infringing SmartWorks IP from the SmartWorks SaaS; provided that SmartWorks shall promptly refund to Customer any prepaid fees for the infringing features of the SmartWorks IP for the portion of the Term left after such termination. In addition, if SmartWorks removes any SmartWorks IP from the SmartWorks SaaS, then Customer shall also have the right to terminate this Agreement, in whole or in part, and receive a full refund of all prepaid fees paid under this Agreement for the portion of the Term left after such termination. In conjunction with Customer’s right to terminate for breach, where applicable, the preceding sentence states SmartWorks’s sole obligation and liability, and Customer’s sole remedy, for breach of the warranty in this Section 9.1(a), but does not relieve SmartWorks of any of its duties or obligations, nor limit any of Customer’s rights and remedies, in Article XVII of this Agreement.

(b) SmartWorks represents and warrants that the SmartWorks SaaS will conform in all material respects to the Documentation, provided Customer has accessed and used the SmartWorks SaaS in accordance with the Documentation. SmartWorks shall promptly correct any breach of this Section 9.1(b) at no cost to Customer by modifying the SmartWorks SaaS so that it complies with the Documentation. For clarity, no breach of this Section 9.1(b) may be corrected by only modifying the Documentation. If SmartWorks fails to correct any breach of this Section 9.1(b) in accordance with the preceding sentence and within the cure period specified in Section 12.1, then Customer shall have the right to terminate this Agreement, in whole or in part, and receive a full refund of all prepaid fees paid under this Agreement for the portion of the Term left after such termination.

(c) SmartWorks represents and warrants that (i) it shall not engage in employment practices that have the effect of discriminating against any employee or applicant for employment, and (ii) it will take affirmative steps to ensure that applicants are employed and employees are treated during employment without regard to their race, color, religion, national origin, sex, age, disability, genetic information, or political belief or affiliation.

(d) SmartWorks represents and warrants that it has not employed or retained any company or person other than a bona fide employee working solely for SmartWorks, to solicit or secure this Agreement, and that it has not for the purpose of soliciting or securing this Agreement paid or agreed to pay any company or person, other than a bona fide employee working solely for SmartWorks, any fee, commission, percentage, brokerage fee, gift, or any other consideration, contingent upon or resulting from the award or making of this Agreement. For breach of these warranties, Customer shall have the right to immediately terminate this Agreement.

(e) SmartWorks represents and warrants that, unless (i) it is a sole proprietorship or (ii) it is a company with fewer than 10 full-time employees and the value of this Agreement is less than $100,000, it does not boycott Israel and will not do so during the Term. This provision is in compliance with §2270.001 of the Texas Government Code. Customer will comply with the United States and Texas Constitutions in consideration of whether to enforce this provision.

9.2 Authority to Contract Warranty

Each party represents and warrants to the other that it (a) has the full right and authority to enter into this Agreement, and (b) is not aware of any pending or threatened claim or litigation that would prevent it from performing its obligations under this Agreement. A party shall promptly notify the other party if at any time during the Term it determines that either (a) or (b) has become inaccurate.

9.3 Warranty Disclaimer

EXCEPT TO THE EXTENT SET OUT IN THIS AGREEMENT, SMARTWORKS PROVIDES THE SMARTWORKS SaaS, THE DOCUMENTATION, AND THE SUPPORT SERVICES “AS IS” AND “AS AVAILABLE,” WITH NO REPRESENTATION OR WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, SATISFACTORY
QUALITY, TITLE, OR NONINFRINGEMENT OF INTELLECTUAL PROPERTY RIGHTS, OR ANY IMPLIED
WARRANTY ARISING FROM STATUTE, COURSE OF DEALING, COURSE OF PERFORMANCE, OR USAGE
OF TRADE. WITHOUT LIMITING THE GENERALITY OF THE FOREGOING OR LIMITING OR MODIFYING IN
ANY MANNER ANY PROVISION OF THIS AGREEMENT TO THE CONTRARY: (a) SMARTWORKS, ITS
LICENSORS AND SUPPLIERS, AND THE THIRD-PARTY IAAS/PAAS PROVIDER DO NOT REPRESENT OR
WARRANT THAT THE SMARTWORKS SAAS WILL PERFORM WITHOUT INTERRUPTION OR ERROR, THAT
THEY WILL CORRECT ALL DEFECTS, OR THAT THEY WILL PREVENT THIRD-PARTY DISRUPTIONS OR
UNAUTHORIZED THIRD-PARTY ACCESS TO THE SMARTWORKS SAAS; (b) SMARTWORKS MAKES NO
WARRANTY OF ANY KIND THAT THE SMARTWORKS IP OR THE SMARTWORKS SAAS WILL MEET
CUSTOMER'S OR ANY OTHER PERSON'S REQUIREMENTS, ACHIEVE ANY INTENDED RESULT, BE
COMPATIBLE OR WORK WITH ANY SOFTWARE, SYSTEM, OR OTHER SERVICES, OR BE SECURE,
ACCURATE, COMPLETE, FREE OF HARMFUL CODE, OR ERROR FREE; AND (c) SMARTWORKS DOES
NOT REPRESENT OR WARRANT THAT THE SMARTWORKS SAAS IS SECURE FROM HACKING OR
OTHER UNAUTHORIZED INTRUSION OR THAT CUSTOMER DATA WILL REMAIN PRIVATE OR SECURE.
TO THE MAXIMUM EXTENT ALLOWED, SMARTWORKS SHALL PASS-THROUGH TO CUSTOMER ANY
WARRANTIES FROM THIRD-PARTY SUPPLIERS OF ANY THIRD-PARTY COMPONENTS. WITHOUT
LIMITING THE FOREGOING AND UNLESS OTHERWISE EXPRESSLY STATED IN THIS AGREEMENT,
SMARTWORKS DOES NOT MAKE ANY REPRESENTATIONS OR WARRANTIES WHATSOEVER WITH
REGARD TO PRODUCTS OR SERVICES FROM THIRD PARTIES OR ON BEHALF OF SUCH THIRD PARTIES
(INCLUDING THE THIRD-PARTY COMPONENTS, THE THIRD-PARTY IAAS/PAAS, THE THIRD-PARTY
PRODUCTS, AND THE OPERATION OF THE INTERNET) AND ASSUMES NO RESPONSIBILITY OR
LIABILITY WITH RESPECT TO THE FOREGOING. NO AGREEMENTS VARYING OR EXTENDING ANY
EXPRESS WARRANTIES SET FORTH IN THIS AGREEMENT SHALL BE BINDING ON EITHER PARTY
UNLESS IN WRITING AND SIGNED BY AUTHORIZED REPRESENTATIVES OF BOTH PARTIES.

ARTICLE X
LIMITATIONS ON LIABILITY

10.1 Limitation

REDACTED

10.2 Exclusion

REDACTED
10.3 Exceptions

(a) REDACTED

(b) REDACTED

(c) REDACTED

10.4 Insurance Does Not Limit Liability

REDACTED

ARTICLE XI
CHANGES

11.1 Changes to SmartWorks SaaS

Provided that it does not reduce the then-current functions, features, accessibility, or performance capabilities of the SmartWorks SaaS when doing so, SmartWorks may, in its sole discretion, make changes to the SmartWorks SaaS, and the Documentation and changes to its use of Third-Party Components or Third-Party IaaS/PaaS that it deems necessary or useful to: (a) maintain or enhance: (i) the quality or delivery of the SmartWorks SaaS to its customers; (ii) the competitive strength of or market for the SmartWorks SaaS; or (iii) the cost efficiency or performance of the SmartWorks SaaS; or (b) to comply with applicable law. For clarity, SmartWorks may substitute any Third-Party Components or the Third-Party IaaS/PaaS. Without limiting the foregoing, either party may, at any time during the Term, request in writing changes to the SmartWorks SaaS. The parties will cooperate in good faith to consider Change Orders in respect of requested changes and, if mutually agreed, to execute appropriate Change Orders. If either party causes or requests a change in the allocation of the resources of SmartWorks applied to a task, changes in completion schedules for individual tasks or for overall change implementation, and changes in staffing that require SmartWorks to provide additional work hours, SmartWorks may propose a change to cover the additional work effort required of it. Approval of any such proposed changes will not be unreasonably withheld (it being acknowledged that any such material changes may require modifications to the consideration paid, and timelines governing any associated Professional Services), and any disputes regarding changes shall be handled initially by discussions between the parties which will be convened in good faith by the parties to resolve any such matters in dispute.

11.2 Changes to Documentation

At all times during the Term, SmartWorks shall ensure that the Documentation is kept up to date in all respects with the then-current functions, features, accessibility, and performance capabilities of the SmartWorks SaaS and shall deliver to Customer all updated versions of the Documentation 30 days prior to the implementation of the applicable update of the SmartWorks SaaS, or earlier if so agreed by the parties. In the event that an update of the SmartWorks SaaS is required by applicable law or to address a potential IP infringement or security issue and SmartWorks
cannot provide Customer the updated Documentation in advance as required in the foregoing sentence, then SmartWorks shall deliver to Customer the applicable updated Documentation as soon thereafter as possible.

ARTICLE XII
TERMINATION AND SUSPENSION

12.1 Termination for Cause
If either party is in material breach of any of its obligations or any provision under this Agreement, the other party may notify the allegedly breaching party in writing of such breach (a “Default Notice”). Upon receipt of a Default Notice, the allegedly breaching party may correct the breach at no additional cost to the other party within 30 days, or deliver to the nonbreaching party a written notice disputing the alleged breach within 10 days, of the date of receipt of the Default Notice. If the allegedly breaching party fails to correct the breach within such 30-day period, and did not deliver to the nonbreaching party a notice disputing the alleged breach within such 10-day period, then the nonbreaching party may terminate this Agreement upon written notice to the other party to that effect. If the allegedly breaching party delivers to the nonbreaching party a timely notice disputing the alleged breach, then the alleged breach shall be resolved pursuant to the dispute resolution procedure in Section 18.2. In the event that Customer terminates the Agreement pursuant to this Section, then Customer shall be entitled to receive a full refund of all prepaid fees paid under this Agreement for the portion of the Term left after such termination.

12.2 Suspension
If Customer fails to pay any undisputed amounts when due under this Agreement, and such failure has continued for 30 days or more following Customer’s receipt of written notice from SmartWorks of such past due amount, then SmartWorks shall have the right to suspend Customer’s access to the SmartWorks SaaS until all undisputed amounts are paid in full and/or terminate this Agreement effective immediately upon written notice to Customer to that effect. The right to suspend under this Section 12.2 does not foreclose SmartWorks’s right to send a Default Notice pursuant to Section 12.1 and seek to terminate pursuant to Section 12.1 of this Agreement if Customer does not cure or dispute the alleged breach.

12.3 Termination for Non-Appropriation
All obligations of Customer are subject to annual appropriations by its Board of Trustees. Accordingly, notwithstanding anything in this Agreement to the contrary, in the event that the Board of Trustees should fail to appropriate funds to pay any of Customer’s obligations under the terms of this Agreement, then Customer may terminate this Agreement on at least 90 days’ written notice prior to the anniversary of the Effective Date, and neither Customer nor SmartWorks shall have any further duties or obligations under this Agreement, except those that expressly survive, including Customer’s obligation to pay SmartWorks any outstanding fees. For clarity, Annual Subscription Fees are non-refundable.

12.4 Termination for Bankruptcy
Either party may terminate this Agreement effective immediately upon written notice to the other party if the other party: (a) becomes insolvent; (b) becomes the subject of any proceeding under any bankruptcy, insolvency or liquidation law, whether domestic or foreign, and whether voluntary or involuntary, which is not resolved favorably to the subject party within 90 days of commencement thereof; or (c) becomes subject to property seizure under court order, court injunction or other court order which has a material adverse effect on its ability to perform hereunder. SmartWorks may only terminate under this Section if Customer fails to make payment in accordance with this Agreement or as otherwise agreed by the parties.

12.5 Termination Due to Change in SmartWorks SaaS
If Customer demonstrates that any modification, change, or replacement of the SmartWorks SaaS impairs Customer’s ability to utilize the SmartWorks SaaS in substantially the same manner as it was utilized prior to the modification, change, or replacement, then Section 12.1 shall apply and Customer may terminate this Agreement as set out therein.
12.6 Termination Following Pilot Period

Following the conclusion of its pilot program, during which it intends to test the operability of the SmartWorks SaaS in conjunction with various other hardware, software, networks, and services, Customer may terminate this agreement on 90 days' written notice prior to the anniversary of the Effective Date.

ARTICLE XIII
EFFECTS OF TERMINATION

13.1 Cessation of Certain Rights

Subject to Section 13.6 below, upon any termination of this Agreement, all rights granted to Customer in this Agreement to access and use the SmartWorks SaaS or the Documentation shall immediately terminate, as shall all rights for SmartWorks to possess Customer Data, and SmartWorks may immediately cease to provide Customer any further access to the SmartWorks SaaS or the Documentation.

13.2 Payment Obligations Survive

Each party’s obligation to pay the other amounts due under this Agreement up to and through the date of termination shall survive such termination. Each party will be responsible to pay the other party costs of enforcing such payment obligations, including court costs, attorney fees, and repossession charges to the extent not prohibited by law.

13.3 Return or Destruction of Confidential Information

Each party shall purge or destroy all copies of any Confidential Information of the other party in its possession or custody or under its control, except as otherwise required under applicable law and except that neither party shall be obligated to purge its backup records in order to comply with this Section (in either case, “Retained Records”). Retained Records may not be accessed or used by the retaining party in any manner or for any purpose without prior written notice of at least 30 days to the owning party, and such Retained Records shall be destroyed promptly when no longer legally required to be retained or in the normal course of the retaining party’s record destruction policies. Upon written request from the other party, each party shall certify in writing its compliance with this Section within 30 days of the termination date. The foregoing shall not apply to Customer Data, which shall be governed by Section 13.5 below.

13.4 Survival of Accrued Rights and Remedies

Except as otherwise provided in this Agreement, termination of this Agreement shall not affect any right of action or remedy of either party arising from anything that was done or not done, as the case may be, prior to the termination date.

13.5 Return and Destruction of Customer Data

If requested by Customer in writing or upon any termination of this Agreement, SmartWorks shall deliver to Customer a complete copy of the Customer Data as mutually agreed with respect to format and associated cost. Upon receipt of written notice from Customer confirming receipt of the Customer Data and that it is complete and readable, SmartWorks shall promptly destroy and delete all copies of the Customer Data in SmartWorks’s possession, custody, or control, and an officer of SmartWorks shall certify the destruction and deletion to the Customer within 10 Business Days of SmartWorks’s receipt of Customer’s notice. Subject to any legal requirement that SmartWorks must retain a copy of the Customer Data, SmartWorks shall not delete the Customer Data for 90 days from the date of termination, except in accordance with this Section 13.5. If SmartWorks has provided the Customer Data to Customer pursuant to this Section, but Customer has not further communicated with SmartWorks regarding the Customer Data within 30 days after receiving the Customer Data, then SmartWorks shall delete all Customer Data promptly thereafter, and in no event more than 10 Business Days after such date, unless prohibited by applicable law. Notwithstanding the foregoing, SmartWorks shall be permitted to delete all Customer Data without providing notification to Customer, and SmartWorks shall not be required to adhere to the time frames.
detailed above where SmartWorks is required by law to delete such Customer Data; provided that, and to the extent permitted by applicable law, SmartWorks shall promptly notify Customer of the required deletion and promptly deliver to Customer a complete copy of the Customer Data in a mutually agreed format prior to the required deletion.

13.6 Reasonable Assistance upon Termination.

Except in the case of termination of this Agreement pursuant to Section 12.1, SmartWorks shall, upon Customer’s request, continue to provide the SmartWorks SaaS to Customer pursuant to the terms of this Agreement for a transitional period of up to 60 months and provide such cooperation and assistance as Customer may reasonably request to support an orderly transition to another provider of similar software, services, or to Customer’s internal operations (the “Transition Period”). The Transition Period will be a minimum of three months, with the prorated Annual Subscription Fees for the initial three-months of the Transition Period to be paid at least 30 days prior to the commencement of the Transition Period. Thereafter, the prorated Annual Subscription Fees will be paid 30 days in advance of each additional month of the of the Transition Period. The prorated Annual Subscription Fees payable during the Transition Period as described in this Section 13.6 shall be at the rates specified in Schedule A if during the initial eight-year Term, and if the Transition Period extends beyond the end of the initial eight-year Term, then prorated Annual Subscription Fees shall be 105% of the Annual Subscription Fees of the final year of the Term. Other support, cooperation, assistance, and services provided by SmartWorks to Customer for the purposes of transition to another provider of similar software, services, or to Customer’s internal operations during the Transition Period (“Transition Services”) (beyond the SmartWorks SaaS and Support Services) will be subject to a fee based on SmartWorks’s then-current rates for Professional Services and such services will be set out in a statement of work to the Professional Services Agreement. Any Transition Period during which Customer will access and use the SmartWorks SaaS and receive Support Services shall be considered part of the Term, while the Transition Services will be governed by the Professional Services Agreement.

ARTICLE XIV
OWNERSHIP

14.1 SmartWorks IP

SmartWorks, its service providers, and licensors are and shall at all times remain the owner of all copyright, trademarks, trade secrets, patents, and any other intellectual property rights in and to the SmartWorks IP. Customer shall acquire no right whatsoever to all or any part of the SmartWorks SaaS, except the limited right to access and use the SmartWorks SaaS in accordance with the terms of this Agreement. Customer must fully reproduce on all authorized copies any copyright or other notice marked on any part of the Documentation or other materials provided by SmartWorks pursuant to this Agreement and must not alter or remove any such copyright or other notice. Unless otherwise agreed in writing, Customer hereby grants to SmartWorks a royalty-free, worldwide, irrevocable, perpetual license to use and incorporate into the SmartWorks SaaS any suggestions, ideas, enhancement requests, recommendations, or other feedback provided by Customer relating specifically to the operation of the SmartWorks SaaS; provided that Customer shall have no obligation to provide any such suggestions, ideas, enhancement requests, recommendations, or other feedback.

14.2 Customer Data

As between SmartWorks (including any of its service providers and licensors) and Customer, all Customer Data is and will remain the sole and exclusive property of Customer. Customer Data is Confidential Information for all purposes under this Agreement, irrespective of whether such data is marked “Confidential”. Subject to the terms and conditions of this Agreement, Customer grants to SmartWorks a non-exclusive, royalty-free license to store and access the Customer Data for the sole purpose of providing the SmartWorks SaaS and to perform any Professional Services that the parties may mutually agree to perform and will need access to Customer Data to perform. SmartWorks shall limit access to the Customer Data to only those of SmartWorks’ employees, Affiliates, and permitted subcontractors who are required to have such access for the sole purpose of SmartWorks providing the SmartWorks SaaS and only if such persons or entities are bound to SmartWorks by confidentiality and nonuse obligations at least as protective as those set forth in this Agreement with respect to the Customer Data. Except as specified in this Agreement, SmartWorks shall not access the Customer Data for any other purpose without the express written consent of Customer. At no time shall any Customer Data be copied,
disclosed, or retained by SmartWorks or any party related to SmartWorks for subsequent use in any transaction that does not include Customer, unless Customer expressly consents to such copying, disclosure, or retention for such purpose, or unless SmartWorks is required to do so by applicable law for such purpose. During the Term only, Customer grants to SmartWorks a revocable, royalty-free license to create monthly reports in respect of matters Customer expressly requests ("Reports") from the Customer Data for the sole purpose of providing feedback to Customer concerning Customer’s use of the SmartWorks SaaS. SmartWorks shall not use or disclose the Reports for any purpose not expressly approved by Customer and shall promptly destroy such Reports at Customer’s direction or upon any termination of this Agreement.

14.3 Customer Data and Privacy Policy of Customer

Customer represents and warrants to SmartWorks that:

(a) Customer Data that is provided to SmartWorks by Customer is either owned exclusively by Customer or Customer has full the right and title to grant the rights to the Customer Data that are expressly granted to SmartWorks in this Agreement;

(b) Customer Data that is provided to SmartWorks by Customer is subject to a Customer privacy policy and Customer’s customers have, if required by applicable law, provided to Customer their written consent sufficient to permit its collection, use, and storage by SmartWorks and the Third-Party IAAS/PAAS as expressly allowed in this Agreement.

(c) Customer complies with all applicable privacy legislation as of the Effective Date in the performance of its obligations hereunder in respect of any Customer Data collected, used, transferred, created, or disclosed pursuant to this Agreement.

ARTICLE XV
CONFIDENTIAL INFORMATION

15.1 Confidentiality and Nonuse Obligations

The Receiving Party: (a) shall keep confidential the Confidential Information to the same extent as Receiving Party maintains the confidentiality of its own similar confidential information, but in no event with less than a reasonable standard of care; (b) shall not use the Confidential Information for any purpose not expressly permitted in this Agreement or otherwise in writing by the Disclosing Party; (c) shall only disclose the Confidential Information to its agents, employees, or representatives who have a need to know such information for the purpose of the Receiving Party performing its obligations or exercising its rights under this Agreement and who have been informed of the confidential nature of such information, but only to the extent that such persons or entities are bound by confidentiality and nonuse obligations that are at least as protective of the Confidential Information as set forth in this Agreement. The Receiving Party shall be responsible for any breach of this Agreement by any of its agents, employees, or representatives. The Receiving Party agrees, at its sole expense, to take reasonable measures to restrain its agents, employees, and representatives from prohibited or unauthorized disclosure or use of any of the Confidential Information. Notwithstanding the foregoing, Customer is a governmental entity subject to the Texas Public Information Act (Tex. Gov. Code §552) ("TPIA") and, as such, will follow the procedures and requirements thereunder, including production of Confidential Information to a requestor under the TPIA if the Attorney General of Texas determines the information is not protected from disclosure under the TPIA. Customer’s compliance with the TPIA shall not constitute a breach of this Agreement.

15.2 Compelled Disclosure

The Receiving Party may disclose Confidential Information if it is compelled by law to do so, provided the Receiving Party, to the maximum extent permitted by applicable law: (a) promptly provides the Disclosing Party prior written notice of such compelled disclosure to allow the Disclosing Party to seek a protective order or other appropriate remedy, (b) discloses only such Confidential Information as is required by law, and (c) reasonably cooperates with the Disclosing Party’s efforts to obtain confidential treatment for any Confidential Information so disclosed, all at the Disclosing Party's cost.
15.3 Privacy Laws

The parties agree that the Customer Data may be subject to privacy laws providing for the owners of the Customer Data to review such Customer Data or to challenge the collection and storage of the Customer Data and further agree that the costs associated with such reviews or challenges will be borne by Customer as set out in Section 16.1 below.

15.4 Texas Public Information Act

In the event SmartWorks is subject to the Texas Public Information Act, upon receipt of a request for any information obtained by SmartWorks in the performance of this Agreement, SmartWorks shall provide written notice to Customer of the request along with a copy of the request to the extent permitted by the Texas Public Information Act, and give Customer the opportunity to respond to the request prior to its release by SmartWorks. In no event shall SmartWorks or any of its employees, agents, or subcontractors provide or participate in any public presentations or prepare or present any papers for public dissemination concerning this Agreement, or using information obtained in connection with the Agreement, without receiving the prior written approval from Customer, which approval may be withheld in Customer's sole and absolute discretion.

15.5 Protection of Customer Data

Protection of personal privacy and data shall be an integral part of the business activities of SmartWorks to ensure there is no inappropriate or unauthorized use of Customer Data at any time. Therefore, without limiting the terms of any other part of this Article XV, for so long as SmartWorks has access to or possession of any Customer Data, SmartWorks shall maintain, at its sole cost and expense, a formal security program, at least as protective as the terms of Schedule H that consists of reasonable and appropriate controls, processes, policies, procedures, and physical, technical, administrative, and organizational measures designed to: (a) ensure the security, confidentiality, integrity, and availability of the Customer Data; (b) protect against threats or hazards to the security, confidentiality, integrity, and availability of the Customer Data; and (c) prevent unauthorized access to or use, disclosure, or theft of the Customer Data. Such controls, processes, policies, procedures, technologies, and measures utilized by SmartWorks and its service providers will include: (1) maintaining an appropriate level of physical security controls over its data center, including appropriate alarm systems, fire suppression, and access controls (including off-hour controls); (2) periodically testing its systems for security breach vulnerabilities; (3) maintaining security breach monitoring services and technology; (4) using then-current commercially reasonable efforts to protect its systems from unauthorized access, including the use of firewall and, where appropriate, data encryption technologies as applicable; (5) maintaining security procedures and controls designed to prevent unauthorized access to Customer Data in its buildings, computer facilities, and record storage facilities, including appropriate controls for the destruction of or disposal of Customer Data, that are consistent with then-current general industry standard practices; and (6) encrypting all Customer Data at rest and in transit with controlled access (unless otherwise stipulated, SmartWorks is responsible for encryption of the Customer Data in its control, custody, or possession). To the extent SmartWorks does not own or control the data center facilities where Customer Data is housed or uses subcontractors in the performance of this Agreement, SmartWorks will ensure that the data center and such subcontractors utilize controls consistent with the requirements of this Article, as applicable. Subject to the limitation of liability in Section 10.1, SmartWorks shall be responsible for the acts and omissions of its data center provider and its subcontractors relating to this Agreement as if SmartWorks had performed such acts or omissions itself.

15.6 Location of Customer Data

SmartWorks shall provide the SmartWorks SaaS to Customer and the Authorized Users solely from data centers in the United States, and all Customer Data shall be stored solely in data centers in the United States. SmartWorks shall not allow its personnel or contractors to store Customer Data on portable devices, including personal computers, except for devices that are used and kept only at its data centers in the United States. SmartWorks shall permit its personnel and contractors to access Customer Data remotely only as required to provide technical
15.7 Security Audits

Upon at least five Business Days’ prior written notice to SmartWorks, SmartWorks shall permit Customer, or a third party on Customer’s behalf, or any appropriate federal or state regulatory agencies, to perform an assessment, audit, examination, or review of SmartWorks’s compliance with this Agreement, including SmartWorks’s compliance with this Article XV, as well as any applicable laws, regulations, and industry standards. SmartWorks shall fully cooperate with such assessment by providing access to knowledgeable personnel, documentation, infrastructure, and application software that processes, stores, or transports Customer Data. SmartWorks may require that a third-party auditor (but not any regulatory agency) of Customer sign a reasonable non-disclosure agreement with SmartWorks in a form mutually agreed by the parties prior to SmartWorks granting the third-party auditor access to SmartWorks’s applicable information. For clarity, in any such inspection or examination, SmartWorks will not be required to provide access to any information related to other customers of SmartWorks or its Affiliates. In addition, upon Customer’s request, and subject to the consent of the Third-Party IaaS/PaaS, as applicable, SmartWorks will provide Customer a copy of SmartWorks’s or its data center provider’s then-current SSAE 18, SOC 2, or ISO 27001 certification, or equivalent reports (or comparable industry-standard successor reports) (“Certification Report”) prepared by SmartWorks’s or its data center provider’s independent third-party auditor, and shall complete an internal control questionnaire provided by Customer relating to the subject matter of this Agreement. In addition, no more than once per calendar year of the Term and upon Customer’s request, SmartWorks will provide Customer with its own form of internal audit reports regarding the security of the Customer Data. If SmartWorks has not produced a Certification Report or its own form of internal audit report on its own, then Customer may, at its sole cost and no more than once each year during the Term, retain a nationally recognized public accounting firm to produce such an audit report relating to the SmartWorks SaaS, excluding the Third-Party IaaS/PaaS. SmartWorks may update the scope of its audit from time to time provided that, during the Term, no update shall operate to materially reduce the security or change either party’s obligations or rights hereunder unless approved by Customer in advance in a signed writing. Customer, at its option, shall have the right to review the security controls to determine if they are adequate to protect Customer’s Confidential Information and may, at its discretion, recommend improvements of such security controls to prevent malicious or inappropriate access to the Customer Data.

15.8 Unauthorized Disclosures

SmartWorks shall discuss security incidents with Customer on an urgent, as-needed basis as part of SmartWorks’s communication and mitigation processes as mutually agreed upon or required by law. If either party discovers any actual or reasonably likely loss, damage, unplanned unavailability, unauthorized use, or improper acquisition of Customer Data in SmartWorks’s (including any data center provider’s or subcontractor’s) possession or control (a “Security Incident”), SmartWorks shall notify Customer without undue delay. In addition, SmartWorks shall promptly investigate such Security Incident and shall share the results of the root cause analysis and the implemented commercially reasonable corrective action plan with Customer without undue delay following such incident, and SmartWorks shall document responsive actions taken related to the Security Incident, including any post-incident review of events and actions taken to make changes in business practices in providing the SmartWorks SaaS. The timeframe for SmartWorks’s efforts under this Section shall be determined by the severity of such Security Incident and shall occur as expeditiously as possible or as required by applicable law. SmartWorks agrees to reasonably cooperate with Customer in connection with any third-party litigation or criminal investigations resulting from a Security Incident, as well as any communications with third parties regarding a Security Incident. Any extraordinary expenses incurred by SmartWorks in respect of the foregoing will be considered Mitigation Costs, it being understood that SmartWorks will notify Customer in writing of Mitigation Costs that exceed $350,000 and SmartWorks will obtain Customer’s written consent to incur same; and provided, however, that a condition to such extraordinary expenses incurred by SmartWorks being considered Mitigation Costs is that SmartWorks provide Customer with prompt proof of SmartWorks’s payment for such expenses. Subject to the provisions of Section 17.3 below and SmartWorks’ limitation of liability set out Section 10.1, SmartWorks shall defend, indemnify, and hold harmless the Customer Indemnified Parties from and against Mitigation Costs and any and all third-party claims for damages, costs, liabilities, expenses, attorney’s fees, equitable relief, or similar relief arising out of or related to a Security Incident resulting from breach of this Agreement by SmartWorks or any of its data center providers or subcontractors (the “Security Incident Indemnity”). “Mitigation Costs” mean any of the following incurred by
Customer: (a) costs to conduct or participate in the investigation and resolution of the Security Incident; (b) costs of notifications to individuals, regulators, or others required by applicable law; (c) costs of credit monitoring services required by applicable law; (d) costs of establishing and operating a website or a toll-free number and call center for affected individuals required by applicable law; (e) costs of completing all corrective actions based on the root cause of the Security Incident; and (f) the reasonable recovery-related costs associated with lost, damaged, or impaired Customer Data.

15.9 Equitable Remedies

The parties acknowledge that a breach of any of the provisions contained in this Article may result in irreparable and continuing harm for which there may be no adequate remedy at law and that the non-breaching party shall be entitled to seek injunctive relief and/or a decree for specific performance without the necessity of posting a bond. Any legal action brought under this Section 15.9 shall not be subject to the requirements of Section 18.2 below.

ARTICLE XVI
CUSTOMER INDEMNIFICATION

16.1 Customer Data Defense and Indemnity

Customer is responsible pursuant to Section 7.5 for its Customer Data, and pursuant to Section 7.4 for its Authorized Users’ use of the SmartWorks SaaS. To the extent permitted by applicable law and subject to Section 3.5 above, Customer shall defend the SmartWorks Indemnified Parties from and against all third-party claims arising out of or based on an allegation that SmartWorks’s use or possession of any Customer Data infringes or violates such third party’s rights in or to such Customer Data, including any claim of violation of privacy, and shall pay all amounts that are finally awarded by a court of competent jurisdiction or agreed to in a settlement approved by Customer. Customer shall have no obligation under this Article XVI if any SmartWorks Indemnified Party: (a) breaches any obligation or limitation set forth in this Agreement related to the Customer Data; (b) fails to comply with any applicable law with respect to the Customer Data; or (c) suffers a breach of its facilities or systems in or on which the Customer Data is maintained by SmartWorks. In addition, to the extent permitted by applicable law and subject to Section 3.5 above, Customer will reimburse SmartWorks for any reasonable fees or other reasonable out-of-pocket costs paid by SmartWorks to comply with requests by third parties, whether individuals or governmental entities, to review such Customer Data in the SmartWorks SaaS or to respond to challenges by such third parties to the collection and storage of the Customer Data in the SmartWorks SaaS, provided that, where not prohibited by applicable law, SmartWorks first notifies Customer in writing of such request or challenge and gives Customer an opportunity to resolve such matter prior to SmartWorks incurring such fees or expenses.

16.2 Customer Indemnity Procedures

Customer’s defense and indemnity obligations in Section 16.1 are conditioned on: (a) SmartWorks giving Customer prompt written notice of any claim described in Section 16.1, where “prompt” means that the timing of such notice does not materially prejudice Customer’s ability to defend against the claim; (b) SmartWorks not making any admissions or entering into any settlement with the third party, except with Customer’s prior written consent, (c) SmartWorks giving Customer sole control of the defense of the claim and all negotiations for its compromise or settlement, provided that no settlement assigning liability to, restricting any operations or rights of, or requiring any payment by a SmartWorks Indemnified Party shall be permitted without the SmartWorks Indemnified Party’s prior written consent; and (d) SmartWorks reasonably cooperating with Customer, at Customer’s expense and at no cost to any SmartWorks Indemnified Party, throughout the defense and settlement of the claim. The SmartWorks Indemnified Parties shall have the right, at their option and at their own expense, to retain legal counsel of its choice and to participate in the defense of any indemnified claim without relieving Customer of any of its obligations under this Article, and Customer shall fully cooperate with the SmartWorks Indemnified Parties in their participation in the defense. Customer shall promptly advise SmartWorks in writing of any claim or demand against Customer (where "prompt" is as defined above) or any of the SmartWorks Indemnified Parties of which Customer becomes aware and that relates to or arises out of Customer’s activities under this Agreement.
16.3 Exclusive Remedy for Defense and Indemnity for Customer Data Claims

THE FOREGOING STATES CUSTOMER'S ENTIRE LIABILITY, AND THE SMARTWORKS INDEMNIFIED PARTIES’ EXCLUSIVE REMEDY, WITH RESPECT TO ANY THIRD-PARTY CLAIMS OF THE TYPE DESCRIBED IN SECTION 16.1 RELATED TO THE CUSTOMER DATA.

ARTICLE XVII
INTELLECTUAL PROPERTY INFRINGEMENT AND SMARTWORKS INDEMNITY

17.1 Intellectual Property Infringement

REDACTED

17.2 SmartWorks Defense and Indemnity

REDACTED

17.3 SmartWorks Indemnity Procedures

REDACTED

17.4 Limitation on IP Claims

REDACTED
17.5 Exclusive Remedy for Defense and Indemnity for IP Claims

REDACTED

17.6 Intellectual Property Claims Regarding Third-Party IaaS/PaaS

REDACTED

ARTICLE XVIII
GENERAL

18.1 Governing Law; Venue

This Agreement, and any disputes arising out of or related to this Agreement, shall be governed by and construed in accordance with the laws of the State of Texas. This Agreement is not be subject to any principle of law that would result in a law other than the laws of the State of Texas being applied to this Agreement, nor is it subject to the Uniform Commercial Code or the United Nations Convention on Contracts for the International Sale of Goods. ANY LEGAL SUIT, ACTION, OR PROCEEDING ARISING OUT OF OR RELATED TO THIS AGREEMENT WILL BE INSTITUTED IN THE STATE OR FEDERAL COURTS WITH JURISDICTION IN BEXAR COUNTY, TEXAS, AND EACH PARTY IRREVOCABLY SUBMITS TO THE EXCLUSIVE JURISDICTION OF SUCH COURTS IN ANY SUCH SUIT, ACTION, OR PROCEEDING. CUSTOMER AND SMARTWORKS HEREBY WAIVE, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, THE RIGHT TO TRIAL BY JURY IN ANY ACTION, PROCEEDING OR COUNTERCLAIM FILED BY ANY PARTY, WHETHER IN CONTRACT, TORT OR OTHERWISE, RELATING DIRECTLY OR INDIRECTLY TO THIS AGREEMENT OR ANY ACTS OR OMISSIONS OF SMARTWORKS IN CONNECTION THEREWITH OR CONTEMPLATED THEREBY. In the event of any dispute arising out of or related to this Agreement, the prevailing party shall be entitled to recover its reasonable attorney’s fees, expenses, and costs.

18.2 Dispute Resolution; Mediation

Except to the extent this Agreement explicitly states that this Section does not apply, each party agrees to submit any claim, controversy, or dispute arising out of or relating to this Agreement, the SmartWorks SaaS, or the relationship created by this Agreement (each a "Dispute") to the other party in accordance with this Section before bringing such claim, controversy or dispute in a court or before any other tribunal. Disputes will initially be considered by each party’s applicable project or business manager (each a "Manager"). The Manager of the party raising the Dispute will provide written notice (e-mail is sufficient) to the other party’s Manager identifying the dispute in reasonable detail (a "Dispute Notice"). Thereafter, the Managers will meet in person or by telephone to resolve the Dispute as soon as reasonably possible considering the nature and impact of the applicable issues. If a Dispute cannot be resolved by the Managers within 7 Business Days after delivery of the Dispute Notice, then the Managers will refer the dispute to their respective vice presidents or equivalent level officers with sufficient authority to fully resolve the Dispute (each an "Executive"). If such Executives cannot resolve the Dispute within 14 Business Days after delivery of the Dispute Notice, then the parties agree to participate in good faith in a one-day non-binding mediation with representatives of each party having all necessary authority to fully resolve the Dispute. The
mediation is to be conducted by either an individual mediator or a mediator appointed by mediation services mutually agreeable to the parties. Such mediator shall be knowledgeable in software system agreements. The mediation shall take place in San Antonio, Texas at a time that is mutually agreeable; provided, however, that the mediation shall occur no later than 30 Business Days after delivery of the Dispute Notice. Except for the costs and expenses of mediation (including compensation and expenses of the mediator), which shall be shared by the parties equally, each party shall bear its own costs and expenses of participating in the dispute resolution process and mediation described in this Section. If the parties are unable to resolve the Dispute upon the earlier of the completion of the mediation or the expiration of 30 Business Days after delivery of the Dispute Notice, then either party may initiate a legal proceeding to resolve the Dispute. All applicable statutes of limitation will be tolled until the meetings and mediation specified in this Section have been completed. The parties will take such action, if any, required to effectuate such tolling. Nothing in this Section shall inhibit a party’s right to seek injunctive or other equitable relief at any time for Disputes concerning actual, alleged, or threatened violations of a party’s Confidential Information or intellectual property rights, for which the parties may immediately bring an action.

18.3 No Waiver of Governmental Immunity or Available Defenses; No Damages for Delay

Nothing in this Agreement, including in Article XVI above, shall be interpreted to constitute a waiver by any Customer Indemnified Party of any governmental immunity available under Texas law or any available defenses under Texas law; provided that the parties agree that this Agreement is a contract for goods or services under Chapter 271 of the Texas Local Government Code. Moreover, notwithstanding anything to the contrary in this Agreement, SmartWorks’s sole remedy for any (a) delay in commencement, prosecution, or completion of services under this Agreement, (b) hindrance, interference, suspension, or obstruction in the performance of services under this Agreement, (c) loss of productivity, or (d) other similar claims (items (a) through (d) herein collectively referred to in this Article as “Delays”), whether or not such Delays are foreseeable, shall be an extension of the Term by an equal number of days as the Delay, unless the Delay is caused by the acts of Customer constituting intentional interference with SmartWorks’s performance of the services, and only to the extent such act continues after SmartWorks delivers Customer written notice of such interference. Unless otherwise expressly stated in this Agreement, in no event shall SmartWorks be entitled to any compensation or recovery of any damages, in connection with any Delay, including consequential damages, lost opportunity costs, impact damages, or other similar remunerations. For purposes of interpreting this Section, Customer’s exercise of any of its rights or remedies under this Agreement (including ordering changes in the services or directing suspension, rescheduling, or correction of the services), regardless of the frequency of Customer’s exercise of such rights or remedies, shall not be construed as intentional interference with SmartWorks’s performance of the services.

18.4 Notice

Any notice required or permitted to be given to either party to this Agreement shall be given in writing and shall be delivered either personally, by overnight courier with signature required, or by prepaid registered or certified mail, return receipt requested, to the appropriate address set out below. Any such notice shall be deemed to have been given and received on the day on which it is actually received or refused (without consideration of actual receipt or refusal of courtesy copies).

Notices to SmartWorks:

**N. HARRIS COMPUTER CORPORATION**  
1 Antares Drive  
Suite 400  
Ottawa ON, K2E 8C4

**Attention:** GENERAL COUNSEL  
Telephone: (613) 226-5511 X2065  
e-mail: legal@harriscomputer.com
With a courtesy copy to:

N. HARRIS COMPUTER CORPORATION
1 Antares Drive
Suite 400
Ottawa ON, K2E 8C4
Attention: CHIEF EXECUTIVE OFFICE
Telephone: (613) 226-5511 X2065

Notices to Customer:

San Antonio Water System
Attn: General Counsel
2800 U.S. Hwy 281 North
San Antonio, Texas 78212

Each party may change its address for notices by issuing notice to the other party in the manner described in this Section 18.4.

18.5 Currency

All dollar amounts referred to in this Agreement are in United States dollars.

18.6 No Publicity or Use of Name

SmartWorks shall not use Customer’s name or logos or refer to the City of San Antonio or Customer, either directly or indirectly, on or in any publicity, marketing, advertising, or other external materials or communications to any third party without Customer's advance written consent, which Customer may withhold in its sole discretion. In addition, SmartWorks shall not disclose Monitoring Data to any third party to the extent that doing so will directly or indirectly associate such Monitoring Data with Customer.

18.7 Entire Agreement

This Agreement, together with the attached Schedules, constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior and contemporaneous agreements, representations, negotiations, understandings, arrangements, and communications between the parties, both written and oral, relating to the subject matter hereof. No terms and conditions in any Customer orders, in any online terms related to the SmartWorks SaaS, or in any other documentation employed by or on behalf of either party in connection with this Agreement, regardless of the date of such documentation, will affect the terms of this Agreement, even if such document is accepted by the receiving party, with such provisions being deemed rejected and deleted. This Agreement may only be modified by a written amendment signed by an authorized representative of each of the parties.

18.8 Order of Precedence

In the case of a conflict between a general term or condition in the main body of this Agreement and a specific term or condition in a Schedule, the specific term or condition in the Schedule will prevail, with the exception of Section 10.1 of the main body of this Agreement (limitations of liability), which will prevail in the event of a conflict with a term or condition in a Schedule.

18.9 Waiver; Cumulative Remedies

No waiver of any breach of any provision of this Agreement shall constitute a waiver of any prior, concurrent, or subsequent breach of the same or any other provisions hereof, and no waiver shall be effective unless made in
writing and signed by an authorized representative of the waiving party. Other than as expressly stated herein, the remedies provided herein are in addition to, and not exclusive of, any other remedies of a party at law or in equity.

18.10 Assignment

Neither party may assign or delegate any of its rights or duties under this Agreement without the prior written consent of the other party, such consent not to be unreasonably withheld. For purposes of the preceding sentence, and without limiting its generality, any merger, consolidation, or reorganization involving a party (regardless of whether such party is a surviving or disappearing entity) will be deemed to be an attempted assignment or delegation of rights, obligations, or performance under this Agreement for which the other party's prior written consent is required. No assignment, delegation, or transfer will relieve either party of any of its obligations under this Agreement. Any purported assignment, delegation, or transfer in violation of this Section 18.10 is void. This Agreement is binding upon and inures to the benefit of the parties hereto and their respective successors and permitted assigns.

18.11 Severability

If any provision of this Agreement is determined by a court of competent jurisdiction to be invalid or unenforceable under any applicable law, then such provision shall be deemed modified and interpreted so as best to accomplish the objectives of the original provision to the fullest extent permitted by law and to the extent necessary in order to render such provision valid and enforceable. If such provision may not be so modified and interpreted, then it shall be severed and the remainder of this Agreement shall remain in full force and effect unless doing so would result in a frustration of purpose of this Agreement.

18.12 Allocation of Risk

The warranty disclaimer, limitation of liability, indemnity, and other risk allocation provisions contained in this Agreement are fundamental elements of the basis of the bargain between SmartWorks and Customer and set forth an allocation of risk reflected in the rights and obligations set forth in this Agreement, including the fees due hereunder.

18.13 Relationship

The parties are and shall at all times remain independent contractors in the performance of this Agreement, and nothing herein shall be deemed to create a joint venture, partnership, agency, or fiduciary relationship between the parties. Neither party will have the power to bind the other party or to contract in the name of or create any liability against the other party in any way or for any purpose. Neither party will be responsible for the acts or defaults of the other party or of those persons or entities for whom the other party is legally responsible, whether at law or pursuant to this Agreement.

18.14 Export Regulation

Each party shall comply with all applicable export control laws in the performance of this Agreement.

18.15 Force Majeure

Without relieving SmartWorks of its obligations to comply with Schedule F, no default, delay, or failure to perform on the part of either party shall be considered a breach of this Agreement where such default, delay, or failure directly results from a Force Majeure Event. "Force Majeure Event" means strikes (but not by the affected party’s employees), riots, civil disturbances, governmental actions, epidemics, pandemics, war, terrorist acts, embargoes, severe weather, fire, earthquakes, floods, acts of God, acts of the public enemy, or other circumstances beyond such party’s reasonable control. Upon the occurrence of a Force Majeure Event, the affected party shall use reasonable efforts to notify the other party of the Force Majeure Event as promptly as possible under the circumstances and will be excused from any further performance or observance of the affected obligation(s) for as long as: (a) such circumstances prevail, (b) such party continues to use commercially reasonable efforts to mitigate the effects of such Force Majeure Event, and (c) such party continues to attempt to recommence performance or observance to the greatest extent possible without delay. Upon the conclusion of a Force Majeure Event, the
affected party will promptly perform obligations that could not be performed during the occurrence of the Force Majeure Event, but only if performance remains possible and desirable by the unaffected party following the Force Majeure Event. The foregoing notwithstanding, if a Force Majeure Event affecting SmartWorks continues for more than 30 days, Customer may terminate this Agreement without any liability for such termination.

18.16 Survival

The rights and obligations of the parties under Articles I, X, XIII, XV, XVI, XVII, and XVIII, and Sections 2.3, 3.5, 3.8, 14.1, and 14.2, shall survive any termination or expiration of this Agreement, as shall any other provision that expressly indicates that it survives termination.

18.17 Counterparts; Digital Signatures

This Agreement may be executed in counterparts (whether by facsimile signature, PDF via email, or otherwise), each of which when so executed shall constitute an original and all of which together shall constitute one and the same instrument.

18.18 Interest in Water System Agreements Prohibited

No officer or employee of Customer or the City of San Antonio is permitted to have a financial interest, direct or indirect, in any agreement with Customer or any financial interest, directly or indirectly, in the sale to Customer of any land, materials, supplies, or service, except on behalf of Customer or the City of San Antonio as an officer or employee. Any violation of this Section, with the knowledge, expressed or implied, of SmartWorks contracting with Customer shall render this Agreement voidable by the Board of Trustees or the President/Chief Executive Officer of Customer.

18.19 Gift Policy

Customer’s employees are prohibited from soliciting, accepting, or agreeing to accept any gifts from outside sources (see Section M. – Gifts or Benefits of the Water System’s Code of Ethical Standard, which is available on the Water System Business Center website). SmartWorks shall not take any act, directly or indirectly, that would result in a breach of such policy by any employee of Customer.

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement to be effective as of the Effective Date.

<table>
<thead>
<tr>
<th>N. Harris Computer Corporation, through its SmartWorks division</th>
<th>San Antonio Water System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature</td>
<td>Signature</td>
</tr>
<tr>
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</tr>
<tr>
<td>Title</td>
<td>Title</td>
</tr>
<tr>
<td>Date</td>
<td>Date</td>
</tr>
</tbody>
</table>
PART 1 – SMARTWORKS SAAS – INCLUDED MODULES

The SmartWorks SaaS provided to Customer is known as “SmartWorks Compass,” and includes each of the following modules:

(i) Compass Platform
(ii) MeterSense MDM Module
(iii) KPI Dashboard Module
(iv) Rate and Revenue Analysis Module
(v) Water Loss Analysis Module
(vi) Leak Detection and Notification Module
(vii) Targeted Messaging Module

(Collectively or singularly, the “SmartWorks Modules”).

The functions, features, and performance of each of the SmartWorks Modules as of the Effective Date are further described in the Documentation and include all of the Minimum Requirements (as defined in the Agreement).

SmartWorks may change, discontinue, or modify functionality of any or all of the SmartWorks Modules in accordance with the terms of the Agreement.

PART 2 – ENVIRONMENTS

The following environments are to be implemented and supported as part of the consideration for the Annual Subscription Fees.

Server Specification Assumptions

<table>
<thead>
<tr>
<th>Environment</th>
<th>Storage</th>
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<tbody>
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<td>Dev/Test instance</td>
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<td>Subset of meters</td>
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<tr>
<td>QA instance</td>
<td>1 year</td>
<td>Per Meter Configuration Table</td>
</tr>
<tr>
<td>Production instance*</td>
<td>3 years + 5 years archived</td>
<td>Per Meter Configuration Table</td>
</tr>
<tr>
<td>Disaster Recovery²</td>
<td>3 years + 5 years archived</td>
<td>Per Meter Configuration Table</td>
</tr>
</tbody>
</table>

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1 The SmartWorks SaaS in the Production environment is capable of importing, processing and storing 36 months of data for the meters reflected in the Meter Configuration table. An archive and purge process will be used for data older than 36 months. Archived data will be recoverable for a period of five years.

2 The SmartWorks Disaster Recovery environment is identical to the production environment. The Disaster Recovery environment shall be configured, per Schedule F – Minimum Requirements, with a recovery time objective of 24 hours, and a recovery point objective of 1 hour. In addition, a High Availability configuration for the Application Server shall be implemented per Schedule F – Minimum Requirements.
<table>
<thead>
<tr>
<th>Program Phases</th>
<th>Phase 2: Pilot</th>
<th>Phase 3 Full Deployment</th>
<th>Steady State Growth</th>
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</tr>
<tr>
<td>Channel</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

**PART 3 - ANNUAL SUBSCRIPTION FEES**

Annual Subscription Fees will be invoiced annually in advance by SmartWorks according to the following table:

<table>
<thead>
<tr>
<th>Year of Term</th>
<th>Annual Subscription Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>REDACTED</td>
</tr>
<tr>
<td>2</td>
<td>REDACTED</td>
</tr>
<tr>
<td>3</td>
<td>REDACTED</td>
</tr>
<tr>
<td>4</td>
<td>REDACTED</td>
</tr>
<tr>
<td>5</td>
<td>REDACTED</td>
</tr>
<tr>
<td>6</td>
<td>REDACTED</td>
</tr>
<tr>
<td>7</td>
<td>REDACTED</td>
</tr>
<tr>
<td>8</td>
<td>REDACTED</td>
</tr>
</tbody>
</table>

The Annual Subscription Fees for the first year shall be invoiced on the Effective Date. Thereafter, Annual Subscription Fees are invoiced 60 days in advance of the upcoming anniversary of the Effective Date and shall be due and payable 30 days from date of invoice.
SCHEDULE B
SUPPORT SERVICES

SmartWorks SaaS
Support Services

The Schedule B describes the Support Services included in the SmartWorks SaaS and more specifically, a listing of ticket priorities, an outline of SmartWorks’s escalation procedures and related details.

SmartWorks reserves the right to make modifications to the Support Services, but only as permitted in Section 8.1 of the Agreement.
STANDARD SUPPORT AND MAINTENANCE SERVICES – GUIDELINES

Support Services

The support services listed below ("Support Services") are included with the SmartWorks SaaS and will be provided to Customer at no additional cost throughout the Term. SmartWorks shall perform the Support Services in an efficient, competent, and timely manner and will exercise reasonable care, skill, and diligence in the performance thereof. SmartWorks shall determine in its sole discretion the manner and means by which the Support Services shall be performed, provided that the Support Services are performed in accordance with the terms of this Schedule B and with due consideration of the requirement to provide adequate knowledge transfer to Customer’s personnel. At all times in performing the Support Services, SmartWorks will communicate openly with Customer in SmartWorks’s methodology, manner, and means. The Support Services will be provided for all of Customer’s environments, which initially include a production environment, a test/development environment, a quality assurance environment, and a disaster recovery environment (the “Initial Environments”)

- Support for the SmartWorks SaaS includes support of all of the following components:
  - The SmartWorks SaaS and all default functionality;
  - The SmartWorks SaaS-side of the interfaces with other third-party systems, as implemented by SmartWorks;
  - Customized rules developed by SmartWorks;
  - The integrity of the Customer Data within the SmartWorks SaaS; and
  - Advice on Validation, Estimation, and Edit ("VEE") parameter settings and processes.

- SmartWorks will create and install software updates and upgrades (release notes will be available upon request and on the Customer Hub) that may include:
  - Defect corrections (as warranted)
  - Planned enhancements
  - State (Provincial) and/or Federal mandated changes.

- SmartWorks will troubleshoot Customer’s issues and provide recommendations for resolution.
- SmartWorks will promptly notify Customer of all issues known to SmartWorks to be Priority 1 issues in the SmartWorks SaaS that impact Customer.
- SmartWorks will deploy and maintain performance monitoring tools.
- SmartWorks will provide remote training on subjects on a limited basis over the phone. Numerous requests in a short period of time may fall outside the intent of Support Services scope, requiring formal training.
- SmartWorks will proactively monitor Customer’s instance of the SmartWorks SaaS to identify small issues before they become big problems using SmartWorks’s HealthWatch - Online Diagnostics, which includes HealthWatch rules that collect data and alert SmartWorks when specific thresholds have been met (e.g. disk space limit reached, no interval data for two days). Depending on the nature of the issue, SmartWorks may either alert Customer or attempt to address and correct the issue. If Customer decides to opt-out of HealthWatch, charges may apply.
- SmartWorks will share useful information regarding the use of the SmartWorks SaaS modules through one or more of the following methods:
  - Support Bulletins
  - Communication on new products and services
- On-site visits (as required)
- Webinars
- Surveys
- Knowledge base

- If requested, SmartWorks will provide an Outstanding Tickets Report with a conference call to discuss same.
- SmartWorks will permit Customer representatives to attend SmartWorks’s annual customer conference (attendance fees apply).
- SmartWorks will permit Customer to participate in BETA programs to the extent requested by Customer and related to the SmartWorks Modules then in use by Customer.
- SmartWorks shall provide an online ticketing system with the following features available to Customer:
  - Ability to log and close tickets
  - Ability to view and update tickets
  - Ability to update contact information
  - Access to published Documentation
  - Access to support knowledge base
  - Ability to report on metrics
- SmartWorks shall maintain an 800-toll free telephone support number that Customer may use on a 24x7x365 basis, it being understood that SmartWorks will respond to support requests during Standard Support Hours (as defined below). In the case of issues submitted as priority 1 during Non-Standard Support Hours, SmartWorks will acknowledge and review the submittal and communicate the next steps by the next Business Day to Customer.

Out-of-Scope Services are defined in Exhibit I to this Schedule B and are not included in the Support Services. Additional fees shall apply to Out-of-Scope Services.

Customer Responsibilities

SmartWorks’s performance of the Support Services are conditioned on Customer:

- Notifying SmartWorks of suspected errors, defects, or malfunctions in the SmartWorks SaaS, including additional data requested by SmartWorks and deemed necessary or desirable by SmartWorks to reproduce the environment in which such error, defect, or malfunction occurred.
- Ensuring that Customer’s personnel are educated and trained in the proper use of the SmartWorks SaaS in accordance with the Documentation. If Customer desires SmartWorks to perform the required training, then the applicable fees will apply and be payable to SmartWorks.
- Providing SmartWorks with access to qualified functional or technical personnel to aid in diagnosis and to assist in troubleshooting the SmartWorks SaaS in the event of error, defect, or malfunction.
- In addition to the foregoing, Customer is responsible upon further investigation and mutual agreed upon with SmartWorks for the following:
  - the data quality, completeness, and availability of data from third party applications through which the SmartWorks SaaS obtains data on Customer’s instructions; and
  - VEE parameter settings, regular monitoring of validation failures, and the rectification of any validation failures.
Updates, Patches and Upgrades to SmartWorks SaaS

SmartWorks will notify Customer of updates, patches, and upgrades to the SmartWorks SaaS as they become available. Customer and SmartWorks will mutually agree if and when SmartWorks will install such updates, patches, or upgrades. When applying emergency patches, SmartWorks will notify Customer immediately and Customer will allow SmartWorks to proceed immediately.

Test Databases and Environments

SmartWorks shall support Customer in the maintenance of independent test environments for testing purposes. This will allow Customer the opportunity to test fixes, modifications, new business processes, and/or scenarios without risking any potentially unwanted changes to the live environment. The support of test databases and environments is included in the Support Services, but the creation of test databases and environments is an Out-of-Scope Service. For clarity, the Initial Environments are all included in Support Services, although they will be created as part of the initial implementation under the separate Professional Services Agreement between SmartWorks and Customer.

Hours of Operations

Support Services are provided from 8:00 a.m. ET to 8:00 p.m. ET, Monday to Friday, excluding designated statutory holidays (“Standard Support Hours”). After-hours assistance is available. SmartWorks will work with Customer to determine if the request falls outside the intended scope of services for the identified issue which may require additional fees.

Designated statutory holidays are:

<table>
<thead>
<tr>
<th>Holiday</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Year’s Eve</td>
<td>Early Closure (noon EST)</td>
</tr>
<tr>
<td>New Year’s Day</td>
<td>Closed</td>
</tr>
<tr>
<td>President’s Day (USA)</td>
<td>Closed</td>
</tr>
<tr>
<td>Family Day (Canada)</td>
<td>Closed</td>
</tr>
<tr>
<td>Victoria Day (Canada)</td>
<td>Closed</td>
</tr>
<tr>
<td>Labor Day</td>
<td>Closed</td>
</tr>
<tr>
<td>Canada Day (Canada)</td>
<td>Closed</td>
</tr>
<tr>
<td>Thanksgiving Day (Canada)</td>
<td>Closed</td>
</tr>
<tr>
<td>Christmas Eve</td>
<td>Early Closure (noon EST)</td>
</tr>
<tr>
<td>Christmas Day</td>
<td>Closed</td>
</tr>
<tr>
<td>Boxing Day (Canada)</td>
<td>Closed</td>
</tr>
</tbody>
</table>

Ticket Process

All issues or questions reported to SmartWorks are tracked via a TeamSupport Customer Hub ticket (each a “TeamSupport Ticket”). SmartWorks’s analysts cannot provide assistance unless a TeamSupport Ticket is logged. The use of a TeamSupport Ticket allows SmartWorks to track the resolution of Customer’s issues. In addition, TeamSupport Tickets allow measurement of SmartWorks’s activities for proper forecasting of staffing requirements. SmartWorks’s current process for logging TeamSupport Tickets includes the following: TeamSupport Customer Hub (via website), email, phone, and fax.
A Team Support Ticket must contain at a minimum: Customer’s name, contact person, SmartWorks Module and/or menu selection, nature of issue, detailed description of question or issue, and any other pertinent information.

SmartWorks’s analysts will provide Customer Team Support Ticket ID to track the reported issue and the Team Support Ticket will be logged into SmartWorks’s Team Support Customer Hub.

Each Team Support Ticket will be stored in a queue, and the first available SmartWorks support representative will be assigned to deal with Customer’s issue.

As the assigned support representative investigates the issue, Customer will be notified of status updates, actions, and a resolution plan via the Team Support Customer Hub. If additional information is required, Customer will be contacted by the assigned support representative to supply the information required.

All correspondence and actions associated with each Team Support Ticket will be tracked against the Team Support Ticket ID in SmartWorks’s Team Support Customer Hub. At any time, Customer may log onto the Team Support Customer Hub to see the status of each Team Support Ticket.

Once a reported issue has been resolved, the Team Support Ticket will be set to a “Resolved” status. Customer will then have time to evaluate the resolution and provide feedback. Once Customer is satisfied that the issue has been resolved, Customer will then close the Team Support Ticket. If Customer does not believe the issue has been satisfactorily resolved, Customer may re-open the Team Support Ticket, and SmartWorks shall undertake further efforts to resolve the issue. SmartWorks will provide Customer adequate time to evaluate the resolution. However, SmartWorks will close a Team Support Ticket if no feedback is received from Customer within five Business Days. Customer will always be notified of a pending or actual Team Support Ticket closure. Customer will have the option of re-opening the Team Support Ticket if needed.

Once a Team Support Ticket has been closed, Customer will receive an automated notification by email. This email will contain the entire event history of the Team Support Ticket from the time it was created and leading up to the resolution of the Team Support Ticket. Customer has the option of viewing both open and closed Team Support Tickets via the Team Support Customer Hub.

If an issue requires escalation to a development resource or programmer for resolution, the issue will be forwarded to SmartWorks’s development team. The Team Support Ticket will remain open until the development team provides a response. If the development team opens a development item, Customer will be provided a development tracking number. Issues escalated to SmartWorks’s development team will be scheduled for resolution in accordance with the requirements of this Schedule B. If an issue is determined to be an enhancement or new feature, SmartWorks’s support personnel will log a ticket in SmartWorks’s product management queue and will notify Customer when a release has been made available.

Customer may contact SmartWorks’s support department for a status update on development issues.
**Ticket Priorities**

The Support Services include resolution of issues based on three TeamSupport Ticket priorities: 1(high/critical), 2(medium), and 3(low). The criteria used to establish a TeamSupport Ticket priority are as follows:

<table>
<thead>
<tr>
<th>Priority Level</th>
<th>Description</th>
</tr>
</thead>
</table>
| 1              | • SmartWorks SaaS down (whether software application, hardware, operating system, database, or otherwise)  
• Program errors without commercially reasonable workarounds  
• Calculation errors impacting records  
• Error messages preventing data integration and update  
• Performance issues of severe nature impacting critical processes  
• Security Issues  

*Note: in most cases issues affecting a test environment only will not be considered a priority of 1* |
| 2              | • System errors that have commercially reasonable workarounds  
• Reports calculation issues  
• Performance issues not impacting critical processes  
• Usability issues  
• Workstation connectivity issues (workstation specific) |
| 3              | • Training questions, how to questions, or implementation of new processes  
• Aesthetic issues  
• Issues where a commercially reasonable workaround is available for a large majority of cases  
• Recommendations for enhancements on system changes  
• Questions on Documentation  
• Test environment issues or questions |

SmartWorks will raise the Priority Level until a “commercially reasonable” workaround is agreed upon.

**Response Times**

Response times will vary and are dependent on the priority of the TeamSupport Ticket. SmartWorks will make its best efforts to ensure that incoming TeamSupport Tickets are dealt with in the order that they are received, provided that later-received TeamSupport Tickets will be escalated based on the priority of the issue reported. SmartWorks’s response times are as follows (all TeamSupport Tickets submitted outside of the hours of operation specified above shall be deemed submitted to SmartWorks at 8 AM on the next Business Day):

<table>
<thead>
<tr>
<th>Priority</th>
<th>Initial Response Time</th>
<th>R&amp;D Response Time from Escalation</th>
<th>Update Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Within 2 hours</td>
<td>Same day</td>
<td>Daily until resolution identified</td>
</tr>
</tbody>
</table>
Within 8 hours
Within one week
Twice weekly until resolution identified

Within 24 hours
Within 3 weeks
Weekly until resolution identified

*During business hours

**Example:**

- If a Priority 1 TeamSupport Ticket is received Monday January 2 at 10 AM ET, then a SmartWorks Support Analyst shall initially respond by Monday January 2 by 12 PM ET and shall send an update daily thereafter until resolution identified.

- If a Priority 1 TeamSupport Ticket is received Monday January 2 at 9 PM ET, then a SmartWorks Support Analyst shall initially respond by Tuesday January 3 by 10 AM ET and shall send an update daily thereafter until resolution identified.

**Escalation Process**

SmartWorks will use best efforts to provide Customer a satisfying and positive Support Services experience. However, if at any time Customer is not completely satisfied with the resolution of an issue, Customer is encouraged to escalate the issue within SmartWorks’s Support Services group as follows:

**Level 1:** Support Services Analyst  
**Level 2:** Team Lead  
**Level 3:** Manager  
**Level 4:** Executive Vice President
OUT-OF-SCOPE SERVICES

“Out-Of-Scope Services” means the following services, which shall be delivered pursuant to a Change Order to this Schedule B:

- Troubleshooting and analysis that was properly to have been performed by Customer through reference to the Documentation/support resources
- Setting VEE parameters and monitoring and rectifying validation failures;
- Services related to Third-Party IaaS/PaaS integration performed at Customer’s site;
- Development of new interfaces or connections to Customer-provided applications;
- Services related to custom modifications (e.g., rules, reports, new data);
- Services related to data conversions and global modification to setup table data;
- Cleansing or re-processing of data originating from a third-party system (e.g., AMI, CIS); and
- Any other services of a similar nature to the Support Services that SmartWorks may offer from time to time and that are not included in the Support Services described in this Schedule B.
SCHEDULE C
SCHEDULE C
SMARTWORKS SAAS AVAILABILITY

1. Availability Requirement.

SmartWorks shall use commercially reasonable efforts to make the SmartWorks SaaS and Customer Data Available (defined below in this Section 1) 100% of the time in any given calendar month during the Term (each such calendar month, a "Service Period") as measured over the course of the total number of days in such calendar month, excluding un-Availability as a result of any of the Exceptions described below in this Section 1 (the "Availability Requirement"). "Service Level Failure" means a failure of the SmartWorks SaaS to meet the Availability Requirement. "Available" means the SmartWorks SaaS and Customer Data are available for access and use by Customer in a production environment via secure VPN connection in full compliance with all Minimum Requirements. For the purposes of calculating the Availability Requirement, the SmartWorks SaaS and Customer Data will not be considered un-Available and no Service Level Failure will be deemed to have occurred in connection with any failure to meet the Availability Requirement that is due, in whole or in part, to any: (a) Customer Cause (defined in Section 2 below); (b) Customer's Internet connectivity; (c) Force Majeure Event (defined in Section 18.15 of the Agreement), but only until such time as SmartWorks's obligations in Schedule H require that Customer's access to the SmartWorks SaaS and Customer Data be restored; (d) Routine Scheduled Downtime (defined in Section 4 below); (e) any interruption to the access or use of the SmartWorks SaaS that occurs in a non-production environment; or (f) disabling, suspension, or termination of the SmartWorks SaaS for cause by SmartWorks, but only to the extent permitted by the terms of the Agreement; (each of (a) through (f) an "Exception"). For clarity, references to "Customer" in this Schedule C include Authorized Users.

2. Customer Cause.

For the purposes of this Schedule C, "Customer Cause" means any of the following: (a) any abuse of or damage to the SmartWorks SaaS by Customer; (b) any interference with, modification to, or alteration of the SmartWorks SaaS by Customer; (c) any use of the SmartWorks SaaS by Customer in a manner prohibited by this Agreement or by the then-current Documentation; (d) any use by Customer of a third-party product that SmartWorks has not provided or caused to be provided to Customer; or (e) any use by Customer of a non-current version or release of Third-Party Products, notwithstanding notice from SmartWorks that updates, fixes, or patches are required (f) Customer's failure to comply with Schedule H – Data Security.

3. Service Level Failures and Remedies.

(a) REDACTED
<table>
<thead>
<tr>
<th>Service Period Availability</th>
<th>Service Level Credit (Percentage of 1/12th of Annual Subscription Fee)</th>
</tr>
</thead>
<tbody>
<tr>
<td>REDACTED</td>
<td>REDACTED</td>
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<tr>
<td>REDACTED</td>
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<tr>
<td>REDACTED</td>
<td>REDACTED</td>
</tr>
</tbody>
</table>

(b) REDACTED

(c) REDACTED

4. **Routine Scheduled Downtime.**

For the purposes of this Schedule C, "**Routine Scheduled Downtime**" means a period of time during which SmartWorks conducts routine system maintenance, provided that SmartWorks has provided Customer written notice a minimum of three business days prior to such period and such period is between 6PM Central Time and midnight on weekdays or any time on weekends, as agreed by the parties.

5. **Factors Outside SmartWorks’s Reasonable Control.**

For the purposes of this Schedule C, the following shall be considered a circumstance beyond SmartWorks’s reasonable control for purposes of the definition of Force Majeure Event in Section 18.15 of the Agreement: (a) power surges, or (b) network or device failures, in each case external to SmartWorks’s data centers.
SCHEDULE D
THIRD-PARTY PRODUCTS

none
SCHEDULE E

INSURANCE TERMS

SmartWorks shall be responsible for all premiums, deductibles, and self-insured retentions, if any, stated in the policies. All deductibles or self-insured retentions shall be disclosed on the Certificate of Insurance. All endorsements naming the Customer Indemnified Parties as additional insureds, waivers, and notices of cancellation endorsements, as well as the Certificates of Insurance shall indicate: San Antonio Water System, c/o Ebix BPO, P.O. Box 100085-ZD, Duluth, GA 30096.

1. Commercial Insurance Specifications

   a. Commencing on the date of this Agreement, SmartWorks shall, at its own expense, purchase, maintain and keep in force such lines of insurance coverage as will protect it and the Customer Indemnified Parties from claims that may arise out of or relate to acts or omissions in the performance of, whether such acts or omissions are by SmartWorks, by any subcontractor or supplier, or by anyone directly or indirectly employed or engaged by any of them or by anyone for whose acts or omissions any of them may be liable, including the following lines of insurance coverage:

   1) **Workers’ Compensation (“WC”)** insurance that will protect SmartWorks and the Customer Indemnified Parties from claims under statutory Workers’ Compensation laws, disability laws, or such other employee benefit laws and that will fulfill the requirements of all jurisdictions in which the Agreement is to be performed.

      The minimum policy limits of liability for this line of insurance coverage shall be statutory limits.

      This line of insurance coverage shall be endorsed to provide a Waiver of Subrogation in favor of the Customer Indemnified Parties with respect to both this insurance coverage and the EL insurance (as specified immediately below in section 1.a.2).

   2) **Employers’ Liability (“EL”)** insurance (Part 2 under the standard Workers’ Compensation insurance policy) that will protect SmartWorks and the Customer Indemnified Parties for damages because of bodily injury, sickness, and disease of SmartWorks’s employees apart from that imposed by Workers’ Compensation laws.

      The EL line of insurance coverage shall have minimum policy limits of liability of not less than:

      REDACTED Bodily Injury by Accident
      REDACTED Bodily Injury by Disease - Each Employee
      REDACTED Bodily Injury by Disease - Policy Limit

   3) **Commercial General Liability (“CGL”)** insurance that will protect it and the Customer Indemnified Parties from claims for damages because of bodily injury, personal injury, sickness, disease, or death and insurance that will protect it and the Customer Indemnified Parties from claims for damages to or destruction of tangible property of others, including loss of use thereof.

      The CGL line of insurance coverage shall:
      
      - Cover independent contractors;
      - Afford coverage for Products Liability and/or Completed Operations and for Contractual Liability.
The CGL line of insurance coverage (which includes excess liability policies) shall have minimum policy limits of liability of not less than:

<table>
<thead>
<tr>
<th>Coverage Type</th>
<th>Limit Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occurrence Limit</td>
<td>REDACTED</td>
</tr>
<tr>
<td>Products/Completed Operations Aggregate</td>
<td>REDACTED</td>
</tr>
<tr>
<td>Personal and Advertising Injury</td>
<td>REDACTED</td>
</tr>
</tbody>
</table>

This line of insurance coverage shall be endorsed:

- Naming the Customer Indemnified Parties as an Additional Insured for both ongoing and completed operations; and
- To provide a Waiver of Subrogation in favor of the Customer Indemnified Parties.

4) **Commercial/Business Automobile Liability** ("AL") insurance that will protect it and the Customer Indemnified Parties from claims for damages arising out of the maintenance, operation, or use of any owned, non-owned, or hired vehicles.

The CGL line of insurance coverage shall have minimum policy limits of liability for bodily injury and property damage combined of not less than REDACTED per each occurrence.

This line of insurance coverage shall be endorsed:

- Naming the Customer Indemnified Parties as an Additional Insured; and
- To provide a Waiver of Subrogation in favor of the Customer Indemnified Parties.

5) **Professional Liability** ("PL") (Technology errors and omissions) insurance with minimum coverage limits of REDACTED per claim, REDACTED in the aggregate, and, if this line of coverage is written on a “Claims Made” form, SmartWorks must maintain this line of insurance coverage for a period of at least 24 months after the date of termination of the Agreement.

The PL line of coverage shall include in writing on the Certificate of Liability Insurance ("Certificate") the coverage form under which the respective line of coverage is written – either:

- Claims-made form; if the coverage form declared on the Certificate is the Claims-made form, the “Retroactive-date” for this line of coverage must also be included on the Certificate as well; or
- Occurrence basis – no additional wording required.

6) **Security and Privacy Liability** ("SPL") (Cyber Risk) insurance to defend and cover the information security and privacy liability exposures (financial loss, penalties, and defense costs) that exist with respect to SmartWorks and the Customer Indemnified Parties, with minimum coverage limits of REDACTED per claim, REDACTED in the aggregate.

The SPL line of insurance shall provide the following coverage:

- Broad coverage for reasonable and necessary expenses associated with an incident, subject to terms and conditions of the applicable insurance policy, in the nature of the following expenses:
o Compliance with data breach notification laws;
o Securing legal counsel to advise on incident response;
o Providing credit file monitoring to victims;

○ Hiring forensic experts to investigate the breach; paying regulatory defense and penalties from privacy law violations; and

○ Coverage for HIPAA related claims.

○ Coverage for legal liabilities, including those arising from failure to comply with state or federal breach notification laws or privacy policies and/or to administer a government-mandated identity theft prevention program.

If the SPL line of insurance is written on a “Claims Made” form, SmartWorks must maintain this line of insurance coverage for a period of at least 24 months after the date of termination of the Agreement.

The SPL line of insurance shall include in writing on the Certificate the coverage form under which the respective line of coverage is written – either:

- Claims-made form; if the coverage form declared on the Certificate is the Claims-made form, the “Retroactive-date” for this line of coverage must also be included on the Certificate as well; or
- Occurrence basis- no additional wording required

b. SmartWorks shall require all subcontractors and suppliers to carry lines of insurance coverage appropriate to their scope of work and shall promptly submit copies of each subcontractor’s Certificate upon request from Customer. Customer may condition its approval of SmartWorks’s use of any subcontractor on receipt of the Certificate.

c. SmartWorks agrees all required insurance policies are to contain or be endorsed, to the extent not inconsistent with the requirements of the issuing insurance carrier or applicable law, to provide for an endorsement that the “other insurance” clause shall not apply where Customer Indemnified Parties are an Additional Insured shown on the policy.

d. As between SmartWorks and the Customer Indemnified Parties, SmartWorks is responsible for the deductibles under all lines of insurance coverage required by this Schedule.

e. The stated policy limits of each line of insurance coverage required by this Schedule are MINIMUM ONLY, and it shall be SmartWorks’s responsibility to determine what policy limits are adequate and the length of time each line of insurance coverage shall be maintained. Insurance policy limits are not a limit of SmartWorks’s liability.

f. The minimum limits required of each line of insurance coverage may be either basic policy limits of the WC, EL, CGL, and AL or any combination of basic limits or umbrella (on an Umbrella form) or excess (on an Other Than Umbrella form) limits.

g. Customer’s acceptance of Certificate(s) that do not comply with this Schedule in any respect does not release SmartWorks from compliance herewith.

h. The Certificate shall contain the following or substantially similar language: “Should any of the policies described herein be cancelled before the expiration date thereof, the insurer(s) affording coverage will endeavour to provide thirty (30) days’ advance written notice by mail to the certificate holder named herein, but failure to mail such notice shall impose no obligation or liability of any kind upon the insurer(s) affording coverage, their agents or representatives, or the issuer of this certificate.”
i. Within five calendar days of cancellation or non-renewal of any required line of insurance coverage, SmartWorks shall provide Customer a replacement Certificate with all required endorsements included. Customer shall have the option to suspend SmartWorks’s performance should there be a lapse in coverage at any time during this Agreement.

j. Failure to provide and to maintain the required lines of insurance coverage shall constitute a material breach of this Agreement.

k. In addition to any other remedies Customer may have, upon SmartWorks’s failure to provide and maintain any insurance or policy endorsements to the extent and within the time herein required, Customer shall have the right to order SmartWorks to stop performing services hereunder and/or withhold any payment(s) which become due to SmartWorks hereunder until SmartWorks demonstrates compliance with this Schedule.

l. Nothing in this Schedule shall be construed as limiting in any way the extent to which SmartWorks may be held responsible for payments for damages to persons or property resulting from SmartWorks’s or its subcontractors’ performance of the services covered under this Agreement.

m. SmartWorks insurance shall be primary and non-contributory with respect to any insurance or self-insurance carried by any Customer Indemnified Party for liability arising out of operations under this Agreement.

n. SmartWorks agrees that all lines of insurance coverage required by this Schedule shall be with insurance companies, firms, or entities that have an A.M. Best rating of “A- (“A”- minus)” and a Financial Size Category of a “VII” or better. All lines of insurance coverage shall be of an “Occurrence” type except as otherwise expressly permitted herein.

o. Customer will accept worker's compensation insurance coverage written by the Texas Workers Compensation Insurance Fund.

p. Customer reserves the right throughout the Term to review the requirements of this Schedule and to require modification of the lines of insurance coverage and their respective liability limits when deemed necessary and prudent by Customer's Risk Manager and Legal Department based upon changes in statutory law, court decisions, or circumstances surrounding this Agreement. In no instance will any modifications to the requirements of this Schedule be permitted whereupon the Customer Indemnified Parties may incur increased risk exposure.

2. **Certificate(s) of Liability Insurance Requirements**

Prior to the commencement of any performance under this Agreement, all of the following requirements shall be met:

a. SmartWorks shall have completed by its insurance agent(s) and submitted to Customer's Contracting Department Certificates providing evidence of SmartWorks's compliance with all requirements of this Schedule.

b. The original Certificates must (1) include the agent's original signature, including the signer's company affiliation, mailing address, office and fax phone numbers, email address, and contact person's name; and (2) be mailed, with copies of all applicable endorsements, directly from the insurer's authorized representative in strict compliance with Sections 2.i. (Certificate Holder), below, and 2.j. (Distribution of Completed Certificates), below.

c. The Texas Legislature passed and Governor Perry signed Senate Bill 425 to become effective January 1, 2012. This law will require all certificates of insurance forms to be filed with and approved by the Texas Department of Insurance before they can be used after the effective date of the law.
In addition, the law codifies current Texas Department of Insurance rules that a certificate of insurance must not obscure or misrepresent the coverage provided by the insurance policies.

d. Customer will not accept Memorandum of Insurance or Binders as proof of insurance.

e. Customer shall have no duty to pay or perform under this Agreement until such Certificates and applicable endorsements have been received, reviewed, and deemed by Customer’s Risk Management/Contract Services Department to be fully-compliant with this Schedule. No one other than Customer’s Risk Manager shall have authority to waive any part of the requirements set forth in this Schedule.

f. Additional Insured:

The AL and CGL policies must be endorsed naming Certificate Holder (as per item 2. i. below) as an Additional Insured with respect to liability arising out of operations of SmartWorks pursuant to this Agreement, and, so noted in the DESCRIPTION OF OPERATIONS section of the Certificate;

Suggested wording to be placed on the Certificate is as follows:

**EITHER** use,

The AL and CGL policies include a blanket automatic Additional Insured endorsement that provides additional insured status to the Certificate Holder only when there is a written contract between the named Insured and the Certificate Holder that requires such status.

**OR** use,

The AL and CGL policies are endorsed naming the Certificate Holder as an Additional Insured.

If the above wording cannot be placed in the DESCRIPTION OF OPERATIONS section of the Certificate, SmartWorks shall provide Customer the completed Certificate, a copy of the specific AL and CGL Additional Insured endorsement documents, or the policy wording from both the AL and CGL policies.

g. Waiver of Subrogation:

The AL, CGL, WC, and EL policies must be endorsed with the Waiver of Subrogation in favor of Certificate Holder (as per item 2. i. below) and so noted in the DESCRIPTION OF OPERATIONS section of the Certificate;

Suggested wording to be placed on the Certificate is as follows:

**EITHER** use,

The AL, CGL, WC, and EL policies include a blanket, automatic Waiver of Subrogation endorsement that provides this feature only when there is a written contract between the named Insured and the Certificate Holder that requires such status.

**OR** use,

The AL, CGL, WC, and EL policies are endorsed with the Waiver of Subrogation in favor of the Certificate Holder.
If the above wording cannot be placed in the DESCRIPTION OF OPERATIONS section of the Certificate, SmartWorks shall provide Customer the completed Certificate, a copy of the specific AL, CGL, WC, and EL Waiver of Subrogation endorsement documents, or the policy wording from each of the AL, CGL, WC, and EL policies.

h. The Customer Project/Contract number(s) along with its Descriptor Caption must be included in the Description of Operations section located in the bottom half of the standard ACORD Certificate forms.

i. Certificate Holder - Customer shall be shown as the Certificate Holder in the Certificate Holder section located in the bottom half of the standard ACORD Certificate forms and formatted as follows:

San Antonio Water System
c/o Ebix BPO
PO Box 100085-ZD
Ref. # 107- (Lawson Acct's Payable Vendor #)-(SAWS Contract/Project #[TBD])
Duluth, GA 30096

DO NOT BEGIN THE DISTRIBUTION OF ANY CERTIFICATES BEFORE RECEIVING AND INSERTING THE COMPLETE REFERENCE NUMBER INTO THE CERTIFICATE HOLDER ADDRESS SHOWN ABOVE.

j. Distribution of Completed Certificates - Completed Certificates shall be sent to Customer as follows:

1) Send original:
   a) By E-Mail: saws@ebix.com
   b) By Fax: 1-770-325-6502

2) Send copy to the following:

San Antonio Water System
Attention: Contract Administration
P.O. Box 2449
San Antonio, TX 78298-2449

k. SmartWorks shall be responsible for obtaining Certificates from its subcontractors and furnishing copies of same to Customer.

3. SURVIVAL

Any and all representations, warranties, and covenants made by SmartWorks under this Schedule are of the essence of this Agreement and shall survive the execution and delivery of it, and all statements contained in any document required by Customer, whether delivered at the time of the execution or at a later date, shall constitute representations and warranties under this Agreement.
July 27, 2020

SAN ANTONIO WATER SYSTEM

FOR

METER DATA MANAGEMENT SYSTEM

(MDMS)
TABLE OF CONTENTS

REDACTED
Exhibit TBD, Solution Requirements Appendix

REDACTED
In the event of the loss of the primary Data Center, the following steps will be taken:

REDACTED
REDACTED
REDACTED
REDACTED
Risk Management Planning is an important part of project management and a core component of the SmartWorks Project Implementation Methodology. Risk Management planning is about REDACTED
REDACTED
REDACTED
REDACTED
REDACTED
REDACTED
REDACTED
REDACTED
REDACTED
REDACTED
SCHEDULE G
SECURITY PROCEDURES

This Schedule G shall only apply if work will be conducted on Customer’s property, on Customer’s infrastructure, or involve any of Customer’s networks, and to the extent not prohibited by applicable laws, SmartWorks shall ensure a Prime Contractor Data Form (“PCDF”) and a “Background Screening Letter” (provided by a third-party background screening service) are properly completed for all employees and subcontractors performing work under this Agreement and is on file with Customer’s Security Office prior to work commencement. Background checks must at a minimum include National Criminal Check, Verify Employment Eligibility (E-Verify), and Terrorist Watch List, with this information being provided in the Background Screening Letter from the third-party screening service. Any person found to have an unacceptable background check will not be allowed to perform work under this Agreement (however, at Customer’s sole discretion, a waiver may be given by Customer’s Security Office for an unacceptable finding provided that it must first be approved and signed off on by the Director of Customer’s Security Office). Any subcontractors performing work must also be listed in the PCDF and the Background Screening Letter. SmartWorks shall be responsible for the accuracy of information on the PCDF and the Background Screening Letter and for obtaining any and all required items (e.g., badges and parking tags) necessary to fulfill the work under this Agreement. The PCDF and Background Screening Letter must be sent electronically to securitygroup@saws.org.

SmartWorks shall advise Customer’s project manager/inspector of any employee terminations or changes to personnel performing work under this Agreement, and SmartWorks shall immediately turn in any and all badges and/or parking tags of employees who are terminated or no longer performing work under this Agreement. If SmartWorks becomes aware, or reasonably should have become aware, of any changes in the information contained in the PCDF or the Background Screening Letters, SmartWorks shall immediately notify Customer’s project manager/inspector and provide updated PCDF and Background Screening Letters, with copies to securitygroup@saws.org.

SmartWorks, its employees, and agents shall obtain a photo identification badge and parking tag from Customer’s Security Office prior to any performing any work on Customer’s property, which badge and parking tag shall be used only for purposes necessary to perform the work under this Agreement. Customer’s Security Office hours for badge issuance are Monday, Wednesday, and Friday from 9:00am to 12:00pm, excluding holidays (hours are subject to change). Customer’s Security staff can be contacted at (210) 233-3177 or (210) 233-3338. Once the project is completed, SmartWorks shall return all badges and parking tags to Customer’s Security Office.

A Customer employee must physically escort SmartWorks’s employees and agents at all times. Customer may, in its sole discretion, waive the escort requirements if the PCDF and a “clean” Background Screening Letter, signed by an authorized representative of a third-party background screening service are approved by Customer’s project manager and Customer’s Security Office. Waiver of the escort requirement shall only be permitted through a written communication to SmartWorks from Customer’s Security Office.

Subcontractors must always be under escort of SmartWorks’s employees while performing work on any of Customer’s property or assets. Subcontractors must display either (1) a company photo badge with name or (2) a valid governmental identification card at all times while working on any of Customer’s property. SmartWorks is solely responsible for the actions of its employees, agents, subcontractors, and consultants.

At all times during the Agreement, SmartWorks shall comply with Customer’s security requirements and shall maintain the security of Customer’s property, infrastructure, networks, facilities, and customer’s property. Security incidents must be reported to Customer’s Security Office immediately at (210) 233-3338.

If SmartWorks plans to stage or store its property, such as equipment, storage boxes, tools, trailers, or high-priced supplies needed for the Agreement, on Customer’s property, then SmartWorks will be responsible for providing a security guard, who will be subject to Customer’s prior approval, when SmartWorks is not working at the property.

If SmartWorks plans to leave the work site unsecure or open during the performance of the Agreement, it must provide an employee or Customer-approved security guard to monitor ingress and egress to the site. If SmartWorks
plans to leave the work site open or unsecure when not working on the site, SmartWorks must provide a Customer-approved security guard.

Customer provides for security on its sites. If SmartWorks takes any action that diminishes Customer’s security, SmartWorks will be responsible for providing additional security requirements at its expense. Some examples of additional requirements that Customer may require include hiring of Customer-approved security guards, temporary fencing, mobile Closed-Circuit Television Monitoring trailer(s), or extra lighting. Notwithstanding anything herein to the contrary, any provisions in this Schedule that may appear to give Customer the right to direct SmartWorks as to details of doing any work under this Agreement or to exercise a measure of control over any security measures or such work shall be deemed to mean that SmartWorks shall follow the desires of Customer for security measures only.

Advance coordination by SmartWorks with Customer’s Security Office for these security requirements is necessary to ensure no delays with timely performance of work. Any other provision of this Agreement notwithstanding, in the event SmartWorks fails to comply with the security requirements set out in this Schedule, Customer may, with no penalty or claim of any nature (including breach of contract) against Customer by SmartWorks:

- Issue a Work Stoppage Order until the security violation(s) are remedied; and/or
- Ask any unidentified or improperly identified person or equipment to leave Customer’s site immediately and not return until items or deficiencies are remedied to Customer’s satisfaction.
Schedule H - Data Security
TABLE OF CONTENTS

TABLE OF CONTENTS .............................................................................................................................................. 2
SCHEDULE H - DATA SECURITY ........................................................................................................................................ 3
1 SECURITY OVERVIEW ............................................................................................................................................. 3
2 SECURITY RESPONSIBILITIES ..................................................................................................................................... 3
Schedule H - Data Security

1 Security Overview
SmartWorks shall provide the SmartWorks SaaS in a safe and secure manner that complies with industry standards and the requirements outlined in Article XV of the Agreement. Customer-specific security requirements will be identified in Schedule F – Minimum Requirements (including its appendix).

2 Security Responsibilities
This section identifies applicable security practices and allocates such roles and responsibilities amongst SmartWorks and Customer.

A. Secure Communications. All data must be exchanged between SmartWorks and Customer through adequate and secure means consistent with the requirements of Article XV of the Agreement.

B. Data, Systems, Websites, and Security. SmartWorks will establish and maintain data security procedures and other safeguards against the destruction, corruption, loss, or alteration of Customer Data, and to prevent access, intrusion, alteration, or other interference by any unauthorized third parties of the Customer Data, in accordance with the standards stated in Article XV of the Agreement. At a minimum, SmartWorks shall use proven, standard algorithms as the basis for encryption technologies. SmartWorks shall comply with any additional data security requirements as mutually agreed in writing by Customer and SmartWorks, including those set forth in the Agreement. Nothing herein shall be construed to limit any obligation of SmartWorks or right of Customer under any other part of the Agreement.

C. Risk Management/Security Assessments. SmartWorks shall:
   1. Ensure that processes are in place to quickly identify newly discovered security vulnerabilities in the SmartWorks SaaS and to update standards to address new vulnerability issues;
   2. Test security controls, limitations, network connections, and restrictions on a regular basis to assure the ability to adequately identify and stop any unauthorized attempts to access Customer’s instance of the SmartWorks SaaS or the Customer Data;
   3. Perform internal and external network vulnerability scans on a regular basis and after any significant change in the network (such as new system component installations and product upgrades);
   4. Promptly notify Customer of newly discovered vulnerabilities in the SmartWorks SaaS, including sufficient details for Customer to perform a risk assessment, as well as the anticipated date of a patch or update to correct such vulnerabilities;
   5. Conduct periodic (at least annually) security assessments of the SmartWorks SaaS, including penetration testing, and provide Customer the results of same within a reasonable period of time following completion of such assessment; and
   6. Perform system and application security assessments prior to the deployment of new services as part of the SmartWorks SaaS or when major changes to the SmartWorks SaaS occur.
D. Access. Customer may provide SmartWorks access to Customer’s systems and network, subject to the following conditions. SmartWorks shall require each user to be uniquely identified before allowing access to Customer’s network or infrastructure. Remote system access shall only be obtained via a Customer approved remote access program. Such remote access sessions will be provided and managed by Customer. Without limiting SmartWorks’s obligations or Customer’s rights under the Agreement, SmartWorks shall take all appropriate security precautions to prevent malicious or unauthorized access to Customer’s systems and network, including the following actions:

1. SmartWorks shall ensure appropriate levels of internal controls for granting access to the Customer systems and network that meet Customer’s requirements;
2. SmartWorks shall ensure that its personnel with on-line access shall only access Customer’s systems and network using personally assigned user IDs;
3. SmartWorks shall ensure that SmartWorks’s employees do not share or reuse user access credentials when accessing Customer’s systems and network;
4. SmartWorks shall ensure that its personnel do not make unauthorized changes to Customer’s systems and network; and
5. SmartWorks will promptly disable and remove user accounts of personnel who leave employment or change job functions.

SmartWorks shall also ensure that all hardware, including laptops, used by SmartWorks to connect to Customers systems and networks shall have anti-threat measures and mitigating controls consisting of at least the following: (I) anti-virus software installed, enabled, and regularly updated; and (II) firewalls installed, enabled, and configured to restrict connections between publicly accessible servers and any SmartWorks system component storing Customer Data and to prohibit direct public access between external networks and any SmartWorks system component that stores Customer Data, including any connections from wireless networks.

E. General Configuration Standards. SmartWorks shall ensure that:

1. All services, applications, scripts, and drivers that will not be used to deliver the SmartWorks SaaS to Customer shall be disabled or removed;
2. All system clocks shall be synchronized with a central time server;
3. The most recent security patches shall be installed on SmartWorks servers, computers, and workstations as soon as practical after testing; the only exception being when installation would unreasonably interfere with SmartWorks’s or Customer’s immediate business requirements, in which case installation shall be as promptly after such interference is reasonably mitigated; and
4. Trust relationships shall not be used between systems involved in delivery of the SmartWorks SaaS to Customer.

F. Access Control. SmartWorks shall ensure that: (1) access to Customer’s instances of the SmartWorks SaaS and the Customer Data shall (a) be permission-limited, (b) any services that are used for administering the SmartWorks SaaS, including the infrastructure used to deliver it, and that are not restricted by IP address or the use of a virtual private network, shall be protected by two-factor authentication, and (c) be
logged and monitored through automated access control tools, and (2) Customer shall have direct access to such logs. All passwords for access to any portion of the SmartWorks SaaS shall adhere strictly to the guidelines established by Customer with regard to minimum length, use of alphanumeric characters, and frequency of updates. Without limiting the foregoing, SmartWorks shall ensure each of the following:

1. Privileged access to the SmartWorks SaaS and Customer Data shall be performed over secure channels (e.g., encrypted network connections using SSH or IPSec);
2. Access to computing resources and Customer Data shall be limited to those individuals whose job duties require such access;
3. Storage and retention of Customer Data shall be for the time periods set forth in Schedule A of the Agreement (or as otherwise mutually agreed) and shall meet all legal and regulatory requirements;
4. All internet connections shall be evaluated (inbound and outbound) and constrained via managed gateways comprised of:
   i. Firewall devices,
   ii. Intrusion Detection System (IDS) / Intrusion Prevention System (IPS) devices; and
5. Screensavers (with screen lockout) shall activate after no more than 10 minutes of inactivity, and a password shall be required to regain access.

G. Access Termination. With respect to terminated employees or employees who no longer require access to Customer’s instances of the SmartWorks SaaS or the Customer Data in order for SmartWorks to perform its obligations under the Agreement, SmartWorks shall promptly disable the access credentials of such individuals.

H. Monitoring/Mitigation. SmartWorks shall ensure that:

1. All appropriate network traffic and host-based activities related to Customer’s instance of the SmartWorks SaaS shall be monitored using mechanisms such as intrusion detection systems, intrusion prevention systems, or others as required by Customer;
2. All logs and other materials generated by such systems shall be protected at the same level as the SmartWorks SaaS and shall be maintained for at least six months;
3. Network intrusion detection systems, host-based intrusion detection systems, and intrusion prevention systems shall be used to monitor all network traffic that may affect or relate to Customer’s instance of the SmartWorks SaaS and shall be configured to alert SmartWorks personnel to suspected compromises;
4. Actual or suspected intrusions or Security Incidents (as defined in Section 15.7 of the Agreement) shall be reported to a designated SmartWorks contact person who shall address these reported events as appropriate;
5. SmartWorks’s designated person for Customer’s instance of the SmartWorks SaaS shall regularly review the logs;
6. SmartWorks shall notify Customer of Security Incidents in accordance with the requirements of the Agreement; and
7. corrective measures shall be prescribed and taken as needed.
SCHEDULE I

San Antonio Water System (SAWS) ConnectH2O

AMI Solution Architecture

August, 2020
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Phased Solution Architecture and Roadmap</td>
<td>3</td>
</tr>
<tr>
<td>2. Proposed Phased Implementation and Architecture Components</td>
<td>11</td>
</tr>
<tr>
<td>3. Assumptions</td>
<td>27</td>
</tr>
</tbody>
</table>
1. Phased Solution Architecture and Roadmap

This section of the document describes a phased approach to implementing AMI, MDMS and EPI applications and integrations at an enterprise level within SAWS. This “strategic architectural roadmap” provides specifics on a simple and feasible, building-block approach towards full implementation. Please note that this is a living document and that the solution architecture will be reviewed and further refined as the program progresses. Additionally, once AMI, MDMS, and EPI vendor solutions have been finalized, more detailed design sessions around the various architectural components identified will be performed.

1.1 Solution Architecture by Phases

The following is a high-level summary of each of the phases:

**Phase 1 – Planning and Requirements**

The phase where these initial artifacts are produced from an IT, PMO, and program planning perspective. **This phase is complete.**

**Phase 2 – Pilot**

This phase focuses on a getting two Pilot AMI solutions up and running, balancing two factors – to not have a great disruption on IS and affect IPS production systems, but still have enough functionality to evaluate the pilot results and demonstrate the value of AMI to the enterprise.

**Phase 3. – Business Release 1**

This phase is the start of AMI full deployment and focuses on getting additional applications and integrations up and running in production mode and emphasizing the full Meter to Cash process. It is highly recommended that SCP be enhanced to support business requirements around customer presentment of the granular consumption data, more customer self-service, personalization, and advanced alerting and customer communications through the outbound communications gateway. It is also recommended to implement a Mobile Workforce Management (MWFM) solution and integrate this to IPS to aid in AMI deployment and accelerate the AMI program benefits.

**Phase 3. – Business Release 2**

The primary focus of this Phase centers around Business Intelligence, namely analytics, dashboards, and reporting from the non-production, SAWS replicated MDMS database instance using a preferred visualization and reporting tool such as Tableau. Another more minor component is to interface MDMS to the EOC Water Outage Map application to aid Operations in visualization of specific MDMS-generated alarm, alerts, and events that would aid in water trouble and leak management operations.
Phase 3. – Business Release 3

This Business Release concentrates in efforts on introducing the Conservation Salesforce CRM into the program. Depending on business requirements and functionality desired around customer enrollment and customer program management, integration to the Enhanced SCP would be required, and also potentially to MDMS.

Phase 3. – Business Release 4

The major component of this phase is adding IVR for customer self service transactions related to MDMS information (e.g. querying on daily consumption, signing up for specific alerts, etc.) and the necessary integration to the Enhanced SCP, Conservation Salesforce CRM, and IPS. A minor component of this phase is also interfacing the Trimble Fire Hydrant Pressure system to the EOC Water Outage Map, or alternative passing the hydrant pressure through the AMI network and leveraging the MDMS to Water Outage Map integration that was implemented in Business Release 2.

Phase 3. – Full Deployment

The final phase of the program represents the full deployment of the AMI network and replacement of SAWS meters with Smart Meters. Some other significant initiatives are also recommended – specifically, expanding the Conservation Salesforce CRM to an enterprise CRM, re-architecting the Data Warehouse from an enterprise perspective with a data model, revised schemas, and a standard ETL tool to obtain data from a variety of data sources, including MDMS. As MDMS data storage requirements continue to increase, it is also recommended to implement some Archival/Purge solution to optimize performance and reduce storage costs, while still meeting data retention requirements.
Phase 2 – Pilot Solution Architecture

Legend
Day 1
Day 30
Day 60

*Timing to be determined
Phase 3 – Business Release (BR1) Proposed Solution Architecture
Phase 3 – Business Release (BR2)  
Proposed Solution Architecture

SAWS ConnectH2O
Solution Architecture v4.0
Phase 3 – Business Release (BR3)
Proposed Solution Architecture
Phase 3 – Business Release (BR4)
Proposed Solution Architecture
2. Proposed Phased Implementation and Architecture Components

The phased strategy depicted in the previous diagrams builds upon the base functionality in Pilot Phase 2 and grows incrementally with Phase 3 Business Releases 1-4, ending with Full Deployment.

Within each phase, a series of strategic “components” are defined and described in the following tables. The impact of each of the strategic components is assessed in more detail by outlining the business impact or business benefit, describing the IT impact, and then proposing any recommendation, justification, and other considerations for including this component in this Phase. An “R” is used to denote a required component and is referenced in both the diagrams and the tables. An “O” is used to denote an optional component and is referenced in both the diagrams and the tables. “BR” is used to denote the specific business release and is referenced in the diagrams and the tables.
<table>
<thead>
<tr>
<th>REF #</th>
<th>Architecture Component</th>
<th>Business Benefit/Impact</th>
<th>IT Impact</th>
<th>Recommendation/Justification</th>
</tr>
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| R1    | End Point asset data (e.g. static meters and AMI communication modules) from each AMI vendor uploaded to:  
- IPS PROD  
- IPS DEV 2 | Provision of the necessary meter and module asset data required by IPS prior to meter and module installation. | Use IPS standard meter upload file formats | Although the number of records uploaded during Pilot is minimal, if an opportunity exists to automate the data upload, it would be beneficial, as it can be applied throughout deployment. Meter sample testing and Meter Release processes are yet to be defined. Depending on the processes defined, additional meter statuses in IPS may be defined to indicate if a meter has been released for install or still in sample testing. |
| R2    | End point data transfers between EPI WOMS and IPS PROD and IPS DEV 2. The integrations include,  
- R2.1 One-time extract of master data such as Premise, Meter, Meter configuration, Last read, dates etc. from IPS PROD to establish EPI dataset for meter/module installation planning  
- R2.2 Ongoing updates of above data from IPS PROD to keep EPI dataset in sync during installation  
- R2.3 Meter Exchanges and/or module installation – Daily export from EPI to Premise/customer location data provided to EPI vendor. As the EPI installs Meters and modules and all the required completion information is provided to IPS. | Support the data upload into both PROD and DEV environments  
- IS will export only the master data related to meters/premises chosen to be included in the pilot.  
- May 2020: R2.1 and R2.2 will be flat file exports from CIS. SAWS will send the export file with the pilot meters every day instead of capturing just the changes. | Can look at automating the WOMS upload process into IPS via Web Services or FTP  
- Only a subset of the integrations will be connected to IPS DEV 2 as PROD is the prime system of record for EPI. For example, master data updates from IPS to EPI will only be sent from IPS PROD. However, order completion data will be integrated with both PROD and DEV.  
- Full Deployment: SAWS will move towards API integration (away from file exports) |
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<th>Architecture Component</th>
<th>Business Benefit/Impact</th>
<th>IT Impact</th>
<th>Recommendation/Justification</th>
</tr>
</thead>
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|       | IPS providing details of the meters exchanged and/or the modules installed. (release and complete process)  
  - R2.3 RTU – Any meter exchanges that were unsuccessful by EPI vendor (for various reasons determined during EPI implementation) The RTUs can be included within the Meter exchange data. In that case, no separate integration is required.  
  - R2.3 GIS Coordinates – The coordinates can be included in the Meter Exchange data. In that case no separate integration is required.  
  - Field Pictures – Photo evidence from field installations | Synchronization between IPS DEV 2 and MDMS Aggregated Monthly Reads sent from MDMS to IPS DEV 2 | MDMS to IPS DEV 2 integration using Web Services/API | Bulk data transfer from MDMS to IPS will most likely be a batch process, but aggregated monthly reads will be real time via Web Services |
| R3    | Integration between MDMS and IPS DEV 2 to support Billing. The integrations may include,  
  - One-time extract of master data such as Premise, Meter, meter configurations etc. to establish MDM dataset  
  - Ongoing updates from IPS DEV 2 on master data changes | | | |
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<th>REF #</th>
<th>Architecture Component</th>
<th>Business Benefit/Impact</th>
<th>IT Impact</th>
<th>Recommendation/Justification</th>
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<tbody>
<tr>
<td></td>
<td>• A request issued from IPS DEV 2 for a read (for a specific date or range of dates)</td>
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<tr>
<td></td>
<td>• A response sent from MDM with the read and read date</td>
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<td></td>
<td>• AMI/AMR flag sync (TBD)</td>
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<td>Better understanding of the impact of AMI/MDMS as it relates to billing.</td>
<td>Standing up IPS DEV 2 environment and integrating to MDMS</td>
<td>If actually producing bills from IPS DEV 2 is too cumbersome, then comparing the aggregate monthly consumption from MDMS to what is produced in IPS PROD may be sufficient</td>
</tr>
<tr>
<td>R4</td>
<td>(removed as no new work needed)</td>
<td>Ability to configure various business rules with VEE and then see its impact on the customer bill</td>
<td>Producing “mock bills” from DEV for comparison and reconciliation</td>
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<td></td>
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<td>This also gives SAWS the insight into the estimation rate in the current system and how AMI helps improve it.</td>
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<tr>
<td>R5</td>
<td>Manual process of both Read and Bill Comparison and Reconciliation during Pilot period</td>
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<tr>
<td>R6</td>
<td>AMI Network Considerations</td>
<td>Minimal, as these considerations are transparent</td>
<td>Various security options need to be evaluated, including any “overhead” that encryption or other processes introduces</td>
<td>Communicate to customers and business areas that the data is secure, possibly encrypted, and protected via a variety of security mechanisms on the AMI Network. Recommend bringing an external resource to perform penetration testing on AMI Infrastructure</td>
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<td>Architecture Component</td>
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<td>IT Impact</td>
<td>Recommendation/Justification</td>
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| R7    | Enable very selected Direct Departmental Access to MDMS during Pilot                   | Allows “superusers” to test MDMS functionality during pilot period, including VEE processing  
                                                   Allows other users in view only mode to see the functionality and data stored in MDMS  
                                                   (High Bill complaints is a good use case to begin using MDMS for) | Configure read/write access for selected individuals/departments           | Negotiate with vendor now on Enterprise site license, especially for read only access. Strongest negotiation position is at start of program. |
| R8    | Leverage Native Analytics and Reporting off of MDMS and Head End                       | Especially in the Pilot stage, the built-in reports and analytics of the AMI systems will give users some business insight into the value of the customer consumption data. | Minimal, as no customization of the reports and analytics engine is required. | Manage expectations around native reports, which may be very limited.  
                                                   Use this opportunity to determine the true analytics and reporting requirements for BR1 and beyond. |
| R9    | AMI Head End to MDMS Integrations. This includes,  
                                                   - R9.1 Daily Register Reads  
                                                   - R9.2 Interval consumption  
                                                   - R9.3 Real-Time Events  
                                                   - R9.4 Non-Real-time events  
                                                   - R9.5, R9.6 Meter communications such as on-demand Reads | Enables MDMS to create bill determinants.  
                                                   Monitor the health of the metering systems  
                                                   Frequent reads from meter than once a month | Supported by vendor – demarcation point for IS should be MDMS  
                                                   AMI Vendor 1 confirmed Batch file transfers for Daily Reads, Interval Reads, events. Yet to confirm with AMI vendor 2. | Leverage any pre-built integration from MDMS to Head End.  
                                                   CMEP? |
<p>| R10   | (not used)                                                                            |                                                                                        |                                                                         |                                                                      |</p>
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<tbody>
<tr>
<td>R11</td>
<td>Provisioning between MDMS, AMI Headends</td>
<td>Provisioning is the extension of Premise-Meter relationship in the Master Data across the three systems – IPS, MDMS and AMI Headends.</td>
<td>Support new integrations to be built between AMI Headends, MDMS, and PROD.</td>
<td>Most AMI systems may not store premise information. In that case, the integration could be the relationship between meter and end point. This integration needs to discussed in detail with the AMI vendors before beginning design.</td>
</tr>
<tr>
<td>R12</td>
<td>Analytics Tool integration with AMI Headends</td>
<td>Validate that the performance of each AMI solution achieves contractual service level agreements.</td>
<td>Support new integrations between AMI headends and Analytics Tool</td>
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<tr>
<td>R13</td>
<td>GPS location data captured during installation of Pilot meters and modules is provided to ESRI GIS.</td>
<td>More accurate locational awareness of meters and modules.</td>
<td>Tool already exists that syncs lat/lon IPS Asset module with lat/lon in ESRI. Need to add lat/lon fields for endpoint assets.</td>
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<tr>
<td>R14</td>
<td>End Point asset data (e.g. static meters and AMI communication modules) from each AMI vendor uploaded to EPI vendor database</td>
<td>Provision of the necessary meter and module asset data required by EPI prior to meter and module installation.</td>
<td>Although the number of records uploaded during Pilot is minimal, if an opportunity exists to automate the data upload, it would be beneficial, as it can be applied throughout deployment. Meter sample testing and Meter Release processes are yet to be defined.</td>
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| R15  | VEE Pre-Processing and testing of business rules for validation and estimation          | Allows SAWS to test VEE processing and define the initial business rules for validation and estimation (missing reads)  
                             |  
                             |                                                                                             | Allows SAWS to “practice” editing of MDMS and any resultant billing adjustments or other downstream processes  
                             |                                                                                             | After R5 is complete, SAWS can utilize estimated reads from MDM (with the assumption that MDMS estimation will be closer to reality due to daily reads than CIS’s once a month read)  
                             |                                                                                             | Modifications to IPS DEV 2 may be required and then tested extensively to ensure it has not affected other areas.  
                             |                                                                                             | Although it is recommended to shift VEE pre-processing to MDMS, SAWS does have the option to continue performing these functions in IPS and have MDMS only send the aggregated monthly reads  
                             |                                                                                             | For Pilot, it may be best not to modify IPS DEV 2 and have the extra complexity of removing certain pre-processing routines |
| R16  | Provisioning between IPS PROD and MDMS. Provisioning is the extension of Premise-Meter relationship in the Master Data across the three systems – IPS, MDMS and AMI Headends. | Keep MDMS, AMI Headends, and PROD in sync on Premise-Meter relationships for accurate billing data to be sent to IPS  
                             | Support new integrations to be built between AMI Headends, MDMS, and PROD.  
<pre><code>                         | This is to keep premise – meter relationship and meter status in sync between IPS and MDMS based on results of service orders such as Meter install, Meter removal, Meter exchange and Meter on or Meter turn off. |
</code></pre>
<p>| R17  | Base Map Data from ESRI to MDMS                                                        | Required to display dashboards in the MDMS                                                                       |                                                                                                      |                                                                                                                                                                                                                                                                  |
| R18  | MTU Programming Data from MTU Programmer to AMI (AclaraONE) (Specific integration only for Aclara AMI Integration) | Required to establish the meter configuration programmed at the MTUs in AclaraONE                            | The MTU programming files have to be sent via FTP from Vanguard’s location to AO                      |                                                                                                                                                                                                                                                                  |</p>
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</table>
| O3    | Expand and test IPS DEV 2 and PROD data models to support additional Smart Meter requirements  
- Firmware Tracking  
- MIU Characteristics  
- Meter Attributes  
- GPS Coordinates  
- Service Point Interconnection  
- MDMS Pre-processing and Billing Component | More extensive meter information in IPS, especially GPS coordinates and Service Point interconnection, may streamline some future business processes | Expanding the data model in IPS to support the required new fields and attributes | Enhancing the IPS to GIS integration to support certain data transfers (e.g. GPS) |
| O4 (NOT INCLUDED IN PILOT PHASE; TO BE ASSIGNED TO FUTURE RELEASE) | Presentment of Customer consumption information, down to the granularity that SAWS decides. | Pilot Customers would be able to visually see their consumption history, | 1. Minimize Production impact to IPS  
2. Integration of MDMS to either SCP or third-party solution | Evaluate two options to give pilot customers visual access to their consumption and smart meter data:  
- Build into current SCP  
- Third Party solutions like Water Smart or Milestone ePortal  
If third party option selected, recommend integrating into current SCP via iFrame or equivalent technology |
| O5 (NOT INCLUDED IN PILOT PHASE; TO BE ASSIGNED TO FUTURE RELEASE) | Smart Portal integration to selected Outbound Customer Communications Gateway | Enables personalization via alerts and notifications that the customer selects based on certain events (e.g. bill produced, unusual high consumption, etc.) | Support integration from embedded Smart Portal to selected customer communications gateway | Standardizing on a product solution for all outbound customer communications |
NOTE: Phases 3.1-3.X will be updated at a later date.

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<tr>
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<tbody>
<tr>
<td><strong>Phase 3.1 through Phase 3.4 – Business Release (BR1-BR4)</strong></td>
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<tr>
<td>R1</td>
<td>End Point Asset Inventory data uploaded to IPS</td>
<td>Synchronization between the Supply Chain data in IPS and the vendor</td>
<td>Support the data upload into IPS</td>
<td>Can look at automating the Asset Inventory upload process into IPS</td>
</tr>
<tr>
<td>R2</td>
<td>End Point Installation data from WOMS uploaded to IPS</td>
<td>As the EPI installs assets, all the required data is synchronized in IPS</td>
<td>Support the data upload into IPS</td>
<td>Can look at automating the WOMS upload process into IPS via Web Services or FTP</td>
</tr>
<tr>
<td>R3</td>
<td>Full Integration between MDMS and IPS PROD</td>
<td>Ability for the business areas to see granular customer consumption data</td>
<td>Clear line of demarcation for support of MDMS, as vendor is responsible for AMI network to MDMS integration</td>
<td>Leverage any standardized product adapters if available</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Supports future state business processes</td>
<td></td>
<td>Web Services integration is required approach</td>
</tr>
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<td></td>
<td></td>
<td>Ability to perform “actionable insight” after analyzing data</td>
<td></td>
<td>Responsibility for MDMS to AMI Network integration should be implemented and supported by vendor</td>
</tr>
<tr>
<td>R4</td>
<td>FCS to MDMS Integration</td>
<td>Continued manual reading as the deployment process continues</td>
<td>FCS to IPS PROD may no longer be required, as it is shifted to MDMS via a standard adapter/API</td>
<td>Consolidates all usage data into MDMS</td>
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<tr>
<td>R5</td>
<td>Continued modification and enhancements to IPS, related to VEE pre-processing and integration of AMI systems and Enhanced SCP to IPS</td>
<td>Configurable business rules and algorithms with VEE in MDMS Better estimation capability for missing reads and intervals MDMS allows for “initial measurement” before transitioning to “finalized read” state</td>
<td>Removing VEE and other pre-processing functionality in IPS</td>
<td>Although it is recommended to shift VEE pre-processing to MDMS, SAWS does have the option to continue performing these functions in IPS and have MDMS only send the aggregated monthly reads</td>
</tr>
<tr>
<td>R6</td>
<td>Continue to provide Direct Departmental access to MDMS (both view only and edit access) for a variety of scenarios.  - On-Demand Reads  - Provide CSA’s more structured access  - Other native MDMS functionality  - Bill/Read Reconciliation  - Native analytics and reporting</td>
<td>Supports new business processes more effectively</td>
<td>Minimal, outside of the administrative process of configuring user access and monitoring system performance</td>
<td>Realize that giving users and departments access to MDMS may require a fair amount of training, as the MDMS vendor solutions have varying sophistication of their “user interface”</td>
</tr>
<tr>
<td>R7</td>
<td>May need to enhance ESRI GIS to reflect Smart Meter layer  - Meter GPS location  - Selected meter attributes  - Service Line Interconnection Point</td>
<td>GIS users have access to more data on SAWS AMI network and selected meter attributes</td>
<td>Enhancing the GIS to IPS integration</td>
<td></td>
</tr>
<tr>
<td>R17E</td>
<td>Extend Integration of MDMS with ESRI GIS for Connectivity Model</td>
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<tr>
<td>R8</td>
<td>Implement MWFM and integrate to IPS</td>
<td>Automation of Service Requests and Work Orders</td>
<td>IPS enhancements would be required, including integration to MWFM</td>
<td>Integrate with AVL already in vehicles for better dispatching</td>
</tr>
<tr>
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<td></td>
<td>Allows SR’s/WO’s generated by CDR Portal to also have field automation</td>
<td>AMI alarms and events processed by MDMS automatically generate service requests and work orders and sent to IPS</td>
<td>Helps automate with meter related field activities and ensures data integrity as deployment continues over 3-year period. Therefore, recommending in 1st business release, even though added integration to IPS is required.</td>
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<td>Evaluate INFOR’s product solution, and determine best fit, as third-party solutions present another option</td>
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<tr>
<td>R9</td>
<td>Presentment of Customer consumption data and level of functionality in Enhanced Portal</td>
<td>1. Transparency of consumption data</td>
<td>Requires development of functionality (or pursuing third party option) and Web Services integration to MDMS</td>
<td>Enhanced SCP may involve a series of incremental functionality via Business Releases</td>
</tr>
<tr>
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<td></td>
<td>2. More effectiveness in conservation programs</td>
<td></td>
<td>If SAWS elects to implement the more advanced customer-facing features (such as consumption “sliders”, bill “projection”, and leak “detection”), then more time must be allocated to develop and test this functionality</td>
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<td></td>
<td>3. Ability to personalize customer experience with alerts and notifications (potential High Bill)</td>
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<tr>
<td>BR2</td>
<td>Integration between AMI systems and EOC Water Outage Map application</td>
<td>EOC can visually see appropriate alarms, alerts, and other sensor information on the Water Outage map.</td>
<td>Need to process relevant alarms and alerts from AMI into EOC Water Outage map</td>
<td>Consideration of pressure and leak sensors on SAWS Distribution Network</td>
</tr>
<tr>
<td></td>
<td>BR2</td>
<td></td>
<td>Need to consider “thresholds” to limit false positives/negatives</td>
<td>Need to determine if some type of “processing” or transformation needs to be performed on the AMI data before being presented on the Water Outage Map</td>
</tr>
</tbody>
</table>
| BR2   | Develop Tableau (or other tool) Analytics and Dashboards to address gaps in native analytics/reporting functionality included in AMI/MDMS | • Non-Revenue Water Analytics  
• Conservation Analytics  
• Consumption Analytics  
• High Bill/Consumption Analytics  
• Leak and Pressure Analytics  
• Other Analytics  
Eventually may be able to perform ad-hoc analytics by the business | Data analyst support to determine the correct back end schemas from the Date Warehouse to be presented in BI  
Assist the business with the visualization aspect and how to get to the right data | Development of Tableau Analytics and Dashboards can be spread throughout several Business Releases (BRs)  
Education on the Data Model to key Tableau front-end “super users” |
| BR2   | Tableau BI direct access to Reporting Database instance where data has been replicated (1 day and older data)  
Or another clone of MDMS Production for reporting purposes | Good performance of developed analytics, dashboards, and reports | Data replication of MDMS to SAWS Site  
Bringing up separate MDMS environment at Reporting Database Instance. | Leverage Reporting instance of MDMS to develop Analytics and Dashboards, minimizing the impact to IPS PROD  
Since analytic and reporting requirements may be quite extensive, it may be beneficial to take an “agile-like” approach with incremental releases (e.g. BR2.1, BR2.2, BR2.3 etc.) |
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<tr>
<td>BR 3</td>
<td>Introduction of Salesforce CRM (Conservation only at this time)</td>
<td>Ability to process “cases” with complex process flows Improved Program Management to help introduce and manage various customer-focused conservation efforts</td>
<td>Integration of Salesforce CRM, Enhanced SCP and IPS via Web Services May require integration between Salesforce CRM to MDMS, depending on functionality desired for future conservation efforts</td>
<td>If integration between SCP and MDMS can be leveraged, then the integration between Salesforce CRM and MDMS would not be required (dashed arrow)</td>
</tr>
<tr>
<td>BR 4</td>
<td>Consideration of IVR for self-service related to consumption and usage information from AMI systems</td>
<td>Some customers prefer to perform self service via the Phone versus SCP May help promote special programs, such as conservation and leak detection</td>
<td>Would require configuration and enhancement to IVR, including menu and call flow design Would require integration of IVR to Enhanced SCP and Conservation CRM to provide self-service functionality</td>
<td>Although the current IVR solution in place may not be flexible enough to support these requirements, this BR is far enough in the future that a new IVR may be in production</td>
</tr>
<tr>
<td>BR4</td>
<td>Integrate Stand-alone Trimble Fire Hydrant Pressure System with Water Outage Map application to show consolidated pressure data</td>
<td>Consolidated view of MDMS generated alarms and alerts with other pressure data</td>
<td>Web services integration to EOC Water Outage Map</td>
<td>Allows EOC to see more data to aid in leak/trouble operations May want to consider bringing the fire hydrant pressure through the AMI network versus the current configuration. If so, then the integration would not be required as we can leverage the MDMS to Water Outage Map integration from the previous Business Release</td>
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<td>Phase 3.X – Full Deployment</td>
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<tr>
<td>R1</td>
<td>Continued modification and enhancements to IPS related to MDMS integration, VEE pre-processing, and enhancements to SCP</td>
<td>Continued fine tuning of VEE will produce more accurate bills and greater confidence in the interval data</td>
<td>FCS support no longer required</td>
<td>If MWFM is not implemented in previous BR, then FCS would remain, as well as the integration to MDMS</td>
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<td>R2</td>
<td>FCS Goes away – replaced by MWFM ?</td>
<td>Addresses scenarios where SAWS may still require a non AMI read as part of some field activity generated by IPS</td>
<td>FCS to MDMS integration no longer required</td>
<td>Several alternatives exist – depending on whether we want to consolidate all field generated SR’s/WO’s in IPS and minimize the number of integrations (e.g. MWFM to MDMS)</td>
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<td>R3</td>
<td>Continued enhancements for direct Departmental Access</td>
<td>More structured access to MDMS will allow departments get meaningful insight from the key AMI applications</td>
<td>Need to consider possible latency issues</td>
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<tr>
<td>R4</td>
<td>Continued enhancements to VEE processing and business rules</td>
<td>Further refinement and application of business rules will improve the validation and estimation routines with interval consumption reading.</td>
<td></td>
<td>If SAWS elects to perform VEE preprocessing in IPS versus MDMS then this component would not be applicable</td>
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<tr>
<td>O1</td>
<td>Enterprise Salesforce CRM integration</td>
<td></td>
<td>CRM to MDMS Integration</td>
<td>Requires a well thought out strategy on how IPS, Enterprise CRM, SCP, and other customer-facing applications are all orchestrated to work with each other, and which is the &quot;owner&quot; for different types of transactions.</td>
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<td>O2</td>
<td>Re-architecture of Data Warehouse with Enterprise Data Model/Schema</td>
<td>Supports more complex queries and analytics, giving the business areas more insight that is actionable. May impact current reports</td>
<td>Standardize on ETL tool</td>
<td>This is a fairly significant effort and will require an enterprise-wide view of the data architecture. As it may impact current reports and analytics in production, expectations and communications with the business areas will need to be managed.</td>
</tr>
</tbody>
</table>
| O3    | Continued expansion of Tableau Analytics and Dashboards related to MDMS and other relevant data sources (SCADA, GIS, etc.) | 1. Non-Revenue Water Analytics  
2. Conservation Analytics  
3. Consumption Analytics  
4. High Bill Analytics  
5. Leak and Pressure Analytics  
6. Revenue Protection Analytics  
7. Other Analytics | Tableau analytics and visualization moved from MDMS at Reporting Instance to Enterprise Data Warehouse | Since analytic and reporting requirements may be quite extensive, it may be beneficial to take an “agile-like” approach with incremental releases. |
| O4    | Feed Data Warehouse with multiple data sources using ETL tool               | Data loading for:  
- MDMS  
- Fire Hydrant Pressure  
- Salesforce CRM  
- Water SCADA  
- MWFM  
- IPS  
- GIS  
- Lawson  
- Other Systems? | Standard data model in DW allows for more complex analysis (e.g. taking SCADA info and correlating with AMI data for water distribution analysis and optimization?) MDMS to DW is part of AMI program scope. All other data sources ETL and DW re-architecting is separate initiative | |
| O5    | Data Archival/Purge Solution for MDMS                                      | Improved performance for MDMS, but will require some technique to access data beyond the “archival point” | Support integration between MDMS and Archiving solution  
MDMS may have some pre-built ILM functionality that can be leveraged | Decision on how long to retain data in MDMS before performing archival and purge operations. Determine if partitioning and compression will help manage the archival and purge process. |
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| O6    | Evaluate Bill Redesign at end of Full Deployment? | More granularity of smart meter consumption data on bill  
More consistency across customer communications channels – SCP, IVR, and physical bill | Modifications to IPS and Bill Print process to support new bill re-design | Evaluate feasibility and appetite toward end of full deployment |
3. Assumptions

Pilot Phase:

1. A new IPS environment will be setup to support the AMI/MDM Integrations and Read validations. This environment may be referred to as IPS AMI. (Currently referred to in the drawings as IPS DEV 2)

2. IPS AMI environment will be treated close to Production as possible to enable clean data for read validation. The frequency of IPS AMI refresh is yet to be decided.

3. The team will use SAWS IT’s development methodology and development lifecycle process to develop all integrations.

4. The team will use the existing BRD document format (as reviewed on the call on 4/30/20) to document business requirements. The format of the BRD may be extended to accommodate the scope of the project as necessary (with SAWS IT’s approval).

5. All code developed and/or modified for this phase and subsequent phases will follow the regular SAWS IT established migration procedures before being deployed into IPS PROD and IPS AMI (IPS DEV 2).
## Products & Versions

### Server Operating System:
- Microsoft Windows Server 2019 (64 bit)
- Debian Linux v10.x

### Database Environment:
- **DBMS:**
  - Microsoft SQL Server 2012
  - Oracle 19c

### Directory Services
- **DNS:** AD Integrated (For Internal DNS)
- **LDAP:** Microsoft Active Directory Windows Server 2016
- **ADFS:** 2012 and up compatible

### Desktop Operating System:
- Microsoft Windows 10

### Desktop Web Browser:
- Chrome
- MS Internet Explorer 11

### Server Applications & Frameworks:
- **Web:** MS IIS v10.x or higher
Integration: Web Services REST / SOAP
Batch File External SFTP only

Collaboration: Microsoft SharePoint (Office 365)

Web Portal (In-house): Java, .Net, C#, HTML

Miscellaneous Services:
Virtualization: VMWare ESX v6.7
Storage Area Network: Nimble SSD
Backup: Symantic Net Backup
Scheduler: CA Autosys
Reporting/Analytics: MS SQL / SSRS / Tableau / Crystal Reports

Security & Access:
Remote Access: Cisco ASA (Firewall/VPN)
Palo Alto Firewall/VPN
Antivirus: Symantec Endpoint Antivirus/Antimalware v12

Systems Monitoring:
Infor Apps App Dynamics
Performance Splunk
Network SNMP SolarWinds

Miscellaneous Tools / Applications:
Q/A Q/C: HP ALM
IVR Cisco / UCCX

Standard Workstation Applications
<table>
<thead>
<tr>
<th>Application</th>
<th>Version</th>
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</thead>
<tbody>
<tr>
<td>Microsoft Office</td>
<td>Office 365 ProPlus</td>
</tr>
<tr>
<td>Internet Explorer (IE)</td>
<td>11.0 or higher</td>
</tr>
<tr>
<td>Macromedia Flash Player</td>
<td>11</td>
</tr>
<tr>
<td>Adobe Acrobat Reader</td>
<td>12x</td>
</tr>
<tr>
<td>Java Runtime Environment (JRE)*</td>
<td>7.x or higher</td>
</tr>
<tr>
<td>Microsoft .NET Framework</td>
<td>4.X</td>
</tr>
<tr>
<td>Oracle Client</td>
<td>13c</td>
</tr>
<tr>
<td>Symantec Endpoint</td>
<td>12.0</td>
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SCHEDULE L
ESCROW REQUIREMENTS

The parties shall, by January 1, 2022, establish and maintain throughout the Term, or as otherwise agreed by the parties, a SaaS escrow consistent with terms of this Schedule (the "Escrow") with a mutually agreeable third-party escrow firm (the "Escrow Agent") that will provide escrow services for the purpose of assuring Customer’s access to and control of the production environment of the SmartWorks SaaS and Customer’s access to the Software Deposit Materials and Customer Database Extract (each defined below) for Customer’s benefit under an escrow services agreement that is satisfactory to Customer, SmartWorks, and Escrow Agent, all in accordance with the terms of this Schedule L ("Escrow Agreement"). As part of the Escrow, SmartWorks shall maintain each of the following on deposit with the Escrow Agent:

(a) All credentials, passwords, information, MFA tokens, devices, and any others means needed or used to access or operate the SmartWorks SaaS as provided by SmartWorks or the Third-Party IAAS/PAAS, subject to and in accordance with the Third-Party IaaS/PaaS Terms, including any third-party dependencies (e.g., APIs) (the “Administrative Credentials”);

(b) A complete copy of the source code for the release of the SmartWorks SaaS then in use by Customer, together with the Documentation and all other items, instructions, manuals, software libraries, program listings, system and process configurations, and flow charts necessary to enable a reasonably skilled programmer to rebuild, maintain, and support the SmartWorks SaaS (the “Software Deposit Materials”) in accordance with the Escrow Use Rights (as defined below); and

(c) A full database extract, in compressed form, of the Customer Data (the “Customer Database Extract”).

SmartWorks shall update the Administrative Credentials in the Escrow within one Business Day of any changes to such credentials. SmartWorks shall update the Software Deposit Materials within 15 business days after Beneficiary begins using a newer version of same in production. SmartWorks will provide the Customer Database Extract to the Escrow Agent at least once per month. Every deposit to the Escrow will be accompanied by a hash that the Escrow Agent can use to verify the integrity of the deposit received.

Upon reasonable prior notice to SmartWorks, Customer (or its designee) will have the right to review and test the deposit materials at Escrow Agent’s site for the purpose of verifying: (1) that the Administrative Credentials enable the successful log-on and control of the production environment of the SmartWorks SaaS, (2) that the Software Deposit Materials are complete and functional and are the same as the then-current release of the SmartWorks SaaS in use by Customer, and (3) that the Customer Database Extract was complete as of the deposit date. Customer may, at its cost, use the Escrow Agent or a third-party technical verification service to conduct such verification activities, provided that such third-party technical verification service is: (a) bound by confidentiality and restricted use obligations at least as protective of the Deposit Materials as those set forth in the Escrow Agreement; (b) is not a competitor of SmartWorks; and (c) Escrow Agent is responsible and liable for all acts and omissions of each subcontractor in connection with any performance of verification testing.

The Escrow Agreement will contain at least the following terms:

(a) Escrow Agent shall be obligated to assume control of the production environment of the SmartWorks SaaS, subject to the Third-Party IaaS/PaaS Terms, and release the Software Deposit Materials and the Customer Database Extract to Customer upon the occurrence of any of the following events: (i) SmartWorks becomes the named debtor in a proceeding in bankruptcy and such proceeding is not dismissed within 60 days thereafter; (ii) SmartWorks executes an assignment for the benefit of its creditors; (iii) a receiver is appointed for SmartWorks; or (iv) SmartWorks ceases its on-going business operations or the delivery or support of the SmartWorks SaaS without a successor who assumes SmartWorks’s obligations under the Agreement. (“Release Event”);
(b) Escrow Agent shall have no responsibility for determination of the Release Event, but rather, upon
the occurrence of a Release Event, Customer may notify the Escrow Agent and request in writing
the release of the Software Deposit Materials, concurrently with a copy to SmartWorks. Customer
shall provide to Escrow Agent a sworn affidavit executed under oath by its duly authorized officer
setting forth (i) a detailed description of the Release Event that Customer contends entitles it to the
release of the Software Deposit Materials pursuant to the Escrow Agreement and (b) certification
that Customer has complied with all preconditions to the requested release set forth in the Escrow
Agreement and this Agreement;

(c) Upon receipt of such notice, Escrow Agent shall immediately notify SmartWorks of Customer’s
request and, absent written notice that SmartWorks disputes the occurrence of a Release Event
being delivered to Escrow Agent within seven days of Escrow Agent's notice to SmartWorks,
Escrow Agent shall assume control of the production environment of the SmartWorks SaaS
(subject to the Third-Party IaaS/PaaS Terms) and release the Software Deposit Materials and the
Customer Database Extract to Customer;

(d) In the event that SmartWorks timely contests the occurrence of a Release Event, then SmartWorks
or Customer may file a legal proceeding pursuant to Section 18.1 (for clarity, Section 18.2 shall not
apply to such a claim), and both parties agree to be bound by the ruling of the court regarding
same; provided that the court shall only be asked to determine whether a Release Event has
occurred;

(e) The use of the Software Deposit Materials and the Administrative Credentials pursuant to a
Release Event shall be for the Escrow Use Rights only; and

(f) The Software Deposit Materials and the Administrative Credentials are deemed to be Confidential
Information.

Provided that Customer shall not exercise the following license until the Escrow Agent releases the Software
Deposit Materials and the Administrative Credentials to Customer pursuant to the foregoing process, SmartWorks
hereby grants to Customer a non-transferable, non-exclusive, irrevocable, world-wide, fully paid limited scope
license to use, copy, and create derivative works of the Software Deposit Materials during the Term as necessary
for the limited purpose of supporting and maintaining Customer’s use of the SmartWorks SaaS pursuant to the
terms and conditions of this Agreement (the “Escrow Use Rights”). In the event of a conflict between the terms
and conditions of this Schedule and the other provisions of this Agreement, the terms and conditions of this
Schedule shall prevail. The Software Deposit Materials shall at all times remain the property of SmartWorks and
shall be treated as SmartWorks’s Confidential Information.

All rights and licenses granted by SmartWorks pursuant to this Agreement are, and will otherwise be deemed to be,
for purposes of Section 365(n) of the United States Bankruptcy Code (or any replacement law) (the “Code”),
licenses to rights to “intellectual property” as defined in the Code. The parties agree that Customer, as licensee of
the rights under this Agreement, will retain and may fully exercise all of its rights and elections under the Code.
The parties further agree that, if bankruptcy proceedings are brought by or against SmartWorks under the Code,
Customer will be entitled to retain all of its rights under this Agreement. For clarity, the parties intend the same
outcome under any similar law in any foreign jurisdiction, including Canada’s Bankruptcy and Insolvency Act or
Companies’ Creditors Arrangement Act. Namely, it is the intent of the parties, to the full extent permitted by the
applicable law, that Customer shall retain all rights under this Agreement for the duration of the Term
notwithstanding any bankruptcy proceedings brought by or against SmartWorks or any attempt by SmartWorks or
by a trustee or by other person or entity to reject this Agreement as a result of any bankruptcy, liquidation,
receivership, or restructuring. This Schedule shall not negate, prejudice, or limit any other rights that Customer
may have.
Schedule M
Material to be Redacted from Published Agreement

The material to be redacted pursuant to Section 1.1(f) of the Agreement is as follows:

- Article X – Limitations on Liability
- Article XVII – Intellectual Property Infringement and SmartWorks Indemnity
- Schedule A - Part 3 - Annual Subscription Fees
- Schedule C – Section 3 – Service Level Failures and Remedies
- Schedule E – all references to insurance coverage limits
- Schedule F – in its entirety
- Schedule J – SAWS VTAQ – all references to SmartWorks security measures, procedures and standards
- Anything else that SAWS elects or the parties agree to redact from the Agreement
2.1 PHASE 1: PROGRAM INFRASTRUCTURE & REQUIREMENTS GATHERING

2.1.1 Develop High-Level Pilot Design, Timeline & Implementation Plan

2.1.2 Update Pilot Plan based on Vendor Evaluations

2.1.3 Update Program Mgmt Baseline Documents accordingly

2.1.4 Develop Pilot Implementation (Tactical) Plans: IS Activities

2.1.5 Develop requirements document based on RFP responses (i.e. Update Solution Arch. Doc. & Information flows)

2.1.6 Develop Technology Blueprint of the to-be infrastructure landscape.

2.1.7 Develop Environment Landscape Plan (ie. Head end, MDMS, CIS, etc.)

2.1.8 Develop Technology Capacity Plan.

2.1.9 Develop recommendations for hardware and new software to support the new AMI infrastructure for production and non-production environments.

2.1.10 Define key 6 KPI elements that SAWS will use for analysis

2.1.11 Finalize Functional Specifications & Information Systems Plans

2.1.12 Field Acceptance Testing (Set-Up): AMI Vendor 1 and AMI Vendor 2

2.2 PHASE 2: METER-TO-CASH PILOT

2.2.1 Draft & Finalize AMI Pilot Plan

2.2.2 Determine data to quantify SLAs and KPIs

2.2.3 Develop Requirements Document based on RFP responses (i.e. Update Solution Arch. Doc. & Information flows)

2.2.4 Assign AMI Water MIUs (AMI Vendor 1 and AMI Vendor 2)

2.2.5 Define final Data Collection Plan

2.2.6 Execute Testing

2.2.7 Implement the AMI Pilot Plan

2.2.8 Contract(s) Approved and Signed

2.2.9 Develop Pilot Implementation Plan

2.2.10 Develop Functional Design Specifications for interfaces needed during the AMI Pilot.

2.2.11 Board Review of Contracts

2.2.12 Contract(s) Reviewed & Approved by Board

2.2.13 Develop Technology Capacity Plan

2.2.14 Develop Environment Landscape Plan (ie. Head end, MDMS, CIS, etc.)

2.2.15 Develop Technology Blueprint of the to-be infrastructure landscape.

2.2.16 Develop requirements document based on RFP responses (i.e. Update Solution Arch. Doc. & Information flows)

2.2.17 Update Program Mgmt Baseline Documents accordingly

2.2.18 Develop Pilot Implementation (Tactical) Plans: IS Activities

2.2.19 Develop Technology Capacity Plan

2.2.20 Develop recommendations for hardware and new software to support the new AMI infrastructure for production and non-production environments.

2.2.21 Define key 6 KPI elements that SAWS will use for analysis

2.2.22 Deployment of Implementation Plan: IS and Field Activities

2.2.23 Field Acceptance Testing (Set-Up): AMI Vendor 1 and AMI Vendor 2

2.2.24 Develop Pilot Implementation (Tactical) Plans: IS Activities

2.2.25 Develop requirements document based on RFP responses (i.e. Update Solution Arch. Doc. & Information flows)

2.2.26 Develop Technology Blueprint of the to-be infrastructure landscape.

2.2.27 Develop Environment Landscape Plan (ie. Head end, MDMS, CIS, etc.)

2.2.28 Develop Technology Capacity Plan

2.2.29 Develop recommendations for hardware and new software to support the new AMI infrastructure for production and non-production environments.

2.2.30 Define key 6 KPI elements that SAWS will use for analysis

2.2.31 Deployment of Implementation Plan: IS and Field Activities

2.2.32 Contract(s) Approved and Signed

2.2.33 Develop Pilot Implementation Plan

2.2.34 Develop Functional Design Specifications for interfaces needed during the AMI Pilot.

2.2.35 Assign AMI Water MIUs (AMI Vendor 1 and AMI Vendor 2)

2.2.36 Define final Data Collection Plan

2.2.37 Execute Testing

2.2.38 Implement the AMI Pilot Plan

2.2.39 Contract(s) Reviewed & Approved by Board

2.2.40 Develop Technology Capacity Plan

2.2.41 Develop Environment Landscape Plan (ie. Head end, MDMS, CIS, etc.)

2.2.42 Develop Technology Blueprint of the to-be infrastructure landscape.

2.2.43 Develop requirements document based on RFP responses (i.e. Update Solution Arch. Doc. & Information flows)

2.2.44 Update Program Mgmt Baseline Documents accordingly

2.2.45 Develop Pilot Implementation (Tactical) Plans: IS Activities

2.2.46 Develop Technology Capacity Plan

2.2.47 Develop recommendations for hardware and new software to support the new AMI infrastructure for production and non-production environments.

2.2.48 Define key 6 KPI elements that SAWS will use for analysis

2.2.49 Deployment of Implementation Plan: IS and Field Activities

2.2.50 Contract(s) Approved and Signed

2.2.51 Develop Pilot Implementation Plan

2.2.52 Develop Functional Design Specifications for interfaces needed during the AMI Pilot.

2.2.53 Assign AMI Water MIUs (AMI Vendor 1 and AMI Vendor 2)

2.2.54 Define final Data Collection Plan

2.2.55 Execute Testing

2.2.56 Implement the AMI Pilot Plan

2.2.57 Contract(s) Reviewed & Approved by Board

2.2.58 Develop Technology Capacity Plan
Develop Functional Design Specifications for interfaces needed during the AMI Pilot.

Configure EPI Handhelds

Order and Receive EPI Installation Handheld Devices

Update configurations of AMI Vendor Handhelds

Develop integrations to AMI systems to extract relevant data.

Create a web user interface to display the data.

Develop Functional Design Specifications for interfaces needed during the AMI Pilot.

Order and Receive Network Devices

Install Network Devices (PTA1, PTA2 and PTA3)

Configure EPI Lower Environment (Vanguard)

Determine Meter and MIU Configurations

Test

Finalize Functional Specifications & Information Systems Plans

Develop Functional Design Specifications for interfaces needed during the AMI Pilot.

2.2.5.19.4.4 CSR/Call Center: awareness and ability to respond to customer questions about privacy, security, safety, and accuracy

2.2.5.18.3 20 days
Order and receive Static Meters (1500 per vendor)

76 days
2.2.3.8.13.11.1 Field (Lab Environment)

2.2.5.19.3.6 Fri 1/31/20
Wed 3/25/20

395
Thu 3/5/20
30 days
Assess Organizational Readiness

2.2.5.17.1 Wed 8/5/20
Sat 2/20/21

178 days
Fri 4/9/21

2.2.4.14
Fri 2/7/20
21 days
Wed 2/5/20

21 days
Wed 9/2/20

R7: Provide SAWS with direct to MDMS

Mon 9/7/20
Fri 4/9/21

Formalize OCM Plan

2.2.3.8.14.2
7 days
463
Thu 2/20/20

50
Thu 3/5/20
50%

2.2.4.11
Review preliminary Network Design

Wed 8/5/20
Mon 9/7/20

35% 7 days
Wed 8/5/20
Mon 9/7/20

2.2.4.12
Develop Meter and Network Infrastructure Plan (Including material forecasting)

Wed 8/5/20
Mon 9/7/20

22% 16 days
Wed 8/5/20
Mon 9/7/20

2.2.4.13
Develop preliminary meter and infrastructure deployment plan

Wed 8/5/20
Mon 9/7/20

22% 16 days
Wed 8/5/20
Mon 9/7/20

2.2.4.14
Develop meter and network deployment exception reporting

Wed 9/15/20
Wed 9/15/20

44% 7 days
Mon 9/17/20
Wed 9/17/20

2.2.4.15
Develop deployment Timeline

Mon 9/17/20
Wed 9/17/20

25% 7 days
Mon 9/17/20
Wed 9/17/20

2.2.4.16
Inventory Management (warehousing, invoicing etc.)

Wed 9/20/20
Wed 9/20/20

0% 7 days
Wed 9/20/20
Wed 9/20/20

2.2.4.17
Mobilization of Field Resources

Wed 9/20/20
Wed 9/20/20

0% 7 days
Wed 9/20/20
Wed 9/20/20

2.2.4.18
Establish sample testing process

Wed 9/20/20
Wed 9/20/20

0% 7 days
Wed 9/20/20
Wed 9/20/20

2.2.4.19
Develop OTA Transition Planning

Wed 9/20/20
Wed 9/20/20

0% 7 days
Wed 9/20/20
Wed 9/20/20

2.2.4.20
Implement installation progress tracking and reporting

Wed 9/22/20
Wed 9/22/20

21% 7 days
Wed 9/22/20
Wed 9/22/20

2.2.4.21
Start 4.4.4.3
Fri 2/27/20

20% 7 days
Fri 2/27/20

2.2.4.22
Billing Review/Account Review

Fri 2/27/20
Fri 2/27/20

75% 10 days
Fri 2/27/20

2.2.4.23
Billing Review/Account Review

Fri 2/27/20
Fri 2/27/20

0% 7 days
Fri 2/27/20

2.2.4.24
Billing Review/Account Review

Fri 2/27/20
Fri 2/27/20

0% 7 days
Fri 2/27/20

2.2.4.25
Billing Review/Account Review

Fri 2/27/20
Fri 2/27/20

0% 7 days
Fri 2/27/20

2.2.4.10
Mobilization of Field Resources

Wed 3/25/20
Wed 3/25/20

0% 7 days
Wed 3/25/20
Wed 3/25/20

2.2.4.11
Review preliminary Network Design

Wed 3/25/20
Wed 3/25/20

35% 7 days
Wed 3/25/20
Wed 3/25/20

2.2.4.12
Develop Meter and Network Infrastructure Plan (Including material forecasting)

Wed 3/25/20
Wed 3/25/20

25% 16 days
Wed 3/25/20
Wed 3/25/20

2.2.4.13
Develop preliminary meter and infrastructure deployment plan

Wed 3/25/20
Wed 3/25/20

22% 16 days
Wed 3/25/20
Wed 3/25/20

2.2.4.14
Develop meter and network deployment exception reporting

Wed 3/25/20
Wed 3/25/20

44% 7 days
Mon 9/17/20
Wed 9/17/20

2.2.4.15
Develop deployment Timeline

Mon 9/17/20
Wed 9/17/20

25% 7 days
Mon 9/17/20
Wed 9/17/20

2.2.4.16
Inventory Management (warehousing, invoicing etc.)

Wed 9/20/20
Wed 9/20/20

0% 7 days
Wed 9/20/20
Wed 9/20/20

2.2.4.17
Mobilization of Field Resources

Wed 9/20/20
Wed 9/20/20

0% 7 days
Wed 9/20/20
Wed 9/20/20

2.2.4.18
Establish sample testing process

Wed 9/20/20
Wed 9/20/20

0% 7 days
Wed 9/20/20
Wed 9/20/20

2.2.4.19
Develop OTA Transition Planning

Wed 9/20/20
Wed 9/20/20

0% 7 days
Wed 9/20/20
Wed 9/20/20

2.2.4.20
Implement installation progress tracking and reporting

Wed 9/22/20
Wed 9/22/20

21% 7 days
Wed 9/22/20
Wed 9/22/20

2.2.4.21
Start 4.4.4.3
Fri 2/27/20

20% 7 days
Fri 2/27/20

2.2.4.22
Billing Review/Account Review

Fri 2/27/20
Fri 2/27/20

75% 10 days
Fri 2/27/20

2.2.4.23
Billing Review/Account Review

Fri 2/27/20
Fri 2/27/20

0% 7 days
Fri 2/27/20

2.2.4.24
Billing Review/Account Review

Fri 2/27/20
Fri 2/27/20

0% 7 days
Fri 2/27/20

2.2.4.25
Billing Review/Account Review

Fri 2/27/20
Fri 2/27/20

0% 7 days
Fri 2/27/20

2.2.4.10
Mobilization of Field Resources

Wed 3/25/20
Wed 3/25/20

0% 7 days
Wed 3/25/20
Wed 3/25/20

2.2.4.11
Review preliminary Network Design

Wed 3/25/20
Wed 3/25/20

35% 7 days
Wed 3/25/20
Wed 3/25/20

2.2.4.12
Develop Meter and Network Infrastructure Plan (Including material forecasting)

Wed 3/25/20
Wed 3/25/20

25% 16 days
Wed 3/25/20
Wed 3/25/20

2.2.4.13
Develop preliminary meter and infrastructure deployment plan

Wed 3/25/20
Wed 3/25/20

22% 16 days
Wed 3/25/20
Wed 3/25/20

2.2.4.14
Develop meter and network deployment exception reporting

Wed 3/25/20
Wed 3/25/20

44% 7 days
Mon 9/17/20
Wed 9/17/20

2.2.4.15
Develop deployment Timeline

Mon 9/17/20
Wed 9/17/20

25% 7 days
Mon 9/17/20
Wed 9/17/20

2.2.4.16
Inventory Management (warehousing, invoicing etc.)

Wed 9/20/20
Wed 9/20/20

0% 7 days
Wed 9/20/20
Wed 9/20/20

2.2.4.17
Mobilization of Field Resources

Wed 9/20/20
Wed 9/20/20

0% 7 days
Wed 9/20/20
Wed 9/20/0
<table>
<thead>
<tr>
<th>Task Name</th>
<th>% Complete</th>
<th>Duration</th>
<th>Start</th>
<th>Finish</th>
<th>Resource Names</th>
<th>Predecessors</th>
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<tbody>
<tr>
<td>Review existing communication practices</td>
<td>30%</td>
<td>241 days</td>
<td>Wed 11/27/19</td>
<td>Fri 7/24/20</td>
<td>SAWS, VASS, EPI</td>
<td>346</td>
</tr>
<tr>
<td>Develop Communication &amp; Outreach Strategy (Security/Safety, Privacy, System Accuracy)</td>
<td>7%</td>
<td>30 days</td>
<td>Wed 12/11/19</td>
<td>Thu 1/9/20</td>
<td>SAWS, VASS</td>
<td>575</td>
</tr>
<tr>
<td>Develop draft strategy</td>
<td>30%</td>
<td>30 days</td>
<td>Wed 12/11/19</td>
<td>Thu 1/9/20</td>
<td>SAWS, VASS</td>
<td>346</td>
</tr>
<tr>
<td>Schedule review sessions</td>
<td>7%</td>
<td>30 days</td>
<td>Wed 12/11/19</td>
<td>Thu 1/9/20</td>
<td>SAWS, VASS</td>
<td>575</td>
</tr>
<tr>
<td>Finalize strategy</td>
<td>30%</td>
<td>30 days</td>
<td>Wed 12/11/19</td>
<td>Thu 1/9/20</td>
<td>SAWS, VASS</td>
<td>346</td>
</tr>
<tr>
<td>Develop Tactical Communication &amp; Outreach Plan</td>
<td>30%</td>
<td>30 days</td>
<td>Thu 12/19/19</td>
<td>Fri 1/24/20</td>
<td>SAWS, VASS</td>
<td>5765+15 days</td>
</tr>
<tr>
<td>Develop Customer Message</td>
<td>0%</td>
<td>30 days</td>
<td>Thu 12/19/19</td>
<td>Fri 1/24/20</td>
<td>SAWS, VASS</td>
<td>346</td>
</tr>
<tr>
<td>Security/Safety</td>
<td>0%</td>
<td>30 days</td>
<td>Thu 12/19/19</td>
<td>Fri 1/24/20</td>
<td>SAWS, VASS</td>
<td>346</td>
</tr>
<tr>
<td>Privacy</td>
<td>0%</td>
<td>30 days</td>
<td>Thu 12/19/19</td>
<td>Fri 1/24/20</td>
<td>SAWS, VASS</td>
<td>346</td>
</tr>
<tr>
<td>System Accuracy</td>
<td>0%</td>
<td>30 days</td>
<td>Thu 12/19/19</td>
<td>Fri 1/24/20</td>
<td>SAWS, VASS</td>
<td>346</td>
</tr>
<tr>
<td>Develop Opt-Out Program</td>
<td>0%</td>
<td>110 days</td>
<td>Mon 1/20/20</td>
<td>Fri 5/8/20</td>
<td>SAWS, VASS</td>
<td>5765+15 days</td>
</tr>
<tr>
<td>Opt-Out Development Prep</td>
<td>0%</td>
<td>20 days</td>
<td>Mon 1/20/20</td>
<td>Sat 2/2/20</td>
<td>SAWS, VASS</td>
<td>5765+10 days</td>
</tr>
<tr>
<td>Planning, Strategy, and Design</td>
<td>0%</td>
<td>15 days</td>
<td>Sun 2/2/20</td>
<td>Sun 2/22/20</td>
<td>SAWS, VASS</td>
<td>346</td>
</tr>
<tr>
<td>Obtain Review of Utilities Opt-Out Proposals</td>
<td>0%</td>
<td>5 days</td>
<td>Sun 2/2/20</td>
<td>Thu 2/20/20</td>
<td>SAWS, VASS</td>
<td>576</td>
</tr>
<tr>
<td>Identify Stakeholders to Participate in Strategy Workshops</td>
<td>0%</td>
<td>5 days</td>
<td>Fri 2/21/20</td>
<td>Fri 3/6/20</td>
<td>SAWS, VASS</td>
<td>576</td>
</tr>
<tr>
<td>Schedule and Coordinate Workshops</td>
<td>0%</td>
<td>5 days</td>
<td>Wed 2/26/20</td>
<td>Sun 3/1/20</td>
<td>SAWS, VASS</td>
<td>576</td>
</tr>
<tr>
<td>Capture and Compile Strategy, Opt-Out Scenarios &amp; Req</td>
<td>0%</td>
<td>20 days</td>
<td>Mon 2/24/20</td>
<td>Sat 3/14/20</td>
<td>SAWS, VASS</td>
<td>576</td>
</tr>
<tr>
<td>First Set of Interview and Workshops</td>
<td>0%</td>
<td>5 days</td>
<td>Mon 3/2/20</td>
<td>Fri 3/28/20</td>
<td>SAWS, VASS</td>
<td>576</td>
</tr>
<tr>
<td>Complete Preliminary Work</td>
<td>0%</td>
<td>5 days</td>
<td>Sat 2/29/20</td>
<td>Wed 3/4/20</td>
<td>SAWS, VASS</td>
<td>576</td>
</tr>
<tr>
<td>Second set of workshops and review of work</td>
<td>0%</td>
<td>10 days</td>
<td>Thu 3/5/20</td>
<td>Sat 3/14/20</td>
<td>SAWS, VASS</td>
<td>576</td>
</tr>
<tr>
<td>Present Final Strategy for Acceptance to Proceed</td>
<td>0%</td>
<td>0 days</td>
<td>Sat 3/14/20</td>
<td>Sat 3/14/20</td>
<td>SAWS, VASS</td>
<td>576</td>
</tr>
<tr>
<td>Opt-Out Scenario Workshops</td>
<td>0%</td>
<td>20 days</td>
<td>Sun 3/15/20</td>
<td>Fri 4/3/20</td>
<td>SAWS, VASS</td>
<td>576</td>
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<tr>
<td>Identify Participants for Opt-Out Scenario XX</td>
<td>0%</td>
<td>5 days</td>
<td>Sun 3/15/20</td>
<td>Thu 3/19/20</td>
<td>SAWS, VASS</td>
<td>576</td>
</tr>
<tr>
<td>Schedule &amp; Coordinate Workshops</td>
<td>0%</td>
<td>5 days</td>
<td>Tue 3/24/20</td>
<td>Tue 3/24/20</td>
<td>SAWS, VASS</td>
<td>576</td>
</tr>
<tr>
<td>Capture and Compile</td>
<td>0%</td>
<td>5 days</td>
<td>Wed 3/25/20</td>
<td>Sun 3/29/20</td>
<td>SAWS, VASS</td>
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<td>Mon 3/30/20</td>
<td>Fri 4/3/20</td>
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<td>Sat 4/4/20</td>
<td>Sun 5/3/20</td>
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<td>5 days</td>
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<td>Wed 4/8/20</td>
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<td>576</td>
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<td>Sun 4/19/20</td>
<td>Thu 4/23/20</td>
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<tr>
<td>Develop &amp; Implement Analytics Tool &amp; Reporting</td>
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<td>Sat 8/7/21</td>
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### ConnectH2O - Integrated Master Schedule (IMS) - September Board Meeting

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<th>Predecessors</th>
<th>Resource Names</th>
<th>Duration</th>
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<td>Apply Lessons Learned. Modify Plans. Update Requirements.</td>
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Attachment 2

MDMS SERVICES CONTRACT

[INSERT DRAFT PSA]
This Professional Services Agreement (the “Agreement”), is entered into on XXXXXXX (the “Effective Date”) by and between the San Antonio Water System (“Customer”), established pursuant to the provisions of City of San Antonio Ordinance Number 75686, Texas Local Government Code Sections 552.141 et seq. and Chapter 1502, as amended, Texas Government Code, and N. Harris Computer Corporation, through its SmartWorks division (“SmartWorks”), having the respective principal places of business provided herein.

WHEREAS, SmartWorks provides access to its software-as-a-service offerings for commodity meter data management (the “SmartWorks SaaS”) to Customer pursuant to a Software as a Service Agreement executed by the parties concurrently with this Agreement (the “SaaS Agreement”);

AND WHEREAS, Customer wishes to retain SmartWorks to perform certain professional services from time to time in respect of the SaaS Agreement;

NOW THEREFORE, in consideration of the mutual covenants and obligations contained in this Agreement and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

ARTICLE I
INTERPRETATION

1.1 Definitions

The following terms shall have the meanings set out below; all other capitalized terms not defined in this Section shall have the meanings given to them elsewhere in the Agreement:

(a) “Affiliate” means any other legal entity that: (i) directly or indirectly controls or is controlled by SmartWorks; or (ii) is directly or indirectly controlled by a legal entity that also directly or indirectly controls SmartWorks. A legal entity controls another legal entity if that first legal entity has the power to direct or cause the direction of the management of the other legal entity, whether directly or indirectly, through one or more intermediaries or otherwise, and whether by ownership of shares or other equity interests, the holding of voting rights or contractual rights, by being the general partner of a limited partnership, or otherwise.

(b) “Business Day” means every day, Monday through Friday, excluding both Customer holidays and SmartWorks holidays.

(c) “Change Order” means any duly executed change order between Customer and SmartWorks evidencing their agreement to add, subtract, or change particular aspects of the Professional Services.

(d) “Completion of Professional Services” means that the Professional Services are complete in accordance with the specifications set out in a Statement of Work.

(e) “Confidential Information” means non-public information or material that is disclosed by the Disclosing Party to the Receiving Party during the Term and that is (i) marked “Confidential”; or (ii) should reasonably be known or understood to be confidential by an individual exercising reasonable commercial judgment in the circumstances. Subject to Chapter 552 of the Texas Government Code, as may be amended from time to time, Confidential Information of SmartWorks shall include the SmartWorks SaaS and the Documentation, including any software code and algorithms, methods, techniques, and processes revealed or utilized therein, as well as its general pricing models, rates, and unit...
pricing. Customer intends to publish the entire Agreement, as referenced in Section 11.7, with its request for Customer’s board’s approval of the Agreement, but agrees that it shall redact the material set forth in Schedule M from such published version of the Agreement. SmartWorks understands that the Agreement, apart from any Confidential Information, is public information under Texas Government Code Chapter 552. Any request for information under Texas Government Code Chapter 552 for Confidential Information would be subject to the procedures thereunder. Confidential Information of Customer includes the Customer Data. Except as can be established using evidence that would be acceptable to a court of competent jurisdiction, Confidential Information does not include information to the extent that such information: (i) is or becomes generally known to the public by any means other than a breach of the obligations of a receiving party hereunder; (ii) was previously known to the receiving party; (iii) is rightly received by the receiving party from a third party who is not under an obligation of confidentiality; or (iv) is independently developed by the receiving party without reference to or use of the other party’s Confidential Information.

(f) “Customer Data” means all information, data, and other content, in any form or medium, that is submitted, posted, or otherwise transmitted by, to, or on behalf of Customer through the SaaS Service or that is stored in or processed by the SaaS Service, including personal information or personally identifiable information of Customer’s customers.

(g) “Customer Indemnified Parties” means Customer and the City of San Antonio, and each of their members, agents, employees, officers, directors, trustees, and representatives.

(h) “Deliverable” means items identified as such in a Statement of Work.

(i) “Deliverable Documentation” means such instructions, notes, and/or other documents or specifications, in printed or electronic format, associated with or related to a Deliverable or Work Product.

(j) “Disclosing Party” means the party to this Agreement who discloses Confidential Information.

(k) “Malicious Code” means unwanted files or programs that can cause harm to a computer or compromise data stored on a computer, including viruses, worms, time bombs, Trojan horses, and other code, files, scripts, agents, or programs generally considered in the industry to constitute malicious code.

(l) “Professional Services” means the professional services provided by SmartWorks pursuant to a Statement of Work.

(m) “Receiving Party” means the party to this Agreement who receives Confidential Information.

(n) “SmartWorks Indemnified Parties” means SmartWorks, its Affiliates, and the Third-Party IaaS/PaaS provider, if applicable, and each of their respective officers, directors, employees, and agents.

(o) “SmartWorks IP” means the SmartWorks SaaS and any and all related intellectual property (including trademarks, logos, and names) provided by SmartWorks under this Agreement to Customer in connection with the Professional Services, including all products, code, documentation, or other materials that it or its employees or subcontractors provides to Customer or uses in the process of providing Professional Services to Customer.
(p) "Statement of Work" means a fully-executed written statement of work describing the scope of work for the applicable project and delineating, among other things, the Professional Services that will be provided by SmartWorks to Customer pursuant to this Agreement; the fees associated with such Professional Services.

(q) "Third-Party IaaS/PaaS" means the cloud infrastructure and/or platform provided by a third party and through which the SmartWorks SaaS are delivered.

(r) "Work Product" means items identified as such in a Statement of Work.

1.2 Schedules

The following schedules are appended to and form an integral part of this Agreement:

Schedule A - Statement of Work #1
Schedule B - not used
Schedule C - not used
Schedule D - not used
Schedule E - Insurance Terms
Schedule F - not used
Schedule G - Security Procedures
Schedule H - Data Security
Schedule I - AMI Solution Architecture
Schedule J - Cloud Vendor Technology Assessment Questionnaire (VTAQ) Responses
Schedule K - SAWS IS Standards
Schedule L - not used
Schedule M - Material to be Redacted from Published Agreement
Schedule N - Connect H2O Integrated Master Schedule (IMS) – September Board Meeting

Additional Statements of Work may be executed by the parties from time to time, and each such Statement of Work shall become an integral part of this Agreement upon its execution by both parties.

1.3 Headings and Wording; No Interpretation Against Drafter

Article, section, and/or paragraph headings used in this Agreement are for reference purposes only and shall not be used in the interpretation hereof. Where context so indicates, a word in the singular form shall include the plural, a word in the masculine form the feminine, and vice-versa. The word "including" and similar constructions (such as "for example", "such as", and "e.g.") shall mean "including, without limitation," throughout this Agreement. The parties agree that the terms and conditions of this Agreement are the result of negotiations between the parties and that this Agreement shall not be construed in favor of or against any party by reason of the extent to which the party or its professional advisors participated in the preparation of this Agreement.

ARTICLE II
PROFESSIONAL SERVICES AND PARTIES’ OBLIGATIONS

2.1 Professional Services

In order to achieve the Completion of Professional Services, SmartWorks agrees, subject to the terms and conditions of this Agreement, to perform the services set out in a Statement of Work, which may include the following:
(a) Oversee and implement the conversion from Customer's existing software applications to the SmartWorks SaaS;

(b) Perform necessary set up and configuration operations.

(c) Provide training, subject to the following:

(i) SmartWorks recommends a maximum of 10 people in each training class for optimal training. In any training class exceeding 10 people, Customer may be assessed an additional charge for additional instructors.

(ii) Customer is required to make copies of the training manuals required for the training classes either by photocopy or electronic duplication, each of which is subject to the restrictions and obligations contained in this Agreement.

(d) Provide custom development of APIs or custom configuration of APIs and maintenance of such APIs;

Each Statement of Work describes in greater detail the Professional Services, the method by which the Professional Services shall be performed, and other obligations of each party. To the extent that the Statement of Work more explicitly details the Professional Services or the obligations of a party, then those details shall prevail over any other document that is less explicit. Any warranties or representations on the part of SmartWorks in the Statement of Work are not binding on SmartWorks and are merely provided for information purposes; the only warranties and representations provided by SmartWorks in respect of the Professional Services and this Agreement are found in Article III.

2.2 Performance by SmartWorks

(a) Manner of Performance – SmartWorks shall perform the Professional Services in an efficient, competent, and timely manner and will exercise reasonable care, skill, and diligence in the performance thereof. At all times in performing the Professional Services, SmartWorks will communicate openly with Customer in its methodology, manner, and means.

(b) SmartWorks’s Discretion – SmartWorks shall determine in its sole discretion the manner and means by which the Professional Services shall be performed, provided that the Professional Services are performed in accordance with the terms of the applicable Statement of Work and with due consideration of the requirement to provide adequate knowledge transfer to Customer’s personnel.

(c) Conduct on Customer’s Premises – SmartWorks will comply with the terms of Schedule G.

(d) Inquiries by Customer – SmartWorks shall respond expeditiously to any inquiries pertaining to this Agreement from Customer.

(e) Coordination of Services – SmartWorks shall work closely with Customer’s staff in the performance of Professional Services and shall be available to Customer’s staff, consultants, and other representatives at all reasonable times.

(f) Project Manager – SmartWorks shall appoint a project manager who shall work closely with Customer’s project manager to achieve Completion of Professional Services and who shall be responsible for supervising SmartWorks’s staff in their performance of the Professional Services.
(g) **Subcontractors** – SmartWorks will not use any subcontractors in the performance of this Agreement, except with Customer’s prior written approval. SmartWorks shall include terms no less restrictive than those in Article VII below in all permitted subcontractor agreements entered into in connection with this Agreement and shall be fully liable for all acts and omissions of any subcontractors as if SmartWorks had performed such acts or omissions itself.

(h) **Insurance** – SmartWorks will comply with the terms in Schedule E.

(i) **Compliance with Applicable Laws** – SmartWorks will: (i) comply with applicable laws in its performance of this Agreement, (ii) secure, pay for, and comply with all permits, governmental fees, licenses, inspections, bonds, security, or deposits necessary for its performance under this Agreement, and (iii) not make or permit to be made any improper payments, nor will it perform any unlawful acts.

(j) **Malicious Code** – SmartWorks will use at least commercially reasonable means and practices to detect, remove, and destroy Malicious Code and will not knowingly deliver Malicious Code to Customer.

(k) **Reasonable Cooperation by SmartWorks** – SmartWorks will reasonably cooperate with Customer and Customer’s third-party providers as required for Completion of Professional Services as set forth in this Agreement and in association with such hardware, software, and services provided by such third parties, provided, however, that should the time required of SmartWorks for such assistance become unreasonable, the parties shall execute a Change Order regarding the required assistance.

(l) **Security Procedure** – SmartWorks will comply with the Security Procedures set out in Schedule G.

### 2.3 Performance by Customer

(a) **Reasonable Cooperation by Customer** – Customer will reasonably cooperate with SmartWorks as required for SmartWorks to achieve the Completion of Professional Services as set forth in this Agreement.

(b) **Required Programs** – Completion of Professional Services may be dependent on the use of certain additional required software programs to achieve remote access (the “**Required Programs**”). Any Required Programs will be specified in the Statement of Work. The cost of Required Programs is not included in the fees stated in the Statement of Work unless otherwise expressly indicated. If the Required Programs are not timely installed, then SmartWorks shall have the right to suspend any Professional Services that SmartWorks cannot perform as a result of such failure, and the related scheduled time frames, until such Required Programs are installed.

(c) **Customer Equipment** – As between SmartWorks and Customer, Customer is responsible for obtaining, installing, and maintaining any equipment, hardware, network, Internet, direct telecommunications connections, software applications, or web browsers that must be installed at Customer’s facilities to receive the Professional Services, including the quality, condition, and repair of such items. If SmartWorks cannot perform any Professional Services as a result of Customer’s failure to comply with this paragraph, then SmartWorks shall notify Customer in writing of any such failure in reasonable detail, and if Customer does not correct such failure within a reasonable period of time, then SmartWorks shall have the right to suspend performance of the affected Professional Services and the related scheduled time frames until such failure is corrected.
(d) **Project Manager** – Customer shall appoint a project manager who shall work closely with SmartWorks’s project manager to achieve Completion of the Professional Services and who shall be responsible for supervising Customer's staff in their obligations related to the Professional Services, which obligations include reasonable co-operation and participation as requested by SmartWorks' project manager.

(e) **Additional Customer Obligations**

(i) Customer shall perform any of Customer's tasks particularly described in a Statement of Work.

(ii) Customer shall notify SmartWorks of suspected defects in the Professional Services or the Work Product of the Professional Services of which Customer becomes aware. Customer shall provide, upon SmartWorks's reasonable request, additional data that Customer possesses and that is deemed necessary or desirable by SmartWorks to reproduce the environment in which such defect occurred.

(iii) Subject to Customer’s security requirements and to the extent reasonably required by SmartWorks for problem diagnosis associated with the Professional Services, Customer (A) shall allow the use of online diagnostics, and (B) shall cooperate in scheduling remote desk top services for diagnostic purposes.

(iv) Customer shall provide SmartWorks access to Customer’s personnel as reasonably necessary to aid SmartWorks in diagnosing and repairing errors, defects, or malfunctions in the Work Product of the Professional Services.

(v) Customer shall have the sole responsibility for conducting any tests it deems necessary prior to the use of any Work Product from the Professional Services, except as otherwise stated in a Statement of Work.

2.4 **Delay of Professional Services**

SmartWorks shall use best efforts to complete each phase and the entirety of each project set forth in the applicable Statement of Work within the time periods identified therein. SmartWorks shall immediately notify Customer and obtain Customer's agreement to any expected delay sufficiently in advance of such delay as to allow Customer an opportunity to assess the impact of such delay. Customer acknowledges that if it fails to timely perform any of its tasks or responsibilities set forth in a Statement of Work, the projects may be delayed. SmartWorks shall provide Customer prompt notice of any delays SmartWorks attributes to Customer so that Customer may reasonably attempt to rectify such delays. Delays caused by either party will be addressed by way of Change Orders, which are more fully discussed in Section 4.2.

2.5 **Cancellation of Professional Services**

Cancellation of any on-site Professional Services by Customer is allowed for any reason if done in writing at least 14 days in advance of such Professional Services. If Customer’s written notice of cancellation is delivered to SmartWorks less than 14 days before the scheduled start of the on-site Professional Services, then Customer will be billed for any unavoidable, non-recoverable direct costs incurred by SmartWorks that result from such cancellation. If Customer later wishes to reschedule such Professional Services, such on-site Professional Services will be rescheduled as SmartWorks's then-current schedule permits. SmartWorks is not responsible for any delay in Customer’s project resulting from Customer's cancellation of Professional Services.
ARTICLE III
REPRESENTATIONS AND WARRANTIES

3.1 Warranties

(a) SmartWorks represents and warrants that the Professional Services will be performed in a professional and diligent manner by personnel who are competent in performing their individual tasks.

(b) SmartWorks represents and warrants that the Professional Services will substantially and materially conform to any applicable requirements set forth in the Statement of Work.

(c) SmartWorks represents and warrants that the Deliverables, Work Products, and Deliverable Documentation will substantially and materially conform to the corresponding specifications set forth in the applicable Statement of Work.

(d) SmartWorks represents and warrants that all products, code, documentation, or other materials that it or its employees or subcontractors provides to Customer or uses in the process of providing Professional Services to Customer, including the Deliverables, Work Products, and Deliverable Documentation will be SmartWorks's original works, or that SmartWorks has all right, title, and interest necessary to provide or use such products, code, documentation, or other materials to Customer and will maintain the full power and authority to grant the rights granted in this Agreement throughout the Term without the further consent of any third party required. SmartWorks's representations and warranties in the preceding sentences do not apply to use by Customer of the SmartWorks IP in combination with hardware or software not provided by SmartWorks; not required, recommended, or approved by SmartWorks for use with the SmartWorks IP; and not reasonably necessary for use by Customer of the SmartWorks IP for its intended purpose. In the event of a breach of the warranty in this Section 3.1(d), SmartWorks, at no cost to Customer, shall promptly take the following actions: (i) secure for Customer the right to continue using the SmartWorks IP; or (ii) replace or modify the SmartWorks IP to make it non-infringing, but without reducing the functions, features, accessibility, or performance of the SmartWorks IP prior to such replacement or modification; or (iii) if neither of the preceding actions is feasible, then SmartWorks may remove the infringing SmartWorks IP; provided that SmartWorks shall promptly refund to Customer the fees paid by Customer for the removed SmartWorks IP. In addition, if SmartWorks removes any SmartWorks IP, then Customer shall also have the right to terminate this Agreement, in whole or in part, and receive a full refund of any prepaid fees paid under this Agreement for any Professional Services to be performed after such termination. In conjunction with Customer’s right to terminate for breach, where applicable, the preceding sentence states SmartWorks's sole obligation and liability, and Customer's sole remedy, for breach of the warranty in this Section 3.1(d), but does not relieve SmartWorks of any of its duties or obligations, nor limit any of Customer’s rights and remedies, in Article X of this Agreement.

(e) SmartWorks represents and warrants that (i) it shall not engage in employment practices that have the effect of discriminating against any employee or applicant for employment, and (ii) it will take affirmative steps to ensure that applicants are employed and employees are treated during employment without regard to their race, color, religion, national origin, sex, age, disability, genetic information, or political belief or affiliation.

(f) SmartWorks represents and warrants that it has not employed or retained any company or person other than a bona fide employee working solely for SmartWorks, to solicit or secure this Agreement, and that it has not for the purpose of soliciting or securing this Agreement...
paid or agreed to pay any company or person, other than a bona fide employee working solely for SmartWorks, any fee, commission, percentage, brokerage fee, gift, or any other consideration, contingent upon or resulting from the award or making of this Agreement. For breach of these warranties, Customer shall have the right to immediately terminate this Agreement.

(g) SmartWorks represents and warrants that, unless (i) it is a sole proprietorship or (ii) it is a company with fewer than 10 full-time employees and the value of this Agreement is less than $100,000, it does not boycott Israel and will not do so during the Term. This provision is in compliance with §2270.001 of the Texas Government Code. Customer will comply with the United States and Texas Constitutions in consideration of whether to enforce this provision.

3.2 Authority to Contract Warranty

Each party represents and warrants to the other that it (a) has the full right and authority to enter into this Agreement, and (b) is not aware of any pending or threatened claim or litigation that would prevent it from performing its obligations under this Agreement. A party shall promptly notify the other party if at any time during the Term it determines that either (a) or (b) has become inaccurate.

3.3 No Warranty Liability in the Event of Customer Breach or Interference

SmartWorks shall have no liability under Section 3.1 to the extent SmartWorks’s failure to comply with 3.1 is caused by Customer’s: (a) failure to meet its obligations under Section 2.3; or (b) interference with SmartWorks’s performance of the Professional Services in any manner not permitted by this Agreement or without the prior written consent of SmartWorks.

3.4 No Other Warranties

The express warranties contained above are in lieu of all other representations, warranties, and conditions, express or implied, whether arising by statute or otherwise in law, from a course of dealing, or usage of trade. Without limiting the generality of the foregoing, SmartWorks disclaims all other representations and warranties, and Customer acknowledges that there are no further representations or warranties regarding the Professional Services, whether express or implied, including any warranties regarding the merchantability of the Professional Services nor for any outcome.

ARTICLE IV
FEES AND PAYMENTS

4.1 Fees and Payments

(a) Customer will pay to SmartWorks the fees and expenses for the Professional Services as detailed in the applicable Statement of Work.

(b) Unless otherwise agreed in writing, Customer will also reimburse SmartWorks for all actual, reasonable, and necessary (i) out-of-pocket travel expenses in accordance with Customer’s then-current travel policy, and (ii) other related expenses incurred in the performance of the Professional Services and incurred at Customer’s specific written request. All expenses shall be billed at actual cost with no markup, except that in no event shall Customer be obligated to pay an amount greater than any “not to exceed” rate or per diem rate specified in the Statement of Work.

(c) Unless otherwise specifically agreed in writing, SmartWorks shall deliver invoices to Customer for fees and reimbursable expenses hereunder on a monthly basis, and
Customer shall make payment of each invoice within 30 days from receipt thereof, unless Customer disputes the invoiced amount as set out in the next paragraph. All invoices must:

(i) specifically reference the SOW under which the relevant Professional Services were performed or expenses were incurred and
(ii) itemize the Professional Services performed, the hours worked if a time and materials engagement, the Deliverables made, and the reimbursable expenses (with copies of all supporting receipts for any pass-through expense that is not a per diem expense allowed under Customer's Consultant and Contractor Reimbursable Expense Policy), if applicable.

(d) If Customer disputes any amount invoiced by SmartWorks, it shall so notify SmartWorks in writing within 15 business days of receipt of the applicable invoice, and the parties shall submit the dispute to the dispute resolution procedure set forth in Section 11.2 below. For clarity, an invoice will be deemed to be undisputed unless Customer provides detailed written notice of its dispute within 15 business days of receipt of the applicable invoice in sufficient detail to allow SmartWorks to respond to such dispute. SmartWorks will respond to Customer’s written notice of dispute within 15 business days and, if the dispute is not resolved by the parties within 10 business days of SmartWorks’s response, then the invoice is deemed to be disputed. If Customer fails to make any payment of undisputed amounts when due, then, without limiting SmartWorks’ other rights and remedies, SmartWorks may in its sole discretion: (i) charge interest on the past due amounts at the rate of 1% per month (12% per annum), or the maximum rate permitted by law, whichever is lower, from the date such fees were due until the date paid, and (ii) suspend performance of the Professional Services pursuant to Section 5.3 below.

(e) The fees for Professional Services are exclusive of taxes, duties, customs charges, levies, or fees imposed by a taxing authority. Any tax by the State of Texas that SmartWorks may be required to collect or pay upon the delivery of the Professional Services shall be paid by Customer and are excluded from the fees listed in the applicable Statement of Work. If Customer is tax exempt, it shall deliver a tax-exempt certificate to SmartWorks on the Effective Date or upon request thereafter. SmartWorks shall be responsible for paying all taxes, fees, assessments and premiums of any kind payable on its employees and operations.

4.2 Change Orders

The parties will cooperate in good faith to consider Change Orders in respect of requested changes to the Professional Services and, if mutually agreed, to execute appropriate Change Orders. If either party causes or requests a change in the allocation of the resources of SmartWorks applied to a task, changes in completion schedules for individual tasks or for overall change implementation, and changes in staffing that require SmartWorks to provide additional work hours, SmartWorks may propose a change to cover the additional work effort required of it. Approval of any such proposed changes will not be unreasonably withheld (it being acknowledged that any such material changes may require modifications to the consideration paid, and timelines governing any associated Professional Services), and any disputes regarding changes shall be handled initially by discussions between the parties which will be convened in good faith by the parties to resolve any such matters in dispute.

4.3 No-Recourse

Unless otherwise required by applicable laws, the sole source of any payment made or to be made by Customer in satisfaction of any obligations assumed by it or imposed on it under and by virtue of this Agreement shall be limited solely and exclusively to any gross revenues derived by Customer. SmartWorks (including its successors in legal interest, assigns, or Affiliates) shall never have the right to demand payment of any amount due SmartWorks under this Agreement, whether on account of the Professional Services, any termination payment, or for any payment or claim of any nature arising from the performance
or non-performance of Customer’s obligations under this Agreement (including any defense or indemnity obligation), from any other source of revenue or fund of Customer or the City of San Antonio, including the general fund or general credit of the City of San Antonio (including the right to require the levy and collection of any tax, whether ad valorem or otherwise), or any other fund (including other enterprise funds), source of revenue, asset, instrument, or property of the City of San Antonio.

4.4 Internet-Based Project Management System

Customer utilizes an Internet-Based Project Management System (“CPMS”). SmartWorks shall conduct communication through CPMS and perform all Agreement-related functions utilizing CPMS, with the exception of any subcontractor payment monitoring activities, which shall be conducted through Customer’s Subcontractor Payment and Utilization Reporting system (“S.P.U.R.”). This includes any and all correspondence, submittals, requests for information, vouchers, compensation requests and processing, amendment, change orders, and other administrative activities as may be required in the Agreement. Customer shall administer the CPMS software, shall provide CPMS training to SmartWorks’s employees, and shall make CPMS accessible via the Internet to all necessary SmartWorks’s employees. All invoices shall be submitted through the CPMS.

4.5 Subcontractors

Customer has adopted a Small, Minority, Woman, and Veteran-owned Business Policy to establish and oversee a program that will support the inclusion of local small, minority, woman, and veteran-owned businesses (“SMWVB”). The SMWVB is intended to ensure that local small, minority, woman, and veteran-owned businesses have an equal opportunity to compete for, receive, and participate in Customer’s contracts. SmartWorks shall take all reasonable steps to maintain compliance with at least the minimum percentage of participation for SMWVBs set out in SmartWorks’s proposal to Customer. SmartWorks shall be required to electronically report the actual payments to all subcontractors, whether SMWVB or non-SMWVB, using the S.P.U.R. system, beginning with the first Customer payment under this Agreement, and with every payment thereafter (for the duration of the contract). After SmartWorks receives payment from Customer, electronic submittals will require data entry of the amount paid to each subcontractor, whether SMWVB or non-SMWVB, listed on the Contractor’s Good Faith Effort Plan from its proposal to Customer. Data entry is required even if the actual payment amount is $0.00. This information will be used for subcontractor utilization tracking purposes. Any unjustified failure to comply with the committed SMWVB levels may be considered breach of contract. Electronic submittal of subcontractor payment information will be accessed through a link on Customer’s “Business Center” web page. SmartWorks and all subcontractors will be provided a unique log-in credential and password to access Customer’s subcontractor payment reporting system. The link may also be accessed through the following internet address: https://saws.smwbe.com. Respondents and/or their agents may contact Customer’s SMWVB Program Manager at 210-233-3420 for assistance or clarification with issues specifically related to the SMWVB Program and S.P.U.R. system reporting.

4.6 Audits and Records

SmartWorks agrees that Customer’s representatives, may, upon reasonable written notice and no more than once every calendar year, shall have access to, and the right to audit, examine, or reproduce, any and all Records of SmartWorks related to accounting and performance under this Agreement for a period of two years after final payment on this Agreement or until all audit and litigation matters that Customer has brought to the attention of SmartWorks are resolved, whichever is longer. The costs of such audits will be borne by Customer. SmartWorks agrees to refund to Customer any overpayments disclosed by any such audit. For purposes of this Section, “Record” means all books, accounts, reports, files, and other data recorded, created, or stored by SmartWorks in fulfillment of this Agreement, whether in digital or physical format, including “contracting information” as defined by §552.003 of the Texas Government Code. All Customer Data contained in the Records is the property of Customer. SmartWorks may not dispose of or destroy a Record without Customer’s authorization and shall promptly deliver the Records, in all requested formats.
and media, along with all finding aids and metadata, to Customer at Customer’s expense. On completion of this Agreement, at Customer’s election, SmartWorks shall either provide Customer all Records in the custody or possession of SmartWorks or preserve all Records for a period of two years after final payment on this Agreement or until all audit and litigation matters that Customer has brought to the attention of SmartWorks are resolved, whichever is longer. The requirements of Subchapter J, Chapter 552, Texas Government Code, may apply to this Agreement, and this Agreement can be terminated if SmartWorks knowingly or intentionally fails to comply with a requirement of that subchapter. SmartWorks shall include the same requirements as are set forth in this Section in any agreements with subcontractors. Any audit, examination, or reproduction conducted by Customer under this Section 4.6 is subject to the confidentiality terms of this Agreement, and Customer will ensure that its representatives in respect of such audit, examination, or reproduction are bound by confidentiality obligations no less stringent than those contained in this Agreement.

ARTICLE V  
TERM AND TERMINATION

5.1 Term

Unless terminated earlier in accordance with the terms hereof, this Agreement shall commence on the Effective Date and shall continue for so long as the SaaS Agreement remains in effect (the “Term”). Upon any termination of the SaaS Agreement, this Agreement shall automatically and simultaneously terminate.

5.2 Termination for Cause

If either party is in material breach of any of its obligations or any provision under this Agreement, the other party may notify the allegedly breaching party in writing of such breach (a “Default Notice”). Upon receipt of a Default Notice, the allegedly breaching party may correct the breach at no additional cost to the other party within 30 days, or deliver to the nonbreaching party a written notice disputing the alleged breach within 10 days, of the date of receipt of the Default Notice. If the allegedly breaching party fails to correct the breach within such 30-day period, and did not deliver to the nonbreaching party a notice disputing the alleged breach within such 10-day period, then the nonbreaching party may terminate this Agreement upon written notice to the other party to that effect. If the allegedly breaching party delivers to the nonbreaching party a timely notice disputing the alleged breach, then the alleged breach shall be resolved pursuant to the dispute resolution procedure in Section 11.2. In the event that Customer terminates the Agreement pursuant to this Section, then Customer shall be entitled to receive a full refund of any prepaid fees paid under this Agreement for Professional Services that would have been performed after such termination.

5.3 Suspension

If Customer fails to pay any undisputed amounts when due under this Agreement, and such failure has continued for 30 days or more following Customer’s receipt of written notice from SmartWorks of such past due amount, then SmartWorks shall have the right to suspend performance of the Professional Services until all undisputed amounts are paid in full and/or terminate this Agreement effective immediately upon written notice to Customer to that effect. The right to suspend under this Section 5.3 does not foreclose SmartWorks’s right to send a Default Notice pursuant to Section 5.2 and seek to terminate pursuant to Section 5.2 of this the Agreement if Customer does not cure or dispute the alleged breach.

5.4 Termination for Non-Appropriation

All obligations of Customer are subject to annual appropriations by its Board of Trustees. Accordingly, notwithstanding anything in this Agreement to the contrary, in the event that the Board of Trustees should fail to appropriate funds to pay any of Customer’s obligations under the terms of this Agreement, then Customer may terminate this Agreement on at least 90 days’ written notice, and neither Customer nor
SmartWorks shall have any further duties or obligations under this Agreement, except those that expressly survive, including Customer’s obligation to pay SmartWorks any outstanding fees.

5.5 Termination for Bankruptcy

Either party may terminate this Agreement effective immediately upon written notice to the other party if the other party: (a) becomes insolvent; (b) becomes the subject of any proceeding under any bankruptcy, insolvency or liquidation law, whether domestic or foreign, and whether voluntary or involuntary, which is not resolved favorably to the subject party within 90 days of commencement thereof; or (c) becomes subject to property seizure under court order, court injunction or other court order which has a material adverse effect on its ability to perform hereunder. SmartWorks may only terminate under this Section if Customer fails to make payment in accordance with this Agreement or as otherwise agreed by the parties.

5.6 Payment Obligations Survive

Each party’s obligation to pay the other amounts due under this Agreement up to and through the date of termination shall survive such termination. Each party will be responsible to pay the other party costs of enforcing such payment obligations, including court costs, attorney fees, and repossession charges to the extent not prohibited by law.

5.7 Return or Destruction of Confidential Information

Each party shall purge or destroy all copies of any Confidential Information of the other party in its possession or custody or under its control, except as otherwise required under applicable law and except that neither party shall be obligated to purge its backup records in order to comply with this Section (in either case, “Retained Records”). Retained Records may not be accessed or used by the retaining party in any manner or for any purpose without prior written notice of at least 30 days to the owning party, and such Retained Records shall be destroyed promptly when no longer legally required to be retained or in the normal course of the retaining party’s record destruction policies. Upon written request from the other party, each party shall certify in writing its compliance with this Section within 30 days of the termination date.

The foregoing shall not apply to Customer Data, which shall be governed by Section 5.9 below.

5.8 Survival of Accrued Rights and Remedies

Except as otherwise provided in this Agreement, termination of this Agreement shall not affect any right of action or remedy of either party arising from anything that was done or not done, as the case may be, prior to the termination date.

5.9 Return and Destruction of Customer Data

If requested by Customer in writing or upon any termination of this Agreement, SmartWorks shall deliver to Customer a complete copy of the Customer Data as mutually agreed with respect to format and associated cost. Upon receipt of written notice from Customer confirming receipt of the Customer Data and that it is complete and readable, SmartWorks shall promptly destroy and delete all copies of the Customer Data in SmartWorks’s possession, custody, or control, and an officer of SmartWorks shall certify the destruction and deletion to the Customer within 10 business days of SmartWorks’s receipt of Customer’s notice. Subject to any legal requirement that SmartWorks must retain a copy of the Customer Data, SmartWorks shall not delete the Customer Data for 90 days from the date of termination, except in accordance with this Section 5.9. If SmartWorks has provided the Customer Data to Customer pursuant to this Section, but Customer has not further communicated with SmartWorks regarding the Customer Data within 30 days after receiving the Customer Data, then SmartWorks shall delete all Customer Data promptly thereafter, and in no event more than 10 business days after such date, unless prohibited by applicable law. Notwithstanding the foregoing, SmartWorks shall be permitted to delete all Customer Data without providing notification to Customer, and SmartWorks shall not be required to adhere to the time frames detailed above.
where SmartWorks is required by law to delete such Customer Data; provided that, and to the extent permitted by applicable law, SmartWorks shall promptly notify Customer of the required deletion and promptly deliver to Customer a complete copy of the Customer Data in a mutually agreed format prior to the required deletion.

ARTICLE VI
OWNERSHIP

6.1 SmartWorks IP

Except as otherwise provided in Section 6.4, SmartWorks, its service providers, and licensors are and shall at all times remain the owner of all copyright, trademarks, trade secrets, patents, and any other intellectual property rights in and to the SmartWorks IP. Customer shall acquire no right whatsoever to all or any part of the SmartWorks IP, except the limited right to access and use the SmartWorks IP in accordance with the terms of this Agreement and the SaaS Agreement. Customer must fully reproduce on all authorized copies any copyright or other notice marked on any part of the Deliverables, Deliverable Documentation, and Work Product or other materials provided by SmartWorks pursuant to this Agreement and must not alter or remove any such copyright or other notice. Unless otherwise agreed in writing, Customer hereby grants to SmartWorks a royalty-free, worldwide, irrevocable, perpetual license to use and incorporate into the SmartWorks SaaS any suggestions, ideas, enhancement requests, recommendations, or other feedback provided by Customer relating specifically to the operation of the SmartWorks SaaS; provided that Customer shall have no obligation to provide any such suggestions, ideas, enhancement requests, recommendations, or other feedback.

6.2 Customer Data

(a) Ownership – As between SmartWorks (including any of its service providers and licensors) and Customer, all Customer Data is and will remain the sole and exclusive property of Customer. Customer Data is Confidential Information for all purposes under this Agreement, irrespective of whether such data is marked “Confidential”. Subject to the terms and conditions of this Agreement, Customer grants to SmartWorks a non-exclusive, royalty-free license to store and access the Customer Data for the sole purpose of providing the SmartWorks SaaS under the SaaS Agreement and to perform any Professional Services that the parties may mutually agree that SmartWorks shall perform and will need access to Customer Data to perform. SmartWorks shall limit access to the Customer Data to only those of SmartWorks’ employees, Affiliates, and permitted subcontractors who are required to have such access for the sole purpose of SmartWorks providing the Professional Services and only if such persons or entities are bound to SmartWorks by confidentiality and nonuse obligations at least as protective as those set forth in this Agreement with respect to the Customer Data. Except as specified in this Agreement, SmartWorks shall not access the Customer Data for any other purpose without the express written consent of Customer. At no time shall any Customer Data be copied, disclosed, or retained by SmartWorks or any party related to SmartWorks for subsequent use in any transaction that does not include Customer, unless Customer expressly consents to such copying, disclosure, or retention for such purpose, or unless SmartWorks is required to do so by applicable law for such purpose.

(b) Customer Data and Privacy Policy of Customer – Customer represents and warrants to SmartWorks that:

(i) Customer Data that is provided to SmartWorks by Customer is either owned exclusively by Customer or Customer has full the right and title to grant the rights to the Customer Data that are expressly granted to SmartWorks in this Agreement;
(ii) Customer Data that is provided to SmartWorks by Customer is subject to a Customer privacy policy and Customer’s customers have, if required by applicable law, provided to Customer their written consent sufficient to permit its collection, use, and storage by SmartWorks and the Third-Party IAAS/PAAS as expressly allowed in this Agreement.

(iii) Customer complies with all applicable privacy legislation as of the Effective Date in the performance of its obligations hereunder in respect of any Customer Data collected, used, transferred, created, or disclosed pursuant to this Agreement.

6.3 Customer’s Pre-existing Materials

Anything to the contrary in this Agreement notwithstanding, Customer shall retain all rights in and to the data and materials owned by it prior to the Effective Date of this Agreement or any applicable SOW. If such data or materials are used by SmartWorks in the performance of this Agreement, Customer hereby grants SmartWorks a revocable, royalty-free license for such use, it being understood that ownership of such data or materials is not thereby transferred to SmartWorks.

6.4  Deliverables, Deliverable Documentation, and Work Product

SmartWorks shall own all rights, title, and interest in and to all intellectual property relating to Deliverables, Deliverable Documentation, and Work Product and any modifications, enhancements, and derivatives thereto. Customer's license to Deliverables, Deliverable Documentation, and Work Product that relate to the Professional Services shall be the same as Customer's Documentation license granted under the SaaS Agreement.

ARTICLE VII
CONFIDENTIAL INFORMATION

7.1 Confidentiality and Nonuse Obligations

The Receiving Party: (a) shall keep confidential the Confidential Information to the same extent as Receiving Party maintains the confidentiality of its own similar confidential information, but in no event with less than a reasonable standard of care; (b) shall not use the Confidential Information for any purpose not expressly permitted in this Agreement or otherwise in writing by the Disclosing Party; (c) shall only disclose the Confidential Information to its agents, employees, or representatives who have a need to know such information for the purpose of the Receiving Party performing its obligations or exercising its rights under this Agreement and who have been informed of the confidential nature of such information, but only to the extent that such persons or entities are bound by confidentiality and nonuse obligations that are at least as protective of the Confidential Information as set forth in this Agreement. The Receiving Party shall be responsible for any breach of this Agreement by any of its agents, employees, or representatives. The Receiving Party agrees, at its sole expense, to take reasonable measures to restrain its agents, employees, and representatives from prohibited or unauthorized disclosure or use of any of the Confidential Information. Notwithstanding the foregoing, Customer is a governmental entity subject to the Texas Public Information Act (Tex. Gov. Code §552) (“TPIA”) and, as such, will follow the procedures and requirements thereunder, including production of Confidential Information to a requestor under the TPIA if the Attorney General of Texas determines the information is not protected from disclosure under the TPIA. Customer’s compliance with the TPIA shall not constitute a breach of this Agreement.

7.2 Compelled Disclosure

The Receiving Party may disclose Confidential Information if it is compelled by law to do so, provided the Receiving Party, to the maximum extent permitted by applicable law: (a) promptly provides the Disclosing Party prior written notice of such compelled disclosure to allow the Disclosing Party to seek a protective
order or other appropriate remedy, (b) discloses only such Confidential Information as is required by law, and (c) reasonably cooperates with the Disclosing Party’s efforts to obtain confidential treatment for any Confidential Information so disclosed, all at the Disclosing Party’s cost.

7.3 Texas Public Information Act

In the event SmartWorks is subject to the Texas Public Information Act, upon receipt of a request for any information obtained by SmartWorks in the performance of this Agreement, SmartWorks shall provide written notice to Customer of the request along with a copy of the request to the extent permitted by the Texas Public Information Act, and give Customer the opportunity to respond to the request prior to its release by SmartWorks. In no event shall SmartWorks or any of its employees, agents, or subcontractors provide or participate in any public presentations or prepare or present any papers for public dissemination concerning this Agreement, or using information obtained in connection with the Agreement, without receiving the prior written approval from Customer, which approval may be withheld in Customer’s sole and absolute discretion.

7.4 Protection of Customer Data

Protection of personal privacy and data shall be an integral part of the business activities of SmartWorks to ensure there is no inappropriate or unauthorized use of Customer Data at any time. Therefore, without limiting the terms of any other part of this Article VII, for so long as SmartWorks has access to or possession of any Customer Data, SmartWorks shall maintain, at its sole cost and expense, a formal security program, at least as protective as the terms of Schedule H that consists of reasonable and appropriate controls, processes, policies, procedures, and physical, technical, administrative, and organizational measures designed to: (a) ensure the security, confidentiality, integrity, and availability of the Customer Data; (b) protect against threats or hazards to the security, confidentiality, integrity, and availability of the Customer Data; and (c) prevent unauthorized access to or use, disclosure, or theft of the Customer Data. Such controls, processes, policies, procedures, technologies, and measures utilized by SmartWorks and its service providers will include: (1) maintaining an appropriate level of physical security controls over its data center, including appropriate alarm systems, fire suppression, and access controls (including off-hour controls); (2) periodically testing its systems for security breach vulnerabilities; (3) maintaining security breach monitoring services and technology; (4) using then-current commercially reasonable efforts to protect its systems from unauthorized access, including the use of firewall and, where appropriate, data encryption technologies as applicable; (5) maintaining security procedures and controls designed to prevent unauthorized access to Customer Data in its buildings, computer facilities, and record storage facilities, including appropriate controls for the destruction of or disposal of Customer Data, that are consistent with then-current general industry standard practices; and (6) encrypting all Customer Data at rest and in transit with controlled access (unless otherwise stipulated, SmartWorks is responsible for encryption of the Customer Data in its control, custody, or possession). To the extent SmartWorks does not own or control the data center facilities where Customer Data is housed or uses subcontractors in the performance of this Agreement, SmartWorks will ensure that the data center and such subcontractors utilize controls consistent with the requirements of this Article, as applicable. Subject to the limitation of liability in Section 8.1, SmartWorks shall be responsible for the acts and omissions of its data center provider and its subcontractors relating to this Agreement as if SmartWorks had performed such acts or omissions itself.

7.5 Location of Customer Data

All Customer Data shall be stored solely in data centers in the United States. SmartWorks shall not allow its personnel or contractors to store Customer Data on portable devices, including personal computers, except for devices that are used and kept only at its data centers in the United States. SmartWorks shall permit its personnel and contractors to access Customer Data remotely only as required to provide technical support. SmartWorks may provide technical user support on a 24/7 basis using a support in other countries in order to provide round-the-clock support, unless otherwise prohibited in the Agreement.
7.6 Security Audits

Upon at least five Business Days’ prior written notice to SmartWorks, SmartWorks shall permit Customer, or a third party on Customer’s behalf, or any appropriate federal or state regulatory agencies, to perform an assessment, audit, examination, or review of SmartWorks’s compliance with this Agreement, including SmartWorks’s compliance with this Article VII, as well as any applicable laws, regulations, and industry standards. SmartWorks shall fully cooperate with such assessment by providing access to knowledgeable personnel, documentation, infrastructure, and application software that processes, stores, or transports Customer Data. SmartWorks may require that a third-party auditor (but not any regulatory agency) of Customer sign a reasonable non-disclosure agreement with SmartWorks in a form mutually agreed by the parties prior to SmartWorks granting the third-party auditor access to SmartWorks’s applicable information. For clarity, in any such inspection or examination, SmartWorks will not be required to provide access to any information related to other customers of SmartWorks or its Affiliates. In addition, upon Customer’s request, and subject to the consent of the Third-Party IaaS/PaaS, as applicable, SmartWorks will provide Customer a copy of SmartWorks’s or its data center provider’s then-current SSAE 18, SOC 2, or ISO 27001 certification, or equivalent reports (or comparable industry-standard successor reports) (“Certification Report”) prepared by SmartWorks’s or its data center provider’s independent third-party auditor, and shall complete an internal control questionnaire provided by Customer relating to the subject matter of this Agreement. In addition, no more than once per calendar year of the Term and upon Customer’s request, SmartWorks will provide Customer with its own form of internal audit reports regarding the security of the Customer Data. If SmartWorks has not produced a Certification Report or its own form of internal audit report on its own, then Customer may, at its sole cost and no more than once each year during the Term, retain a nationally recognized public accounting firm to produce such an audit report relating to the SmartWorks SaaS, excluding the Third-Party IaaS/PaaS. SmartWorks may update the scope of its audit from time to time provided that, during the Term, no update shall operate to materially reduce the security or change either party’s obligations or rights hereunder unless approved by Customer in advance in a signed writing. Customer, at its option, shall have the right to review the security controls to determine if they are adequate to protect Customer’s Confidential Information and may, at its discretion, recommend improvements of such security controls to prevent malicious or inappropriate access to the Customer Data.

7.7 Unauthorized Disclosures

SmartWorks shall discuss security incidents with Customer on an urgent, as-needed basis as part of SmartWorks’s communication and mitigation processes as mutually agreed upon or required by law. If either party discovers any actual or reasonably likely loss, damage, unplanned unavailability, unauthorized use, or improper acquisition of Customer Data in SmartWorks’s (including any data center provider’s or subcontractor’s) possession or control (a “Security Incident”), SmartWorks shall notify Customer without undue delay. In addition, SmartWorks shall promptly investigate such Security Incident and shall share the results of the root cause analysis and the implemented commercially reasonable corrective action plan with Customer without undue delay following such incident, and SmartWorks shall document responsive actions taken related to the Security Incident, including any post-incident review of events and actions taken to make changes in business practices in providing the Professional Services. The timeframe for SmartWorks’s efforts under this Section shall be determined by the severity of such Security Incident and shall occur as expeditiously as possible or as required by applicable law. SmartWorks agrees to reasonably cooperate with Customer in connection with any third-party litigation or criminal investigations resulting from a Security Incident, as well as any communications with third parties regarding a Security Incident. Any extraordinary expenses incurred by SmartWorks in respect of the foregoing will be considered Mitigation Costs, but only to the extent that SmartWorks first notifies Customer in writing of the purported extraordinary costs before SmartWorks incurs such costs, and SmartWorks obtains Customer’s written consent to incur same; and provided, however, that a condition to such extraordinary expenses incurred by SmartWorks being considered Mitigation Costs is that SmartWorks provide Customer with prompt proof of SmartWorks’s payment for such expenses. Subject to the provisions of Section 10.3 below and SmartWorks’ limitation of liability set out Section 8.1, SmartWorks shall defend, indemnify, and hold harmless the Customer Indemnified Parties from and against Mitigation Costs and any and all third-party claims for damages, costs,
liabilities, expenses, attorney’s fees, equitable relief, or similar relief arising out of or related to a Security Incident resulting from breach of this Agreement by SmartWorks or any of its data center providers or subcontractors (the “Security Incident Indemnity”). “Mitigation Costs” mean any of the following incurred by Customer: (a) costs to conduct or participate in the investigation and resolution of the Security Incident; (b) costs of notifications to individuals, regulators, or others required by applicable law; (c) costs of credit monitoring services required by applicable law; (d) costs of establishing and operating a website or a toll-free number and call center for affected individuals required by applicable law; (e) costs of completing all corrective actions based on the root cause of the Security Incident; and (f) the reasonable recovery-related costs associated with lost, damaged, or impaired Customer Data.

7.8 Equitable Remedies

The parties acknowledge that a breach of any of the provisions contained in this Article may result in irreparable and continuing harm for which there may be no adequate remedy at law and that the non-breaching party shall be entitled to seek injunctive relief and/or a decree for specific performance without the necessity of posting a bond. Any legal action brought under this Section 7.8 shall not be subject to the requirements of Section 11.2 below.

ARTICLE VIII
LIMITATION ON LIABILITY

8.1 Limitation

REDACTED

8.2 Exclusion

REDACTED

8.3 Exceptions

(a) REDACTED
8.4 Insurance Does Not Limit Liability

REDACTED

ARTICLE IX
CUSTOMER INDEMNIFICATION

9.1 Customer Data Defense and Indemnity

Customer is responsible pursuant to Sections 7.5 and 7.4 of the SaaS Agreement for its Customer Data, and for its Authorized Users’ use. To the extent permitted by applicable law and subject to Section 4.3 above, Customer shall defend the SmartWorks Indemnified Parties from and against all third-party claims arising out of or based on an allegation that SmartWorks’s use or possession of any Customer Data infringes or violates such third party’s rights in or to such Customer Data, including any claim of violation of privacy, and shall pay all amounts that are finally awarded by a court of competent jurisdiction or agreed to in a settlement approved by Customer. Customer shall have no obligation under this Article IX if any SmartWorks Indemnified Party: (a) breaches any obligation or limitation set forth in this Agreement related to the Customer Data; (b) fails to comply with any applicable law with respect to the Customer Data; or (c) suffers a breach of its facilities or systems in or on which the Customer Data is maintained by SmartWorks. In addition, to the extent permitted by applicable law and subject to Section 4.3 above, Customer will reimburse SmartWorks for any reasonable fees or other reasonable out-of-pocket costs paid by SmartWorks to comply with requests by third parties, whether individuals or governmental entities, to review such Customer Data in the SmartWorks SaaS or to respond to challenges by such third parties to the collection and storage of the Customer Data in the SmartWorks SaaS, provided that, where not prohibited by applicable law, SmartWorks first notifies Customer in writing of such request or challenge and gives Customer an opportunity to resolve such matter prior to SmartWorks incurring such fees or expenses.

9.2 Customer Indemnity Procedures

Customer’s defense and indemnity obligations in Section 9.1 are conditioned on: (a) SmartWorks giving Customer prompt written notice of any claim described in Section 9.1, where “prompt” means that the timing of such notice does not materially prejudice Customer’s ability to defend against the claim; (b) SmartWorks not making any admissions or entering into any settlement with the third party, except with Customer’s prior written consent; (c) SmartWorks giving Customer sole control of the defense of the claim and all negotiations for its compromise or settlement, provided that no settlement assigning liability to, restricting any operations or rights of, or requiring any payment by a SmartWorks Indemnified Party shall be permitted without the SmartWorks Indemnified Party’s prior written consent; and (d) SmartWorks reasonably cooperating with Customer, at Customer’s expense and at no cost to any SmartWorks Indemnified Party,
throughout the defense and settlement of the claim. The SmartWorks Indemnified Parties shall have the right, at their option and at their own expense, to retain legal counsel of its choice and to participate in the defense of any indemnified claim without relieving Customer of any of its obligations under this Article, and Customer shall fully cooperate with the SmartWorks Indemnified Parties in their participation in the defense. Customer shall promptly advise SmartWorks in writing of any claim or demand against Customer (where “prompt” is as defined above) or any of the SmartWorks Indemnified Parties of which Customer becomes aware and that relates to or arises out of Customer's activities under this Agreement.

9.3 Exclusive Remedy for Defense and Indemnity for Customer Data Claims

THE FOREGOING STATES CUSTOMER'S ENTIRE LIABILITY, AND THE SMARTWORKS INDEMNIFIED PARTIES' EXCLUSIVE REMEDY, WITH RESPECT TO ANY THIRD-PARTY CLAIMS OF THE TYPE DESCRIBED IN SECTION 9.1 RELATED TO THE CUSTOMER DATA.

ARTICLE X
INTELLECTUAL PROPERTY INFRINGEMENT AND SMARTWORKS INDEMNITY

10.1 Intellectual Property Infringement

REDACTED

10.2 SmartWorks Defense and Indemnity

REDACTED

10.3 SmartWorks Indemnity Procedures

REDACTED
10.4 Limitation on IP Claims

REDACTED

10.5 Exclusive Remedy for Defense and Indemnity for IP Claims

REDACTED

ARTICLE XI
GENERAL

11.1 Governing Law; Venue

This Agreement, and any disputes arising out of or related to this Agreement, shall be governed by and construed in accordance with the laws of the State of Texas. This Agreement is not be subject to any principle of law that would result in a law other than the laws of the State of Texas being applied to this Agreement, nor is it subject to the Uniform Commercial Code or the United Nations Convention on Contracts for the International Sale of Goods. ANY LEGAL SUIT, ACTION, OR PROCEEDING ARISING OUT OF OR RELATED TO THIS AGREEMENT WILL BE INSTITUTED IN THE STATE OR FEDERAL COURTS WITH JURISDICTION IN BEXAR COUNTY, TEXAS, AND EACH PARTY IRREVOCABLY SUBMITS TO THE EXCLUSIVE JURISDICTION OF SUCH COURTS IN ANY SUCH SUIT, ACTION, OR PROCEEDING. CUSTOMER AND SMARTWORKS HEREBY WAIVE, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, THE RIGHT TO TRIAL BY JURY IN ANY ACTION, PROCEEDING OR COUNTERCLAIM FILED BY ANY PARTY, WHETHER IN CONTRACT, TORT OR OTHERWISE, RELATING DIRECTLY OR INDIRECTLY TO THIS AGREEMENT OR ANY ACTS OR OMISSIONS OF SMARTWORKS IN CONNECTION THEREWITH OR CONTEMPLATED THEREBY. In the event of any dispute arising out of or related to this Agreement, the prevailing party shall be entitled to recover its reasonable attorney's fees, expenses, and costs.

11.2 Dispute Resolution; Mediation

Except to the extent this Agreement explicitly states that this Section does not apply, each party agrees to submit any claim, controversy, or dispute arising out of or relating to this Agreement, the SmartWorks SaaS, or the relationship created by this Agreement (each a “Dispute”) to the other party in accordance with this Section before bringing such claim, controversy or dispute in a court or before any other tribunal. Disputes will initially be considered by each party's applicable project or business manager (each a “Manager”). The Manager of the party raising the Dispute will provide written notice (e-mail is sufficient) to the other party's Manager identifying the dispute in reasonable detail (a “Dispute Notice”). Thereafter, the Managers will
meet in person or by telephone to resolve the Dispute as soon as reasonably possible considering the nature and impact of the applicable issues. If a Dispute cannot be resolved by the Managers within 7 Business Days after delivery of the Dispute Notice, then the Managers will refer the dispute to their respective vice presidents or equivalent level officers with sufficient authority to fully resolve the Dispute (each an "Executive"). If such Executives cannot resolve the Dispute within 14 Business Days after delivery of the Dispute Notice, then the parties agree to participate in good faith in a one-day non-binding mediation with representatives of each party having all necessary authority to fully resolve the Dispute. The mediation is to be conducted by either an individual mediator or a mediator appointed by mediation services mutually agreeable to the parties. Such mediator shall be knowledgeable in software system agreements. The mediation shall take place in San Antonio, Texas at a time that is mutually agreeable; provided, however, that the mediation shall occur no later than 30 Business Days after delivery of the Dispute Notice. Except for the costs and expenses of mediation (including compensation and expenses of the mediator), which shall be shared by the parties equally, each party shall bear its own costs and expenses of participating in the dispute resolution process and mediation described in this Section. If the parties are unable to resolve the Dispute upon the earlier of the completion of the mediation or the expiration of 30 Business Days after delivery of the Dispute Notice, then either party may initiate a legal proceeding to resolve the Dispute. All applicable statutes of limitation will be tolled until the meetings and mediation specified in this Section have been completed. The parties will take such action, if any, required to effectuate such tolling. Nothing in this Section shall inhibit a party’s right to seek injunctive or other equitable relief at any time for Disputes concerning actual, alleged, or threatened violations of a party’s Confidential Information or intellectual property rights, for which the parties may immediately bring an action.

11.3 No Waiver of Governmental Immunity or Available Defenses; No Damages for Delay

Nothing in this Agreement, including in Article IX above, shall be interpreted to constitute a waiver by any Customer Indemnified Party of any governmental immunity available under Texas law or any available defenses under Texas law; provided that the parties agree that this Agreement is a contract for goods or services under Chapter 271 of the Texas Local Government Code. Moreover, notwithstanding anything to the contrary in this Agreement, SmartWorks’s sole remedy for any (a) delay in commencement, prosecution, or completion of services under this Agreement, (b) hindrance, interference, suspension, or obstruction in the performance of services under this Agreement, (c) loss of productivity, or (d) other similar claims (items (a) through (d) herein collectively referred to in this Article as “Delays”), whether or not such Delays are foreseeable, shall be an extension of the Term by an equal number of days as the Delay, unless the Delay is caused by the acts of Customer constituting intentional interference with SmartWorks’s performance of the services, and only to the extent such act continues after SmartWorks delivers Customer written notice of such interference. Unless otherwise expressly stated in this Agreement, in no event shall SmartWorks be entitled to any compensation or recovery of any damages, in connection with any Delay, including consequential damages, lost opportunity costs, impact damages, or other similar remunerations. For purposes of interpreting this Section, Customer’s exercise of any of its rights or remedies under this Agreement (including ordering changes in the services or directing suspension, rescheduling, or correction of the services), regardless of the frequency of Customer’s exercise of such rights or remedies, shall not be construed as intentional interference with SmartWorks’s performance of the services.

11.4 Notice

Any notice required or permitted to be given to either party to this Agreement shall be given in writing and shall be delivered either personally, by overnight courier with signature required, or by prepaid registered or certified mail, return receipt requested, to the appropriate address set out below. Any such notice shall be deemed to have been given and received on the day on which it is actually received or refused.
Notices to SmartWorks:

N. HARRIS COMPUTER CORPORATION  
1 Antares Drive  
Suite 400  
Ottawa ON, K2E 8C4  
Attention: GENERAL COUNSEL  
Telephone: (613) 226-5511 X2065  
e-mail: legal@harriscomputer.com

With a courtesy copy to:

N. HARRIS COMPUTER CORPORATION  
1 Antares Drive  
Suite 400  
Ottawa ON, K2E 8C4  
Attention: CHIEF EXECUTIVE OFFICE  
Telephone: (613) 226-5511 X2065

Notices to Customer:

San Antonio Water System  
Attn: General Counsel  
2800 U.S. Hwy 281 North  
San Antonio, Texas 78212

Each party may change its address for notices by issuing notice to the other party in the manner described in this Section 11.4.

11.5 Currency

All dollar amounts referred to in this Agreement are in United States dollars.

11.6 No Publicity or Use of Name

SmartWorks shall not use Customer’s name or logos or refer to the City of San Antonio or Customer, either directly or indirectly, on or in any publicity, marketing, advertising, or other external materials or communications to any third party without Customer’s advance written consent, which Customer may withhold in its sole discretion. In addition, SmartWorks shall not disclose Monitoring Data to any third party to the extent that doing so will directly or indirectly associate such Monitoring Data with Customer.

11.7 Entire Agreement

This Agreement, together with the attached Schedules, constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior and contemporaneous agreements, representations, negotiations, understandings, arrangements, and communications between the parties, both written and oral, relating to the subject matter hereof. No terms and conditions in any Customer orders, in any online terms related to the SmartWorks SaaS, or in any other documentation employed by or on behalf of either party in connection with this Agreement, regardless of the date of such documentation, will affect the terms of this Agreement, even if such document is accepted by the receiving party, with such provisions being deemed rejected and deleted. This Agreement may only be modified by a written amendment signed by an authorized representative of each of the parties.
11.8 Order of Precedence

In the case of a conflict between a general term or condition in the main body of this Agreement and a specific term or condition in a Schedule, the specific term or condition in the Schedule will prevail, with the exception of Section 8.1 (limitations of liability) and Article III (Representation and Warranties) of the main body of this Agreement, which will prevail in the event of a conflict with a term or condition in a Schedule.

11.9 Waiver; Cumulative Remedies

No waiver of any breach of any provision of this Agreement shall constitute a waiver of any prior, concurrent, or subsequent breach of the same or any other provisions hereof, and no waiver shall be effective unless made in writing and signed by an authorized representative of the waiving party. Other than as expressly stated in this Agreement (including in Sections 3.1(d), 4.3, 9.3, 10.5, and 11.3), the remedies provided herein are in addition to, and not exclusive of, any other remedies of a party at law or in equity. Termination of this Agreement shall not affect any right of action of either party arising from anything that was done or not done, as the case may be, prior to the termination taking effect.

11.10 Assignment

Neither party may assign or delegate any of its rights or duties under this Agreement without the prior written consent of the other party, such consent not to be unreasonably withheld. For purposes of the preceding sentence, and without limiting its generality, any merger, consolidation, or reorganization involving a party (regardless of whether such party is a surviving or disappearing entity) will be deemed to be an attempted assignment or delegation of rights, obligations, or performance under this Agreement for which the other party’s prior written consent is required. No assignment, delegation, or transfer will relieve either party of any of its obligations under this Agreement. Any purported assignment, delegation, or transfer in violation of this Section 11.10 is void. This Agreement is binding upon and inures to the benefit of the parties hereto and their respective successors and permitted assigns.

11.11 Severability

If any provision of this Agreement is determined by a court of competent jurisdiction to be invalid or unenforceable under any applicable law, then such provision shall be deemed modified and interpreted so as best to accomplish the objectives of the original provision to the fullest extent permitted by law and to the extent necessary in order to render such provision valid and enforceable. If such provision may not be so modified and interpreted, then it shall be severed and the remainder of this Agreement shall remain in full force and effect unless doing so would result in a frustration of purpose of this Agreement.

11.12 Allocation of Risk

The warranty disclaimer, limitation of liability, indemnity, and other risk allocation provisions contained in this Agreement are fundamental elements of the basis of the bargain between SmartWorks and Customer and set forth an allocation of risk reflected in the rights and obligations set forth in this Agreement, including the fees due hereunder.

11.13 Relationship

The parties are and shall at all times remain independent contractors in the performance of this Agreement, and nothing herein shall be deemed to create a joint venture, partnership, agency, or fiduciary relationship between the parties. Neither party will have the power to bind the other party or to contract in the name of or create any liability against the other party in any way or for any purpose. Neither party will be responsible for the acts or defaults of the other party or of those persons or entities for whom the other party is legally responsible, whether at law or pursuant to this Agreement.
11.14 **Export Regulation**

Each party shall comply with all applicable export control laws in the performance of this Agreement.

11.15 **Force Majeure**

No default, delay, or failure to perform on the part of either party shall be considered a breach of this Agreement where such default, delay, or failure directly results from a Force Majeure Event. “**Force Majeure Event**” means strikes (but not by the affected party’s employees), riots, civil disturbances, governmental actions, epidemics, pandemics, war, terrorist acts, embargoes, severe weather, fire, earthquakes, floods, acts of God, acts of the public enemy, or other circumstances beyond such party’s reasonable control. Upon the occurrence of a Force Majeure Event, the affected party shall use reasonable efforts to notify the other party of the Force Majeure Event as promptly as possible under the circumstances and will be excused from any further performance or observance of the affected obligation(s) for as long as: (a) such circumstances prevail, (b) such party continues to use commercially reasonable efforts to mitigate the effects of such Force Majeure Event, and (c) such party continues to attempt to recommence performance or observance to the greatest extent possible without delay. Upon the conclusion of a Force Majeure Event, the affected party will promptly perform obligations that could not be performed during the occurrence of the Force Majeure Event, but only if performance remains possible and desirable by the unaffected party following the Force Majeure Event. The foregoing notwithstanding, if a Force Majeure Event affecting SmartWorks continues for more than 30 days, Customer may terminate this Agreement without any liability for such termination.

11.16 **Survival**

The rights and obligations of the parties under Articles I, VII, VIII, IX, X and XI, and Sections 3.4, 4.1, 4.3, 4.6, 5.6, 5.7, 5.8, 5.9, 6.1, 6.2, and 6.3 shall survive any termination or expiration of this Agreement.

11.17 **Counterparts; Digital Signatures**

This Agreement may be executed in counterparts (whether by facsimile signature, PDF via email, or otherwise), each of which when so executed shall constitute an original and all of which together shall constitute one and the same instrument.

11.18 **Interest in Water System Agreements Prohibited**

No officer or employee of Customer or the City of San Antonio is permitted to have a financial interest, direct or indirect, in any agreement with Customer or any financial interest, directly or indirectly, in the sale to Customer of any land, materials, supplies, or service, except on behalf of Customer or the City of San Antonio as an officer or employee. Any violation of this Section, with the knowledge, expressed or implied, of SmartWorks contracting with Customer shall render this Agreement voidable by the Board of Trustees or the President/Chief Executive Officer of Customer.

11.19 **Gift Policy**

Customer’s employees are prohibited from soliciting, accepting, or agreeing to accept any gifts from outside sources (see Section M. – Gifts or Benefits of the Water System’s Code of Ethical Standard, which is available on the Water System Business Center website). SmartWorks shall not take any act, directly or indirectly, that would result in a breach of such policy by any employee of Customer.
IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement to be effective as of the Effective Date.

N. Harris Computer Corporation, through its SmartWorks division

Signature

Name

Title

Date

San Antonio Water System

Signature

Name

Title

Date
Statement of Work #1

for

SmartWorks Compass

Presented to

San Antonio Water System, TX

(SAWS)

Version: 0.27
## Revision Control

**Document Title:** San Antonio Water System (SAWS) – SmartWorks Statement of Work #1  
**Document Owner:** SmartWorks – Professional Services

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Updated connected based on SAWS feedback & June 26 call with SAWS |
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<td>V. Gagnier</td>
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</table>
# Table of Contents

1. General ........................................................................................................................................... 7
   1.1. Glossary of Terms ...................................................................................................................... 8
   1.2. Roles and Responsibilities ........................................................................................................ 11
   1.3. Related Documents ................................................................................................................... 13

2. SmartWorks Software Implementation Scope .................................................................................. 13
   2.1. Storage ...................................................................................................................................... 14
   2.2. Meter Configuration .................................................................................................................. 15
   2.3. SmartWorks Software Modules ............................................................................................... 15
       2.3.1. MeterSense MDM – Phase 2 Pilot ..................................................................................... 15
       2.3.2. KPI Dashboard – Phase 2 Pilot .......................................................................................... 17
       2.3.3. Rate and Revenue Analysis – Phase 3 (BR2) .................................................................... 19
       2.3.4. Water Loss Analysis – Phase 3 (BR2) ............................................................................. 20
       2.3.5. Leak Detection and Notification – Phase 3 (BR2) ............................................................. 22
       2.3.6. Targeted Messaging – Phase 3 (BR2) .............................................................................. 23
   2.4. Reporting .................................................................................................................................... 25
       2.4.1. Deliverables ....................................................................................................................... 25
   2.5. Project Deliverables and Work Products Summary .................................................................... 25
       2.5.1. Deliverables ....................................................................................................................... 25
       2.5.2. Work Products .................................................................................................................. 26

3. Software Integrations ...................................................................................................................... 27
   3.1. AMI Head End System (Itron) – Phases 2 & 3(BR1) .................................................................. 28
       3.1.1. Phase 2 -Deliverables ......................................................................................................... 28
       3.1.2. Phase 3.1 -Deliverables .................................................................................................... 29
   3.2. AMI Head End System (Aclara) – Phase 2 & 3(BR1) ............................................................... 29
       3.2.1. Phase 2 -Deliverables ......................................................................................................... 29
       3.2.2. Phase 3.1 -Deliverables .................................................................................................... 30
   3.3. Automated Meter Reading - AMR (FCS) Reads – Phase 3(BR1) .............................................. 30
       3.3.1. Phase 3 (BR1) -Deliverables ............................................................................................... 30
   3.4. Customer Information System (CIS) - IPS – Phase 2 & 3(BR1) ............................................... 30
       3.4.1. CIS Synchronization Integration ....................................................................................... 30
       3.4.2. Billing Interface – On Cycle ............................................................................................. 32
       3.4.3. Billing Interface – Off Cycle (MultiSpeak) ...................................................................... 32
       3.4.4. OnDemand read initiation from CIS (MultiSpeak ®) ....................................................... 32
       3.4.5. Phase 2 -Deliverables ....................................................................................................... 33
       3.4.6. Phase 3 (BR1) -Deliverables ............................................................................................. 33
   3.5. Geographic Information System (GIS) Data Usage - ESRI – Phases 2 & 3(BR2) ..................... 34
       3.5.1. Base Map - Phase 2 .......................................................................................................... 34
       3.5.2. Meter Hierarchy - Phase 3(BR2) ....................................................................................... 34
       3.5.3. Phase 2 -Deliverables ....................................................................................................... 34
       3.5.4. Phase 3.2 -Deliverables (or no later than 3.4) .................................................................. 34
   3.6. System of Record (SOR) for Supply Water Data – Phase 3(BR2) ............................................. 34
1. General

This Statement of Work #1 ("SOW" or "Statement of Work") defines the Professional Services to be performed by the SmartWorks division of N. Harris Computer Corporation (herein referred to as "SmartWorks") for the San Antonio Water System, (herein referred to as “Customer” or “SAWS”), established pursuant to the provisions of City of San Antonio Ordinance Number 75686, Texas Local Government Code Sections 552.141 et seq. and Chapter 1502, as amended, Texas Government Code. This SOW includes a high-level timeline and other particulars specific to the services requested by Customer. This SOW is made subject to and is governed by the Professional Services Agreement between SmartWorks and Customer dated [INSERT DATE] ("PSA"). Capitalized terms used in this SOW but not defined in this SOW shall have the meanings given to them in the PSA. For the avoidance of doubt, all references to SAWS in this SOW reference the same entity as is defined as “Customer” in the PSA.

This SOW, including its appendices, serves as the complete understanding between Customer and SmartWorks as to what the Professional Services for the configuration and implementation of SmartWorks Compass (herein referred to as the “SmartWorks Software”) entail. This SOW will also be used by Customer to determine if the SmartWorks Software provides the functionality requested and agreed to, per this SOW. If there are any issues during the project lifecycle, this SOW will be used to determine if the issue is a configuration/development issue or if the issue was not included as part of the current scope of Professional Services.

Changes to this document shall be made through a Change Management Process as described Section 7.3 below.

The Professional Services under this SOW will accomplish the following high-level objectives:

1) Install, configure, and implement the SmartWorks Software as defined in Section 2.
2) The SmartWorks Software will be installed at the SmartWorks Hosting Facility.
3) Initiate the collection and management of meter data from two (2) AMI head-end within SmartWorks Software.
4) During Phase 2: Integrate with two AMI Systems (2), Hansen’s Infor CIS and ESRI’s GIS, to import meter usage, events, alerts, and location data and to provide the necessary meter, event, and billing data as required.
5) During Phase 3: Integrate with FCS (BR1), Portal Interface (BR1), EOC Water Mapping (BR2) and IVR interface (BR4)
6) During Phase 3: Provide Customer with the information necessary to access the data (e.g., best practices, schema) for the ECHO Center SAWS ConnectH2O Database (BR2).
7) Deliver system training designed to develop competency with the use and configuration of the SmartWorks Software.
9) During the Professional Services described herein, SmartWorks is anticipated to follow the SAWS ConnectH2O Program Management Plans.
### 1.1. Glossary of Terms

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
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<tr>
<td>Acceptance Testing Period</td>
<td>A defined period of time to perform User Acceptance Testing on the Solution, including testing in a live Production environment.</td>
</tr>
<tr>
<td>Actual Solution Acceptance Date</td>
<td>Date that written acceptance by Customer is received by SmartWorks that Solution substantially meets the Functional and Integration Requirements Document, which is a Deliverable described in Section 2.5.1 below, and substantially satisfies the testing criteria set forth in the Solution Acceptance Criteria (defined in Section 6.2.1 below).</td>
</tr>
<tr>
<td>AMI</td>
<td>Advanced Meter Infrastructure</td>
</tr>
<tr>
<td>AMR</td>
<td>Automated Meter Reading</td>
</tr>
</tbody>
</table>
| Billing Determinant                       | The measure of consumption used to calculate a customer’s bill. A Billing Determinant is either:  
- A register read; or  
- A value calculated by the MDM for billing purposes based on interval and/or register read data. If rates are blocked, seasonally differentiated, time-differentiated, or separated by demand and energy measures, then the Billing Determinants are organized in the same fashion. |
<p>| Change Management Process                | The process outlined in Section 7.3 of the SOW, which SmartWorks will follow, along with the ConnectH2O Program Management Plans, for any proposed changes to the SOW. |
| CIS                                       | Customer Information System                                              |
| ConnectH2O Program                       | The SAWS program for which the MDMS will be implemented.                 |
| Correction Period                         | A defined period of time that SmartWorks has to correct any deficiency identified during User Acceptance Testing. |
| Deliverable                               | An item created during the project that requires formal review and approval by Customer. |
| Deliverable Acceptance Criteria          | Criterion by which Customer determines that the Deliverable provided by Consultant is in accordance with this Statement of Work. |
| Deliverable Acceptance Criteria Document  | A central listing of all Deliverables and Work Products developed by and maintained throughout the project. |
| EOC                                       | Emergency Operations Center                                              |</p>
<table>
<thead>
<tr>
<th><strong>Expected Solution Acceptance Date</strong></th>
<th>The date identified in the Integrated Master Schedule (IMS) by which the parties expect Solution Acceptance to be achieved.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FCS</strong></td>
<td>Field Collection System</td>
</tr>
<tr>
<td><strong>Final Solution Acceptance</strong></td>
<td>Customer determination by written acknowledgement that the Solution provided by SmartWorks performs in accordance with the Functional and Integration Requirements Document developed for this Statement of Work and any applicable Documentation.</td>
</tr>
<tr>
<td></td>
<td>• Final Solution Acceptance is achieved when all agreed effort is completed and Final System Acceptance has been achieved.</td>
</tr>
<tr>
<td><strong>Final System Acceptance Testing</strong></td>
<td>The means by which SmartWorks will verify that the technical, functional, integration and performance (SLA's), requirements of the system have been met.</td>
</tr>
<tr>
<td><strong>GIS</strong></td>
<td>Geographic Information System</td>
</tr>
<tr>
<td><strong>Go-Live Plan Document</strong></td>
<td>A Deliverable identifying and describing the activities to be performed during the Deployment phase of the project.</td>
</tr>
<tr>
<td><strong>Integrated Master Schedule or IMS</strong></td>
<td>A plan jointly created and base-lined by Customer and SmartWorks during the Initiation/Definition phase of the project and that establishes the implementation timeline (including certain milestones) for the project in Schedule N - Integrated Master Schedule (IMS) Baseline</td>
</tr>
<tr>
<td><strong>Interval Read Data</strong></td>
<td>A meter read showing the consumption over a defined period of time, demand, or interval, normally 60 minutes, 30 minutes, 15 minutes, or 5 minutes. Typical units of measure include gallons per cubic foot or cubic meter for water meters.</td>
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<tr>
<td><strong>IPS</strong></td>
<td>INFOR Public Sector tool utilized as the Customer Information System.</td>
</tr>
<tr>
<td><strong>IVR</strong></td>
<td>Interactive Voice Response</td>
</tr>
<tr>
<td><strong>KPI</strong></td>
<td>Key Performance Indicator</td>
</tr>
<tr>
<td><strong>LDAP</strong></td>
<td>Lightweight Directory Access Protocol</td>
</tr>
<tr>
<td><strong>MDM</strong></td>
<td>The MeterSense (MDM) module is the Meter Data Management module of the SmartWorks Software</td>
</tr>
<tr>
<td><strong>MDMS</strong></td>
<td>SmartWorks Meter Data Management System (MDMS) Solution</td>
</tr>
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### Meter Channel
Unique stream of meter read data, with corresponding Unit of Measure ("UOM"), provided by meters and stored under a unique Channel ID within the SmartWorks Software.

Each channel can consist of consumption data (referred to as consumption channel) or a demand data (referred to as demand channel).

### Meter-to-Cash
Billing function of the MDM, which provides validated Billing Determinants to the CIS.

### MVRS File Format
Itron’s PC-based handheld meter reading software file format.

### Performance Testing, Stress Testing or Scalability Testing
Testing to measure and quantify SmartWorks system and network performance based on pre-defined criteria.

### Post Implementation Grace Period
Calendar days after Actual Solution Acceptance Date per the IMS for each phase in which SmartWorks Software is operating as Customer’s primary operating system with respect to functionality contained herein.

### Register Read Data
A value provided by the meter that is shown on the meter’s faceplate and hence can be validated by the customer by visual inspection of the meter. This can include:
- Cumulative Consumption Register Read – total measured consumption since the meter was manufactured or refurbished. Typical units of measure include gallons per cubic foot or cubic meter for water meters.
- Time of Use Consumption Register (total consumption during a specific time of use window)

### SaaS Agreement
The Software as a Service Agreement dated [INSERT DATE] between Customer and SmartWorks.

### SCP, SCP Portal or myaccount.saws.org
SAWS Customer Portal

### SmartWorks Project Schedule
SmartWorks internal plan, components of which may be incorporated into the Integrated Master Schedule (IMS).

### Solution
The set of related software programs and Professional Services set forth in this Statement of Work, including the SmartWorks Software.

### System Integration Testing
Testing the core Solution (Configuration, Interfaces, Reports, and Modifications) against agreed upon functional and integration requirements.

### Unit Testing
Testing individual Solution components to validate that each component meets the specifications set forth during the project.
User Acceptance Testing (UAT) Testing to validate that the Solution behaves per agreed upon requirements as defined in the Functional and Integration Requirements Document based on the test cases and selected scenarios.

VEE Validation, Estimation, and Editing

1.2. Roles and Responsibilities

The activities to be carried out are detailed in each section of this SOW. The table below defines the associated roles and responsibilities at a high level. Changes to team personnel will be carefully evaluated by both parties, in the context of the project, and will be provided to Customer for consideration in advance of any changes. References to the corresponding sections of the SOW are included when a more detailed description is required.

<table>
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<th>Responsibility</th>
<th>Role</th>
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<tr>
<td>Define scope of work with CIS vendor under a separate agreement.</td>
<td>Project Manager (SAWS)</td>
</tr>
<tr>
<td>Establish detailed project plan</td>
<td>Project Managers (SmartWorks/SAWS)</td>
</tr>
<tr>
<td>SmartWorks will revise and update the applicable section of the IMS to include:</td>
<td>Project Manager (SmartWorks)</td>
</tr>
<tr>
<td>a. Detailed implementation phasing and tasks, including activities,</td>
<td></td>
</tr>
<tr>
<td>deliverables/milestones, dependencies, risks/mitigations, and assumptions</td>
<td></td>
</tr>
<tr>
<td>and issues</td>
<td></td>
</tr>
<tr>
<td>b. Detailed implementation schedule, with tasks/activities, deliverables/</td>
<td></td>
</tr>
<tr>
<td>milestones, and identification of variables that can impact the schedule</td>
<td></td>
</tr>
<tr>
<td>Refined implementation budget based on the results of the requirements</td>
<td></td>
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<tr>
<td>definition and implementation planning efforts outside the Statement of</td>
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</tr>
<tr>
<td>Work herein, according to the established Change Management Process.</td>
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<tr>
<td>Integrate project plan into Integrated Master Schedule (IMS) for all parties</td>
<td>SAWS with the assistance of SmartWorks Project Manager</td>
</tr>
<tr>
<td>Ensure resources are available to carry out tasks defined in Section 8.4</td>
<td>Project Manager (SAWS)</td>
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<tr>
<td>(Customer Resource Involvement) below</td>
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<tr>
<td>Engage in Customer tasks defined in Roles and Responsibility Matrix.</td>
<td>Project Team (SAWS)</td>
</tr>
<tr>
<td>Ensure resources are available to perform work as defined in SOW</td>
<td>Project Manager (SmartWorks)</td>
</tr>
<tr>
<td>Ensure assistance and cooperation by third-party vendors (including AMI, CIS,</td>
<td>Project Manager (SAWS)</td>
</tr>
<tr>
<td>and GIS)</td>
<td></td>
</tr>
<tr>
<td>Participate in weekly project calls</td>
<td>Entire Project Team (SmartWorks/SAWS)</td>
</tr>
<tr>
<td>Responsibility</td>
<td>Role</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Configure, with the assistance of SmartWorks’s infrastructure specialist, a Virtual Private Network (“VPN”) to enable Customer access to the SmartWorks Hosting Facility (applications on the SmartWorks Hosting Facility may not be exposed on the internet).</td>
<td>Project Team (SAWS)</td>
</tr>
<tr>
<td>Provide SAWS IT personnel with SmartWorks connectivity requirements and consult with SAWS IT personnel on SmartWorks’s experiences with similar project implementations</td>
<td>Infrastructure specialist (SmartWorks)</td>
</tr>
<tr>
<td>SmartWorks will establish a direct network connection to the AMI vendor(s) per Schedule F (SolutionRequirementsAppendix).</td>
<td>Infrastructure specialist (SmartWorks)</td>
</tr>
<tr>
<td>Perform initial install of the SmartWorks Software in SmartWorks Hosting Facility</td>
<td>Infrastructure specialist (SmartWorks)</td>
</tr>
<tr>
<td>Install SmartWorks Software modules as per Section 2 (SmartWorks Software Implementation Scope) below</td>
<td>Consultants (SmartWorks)</td>
</tr>
<tr>
<td>Provide Deliverables as defined in Section 2.5 (Project Deliverables and Work Products) below</td>
<td>Consultants (SmartWorks)</td>
</tr>
<tr>
<td>Provide AMI infrastructure and meter data</td>
<td>Metering (SAWS via AMI vendor)</td>
</tr>
<tr>
<td>Provide input data for integration points as defined in Section 4 (Software Integrations) below</td>
<td>Project Team (SAWS)</td>
</tr>
<tr>
<td>Install and configure integration points as defined in Section 4 (Software Integrations) below</td>
<td>Consultants (SmartWorks)</td>
</tr>
<tr>
<td>Perform Unit Testing, System Testing, and Integration Testing</td>
<td>Consultants (SmartWorks)</td>
</tr>
<tr>
<td>Perform User Acceptance Testing</td>
<td>Project Team (SAWS)</td>
</tr>
<tr>
<td>Provide support during User Acceptance Testing</td>
<td>Consultants (SmartWorks)</td>
</tr>
<tr>
<td>Complete “Deliverable Acceptance Criteria” document</td>
<td>Project Managers (SAWS / SmartWorks)</td>
</tr>
<tr>
<td>Perform configuration updates once training has been delivered and User Acceptance Testing is completed. Note: Guidance will be provided by SmartWorks until the project is deemed completed.</td>
<td>Project Team (SAWS)</td>
</tr>
<tr>
<td>Develop and document system configurations and processes to meet specifications as contracted.</td>
<td>Consultants (SmartWorks)</td>
</tr>
<tr>
<td>Consult with Customer to support the implementation of requirements specifications, including gathering information related to existing IT systems, infrastructure, and SAWS-developed business processes.</td>
<td>Consultants (SmartWorks)</td>
</tr>
<tr>
<td>Consult and support Customer in identifying the need to augment, modify, and enhance current business practices to support the implementation of requirements specifications.</td>
<td>Consultants (SmartWorks)</td>
</tr>
<tr>
<td>Provide project management, technical implementation resources, training resources, testing resources, support service resources, and contract administration for the implementation of the scope of work as defined herein.</td>
<td>Consultants (SmartWorks)</td>
</tr>
</tbody>
</table>
### Responsibility

<table>
<thead>
<tr>
<th>Responsibility</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coordinate with SAWS using the Change Management Process for any scope of work or change orders.</td>
<td>Consultants (SmartWorks)</td>
</tr>
<tr>
<td>Perform the requisite due diligence on Customer’s IT infrastructure and software applications to supply accurate and complete information to support requirements specifications development per the baseline schedule.</td>
<td>Project Team (SAWS)</td>
</tr>
</tbody>
</table>

### 1.3. Related Documents

The related and referenceable documents to the SOW between Customer and SmartWorks consist of Specifications, SmartWorks responses to the Specifications, Drawings, Integrated Master Schedule, and SAWS Standards referenced as Schedules in the SaaS Agreement and the PSA. These documents in conjunction with the SOW are to be used in support of delivering the solution as follows:

- Schedule B – Support Services
- Schedule C – Service Availability
- Schedule F – Minimum Requirements and Minimum Requirements Appendix
- Schedule H – Data Security
- Schedule I – Solution Architecture documents
- Schedule J – SAWS VTAQ
- Schedule K – SAWS IS Standards
- Schedule N – Integrated Master Schedule Baseline

In addition, the following Appendices are incorporated herein and are to be used in support of delivering the solution:

- Appendix A – Proposed Change Order Template
- Appendix B – Proposed Kickoff and Discovery Agenda
- Appendix C – Professional Services Fees

### 2. SmartWorks Software Implementation Scope

The scope of this Statement of Work is to implement the SmartWorks Software and Solution for Customer and to train Customer’s key people on the operation of the SmartWorks Software. Customer will procure and install its respective advanced meters and supporting network infrastructure.

SmartWorks will deploy four (4) instances of the SmartWorks Software at the SmartWorks Hosting Facility in the United States, per the relevant contract Schedules of the following environments:

1) Dev/Test environment
2) QA environment
3) Production environment
4) Disaster Recovery environment
The intent of the test environment is to test new or existing functionality with a minimal set of data representative of the meter population prior to a Production environment update.

All four (4) instances of the underlying infrastructure will be provisioned and operational at the beginning of the Pilot Phase and handed over to Customer during the Pilot Phase.

Each environment will be fully integrated and operational as defined in Sections 9.1 (Software Progression and Configuration Management) and Section 11 (Project Deliverables / Completion Criteria Summary) of the SOW.

### Server Specification Assumptions

<table>
<thead>
<tr>
<th></th>
<th>Storage</th>
<th>Meter Population</th>
<th>Integrations</th>
<th>VEE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dev/Test instance</td>
<td>1 year</td>
<td>Subset of meters</td>
<td>Enabled as required</td>
<td>Enabled as required</td>
</tr>
<tr>
<td>QA instance</td>
<td>1 year</td>
<td>Meter Deployment</td>
<td>All integrations defined in Section 3, not real time.</td>
<td>Enabled as required</td>
</tr>
<tr>
<td></td>
<td></td>
<td>following table in Section 2.2</td>
<td>Real time integrations only enabled/active as required e.g. DataSync, real time events, remote actions</td>
<td></td>
</tr>
<tr>
<td>Production instance</td>
<td>3 years</td>
<td>Meter Deployment</td>
<td>All integrations defined in Section 3</td>
<td>Enabled</td>
</tr>
<tr>
<td></td>
<td></td>
<td>following table in Section 2.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disaster Recovery</td>
<td>3 years</td>
<td>Meter Deployment</td>
<td>No live integration</td>
<td>Disabled</td>
</tr>
<tr>
<td></td>
<td></td>
<td>following table in Section 2.2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 2.1. Storage

The SmartWorks Software in the Production environment is capable of importing, processing, and storing thirty-six (36) months of data for the meters reflected in the Meter Configuration table in Section 2.2. An archive and purge process will be used for data older than thirty-six (36) months. Archived data will be recoverable for a period of five (5) years.

To restore a location’s data, users have the ability to enter the location number or meter ID. Once the restore execution is complete, all data for the selected meter ID, or for all meters associated with the selected location number, will now be available in the system again and can be viewed in graphs, tables, or other reports. This data will remain in the system indefinitely and will be excluded from further data purge processes. Users also have the ability to configure a “Data Purge Exclusion Meter List”.

Changes to storage and data processing requirements, including storage duration, meter counts, configuration of intervals length, or number of channels, impact the storage requirements submitted with SmartWorks’s proposal. These may be brought into scope using the Change Management process described in section 7.3.

In Phase 2, a set of test meters in the pre-production environment will be defined by Customer as being eligible for testing functionality.
2.2. Meter Configuration

The SmartWorks Software is capable of importing, processing, and storing meter usage data based on the interval length and channels defined below.

<table>
<thead>
<tr>
<th>Program Phases</th>
<th>Phase 2: Pilot</th>
<th>Phase 3: Full Deployment</th>
<th>Steady State Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>2020</td>
<td>2021</td>
<td>2022</td>
</tr>
<tr>
<td>AMI Meter Population</td>
<td>5,015</td>
<td>6,170</td>
<td>135,405</td>
</tr>
<tr>
<td>Interval Length</td>
<td>60 min</td>
<td>60 min</td>
<td>60 min</td>
</tr>
<tr>
<td>Meter Channel</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

In addition to the above AMI meters, the SmartWorks Software will be configured to synchronize AMR meters from the CIS. Monthly register reads will be imported for AMR meters as described in Section 3.3 (AMR Reads) below. The import of historical data (meters asset as well as meter reads) is not included as part of the scope of this project.

Note: Total meter population at the time of contracting (AMI & AMR) is approximately 575,000 meters.

2.3. SmartWorks Software Modules

The following SmartWorks Software modules will be installed and configured as part of the scope of this engagement and in accordance with the documents in Section 1.3:

- SmartWorks Compass MDM, including the following modules:
  - MeterSense MDM
  - KPI Dashboard
  - Rate and Revenue Analysis
  - Water Loss Analysis
  - Leak Detection and Notification
  - Targeted Messaging

This section includes a description of each module, as well as their corresponding Pre-Requisites & Assumptions.

2.3.1. MeterSense MDM – Phase 2 Pilot

SmartWorks will install and configure the MeterSense MDM module.

Module functionality includes:
- Support meter deployment
- Reports to help ensure that meters are provisioned correctly and communicating in the field
- Monitor AMI performance
Report on number of reads delivered compared to AMI Service Level Agreement
Support Meter-to-Cash (e.g., Billing activities)
Validation of reads, Billing Determinants, and customer service support
Alert via meter events
Store and report on tampers, leaks, error, and other meter flags

2.3.1.1. Pre-Requisites & Assumptions
- Meter reads are available and imported from the AMI Head End System (“AMI HES”) as defined in Section 3.1 (AMI Head End System Itron) and 3.2 (AMI Head End System Aclara) below.
- Meter events are available and imported from the AMI HES as defined in Section 3.1 (AMI Head End System 1) and 3.2 (AMI Head End System 2) below.
- Meter installation and removal is synchronized with the system of record as defined in Section 3.4.1 (CIS Synchronization Integration) below.
- Data elements required for the configuration of VEE routines are synchronized with the system of record as defined in Section 3.4.1 (CIS Synchronization Integration) below. Examples include, but are not limited to, meter groups, location groups, seasonal, and number of dials.
- After installation of the MeterSense MDM and training by SmartWorks, a SAWS operator could configure meter read validation routines (VEE – Validate, edit, estimate) as defined in SmartWorks User-Guide VEE.
- Data will be presented in the MeterSense MDM reports based on the modules identified in this Statement of Work and the availability of the data described in Section 4 (Software Integrations) below.

2.3.1.2. Deliverables (i.e., functionality, configurations, etc.)
- Day 1:
  - MeterSense MDM module installed and enabled
  - Interface data mapping requirements identified
  - Data integration requirements identified
  - Integration to Weather Network available (as further described in Section 3.7 (Weather Network – Phase 2) below
  - GIS Base Map available (as further described in Section 3.5.1 (Base Map – Phase 2) below
- Day 30:
Network communication established
Asset inventory and End Point installation data uploaded from IPS into MDM, including latitude and longitude
Meter reads and meter events uploaded from AMI 1 into MDM
Meter reads and meter events uploaded from AMI 2 into MDM
LDAP and User Roles are configured
Initial VEE parameters are configured

- Day 60:
  - MVRS Billing functional between MDM and CIS with aggregated monthly reads is available for billing comparison
  - Pilot LDAP and User Roles are configured
  - Pilot VEE parameters that have been agreed upon are configured
  - Final data mapping requirements completed
  - Final Implementation Questionnaire completed

- Pilot Go-Live:
  - Training provided
  - Functionality as described in the following user guides is available (assuming the required data elements are provided as described in Section 3 (Software Integration) below):
    - SmartWorks_User-Guide_SimplifiedDataSync.pdf
    - SmartWorks_User-Guide_BillingInterface.pdf
    - SmartWorks_User-Guide_VEE.pdf
    - SmartWorks_User-Guide_MapViews.pdf
    - SmartWorks_User-Guide_Customizable_Setup_Screens.pdf
    - SmartWorks_User-Guide_FrameworkConfiguration.pdf

- Phase 3 (BR1):
  - User Defined Items, Item Groups, and Virtual Meters are available for configuration based on custom reports requirements identified during the Discovery Sessions

- Phase 3 (BR2):
  - Custom reports or custom queries have been developed based on Customer reporting requirements gathered during the Discovery Session.
  - Final LDAP and User Roles are configured
  - Final VEE parameters that have been agreed upon are configured

2.3.2. KPI Dashboard – Phase 2 Pilot
SmartWorks will install and configure the KPI Dashboard module. The KPI Dashboard enables the user to configure one or more dashboards to display information on Key Performance Indicators (each a “KPI”). A KPI is a metric that is represented by one of the following One-Dimensional or Two-Dimensional KPI Visualization components:
- One-Dimensional KPI Visualization includes: Numeric, Thermometer, or Speedometer
- Two-Dimensional KPI Visualization includes: Area, Bar, Column, Scatter, Pie, or Table

For each KPI, a panel of information is available. This includes:

- Value of the KPI displayed as a numeric value, speedometer graphic, or thermometer graphic.
- If a drilldown link was defined when the KPI was registered, clicking anywhere on the value will launch a window with the drilldown page.
- Color-coded value (i.e. red/yellow/green), depending on settings.
- Max/min statistics and trend area.
- Secondary KPI value, where configured. If the secondary KPI value has been defined with a drilldown link, clicking on the value will launch a window with the drilldown page.

Information on a KPI can be shared via email on a scheduled basis or a threshold-driven exception basis.

A set of standard KPIs are made available with the KPI Dashboard module. These are arranged into a set of standard dashboards. It may be that not all dashboards or KPIs are applicable to a utility depending on available information, modules deployed, and integrations performed. Users may configure their own dashboards from the available KPIs.

2.3.2.1. Pre-Requisites & Assumptions
- Deployment of the SmartWorks Compass MDM Framework, if not already in place.
- Population of any data required for calculation of KPIs.

2.3.2.2. Deliverables (i.e., reports expected, descriptions, etc.)
- Day 1:
  - KPI Dashboard module installed and enabled
- Day 30: Network communication established
  - Standard KPIs available:
    - AMI Health KPI Dashboard
    - MDM Health KPI Dashboard
    - Meter Data Stats KPI Dashboard
- Pilot Go-Live:
  - Training provided
  - Functionality as described in the following user guide is available (assuming the required data elements are provided as described in Section 3 (Software Integration) below):
    - SmartWorks_User-Guide_KPI_Dashboard.pdf
- Phase 3 (BR2):
  - Custom KPIs have been developed based on Customer reporting requirements gathered during the Discovery Session.
2.3.3. Rate and Revenue Analysis – Phase 3 (BR2)

The Rate and Revenue Analysis module enables a user to model billing rates and apply those rates to consumption profiles that have been imported from other systems. Rates may be applied over user-definable timeframes. This allows the user to compare multiple rates for a single consumption pattern.

The user may also use this module to pre-calculate and store pseudo bills by applying one or more rates to one or more consumption profiles for one or more definable time periods. Standard reporting provides comparisons of these calculated bills to assess the impact on utility revenue for different scenarios. Scenarios may include groups of customers switching from one rate to another, changing the parameters that constitute a rate, or introducing a new rate to a group of customers.

For water meters, the Rate Plan functionality of the Rate and Revenue Analysis module allows the specification of a multiplier, a rate, and a tax rate. Block/Tiered rates are also supported. The rate plan’s unique ID, detailed description, active/inactive dates, and bill period proration can be specified.

Example:

<table>
<thead>
<tr>
<th>Rate Plan ID:</th>
<th>Three Tiered Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate Plan Description:</td>
<td>Blocked Water Rate</td>
</tr>
<tr>
<td>Active Date:</td>
<td>20130101</td>
</tr>
<tr>
<td>Inactive Date:</td>
<td>20131231</td>
</tr>
</tbody>
</table>

Bill Period (for proration)
- Minimum Days: 27
- Average Days: 30
- Maximum Days: 33

<table>
<thead>
<tr>
<th>Bill Charges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
</tr>
<tr>
<td>Tier 1</td>
</tr>
<tr>
<td>Tier 2</td>
</tr>
<tr>
<td>Tier 3</td>
</tr>
<tr>
<td>Surcharge</td>
</tr>
</tbody>
</table>

2.3.3.1. Pre-Requisites & Assumptions

- Deployment of the SmartWorks Compass MDM Framework, if not already in place.
- Integration with AMI HES, which will deliver usage interval data.
  - Alternatively, estimation can be deployed (additional scope and hosting requirements to be agreed upon) to create pseudo interval data from periodic consumption information (e.g., FCS Data), such as daily or monthly reads. Where feasible, the pseudo interval data, which represents an estimated or assumed usage profile, is scaled to the actual usage volumes using Customer’s register reads as “bookends” for scaling.
• Synchronization with CIS or other system of record for association of meters with locations and accounts, plus the status of the account (active/inactive).
• Configuration or import of rate structures to be analyzed during Phase 3 BR1 discovery.

2.3.3.2. Deliverables (i.e., functionality, configurations, etc.)
• Day 1:
  o Rates and Revenue Analysis module installed and enabled
• Day 30:
  o Network communication established
• Phase 3 (BR2, or no later then end of BR4):
  o Rates configured or imported from CIS (based on BR1 discovery)
  o TOU Windows configured (if applicable)
  o Applicable meter groups and locations groups configured
  o Training provided
  o Functionality as described in the following user guide is available (assuming the required data elements are provided as described in Section 3 (Software Integration) below):
    ▪ SmartWorks_User-Guide_RateImpactAnalysis.pdf
    ▪ SmartWorks_User-Guide_ItemGrouping.pdf

2.3.4. Water Loss Analysis – Phase 3 (BR2)

The Water Loss Analysis module calculates and continually monitors losses to the greatest level of detail enabled by Customer’s existing metering in the distribution network. Customer is able to focus efforts in the areas of greatest loss, immediately identify increases in loss, and reap greater loss reduction without increasing field costs.

Functionality and implementation delivered:
• Map Views that display District Metered Areas (“DMA”) “meters”, overlaid on the GIS Base Map and color coded:
  o by absolute loss or
  o by percentage loss
• KPI Dashboard with KPIs, including:
  o Total Production, Total Loss Volume, Total Loss Percentage
  o Historical loss metric as above for last year
  o Number of DMAs/Zones above X% loss
• Loss Summary View
  o Loss Summary View
    ▪ Tabular report
  o Setup parameters to be configured by the user:
    ▪ Date Range and DMA Group, potentially filtered to display a selected quantity of meters above/below defined thresholds
  o One row per DMA and columns for:
- Area/Zone ID
- Numbers of Consumer and Contributors
- Total Volumes for Consumers and Contributors
- Total Loss Volume
- Total Loss %
- Area/Zone usage as % of total (i.e. relative size of area)
- Other metrics may be added depending on available data

Drilldowns hyperlinked from the Summary Report to include:
- Map of the DMA
- List of Consumers, potentially with
  - Consumption in the defined date range
  - Consumption compared to last year
  - Percentage increase/decrease from last year
  - Average daily consumption

2.3.4.1. Pre-Requisites & Assumptions

- DMAs or zones are defined with contributing and consuming meters, plus storage volumes or flows known for each zone. It is assumed that DMAs/zones can be isolated so that loss can be calculated for each DMA/zone. However, if any DMAs/zones cannot be isolated, they can be grouped together for purposes of loss calculation.
- Up-to-date information on distribution hierarchy is known, and associations of contributing meters to consuming meters is available via ongoing synchronization. Customer’s system of record (i.e., CIS or GIS) must provide: (a) a list of parent and child meters, (b) a date-driven relationship (meter hierarchy) with corresponding multipliers. In the case when active/inactive dates are not available, these dates can be inferred during the DataSync process. Customer understands that the accuracy for the historical loss analysis may be affected.
- It is assumed that contributing meters and consuming meters deliver interval usage data in intervals between 15 and 60 minutes. For bulk/master meters and storage flows, this data is typically provided by an integration to a “Source,” e.g., SCADA system. For meters that do not deliver interval usage data, SmartWorks will quote the cost of performing an automatic calculation to spread longer term measured usage (e.g., monthly or weekly volume) into equal hourly volumes. These pro-rated hourly volumes will be used in the loss calculations.
- It is assumed that Customer can provide an accessible URL to the base map for its ESRI-based GIS system, to act as the Base Map for the SmartWorks geo-spatial views. It is assumed that area/zones are visible as a layer in this GIS map.

2.3.4.2. Deliverables (i.e., functionality, configurations, etc.)

- Day 1:
  - Water Loss Analysis module installed and enabled
- Day 30:
  - Network communication established
- Phase 3 (BR2, or no later than end of BR4):
  - Meter Hierarchy imported as per Section 3.5.2 (Meter Hierarchy) below
Supply Water Data imported as per Section 3.6 (System of Record (SOR) for Supply Water Data) below

- Applicable Virtual Meters configured
- Training provided
- Functionality as described in the following user guides is available (assuming the required data elements are provided as described in Section 3 (Software Integration) below):
  - SmartWorks_User-Guide_VirtualMeters.pdf
  - SmartWorks_User-Guide_LossAnalysis.pdf
  - SmartWorks_User-Guide_LineGraphAnalysis.pdf
  - SmartWorks_User-Guide_MeterUsageComparison.pdf

2.3.5. Leak Detection and Notification – Phase 3 (BR2)

The Leak Detection and Notification module provides an analytical software solution that identifies leaks both from meter notifications and using intelligent data analysis. A prioritized list of customers to be contacted is then produced, filtered for false positives and duplicates, and refined on an ongoing basis to eliminate wasted effort.

Functionality Delivered:

- Import Leak Events from AMI meters.
- Monitor for Continuous Consumption, with parameters configurable by group.
- Generate Leak Notifications using either or both of the approaches above.
- Send notifications via email to customers, with summary reports to utility personnel.
- Registered Report: lists Leak Notifications generated over a selected period of time (default to last seven days)
- Registered Report: lists customers that have received Leak Notification but the leak still persists for a selected period of time (default to three days).
- Leak Detection KPI Dashboard displaying.
  - Leaks Detected: Number of locations with a suspected leak.
  - Average Leak Time: Average time of leak, based on Continuous Consumption statistics.
  - Average Leak Volume: Average leak volume, takes the average of each interval that reported a Continuous Consumption failure.
  - Leak Notifications Sent: Leak Notifications sent to customers. This KPI is based on a rule specifically created for customers that emails the leak notification to customers, reported on a daily basis. Customer will import customer/account/location information from the CIS.
  - Total Leak Volume: Total Volume of all reported Continuous Consumption failures over the previous 6 months’ time span.
  - Average Leak Volume: Average leak volume of all reported Continuous Consumption failures over the previous 6 months.
2.3.5.1. Pre-Requisites & Assumptions

- Utilization of the Leak Notifications functionality from meters requires meter-generated leak notifications to be delivered to the SmartWorks Software via standard Advanced Meter Infrastructure integration methods.
- Utilization of usage data analysis for leak notification requires hourly (or finer) interval usage data to be delivered to the SmartWorks Software via standard Advanced Meter Infrastructure integration methods.
- Customer communications for notification of leaks is assumed to leverage existing customer communication approaches or email communications from the SmartWorks Software, using email addresses provided via synchronization from Customer’s system of record.
- Synchronization exists with CIS for association of meters with locations and accounts, plus the status of the account (active/inactive).
- Map views require latitude/longitude information for each meter to be available via synchronization with the system of record.
- Customer contact details must be accessible by the SmartWorks Software for any end customer communications sent by the SmartWorks Software. If customer information cannot be synchronized, it is assumed that utility or generic email distribution list will be provided for the purpose of the Leak Notification functionality.

2.3.5.2. Deliverables (i.e., functionality, configurations, etc.)

- Day 1:
  - Leak Detection and Notification module installed and enabled
- Day 30:
  - Network communication established
- Phase 3 (BR2):
  - Leak Events imported from the AMI
  - Continuous Consumption VEE configured
  - KPIs and reports configured
  - Notifications provided to applicable distribution list
  - Training provided
  - Functionality as described in the following user guides is available (assuming the required data elements are provided as described in Section 3 (Software Integration) below):
    - SmartWorks_User-Guide_ContinuousConsumption.pdf

2.3.6. Targeted Messaging – Phase 3 (BR2)

The Targeted Messaging module makes Customer’s customer communications more effective by personalizing the right messages to the right customer groups depending on usage patterns, demographics, and other information.

This module provides a mechanism for two types of messages:

- Periodic Messages
  - To automatically produce and optionally send periodic – e.g., monthly – PDF reports to customers that contain information such as characteristics and usage specific to that customer, plus general...
information from Customer. Information is filtered, targeted, and delivered based on intelligently defined Location Groups.

- **Ad Hoc Messages**
  - To produce and send one-time or ad hoc email communications that can contain customer-specific data and general information.

To view a history of scorecard emails sent to customers, a Periodic Message Delivery Log will be accessible by users. They will be able to perform a search by account ID, location number, email address, or date.

This module is not designed for emergency use. It does not assume that contact details will be available for all customers, and there is no mechanism for confirmed delivery of messages. For these reasons, this module is intended to supplement but not replace Customer’s existing methods of communication for emergency situations.

**Implementation:**
- Install and perform basic configuration of functions and menu items for
  - Periodic Messaging
  - Ad Hoc Messaging
- Discovery Session with Customer to determine initial configurations for Periodic Messages, their cover emails (if needed), and Ad Hoc email messages.
- Provide a template HTML Ad Hoc message configuration
- Configure initial settings for Periodic Messages
- Configure one sample Education Item for illustration

**2.3.6.1. Pre-Requisites & Assumptions**
- Additional demographic data that is to be used in segmentation (categorization) of customers will be available in the CIS and accessible via data synchronization. Interfaces to additional systems can be quoted on request.
- Customer is responsible for defining the content of customer messaging/communications based on the tools and training described in this document.
- Customer usage data is made available in high quality form from the meter reading system and is accessible using a standard **SmartWorks Software** integration.
- Email distribution lists for each segment will be configured by Customer and made accessible via integration with CIS.

**2.3.6.2. Deliverables (i.e., functionality, configurations, etc.)**
- **Day 1:**
  - Targeted Messaging module installed and enabled
- **Day 30:**
  - Network communication established
- **Phase 3 (BR2):**
  - Customer bulletin/scorecard developed
  - Intelligent Segmentation scores configured
2.4. Reporting

All standard reports available within the SmartWorks Software will be made available for all licensed modules.

A scope of 315 hours will be assigned to the design, development, and testing of custom reports or custom queries based on Customer reporting requirements gathered during the Discovery Session and throughout the course of the project. This includes the development of custom KPI Dashboard reports. Requirements for custom reports must be defined prior to each Testing phase, but no later than Phase 3 BR2.

Customer can decide to re-assign all or parts of these hours to other project activities, such as additional remote training.

No additional custom reports have been identified for delivery. However, if during the project, Customer identifies a requirement for a custom report, the services can be brought into scope using the Change Management Process described in section 7.3.

2.4.1. Deliverables

Phase 3 (BR2):
- Rules engine enabled
- Requirements identified and documented
- Custom KPIs configured as documented in the requirements document
- Custom reports configured as documented in the requirements document
- Training provided

2.5. Project Deliverables and Work Products Summary

The following deliverables, milestones and work products are included in this project.

- **Deliverables** are items created during the project that may require formal review and approval by the customer.
- **Work products** are items created during the project that are reviewed by the customer but do not require formal approval by the customer.

2.5.1. Deliverables

The following list identifies the key Deliverables associated with this project:

<table>
<thead>
<tr>
<th>Deliverables</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Functional and Integration Requirements Documents</td>
<td>Requirements documents include: System Integration and Timelines - This document confirms the systems Compass will be connecting to, as well as the connection</td>
</tr>
</tbody>
</table>
### Work Products

The following list identifies the key Work Product documentation associated with this project:

<table>
<thead>
<tr>
<th>Work Product</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Schedule</td>
<td>Project Plan, including high level Milestones, schedule, and resourcing (Components to be inserted into IMS)</td>
</tr>
<tr>
<td>Deliverable Acceptance Criteria</td>
<td>Acceptance of Deliverables throughout the project. Final</td>
</tr>
</tbody>
</table>
3. Software Integrations

During software integration:

- Customer will act as or provide an integration coordinator who will be responsible for overseeing integration communications for this project.

  The integration coordinator role consists of securing, as required and in a timely fashion, the assistance and cooperation of third-party vendors. A change order may be required if a third-party vendor is unavailable or non-cooperative and causes a significant impact to the project schedule or effort, which occurs when resources will need to remain engaged in the project while the deliverables are not progressing.

- SmartWorks will provide advice and recommendations regarding its experience and leading practice.
SmartWorks will make a reasonable attempt to provide sufficient lead time when making requests for assistance from third-party vendors. When deemed appropriate by Customer, SmartWorks will also work directly with third-party vendors if direct communication will result in efficient execution of the project.

Any version changes to integrating systems that occur during the scope of work outlined herein will be reviewed by SmartWorks and may require a change order if integration updates or re-testing activities are required.

Details related to the currently supported integration methods can be found in SmartWorks_Specification_Technical_Interface document.pdf.

The following Integrations are included in the scope for the project:

3.1. AMI Head End System (Itron) – Phases 2 & 3(BR1)

The SmartWorks Software will integrate with the AMI HES to:

- Import the current day’s readings as well as older reads that were previously missed. Interval and register read data will be received from the AMI using a standard flat file format mutually agreed upon between the AMI vendors and SmartWorks for import into the SmartWorks Software (e.g., CMEP, *.csv).
- Import meter event data from the AMI using a flat file format. For real time events, MultiSpeak® methods (v3.0 or 4.1) will be used if available. Examples include alerts such as tamper, leak, etc. Specific alarms will be defined between the AMI vendor and Customer.
- Where the functionality is supported by the AMI meters or other compatible meters, the SmartWorks Software will integrate with the AMI HES to perform On Demand reads and Remote Connects & Disconnects using MultiSpeak® methods (v3.0 or 4.1) or a mutually agreeable API call.

If flat files are used for providing meter data, the files are expected to be delivered by 7:00 am Local Time or an agreed upon time suitable to SmartWorks and Customer in order for the SmartWorks Software to perform the VEE process. The AMI HES may deliver files at multiple times during the day in order to collect the maximum amount of meter data.

It is assumed that the AMI HES will be installed on the Customer’s system in time for SmartWorks to perform its development and testing activities.

3.1.1. Phase 2 -Deliverables

- Day 1:
  - Data integration requirements identified
  - Initial Implementation Questionnaire completed
- Day 30:
  - Initial meter reads and meter events uploaded from the AMI into MDM
Applicable remote actions triggered from the MDM to the AMI

- Day 60:
  - Final Implementation Questionnaire completed
  - Automated meter reads and meter events uploaded from the AMI into MDM
  - Training provided

3.1.2. Phase 3.1 - Deliverables
- Requirements documents approved pertaining to BR 3.1 Activities.
- MeterSense MDM module fully functional as described in Section 2.3.1 above

3.2. AMI Head End System (Aclara) – Phase 2 & 3(BR1)

The SmartWorks Software will integrate with the AMI HES to:

- Import the current day’s readings as well as older reads that were previously missed. Interval and register read data will be received from the AMI using a standard flat file format mutually agreed upon between the AMI vendors and by SmartWorks for import into the SmartWorks Software (e.g., CMEP, *.csv).
- Import meter event data from the AMI using a flat file format. For real time events, MultiSpeak® methods (v3.0 or 4.1) will be used if available. Examples include alerts such as tamper, leak, etc. Specific alarms will be defined between the AMI vendor and Customer.
- Where the functionality is supported by the AMI meters or others compatible meters, the SmartWorks Software will integrate with the AMI HES to perform On Demand reads and Remote Connects & Disconnects using MultiSpeak® methods (v3.0 or 4.1) or a mutually agreeable API call.

If flat files are used for providing meter data, the files are expected to be delivered by 7:00 am Local Time or an agreed upon time suitable to SmartWorks and Customer in order for the SmartWorks Software to perform the VEE process. The AMI HES may deliver files at multiple times during the day in order to collect the maximum amount of meter data.

It is assumed that the AMI HES will be installed on the Customer’s system in time for SmartWorks to perform its development and testing activities.

3.2.1. Phase 2 - Deliverables

- Day 1:
  - Data integrations requirements identified
  - Initial Implementation Questionnaire completed

- Day 30:
  - Discovery sessions have been held
  - Initial meter reads and meter events uploaded from the AMI into MDM
  - Applicable remote actions triggered from the MDM to the AMI

- Day 60:
  - Final Implementation Questionnaire completed
  - Automated meter reads and meter events uploaded from the AMI into MDM
Training provided

3.2.2. Phase 3.1 -Deliverables
- Requirements documents approved pertaining to BR 3.1 Activities.
- MeterSense MDM module fully functional as described in Section 2.3.1 above

3.3. Automated Meter Reading - AMR (FCS) Reads – Phase 3(BR1)

The SmartWorks Software will integrate with FCS to import monthly register read data as of the beginning of Phase 3(BR1). Historical reads are not included as part of the scope of this project. Customer will provide the register reads in a MVRS file format, which will be made available on an ftp/sftp site.

- During Pilot Deployment, AMR (FCS) Reads will continue to be sent to IPS.
- During Full Deployment, the intent is for AMR (FCS) Reads to go directly to the SmartWorks Software, per the published Solution Architecture document.
  - IPS will send Read Cycle Files to FCS for gathering reads of AMR meters,
  - The MeterSense MDM module will import the AMR’s MVRS register read file from the FCS software.

Assumptions for importing MVRS file: All required attributes in the MVRS file, such as billing service route and meter to customer information, are provided to the MeterSense MDM module as part of the DataSync process.

It is assumed that these AMR monthly register reads will be validated using existing VEE routine. Standard Compass Register read reports will be used. It is assumed that no interval reads will be generated by the SmartWorks Software to fill in usage between these register reads.

3.3.1. Phase 3 (BR1) -Deliverables
- Discovery Sessions have been held
- AMR reads imported and validated, as documented in the requirements document
- Requirements documents approved pertaining to BR 3.1 Activities
- MeterSense MDM module fully functional as described in Section 2.3.1 above
- Training provided

3.4. Customer Information System (CIS) - IPS – Phase 2 & 3(BR1)

In collaboration with Customer or Customer’s agent(s), SmartWorks will provide the following integrations with Customer’s CIS instances. The integrations will require ongoing support from the CIS vendor through the SmartWorks integration project.

3.4.1. CIS Synchronization Integration

SmartWorks will enable the import of customer and meter data into the SmartWorks Software for validation of AMI data. A daily full periodic synchronization activity will occur.

The information to be provided from the CIS may include the following:
<table>
<thead>
<tr>
<th><strong>SmartWorks Software</strong></th>
<th><strong>Notifications (per Sections 2.3.5 &amp; 2.3.6 above)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>METERS (required): List of meters with identifiers, meter types</td>
<td>X</td>
</tr>
<tr>
<td>METER COORDINATES (required): Meter latitude and longitude information</td>
<td>X</td>
</tr>
<tr>
<td>LOCATION (required): List of location (account) numbers, service addresses</td>
<td>X</td>
</tr>
<tr>
<td>METER LOCATION (required): A date-driven cross reference between meter and location number (i.e., when a meter is installed and removed from a location)</td>
<td>X</td>
</tr>
<tr>
<td>METER CONNECTION STATUS (required): State of the meter (ON/OFF)</td>
<td>X</td>
</tr>
<tr>
<td>METER ALIAS: Descriptive information related to the meter, combining meter/location attributes</td>
<td>X</td>
</tr>
<tr>
<td>BILLING SCHEDULE: Cycle/Route schedule indicating billing period and reading period</td>
<td>X</td>
</tr>
<tr>
<td>ACCOUNTS: Customer account information (such as account ID, occupant code)</td>
<td>X</td>
</tr>
<tr>
<td>ACCOUNT SERVICES: A date-driven cross reference between account and location (i.e., customer move in/out information)</td>
<td>X</td>
</tr>
<tr>
<td>CUSTOMERS: If made available by Customer, list of end customers with identifiers, names, and email address</td>
<td>X</td>
</tr>
<tr>
<td>CUSTOMER/ACCOUNTS CROSS REFERENCE: A date-driven cross reference between account and customers</td>
<td>X</td>
</tr>
<tr>
<td>METER RATE CODES: Rate codes associated to each meter</td>
<td>X</td>
</tr>
<tr>
<td>RATES PLANS: Simple rate elements (e.g., Tiered, TOU, Fixed) as defined in Section 2.3.3 above</td>
<td>X</td>
</tr>
</tbody>
</table>

**Notes:**

- Meters to be synchronize in the MeterSense MDM module are meters currently installed at the time of the Pilot phase of the project, as well as future meters. Historical asset data prior to the start of the project will not be synchronized into the MeterSense MDM module.
- If Customer information cannot be synchronized to the MeterSense MDM module, it is assumed that email distribution lists for each notification segment (e.g., Leak, Missing read) will be configured by Customer and made accessible via integration with CIS.
- It is expected that when a radio is installed or removed from a meter, a cross reference between meter ID and associated radio ID will be maintained in the CIS and provided during DataSync.
- Phase 2 (Pilot) and Phase 3 (BR1): This integration will be established using a flat file (*.csv). The file will be developed by the CIS vendor or another agent of Customer. The DataSync files must be made available prior to commencement of integration work.
Depending on Customer requirements, the synchronization will occur between one (1) to three (3) times per day and will be scheduled to occur after the Customer database has been updated. The .csv file will be placed on a sftp site for download by the SmartWorks Software.

**Note:** It is assumed that for the purpose of Meter Provisioning (i.e., installation notification from the CIS to the AMI), the CIS will create a separate flat file that meets the AMI’s data requirements. The SmartWorks Software will be used for the purpose of transferring the file from the CIS to the AMI system, without data manipulation and by following a standard sftp protocol.

### 3.4.2. Billing Interface – On Cycle

Customer will bill using register reads, not consumption-based determinants for AMI meters. The CIS will use the register reads provided to calculate the billed consumption amount.

At the time of the proposed Phase 2 Workshops, Customer will make a determination to the flat file method (e.g., MVRS, *csv.) by which billing determinants will be provided to the CIS (e.g. INFOR) (e.g., Request/Response and/or the use of Customer provided Schedules stored in the MDM).

It is assumed that all reads required for the purpose of billing will be provided by the AMI system as well as the AMR system. Should the SmartWorks Software be required to perform calculations, those services can be brought into scope using the Change Management Process described in section 7.3.

### 3.4.3. Billing Interface – Off Cycle (MultiSpeak)

The CIS and the SmartWorks Software will use a MultiSpeak® web service call (synchronous SOAP call) to request and receive off-cycle meter reads. The CIS will apply the correct rate to each register.

Supported MultiSpeak® methods for billing reads include:
- GetLatestReadingByMeterID (MS4.1) or GetLatestReadingByMeterNo (MS3.0)
- GetReadingsByMeterID (MS4.1) or GetReadingsByMeterNo (MS3.0).
- GetLatestReadings (MS 4.1 and 3.0).
- GetLatestReadingsByMeterIDList (MS 4.1 and 3.0).

### 3.4.4. OnDemand read initiation from CIS (MultiSpeak®)

The SmartWorks Software will provide the ability for a user to use the CIS to initiate a remote meter action (On Demand read).

MultiSpeak® methods will be used to accomplish this integration. The SmartWorks Software will broker the transaction by integrating with the AMI HES.
3.4.5. Phase 2 - Deliverables

- Day 1:
  - Initial Implementation Questionnaire completed
  - Initial Data Mapping requirements completed
- Day 30:
  - Discovery Sessions have been held
  - Asset inventory and End Point installation data uploaded from IPS into MDM, including latitude and longitude
- Day 60:
  - Final Data Mapping requirements completed
  - Final Implementation Questionnaire completed
  - MVRS Billing functional between MDM and CIS with aggregated monthly reads available for billing comparison
  - OnDemand read triggered from the CIS and brokered by the MDM to the AMI, assuming the interface is ready and made available by the CIS.
  - Training provided

3.4.6. Phase 3 (BR1) - Deliverables

- Automated daily synchronization of Asset inventory and End Point installation data uploaded from IPS into MDM
- Full Meter to Cash process functional and ready to use in IPS Production
- Requirements documents approved pertaining to BR 3.1 Activities.
- MDM fully functional as described in Section 2.3.1 above
3.5. Geographic Information System (GIS) Data Usage - ESRI – Phases 2 & 3(BR2)

3.5.1. Base Map - Phase 2
The SmartWorks Software will be configured so that meter data will be overlaid on top of one or more “Base Maps” from the ESRI GIS via URL live link. With this capability, Customer will be able to view meter data together with its other data layers within the SmartWorks Software.

Customer will create a URL and provide a Base Map to SmartWorks for configuration of the MeterSense MDM module. This scope of integration assumes Customer is hosting the GIS on a web server and can provide a URL.

3.5.2. Meter Hierarchy - Phase 3(BR2)
For the purpose of the Water Loss Analysis module, it is assumed that the SmartWorks Software will receive a connectivity model to include meter relationships (e.g., distribution model) and corresponding multipliers. This data will be made available using flat files. If active/inactive dates are not available, the historical relationships will be inferred by the SmartWorks Software based on the DataSync date, which may impact the accuracy of the loss analysis if the relationship change didn’t occur on the same date as the DataSync date.

Final requirements will be determined during the BR2 Discovery Session.

3.5.3. Phase 2 - Deliverables
- Day 1:
  - GIS Base Map available
- Day 30:
  - Meters visible on map, based on latitude/longitude provided in the Meter Asset inventory upload from the IPS to the MDM
- Day 60:
  - Training provided

3.5.4. Phase 3.2 - Deliverables (or no later than 3.4)
- Meter Hierarchy uploaded from GIS
- Virtual Meters created based on Meter Hierarchy provided

3.6. System of Record (SOR) for Supply Water Data – Phase 3(BR2)
For the purpose of the Water Loss Analysis module, 60 minutes interval supply data will be imported into the SmartWorks Software from Customer’s SOR system, e.g. SCADA. The data will be a delimited flat file-based interface using a CMEP or a SmartWorks Software generic file format.

It is assumed that the number of meters and corresponding volume of interval data imported for the purpose of the Water Loss Analysis module will be reasonable and will align with the server specifications assumptions used for the purpose of the SaaS Agreement.
Final requirements will be determined during the Phase 3 BR2 Discovery Session. Final implementation is slated for completion during Phase 3 BR 2, which may need to occur thereafter but no later than Phase 3 BR4.

### 3.6.1. Deliverable(s)
- Supply data imported as reads into the MeterSense MDM module
- Supply data salidated as per VEE configuration agreed upon during Discovery Sessions

### 3.7. The Weather Network – Phase 2

The SmartWorks Software will integrate weather data services with daily feed of observed weather data received from the Weather Network weather station determined to be closest to a customer’s location.

The following weather data, if provided by the weather station, will be imported into the SmartWorks Software:
- Humidity (Hourly)
- Precipitation (Daily)
- Temperature (Hourly)
- Wind Speed (Hourly)
- Wind Direction (Hourly)
- Weather Conditions (Hourly)

This data is automatically downloaded from SmartWorks’s data provider for a weather station or stations in the Customer’s service area and is automatically inserted into the SmartWorks Software database.

### 3.7.1. Deliverable(s)
- Day 30: Integration to Weather Network available for the SmartWorks Software to include weather data

### 3.8. SCP Portal Interface – Phase 3(BR1)

The Smartworks Software will integrate with the SCP Portal to provide hourly Interval Read Data as well as daily midnight register read value, using a data export of the following information, for each Location ID (Premise ID):
- Location ID (Premise ID)
- meter_id
- Read date time
- Hourly consumption (24hrs)
- Midnight Register Read Value
- Unit of Measure
- Multiplier

It is assumed that all data points required for this integration will be provided by the AMI (meter reads) or the CIS (meter and location attributes). The data will be provided using a delimited .csv flat file. Flat files will be delivered using ftp or sftp transfer protocols.
The SmartWorks Software also has the ability to integrate with the SCP Portal to provide register reads and hourly interval reads data using:

- supported MS3.0 or MS4.1 MultiSpeak Methods or
- MeterSense MDM module SOAP API Messages.

EXAMPLE: Extract from SmartWorks_Specification_Technical_Interface.pdf document:

![Diagram of MultiSpeak method](image)

The MultiSpeak method ‘GetReadingsByMeterIDAndFieldNameIntervalData’ is used for synchronous requests for interval data from MeterSense. The most common use case would be for web presentment products to gather interval readings for analysis and presentment to the customer in real time, thus eliminating the need for redundant storage of interval data within a web presentment tool. The use case is depicted below:

Details about the interval data meter reading format is found in the section on Interval Data Blocks, and sample SOAP messages are available in the section GetReadingsByMeterIDAndFieldNameIntervalData (Incoming).

Final requirements will be determined during the Phase 3 BR1 Discovery Session.

3.8.1. Deliverable(s)

- SCP Portal interface available and functional, as defined in approved requirements document
- Training provided

3.9. EOC Water Mapping – Phase 3(BR2)

The SmartWorks Software will complete integration with EOC Water Mapping to provide a daily data export that could contain alarms, alerts, and events that would aid in water trouble and leak management and assist in the generation of outage visuals. It is assumed that all data points required for this integration will be provided by the AMI (meter reads) or the CIS (meter and location attributes) and that no further calculations are required.

The data will be provided using a delimited .csv flat file. Flat files will be delivered using ftp or sftp transfer protocols.

Final requirements will be determined during the Phase 3 BR2 Discovery Session. Final implementation is slated for completion during Phase 3 BR 2, which may need to occur thereafter but no later than Phase 3 BR4.
3.9.1. Deliverable(s)
   - Integrated EOC Water Mapping available and functional, as defined in approved requirements document
   - Training provided

3.10. IVR Interface – Phase 3(BR4)

Currently not planned to integrate directly with Customer’s IVR. If necessary, the SmartWorks Software would be capable of integrating to an external IVR. Final requirements on the configuration and capability of the integration will be determined during the Phase 3 BR4 Discovery Session.

Pre-Requisites:
- Customer needs to provide any authentication information required to connect to the IVR, such as a local number already owned.

Assumptions
- Customer will handle all billing with the IVR
- If bulk messaging is required, there should be a reasonable limit on the number of messages to be sent
- Testing will likely result in end customer being billed for each message sent

Web API methods supported by the MDM can also be used by the IVR to request meter reads as well as meter events.

Final requirements will be determined during the Phase 3 BR4 Discovery Session.

3.10.1. Deliverable(s)

- IVR Interface available and functional, as defined in approved requirements document
- Training provided

4. Solution Requirements Analysis

During Pilot Deployment (Phase 2) and Full Deployment (Phase 3) of the ConnectH2O Program, SmartWorks will conduct workshops to determine which of the requirements specified in the Solution Architecture Diagrams and Solution Requirements exhibits are necessary for Phase 2 and Phase 3: Full Deployment activities.

4.1. Kick Off and Discovery Sessions

The SmartWorks team will be engaged in the requirement analysis activities as described in the table below. For each onsite session, the SAWS “core project team,” which typically comprises representatives from each department (Billing, CSR, Metering, GIS, IT, Finance), are expected to attend all of the sessions to be able to effectively contribute to the discussions.

An indicative agenda for each session is included in APPENDIX B – Proposed Kick Off and Discovery Agenda. Final agenda will be mutually agreed upon between SmartWorks and SAWS prior to each session.
<table>
<thead>
<tr>
<th>Activity</th>
<th>Subsections</th>
<th>Location</th>
<th>SmartWorks Resources</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kick Off Meeting</td>
<td>• Team Introduction</td>
<td>Onsite</td>
<td>Project Manager Business Analyst Technical Lead Technical Consultant Infrastructure Specialist</td>
<td>2 days</td>
</tr>
<tr>
<td></td>
<td>• Project Overview</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>• Scheduling &amp; Milestones</td>
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<td></td>
<td>• Deliverables</td>
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<td></td>
<td>• Solution Architecture</td>
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<tr>
<td></td>
<td>• Data Mapping requirements document</td>
<td></td>
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<tr>
<td></td>
<td>• Implementation Questionnaire document</td>
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<td></td>
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<tr>
<td>SmartWorks Software Overview Session</td>
<td>• Demo of the system</td>
<td>Remote</td>
<td>Business Analyst Technical Lead</td>
<td>0.5 day</td>
</tr>
<tr>
<td>Discovery Session (Pilot)</td>
<td>• Data Collection: AMI Meter Reads &amp; Events</td>
<td>Onsite</td>
<td>Project Manager Business Analyst Technical Lead Technical Consultant</td>
<td>3 days</td>
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<tr>
<td></td>
<td>• Billing</td>
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<td></td>
<td>• VEE Overview</td>
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<td>• Meter Install/Change/Remove</td>
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<td>• Contact Handling</td>
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<td></td>
<td>• Data Synchronization</td>
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<td>• Daily System Timeline</td>
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<td>• Reports and KPIs</td>
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<td>• Security</td>
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<td></td>
<td>• User Roles</td>
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<tr>
<td></td>
<td>• ESRI Map Servers</td>
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<tr>
<td>Discovery Session (BR1 &amp; BR2)</td>
<td>• Data Synchronization</td>
<td>Onsite</td>
<td>Project Manager Business Analyst Technical Lead</td>
<td>4 days</td>
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<tr>
<td></td>
<td>• Daily System Timeline and System integration</td>
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<td></td>
<td>• Rate and Revenue</td>
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<td></td>
<td>• Water Loss Analysis</td>
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<td></td>
<td>• Leak Detection</td>
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<td></td>
<td>• Targeted Messaging</td>
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<td></td>
<td>• EOC Water Mapping</td>
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<tr>
<td></td>
<td>• Web Portal Interface</td>
<td></td>
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<tr>
<td></td>
<td>• Custom Reports</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activity</td>
<td>Sub Sections</td>
<td>Location</td>
<td>SmartWorks Resources</td>
<td>Length</td>
</tr>
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<td>-----------------------------</td>
<td>--------------------------------------------------------</td>
<td>----------</td>
<td>-------------------------------</td>
<td>--------</td>
</tr>
</tbody>
</table>
| Discovery Session (BR4)     | • Data Synchronization  
                          |          | Onsite                        |        |
|                             | • Daily System Timeline and System integration  
                          |          | Project Manager  
                          |        |
|                             | • IVR Interface                                          |          | Business Analyst  
                          |        |
|                             |                                                        |          | Technical Lead                | 2 days |

**Note:** During exceptional circumstances, Onsite sessions can be held remotely if agreed upon by Customer and SmartWorks.

### 4.1.1. Kick Off Meeting

The purpose of this onsite meeting is to introduce project team members and review the project at a high level. Topics include scheduling, methodology, milestones, communication plan, and short-term focus. Preliminary requirements for each integration are also reviewed.

Additional topics can also include a demo of the SmartWorks Software, as well as a review of infrastructure components, including the Solution Architecture Diagram.

### 4.1.2. Overview Training Session

The Overview Training Session is held with the core user group when initial configuration is complete. This session occurs during the Pilot phase and is held remotely, in preparation for the Onsite Discovery Session, enabling users to navigate the SmartWorks Software prior to the decision-making process that will take place during the Discovery Session.

The Overview Training Session provides users an overview of current system functionality. Upon conclusion of this session, users are able to navigate the SmartWorks Software platform and understand existing configuration.

### 4.1.3. Discovery Sessions

The purpose of the Discovery Sessions is to demonstrate existing functionality of the SmartWorks Software and elicit feedback for updates to that functionality. Emphasis is placed on understanding Customer’s existing business process. The impact to the process due to SmartWorks Software is documented in the Functional and Integration Requirement Document.

### 4.1.4. Remote Workshops

Remote sessions will be scheduled as mutually agreed upon to follow up on the action items documented during the onsite Discovery Sessions and to review Customer’s comments on the Functional and Integration Requirements Document prior to finalizing this document.
## 4.2. Roles and Responsibilities

<table>
<thead>
<tr>
<th>Responsibility</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>SmartWorks will support ConnectH2O workshops with Customer and necessary</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>vendors to define the specific solution requirements for the SmartWorks</td>
<td></td>
</tr>
<tr>
<td>Software and its interfaces to the AMI vendor systems and Customer’s</td>
<td></td>
</tr>
<tr>
<td>enterprise systems. If SmartWorks has similar, previously developed</td>
<td></td>
</tr>
<tr>
<td>functionality as requested by Customer, it will be shared with Customer as</td>
<td></td>
</tr>
<tr>
<td>part of the requirements gathering process.</td>
<td></td>
</tr>
<tr>
<td>SmartWorks will develop documentation reflecting core functional,</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>non-functional requirements, configuration, customization, and business</td>
<td></td>
</tr>
<tr>
<td>processes being requested by Customer, within the scope of the contracted</td>
<td></td>
</tr>
<tr>
<td>effort and integrations, for the Pilot Deployment and Full Deployment time</td>
<td></td>
</tr>
<tr>
<td>periods.</td>
<td></td>
</tr>
<tr>
<td>SmartWorks will develop a solution design document defining each interface</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>and define elements (for example, graphical models, technical detail, and</td>
<td></td>
</tr>
<tr>
<td>flow of events).</td>
<td></td>
</tr>
<tr>
<td>Participate in workshops to create collateral that will document interfaces</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>between the SmartWorks Software, AMI vendor systems, and Customer’s</td>
<td></td>
</tr>
<tr>
<td>enterprise systems.</td>
<td></td>
</tr>
<tr>
<td>a. SmartWorks will conduct workshops with Customer to update the existing</td>
<td></td>
</tr>
<tr>
<td>Solution Architecture Diagram, which describes at a high level the scope of</td>
<td></td>
</tr>
<tr>
<td>development.</td>
<td></td>
</tr>
<tr>
<td>Utilizing the agreed upon Solution Architecture Diagrams, SmartWorks will</td>
<td></td>
</tr>
<tr>
<td>compile development documentation, including technical, functional, and</td>
<td></td>
</tr>
<tr>
<td>integration solution specifications.</td>
<td></td>
</tr>
<tr>
<td>SmartWorks will review Customer’s comments and concerns in review of the</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>Functional and Integration Requirements Documents and make any necessary</td>
<td></td>
</tr>
<tr>
<td>mutually acceptable changes. The updated Functional and Integration</td>
<td></td>
</tr>
<tr>
<td>Requirements Documents will be issued to Customer for further review.</td>
<td></td>
</tr>
<tr>
<td>SmartWorks will provide the necessary input into the ConnectH2O business</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>process and/or workflow enhancements to ensure Customer’s business benefits</td>
<td></td>
</tr>
<tr>
<td>and goals of SmartWorks data will be achieved.</td>
<td></td>
</tr>
<tr>
<td>SmartWorks will work with the ConnectH2O Program Team to review and update</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>the IMS and resource plan based on the workshop discoveries made during</td>
<td></td>
</tr>
<tr>
<td>requirements definition. The agreed upon implementation plan will serve as</td>
<td></td>
</tr>
<tr>
<td>the roadmap for Customer and SmartWorks to design, develop, deploy, test, and</td>
<td></td>
</tr>
<tr>
<td>transition the Solution.</td>
<td></td>
</tr>
<tr>
<td>Customer will review the final revisions, and, provided that all agreed upon</td>
<td>SAWS</td>
</tr>
<tr>
<td>changes are made, Customer will accept the Functional and Integration</td>
<td></td>
</tr>
<tr>
<td>Requirements Document. The schedule does not account for additional review/</td>
<td></td>
</tr>
<tr>
<td>change iterations.</td>
<td></td>
</tr>
<tr>
<td>Provide necessary documentation for the external systems to be integrated with</td>
<td>SAWS</td>
</tr>
<tr>
<td>the SmartWorks Software.</td>
<td></td>
</tr>
<tr>
<td>Collaborate and approve the updated project schedule and revised implementation plan.</td>
<td>SAWS</td>
</tr>
</tbody>
</table>
Customer will complete review and comment on each specification document within a reasonable response window (normally within 10 Business Days) to maintain adherence to the project schedule. Significant delays in reviews of documentation will be subject to the Change Management Process.

Customer will review the final revisions, and, provided that all agreed upon changes are made, Customer will accept the defined documents in Section 11. The schedule does not account for additional review/change iterations.

SAWS will identify users of the Solution

Ensure the staff members that have been identified to participate in Discovery Session(s) are available on dates agreed to and scheduled.

Complete the Implementation Questionnaire provided by SmartWorks. This questionnaire provides SmartWorks with the technical and environmental details required to configure the SmartWorks Software.

<table>
<thead>
<tr>
<th>Responsibility</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer will complete review and comment on each specification document within a reasonable response window (normally within 10 Business Days) to maintain adherence to the project schedule. Significant delays in reviews of documentation will be subject to the Change Management Process.</td>
<td>SAWS</td>
</tr>
<tr>
<td>Customer will review the final revisions, and, provided that all agreed upon changes are made, Customer will accept the defined documents in Section 11. The schedule does not account for additional review/change iterations.</td>
<td>SAWS</td>
</tr>
<tr>
<td>SAWS will identify users of the Solution</td>
<td>SAWS</td>
</tr>
<tr>
<td>Ensure the staff members that have been identified to participate in Discovery Session(s) are available on dates agreed to and scheduled.</td>
<td>SAWS</td>
</tr>
<tr>
<td>Complete the Implementation Questionnaire provided by SmartWorks. This questionnaire provides SmartWorks with the technical and environmental details required to configure the SmartWorks Software.</td>
<td>SAWS</td>
</tr>
</tbody>
</table>

5. SmartWorks Software Training

In order to effectively use the SmartWorks Software both during User Acceptance Testing and in a production capacity, SmartWorks will provide end-user training as part of this project.

Training on use of the SmartWorks Software will be provided by SmartWorks’s Professional Services team over the course of the product implementation. The sessions will be held on-site at Customer’s headquarters. The training material covered will include high level design overview, as well as demonstration, working sessions, use cases, and strategies for team operations.

During the course of the implementation, advanced modules of the SmartWorks Software will be configured towards the end of the project, resulting in training being provided after the module has been configured. Dependencies and requirements will need to be met before certain training sessions can be executed. For example, the Water Loss Analysis module requires third-party data (e.g., date from the AMI, CIS, GIS) to be configured in the SmartWorks Software before the training sessions can be held.

In advance to every on-site visit, agendas will be provided that highlight the details of the training material, as well as the recommended audience to the pertaining sessions. Project managers will reach out to ensure the correct people are attending sessions relevant to their roles.

Training will be administered by Technical Consultant & Business Analysts from SmartWorks. The two trainers will be able to cover content pertaining to the audience to explain the business processes that need to be but in place, as well as the “how to” for everyday business tasks.

It is important there is a “core team” that attends each session, even if they don’t meet the technical knowledge requirements. This will allow the core team to understand at a high level how the SmartWorks Software can operate in different departments.

Some of the training session will be held in the format of “Working Sessions”, enabling the audience to participate alongside the trainer. In this case, participants will require access to a workstation with login access into the SmartWorks Software.
The trainer will also be presenting the material through PowerPoint along with the demonstration of the SmartWorks Software. The trainer will provide a copy of the slide decks to Customer for internal use.

Some sessions will require technical knowledge of SQL, understanding system/Linux logs, database structures, and programming logic. It is up to Customer to ensure the level of knowledge is met before attending these sessions. SmartWorks will not be training users on the technical knowledge, but rather on the how to use it in the advanced sessions. For example, SmartWorks will show how to create SQL reports in the system, but not cover how to use SQL.

5.1. Training Sessions

Onsite and remote training sessions will be provided to the Customer as outlined in the table below.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Location</th>
<th>SmartWorks Resources</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>Functional and Process Training</td>
<td>Onsite</td>
<td>Business Analyst</td>
<td>3 days x 3 trips</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Technical Lead</td>
<td></td>
</tr>
<tr>
<td>Advanced Process Automation Rules Training</td>
<td>Onsite</td>
<td>Technical Lead</td>
<td>2 days</td>
</tr>
</tbody>
</table>

Note: During exceptional circumstances, onsite sessions can be held remotely if agreed upon by Customer and SmartWorks.

The following is a matrix that highlights the sessions that will be covered during the four(4) on-site visits. The scheduling for these sessions is subject to change upon mutual agreement between SmartWorks and Customer, based on the project delivery timelines.

Onsite Training (Phase 2 - Pilot)

<table>
<thead>
<tr>
<th>Topics</th>
<th>Timeline</th>
<th>Customer Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>High level MDM Data Flows</td>
<td>Day 1</td>
<td>Core SAWS Team</td>
</tr>
<tr>
<td>- Data Flows with CIS, AMI, GIS, and other Systems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Navigation through the SmartWorks Software</td>
<td>Day 1</td>
<td>Core SAWS Team</td>
</tr>
<tr>
<td>- Understand the SmartWorks Software’s feature set and basic navigation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Understanding VEE</td>
<td>Day 1</td>
<td>Core SAWS Team</td>
</tr>
<tr>
<td>- Validation, Estimation &amp; Editing (VEE)</td>
<td></td>
<td>Billing</td>
</tr>
<tr>
<td>- Validation Routines</td>
<td></td>
<td>Metering</td>
</tr>
<tr>
<td>- Reviewing Configuration parameters</td>
<td></td>
<td>CIS Rep</td>
</tr>
<tr>
<td>- Troubleshooting scenarios</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Core Reports</td>
<td>Day 2</td>
<td>Core SAWS Team</td>
</tr>
<tr>
<td>- Using and understanding Core Reports</td>
<td></td>
<td>Billing</td>
</tr>
<tr>
<td>- Navigating Maps, Filtering, Drill downs</td>
<td></td>
<td>Billing</td>
</tr>
<tr>
<td>Topics</td>
<td>Timeline</td>
<td>Customer Participants</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>----------</td>
<td>------------------------------------------------------------</td>
</tr>
<tr>
<td>Billing &amp; Business Processes</td>
<td>Day 2</td>
<td>Core SAWS Team</td>
</tr>
<tr>
<td>- Billing Interface</td>
<td></td>
<td>Billing</td>
</tr>
<tr>
<td>- Missing Reads scenarios</td>
<td></td>
<td>CIS Rep</td>
</tr>
<tr>
<td>- Summary Reports</td>
<td></td>
<td>Customer Service Rep</td>
</tr>
<tr>
<td>Reports &amp; Tools Available</td>
<td>Day 3</td>
<td>Core SAWS Team</td>
</tr>
<tr>
<td>- Meter, Location and Item Groups (SQL)</td>
<td></td>
<td>Metering</td>
</tr>
<tr>
<td>- Virtual Meters</td>
<td></td>
<td>Billing</td>
</tr>
<tr>
<td>- Markers “flags”</td>
<td></td>
<td>Programmer (SQL expert)</td>
</tr>
<tr>
<td>- Register and Custom Reports (SQL)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Editing Menu Items &amp; Saving Reports</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advanced KPI Dashboard</td>
<td>Day 3</td>
<td>Core SAWS Team</td>
</tr>
<tr>
<td>- Registering &amp; Creating KPIs</td>
<td></td>
<td>Metering</td>
</tr>
<tr>
<td>- Examples and use case scenarios</td>
<td></td>
<td>Billing</td>
</tr>
<tr>
<td>- Security Configuration</td>
<td></td>
<td>Programmer (SQL expert)</td>
</tr>
<tr>
<td>- System Log</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Troubleshooting tools</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Onsite Training (Phase 3 – BR1&2)**

<table>
<thead>
<tr>
<th>Topics</th>
<th>Timeline</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional Data Flow Review</td>
<td>Day 1</td>
<td>Core SAWS Team</td>
</tr>
<tr>
<td>- Data Flows with CIS, AMI, GIS and other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Systems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic MeterSense MDM Module Refresher Training</td>
<td>Day 1</td>
<td>Core SAWS Team</td>
</tr>
<tr>
<td>- Review specific reports and module</td>
<td></td>
<td></td>
</tr>
<tr>
<td>features</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Loss Analysis Module</td>
<td>Day 2</td>
<td>Core SAWS Team</td>
</tr>
<tr>
<td>- Demonstration of features</td>
<td></td>
<td>Metering Engineering</td>
</tr>
<tr>
<td>Use case scenarios</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leak Detection and Notification Module</td>
<td>Day 2</td>
<td>Core SAWS Team</td>
</tr>
<tr>
<td>- Demonstration of features</td>
<td></td>
<td>Metering Engineering</td>
</tr>
<tr>
<td>Use case scenarios</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Topics</td>
<td>Timeline</td>
<td>Participants</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>----------</td>
<td>-------------------------------------</td>
</tr>
<tr>
<td>Rate and Revenue Analysis Module</td>
<td>Day 3</td>
<td>Core SAWS Team Billing</td>
</tr>
<tr>
<td>• Demonstration of features</td>
<td></td>
<td>CSR</td>
</tr>
<tr>
<td>• Use case scenarios</td>
<td></td>
<td>Finance</td>
</tr>
<tr>
<td>Targeted Messaging Module</td>
<td>Day 3</td>
<td>Core SAWS Team Billing</td>
</tr>
<tr>
<td>• Demonstration of features</td>
<td></td>
<td>CSR</td>
</tr>
<tr>
<td>• Use case scenarios</td>
<td></td>
<td>CIS Rep</td>
</tr>
<tr>
<td>Portal Interface</td>
<td>Day 4</td>
<td>Core SAWS Team Billing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Customer Service Reps</td>
</tr>
</tbody>
</table>

**Onsite Training (Phase 3 – BR4)**

<table>
<thead>
<tr>
<th>Topics</th>
<th>Timeline</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional Data Flow Review</td>
<td>Day 1</td>
<td>Core SAWS Team</td>
</tr>
<tr>
<td>• Data Flows with CIS, AMI, GIS and other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Systems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refresher Training</td>
<td>Day 1</td>
<td>Core SAWS Team</td>
</tr>
<tr>
<td>• Reviewing question, use cases</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Training targeted towards new users</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IVR Interface</td>
<td>Day 2</td>
<td>Core SAWS Team</td>
</tr>
</tbody>
</table>

**Advanced Process Automation Rules Training (Phase 3)**

<table>
<thead>
<tr>
<th>Topics</th>
<th>Timeline</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Level Rules Engine</td>
<td>Day 1</td>
<td>Core SAWS Team</td>
</tr>
<tr>
<td>• Rules Engine introduction</td>
<td></td>
<td>“Rules Champions”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Rules Engine Technician”</td>
</tr>
<tr>
<td>Use Cases, Examples</td>
<td>Day 1</td>
<td>“Rules Champions”</td>
</tr>
<tr>
<td>• Walkthrough of how the SmartWorks SaaS</td>
<td></td>
<td>“Rules Engine Technician”</td>
</tr>
<tr>
<td>is used</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working Sessions</td>
<td>Day 2</td>
<td>“Rules Champions”</td>
</tr>
<tr>
<td>• Helping participants create one rule with</td>
<td></td>
<td>“Rules Engine Technician”</td>
</tr>
<tr>
<td>the trainer</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**5.1.1. Functional and Process Training**

During the Functional and Process Training, up to 12 users will be provided training on the SmartWorks Software. System Navigation will be reviewed, as well as the main business functions of the solution.
Following the Functional and Process Training, the business processes and use cases applicable to Customer will be reviewed.

Topics typically covered in this training include:
- SmartWorks Software Overview
- Data Setup
- Meter Reads & Validating, Estimating, Editing – VEE
- Billing & Customer Service Functions
- Using Maps and Reports
- Advanced Reporting
- System Administration
- Sessions specific to each SmartWorks Software module defined in Section 2.3 above
- Process Automation Overview

5.1.2. Advanced Process Automation Rules Training

The Advanced Process Automation Rules Training course is a two-day technical course on rules development designed to enable participants to become competent at developing rules for the SmartWorks Software modules.

The topics include:

1. Overview of Rules Engine as a tool, Lifecycle of a Rule, and Rule Components
   a. Applications of Rules
   b. AMI System Performance
   c. Responding to VEE exceptions
   d. Meter Events and Alarms
3. Data Analysis
4. Data Safety Practices

The course will be delivered following rules design themes so that participants understand the construction of rules and can apply those design themes to any functional application and will include hands on exercises and an exam.

The Advanced Process Automation Module Rules Training course will be delivered to up to seven (7) participants. The intent is to train individuals within an organization to create a “rules engine technician” who can take business requirements from business lines to develop a rule that meets the business’s needs. Customer should only need one (1) to three (3) technicians.

Competency with SQL and a basic understanding of databases are pre-requisites for participants in the Advanced Process Automation Module Rules Training course.

Customer should also have several “rules champions” who represent a business unit. The rules champions will be trained on the capabilities of the Rules Engine during the Functional and Process Training course.
These business unit rules champions would be responsible for finding ways to improve their business and then passing the requirements to the rules engine technician (i.e. the one (1) or two (2) people trained by this course). The technician creates the rule. The champion tests and signs off on the rule.

### 5.2. Roles and Responsibilities

<table>
<thead>
<tr>
<th>Responsibility</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide the training described in Section 5 of the SOW to Customer’s staff, with a goal of providing sufficient knowledge to enable Customer resources to: a. Understand key management and operational topics concerning the SmartWorks technologies  b. Train other Customer employees in the use of the SmartWorks Software.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>Collaborate with Customer in the development of an overall training plan in accordance with Section 5 of the SOW and document accordingly in the Integrated Master Schedule.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>Provide information regarding prerequisite knowledge, experience, and/or prior coursework for each course offered.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>Deliver each agreed upon training course at Customer’s facilities in a structured classroom training format.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>If required during the project delivery, some training sessions may be provided remotely if mutually agreed upon.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>SmartWorks to provide a minimum of four (4) weeks written notice prior to scheduling any onsite training courses, which would then be scheduled at a mutually convenient date and time. For the Pilot Phase, the written notice may be shortened.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>Deliver written and current presentation materials for all training courses described in Section 5 of the SOW.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>Deliver current and written documentation for all products, services, and technologies delivered under this SOW in the form of user guides accessible via the Compass Interface of the SmartWorks Software.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>Set up the production environment according to SmartWorks’s specifications.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>Ensure that access to all Customer systems interfaces is available to the SmartWorks Software production system.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>Customer will be responsible for ensuring that Customer’s personnel and facilities are available for training.</td>
<td>SAWS</td>
</tr>
<tr>
<td>Support SmartWorks to Establish VPN access into the Dev/Test, QA and Production environments to allow remote support and operation, as required.</td>
<td>SAWS</td>
</tr>
<tr>
<td>Responsibility</td>
<td>Role</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Provide appropriate Customer staff to receive training for the roles that they perform.</td>
<td>SAWS</td>
</tr>
<tr>
<td>Work with SmartWorks to determine needed equipment and environments (PC, Rooms, internet, etc.) to conduct training.</td>
<td>SAWS</td>
</tr>
</tbody>
</table>

**6. System Quality Assurance**

System Testing is an activity that is addressed through all Phases of the SmartWorks Software Implementation Methodology, but is the focus of the Testing Phase.

Over the course of the deployment, Customer intend to perform System Testing in order to verify that the installed SmartWorks Software meets or exceeds the requirements of this SOW. The Quality Assurance Plan, guided by the Program Management Plans, will describe the test approach for Unit Testing, System Integration Testing (SIT), User Acceptance Testing (UAT) and Final System Acceptance Testing (FSAT), and user operational testing of the requirements outlined in the Solution Requirements Appendix and Section 7 and Section 11 of this SOW.

SmartWorks will work with Customer to identify the means by which each of the requirements will be tested and satisfied, including demonstration, test, and/or analysis. The mapping of each requirement in the SmartWorks documentation to each specific test scenario will be contained in a Requirements Traceability Matrix that is updated prior to the actual test.

SmartWorks will execute the test outlined from the quality assurance planning task via a collection of test scenarios developed during System Requirements documentation and sessions described in Section 4 above. The pre-production and lower environments will be used throughout the development and test phases of the project to ensure a high-quality delivery into Customer’s Production environment. In support of this, Customer will be required to provide system data from the various systems involved with the project, either in the form of data dumps and test files, where relevant, or possibly in an agreed upon text-based format. This support will be discussed and agreed at the solution and integration requirements workshops.

As defects during Unit Testing are identified, they will go through a defect resolution process to ensure timely, accurate, and high-quality fixes are developed. The development and release of these defect fixes will be coordinated and released back into the pre-production and lower environments. A full regression test of the pertaining scenarios will be completed to ensure full compliance with the requirements specifications are met prior to delivery to Customer.

Customer’s team members, with SmartWorks’s assistance, are expected to conduct System Integration Testing, User Acceptance Testing, and Final System Acceptance Test using the test scenarios identified. Any Severity 1, 2, or 3 (see table in Section 6.2.1 below) application or interface defects uncovered during this testing will be submitted and fixed and regression testing will follow by the identified vendor. The presence of Customer’s system administration staff for the installation, and their availability to subsequently support Integration Testing, will be critical to the installation and testing phase of the project being completed on schedule.
6.1. Testing Support

In addition to continuous remote testing support during the testing phases, the SmartWorks team will be engaged in onsite and remote testing support as described in the table below:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Location</th>
<th>SmartWorks Resources</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pilot Testing Support</td>
<td>Onsite</td>
<td>Business Analyst, Technical Lead or Consultant</td>
<td>5 days</td>
</tr>
<tr>
<td>System Integration Testing</td>
<td>Onsite</td>
<td>Business Analyst, Technical Lead or Consultant</td>
<td>5 days</td>
</tr>
<tr>
<td>User Acceptance Testing support</td>
<td>Onsite</td>
<td>Business Analyst, Technical Lead or Consultant</td>
<td>5 days</td>
</tr>
<tr>
<td>Performance Testing</td>
<td>Remote</td>
<td>Technical Lead, Infrastructure Specialist</td>
<td>10 days</td>
</tr>
</tbody>
</table>

Note: The system will be monitored for a period of 10 days during Phase 3 following the BR2 Phase.

Remote sessions will be scheduled as mutually agreed upon to support each phase.

6.2. Testing Procedure

To ensure that a quality Solution is delivered to Customer, the Testing Phase focuses on validating that the configured and developed Solution performs per agreed upon requirements for each module. Testing will consist of four (4) main activities, each of which will have clearly defined entrance and exit criteria that must be met before approvals will be given. These approvals will be pre-requisites for items such as release of electric meters to manufacturing, validation of specific system functionality that must be met before proceeding to subsequent deployment stages, monitoring system performance metrics of installed and provisioned meters, etc. This includes four (4) main testing activities:

A. **Unit Testing**: Represents a Phase 2 activity with testing to be conducted by SmartWorks in Lower environments within the confines of the specific Solution component, such as within the MDM itself, that validates that the updated coding and configuration for the applicable system is functioning and properly delivering the specified outputs of the specific requirement for which such coding was performed. As each code module is developed, unit tests are generated and executed to validate that each particular function / method handles the inputs and outputs correctly. Once Unit Testing is completed, a Go/No-Go meeting will be conducted to determine if the release for System Integration Testing can be conducted. Unit Testing will consist of validation of the Solution requirements.

B. **System Integration Testing (SIT)**: Represents a Phase 2 and Phase 3 activity to be conducted by Customer in the pre-production and lower environments and/or the Production environment
before "Mass Meter Deployment" is approved. Once System Integration Testing is completed, a Go/No-Go meeting will be conducted to determine if the release for User Acceptance Testing can be conducted. System Integration Testing will consist of validation of the Solution requirements.

C. **User Acceptance Testing (UAT):** Represents a Phase 2 and/or Phase 3 activity to be conducted in various test environments by Customer. Once UAT is completed, a Go/No-Go meeting will be conducted to determine if the deployment of end-point devices (Meters, Register and Modules) and network equipment can commence. User Acceptance Testing will consist of validation of the Solution requirements.

D. **Final System Acceptance Testing (FSAT):** Represents a Phase 3 activity that Customer shall execute on the MDM as optimized and with the assistance of SmartWorks. The Final System Acceptance Test consists of the demonstration of the successful completion of all Unit, SIT, UAT and performance testing. The Final System Acceptance Testing (FSAT) gate can be passed for Final Solution Acceptance (FSA).

The progress for performing the four (4) testing activities will be logged into a test tracking system, such as HPALM. At a minimum, the ticket will include the following information:

- The test name
- The objective for performing the test
- A Description of the steps required to perform the test “Test Script”
- The expected result that will demonstrate the test is successful “Test Acceptance Criteria”
- The actual result observed after performing the test “Test Result”

Prior to commencing System Integration Testing activities, the Test Scripts and Test Acceptance Criteria will be documented in TeamSupport by SmartWorks using Test Scripts that have been defined by SmartWorks.

While performing testing activities, the tester will update TeamSupport with the Test Result and will make a determination as to whether the result meets the Test Acceptance Criteria.

Functional Testing and Integration Testing will be performed by SmartWorks. User Acceptance Testing will be performed by Customer with support from SmartWorks.

### 6.2.1 User Acceptance Testing Procedure

Once Functional Testing and Integration Testing have been completed and Customer staff has received Functional and Process Training, Customer’s staff will have the necessary tools to perform User Acceptance Testing.

Prior to commencing the User Acceptance Testing activity, the Test Scripts and Test Acceptance Criteria will be documented in TeamSupport by SmartWorks collaboratively with Customer.
Customer will have its own instance of the SmartWorks Software, loaded with its data, to train and test on. SmartWorks will provide the documents and training to Customer staff for the applications/modules assigned. Training will be conducted onsite and using WebEx sessions, phone calls, and documentation as needed.

Customer will have the Acceptance Testing Period to perform User Acceptance Testing on the Solution (including testing in the live Production environment). The length of the Acceptance Testing Period will be defined in the Integrated Master Schedule (IMS). This Acceptance Testing Period will begin upon formal written notification from SmartWorks to Customer that the SmartWorks Software has been configured and is ready for testing. During such Acceptance Testing Period, both parties shall work diligently and dedicate the appropriate resources to conclude the evaluation in a timely and efficient fashion.

If the Solution substantially meets the Functional and Integration Requirements Document and substantially satisfies the testing criteria set forth in TeamSupport (together the “Solution Acceptance Criteria”), then Customer will provide SmartWorks written notice of acceptance thereof and the date of such notice shall be the Actual Solution Acceptance Date.

In the event Customer determines that the results of a test do not meet the Solution Acceptance Criteria following the initial User Acceptance Testing cycle, Customer will provide SmartWorks with written notice thereof, specifying in reasonable detail how the Solution failed to meet the Solution Acceptance Criteria. If Customer delivers to SmartWorks such notice, SmartWorks shall make all necessary corrections, repairs, fixes, modifications, additions to, or replacements of all or any part of the rejected SmartWorks Software, as well as integrations for which SmartWorks is responsible, so that the Solution conforms to and performs in accordance with the Solution Acceptance Criteria. SmartWorks will have the Correction Period to correct any deficiency, after which the User Acceptance Testing will be resumed. The Correction Period will be defined in the Integrated Master Schedule (IMS).

Should Customer require additional testing outside of SmartWorks’s standard testing routines, these can be brought into scope via the Change Management Process. Disaster Recovery testing is addressed in Schedule F (Solution Requirements and Solution Requirement Appendix).

In the event retesting is required by Customer, the User Acceptance Testing process will then be repeated.

Customer shall not unreasonably reject or fail to accept the Solution based on any Severity 3 issues, as defined in Schedule B – Support Services.

In the event that Customer fails to notify SmartWorks in writing of any deficiency in a test result, acceptance shall be deemed to have occurred upon the expiration of the applicable Acceptance Testing Period. During the Acceptance Testing Period, Customer may, in collaboration with SmartWorks, acting reasonably, extend the Acceptance Testing Period, the Correction Period, and the Expected Solution Acceptance Date (such that the extended Acceptance Testing Period shall expire on the revised Expected Solution Acceptance Date).

During project implementation, the first point of contact to address any project matters should be SmartWorks’s Project Manager. Should there be a need to escalate further, the following escalation process should be followed:

- Contact Director of Professional Services to create an action plan that will address any questions or concerns.
- If the answers provided require further discussions, Customer should contact VP of Customer Success to determine next steps.
- If the answers provided require further discussions, Customer should contact SmartWorks’s EVP to determine the next course of action.

### 6.3. Roles and Responsibilities

<table>
<thead>
<tr>
<th>Responsibility</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Establish VPN access for Customer into the Dev/Test, QA, Production and Disaster Recovery environments to allow remote support.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>SmartWorks will support the creation of testing documents according to the applicable testing activity, inclusive of applicable test scripts to ensure that system performance, capacity, and functional requirements are satisfied.</td>
<td>SmartWorks</td>
</tr>
</tbody>
</table>
| SmartWorks will develop a collection of test scenarios in accordance with the Functional and Integration Requirements Document to ensure the Solution is fully tested.  
Note: The development of User Acceptance Testing scenarios will be the responsibility of Customer as defined below. | SmartWorks         |
<p>| Assist Customer with the development of test scripts based on the Acceptance Criteria defined in this SOW. | SmartWorks         |
| SmartWorks to provide subject matter expertise, guidance, and templates to assist Customer in the development of the System Testing plan(s). | SmartWorks         |
| SmartWorks to provide to Customer (i) relevant test scripts previously developed by SmartWorks, and (ii) test scripts developed by SmartWorks’s customers that SmartWorks is permitted to distribute to Customer in the form currently available to SmartWorks. | SmartWorks         |
| For any planned or urgent system changes related to any aspect of the SmartWorks Software, SmartWorks will follow the established testing progress requiring system changes to progress through pre-production environments, then into the Production environment and Disaster Recovery environment. | SmartWorks         |
| Provide troubleshooting and remediation support to Customer during the execution of the test plans by means of assisting Customer with the maintenance of a Program Weekly Defect Log. | SmartWorks         |
| SmartWorks will assist Customer in conducting System-End-to-End-Testing in a pre-production environment and/or in the Production environment. | SmartWorks         |
| For documentation of test results, SmartWorks shall support the use of a Requirements Traceability Matrix (“RTM”), developed by Customer. SmartWorks shall provide its test updates to this RTM on at least a weekly basis. | SmartWorks         |
| Assist Customer with the Final System Acceptance Testing in the Production environment. | SmartWorks         |
| SmartWorks shall adhere to the scheduled test Gates and Go/No-Go Meetings as specified in the Integrated Master Schedule (IMS). | SmartWorks         |</p>
<table>
<thead>
<tr>
<th>Responsibility</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>SmartWorks will support Customer with regression test activities throughout the deployment period to re-validate Solution compliance after any system release, patch, firmware or hardware upgrade, etc.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>If necessary, SmartWorks will submit a defect to the Customer’s systems based on the severity classification as outlined in SaaS Agreement</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>Submit a Final System Acceptance Test certificate for approval and signature by Customer.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>Customer will create, with SmartWorks’s support, testing documentation in accordance with the applicable stage gate. Testing activities will be inclusive of applicable test documentation ensuring that Solution performance, capacity, and functional requirements are satisfied.</td>
<td>SAWS</td>
</tr>
<tr>
<td>Customer will develop an integrated test schedule that encompasses the test use cases for each stage of testing.</td>
<td>SAWS</td>
</tr>
<tr>
<td>Ensure that test data and/or access to all required systems included in the integration is available through the test environment.</td>
<td>SAWS</td>
</tr>
<tr>
<td>Maintain the Requirements Traceability Matrix (RTM).</td>
<td>SAWS</td>
</tr>
<tr>
<td>Use a defect tracking framework to maintain a comprehensive log of all defects found, the status of such defects, and the resolution plan and schedule therein.</td>
<td>SAWS</td>
</tr>
<tr>
<td>Customer shall conduct regular regression test activities throughout the deployment period to re-validate Solution compliance after any system releases, patches, firmware or hardware upgrades, etc.</td>
<td>SAWS</td>
</tr>
<tr>
<td>Participate in coordinated test activities.</td>
<td>SmartWorks / SAWS</td>
</tr>
<tr>
<td>Execute integration test plans and scenarios involving SmartWorks and the SmartWorks Software.</td>
<td>SmartWorks / SAWS</td>
</tr>
<tr>
<td>Create User Acceptance Testing detailed plan.</td>
<td>SAWS</td>
</tr>
<tr>
<td>Conduct User Acceptance Testing.</td>
<td>SAWS</td>
</tr>
</tbody>
</table>
7. Program Management Approach

7.1. Communication/Relationship Management Approach

Communication management is the cornerstone of any project and a well-structured communication plan is a must from the beginning. Regular and ongoing communications include those opportunities to communicate with project team members, sponsors, steering committee members, and other key stakeholders on a regular basis. These types of communication include regular status reports, scheduled project team meetings, and monthly updates with the steering committee or with executive project sponsors on a project.

During the Kick Off Meeting, a communication plan will be presented and reviewed with Customer staff based on the following communication strategy:

Goals of Communication Strategy
- Keep people informed on project status
- Focus on communication to effectively prepare Customer for its software rollout
- Focus on communication to build support for project
- Monitor effectiveness of communication

Guiding Principles
- Clear messages using simple language
- Openness, honesty, credibility, and trust in all communications
- Two-way communication, with feedback valued and asked for
- Project team and management ownership of the communication program
- Ongoing commitment to the communications process

Effective Communication Guidelines
- There are multiple audiences for project communications
  Communication needs to be:
  - Tailored to specific groups
  - Regular and informative
  - Real-time and relevant
- Communication content needs to be of interest to the target audience

Following is the proposed communication plan for the project:

<table>
<thead>
<tr>
<th>What</th>
<th>Who / Target</th>
<th>Purpose</th>
<th>When / Frequency</th>
<th>Type/Method(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Kick Off</td>
<td>All stakeholders</td>
<td>Communicate plans and stakeholder roles/responsibilities.</td>
<td>At or near Project Start Date</td>
<td>Remote Meeting</td>
</tr>
<tr>
<td>Status Reports</td>
<td>All Stakeholders and Project Office</td>
<td>Update stakeholders on progress of the project.</td>
<td>Weekly</td>
<td>Distribute electronically using agreed Status Report template</td>
</tr>
<tr>
<td>What</td>
<td>Who / Target</td>
<td>Purpose</td>
<td>When / Frequency</td>
<td>Type/Method(s)</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>-------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
<td>------------------</td>
<td>-------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Team Meetings</td>
<td>Entire Project Team</td>
<td>To review detailed plans (tasks, assignments, and action items) and risks.</td>
<td>Weekly</td>
<td>Meeting Review Project Plan, Status Reports, and Risk Log</td>
</tr>
<tr>
<td>Project Management Status Meetings</td>
<td>Sponsor(s) and Project Manager (SmartWorks, Customer, AMI Vendor, CIS Vendor)</td>
<td>Update sponsor(s) on status and discuss critical issues. Seek approval for changes to Project Plan.</td>
<td>Weekly</td>
<td>Meeting</td>
</tr>
<tr>
<td>Executive Sponsor Meetings</td>
<td>Executive Sponsor(s) and Project Manager(s)</td>
<td>Update sponsor(s) on status and discuss critical issues. Seek approval for changes to Project Plan.</td>
<td>Monthly</td>
<td>Meeting</td>
</tr>
</tbody>
</table>

### 7.2. Work Management Approach

Work will be managed through the use of the SmartWorks Project Schedule. The SmartWorks Project Manager will have the responsibility to create and maintain the SmartWorks Project Schedule for the modules and integrations listed in this Statement of Work. It is expected that Customer’s Project Manager will work in conjunction with the SmartWorks Project Manager to ensure that key Customer activities defined in SmartWorks Project Schedule that impact the ConnectH2O Program are also contained in the Integrated Master Schedule (IMS).

During and after the User Acceptance Testing in the Testing phase, the SmartWorks TeamSupport solution will be used to track project issues such as bugs or other lower level action items. The entire project team (SmartWorks / Customer) will have access to TeamSupport.

### 7.3. Change Management Process

This document serves as the complete understanding, between Customer and SmartWorks, as to what the current Statement of Work entails. Customer and/or SmartWorks may propose changes to the scope of work defined in this SOW (each a “Change Request”). The proposed Change Order Form (attached to this SOW as Appendix A) must be used for all Change Requests. The Customer or SmartWorks shall have no obligation to pay for or commence work in connection with any Change Request until the fee and schedule impact of the Change Request is agreed upon in a written Change Order Form signed by the designated representatives from both parties.

Upon a request for a Change Request, then the Customer or SmartWorks shall submit the standard Change Order Form describing the Change Request, including the impact on the schedule, budget, scope, and expenses. The Change Management Process consists of:

- Identify and document proposed Change Request
- Assess impact of proposed Change Request
- Estimate required effort / cost of proposed Change Request
- Submit Change Order Form for approval / disapproval
- Communicate Change Order Form decision
- If Change Order Form is Approved:
  - Assign responsibility
  - SmartWorks to update Project Plan as needed
o If there are project delays due to Change Request, Customer or SmartWorks may make subsequent Change Requests to address those delays

o Monitor and report progress

Within fifteen (15) consecutive Business Days of its receipt of the Change Order Form, Customer or SmartWorks shall either:
- Accept the proposed change by signing the Change Order Form,
- Reject the proposed Change Request and inform Customer or SmartWorks’s Project Manager via email, or
- Both parties determine that the proposed changes be tabled for review on a mutually agreed upon later date, without exceeding 45 Business Days.

If SmartWorks is advised not to perform the change, or in the absence of Customer acceptance or rejection within 15 Business Days then SmartWorks:
- Will not perform the proposed Change Request and will proceed only with the original services
- May create a new Change Request to accommodate the expenses incurred during the discussion of the proposed Change Request, This may happen only in cases where:
  o Customer takes longer than fifteen (15) Business Days to reach the decision, or does not reach a decision, and
  o Overall project timeline, budget, or scope affected.

See Appendix A for proposed Change Order Template

7.4. Risk Management Approach

Risk management planning is an important part of project management and a core component of the SmartWorks Project Implementation Methodology. Risk management planning is about defining the process of how to engage and oversee risk management activities for a project. Having a viable plan on how to manage risk allows one to mitigate risk versus attempting to decide in the midst how to handle a risk. The earlier risk management planning is engaged within the project increases the probability of success of risk mitigation activities. Risk management planning will be initiated at the start of the project by having the initial discussion with Customer prior to or during the Kick Off Meeting.

Risks can be raised by any project stakeholder, including all project team members, Customer, third-party integrators, or vendors during the project.

Risks will be entered on the Risk Log and categorized by type and priority. The SmartWorks Project Manager will investigate the risk and, if necessary, will update the Risk Log with background information to place the risk in perspective.

At a minimum, the following information will be captured and tracked in the Risk Log for all risks:
- RISK ID – each risk should have a unique ID
- TITLE – short description of the risk (usually a few words or a sentence, helpful when reporting risks)
- DESCRIPTION – complete description of the risk, the more details the better
- IMPACT – impact to the project and/or business in terms of money, time, and/or quality
- PROBABILITY – indicate the probability of the risk
- SEVERITY – risk severity (typically values could be “critical”, “high”, “medium”, “low”)
- TYPE – type of risk (e.g., technical, process, organizational, etc.)
• RISK MITIGATION PLAN – detailed description of actions (including dates and owners) required mitigating the risk
• STATUS – current status of the risk (typical values are “open” or “closed”)

The following risk matrix will be used to establish the severity of risk:

<table>
<thead>
<tr>
<th>PROBABILITY</th>
<th>IMPACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low (1)</td>
<td>Low (1)</td>
</tr>
<tr>
<td>Medium (2)</td>
<td>Medium (2)</td>
</tr>
<tr>
<td>High (3)</td>
<td>High (3)</td>
</tr>
</tbody>
</table>

Throughout the duration of the project, as risks are identified they will be added to the Risk Log and will be reviewed at weekly Status Meetings with the team to determine the possibility of occurrence and the best plan for mitigation.

If identified risk(s) and/or mitigation strategies are deemed to have an effect on project timeline, budget, or scope, a Change Request may be created per Section 7.3 to address those concerns.

Based on SmartWorks’s experience, the following have been identified as dependencies that could have negative effect on project timeline, cost, and/or scope and could become potential risks:

• VPN ports not opened for SmartWorks personnel and for communication between integration points
• AMI not ready on time or not sending the required data
• Data source not ready for DataSync
• Resources not available to provide required information

Early engagement and commitments on timelines by all parties can significantly reduce risks linked to the above dependencies.

7.5. Acceptance Management Approach

In collaboration with Customer, SmartWorks will develop and maintain Deliverable Acceptance Criteria Document. The Deliverable Acceptance Criteria Document will also set forth the Deliverable Acceptance Criteria.

A baseline version of the Deliverable Acceptance Criteria Document will be created through a combined effort between SmartWorks and Customer during the Initiation and Build activities. The Deliverable Acceptance Criteria Document will be reviewed with Customer regularly and updated to record the approval of the Deliverables as they are accepted. The approvals of the Deliverables in the Deliverable Acceptance Criteria Document will constitute final system acceptance.

A core component of the Deliverable Acceptance Criteria Document will be the execution of the test plan and test cases. The test plan, also created in the Initiation and Build activities, and the test case scenarios, created during the Development activities, are customized specific to the implementation for Customer.
The test plan and test case scenarios are used for testing and will be provided to Customer for its own review and testing of the Solution. SmartWorks’s Implementation Team and Customer’s staff will work as a team to ensure that exhaustive testing is carried out. During the Testing activities, when the system testing is being executed, the project team will be meeting to review the testing status and ensure that scheduled testing is being carried out.

### 7.6. Roles and Responsibilities

<table>
<thead>
<tr>
<th>Responsibility</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>SmartWorks, through the SmartWorks Project Manager and project team, shall manage the project and Deliverables under this SOW during the deployment period as specified in the Integrated Master Schedule (IMS), to include:</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>A. Working with Customer to develop a comprehensive Project Plan, including all products, services, and environments listed in this SOW.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>B. Contribute to the creation, tracking, and updating of the Project Plan.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>C. Complete the project on schedule, within scope, and within budget (execution of minimal Change Requests)</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>D. Participate in Customer’s project planning meetings.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>E. Work with Customer to develop a review and acceptance process for Solution documentation and testing results.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>F. Provide weekly status reports addressing the progress of the project, issues, and outstanding action items.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>G. Conduct weekly meetings as agreed to with Customer’s project team to coordinate project activities between the parties.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>H. Coordinate Deliverables with Customer and Customer’s subcontractors, including answering general questions and providing overall project facilitation.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>I. Use SmartWorks’s and other outlined project management plans’ best practices and implement a definitive plan of action to complete the work in an organized and timely manner.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>J. Coordinate SmartWorks’s project resources and personnel.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>K. Coordinate delivery of services and products in accordance with Customer’s requirements and applicable codes and standards.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>L. Administer the project so that reporting and document control conforms to Customer’s and project requirements.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>Responsibility</td>
<td>Role</td>
</tr>
<tr>
<td>----------------</td>
<td>------</td>
</tr>
<tr>
<td>M. Manage and coordinate all SmartWorks activity required to meet project delivery.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>N. Support project quality standards and procedures as outlined by the ConnectH2O Program Management Plans.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>O. SmartWorks will use jointly accepted reporting document formats (status reports and schedule) outlined by the ConnectH2O Program for weekly project reporting.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>P. Prepare weekly status reports summarizing the progress of the work and status of Deliverables, costs, resource allocation, issues, risks, trends, delays, and issue and risk mitigation efforts. The frequency of the status reports may be adjusted by mutual agreement of the Customer and SmartWorks Project Managers.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>Q. Provide meeting minutes from workshops and joint project meetings.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>R. Alert the Customer Project Manager as to outstanding invoices or accounting problems.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>S. Provide administrative support to the project team, including scheduling, correspondence preparation, documentation assistance, and coordination of Deliverables.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>T. Establish a regular review/oversight process and schedule, including Customer staff and SmartWorks staff, in order to ensure full understanding of project progress, issues, and actions required during Phase 2 and Phase 3.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>U. Ensure delivery of project documentation (workshop material, functional, interface, architecture specifications, etc.) upon request by Customer.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>V. Verify implementation of quality control procedures according to generally accepted engineering methods.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>W. Maintain updated SmartWorks Solution Issues/Incident/Error reports with noted response times, agreed resolutions, and outstanding items, as described in Schedule B to the SaaS Agreement (Support Services).</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>X. Ensure the Solution is consistent and available with identified integration points and functionality as contracted and in accordance with the approved functional specifications documents</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>Responsibility</td>
<td>Role</td>
</tr>
<tr>
<td>----------------</td>
<td>------</td>
</tr>
<tr>
<td>Y. Designate a Project Manager to work with SmartWorks to assist in the creation of efficient paths of communication with SmartWorks, including prioritizing communication requests made to SmartWorks and departments within Customer.</td>
<td>SAWS</td>
</tr>
<tr>
<td>Z. Customer’s Project Manager will assist in maintaining efficient paths of communication with departments within Customer and between applicable vendors.</td>
<td>SAWS</td>
</tr>
<tr>
<td>AA. Assist with the coordination of meetings with Customer’s resources, as needed, to provide the optimal flow of information.</td>
<td>SAWS</td>
</tr>
<tr>
<td>BB. Provide SmartWorks and Customer management with accurate, timely data on progress and expenditures to allow effective cost control.</td>
<td>SAWS</td>
</tr>
<tr>
<td>CC. Enforce project quality standards and procedures</td>
<td>SAWS</td>
</tr>
</tbody>
</table>

8. Program Delivery Approach

8.1. Implementation Approach – Phases, Deliverables, Key Milestones

Successful implementation is based on SmartWorks’s understanding of Customer’s requirements and experience gained through the implementations of SmartWorks Software for various customers across North America. Customer’s established Program Management Plans for the ConnectH2O Program will leverage SmartWorks’s Implementation Methodology referenced in the Solution Requirements Appendix, which has been honed and perfected over the company’s long history to successfully guide project implementation from initiation to deployment.

SmartWorks shall complete implementation activities, which take into account initiation and build, analysis, development, testing, and deployment of the SmartWorks Software to interact with the AMI vendors during the Pilot phase and the Full Deployment phase, along with Customer’s enterprise systems. Implementation will be based on the SmartWorks system design documents created and accepted within the scope of this SOW and the Solution Requirements Appendix.

When completed, this implementation work shall assure that the SmartWorks Software, AMI systems, and Customer’s enterprise systems will be able to consistently and successfully operate and deliver the Solution requirements to the SAWS ConnectH2O Program.

8.2. Implementation Methodology

The SmartWorks Implementation Methodology is based on the following guiding principles:

- Promote and foster Customer ownership of solution;
- Establish and maintain consistent and regular touchpoints with Customer;
- Ensure that project performance is visible, measurable, and tracked and that are risks identified and mitigated; and
- Seek to minimize Customer’s cost and time while still achieving project objectives.
The Implementation Methodology consists of two main areas: **Project Management** and **SmartWorks Software Implementation Management** where each has associated (where applicable):

- Processes / Checklists / Matrices that define how to operate;
- Deliverables that are formal outputs that require Customer sign-off;
- Work Products that are outputs produced as part of the work required to achieve the desired project goals; and
- Tools / Assets that are leveraged to produce defined outputs.

The **Project Management** area defines how projects are managed. It includes:

- **Communication/Status Management** aimed at establishing internal and external communications, as well as monitoring and communicating project status and effort spent;
- **Relationship Management** aimed at measuring the pulse of Customer and its partners;
- **Work Management** aimed at capturing and monitoring effort, cost, and work to be performed;
- **Scope Management** aimed at defining and controlling project scope;
- **Risk Management** aimed at planning, mitigating, tracking, and monitoring risks;
- **Deliverable/Acceptance Management** aimed at ensuring that Deliverables are delivered and accepted; and
- **Financial/Contract Management** aimed at monitoring project financial health.

The **Implementation Management** area defines the Implementation Activities and associated Work Products and Deliverables that are part of this project. The Implementation Activities defined in the following table will be repeated for each phase of the ConnectH2O project (Phase 2, Phase 3 BR1 to BR4):

<table>
<thead>
<tr>
<th>Implementation Activities</th>
<th>Objectives</th>
<th>Key Work Products and Activities</th>
<th>Deliverables</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Initiation and Build</strong> (ConnectH2O Phase 2)</td>
<td>To kick off project and establish successful working relationship</td>
<td>• Kick Off Meeting&lt;br&gt;• Implementation Questionnaire&lt;br&gt;• Deliverable Acceptance Criteria Document&lt;br&gt;• Initial Configuration complete&lt;br&gt;• Physical Architecture Recommendation</td>
<td>• SmartWorks Software installation&lt;br&gt;• Software Overview Training Session</td>
</tr>
<tr>
<td><strong>Key Milestones</strong></td>
<td>To obtain detailed agreement on Project Plan</td>
<td>• Discovery Session(s) Summary</td>
<td></td>
</tr>
<tr>
<td>• Kick Off Meeting Held&lt;br&gt;• Project Plan Reviewed/Updated</td>
<td>To install and perform base configuration work</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Analysis</strong> (ConnectH2O Phases 2 &amp; 3)</td>
<td>To demonstrate base configuration functionality</td>
<td>• Discovery Session(s) Summary</td>
<td>• Functional and Integration Requirements Document</td>
</tr>
<tr>
<td><strong>Key Milestones</strong></td>
<td>• Conduct Discovery Sessions&lt;br&gt;• To obtain an agreement on what is remaining to be delivered</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Integration Documents signed&lt;br&gt;• Functional and Integration Requirement Document signed</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Implementation Activities

<table>
<thead>
<tr>
<th>Development (ConnectH2O Phases 2&amp;3)</th>
<th>Objectives</th>
<th>Key Work Products and Activities</th>
<th>Deliverables</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Key Milestones</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solution Feature / Code / Configuration Complete</td>
<td>To configure according to requirements and build the Solution components</td>
<td>Test Scenarios / Cases</td>
<td>SmartWorks Software configuration</td>
</tr>
<tr>
<td></td>
<td>To write associated test cases that Customer would execute for acceptance of the Solution</td>
<td>User Acceptance Test Scripts</td>
<td>SmartWorks Software integration</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Base Solution Installed and Configured</td>
<td></td>
</tr>
<tr>
<td><strong>Testing (ConnectH2O Phases 2&amp;3)</strong></td>
<td></td>
<td>System Integration Testing Results</td>
<td></td>
</tr>
<tr>
<td><strong>Key Milestones</strong></td>
<td></td>
<td>User Acceptance Test (UAT) Results</td>
<td></td>
</tr>
<tr>
<td>User Acceptance Testing Complete</td>
<td></td>
<td>Accepted Solution per UAT</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Functional and Process Training</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>User Acceptance Testing Support</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Go-Live Plan Document</td>
<td></td>
</tr>
<tr>
<td><strong>Deployment (ConnectH2O Phases 2&amp;3)</strong></td>
<td></td>
<td>Solution Live</td>
<td></td>
</tr>
<tr>
<td><strong>Key Milestones</strong></td>
<td></td>
<td>Installation Acceptance</td>
<td></td>
</tr>
<tr>
<td>Solution Live</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To minimize project costs, the majority of project work will be performed at one of SmartWorks’s locations, except for key project activities, such as Discovery Sessions, where face-to-face meetings are deemed more effective for a successful project. Throughout the project, SmartWorks’s project team will be engaged with Customer using WebEx sessions to review configuration work and provide remote support.

### 8.3. Implementation Timeline

The actual duration and scheduling of project activities will be jointly evaluated and documented during the Initiation and Build phase to be incorporated into the Integration Master Schedule (IMS).

A baseline plan will be delivered within fourteen (14) calendar days of the project Kick Off Meeting allowing Customer an opportunity to review the Project Plan over the next ten (10) Business Days. If Customer does not agree to the proposed Project Plan, Customer and SmartWorks will work collaboratively to develop a mutually agreeable Project Plan within a reasonable timeline.

The Project Plan will include a project completion date (the date where project is completed based on the criteria in Section 11 (Project Deliverables / Completion Criteria Summary) below). The Project Plan will be reviewed periodically during the project and may be revised. Changes to the project completion date may require a Change Order if it is mutually determined that the delay in completion is the fault of the Customer or Customer’s third-party vendors.
8.4. Customer Resource Involvement

SmartWorks strongly believes that a successful implementation project requires that both Customer and SmartWorks resources work openly and collaboratively towards a common objective. As such, Customer’s involvement will be required through all phases of the implementation project. SmartWorks also believes that the involvement of key Customer resources will help with the organizational change management activities that are essential to obtain acceptance of the new Solution.

The factors that will determine the size of Customer’s team include the following:

- The level and expertise of each of the Customer’s project core team members;
- The ability of Customer’s Project Manager to make decisions regarding the project;
- Whether current job responsibilities will interfere with Customer’s project core team responsibilities;
- The amount of business-reengineering that Customer determines is necessary; and
- The number of personnel that Customer will use to run its Solution, which in turn affects the amount of training needed.

Based on SmartWorks’s experience with other clients, the Roles and Responsibilities documented in Section 8.5 outline the anticipated involvement of Customer throughout the implementation project by phase.

8.5. Roles and Responsibilities

<table>
<thead>
<tr>
<th>Responsibility</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assign appropriate solution architecture and other technical resources to the development, configuration, and integration work, as defined in the Project Schedule attached as outlined in Integrated Master Schedule (IMS) Baseline exhibit.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>SmartWorks shall provide integration specifications and Functional and Integration Requirements Document for SmartWorks to develop integrations with the AMI vendors and Customer’s enterprise systems.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>SmartWorks shall assist in troubleshooting and resolving Solution defects.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>SmartWorks shall assist with prototyping and testing.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>Assign appropriate solution architecture and other technical resources to the development, configuration and integration work, as defined in the Project Schedule attached as outlined in Integrated Master Schedule (IMS) Baseline exhibit.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>Coordinate meetings with SmartWorks and internal resources, as needed, to provide the optimal flow of information.</td>
<td>SAWS</td>
</tr>
<tr>
<td>Articulate requirements for testing and draft a functional test plan related to integration for SmartWorks’s review and feedback.</td>
<td>SAWS</td>
</tr>
</tbody>
</table>
Responsibility | Role
--- | ---
Identify which of Customer’s enterprise systems require integration with the SmartWorks Software to fulfill the ConnectH2O Program requirements. | SAWS
Provide SmartWorks with access to vendors and application subject matter experts as needed to complete the Functional and Integration Requirements Document. | SAWS
Review and, if acceptable to Customer, accept the Functional and Integration Requirements Document within timely fashion. | SAWS
Customer must make available test data or instances of its Solution dependent systems, for example CIS and AMI, for Testing per the Functional and Integration Requirements Document. | SAWS
Provide and ensure all required technical staff are available on dates mutually agreed to and scheduled. | SAWS

9. SaaS Application Deployment and Management

9.1. Software Progression and Configuration Management

The SmartWorks System is the centralized application that manages and runs the SmartWorks system.

Prior to the rollout of the Solution to the Production environment, SmartWorks will conduct a series of training sessions for the users, administrators, and operators of the Solution as outlined in Section 5 above.

Following the successful completion of the Phases outlined in the table below and Final System Acceptance Testing for Go-Live activities as outlined by the Integrated Master Schedule (IMS), the Solution will be rolled out into the Production and Disaster Recovery Environments.

During the course of the project, updates are performed as described in the table below.

<table>
<thead>
<tr>
<th>Connect H2O Phase</th>
<th>Activities</th>
<th>Operational Environment</th>
<th>Updates</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Pilot</td>
<td>• Initiation and Build  • Analysis  • Development</td>
<td>Pre-production</td>
<td>Configuration</td>
<td>Performed on an ongoing basis by SmartWorks Implementation Team. No Customer approval required.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Software updates</td>
<td>Performed on an ongoing basis by SmartWorks Implementation Team. No Customer approval required.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Software upgrades</td>
<td>Not performed without prior agreement between SmartWorks and Customer.</td>
</tr>
<tr>
<td>Connect H2O Phase</td>
<td>Activities</td>
<td>Operational Environment</td>
<td>Updates</td>
<td>Details</td>
</tr>
<tr>
<td>-------------------</td>
<td>-----------------------------</td>
<td>--------------------------</td>
<td>----------------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>2 Pilot</td>
<td>• Testing</td>
<td>Pre-production</td>
<td>Configuration</td>
<td>Performed to address issues raised as a result of SIT and UAT. Customer to be notified, reviewed and approved by SAWS.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Software updates</td>
<td>Performed to address issues raised as a result of SIT and UAT. Customer to be notified, reviewed and approved by SAWS. Release notes will be available upon request.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Software upgrades</td>
<td>Not performed.</td>
</tr>
<tr>
<td>2 Pilot</td>
<td>• Deployment</td>
<td>Pre-production</td>
<td>Configuration</td>
<td>Performed for items related to documented and pre-approved Go-Live deployment activities.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Software updates</td>
<td>Not performed, unless issues found during Go-Live deployment activities. Requires agreement between SmartWorks and Customer.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Software upgrades</td>
<td>Not performed.</td>
</tr>
<tr>
<td>Pilot ready for AMI monitoring</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Pilot &amp;</td>
<td>• Initiation and</td>
<td>Dev/Test</td>
<td>Configuration</td>
<td>Performed on an ongoing basis by SmartWorks Implementation Team. Changes to be performed in coordination between SmartWorks and Customer.</td>
</tr>
<tr>
<td>3 BR1</td>
<td>Build</td>
<td></td>
<td>Software updates</td>
<td>Performed on an ongoing basis by SmartWorks Implementation Team. Customer to be notified, reviewed and approved by SAWS.</td>
</tr>
<tr>
<td></td>
<td>• Analysis</td>
<td></td>
<td>Software upgrades</td>
<td>Not performed without prior agreement between SmartWorks and Customer.</td>
</tr>
<tr>
<td></td>
<td>• Development</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Pilot &amp;</td>
<td>• Testing</td>
<td>Dev/Test &amp; QA</td>
<td>Configuration</td>
<td>Performed to address issues raised as a result of SIT and UAT. Customer to be notified, reviewed and approved by SAWS.</td>
</tr>
<tr>
<td>3 BR1</td>
<td></td>
<td></td>
<td>Software updates</td>
<td>Performed to address issues raised as a result of SIT and UAT. Release notes will be available upon request. Customer to be notified, reviewed and approved by SAWS.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Software upgrades</td>
<td>Not performed.</td>
</tr>
<tr>
<td>3 Pilot &amp;</td>
<td>• Deployment</td>
<td>Production</td>
<td>Configuration</td>
<td>Promoted from Dev/Test and QA environment after approval from Customer.</td>
</tr>
<tr>
<td>3 BR1</td>
<td></td>
<td></td>
<td>Software updates</td>
<td>Promoted from Dev/Test and QA environment after approval from Customer.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Software upgrades</td>
<td>Not performed.</td>
</tr>
<tr>
<td>Connect H2O Phase</td>
<td>Activities</td>
<td>Operational Environment</td>
<td>Updates</td>
<td>Details</td>
</tr>
<tr>
<td>------------------</td>
<td>-----------------------------</td>
<td>--------------------------</td>
<td>----------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Meter to Cash from CIS enabled in Production</td>
<td>• Initiation and Build  &lt;br&gt;• Analysis  &lt;br&gt;• Development</td>
<td>Dev/Test</td>
<td>Configuration</td>
<td>Performed on an ongoing basis by SmartWorks Implementation Team. Changes to be performed in coordination between SmartWorks and Customer.</td>
</tr>
<tr>
<td>3 BR2</td>
<td></td>
<td>Dev/Test</td>
<td>Software updates</td>
<td><strong>Performed on an ongoing basis by SmartWorks Implementation Team.</strong> Customer to be notified, reviewed and approved by SAWS.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Software upgrades</td>
<td><strong>Not performed without prior agreement between SmartWorks and Customer.</strong></td>
</tr>
<tr>
<td>3 BR2</td>
<td>• Testing</td>
<td>Dev/Test &amp; QA</td>
<td>Configuration</td>
<td>Performed to address issues raised as a result of SIT and UAT. Customer to be notified, reviewed and approved by SAWS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Software updates</td>
<td>Performed to address issues raised as a result of SIT and UAT. Release notes will be available upon request.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Software upgrades</td>
<td>Not performed.</td>
</tr>
<tr>
<td>3 BR2</td>
<td>• Deployment</td>
<td>Production</td>
<td>Configuration</td>
<td><strong>Promoted from Dev/Test and QA environment after approval from Customer</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Software updates</td>
<td><strong>Promoted from Dev/Test and QA environment after approval from Customer</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Software upgrades</td>
<td>Not performed.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>All Compass Modules and integrations accepted, with the exception of IVR</td>
<td></td>
</tr>
<tr>
<td>3 BR3 &amp; 3 BR4</td>
<td>• Initiation and Build  &lt;br&gt;• Analysis  &lt;br&gt;• Development</td>
<td>Dev/Test</td>
<td>Configuration</td>
<td>Performed on an ongoing basis by SmartWorks Implementation Team. Changes to be performed in coordination between SmartWorks and Customer.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Software updates</td>
<td><strong>Performed on an ongoing basis by SmartWorks Implementation Team.</strong> Customer to be notified, reviewed and approved by SAWS.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Software upgrades</td>
<td><strong>Not performed without prior agreement between SmartWorks and Customer.</strong></td>
</tr>
<tr>
<td>3 BR3 &amp; 3 BR4</td>
<td>• Testing</td>
<td>Dev/Test &amp; QA</td>
<td>Configuration</td>
<td>Performed to address issues raised as a result of SIT and UAT. Customer to be notified, reviewed and approved by SAWS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Software updates</td>
<td>Performed to address issues raised as a result of SIT and UAT. Release notes will be available upon request.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Software upgrades</td>
<td>Not performed.</td>
</tr>
<tr>
<td>Connect H2O Phase</td>
<td>Activities</td>
<td>Operational Environment</td>
<td>Updates</td>
<td>Details</td>
</tr>
<tr>
<td>------------------</td>
<td>------------</td>
<td>--------------------------</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>3 BR3 &amp; 3 BR4</td>
<td>Deployment</td>
<td>Production</td>
<td>Configuration</td>
<td>Promoted from Dev/Test and QA environment after approval from Customer</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Software updates</td>
<td>Promoted from Dev/Test and QA environment after approval from Customer</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Software upgrades</td>
<td>Not performed.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Final Solution accepted</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Post Go-Live</th>
<th>Customer Support</th>
<th>All</th>
<th>Configuration</th>
<th>See Master Support and Maintenance Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Software updates</td>
<td>See Master Support and Maintenance Agreement</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Software upgrades</td>
<td>See Master Support and Maintenance Agreement</td>
</tr>
</tbody>
</table>

Note: Once the Dev/Test instance is setup during the Deployment phase, the migration of items (configuration, updates, or upgrades) from the Dev/Test environment to the Production environment will be evaluated for each scenario and a plan will be agreed upon between Customer and SmartWorks.

### 9.2. Roles and Responsibilities

<table>
<thead>
<tr>
<th>Responsibility</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan and Design: Engage in planning and design sessions with Customer that will provide and collect information relevant to the integration and implementation of the SmartWorks Software into Customer’s enterprise systems, as detailed in the Solution Architecture Diagrams exhibits and Schedule J (Solution Architecture Diagrams).</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>Provide application deployment services for the environments listed in this SOW</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>Commission SmartWorks Software, setup users (Admin, Operations), ‘hand off’ SmartWorks Software to Customer for sign on testing and training.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>Assist Customer with the testing of firewalls, ports, etc. that are integral to the operation and access of the SmartWorks Software.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>Supply and maintain all Licensed 3rd Party Software as specified in SaaS Solution Agreement exhibit after Go-Live Activities.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>Solution patches, updates, and upgrades will be performed by SmartWorks. In cases where a new version or updated functionality is included, this will be communicated to Customer well in advance so both parties can plan, test, and implement accordingly.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>Responsibility</td>
<td>Role</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Alignment of Disaster Recovery environment with Production environment. As approved Solution patches, updates, and upgrades are made to the Production environment, assure that identical changes to the Disaster Recovery environment are made within the same calendar day of the Production environment. Provide Customer with day-to-day management of the Solution until it has been determined that Customer’s personnel has been sufficiently trained per Section 5 above and Final System Acceptance Testing per Section 11 below has been successfully concluded.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>Provide incident response and resolution in accordance with SaaS Agreement.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>SmartWorks to provide back-up and disaster recovery proven processes in accordance with the SaaS Agreement and Solution Requirements exhibits.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>Provide investigation results and mitigation steps to resolve application operational issues (e.g., meter reads, reports, alarms, etc.) until Final System Acceptance Testing has been successfully concluded.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>Disaster Recovery, Backups and Restoration of Data: Provide the data center’s automated solution to assure no less than daily backups of application configuration files and generated data in the Production environment for use in the Disaster Recovery environment.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>System Changes: For any planned or urgent system changes related to any aspect of the Solution, SmartWorks will follow the established change management process described in the SaaS Agreement.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>Maintenance: SmartWorks will maintain all software related to the Solution per the SaaS Agreement.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>Submit build request to SmartWorks, including any relevant design documents (e.g. System Architecture Diagram) and connection information.</td>
<td>SAWS</td>
</tr>
<tr>
<td>SAWS Staff: Customer will ensure that appropriate Customer staff (or contractors) participate in relevant technology planning sessions to assist in making appropriate decisions.</td>
<td>SAWS</td>
</tr>
<tr>
<td>Coordinate, schedule, and review any changes to the Solution proposed by SmartWorks in accordance with agreed to configuration and Change Management Process.</td>
<td>SAWS</td>
</tr>
<tr>
<td>Execute its responsibilities as specified in approved configuration management and Change Management Process.</td>
<td>SAWS</td>
</tr>
<tr>
<td>Log incidents related to the Solution with SmartWorks’s designated deployment team during deployment activities in accordance with approved notification processes.</td>
<td>SAWS</td>
</tr>
<tr>
<td>With SmartWorks’s assistance, identify and research problems with the SmartWorks software components</td>
<td>SAWS</td>
</tr>
</tbody>
</table>
Responsibility | Role
--- | ---
Create and manage user accounts. | SAWS
Coordinate the activities of Customer’s technical personnel for on-site Solution updates or other field troubleshooting activities. | SAWS

10. Solution Security

SmartWorks shall implement a Solution that is safe and secure, which complies with industry standards, and the requirements of SaaS Agreement. Customer’s specific security requirements are identified in Section 1.3 of the Statement of Work;

SmartWorks and Customer will fulfill the following roles and responsibilities:

10.1. Roles and Responsibilities

<table>
<thead>
<tr>
<th>Responsibility</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work with Customer on security planning, assessments, threats, mitigations, architecture, design, test plans, test execution, standards, procedures, and reporting, including device and user authentication, encryption, VPNs, firewalls, security appliances, intrusion detection, vulnerability scans, and penetration testing as needed to significantly mitigate threats at or above industry standard and achieving compliance with Customer’s requirements and standards.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>Lead an interactive session to provide an overview of SmartWorks’ security model with Customer, including a review of the security technologies, policies, processes, controls, and features of the Solution in preparation deployment.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>Provide security architecture and configuration document that describes recommended security appliances between Customer and SmartWorks.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>Provide information and rules needed for Customer’s firewall configuration for the Solution implementation.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>Work with SmartWorks on security planning, assessments, threats, mitigations, architecture, design, test plans, test execution, standards, procedures, and reporting, including device and user authentication, encryption, VPNs, firewalls, security appliances, intrusion detection, vulnerability scans, and penetration testing as needed to significantly mitigate threats at or above industry standard and achieving compliance with Customer’s requirements and standards.</td>
<td>SAWS</td>
</tr>
<tr>
<td>Review the cyber security solution for the advanced security appliance and incorporate into overall Solution architecture.</td>
<td>SAWS</td>
</tr>
</tbody>
</table>

11. Project Deliverables / Completion Criteria Summary

Acceptance criteria have been defined at a high level for each Phase of the implementation project. A set of assumptions have also been identified.
As per Section 2 above, all four (4) instances of the underlying infrastructure will be provisioned at the beginning of the Pilot Phase and handed over to Customer during the Pilot Phase. Each environment will be fully integrated and operational as defined in Sections 9.1 (Software Progression and Configuration Management) above and this Section 11.

Throughout the project life cycle, the quality assurance plan from Section 6 above will be executed as part of the Completion Criteria in this section.

<table>
<thead>
<tr>
<th>Milestone</th>
<th>ConnectH2O Phase</th>
<th>Deliverables/Completion Criteria</th>
<th>Assumptions</th>
<th>Operational IT Instance(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>Contract Signing Completed</td>
<td></td>
<td>N/A</td>
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<tr>
<td></td>
<td></td>
<td>• Introduction call between</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>SmartWorks and Customer</td>
<td></td>
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<td></td>
<td></td>
<td>• Project Managers</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• Resource mobilization and</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>assignment</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• System provisioning</td>
<td></td>
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<td></td>
<td></td>
<td>• License generation</td>
<td></td>
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<td></td>
<td></td>
<td>• Confirm project planning</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>sessions and review of</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Statement of Work</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>Kick-Off Sessions Completed (as</td>
<td>• Customer provides input for the</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>outlined in Section 4 above)</td>
<td>documents presented</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Team Introduction</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Project Overview</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Scheduling &amp; Milestones</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• Deliverables</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• Solution Architecture</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• Data Mapping requirements</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• Implementation Questionnaire</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Milestone</td>
<td>ConnectH2O Phase</td>
<td>Deliverables/Completion Criteria</td>
<td>Assumptions</td>
<td>Operational IT Instance(s)</td>
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<tr>
<td>3</td>
<td>2</td>
<td>End of Day 1 Activities</td>
<td></td>
<td>Pre-Production Provisioned (will become Production environment during Phase 3)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Infrastructure for the four Dev/Test, QA, Disaster Recovery and Production environments have been provisioned.</td>
<td></td>
<td>DEV/TEST Provisioned</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Initial Data Mapping requirements completed</td>
<td></td>
<td>QA Provisioned</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Initial Implementation Questionnaire completed</td>
<td></td>
<td>DISASTER RECOVERY Provisioned</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Discovery Sessions have been held (as outlined in Section 4 above)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Requirements documents pertaining to Pilot Phase have been developed</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Delivery of applicable Deliverables and Work Products as seen in Section 2.5 above and throughout the SOW.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Deliverables completed as outlined for the applicable Software Modules (e.g., Section 2 above) and Integrations. (e.g., Section 3 above)</td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>• MDMS tasks completed per the Integrated Master Schedule (IMS)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Milestone</td>
<td>ConnectH2O Phase</td>
<td>Deliverables/Completion Criteria</td>
<td>Assumptions</td>
<td>Operational IT Instance(s)</td>
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</tr>
</tbody>
</table>
| 4         | 2                | End of Day 30 Activities         | • Network communication established  
• DataSync files have been provided  
• Integration to Weather Network available  
• Meter data available  
• LDAP and User Roles are configured  
• Initial VEE Parameters that have been agreed upon are configured | • Pre-Production  
(will become Production environment during Phase 3)  
• DEV/TEST  
• QA  
• DISASTER RECOVERY |
<table>
<thead>
<tr>
<th>Milestone</th>
<th>ConnectH2O Phase</th>
<th>Deliverables/Completion Criteria</th>
<th>Assumptions</th>
<th>Operational IT Instance(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>2</td>
<td>End of Day 60 Activities:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Requirements documents</td>
<td>• Network</td>
<td>• Pre-Production</td>
</tr>
<tr>
<td></td>
<td></td>
<td>pertaining to Pilot Phase</td>
<td>communication established</td>
<td>(will become Production</td>
</tr>
<tr>
<td></td>
<td></td>
<td>have been approved for</td>
<td>• Pilot LDAP and</td>
<td>environment during Phase 3)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Day 60 Activities.</td>
<td>User Roles are configured</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Final Data Mapping requirements completed.</td>
<td>• Final VEE Parameters that have been agreed upon are configured</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• Final Implementation Questionnaire completed.</td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>• Ongoing Meter reads and</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>meter events uploaded</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>from AMI into MDM.</td>
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<td></td>
<td></td>
<td>• MVRS Billing functional</td>
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<tr>
<td></td>
<td></td>
<td>between MDM and CIS</td>
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<tr>
<td></td>
<td></td>
<td>with aggregated monthly reads,</td>
<td></td>
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<td></td>
<td></td>
<td>available for billing comparison.</td>
<td></td>
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<td></td>
<td></td>
<td>• Standard MDM reports</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>available and functional</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• Training for Pilot Phase has</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>been provided as shown in</td>
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<td></td>
<td></td>
<td>Section 5.</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• <strong>MeterSense MDM</strong> module</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>available and functional.</td>
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<tr>
<td></td>
<td></td>
<td>• Deliverables completed as</td>
<td></td>
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<td></td>
<td>outlined for the applicable</td>
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<td></td>
<td></td>
<td>Software Modules (e.g.,</td>
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<td></td>
<td></td>
<td>Section 2 above) and</td>
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<td>Integrations. (e.g., Section</td>
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<td></td>
<td></td>
<td>3 above)</td>
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<td>• Delivery of applicable</td>
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<td></td>
<td></td>
<td>Deliverables and Work Products</td>
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<td></td>
<td></td>
<td>as seen in Section 2.5 above and</td>
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<td></td>
<td></td>
<td>throughout the SOW.</td>
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<tr>
<td></td>
<td></td>
<td>• MDMS tasks completed per the</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Integrated Master Schedule (IMS)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>2</td>
<td>End of Pilot Activities (Go-Live)</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>- Requirements documents pertaining to Pilot Phase have been approved for Go-Live Activities.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Solution meets applicable contracted SLA’s per Tab 5.0 Performance Metrics (SLAs) of the Solution Requirements responses.</td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>- <strong>MeterSense MDM</strong> module available and functional.</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>- <strong>KPI Dashboard</strong> module available and functional</td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>- Deliverables completed as outlined for the applicable Software Modules (e.g., Section 2 above) and Integrations. (e.g., Section 3 above).</td>
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<tr>
<td></td>
<td></td>
<td>- Delivery of applicable Deliverables and Work Products as seen in Section 2.5 above and throughout the SOW.</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>- Delivery of Solution security</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>- MDMS tasks completed per the Integrated Master Schedule (IMS)</td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>- Generating Billing Determinants for deployed Phase 2 - Pilot meters and 2 Billing Cycles converted to over-the-air billing with the data provided by the AMI systems to the MDMS</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- <strong>Note:</strong> If no AMI billing cycle(s) have been converted in their entirety to billing by the end of Pilot Activities, then a mutually agreed upon subset of over-the-air billing meters can be used.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<p>| 7 | Phase 3 – BR 1 | Requirements documents | One AMI system up | PRODUCTION | Pre-Production (will become Production environment during Phase 3) | DEV/TEST | QA | DISASTER RECOVERY |</p>
<table>
<thead>
<tr>
<th>Milestone</th>
<th>ConnectH2O Phase</th>
<th>Deliverables/Completion Criteria</th>
<th>Assumptions</th>
<th>Operational IT Instance(s)</th>
</tr>
</thead>
</table>
|           |                 | approved pertaining to BR 3.1 Activities.  
• Automated daily synchronization of Asset inventory and End Point installation data uploaded from IPS into MDM.  
• Deliverables completed as outlined for the applicable Software Modules (e.g., Section 2 above) and Integrations. (e.g., Section 3 above)  
• Interface to AMR reads available and functional.  
• Full Meter to Cash process functional and ready to use in IPS production.  
• SCP Portal Interface as defined in Section 3.8 above is functional.  
• Delivery of Solution security  
• Solution meets applicable contracted SLA’s per Tab 5.0 Performance Metrics (SLAs) of the Solution Requirements responses. | and running in production mode  
• Meters deployed in production and providing data as defined in Section 3 above | • DEV/TEST  
• QA  
• DISASTER RECOVERY |
<table>
<thead>
<tr>
<th>Milestone</th>
<th>ConnectH2O Phase</th>
<th>Deliverables/Completion Criteria</th>
<th>Assumptions</th>
<th>Operational IT Instance(s)</th>
</tr>
</thead>
</table>
| 8 Phase 3 – BR 2 | • Requirements documents approved pertaining to BR 3.2 Activities.  
• Automated daily synchronization of Asset inventory and End Point installation data uploaded from IPS into MDM.  
• Rate and Revenue, Water Loss Analysis, Leak Detection and Notification and Targeted Messaging modules available and functional.  
• Deliverables completed as outlined for the applicable Software Modules (e.g., Section 2 above) and Integrations. (e.g., Section 3 above)  
• EOC Water Mapping available and functional.  
• Training for BR1 and BR2 has been provided as shown in Section 2.5 above.  
• Requirements documents pertaining to BR1 and BR2 have been approved.  
• Delivery of applicable Deliverables and Work Products.  
• Delivery of Solution security  
• Performance / Stress / Disaster Recovery Testing  
• Solution meets applicable contracted SLA’s per Tab 5.0 Performance Metrics (SLAs) of the Solution Requirements responses. | • Requirements identified in SOW for each module are met  
• Integration requirements identified in Section 3 above are met  
• Custom reporting requirements have been finalized  
• Monitor Solution performance to achieve SLA for Meter Data Load and VEE for a period of 10 calendar days in Production or QA environment, if Production is not available, and two hours in Disaster Recovery environment. | • PRODUCTION  
• DEV/TEST  
• QA  
• DISASTER RECOVERY |
<table>
<thead>
<tr>
<th>Milestone</th>
<th>ConnectH2O Phase</th>
<th>Deliverables/Completion Criteria</th>
<th>Assumptions</th>
<th>Operational IT Instance(s)</th>
</tr>
</thead>
</table>
| 9         | Phase 3 – BR4   | • Requirements documents approved pertaining to BR 3.4 Activities.  
• IVR Interface as defined in Section 3.9 above is functional  
• Delivery of applicable Deliverables and Work Products.  
• Deliverables completed as outlined for the applicable Software Modules (e.g., Section 2 above) and Integrations. (e.g., Section 3 above).  
• Training for BR1 and BR2 has been provided as shown in Section 2.5 above.  
• Solution meets applicable contracted SLA’s per Tab 5.0 Performance Metrics (SLAs) of the Solution Requirements responses. | • Integration requirements identified in Section 3 above are met | • PRODUCTION  
• DEV/TEST  
• QA  
• DISASTER RECOVERY |
| 10        | Phase 3 -Final Solution Acceptance | • Requirements documents approved pertaining to Final System Acceptance Activities.  
• Applicable Deliverables and Work Products  
• Delivery of Solution security.  
• Solution meets applicable contracted SLA’s per Tab 5.0 Performance Metrics (SLAs) of the Solution Requirements responses.  
• Solution meets scalability testing SLAs1  
• Final Solution Acceptance is achieved when all agreed effort is completed and Final System Acceptance has been achieved. | • Demonstrate that the Solution scales to the target meter population based on the Server Specification Assumptions in Section 2 above and the SaaS Agreement  
• System able to provide Billing Determinants for available meters per SLAs | • PRODUCTION  
• DEV/TEST  
• QA  
• DISASTER RECOVERY |

1 Demonstrate that the Solution is tested to the target meter population (actual and/or simulated) based on the Server Specification Assumptions in Section 2 above and in the SaaS Agreement.
Notes:

- It is assumed that Performance Testing will be performed in the Production environment. Should this instance be utilized for other processes that cannot be interrupted, the test will be performed in the QA environment.
- If data elements required for the Water Loss Analysis modules are not available in time for BR2, this module can be implemented at a later time, but no later than BR4. If completed prior to the end of BR4, a no cost Change Order can be issued, assuming scope and level of effort has not increased based on the discussion from Discovery Sessions.

The implementation project described in this SOW is deemed complete once the following criteria have been met:

- An agreed upon sample of AMI meters representing different meter types and location classes have been installed and tested during User Acceptance Testing, within the project timeline indicated in Section 8.3 above.
- Final Solution Acceptance has been given by Customer.
- All SmartWorks Software functionality within scope of this SOW has been deployed for a minimum of 30 calendar days Post Implementation Grace Period for each phase. For the final phase of this project (Phase 3 – BR4), the Post Implementation Grace Period will be extended to 90 days.
- Severity Level 1 issues identified during the Post Implementation Grace Period have been addressed. The Severity Matrix Table presented in Section 6.2.1 above, defines the Severity Level 1 issues.

Customer will be transitioned to support upon completion of the project phases.

Severity Level 2 and 3 issues logged in TeamSupport within the first three (3) weeks of the Post Implementation Grace Period will be reviewed by the SmartWorks Implementation Team prior to the transition to support and, if possible, will be addressed prior to the end of the Post Implementation Grace Period. After the transition to support, all outstanding Severity Level 2 and 3 issues will be addressed following the SaaS Agreement.

12. Transition-to-Operations approach

As the project deployment approaches completion, Customer will commence transition-to-operations activities. These activities will encompass IT Operations, Application Operations, Data Management Operations, etc. in support of the deployed Solution. The following Roles and Responsibilities will be provided during this transition period.

12.1. Roles and Responsibilities

<table>
<thead>
<tr>
<th>Responsibility</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide assistance by contributing subject matter expertise to assist Customer with its transition-to-operations activities.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>Responsibility</td>
<td>Role</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>SmartWorks to contribute to the Transition-to-Operations plan to migrate the</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>configured and tested MDMS to the Production environment.</td>
<td></td>
</tr>
<tr>
<td>Provide a plan to include training and documentation for Customer to support</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>daily: a. Monitoring and Maintenance of Register and Interval Reads.</td>
<td></td>
</tr>
<tr>
<td>b. Validating, Estimating, and Editing of Register and Interval Reads.</td>
<td></td>
</tr>
<tr>
<td>c. SmartWorks Solution Monitoring and Maintenance.</td>
<td></td>
</tr>
<tr>
<td>d. SmartWorks Solution Monitoring and Maintenance (i.e., monitoring register</td>
<td></td>
</tr>
<tr>
<td>reads, interval reads and billing schedules, alerts and alarms, servers)</td>
<td></td>
</tr>
<tr>
<td>Provide written SmartWorks Solution Disaster Recovery procedures.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>Assist Customer with developing a Long-Term Operations Support Model that</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>describes Roles, Responsibilities, and Resource Estimations needed for</td>
<td></td>
</tr>
<tr>
<td>Customer to support the SmartWorks Solution.</td>
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</tr>
<tr>
<td>Provide Application Administration and Application Operations documentation.</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>Maintain SmartWorks Solution technical infrastructure, including servers and</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>any Customer-provided third-party software.</td>
<td></td>
</tr>
<tr>
<td>Provide Final Requirements documentation as to the Solution accepted and</td>
<td>SmartWorks</td>
</tr>
<tr>
<td>delivered to Customer.</td>
<td></td>
</tr>
<tr>
<td>Provide input to and approve the Transition Plan that details steps and pre-</td>
<td>SAWS</td>
</tr>
<tr>
<td>requisites for transitioning primary responsibility between SmartWorks and</td>
<td></td>
</tr>
<tr>
<td>Customer.</td>
<td></td>
</tr>
<tr>
<td>Provide appropriate staff to receive training for all operational functions in</td>
<td>SAWS</td>
</tr>
<tr>
<td>accordance with training as defined in Section 5 and the schedule defined for</td>
<td></td>
</tr>
<tr>
<td>these activities.</td>
<td></td>
</tr>
<tr>
<td>Provide input to and approve daily, weekly, and monthly reporting requirements</td>
<td>SAWS</td>
</tr>
<tr>
<td>for managing the Solution.</td>
<td></td>
</tr>
<tr>
<td>Accept transition of support and daily production activities of the complete</td>
<td>SAWS</td>
</tr>
<tr>
<td>Solution based on agreed to schedule in the Customer-approved Transition Plan.</td>
<td></td>
</tr>
<tr>
<td>As of the end of the Pilot Phase and the defined Pilot Phase system</td>
<td>SAWS</td>
</tr>
<tr>
<td>acceptance, monitor VEE exception reports and resolve any pending exceptions</td>
<td></td>
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<td>on a regular basis to avoid accumulation of unresolved failures.</td>
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</tr>
<tr>
<td>Assist SmartWorks in developing a Go-Live Plan Document based on the program</td>
<td>SAWS</td>
</tr>
<tr>
<td>defined Phases.</td>
<td></td>
</tr>
<tr>
<td>Assist in activities as defined within the Go-Live Plan Document.</td>
<td>SAWS</td>
</tr>
</tbody>
</table>

13. Assumptions

The Services, fees, and delivery schedule for this project are based upon the following assumptions:

1. This SOW defines the scope of work for SmartWorks and does not include any work or expenses required from other vendors, including GIS, AMI, CIS, etc.
2. This project currently has, and will continue to have, the support of senior Customer management and will be assigned sufficient priority with respect to other projects to ensure its success.
3. Customer will assign a Project Manager to act as an internal resource and guide throughout this project.
4. Customer will secure the appropriate staff in a timely fashion in order to discuss or review the various materials produced when required, provided SmartWorks gives reasonable notice of such request.

5. SmartWorks will provide a written agenda and notice of any prerequisites to Customer prior to any onsite or remote sessions.

6. SmartWorks will provide adequate resources to support the efforts to complete the project as schedules and within the constraints of the project budget.

7. Customer agrees to facilitate any required logistics between additional vendors, Customer resources, and SmartWorks for the fulfillment of this SOW.

8. The SmartWorks Solution implementation is dependent upon accurate and timely information and cooperation of third-party vendors in order to achieve functional integration. SmartWorks will identify those dependencies to Customer and create a mutually agreed schedule to provide the assistance and information. Customer will ensure the cooperation and involvement of third-party vendors on or before the agreed schedule date.

9. Third-party vendors’ solutions are able to provide data required by the SmartWorks Software, as well as accept information provided by the SmartWorks Software.

10. All third-party software and hardware products are assumed to perform correctly in Customer’s environment in accordance with the appropriate third-party vendor’s specifications.

11. All documentation provided by Customer shall be up-to-date and accurate or, if that is not the case, Customer will advise SmartWorks as such.

12. All network components supplied by Customer are working properly and are free of defects and will meet minimum industry standards provided during the project.

13. To minimize project costs and to align with the contracted travel budget, applicable project work will be performed at one of SmartWorks’s locations, except for project activities where onsite work is deemed more effective and mutually agreed upon between Customer and SmartWorks.

14. The SmartWorks Solution implementation is dependent on remote access for configuration and production connection to third-party vendors in order to achieve functional integrations. SmartWorks will identify those dependencies to Customer and create a mutually agreed schedule to provide the assistance and information. Customer will ensure the cooperation and involvement of third-party vendors on or before the agreed scheduled date.

15. Any items not explicitly identified within this document are considered out of scope. Applicable changes to those responsibilities and/or deliverables and mutual agreed upon will be considered a change in scope for the project. Any proposed change to the project scope must be put into written format and be submitted to SmartWorks during this project for review and consideration.
14. Document Acceptance and Sign-off

Accepted on this day by:

San Antonio Water System (SAWS)  N.Harris Computer Corporation, through its SmartWorks division

By: ____________________________   By: ______________________________

Name: ___________________________   Name: _____________________________

Title: ___________________________   Title: _____________________________

Date: ___________________________   Date: _____________________________
APPENDIX A – Proposed Change Order Template

Harris Utilities SmartWorks Change Order

This document defines the work to be performed by the Harris Utilities, SmartWorks division of N. Harris Computer Corporation (herein referred to as “SmartWorks”) for San Antonio Water System (herein referred to as “Customer”), upon authorization to proceed from Customer.

Date: <Date>
Change Order #: <xx>

Customer: <Customer>
Customer Contact: <Name of Requester/Technical Contact>

Description of Change: <Title of Change Order>

Related Documents

1. This Change Order is subject to the terms and conditions of the Software License Agreement, Support and Maintenance Agreement, Software Implementation Services Agreement and Hosting Services Agreement between San Antonio Water System and N. Harris Computer Corp. signed <date signed>
2. This Change Order describes a change from the scope or schedule defined in <Statement of Work (SOW) details>
3. (other related documents such as Technical Specification Documents)

Scope of Change

<Describe changes to be made>

Assumptions and Constraints

1. <List any applicable assumptions/constraints>

Schedule Impact

<Identify schedule impact, if any>
## Change Order Effort

<table>
<thead>
<tr>
<th>Description</th>
<th>Estimated Effort (Hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Description 1</td>
<td>0</td>
</tr>
<tr>
<td>Work Description 2</td>
<td>0</td>
</tr>
<tr>
<td><strong>Project Total</strong></td>
<td><strong>0</strong></td>
</tr>
</tbody>
</table>

## Change Order Fees

**Support and Maintenance**
Monthly Support & Maintenance fees may be adjusted based on the increased functionality or complexity resulting from this scope of work.

**Taxes**
Fees exclude any applicable taxes.

**Validity**
The price estimate is valid for a period of thirty (30) days from the quote submission. Customer may request this date to be extended.

**Scope Changes**
If there are material changes to the scope or SmartWorks' understanding of the scope, the price estimate is subject to change.
- The Standard hourly rate for additional services is USD $220.
- The Support & Maintenance fees may be adjusted accordingly as well.
**Change Order Payment Schedule**

Customer will be invoiced based on the following payment fees and schedule. All prices are in USD.

<table>
<thead>
<tr>
<th>Description</th>
<th>Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Milestone A TBD)</td>
<td>X%</td>
</tr>
<tr>
<td>(Milestone B TBD)</td>
<td>X%</td>
</tr>
</tbody>
</table>

**Total**

100% $0.00

**Additional Annual Support & Maintenance fees**

$0.00

**Notes:**
- This fee is intended to cover support and maintenance activities anticipated for new functionality provided in this quote.
- The fee will be applied upon installation in test environment (or production if a test environment is not available).
- The first-year fee will be pro-rated to align with Customer’s existing maintenance payment schedule.

Annual fees are subject to change as defined in the Support and Maintenance Agreement.

Invoices are payable on a net 30-day basis.
Change Order Acceptance and Sign-off

A signature below will serve as authorization to proceed with the work defined in this document.

Please sign and return this document to [Project Manager]:

- Fax: 613-482-4874
- Email: [projectmanager]@harriscomputer.com

☐ Approval to Proceed

Please provide both an authorized signature for sign-off on this Change Order, and a technical contact where we should be directing Technical Issues.

<table>
<thead>
<tr>
<th>Print Name (Authorized signature)</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Name (Technical Contact)</th>
<th>e-mail</th>
<th>Phone Number</th>
</tr>
</thead>
</table>

N. Harris Computer Corporation

SmartWorks manager authorized to sign this Change Order

<table>
<thead>
<tr>
<th>Print Name (Authorized signature)</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
</table>

If you have any questions or need further information, please feel free to contact the Project Manager noted above.
# APPENDIX B – Proposed Kick Off and Discovery Agenda

## Kick Off meeting Day One:

<table>
<thead>
<tr>
<th>Topic</th>
<th>SAWS Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Team Introductions (Core Team) and Workshop Overview and Approach</td>
<td>SAWS: Core implementation team, including representatives from:</td>
</tr>
<tr>
<td>- Project Overview</td>
<td>◦ Billing, CSR (CIS)</td>
</tr>
<tr>
<td>- Scheduling &amp; Milestones</td>
<td>◦ GIS department</td>
</tr>
<tr>
<td>- Deliverables</td>
<td>◦ Metering department</td>
</tr>
<tr>
<td></td>
<td>◦ IT</td>
</tr>
<tr>
<td>- Solution Architecture</td>
<td>CIS Vendor</td>
</tr>
<tr>
<td></td>
<td>AMI Vendor</td>
</tr>
</tbody>
</table>

## Kick Off meeting Day Two:

<table>
<thead>
<tr>
<th>Topic</th>
<th>SAWS Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Implementation Questionnaire: Review preliminary requirements for</td>
<td>SAWS: Core implementation team, including representatives from:</td>
</tr>
<tr>
<td>◦ Billing integration</td>
<td>◦ Billing, CSR (CIS)</td>
</tr>
<tr>
<td>◦ OnDemand read initiation</td>
<td>◦ GIS department</td>
</tr>
<tr>
<td>◦ GIS integration</td>
<td>◦ Metering department</td>
</tr>
<tr>
<td></td>
<td>◦ IT</td>
</tr>
</tbody>
</table>
• AMI integration

• Metering department
• IT

CIS Vendor
AMI Vendor

• Data Mapping requirements
  • Review datasync requirements from CIS

SAWS:
Core implementation team, including representatives from:
• Billing, CSR (CIS)
• Metering department

CIS Vendor

<table>
<thead>
<tr>
<th>Topic</th>
<th>SAWS Participants</th>
</tr>
</thead>
</table>
| • **Team Introductions (Core Team) and Workshop**  
  Overview and Approach                      | SAWS: All participants over the course of the three days |
| • **Data Collection: AMI Meter Readings:**  
  This session describes the meter reading processes for AMI meter installations for:  
  o Collection of meter data (interval and register reads, interval length, data collection frequency) | SAWS: Core implementation team, Water Metering |
| • **Data Collection: AMI Meter Events / Alarms:**  
  This session describes receiving and responding to Meter Events / Alarms using:  
  o MultiSpeak methods: MeterEventNotification and ODEventNotification  
  o CMEP file: MLA01  
  o Meter Events / Alarms handling |
<table>
<thead>
<tr>
<th>Topic</th>
<th>SAWS Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Data Collection: Meter Readings – Other Meters:</strong></td>
<td></td>
</tr>
<tr>
<td>This session describes the meter reading process for other</td>
<td></td>
</tr>
<tr>
<td>meters installations:</td>
<td></td>
</tr>
<tr>
<td>o AMR Meters</td>
<td></td>
</tr>
<tr>
<td>o Collection of meter read data (register reads, data collection</td>
<td></td>
</tr>
<tr>
<td>frequency, file transfer)</td>
<td></td>
</tr>
<tr>
<td>o File format</td>
<td></td>
</tr>
<tr>
<td>▪ Meter ID</td>
<td></td>
</tr>
<tr>
<td>▪ Register Read timestamps</td>
<td></td>
</tr>
<tr>
<td>▪ DST</td>
<td></td>
</tr>
<tr>
<td>o Channel lineups / Multipliers / Encoded digits</td>
<td></td>
</tr>
<tr>
<td>o Configuration of meters for specific data collection</td>
<td></td>
</tr>
</tbody>
</table>

**Phase 2 (Pilot) Day Two:**

<table>
<thead>
<tr>
<th>Topic</th>
<th>SAWS Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Billing:</strong></td>
<td></td>
</tr>
<tr>
<td>This session describes the requirements to calculate and produce</td>
<td></td>
</tr>
<tr>
<td>customer bills:</td>
<td></td>
</tr>
<tr>
<td>o On Cycle Billing: Billing Schedule/Read Dates/Date Tolerances</td>
<td></td>
</tr>
<tr>
<td>o Off Cycle Billing: Manual or Final Bills</td>
<td></td>
</tr>
<tr>
<td><strong>Billing Interface – MultiSpeak®</strong></td>
<td></td>
</tr>
<tr>
<td>Technical Design discussion: The Compass / CIS billing interface</td>
<td></td>
</tr>
<tr>
<td><strong>VEE Overview</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Data Collection: Meter Readings - Exception Handling:</strong></td>
<td></td>
</tr>
<tr>
<td>This process describes the exception handling for meter read data:</td>
<td></td>
</tr>
<tr>
<td>o Addressing Missing Meter Reads ahead of billing</td>
<td></td>
</tr>
<tr>
<td>o Meter Read Validation Options</td>
<td></td>
</tr>
<tr>
<td><strong>Addressing Meter Data Validation exceptions</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Meter Install / Change / Remove:</strong></td>
<td></td>
</tr>
<tr>
<td>This process describes the required activities for handling</td>
<td></td>
</tr>
<tr>
<td>meter installations, changes and removals on existing and new</td>
<td></td>
</tr>
<tr>
<td>services. Including any field activities required to complete the</td>
<td></td>
</tr>
<tr>
<td>service request, including meter investigation activities and</td>
<td></td>
</tr>
<tr>
<td>follow up communications with customers.</td>
<td></td>
</tr>
<tr>
<td>o New Connect / Upgrade</td>
<td></td>
</tr>
</tbody>
</table>

SAWS: Core implementation team, Billing, Customer Service

SAWS: Core implementation team, Distribution System Engineering

SAWS: Core implementation team, Customer Service, Billing, System Operations
- Meter Failure / Meter Replacement (including steps to provision new meter into all systems)
- Cancel Service / Remove Meter
- Broken Meter Seal

**Phase 2 (Pilot) Day Three:**

<table>
<thead>
<tr>
<th>Topic</th>
<th>SAWS Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Compass Contact Handling:</strong></td>
<td>SAWS: Core implementation team, Customer Service, Billing, CIS team</td>
</tr>
<tr>
<td>This process describes the requirements for handling customer contacts via various contact channels within the business. It includes all activities from receipt of the initial contact through to closing the contact either through first contact resolution, including generation of fulfillment materials, or initiation of the next action.</td>
<td></td>
</tr>
<tr>
<td>o Scenarios involving remote meter actions:</td>
<td>SAWS: Core implementation team, Customer Service, Billing, CIS team</td>
</tr>
<tr>
<td>- Move In / Move Out (MIMO):</td>
<td></td>
</tr>
<tr>
<td>- High Bill Complaint (On Demand Read)</td>
<td></td>
</tr>
<tr>
<td>- Disconnect for non-payment</td>
<td></td>
</tr>
<tr>
<td>- Re-connect after payment</td>
<td></td>
</tr>
<tr>
<td>- Considerations for Disconnects:</td>
<td></td>
</tr>
<tr>
<td>o Scenarios not involving remote meter actions:</td>
<td></td>
</tr>
<tr>
<td><strong>Service Order Integration:</strong></td>
<td>SAWS: Core implementation team, Customer Service, Billing, CIS team</td>
</tr>
<tr>
<td><strong>Data Synchronization Validation:</strong></td>
<td>SAWS: Core implementation team, CIS team, IT</td>
</tr>
<tr>
<td>o Review of existing DataSync data in Compass from CIS to validate data (i.e., Meter IDs, UOMs, etc.).</td>
<td></td>
</tr>
<tr>
<td>o Review of DataSync mapping document</td>
<td></td>
</tr>
<tr>
<td>o Any additional fields required?</td>
<td></td>
</tr>
<tr>
<td>o User Defined Items for Meter and Location Groups for VEE, Reports, etc.?</td>
<td></td>
</tr>
<tr>
<td><strong>Daily System Timeline and Systems Integration:</strong></td>
<td>SAWS: Core implementation team, Customer Service, Billing, CIS team</td>
</tr>
<tr>
<td>o CIS DataSync</td>
<td></td>
</tr>
<tr>
<td>o AMI MeterDataLoad</td>
<td></td>
</tr>
<tr>
<td>o Weather Data</td>
<td></td>
</tr>
<tr>
<td>o CIS Billing</td>
<td></td>
</tr>
<tr>
<td><strong>Security:</strong></td>
<td>SAWS: Core implementation team, Customer Service, Billing, CIS team</td>
</tr>
<tr>
<td>o Compass User Roles</td>
<td></td>
</tr>
<tr>
<td>o Menu Items</td>
<td></td>
</tr>
<tr>
<td><strong>LDAP</strong></td>
<td></td>
</tr>
<tr>
<td><strong>ESRI Map Server URLs</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Implementation Questionnaire Review</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Basic KPI &amp; Dashboard</strong></td>
<td></td>
</tr>
</tbody>
</table>
Phase 3 (BR1 & BR2) Day One:

<table>
<thead>
<tr>
<th>Topic</th>
<th>SAWS Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-Going process</td>
<td>SAWS: Core implementation team, Customer Service, Meter shop, Supply data team</td>
</tr>
<tr>
<td><strong>Data Synchronization Validation:</strong></td>
<td></td>
</tr>
<tr>
<td>o Review of existing DataSync data in Compass from CIS to validate data (i.e., Meter IDs, UOMs, etc).</td>
<td></td>
</tr>
<tr>
<td>o Review of DataSync mapping document</td>
<td></td>
</tr>
<tr>
<td>o Any additional fields required?</td>
<td></td>
</tr>
<tr>
<td>o User Defined Items for Meter and Location Groups for VEE, Reports, etc.?</td>
<td></td>
</tr>
<tr>
<td><strong>Daily System Timeline and Systems Integration:</strong></td>
<td></td>
</tr>
<tr>
<td>o CIS DataSync</td>
<td></td>
</tr>
<tr>
<td>o AMI MeterDataLoad</td>
<td></td>
</tr>
<tr>
<td>o Weather Data</td>
<td></td>
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<tr>
<td>o CIS Billing</td>
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<tr>
<td><strong>Water Loss Analysis</strong></td>
<td></td>
</tr>
<tr>
<td>o Meter Hierarchy</td>
<td></td>
</tr>
<tr>
<td>o Data Collection and connectivity</td>
<td></td>
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<tr>
<td><strong>SAWS:</strong></td>
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</tr>
<tr>
<td>Core implementation team, Customer Service, Meter shop, Scada team, Meter Shop, Water loss team</td>
<td></td>
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</tbody>
</table>

Phase 3 (BR1 & BR2) Day Two:

<table>
<thead>
<tr>
<th>Topic</th>
<th>SAWS Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rate and Revenue Analysis Module</strong></td>
<td></td>
</tr>
<tr>
<td>o CIS DataSync information.</td>
<td></td>
</tr>
<tr>
<td>o Billing System Rate information</td>
<td></td>
</tr>
<tr>
<td>o Importing Rates, billing schedules, cycles, etc</td>
<td></td>
</tr>
<tr>
<td><strong>Targeted Messaging Module</strong></td>
<td></td>
</tr>
<tr>
<td>o Notification requirements</td>
<td></td>
</tr>
<tr>
<td>o Target audience</td>
<td></td>
</tr>
<tr>
<td>o Segmentation</td>
<td></td>
</tr>
<tr>
<td><strong>SAWS:</strong></td>
<td></td>
</tr>
<tr>
<td>Core implementation team, Customer Service, Billing, CIS</td>
<td></td>
</tr>
<tr>
<td>Core implementation team, CIS team, Billing</td>
<td></td>
</tr>
</tbody>
</table>
Phase 3 (BR1 & BR2) Day Three:

<table>
<thead>
<tr>
<th>Topic</th>
<th>SAWS Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Leak Detection and Notification Module</td>
<td>SAWS: Core implementation team, Customer Service, CIS, Meter Shop</td>
</tr>
<tr>
<td>o Integration requirements</td>
<td></td>
</tr>
<tr>
<td>o Notification requirements</td>
<td></td>
</tr>
<tr>
<td>o Meter event</td>
<td></td>
</tr>
<tr>
<td>• Custom reporting requirements</td>
<td>SAWS: Core implementation team</td>
</tr>
<tr>
<td>o Understanding business processes</td>
<td></td>
</tr>
<tr>
<td>o Identifying problems that can be solved</td>
<td></td>
</tr>
<tr>
<td>with Compass</td>
<td></td>
</tr>
<tr>
<td>o Identifying additional deliverables</td>
<td></td>
</tr>
<tr>
<td>• EOC Water Mapping</td>
<td>SAWS: Core implementation team, Meter Shop, EOC Mapping team</td>
</tr>
<tr>
<td>o Integration and data export requirements</td>
<td></td>
</tr>
<tr>
<td>• Additional Items, Wrap-up and Next Steps</td>
<td>SAWS: Core implementation team</td>
</tr>
</tbody>
</table>

Phase 3 (BR1 & BR2) Day Four:

<table>
<thead>
<tr>
<th>Topic</th>
<th>SAWS Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Remaining Module Configuration Items</td>
<td>SAWS: Core implementation team</td>
</tr>
<tr>
<td>o Any outstanding items that need additional requirements</td>
<td></td>
</tr>
<tr>
<td>o TBD</td>
<td></td>
</tr>
<tr>
<td>• Web Portal Interface</td>
<td>SAWS: Core implementation team, CIS team, IT</td>
</tr>
<tr>
<td>o Connectivity</td>
<td></td>
</tr>
<tr>
<td>o Exporting data</td>
<td></td>
</tr>
</tbody>
</table>
### Phase 3 (BR3 & BR4) Day One:

<table>
<thead>
<tr>
<th>Topic</th>
<th>SAWS Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>On-Going process</strong></td>
<td></td>
</tr>
<tr>
<td>✷ <strong>Data Synchronization Validation:</strong></td>
<td></td>
</tr>
<tr>
<td>o Review of existing DataSync data in Compass from CIS to validate data (i.e., Meter IDs, UOMs, etc).</td>
<td></td>
</tr>
<tr>
<td>o Review of DataSync mapping document</td>
<td></td>
</tr>
<tr>
<td>o Any additional fields required?</td>
<td></td>
</tr>
<tr>
<td>o User Defined Items for Meter and Location Groups for VEE, Reports, etc.?</td>
<td></td>
</tr>
<tr>
<td>✷ <strong>Daily System Timeline and Systems Integration:</strong></td>
<td></td>
</tr>
<tr>
<td>o CIS DataSync</td>
<td></td>
</tr>
<tr>
<td>o AMI MeterDataLoad</td>
<td></td>
</tr>
<tr>
<td>o Weather Data</td>
<td></td>
</tr>
<tr>
<td>o CIS Billing</td>
<td></td>
</tr>
</tbody>
</table>

### Phase 3 (BR4) Day Two:

<table>
<thead>
<tr>
<th>Topic</th>
<th>SAWS Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>✷ <strong>Remaining Compass Configuration Items</strong></td>
<td></td>
</tr>
<tr>
<td>o Any outstanding items that need additional requirements</td>
<td></td>
</tr>
<tr>
<td>o TBD</td>
<td></td>
</tr>
<tr>
<td>✷ <strong>IVR Interface</strong></td>
<td></td>
</tr>
<tr>
<td>✷ <strong>Implementation strategy</strong></td>
<td></td>
</tr>
<tr>
<td>o Notification methods</td>
<td></td>
</tr>
<tr>
<td>o Data elements</td>
<td></td>
</tr>
<tr>
<td>o IVR capabilities</td>
<td></td>
</tr>
</tbody>
</table>

SAWS: Core implementation team, Customer Service, CIS, Meter Shop

SAWS: Core implementation team, CIS team, IT
| Additional Items, Wrap-up and Next Steps | SAWS: Core implementation team, CIS team, IT |
APPENDIX C – Professional Services Fees

Meter Data Management System (MDMS)
FOR
San Antonio Water System (SAWS)
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>TABLE OF CONTENTS</td>
<td>94</td>
</tr>
<tr>
<td>PROFESSIONAL SERVICES FEES</td>
<td>95</td>
</tr>
<tr>
<td>1 BACKGROUND.</td>
<td>95</td>
</tr>
<tr>
<td>2 INCORPORATION INTO STATEMENT OF WORK #1.</td>
<td>95</td>
</tr>
<tr>
<td>3 PROFESSIONAL SERVICES FEES AND TRAVEL EXPENSES:</td>
<td>95</td>
</tr>
<tr>
<td>4 FEES TO BE PAID:</td>
<td>95</td>
</tr>
</tbody>
</table>
Professional Services Fees

Background.

This Appendix sets forth the pricing for the SmartWorks Professional Services to be supplied by SmartWorks to Customer pursuant to Statement of Work #1. All quantities shown represent Customer’s current estimate of its requirements assuming that there are no modifications to the Integrated Master Schedule that impact Phase 2 - Pilot Deployment - or Phase 3 Full Deployment. Any modifications to the Integrated Master Schedule may result in additional resources and additional fees, provided that any such additional resources or fees shall be agreed through the Change Management Process.

Incorporation into Statement of Work #1.

This Appendix is subject to and made part of Statement of Work #1 and the governing Professional Services Agreement between the parties dated [Insert Date].

Professional Services Fees and Travel Expenses:

- No escalation shall be applied to the Professional Services Fees described in Statement of Work #1, unless mutually agreed to by both parties through a Change Order.
- Travel expenses (Not to Exceed) will follow Consultant and Contractor Reimbursable Expense Policy.
- Commencement of Phase 3 activities will be contingent on Customer’s Board approving the work to be performed in Phase 3 - Full System Deployment.
- If both parties agree to move intended work from one payment milestone to another, then the fee schedule will be adjusted accordingly.

Fees to be Paid:

- Per Table 1 - Professional Services Fees and Travel Expenses
  
  o Professional Service fees will be paid to SmartWorks per the payment milestone schedule and acceptance criteria as outlined in Table 1 below and in Statement of Work #1.
  
  o Travel Expenses (Not to Exceed) will be invoiced per the payment milestone schedule as incurred, per Customer’s Travel Policy, not to exceed the amounts outlined, unless otherwise approved, for each of the payment milestones outlined in Table 1.

  o Phase 2 - Pilot Deployment:

    Acceptance Criteria – Milestone Payments 1-6 (Contract Signing, Kick-Off Session, End of Day 1, End of Day 30, End of Day 60 and Phase 2 Go-Live Activities): Upon completion of each Phase 2 identified payment milestone and acceptance of the work performed under the respective payment milestone in Statement of Work #1, the payment milestone(s) is then eligible for invoicing and payment in accordance with the terms of Article IV of the PSA.

  o Phase 3 - Full Deployment:

    Acceptance Criteria – Milestone Payments 7-9 (Business Releases 3.1, 3.2, and 3.4): Upon completion of each Phase 3 identified payment milestone and acceptance of the work performed under the respective payment milestone in Statement of Work #1, the payment milestone(s) is then eligible for invoicing and payment in accordance with the terms of Article IV of the PSA. Note: No specific Deliverables are required during Business Release 3.3.

  o Phase 3 – Full Deployment (Final System Acceptance):

    Acceptance Criteria- Milestone Payment 10 (Final System Acceptance: Scalability Testing): Upon completion of Phase 3 - Final Solution Acceptance) identified payment milestone and acceptance of the work performed under the respective payment milestone(s) in the SOW the milestone is then eligible for invoicing and payment in accordance with the terms of Article IV of the PSA.
Table 1 - Professional Services Fees and Travel Expenses

<table>
<thead>
<tr>
<th>Payment Milestone</th>
<th>Phase</th>
<th>Payment Milestone Description</th>
<th>Project Management Services</th>
<th>Integration Design Services</th>
<th>Data Conversion Service</th>
<th>Custom Report Development</th>
<th>Configuration Service</th>
<th>Training Services</th>
<th>Testing Services</th>
<th>Expected Completion Date</th>
<th>Agreed Payment Milestone Total</th>
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<tr>
<td>1</td>
<td>2</td>
<td>Contract Signing:</td>
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<td>10/9/2020</td>
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<td>2</td>
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<td>Completion of Kick-Off Session(s):</td>
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<td>36</td>
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<td>11/9/2020</td>
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<td>3</td>
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<td>End of Day 1 Activities:</td>
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<td>End of Day 30 Activities:</td>
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<td>5</td>
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<td>End of Day 60 Activities:</td>
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<td>133</td>
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<td>Phase 2: Professional Services:</td>
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<td>Phase 2: Travel Budget:</td>
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<td>Contract Total:</td>
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</tr>
</tbody>
</table>

1 Hours and trips shown are for reference only. Invoices will be paid to SmartWorks on the Payment Milestone Total shown.
SCHEDULE E
SCHEDULE E

INSURANCE TERMS

SmartWorks shall be responsible for all premiums, deductibles, and self-insured retentions, if any, stated in the policies. All deductibles or self-insured retentions shall be disclosed on the Certificate of Insurance. All endorsements naming the Customer Indemnified Parties as additional insureds, waivers, and notices of cancellation endorsements, as well as the Certificates of Insurance shall indicate: San Antonio Water System, c/o Ebix BPO, P.O. Box 100085-ZD, Duluth, GA 30096.

1. Commercial Insurance Specifications

a. Commencing on the date of this Agreement, SmartWorks shall, at its own expense, purchase, maintain and keep in force such lines of insurance coverage as will protect it and the Customer Indemnified Parties from claims that may arise out of or relate to acts or omissions in the performance of, whether such acts or omissions are by SmartWorks, by any subcontractor or supplier, or by anyone directly or indirectly employed or engaged by any of them or by anyone for whose acts or omissions any of them may be liable, including the following lines of insurance coverage:

1) Workers' Compensation (“WC”) insurance that will protect SmartWorks and the Customer Indemnified Parties from claims under statutory Workers' Compensation laws, disability laws, or such other employee benefit laws and that will fulfill the requirements of all jurisdictions in which the Agreement is to be performed.

   The minimum policy limits of liability for this line of insurance coverage shall be statutory limits.

   This line of insurance coverage shall be endorsed to provide a Waiver of Subrogation in favor of the Customer Indemnified Parties with respect to both this insurance coverage and the EL insurance (as specified immediately below in section 1.a.2).

2) Employers' Liability (“EL”) insurance (Part 2 under the standard Workers’ Compensation insurance policy) that will protect SmartWorks and the Customer Indemnified Parties for damages because of bodily injury, sickness, and disease of SmartWorks's employees apart from that imposed by Workers’ Compensation laws.

   The EL line of insurance coverage shall have minimum policy limits of liability of not less than:

   | REDACTED | Bodily Injury by Accident |
   | REDACTED | Bodily Injury by Disease - Each Employee |
   | REDACTED | Bodily Injury by Disease - Policy Limit |

3) Commercial General Liability (“CGL”) insurance that will protect it and the Customer Indemnified Parties from claims for damages because of bodily injury, personal injury, sickness, disease, or death and insurance that will protect it and the Customer Indemnified Parties from claims for damages to or destruction of tangible property of others, including loss of use thereof.

   The CGL line of insurance coverage shall:

   - Cover independent contractors;
   - Afford coverage for Products Liability and/or Completed Operations and for Contractual Liability.
The CGL line of insurance coverage (which includes excess liability policies) shall have minimum policy limits of liability of not less than:

<table>
<thead>
<tr>
<th>Coverage</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occurrence Limit</td>
<td>REDACTED</td>
</tr>
<tr>
<td>Products/Completed Operations Aggregate</td>
<td>REDACTED</td>
</tr>
<tr>
<td>Personal and Advertising Injury</td>
<td>REDACTED</td>
</tr>
</tbody>
</table>

This line of insurance coverage shall be endorsed:

- Naming the Customer Indemnified Parties as an Additional Insured for both ongoing and completed operations; and
- To provide a Waiver of Subrogation in favor of the Customer Indemnified Parties.

4) **Commercial/Business Automobile Liability ("AL")** insurance that will protect it and the Customer Indemnified Parties from claims for damages arising out of the maintenance, operation, or use of any owned, non-owned, or hired vehicles.

The CGL line of insurance coverage shall have minimum policy limits of liability for bodily injury and property damage **combined** of not less than REDACTED per each occurrence.

This line of insurance coverage shall be endorsed:

- Naming the Customer Indemnified Parties as an Additional Insured; and
- To provide a Waiver of Subrogation in favor of the Customer Indemnified Parties.

5) **Professional Liability ("PL")** (Technology errors and omissions) insurance with minimum coverage limits of REDACTED per claim, REDACTED in the aggregate, and, if this line of coverage is written on a "Claims Made" form, SmartWorks must maintain this line of insurance coverage for a period of at least 24 months after the date of termination of the Agreement.

The PL line of coverage shall include in writing on the Certificate of Liability Insurance ("Certificate") the coverage form under which the respective line of coverage is written – either:

- Claims-made form; if the coverage form declared on the Certificate is the Claims-made form, the "Retroactive-date" for this line of coverage must also be included on the Certificate as well; or
- Occurrence basis – no additional wording required.

6) **Security and Privacy Liability ("SPL")** (Cyber Risk) insurance to defend and cover the information security and privacy liability exposures (financial loss, penalties, and defense costs) that exist with respect to SmartWorks and the Customer Indemnified Parties, with minimum coverage limits of REDACTED per claim, REDACTED in the aggregate.

The SPL line of insurance shall provide the following coverage:

- Broad coverage for reasonable and necessary expenses associated with an incident, subject to terms and conditions of the applicable insurance policy, in the nature of the following expenses:
Compliance with data breach notification laws;
- Securing legal counsel to advise on incident response;
- Providing credit file monitoring to victims;
- Hiring forensic experts to investigate the breach; paying regulatory defense and penalties from privacy law violations; and
- Coverage for HIPAA related claims.
- Coverage for legal liabilities, including those arising from failure to comply with state or federal breach notification laws or privacy policies and/or to administer a government-mandated identity theft prevention program.

If the SPL line of insurance is written on a “Claims Made” form, SmartWorks must maintain this line of insurance coverage for a period of at least 24 months after the date of termination of the Agreement.

The SPL line of insurance shall include in writing on the Certificate the coverage form under which the respective line of coverage is written – either:

- Claims-made form; if the coverage form declared on the Certificate is the Claims-made form, the “Retroactive-date” for this line of coverage must also be included on the Certificate as well; or
- Occurrence basis- no additional wording required

b. SmartWorks shall require all subcontractors and suppliers to carry lines of insurance coverage appropriate to their scope of work and shall promptly submit copies of each subcontractor’s Certificate upon request from Customer. Customer may condition its approval of SmartWorks’s use of any subcontractor on receipt of the Certificate.

c. SmartWorks agrees all required insurance policies are to contain or be endorsed, to the extent not inconsistent with the requirements of the issuing insurance carrier or applicable law, to provide for an endorsement that the “other insurance” clause shall not apply where Customer Indemnified Parties are an Additional Insured shown on the policy.

d. As between SmartWorks and the Customer Indemnified Parties, SmartWorks is responsible for the deductibles under all lines of insurance coverage required by this Schedule.

e. The stated policy limits of each line of insurance coverage required by this Schedule are MINIMUM ONLY, and it shall be SmartWorks’s responsibility to determine what policy limits are adequate and the length of time each line of insurance coverage shall be maintained. Insurance policy limits are not a limit of SmartWorks’s liability.

f. The minimum limits required of each line of insurance coverage may be either basic policy limits of the WC, EL, CGL, and AL or any combination of basic limits or umbrella (on an Umbrella form) or excess (on an Other Than Umbrella form) limits.

g. Customer’s acceptance of Certificate(s) that do not comply with this Schedule in any respect does not release SmartWorks from compliance herewith.

h. The Certificate shall contain the following or substantially similar language: “Should any of the policies described herein be cancelled before the expiration date thereof, the insurer(s) affording coverage will endeavour to provide thirty (30) days’ advance written notice by mail to the certificate holder named herein, but failure to mail such notice shall impose no obligation or liability of any kind upon the insurer(s) affording coverage, their agents or representatives, or the issuer of this certificate.”
i. Within five calendar days of cancellation or non-renewal of any required line of insurance coverage, SmartWorks shall provide Customer a replacement Certificate with all required endorsements included. Customer shall have the option to suspend SmartWorks’s performance should there be a lapse in coverage at any time during this Agreement.

j. Failure to provide and to maintain the required lines of insurance coverage shall constitute a material breach of this Agreement.

k. In addition to any other remedies Customer may have, upon SmartWorks’s failure to provide and maintain any insurance or policy endorsements to the extent and within the time herein required, Customer shall have the right to order SmartWorks to stop performing services hereunder and/or withhold any payment(s) which become due to SmartWorks hereunder until SmartWorks demonstrates compliance with this Schedule.

l. Nothing in this Schedule shall be construed as limiting in any way the extent to which SmartWorks may be held responsible for payments for damages to persons or property resulting from SmartWorks’s or its subcontractors’ performance of the services covered under this Agreement.

m. SmartWorks insurance shall be primary and non-contributory with respect to any insurance or self-insurance carried by any Customer Indemnified Party for liability arising out of operations under this Agreement.

n. SmartWorks agrees that all lines of insurance coverage required by this Schedule shall be with insurance companies, firms, or entities that have an A.M. Best rating of “A- (“A”- minus)” and a Financial Size Category of a “VII” or better. All lines of insurance coverage shall be of an “Occurrence” type except as otherwise expressly permitted herein.

o. Customer will accept worker’s compensation insurance coverage written by the Texas Workers Compensation Insurance Fund.

p. Customer reserves the right throughout the Term to review the requirements of this Schedule and to require modification of the lines of insurance coverage and their respective liability limits when deemed necessary and prudent by Customer’s Risk Manager and Legal Department based upon changes in statutory law, court decisions, or circumstances surrounding this Agreement. In no instance will any modifications to the requirements of this Schedule be permitted whereupon the Customer Indemnified Parties may incur increased risk exposure.

2. Certificate(s) of Liability Insurance Requirements

Prior to the commencement of any performance under this Agreement, all of the following requirements shall be met:

a. SmartWorks shall have completed by its insurance agent(s) and submitted to Customer's Contracting Department Certificates providing evidence of SmartWorks's compliance with all requirements of this Schedule.

b. The original Certificates must (1) include the agent's original signature, including the signer's company affiliation, mailing address, office and fax phone numbers, email address, and contact person's name; and (2) be mailed, with copies of all applicable endorsements, directly from the insurer's authorized representative in strict compliance with Sections 2.i. (Certificate Holder), below, and 2.j. (Distribution of Completed Certificates), below.

c. The Texas Legislature passed and Governor Perry signed Senate Bill 425 to become effective January 1, 2012. This law will require all certificates of insurance forms to be filed with and approved by the Texas Department of Insurance before they can be used after the effective date of the law.
In addition, the law codifies current Texas Department of Insurance rules that a certificate of insurance must not obscure or misrepresent the coverage provided by the insurance policies.

d. Customer will not accept Memorandum of Insurance or Binders as proof of insurance.

e. Customer shall have no duty to pay or perform under this Agreement until such Certificates and applicable endorsements have been received, reviewed, and deemed by Customer’s Risk Management/Contract Services Department to be fully-compliant with this Schedule. No one other than Customer’s Risk Manager shall have authority to waive any part of the requirements set forth in this Schedule.

f. Additional Insured:

The AL and CGL policies must be endorsed naming Certificate Holder (as per item 2.i. below) as an Additional Insured with respect to liability arising out of operations of SmartWorks pursuant to this Agreement, and, so noted in the DESCRIPTION OF OPERATIONS section of the Certificate;

Suggested wording to be placed on the Certificate is as follows:

EITHER use,

The AL and CGL policies include a blanket automatic Additional Insured endorsement that provides additional insured status to the Certificate Holder only when there is a written contract between the named Insured and the Certificate Holder that requires such status.

OR use,

The AL and CGL policies are endorsed naming the Certificate Holder as an Additional Insured.

If the above wording cannot be placed in the DESCRIPTION OF OPERATIONS section of the Certificate, SmartWorks shall provide Customer the completed Certificate, a copy of the specific AL and CGL Additional Insured endorsement documents, or the policy wording from both the AL and CGL policies.

g. Waiver of Subrogation:

The AL, CGL, WC, and EL policies must be endorsed with the Waiver of Subrogation in favor of Certificate Holder (as per item 2.i. below) and so noted in the DESCRIPTION OF OPERATIONS section of the Certificate;

Suggested wording to be placed on the Certificate is as follows:

EITHER use,

The AL, CGL, WC, and EL policies include a blanket, automatic Waiver of Subrogation endorsement that provides this feature only when there is a written contract between the named Insured and the Certificate Holder that requires such status.

OR use,

The AL, CGL, WC, and EL policies are endorsed with the Waiver of Subrogation in favor of the Certificate Holder.
If the above wording cannot be placed in the DESCRIPTION OF OPERATIONS section of the Certificate, SmartWorks shall provide Customer the completed Certificate, a copy of the specific AL, CGL, WC, and EL Waiver of Subrogation endorsement documents, or the policy wording from each of the AL, CGL, WC, and EL policies.

h. The Customer Project/Contract number(s) along with its Descriptor Caption must be included in the Description of Operations section located in the bottom half of the standard ACORD Certificate forms.

i. Certificate Holder - Customer shall be shown as the Certificate Holder in the Certificate Holder section located in the bottom half of the standard ACORD Certificate forms and formatted as follows:

San Antonio Water System  
c/o Ebix BPO  
PO Box 100085-ZD  
Ref. # 107- (Lawson Acct's Payable Vendor #)-(SAWS Contract/Project #[TBD])-  
Duluth, GA 30096

DO NOT BEGIN THE DISTRIBUTION OF ANY CERTIFICATES BEFORE RECEIVING AND INSERTING THE COMPLETE REFERENCE NUMBER INTO THE CERTIFICATE HOLDER ADDRESS SHOWN ABOVE.

j. Distribution of Completed Certificates - Completed Certificates shall be sent to Customer as follows:

1) Send original:
   a) By E-Mail: saws@ebix.com  
b) By Fax: 1-770-325-6502

2) Send copy to the following:
   San Antonio Water System  
   Attention: Contract Administration  
   P.O. Box 2449  
   San Antonio, TX 78298-2449

k. SmartWorks shall be responsible for obtaining Certificates from its subcontractors and furnishing copies of same to Customer.

3. **SURVIVAL**

Any and all representations, warranties, and covenants made by SmartWorks under this Schedule are of the essence of this Agreement and shall survive the execution and delivery of it, and all statements contained in any document required by Customer, whether delivered at the time of the execution or at a later date, shall constitute representations and warranties under this Agreement.
SCHEDULE G
SECURITY PROCEDURES

This Schedule G shall only apply if work will be conducted on Customer’s property, on Customer’s infrastructure, or involve any of Customer’s networks, and to the extent not prohibited by applicable laws, SmartWorks shall ensure a Prime Contractor Data Form (“PCDF”) and a “Background Screening Letter” (provided by a third-party background screening service) are properly completed for all employees and subcontractors performing work under this Agreement and is on file with Customer’s Security Office prior to work commencement. Background checks must at a minimum include National Criminal Check, Verify Employment Eligibility (E-Verify), and Terrorist Watch List, with this information being provided in the Background Screening Letter from the third-party screening service. Any person found to have an unacceptable background check will not be allowed to perform work under this Agreement (however, at Customer’s sole discretion, a waiver may be given by Customer’s Security Office for an unacceptable finding provided that it must first be approved and signed off on by the Director of Customer’s Security Office). Any subcontractors performing work must also be listed in the PCDF and the Background Screening Letter. SmartWorks shall be responsible for the accuracy of information on the PCDF and the Background Screening Letter and for obtaining any and all required items (e.g., badges and parking tags) necessary to fulfill the work under this Agreement. The PCDF and Background Screening Letter must be sent electronically to securitygroup@saws.org. SmartWorks shall advise Customer’s project manager/inspector of any employee terminations or changes to personnel performing work under this Agreement, and SmartWorks shall immediately turn in any and all badges and/or parking tags of employees who are terminated or no longer performing work under this Agreement. If SmartWorks becomes aware, or reasonably should have become aware, of any changes in the information contained in the PCDF or the Background Screening Letters, SmartWorks shall immediately notify Customer’s project manager/inspector and provide updated PCDF and Background Screening Letters, with copies to securitygroup@saws.org.

SmartWorks, its employees, and agents shall obtain a photo identification badge and parking tag from Customer’s Security Office prior to any performing any work on Customer’s property, which badge and parking tag shall be used only for purposes necessary to perform the work under this Agreement. Customer’s Security Office hours for badge issuance are Monday, Wednesday, and Friday from 9:00am to 12:00pm, excluding holidays (hours are subject to change). Customer’s Security staff can be contacted at (210) 233-3177 or (210) 233-3338. Once the project is completed, SmartWorks shall return all badges and parking tags to Customer’s Security Office.

A Customer employee must physically escort SmartWorks’s employees and agents at all times. Customer may, in its sole discretion, waive the escort requirements if the PCDF and a “clean” Background Screening Letter, signed by an authorized representative of a third-party background screening service are approved by Customer’s project manager and Customer’s Security Office. Waiver of the escort requirement shall only be permitted through a written communication to SmartWorks from Customer’s Security Office.

Subcontractors must always be under escort of SmartWorks’s employees while performing work on any of Customer’s property or assets. Subcontractors must display either (1) a company photo badge with name or (2) a valid governmental identification card at all times while working on any of Customer’s property. SmartWorks is solely responsible for the actions of its employees, agents, subcontractors, and consultants.

At all times during the Agreement, SmartWorks shall comply with Customer’s security requirements and shall maintain the security of Customer’s property, infrastructure, networks, facilities, and customer’s property. Security incidents must be reported to Customer’s Security Office immediately at (210) 233-3338.

If SmartWorks plans to stage or store its property, such as equipment, storage boxes, tools, trailers, or high-priced supplies needed for the Agreement, on Customer’s property, then SmartWorks will be responsible for providing a security guard, who will be subject to Customer’s prior approval, when SmartWorks is not working at the property.

If SmartWorks plans to leave the work site unsecure or open during the performance of the Agreement, it must provide an employee or Customer-approved security guard to monitor ingress and egress to the site. If SmartWorks
plans to leave the work site open or unsecure when not working on the site, SmartWorks must provide a Customer-approved security guard.

Customer provides for security on its sites. If SmartWorks takes any action that diminishes Customer’s security, SmartWorks will be responsible for providing additional security requirements at its expense. Some examples of additional requirements that Customer may require include hiring of Customer-approved security guards, temporary fencing, mobile Closed-Circuit Television Monitoring trailer(s), or extra lighting. Notwithstanding anything herein to the contrary, any provisions in this Schedule that may appear to give Customer the right to direct SmartWorks as to details of doing any work under this Agreement or to exercise a measure of control over any security measures or such work shall be deemed to mean that SmartWorks shall follow the desires of Customer for security measures only.

Advance coordination by SmartWorks with Customer’s Security Office for these security requirements is necessary to ensure no delays with timely performance of work. Any other provision of this Agreement notwithstanding, in the event SmartWorks fails to comply with the security requirements set out in this Schedule, Customer may, with no penalty or claim of any nature (including breach of contract) against Customer by SmartWorks:

- Issue a Work Stoppage Order until the security violation(s) are remedied; and/or
- Ask any unidentified or improperly identified person or equipment to leave Customer’s site immediately and not return until items or deficiencies are remedied to Customer’s satisfaction.
SCHEDULE H
San Antonio Water System Data Security

Schedule H - Data Security
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>TABLE OF CONTENTS</td>
<td>2</td>
</tr>
<tr>
<td>SCHEDULE H - DATA SECURITY</td>
<td>3</td>
</tr>
<tr>
<td>1 SECURITY OVERVIEW</td>
<td>3</td>
</tr>
<tr>
<td>2 SECURITY RESPONSIBILITIES</td>
<td>3</td>
</tr>
</tbody>
</table>
Schedule H - Data Security

1 Security Overview
SmartWorks shall provide the SmartWorks SaaS in a safe and secure manner that complies with industry standards and the requirements outlined in Article XV of the Agreement. Customer-specific security requirements will be identified in Schedule F – Minimum Requirements (including its appendix).

2 Security Responsibilities
This section identifies applicable security practices and allocates such roles and responsibilities amongst SmartWorks and Customer.

A. Secure Communications. All data must be exchanged between SmartWorks and Customer through adequate and secure means consistent with the requirements of Article XV of the Agreement.

B. Data, Systems, Websites, and Security. SmartWorks will establish and maintain data security procedures and other safeguards against the destruction, corruption, loss, or alteration of Customer Data, and to prevent access, intrusion, alteration, or other interference by any unauthorized third parties of the Customer Data, in accordance with the standards stated in Article XV of the Agreement. At a minimum, SmartWorks shall use proven, standard algorithms as the basis for encryption technologies. SmartWorks shall comply with any additional data security requirements as mutually agreed in writing by Customer and SmartWorks, including those set forth in the Agreement. Nothing herein shall be construed to limit any obligation of SmartWorks or right of Customer under any other part of the Agreement.

C. Risk Management/Security Assessments. SmartWorks shall:
   1. Ensure that processes are in place to quickly identify newly discovered security vulnerabilities in the SmartWorks SaaS and to update standards to address new vulnerability issues;
   2. Test security controls, limitations, network connections, and restrictions on a regular basis to assure the ability to adequately identify and stop any unauthorized attempts to access Customer’s instance of the SmartWorks SaaS or the Customer Data;
   3. Perform internal and external network vulnerability scans on a regular basis and after any significant change in the network (such as new system component installations and product upgrades);
   4. Promptly notify Customer of newly discovered vulnerabilities in the SmartWorks SaaS, including sufficient details for Customer to perform a risk assessment, as well as the anticipated date of a patch or update to correct such vulnerabilities;
   5. Conduct periodic (at least annually) security assessments of the SmartWorks SaaS, including penetration testing, and provide Customer the results of same within a reasonable period of time following completion of such assessment; and
   6. Perform system and application security assessments prior to the deployment of new services as part of the SmartWorks SaaS or when major changes to the SmartWorks SaaS occur.
D. Access. Customer may provide SmartWorks access to Customer’s systems and network, subject to the following conditions. SmartWorks shall require each user to be uniquely identified before allowing access to Customer’s network or infrastructure. Remote system access shall only be obtained via a Customer approved remote access program. Such remote access sessions will be provided and managed by Customer. Without limiting SmartWorks’s obligations or Customer’s rights under the Agreement, SmartWorks shall take all appropriate security precautions to prevent malicious or unauthorized access to Customer’s systems and network, including the following actions:

1. SmartWorks shall ensure appropriate levels of internal controls for granting access to the Customer systems and network that meet Customer’s requirements;
2. SmartWorks shall ensure that its personnel with on-line access shall only access Customer’s systems and network using personally assigned user IDs;
3. SmartWorks shall ensure that SmartWorks’s employees do not share or reuse user access credentials when accessing Customer’s systems and network;
4. SmartWorks shall ensure that its personnel do not make unauthorized changes to Customer’s systems and network; and
5. SmartWorks will promptly disable and remove user accounts of personnel who leave employment or change job functions.

SmartWorks shall also ensure that all hardware, including laptops, used by SmartWorks to connect to Customers systems and networks shall have anti-threat measures and mitigating controls consisting of at least the following: (I) anti-virus software installed, enabled, and regularly updated; and (II) firewalls installed, enabled, and configured to restrict connections between publicly accessible servers and any SmartWorks system component storing Customer Data and to prohibit direct public access between external networks and any SmartWorks system component that stores Customer Data, including any connections from wireless networks.

E. General Configuration Standards. SmartWorks shall ensure that:

1. All services, applications, scripts, and drivers that will not be used to deliver the SmartWorks SaaS to Customer shall be disabled or removed;
2. All system clocks shall be synchronized with a central time server;
3. The most recent security patches shall be installed on SmartWorks servers, computers, and workstations as soon as practical after testing; the only exception being when installation would unreasonably interfere with SmartWorks’s or Customer’s immediate business requirements, in which case installation shall be as promptly after such interference is reasonably mitigated; and
4. Trust relationships shall not be used between systems involved in delivery of the SmartWorks SaaS to Customer.

F. Access Control. SmartWorks shall ensure that: (1) access to Customer’s instances of the SmartWorks SaaS and the Customer Data shall (a) be permission-limited, (b) any services that are used for administering the SmartWorks SaaS, including the infrastructure used to deliver it, and that are not restricted by IP address or the use of a virtual private network, shall be protected by two-factor authentication, and (c) be
logged and monitored through automated access control tools, and (2) Customer shall have direct access to such logs. All passwords for access to any portion of the SmartWorks SaaS shall adhere strictly to the guidelines established by Customer with regard to minimum length, use of alphanumeric characters, and frequency of updates. Without limiting the foregoing, SmartWorks shall ensure each of the following:

1. Privileged access to the SmartWorks SaaS and Customer Data shall be performed over secure channels (e.g., encrypted network connections using SSH or IPSec);
2. Access to computing resources and Customer Data shall be limited to those individuals whose job duties require such access;
3. Storage and retention of Customer Data shall be for the time periods set forth in Schedule A of the Agreement (or as otherwise mutually agreed) and shall meet all legal and regulatory requirements;
4. All internet connections shall be evaluated (inbound and outbound) and constrained via managed gateways comprised of:
   i. Firewall devices,
   ii. Intrusion Detection System (IDS) / Intrusion Prevention System (IPS) devices; and
5. Screensavers (with screen lockout) shall activate after no more than 10 minutes of inactivity, and a password shall be required to regain access.

G. Access Termination. With respect to terminated employees or employees who no longer require access to Customer’s instances of the SmartWorks SaaS or the Customer Data in order for SmartWorks to perform its obligations under the Agreement, SmartWorks shall promptly disable the access credentials of such individuals.

H. Monitoring/Mitigation. SmartWorks shall ensure that:

1. All appropriate network traffic and host-based activities related to Customer’s instance of the SmartWorks SaaS shall be monitored using mechanisms such as intrusion detection systems, intrusion prevention systems, or others as required by Customer;
2. All logs and other materials generated by such systems shall be protected at the same level as the SmartWorks SaaS and shall be maintained for at least six months;
3. Network intrusion detection systems, host-based intrusion detection systems, and intrusion prevention systems shall be used to monitor all network traffic that may affect or relate to Customer’s instance of the SmartWorks SaaS and shall be configured to alert SmartWorks personnel to suspected compromises;
4. Actual or suspected intrusions or Security Incidents (as defined in Section 15.7 of the Agreement) shall be reported to a designated SmartWorks contact person who shall address these reported events as appropriate;
5. SmartWorks’s designated person for Customer’s instance of the SmartWorks SaaS shall regularly review the logs;
6. SmartWorks shall notify Customer of Security Incidents in accordance with the requirements of the Agreement; and
7. corrective measures shall be prescribed and taken as needed.
SCHEDULE I

San Antonio Water System (SAWS) ConnectH2O

AMI Solution Architecture

August, 2020
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Phased Solution Architecture and Roadmap</td>
<td>3</td>
</tr>
<tr>
<td>2. Proposed Phased Implementation and Architecture Components</td>
<td>11</td>
</tr>
<tr>
<td>3. Assumptions</td>
<td>27</td>
</tr>
</tbody>
</table>
1. Phased Solution Architecture and Roadmap

This section of the document describes a phased approach to implementing AMI, MDMS and EPI applications and integrations at an enterprise level within SAWS. This “strategic architectural roadmap” provides specifics on a simple and feasible, building-block approach towards full implementation. Please note that this is a living document and that the solution architecture will be reviewed and further refined as the program progresses. Additionally, once AMI, MDMS, and EPI vendor solutions have been finalized, more detailed design sessions around the various architectural components identified will be performed.

1.1 Solution Architecture by Phases

The following is a high-level summary of each of the phases:

**Phase 1 – Planning and Requirements**

The phase where these initial artifacts are produced from an IT, PMO, and program planning perspective. **This phase is complete.**

**Phase 2 – Pilot**

This phase focuses on getting two Pilot AMI solutions up and running, balancing two factors – to not have a great disruption on IS and affect IPS production systems, but still have enough functionality to evaluate the pilot results and demonstrate the value of AMI to the enterprise.

**Phase 3. – Business Release 1**

This phase is the start of AMI full deployment and focuses on getting additional applications and integrations up and running in production mode and emphasizing the full Meter to Cash process. It is highly recommended that SCP be enhanced to support business requirements around customer presentment of the granular consumption data, more customer self-service, personalization, and advanced alerting and customer communications through the outbound communications gateway. It is also recommended to implement a Mobile Workforce Management (MWFM) solution and integrate this to IPS to aid in AMI deployment and accelerate the AMI program benefits.

**Phase 3. – Business Release 2**

The primary focus of this Phase centers around Business Intelligence, namely analytics, dashboards, and reporting from the non-production, SAWS replicated MDMS database instance using a preferred visualization and reporting tool such as Tableau. Another more minor component is to interface MDMS to the EOC Water Outage Map application to aid Operations in visualization of specific MDMS-generated alarm, alerts, and events that would aid in water trouble and leak management operations.
Phase 3. – Business Release 3

This Business Release concentrates in efforts on introducing the Conservation Salesforce CRM into the program. Depending on business requirements and functionality desired around customer enrollment and customer program management, integration to the Enhanced SCP would be required, and also potentially to MDMS.

Phase 3. – Business Release 4

The major component of this phase is adding IVR for customer self service transactions related to MDMS information (e.g. querying on daily consumption, signing up for specific alerts, etc.) and the necessary integration to the Enhanced SCP, Conservation Salesforce CRM, and IPS. A minor component of this phase is also interfacing the Trimble Fire Hydrant Pressure system to the EOC Water Outage Map, or alternative passing the hydrant pressure through the AMI network and leveraging the MDMS to Water Outage Map integration that was implemented in Business Release 2.

Phase 3. – Full Deployment

The final phase of the program represents the full deployment of the AMI network and replacement of SAWS meters with Smart Meters. Some other significant initiatives are also recommended – specifically, expanding the Conservation Salesforce CRM to an enterprise CRM, re-architecting the Data Warehouse from an enterprise perspective with a data model, revised schemas, and a standard ETL tool to obtain data from a variety of data sources, including MDMS. As MDMS data storage requirements continue to increase, it is also recommended to implement some Archival/Purge solution to optimize performance and reduce storage costs, while still meeting data retention requirements.
Phase 2 – Pilot Solution Architecture

Advance Metering Infrastructure Vendor 1
- Head End system
- Comms Gateway

Advance Metering Infrastructure Vendor 2
- Head End system
- Comms Gateway

Milestone Analytics Tool

MDMS

Native Analytics/Reporting

Selected Departmental Direct Access to MDMS

IPS (PROD)
- CIS/CRM
- WO/Assets
- CDR/Permitting

Vanguard EPI
- Asset Inventory

Asset Inventory

Billing Comparison & Reconciliation

ESRI

Legend
- Day 1
- Day 30
- Day 60

*Timing to be determined
Phase 3 – Business Release (BR1)
Proposed Solution Architecture
Phase 3 – Business Release (BR4)
Proposed Solution Architecture

[Diagram of solution architecture with various components and processes]
2. Proposed Phased Implementation and Architecture Components

The phased strategy depicted in the previous diagrams builds upon the base functionality in Pilot Phase 2 and grows incrementally with Phase 3 Business Releases 1-4, ending with Full Deployment.

Within each phase, a series of strategic “components” are defined and described in the following tables. The impact of each of the strategic components is assessed in more detail by outlining the business impact or business benefit, describing the IT impact, and then proposing any recommendation, justification, and other considerations for including this component in this Phase. An “R” is used to denote a required component and is referenced in both the diagrams and the tables. An “O” is used to denote an optional component and is referenced in both the diagrams and the tables. “BR” is used to denote the specific business release and is referenced in the diagrams and the tables.
<table>
<thead>
<tr>
<th>REF #</th>
<th>Architecture Component</th>
<th>Business Benefit/Impact</th>
<th>IT Impact</th>
<th>Recommendation/Justification</th>
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<td><strong>Phase 2 - Pilot</strong></td>
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| R1    | End Point asset data (e.g. static meters and AMI communication modules) from each AMI vendor uploaded to  
  - IPS PROD  
  - IPS DEV 2 | Provision of the necessary meter and module asset data required by IPS prior to meter and module installation. | Use IPS standard meter upload file formats | Although the number of records uploaded during Pilot is minimal, if an opportunity exists to automate the data upload, it would be beneficial, as it can be applied throughout deployment. Meter sample testing and Meter Release processes are yet to be defined. Depending on the processes defined, additional meter statuses in IPS may be defined to indicate if a meter has been released for install or still in sample testing. |
| R2    | End point data transfers between EPI WOMS and IPS PROD and IPS DEV 2. The integrations include,  
  - R2.1 One-time extract of master data such as Premise, Meter, Meter configuration, Last read dates etc. from IPS PROD to establish EPI dataset for meter/module installation planning  
  - R2.2 Ongoing updates of above data from IPS PROD to keep EPI dataset in sync during installation  
  - R2.3 Meter Exchanges and/or module installation – Daily export from EPI to Premise/customer location data provided to EPI vendor. | Support the data upload into both PROD and DEV environments | Can look at automating the WOMS upload process into IPS via Web Services or FTP | Only a subset of the integrations will be connected to IPS DEV 2 as PROD is the prime system of record for EPI. For example, master data updates from IPS to EPI will only be sent from IPS PROD. However, order completion data will be integrated with both PROD and DEV. Full Deployment: SAWS will move towards API integration (away from file exports) |

**SAWS**

*Solution Architecture v4.0*  

*Proprietary and Confidential*
<table>
<thead>
<tr>
<th>REF #</th>
<th>Architecture Component</th>
<th>Business Benefit/Impact</th>
<th>IT Impact</th>
<th>Recommendation/Justification</th>
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</thead>
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<td></td>
<td>IPS providing details of the meters exchanged and/or the modules installed. (release and complete process)</td>
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<td></td>
<td>• R2.3 RTU – Any meter exchanges that were unsuccessful by EPI vendor (for various reasons determined during EPI implementation) The RTUs can be included within the Meter exchange data. In that case, no separate integration is required.</td>
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<td></td>
<td>• R2.3 GIS Coordinates – The coordinates can be included in the Meter Exchange data. In that case no separate integration is required.</td>
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<td></td>
<td>• Field Pictures – Photo evidence from field installations</td>
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<td>R3</td>
<td>Integration between MDMS and IPS DEV 2 to support Billing. The integrations may include,</td>
<td>Synchronization between IPS DEV 2 and MDMS Aggregated Monthly Reads sent from MDMS to IPS DEV 2</td>
<td>MDMS to IPS DEV 2 integration</td>
<td>Bulk data transfer from MDMS to IPS will most likely be a batch process, but aggregated monthly reads will be real time via Web Services</td>
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<td>• One-time extract of master data such as Premise, Meter, meter configurations etc. to establish MDM dataset</td>
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<tr>
<td></td>
<td>• Ongoing updates from IPS DEV 2 on master data changes</td>
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<td></td>
<td>• A request issued from IPS DEV 2 for a read (for a specific date or range of dates)</td>
<td></td>
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<td></td>
<td>• A response sent from MDM with the read and read date</td>
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<td>• AMI/AMR flag sync (TBD)</td>
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<td>R4</td>
<td></td>
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<td>If actually producing bills from IPS DEV 2 is too cumbersome, then comparing the aggregate monthly consumption from MDMS to what is produced in IPS PROD may be sufficient</td>
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<td></td>
<td>R5 Manual process of both Read and Bill Comparison and Reconciliation during Pilot period</td>
<td>Better understanding of the impact of AMI/MDMS as it relates to billing.</td>
<td>Standing up IPS DEV 2 environment and integrating to MDMS</td>
<td>Communicate to customers and business areas that the data is secure, possibly encrypted, and protected via a variety of security mechanisms on the AMI Network.</td>
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<td></td>
<td>Ability to configure various business rules with VEE and then see its impact on the customer bill</td>
<td>Producing “mock bills” from DEV for comparison and reconciliation</td>
<td>Recommend bringing an external resource to perform penetration testing on AMI Infrastructure</td>
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<td>This also gives SAWS the insight into the estimation rate in the current system and how AMI helps improve it</td>
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<td></td>
<td>R6 AMI Network Considerations</td>
<td>Minimal, as these considerations are transparent</td>
<td>Various security options need to be evaluated, including any &quot;overhead&quot; that encryption or other processes introduces</td>
<td></td>
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<tr>
<td></td>
<td>• Data Encryption</td>
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<td></td>
<td>• Security at Backhaul</td>
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<tr>
<td></td>
<td>• System and Network Monitoring</td>
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<td></td>
<td>• DMZ/Firewall</td>
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<td>R7</td>
<td>Enable very selected Direct Departmental Access to MDMS during Pilot</td>
<td>Allows “superusers” to test MDMS functionality during pilot period, including VEE processing.</td>
<td>Configure read/write access for selected individuals/departments.</td>
<td>Negotiate with vendor now on Enterprise site license, especially for read only access. Strongest negotiation position is at start of program.</td>
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<td></td>
<td></td>
<td>Allows other users in view only mode to see the functionality and data stored in MDMS.</td>
<td>Monitor performance/latency of MDMS during peak access.</td>
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<td>(High Bill complaints is a good use case to begin using MDMS for)</td>
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<tr>
<td>R8</td>
<td>Leverage Native Analytics and Reporting off of MDMS and Head End</td>
<td>Especially in the Pilot stage, the built-in reports and analytics of the AMI systems will give users some business insight into the value of the customer consumption data.</td>
<td>Minimal, as no customization of the reports and analytics engine is required.</td>
<td>Manage expectations around native reports, which may be very limited. Use this opportunity to determine the true analytics and reporting requirements for BR1 and beyond.</td>
</tr>
<tr>
<td>R9</td>
<td>AMI Head End to MDMS Integrations. This includes,</td>
<td>Enables MDMS to create bill determinants.</td>
<td>Supported by vendor – demarcation point for IS should be MDMS.</td>
<td>Leverage any pre-built integration from MDMS to Head End. CMEP?</td>
</tr>
<tr>
<td></td>
<td>- R9.1 Daily Register Reads</td>
<td>Monitor the health of the metering systems.</td>
<td>AMI Vendor 1 confirmed Batch file transfers for Daily Reads, Interval Reads, events. Yet to confirm with AMI vendor 2.</td>
<td></td>
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<tr>
<td></td>
<td>- R9.2 Interval consumption</td>
<td>Frequent reads from meter than once a month</td>
<td></td>
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<td>- R9.3 Real-Time Events</td>
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<td>- R9.4 Non-Real-time events</td>
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<td></td>
<td>- R9.5, R9.6 Meter communications such as on-demand Reads</td>
<td></td>
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<tr>
<td>R10</td>
<td>(not used)</td>
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SAWS
Solution Architecture v4.0
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<tr>
<th>REF #</th>
<th>Architecture Component</th>
<th>Business Benefit/Impact</th>
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<tr>
<td>R11</td>
<td>Provisioning between MDMS, AMI Headends</td>
<td>Provisioning is the extension of Premise-Meter relationship in the Master Data across the three systems – IPS, MDMS and AMI Headends.</td>
<td>Keep MDMS, AMI Headends, and PROD in sync on Premise-Meter relationships for accurate billing data to be sent to IPS</td>
<td>Support new integrations to be built between AMI Headends, MDMS, and PROD.</td>
</tr>
<tr>
<td>R12</td>
<td>Analytics Tool integration with AMI Headends</td>
<td>Validate that the performance of each AMI solution achieves contractual service level agreements.</td>
<td>Support new integrations between AMI headends and Analytics Tool</td>
<td></td>
</tr>
<tr>
<td>R13</td>
<td>GPS location data captured during installation of Pilot meters and modules is provided to ESRI GIS. R2.3 Inputs the Lat/Lon into IPS</td>
<td>More accurate locational awareness of meters and modules.</td>
<td>Tool already exists that syncs lat/lon IPS Asset module with lat/lon in ESRI. Need to add lat/lon fields for endpoint assets.</td>
<td></td>
</tr>
<tr>
<td>R14</td>
<td>End Point asset data (e.g. static meters and AMI communication modules) from each AMI vendor uploaded to EPI vendor database</td>
<td>Provision of the necessary meter and module asset data required by EPI prior to meter and module installation.</td>
<td></td>
<td>Although the number of records uploaded during Pilot is minimal, if an opportunity exists to automate the data upload, it would be beneficial, as it can be applied throughout deployment. Meter sample testing and Meter Release processes are yet to be defined.</td>
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<tr>
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<td>R15</td>
<td>VEE Pre-Processing and testing of business rules for validation and estimation</td>
<td>Allows SAWS to test VEE processing and define the initial business rules for validation</td>
<td>Modifications to IPS DEV 2 may be required and then tested extensively to ensure it has not affected other areas.</td>
<td>Although it is recommended to shift VEE pre-processing to MDMS, SAWS does have the option to continue performing these functions in IPS and have MDMS only send the aggregated monthly reads. For Pilot, it may be best not to modify IPS DEV 2 and have the extra complexity of removing certain pre-processing routines</td>
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<td></td>
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<td>and estimation (missing reads)</td>
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<td></td>
<td>Allows SAWS to “practice” editing of MDMS and any resultant billing adjustments or other</td>
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<td></td>
<td></td>
<td>downstream processes</td>
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<td></td>
<td>After R5 is complete, SAWS can utilize estimated reads from MDM (with the assumption that MDMS estimation will be closer to reality due to daily reads than CIS’s once a month read)</td>
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<tr>
<td>R16</td>
<td>Provisioning between IPS PROD and MDMS. Provisioning is the extension of Premise-Meter</td>
<td>Keep MDMS, AMI Headends, and PROD in sync on Premise-Meter relationships for accurate</td>
<td>Support new integrations to be built between AMI Headends, MDMS, and PROD.`</td>
<td>This is to keep premise – meter relationship and meter status in sync between IPS and MDMS based on results of service orders such as Meter install, Meter removal, Meter exchange and Meter on or Meter turn off.</td>
</tr>
<tr>
<td></td>
<td>relationship in the Master Data across the three systems – IPS, MDMS and AMI Headends.</td>
<td>billing data to be sent to IPS</td>
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<tr>
<td>R17</td>
<td>Base Map Data from ESRI to MDMS</td>
<td>Required to display dashboards in the MDMS</td>
<td></td>
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</tr>
<tr>
<td>R18</td>
<td>MTU Programming Data from MTU Programmer to AMI (AclaraONE) (Specific integration only for Aclara AMI Integration)</td>
<td>Required to establish the meter configuration programmed at the MTUs in AclaraONE</td>
<td>The MTU programming files have to be sent via FTP from Vanguard’s location to AO</td>
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</tbody>
</table>
| O3    | Expand and test IPS DEV 2 and PROD data models to support additional Smart Meter requirements  
- Firmware Tracking  
- MIU Characteristics  
- Meter Attributes  
- GPS Coordinates  
- Service Point Interconnection  
- MDMS Pre-processing and Billing Component | More extensive meter information in IPS, especially GPS coordinates and Service Point interconnection, may streamline some future business processes | Expanding the data model in IPS to support the required new fields and attributes | Enhancing the IPS to GIS integration to support certain data transfers (e.g. GPS) |
| O4    | Presentment of Customer consumption information, down to the granularity that SAWS decides. | Pilot Customers would be able to visually see their consumption history,  
1. Minimize Production impact to IPS  
2. Integration of MDMS to either SCP or third-party solution | Evaluate two options to give pilot customers visual access to their consumption and smart meter data:  
- Build into current SCP  
- Third Party solutions like Water Smart or Milestone ePortal  
If third party option selected, recommend integrating into current SCP via iFrame or equivalent technology |
| O5    | Smart Portal integration to selected Outbound Customer Communications Gateway | Enables personalization via alerts and notifications that the customer selects based on certain events (e.g. bill produced, unusual high consumption, etc.) | Support integration from embedded Smart Portal to selected customer communications gateway | Standardizing on a product solution for all outbound customer communications |
NOTE: Phases 3.1-3.X will be updated at a later date.

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Phase 3.1 through Phase 3.4 – Business Release (BR1-BR4)</strong></td>
<td></td>
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<tr>
<td>R1</td>
<td>End Point Asset Inventory data uploaded to IPS</td>
<td>Synchronization between the Supply Chain data in IPS and the vendor</td>
<td>Support the data upload into IPS</td>
<td>Can look at automating the Asset Inventory upload process into IPS</td>
</tr>
<tr>
<td>R2</td>
<td>End Point Installation data from WOMS uploaded to IPS</td>
<td>As the EPI installs assets, all the required data is synchronized in IPS</td>
<td>Support the data upload into IPS</td>
<td>Can look at automating the WOMS upload process into IPS via Web Services or FTP</td>
</tr>
<tr>
<td>R3</td>
<td>Full Integration between MDMS and IPS PROD</td>
<td>Ability for the business areas to see granular customer consumption data</td>
<td>Clear line of demarcation for support of MDMS, as vendor is responsible for AMI network to MDMS integration</td>
<td>Leverage any standardized product adapters if available</td>
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<tr>
<td></td>
<td></td>
<td>Supports future state business processes</td>
<td>Web Services integration is required approach</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ability to perform “actionable insight” after analyzing data</td>
<td>Responsibility for MDMS to AMI Network integration should be implemented and supported by vendor</td>
<td></td>
</tr>
<tr>
<td>R4</td>
<td>FCS to MDMS Integration</td>
<td>Continued manual reading as the deployment process continues</td>
<td>FCS to IPS PROD may no longer be required, as it is shifted to MDMS via a standard adapter/API</td>
<td>Consolidates all usage data into MDMS</td>
</tr>
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<tr>
<td>R5</td>
<td>Continued modification and enhancements to IPS, related to VEE pre-processing and integration of AMI systems and Enhanced SCP to IPS</td>
<td>Configurable business rules and algorithms with VEE in MDMS&lt;br&gt;Better estimation capability for missing reads and intervals&lt;br&gt;MDMS allows for “initial measurement” before transitioning to “finalized read” state</td>
<td>Removing VEE and other pre-processing functionality in IPS</td>
<td>Although it is recommended to shift VEE pre-processing to MDMS, SAWS does have the option to continue performing these functions in IPS and have MDMS only send the aggregated monthly reads</td>
</tr>
<tr>
<td>R6</td>
<td>Continue to provide Direct Departmental access to MDMS (both view only and edit access) for a variety of scenarios.</td>
<td>Supports new business processes more effectively</td>
<td>Minimal, outside of the administrative process of configuring user access and monitoring system performance</td>
<td>Realize that giving users and departments access to MDMS may require a fair amount of training, as the MDMS vendor solutions have varying sophistication of their “user interface”</td>
</tr>
<tr>
<td>R7</td>
<td>May need to enhance ESRI GIS to reflect Smart Meter layer&lt;br&gt;- Meter GPS location&lt;br&gt;- Selected meter attributes&lt;br&gt;- Service Line Interconnection Point</td>
<td>GIS users have access to more data on SAWS AMI network and selected meter attributes</td>
<td>Enhancing the GIS to IPS integration</td>
<td></td>
</tr>
<tr>
<td>R17E</td>
<td>Extend Integration of MDMS with ESRI GIS for Connectivity Model</td>
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<tr>
<td>R8</td>
<td>Implement MWFM and integrate to IPS</td>
<td>Automation of Service Requests and Work Orders</td>
<td>IPS enhancements would be required, including integration to MWFM</td>
<td>Integrate with AVL already in vehicles for better dispatching</td>
</tr>
<tr>
<td></td>
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<td>Allows SR’s/WO’s generated by CDR Portal to also have field automation</td>
<td>AMI alarms and events processed by MDMS automatically generate service requests and work orders and sent to IPS</td>
<td>Helps automate with meter related field activities and ensures data integrity as deployment continues over 3-year period. Therefore, recommending in 1st business release, even though added integration to IPS is required.</td>
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<td>Evaluate INFOR’s product solution, and determine best fit, as third-party solutions present another option</td>
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<tr>
<td>R9</td>
<td>Presentment of Customer consumption data and level of functionality in Enhanced Portal • Usage drill down • Personalization/Alerts • Consumption “Slider” impact • Bill “Projector” • Leak “Detector”</td>
<td>1. Transparency of consumption data 2. More effectiveness in conservation programs 3. Ability to personalize customer experience with alerts and notifications (potential High Bill) Built in Analytics allows SAWS to see if customers are using Smart Portal functionality</td>
<td>Requires development of functionality (or pursuing third-party option) and Web Services integration to MDMS</td>
<td>Enhanced SCP may involve a series of incremental functionality via Business Releases</td>
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<td>If SAWS elects to implement the more advanced customer-facing features (such as consumption “sliders”, bill “projection”, and leak “detection”), then more time must be allocated to develop and test this functionality</td>
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<tr>
<td>BR2</td>
<td>Integration between AMI systems and EOC Water Outage Map application</td>
<td>EOC can visually see appropriate alarms, alerts, and other sensor information on the Water Outage map.</td>
<td>Need to process relevant alarms and alerts from AMI into EOC Water Outage map</td>
<td>Consideration of pressure and leak sensors on SAWS Distribution Network</td>
</tr>
<tr>
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<td>Need to consider “thresholds” to limit false positives/negatives</td>
<td>Need to determine if some type of “processing” or transformation needs to be performed on the AMI data before being presented on the Water Outage Map</td>
</tr>
</tbody>
</table>
| BR2   | Develop Tableau (or other tool) Analytics and Dashboards to address gaps in native analytics/reporting functionality included in AMI/MDMS | • Non-Revenue Water Analytics  
• Conservation Analytics  
• Consumption Analytics  
• High Bill/Consumption Analytics  
• Leak and Pressure Analytics  
• Other Analytics  
Eventually may be able to perform ad-hoc analytics by the business | Data analyst support to determine the correct back end schemas from the Date Warehouse to be presented in BI  
Assist the business with the visualization aspect and how to get to the right data | Development of Tableau Analytics and Dashboards can be spread throughout several Business Releases (BRs)  
Education on the Data Model to key Tableau front-end “super users” |
| BR2   | Tableau BI direct access to Reporting Database instance where data has been replicated (1 day and older data) Or another clone of MDMS Production for reporting purposes | Good performance of developed analytics, dashboards, and reports                           | Data replication of MDMS to SAWS Site  
Bringing up separate MDMS environment at Reporting Database Instance. | Leverage Reporting instance of MDMS to develop Analytics and Dashboards, minimizing the impact to IPS PROD  
Since analytic and reporting requirements may be quite extensive, it may be beneficial to take an “agile-like” approach with incremental releases (e.g. BR2.1, BR2.2, BR2.3 etc.) |
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<tr>
<td>BR 3</td>
<td>Introduction of Salesforce CRM (Conservation only at this time)</td>
<td>Ability to process “cases” with complex process flows Improved Program Management to help introduce and manage various customer-focused conservation efforts</td>
<td>Integration of Salesforce CRM, Enhanced SCP and IPS via Web Services May require integration between Salesforce CRM to MDMS, depending on functionality desired for future conservation efforts</td>
<td>If integration between SCP and MDMS can be leveraged, then the integration between Salesforce CRM and MDMS would not be required (dashed arrow)</td>
</tr>
<tr>
<td>BR 4</td>
<td>Consideration of IVR for self-service related to consumption and usage information from AMI systems</td>
<td>Some customers prefer to perform self service via the Phone versus SCP May help promote special programs, such as conservation and leak detection</td>
<td>Would require configuration and enhancement to IVR, including menu and call flow design Would require integration of IVR to Enhanced SCP and Conservation CRM to provide self-service functionality</td>
<td>Although the current IVR solution in place may not be flexible enough to support these requirements, this BR is far enough in the future that a new IVR may be in production</td>
</tr>
<tr>
<td>BR4</td>
<td>Integrate Stand-alone Trimble Fire Hydrant Pressure System with Water Outage Map application to show consolidated pressure data</td>
<td>Consolidated view of MDMS generated alarms and alerts with other pressure data</td>
<td>Web services integration to EOC Water Outage Map</td>
<td>Allows EOC to see more data to aid in leak/trouble operations May want to consider bringing the fire hydrant pressure through the AMI network versus the current configuration. If so, then the integration would not be required as we can leverage the MDMS to Water Outage Map integration from the previous Business Release</td>
</tr>
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<tr>
<td>R1</td>
<td>Continued modification and enhancements to IPS related to MDMS integration, VEE preprocessing, and enhancements to SCP</td>
<td>Continued fine tuning of VEE will produce more accurate bills and greater confidence in the interval data</td>
<td>FCS support no longer required</td>
<td>If MWFM is not implemented in previous BR, then FCS would remain, as well as the integration to MDMS</td>
</tr>
<tr>
<td>R2</td>
<td>FCS Goes away – replaced by MWFM?</td>
<td>Addresses scenarios where SAWs may still require a non AMI read as part of some field activity generated by IPS</td>
<td>FCS to MDMS integration no longer required</td>
<td>Several alternatives exist – depending on whether we want to consolidate all field generated SR’s/WO’s in IPS and minimize the number of integrations (e.g. MWFM to MDMS)</td>
</tr>
<tr>
<td>R3</td>
<td>Continued enhancements for direct Departmental Access</td>
<td>More structured access to MDMS will allow departments get meaningful insight from the key AMI applications.</td>
<td>Need to consider possible latency issues</td>
<td>If SAWs elects to perform VEE preprocessing in IPS versus MDMS then this component would not be applicable</td>
</tr>
<tr>
<td>R4</td>
<td>Continued enhancements to VEE processing and business rules</td>
<td>Further refinement and application of business rules will improve the validation and estimation routines with interval consumption reading.</td>
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<tr>
<td>O1</td>
<td>Enterprise Salesforce CRM integration</td>
<td></td>
<td>CRM to MDMS Integration</td>
<td>Requires a well thought out strategy on how IPS, Enterprise CRM, SCP, and other customer-facing applications are all orchestrated to work with each other, and which is the “owner” for different types of transactions.</td>
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<td>O2</td>
<td>Re-architecture of Data Warehouse with Enterprise Data Model/Schema</td>
<td>Supports more complex queries and analytics, giving the business areas more insight that is actionable May impact current reports</td>
<td>Standardize on ETL tool</td>
<td>This is a fairly significant effort and will require an enterprise-wide view of the data architecture. As it may impact current reports and analytics in production, expectations and communications with the business areas will need to be managed</td>
</tr>
<tr>
<td>O3</td>
<td>Continued expansion of Tableau Analytics and Dashboards related to MDMS and other relevant data sources (SCADA, GIS, etc.)</td>
<td>1. Non-Revenue Water Analytics 2. Conservation Analytics 3. Consumption Analytics 4. High Bill Analytics 5. Leak and Pressure Analytics 6. Revenue Protection Analytics 7. Other Analytics</td>
<td>Tableau analytics and visualization moved from MDMS at Reporting Instance to Enterprise Data Warehouse</td>
<td>Since analytic and reporting requirements may be quite extensive, it may be beneficial to take an “agile-like” approach with incremental releases</td>
</tr>
<tr>
<td>O4</td>
<td>Feed Data Warehouse with multiple data sources using ETL tool</td>
<td>Data loading for:  - MDMS  - Fire Hydrant Pressure  - Salesforce CRM  - Water SCADA  - MWFM  - IPS  - GIS  - Lawson  - Other Systems?</td>
<td>Standard data model in DW allows for more complex analysis (e.g. taking SCADA info and correlating with AMI data for water distribution analysis and optimization?) MDMS to DW is part of AMI program scope. All other data sources ETL and DW re-architecting is separate initiative</td>
<td></td>
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<tr>
<td>O5</td>
<td>Data Archival/Purge Solution for MDMS</td>
<td>Improved performance for MDMS, but will require some technique to access data beyond the “archival point”</td>
<td>Support integration between MDMS and Archiving solution MDMS may have some pre-built ILM functionality that can be leveraged</td>
<td>Decision on how long to retain data in MDMS before performing archival and purge operations Determine if partitioning and compression will help manage the archival and purge process</td>
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</table>
| O6    | Evaluate Bill Redesign at end of Full Deployment? | More granularity of smart meter consumption data on bill  
More consistency across customer communications channels – SCP, IVR, and physical bill | Modifications to IPS and Bill Print process to support new bill re-design | Evaluate feasibility and appetite toward end of full deployment |
3. Assumptions

Pilot Phase:

1. A new IPS environment will be setup to support the AMI/MDM Integrations and Read validations. This environment may be referred to as IPS AMI. (Currently referred to in the drawings as IPS DEV 2)

2. IPS AMI environment will be treated close to Production as possible to enable clean data for read validation. The frequency of IPS AMI refresh is yet to be decided.

3. The team will use SAWS IT’s development methodology and development lifecycle process to develop all integrations.

4. The team will use the existing BRD document format (as reviewed on the call on 4/30/20) to document business requirements. The format of the BRD may be extended to accommodate the scope of the project as necessary (with SAWS IT’s approval).

5. All code developed and/or modified for this phase and subsequent phases will follow the regular SAWS IT established migration procedures before being deployed into IPS PROD and IPS AMI (IPS DEV 2).
Products & Versions

Server Operating System:

Microsoft Windows Server 2019 (64 bit)
Debian Linux v10.x

Database Environment:

DBMS: Microsoft SQL Server 2012
Oracle 19c

Directory Services

DNS: AD Integrated (For Internal DNS)
LDAP: Microsoft Active Directory Windows Server 2016
ADFS: 2012 and up compatible

Desktop Operating System:

Microsoft Windows 10

Desktop Web Browser:

Chrome
MS Internet Explorer 11

Server Applications & Frameworks:

Web: MS IIS v10.x or higher

SAWS.SmartWorks.SaaS (Schd K only).FINAL Page 2 of 4
Integration: Web Services REST / SOAP
Batch File External SFTP only

Collaboration: Microsoft SharePoint (Office 365)

Web Portal (In-house): Java, .Net, C#, HTML

Miscellaneous Services:
Virtualization: VMWare ESX v6.7
Storage Area Network: Nimble SSD
Backup: Symantic Net Backup
Scheduler: CA Autosys
Reporting/Analytics: MS SQL / SSRS / Tableau / Crystal Reports

Security & Access:
Remote Access: Cisco ASA (Firewall/VPN)
Palo Alto Firewall/VPN
Antivirus: Symantec Endpoint Antivirus/Antimalware v12

Systems Monitoring:
Infor Apps App Dynamics
Performance Splunk
Network SNMP SolarWinds

Miscellaneous Tools / Applications:
Q/A Q/C: HP ALM
IVR Cisco / UCCX

Standard Workstation Applications
<table>
<thead>
<tr>
<th>Application</th>
<th>Version</th>
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</thead>
<tbody>
<tr>
<td>Microsoft Office</td>
<td>Office 365 ProPlus</td>
</tr>
<tr>
<td>Internet Explorer (IE)</td>
<td>11.0 or higher</td>
</tr>
<tr>
<td>Macromedia Flash Player</td>
<td>11</td>
</tr>
<tr>
<td>Adobe Acrobat Reader</td>
<td>12x</td>
</tr>
<tr>
<td>Java Runtime Environment (JRE)*</td>
<td>7.x or higher</td>
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<td>Microsoft .NET Framework</td>
<td>4.X</td>
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<tr>
<td>Oracle Client</td>
<td>13c</td>
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<tr>
<td>Symantec Endpoint</td>
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</table>
Schedule M

Material to be Redacted from Published Agreement

The material to be redacted pursuant to Section 1.1(e) of the Agreement is as follows:

- Article VIII – Limitations on Liability
- Article X – Intellectual Property Infringement and SmartWorks Indemnity
- Schedule E – all references to insurance coverage limits
- Schedule F – in its entirety
- Schedule J – SAWS VTAQ – all references to SmartWorks security measures, procedures and standards
- Anything else that SAWS elects or the parties agree to redact from the Agreement
Issue and Evaluate RFP's, Select Vendors and Negotiate Contracts 316 days Tue 11/26/19 to Tue 10/6/20

Vendor RFP Response Period 58 days Tue 11/26/19 to Wed 1/22/20

Receive RFP 0 days Wed 11/26/19 to Wed 1/22/20

Evaluate RFP's and Select Vendor (EPI) 43 days Thu 1/23/20 to Thu 3/5/20

Evaluate RFP's and Select Vendors (AMI and MDMMS) 57 days Thu 1/23/20 to Thu 3/19/20

Contract Negotiations (EPI, AMI and MDMMS Vendors) 193 days Fri 3/6/20 to Mon 9/14/20

Negotiate Contracts for EPI Vendor 193 days Fri 3/6/20 to Mon 9/14/20

Negotiate Contracts for AMI and MDMMS Vendors 179 days Fri 3/20/20 to Mon 9/14/20

Contract(s) Reviewed & Approved by Board 22 days Tue 9/25/20 to Tue 10/6/20

Board Review of Contracts 22 days Tue 9/25/20 to Tue 10/6/20

Contract(s) Approved by Board 0 days Tue 10/6/20 to Tue 10/6/20

Develop Pilot Implementation Plans 516 days Wed 11/27/19 to Mon 5/10/21

Develop Pilot Implementation (Strategic) Plans 241.6 days Thu 1/23/20 to Sun 9/20/20

Develop High-Level Pilot Design, Timeline & Implementation Plan 30 days Thu 1/23/20 to Sat 2/29/20

Update Pilot Plan based on Vendor Evaluations 162 days Fri 3/6/20 to Fri 8/14/20

Update Program Mgmt Baseline Documents accordingly 14 days Fri 1/24/20 to Sun 2/2/20

Develop Pilot Implementation (Tactical) Plans: Nomenclatures & Policies 162 days Fri 3/20/20 to Fri 8/14/20

Develop requirements document based on RFP responses (i.e. Update Solution Arch Doc. & Information Flows) 30 days Fri 3/20/20 to Sat 4/20/20

Develop Technology Blueprint of the to-be infrastructure landscape. 21 days Sun 4/5/20 to Sat 4/19/20

Develop Environment Landscape Plan (i.e. Head end, MDM, CIS, etc) 21 days Sun 4/5/20 to Sat 4/12/20

Develop Technology Capacity Plan. 21 days Sun 4/5/20 to Sat 4/12/20

Develop recommendations for hardware and new software to support the new AMI infrastructure for production and non-production environments. 7 days Sun 4/5/20 to Sat 4/12/20

Define key 6 KPI elements that SAWS will use for analysis 132 days Sun 4/5/20 to Fri 8/14/20

Deployment of Implementation Plan: IS and Field Activities 358 days Fri 3/3/20 to Sat 3/21/20

Day 1 Pilot (Lab + PT1A) 309 days Fri 3/20/20 to Fri 2/21/20

Finalize Functional Specifications & Information Systems Plans 56 days Wed 10/14/20 to Tue 12/8/20

Develop specification for KPI Analytics Tool 28 days Wed 10/14/20 to Tue 11/10/20

Develop Functional Design Specifications for interfaces needed during the AMI Pilot. 28 days Wed 10/14/20 to Tue 11/10/20


Field Acceptance Testing (Set-Up): AMI Vendor 1 and AMI Vendor 2 225.5 days Thu 3/20/20 to Sat 10/31/20

Build Lab 8 days Wed 3/13/20 to Wed 3/19/20

Receive Network Devices 14 days Wed 3/13/20 to Sat 3/20/20

Install Network Devices 10 days Sat 3/21/20 to Thu 3/27/20

Standup and Configure SAWS AMI HES 10 days Sat 3/17/20 to Thu 3/25/20

Standup EPI (Lower Environment) WOMS (Vanguard) 10 days Sat 3/17/20 to Thu 3/25/20

Install AMI Water MUs (AMI Vendor 1 and AMI Vendor 2) 22.5 days Wed 10/7/20 to Thu 10/29/20

Obtain AMI Vendor Installation Handheld Device 14 days Wed 10/7/20 to Thu 10/22/20

Configure AMI Vendor Handhelds 2 days Wed 10/21/20 to Thu 10/22/20

Order/Receive MUs 14 days Wed 10/21/20 to Thu 10/22/20

Install MUs 4 days Fri 10/23/20 to Mon 10/26/20

Field Lab (20 Meters: 10 PD Meters and 10 Static Meters) 4 days Fri 10/23/20 to Mon 10/26/20

Pre-Pilot Prod Meters (10 Static Meters in select locations in Pilot Area) 4 days Fri 10/23/20 to Mon 10/26/20

Set up MUs in AMI HES (DEV) 2 days Tue 10/27/20 to Thu 11/2/20

Begin Monitoring Pre-Pilot Prod Meters 0 days Mon 10/26/20 to Mon 10/26/20

Static Meter: First Article Testing (FAT) 225.5 days Fri 3/20/20 to Sat 10/31/20

Order/Receive new meters 42 days Fri 3/30/20 to Thu 4/2/20

Install new Meters 2 days Fri 5/1/20 to Sat 5/2/20

Execute Testing 90 days Sun 5/3/20 to Fri 7/3/20

Set up MUs in AMI HES (DEVS) 2 days Thu 10/29/20 to Fri 11/6/20

Start/Conduct Field Acceptance Testing (Lab Environment) 0 days Sat 10/31/20 to Sat 10/31/20

Field Testing 108 days Wed 10/7/20 to Sat 2/6/21

**Note:** The above information is a screenshot of a project management tool, likely used for tracking the progression of a project or program. Each entry typically represents a task, with details such as duration, start, finish, and resource names. The predecessors column indicates the tasks that must be completed before the current task can begin. The IDs and resource names are placeholders and do not contain real information.
ConnectH2O - Integrated Master Schedule (IMS) - October Board Meeting
ID

VASS WBS

Task Name

Duration

Start

Finish

Resource Names

Predecessors

SAWS,VASS,AMI
SAWS,VASS,AMI
SAWS,VASS,AMI
SAWS,VASS,AMI

410
410
395
439

SAWS,VASS,AMI
SAWS,VASS
SAWS,VASS

411
411
442

SAWS,VASS,EPI
SAWS,VASS
SAWS,VASS,AMI
SAWS,VASS,AMI
SAWS,VASS,AMI
SAWS,VASS,AMI
SAWS,VASS,AMI
SAWS,VASS,EPI
SAWS,VASS,EPI
SAWS,VASS,EPI
SAWS,VASS,EPI
SAWS,VASS,EPI
SAWS,VASS,EPI,AMI

410
410
410
410
410
410
410
410
410
410
410
410
410

Sat 2/6/21

SAWS,VASS,EPI,AMI

410

Sat 2/6/21

SAWS,VASS,EPI,AMI

410

Wed 12/9/20

Sat 2/6/21

SAWS,VASS,EPI,AMI

410

27 days
3 days
14 days
5 days
5 days
70 days
28 days
2 days
94 days
49 days
21 days
21 days

Wed 10/7/20
Wed 10/7/20
Sat 10/10/20
Sat 10/24/20
Thu 10/29/20
Wed 10/7/20
Wed 10/7/20
Mon 12/14/20
Wed 11/11/20
Wed 11/11/20
Wed 11/11/20
Wed 12/9/20

Mon 11/2/20
Fri 10/9/20
Fri 10/23/20
Wed 10/28/20
Mon 11/2/20
Tue 12/15/20
Tue 11/3/20
Tue 12/15/20
Sat 2/27/21
Wed 1/13/21
Tue 12/1/20
Wed 1/13/21

SAWS,VASS,AMI
SAWS,VASS,AMI
SAWS,VASS,AMI
SAWS,VASS,AMI

395
464
465
466

SAWS,VASS,AMI
SAWS,VASS,AMI

395
469,447

SAWS,VASS,AMI,MDMS,EPI
SAWS,VASS,AMI,MDMS,EPI

412
413

45 days
45 days
5 days
45 days
45 days
45 days
45 days
45 days
45 days
45 days
45 days
45 days
45 days

Thu 1/14/21
Thu 1/14/21
Thu 1/14/21
Thu 1/14/21
Thu 1/14/21
Thu 1/14/21
Thu 1/14/21
Thu 1/14/21
Thu 1/14/21
Thu 1/14/21
Thu 1/14/21
Thu 1/14/21
Thu 1/14/21

Sat 2/27/21
Sat 2/27/21
Mon 1/18/21
Sat 2/27/21
Sat 2/27/21
Sat 2/27/21
Sat 2/27/21
Sat 2/27/21
Sat 2/27/21
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Sat 2/27/21
Sat 2/27/21

SAWS,VASS,MDMS
SAWS,VASS,MDMS
SAWS,VASS,MDMS
SAWS,VASS,AMI,MDMS
SAWS,VASS,AMI,MDMS
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SAWS,VASS,AMI
SAWS,VASS,AMI
SAWS,VASS,MDMS

472
472,477SS
472,477SS
472,477SS
472,477SS
472,477SS
472,477SS
472,477SS
472,477SS
472,477SS
472,477SS

157 days
56 days
28 days
28 days

Wed 10/7/20
Wed 12/2/20
Wed 12/2/20
Thu 1/14/21

Sat 3/27/21
Wed 2/10/21
Wed 1/13/21
Wed 2/10/21

SAWS,VASS,AMI,MDMS,EPI
SAWS,VASS,AMI,MDMS,EPI

473
474

98 days
70 days
70 days
1 day
1 day
0 days

Wed 10/7/20
Wed 10/7/20
Tue 11/3/20
Wed 1/27/21
Wed 1/27/21
Wed 1/27/21

Wed 1/27/21
Tue 12/15/20
Tue 1/26/21
Wed 1/27/21
Wed 1/27/21
Wed 1/27/21

SAWS,VASS,AMI
SAWS,VASS,AMI

395
395,429,463

SAWS,VASS,EPI
SAWS,VASS,AMI

494
495

HES and Network (AMI Vendor 1 and AMI Vendor 2)
Implement / update environment settings based on the Technical Design Specification
Update configurations of AMI Vendor Handhelds
Order and Receive Network Devices
Install Network Devices (PTA1, PTA2 and PTA3)
KPI Analytics Tool
Build
Develop integrations to AMI systems to extract relevant data.
Create a web user interface to display the data
Test
Integrations (Code, Test and Implement)
Configur EPI (Lower Environment) WOMS (Vanguard)
Standup IPS (DEV)
R1.1.1: Meter Manufacture / Calibration Files (AMI: Vendor 1 <->IPS: Prod. & Dev.)
R1.2.1: Device Manufacturer Inventory Files (AMI: Vendor 1<->IPS: Prod. & Dev.)
R1.1.2: Meter Manufacture / Calibration Files (AMI: Vendor 2 <->IPS: Prod. & Dev.)
R1.2.2: Device Manufacturer Inventory Files (AMI: Vendor 2<->IPS: Prod. & Dev.)
R2.1 / R2.2: CIS Extract and Daily Updates (EPI<-IPS: Prod. & Dev.)
R2.3: Meter Exchange (EPI<->IPS: Prod. & Dev.)
R2.7: Meter Exchange Req. (EPI<->IPS: Prod. & Dev.)
R2.4: Return to Manufacturer-RMA (EPI<->IPS: Prod. & Dev.)
R13.1: Provide GPS Lat/Lon (IPS Prod <->ESRI)
R13.2: Sync GPS Lat/Lon (IPS Prod <->ESRI)
R14.1.1: Meter Manufacturer / Calibration Files (Vendor 1 Asset Inventory<->Vanguard(EPI)-WOMS)

73 days
10 days
2 days
28 days
14 days
56 days
28 days
28 days
28 days
28 days
45 days
5 days
5 days
45 days
45 days
45 days
45 days
45 days
45 days
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45 days
45 days
45 days
45 days

Wed 10/7/20
Wed 12/9/20
Wed 12/9/20
Wed 10/7/20
Wed 11/4/20
Wed 11/11/20
Wed 11/11/20
Wed 11/11/20
Wed 11/11/20
Wed 12/9/20
Wed 12/9/20
Wed 12/9/20
Wed 12/9/20
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Wed 12/9/20
Wed 12/9/20
Wed 12/9/20
Wed 12/9/20

Fri 12/18/20
Fri 12/18/20
Thu 12/10/20
Tue 11/3/20
Tue 11/17/20
Wed 1/20/21
Tue 12/8/20
Tue 12/8/20
Tue 12/8/20
Wed 1/20/21
Sat 2/6/21
Sun 12/13/20
Sun 12/13/20
Sat 2/6/21
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Sat 2/6/21
Sat 2/6/21

460

2.2.3.1.3.6.27

R14.2.1: Device Manufacturer Inventory Files (Vendor 1 Asset Inventory<->Vanguard(EPI)-WOMS)

45 days

Wed 12/9/20

461

2.2.3.1.3.6.35

R14.1.2: Meter Manufacturer / Calibration Files (Vendor 2 Asset Inventory<->Vanguard(EPI)-WOMS) 45 days

Wed 12/9/20

462

2.2.3.1.3.6.29

R14.2.2: Device Manufacturer Inventory Files (Vendor 1 Asset Inventory<->Vanguard(EPI)-WOMS)

45 days

463
464

2.2.3.1.3.9
2.2.3.1.3.9.22
2.2.3.1.3.9.23
2.2.3.1.3.9.24
2.2.3.1.3.9.25
2.2.3.1.3.7
2.2.3.1.3.7.1
2.2.3.1.3.7.2
2.2.3.2
2.2.3.2.1
2.2.3.2.1.1
2.2.3.2.1.5

Commnication Module First Article Test (FAT)
Determine Meter and MIU Configurations
Order and Receive First Article Meters and MIUs
Review and Approve configurations
Release Meters and MIUs for production
Install AMI Water MIUs
Order and Receive EPI Installation Handheld Devices
Configure EPI Handhelds
Day 30 Pilot (PTA1)
Finalize Functional Specifications & Information Systems Plans
Develop Functional Design Specifications for interfaces needed during the AMI Pilot.
Document Technical Design Specification will be developed to document: a. Volumetric Requirements,
Field Testing
Integrations (Code, Test and Implement)
Standup MDMS
R3.3: Premise, Meter and Module Route (MDMS<- IPS: Prod. & Dev.)
R3.4: AMI Flag Sync (MDMS<->IPS: Prod. & Dev.)
R9.1 / R9.2: Meter Reads & Interval Data (MDMS<-AMI: Vendor 1 & 2)
R9.3 / R9.4: Real-Time and Non Real-Time Events ( MDMS<-AMI: Vendor 1 & 2)
R9.5 / R9.6: On Demand Reads (MDMS<->AMI: Vendor 1 & 2)
R11.1, R11.2, R11.3 & R11.4: Meter Provisioning (MDMS<->AMI: Vendor 1 & 2)
R12: Milestone Analytics Tool (MUSI<->AMI: Vendor 1 & 2)
R16.1: Provisioning (IPS (Prod)<->MDMS)
R15: Enable Validating, Estimation and Editing (VEE): Pre-Processing and Testing of Business Rules

Day 60 Pilot (Lab + PTA2, PTA3)
Final Functional Specifications & Information System Plans
Develop Functional Design Specifications for interfaces needed during the AMI Pilot.
Document Technical Design Specification will be developed to document: a. Volumetric Requirements,
Field Acceptance Testing (On-Going)
Order/receive MIUs
Order/Receive Meters [Static or a Mechanical]
Install Meters and MIUs (40 Units)
Field (LAB Environment)
Continue/Conduct Field Acceptance Testing (Meter/MIU)

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2.2.3.2.2
2.2.3.2.2.1
2.2.3.2.2.1.1
2.2.3.2.2.1.4
2.2.3.2.2.1.22
2.2.3.2.2.1.23
2.2.3.2.2.1.7
2.2.3.2.2.1.5
2.2.3.2.2.1.6
2.2.3.2.2.1.2
2.2.3.2.2.1.8
2.2.3.2.2.1.19
2.2.3.2.2.1.27
2.2.3.8
2.2.3.8.12
2.2.3.8.12.7
2.2.3.8.12.8
2.2.3.8.13
2.2.3.8.13.9
2.2.3.8.13.10
2.2.3.8.13.11
2.2.3.8.13.11.1
2.2.3.8.13.12

AF

439

R

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D

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T

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2.2.3.1.3.1
2.2.3.1.3.1.2
2.2.3.1.3.1.7
2.2.3.1.3.1.3
2.2.3.1.3.1.5
2.2.3.1.3.5
2.2.3.1.3.5.1
2.2.3.1.3.5.1.1
2.2.3.1.3.5.1.2
2.2.3.1.3.5.2
2.2.3.1.3.6
2.2.3.1.3.6.1
2.2.3.1.3.6.2
2.2.3.1.3.6.7
2.2.3.1.3.6.30
2.2.3.1.3.6.31
2.2.3.1.3.6.32
2.2.3.1.3.6.9
2.2.3.1.3.6.10
2.2.3.1.3.6.21
2.2.3.1.3.6.19
2.2.3.1.3.6.15
2.2.3.1.3.6.23
2.2.3.1.3.6.14

436

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Page 2


## ConnectH2O - Integrated Master Schedule (IMS) - October Board Meeting

### 2.2.3.8.14
- **Integrations (Code, Test and Implement)**
- **Task Name:** Integrations (Code, Test and Implement)
- **Duration:** 45 days
- **Start:** Thu 2/11/21
- **Finish:** Sat 3/27/21
- **Resource Names:** SAWS,VASS,AMI,MDMS,EPI
- **Predecessors:**

### 2.2.3.8.14.39
- **R5: Billing Comparison (IPS Prod/Dev) --> Billing Comparison & Reconciliation Tool**
- **Task Name:** R5: Billing Comparison (IPS Prod/Dev) --> Billing Comparison & Reconciliation Tool
- **Duration:** 45 days
- **Start:** Thu 2/11/21
- **Finish:** Sat 3/27/21
- **Resource Names:** SAWS,VASS,AMI,MDMS,EPI

### 2.2.3.8.14.37
- **R7: Provide SAWS with direct to MDMS**
- **Task Name:** R7: Provide SAWS with direct to MDMS
- **Duration:** 45 days
- **Start:** Thu 2/11/21
- **Finish:** Sat 3/27/21
- **Resource Names:** SAWS,VASS,AMI,MDMS

### 2.2.4
- **High-Level AMI Deployment Plan Development: Planning and Mobilization of AMI and EPI Vendors**
- **Task Name:** High-Level AMI Deployment Plan Development: Planning and Mobilization of AMI and EPI Vendors
- **Duration:** 133 days
- **Start:** Wed 6/17/20
- **Finish:** Tue 10/27/20
- **Resource Names:** SAWS,VASS,AMI,MDMS,EPI

### 2.2.4.11
- **Review preliminary Network Design**
- **Task Name:** Review preliminary Network Design
- **Duration:** 7 days
- **Start:** Wed 8/5/20
- **Finish:** Mon 10/12/20
- **Resource Names:** SAWS,VASS,AMI

### 2.2.4.12
- **Develop Meter and Network Logistics Plan (including material forecasting)**
- **Task Name:** Develop Meter and Network Logistics Plan (including material forecasting)
- **Duration:** 16 days
- **Start:** Wed 8/5/20
- **Finish:** Mon 10/19/20
- **Resource Names:** SAWS,VASS,AMI,MDMS,EPI

### 2.2.4.13
- **Develop preliminary meter and network deployment plan**
- **Task Name:** Develop preliminary meter and network deployment plan
- **Duration:** 16 days
- **Start:** Wed 8/5/20
- **Finish:** Mon 10/19/20
- **Resource Names:** SAWS,VASS,AMI,MDMS,EPI

### 2.2.4.14
- **Develop meter and network deployment exception reporting**
- **Task Name:** Develop meter and network deployment exception reporting
- **Duration:** 14 days
- **Start:** Mon 10/20/20
- **Finish:** Mon 10/20/20
- **Resource Names:** SAWS,VASS,AMI,MDMS,EPI

### 2.2.4.4
- **Review preliminary Network Design**
- **Task Name:** Review preliminary Network Design
- **Duration:** 7 days
- **Start:** Thu 11/3/20
- **Finish:** Tue 11/3/20
- **Resource Names:** SAWS,VASS,AMI,MDMS,EPI

### 2.2.4.5
- **Develop OCM Plan**
- **Task Name:** Develop OCM Plan
- **Duration:** 7 days
- **Start:** Thu 11/3/20
- **Finish:** Tue 11/3/20
- **Resource Names:** SAWS,VASS,AMI,MDMS,EPI

### 2.2.4.6
- **Develop “To-Be” BPMs**
- **Task Name:** Develop “To-Be” BPMs
- **Duration:** 7 days
- **Start:** Thu 11/3/20
- **Finish:** Tue 11/3/20
- **Resource Names:** SAWS,VASS,AMI,MDMS,EPI

### 2.2.5
- **Organizational Change Management**
- **Task Name:** Organizational Change Management
- **Duration:** 474 days
- **Start:** Wed 1/8/20
- **Finish:** Mon 5/10/21

### 2.2.5.17
- **Implement installation progress tracking and reporting**
- **Task Name:** Implement installation progress tracking and reporting
- **Duration:** 21 days
- **Start:** Wed 10/20/20
- **Finish:** Tue 10/27/20
- **Resource Names:** SAWS,VASS,AMI,MDMS,EPI

### 2.2.5.18
- **Establish sample testing process**
- **Task Name:** Establish sample testing process
- **Duration:** 14 days
- **Start:** Fri 3/6/20
- **Finish:** Tue 3/10/20
- **Resource Names:** SAWS,VASS,AMI,MDMS,EPI

### 2.2.5.19
- **Develop meter and network deployment exception reporting**
- **Task Name:** Develop meter and network deployment exception reporting
- **Duration:** 7 days
- **Start:** Wed 10/7/20
- **Finish:** Mon 10/13/20
- **Resource Names:** SAWS,VASS,AMI,MDMS,EPI

### 2.2.5.20
- **Assess Organizational Readiness**
- **Task Name:** Assess Organizational Readiness
- **Duration:** 56 days
- **Start:** Sat 3/28/20
- **Finish:** Fri 4/3/20
- **Resource Names:** SAWS,VASS,AMI,MDMS,EPI

### 2.2.5.21
- **Complete inteviews**
- **Task Name:** Complete inteviews
- **Duration:** 21 days
- **Start:** Wed 1/8/20
- **Finish:** Wed 1/25/20
- **Resource Names:** SAWS,VASS,AMI,MDMS,EPI

### 2.2.5.22
- **Review with impacted business units**
- **Task Name:** Review with impacted business units
- **Duration:** 30 days
- **Start:** Wed 1/22/20
- **Finish:** Thu 2/20/20
- **Resource Names:** SAWS,VASS,AMI,MDMS,EPI

### 2.2.5.23
- **Create final drafts**
- **Task Name:** Create final drafts
- **Duration:** 30 days
- **Start:** Wed 5/20/20
- **Finish:** Thu 5/20/20
- **Resource Names:** SAWS,VASS,AMI,MDMS,EPI

### 2.2.5.24
- **Secure approval of impacted business units**
- **Task Name:** Secure approval of impacted business units
- **Duration:** 20 days
- **Start:** Fri 3/6/20
- **Finish:** Wed 3/25/20
- **Resource Names:** SAWS,VASS,AMI,MDMS,EPI

### 2.2.5.25
- **Internal communications**
- **Task Name:** Internal communications
- **Duration:** 343 days
- **Start:** Sat 2/8/20
- **Finish:** Sat 1/30/21

### 2.2.5.26
- **Develop model messages and channels**
- **Task Name:** Develop model messages and channels
- **Duration:** 14 days
- **Start:** Sat 2/15/20
- **Finish:** Fri 3/6/20
- **Resource Names:** SAWS,VASS,AMI,MDMS,EPI

### 2.2.5.27
- **Develop internal communications**
- **Task Name:** Develop internal communications
- **Duration:** 21 days
- **Start:** Sat 4/4/20
- **Finish:** Fri 4/24/20
- **Resource Names:** SAWS,VASS,AMI,MDMS,EPI

### 2.2.5.28
- **Distribute Draft Messaging**
- **Task Name:** Distribute Draft Messaging
- **Duration:** 21 days
- **Start:** Sat 4/24/20
- **Finish:** Fri 5/15/20
- **Resource Names:** SAWS,VASS,AMI,MDMS,EPI

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C:\Users\Tony Pietrantoni\Box\SAWS - San Antonio Water System\PMO\Integrated Master Schedule\SAWS ConnectH2O IMS (CalendarDays).08282020.1.0.mpp
<table>
<thead>
<tr>
<th>ID</th>
<th>VASS WBS</th>
<th>Task Name</th>
<th>Duration</th>
<th>Start</th>
<th>Finish</th>
<th>Resource Names</th>
<th>Predecessors</th>
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<tbody>
<tr>
<td>631</td>
<td>3.3.3.2</td>
<td>Review, refine, and update Technology Blueprint Document</td>
<td>325 days</td>
<td>Mon 6/1/21</td>
<td>Wed 6/29/20</td>
<td>SAWS,VASS,AMI,EPI,MDMS</td>
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<tr>
<td>632</td>
<td>3.3.3.3</td>
<td>Review, refine, and update Technology Capacity Plan</td>
<td>325 days</td>
<td>Mon 6/1/21</td>
<td>Wed 6/29/20</td>
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<tr>
<td>633</td>
<td>3.3.3.4</td>
<td>Review, refine, and update Environment Landscape</td>
<td>325 days</td>
<td>Mon 6/1/21</td>
<td>Wed 6/29/20</td>
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<tr>
<td>634</td>
<td>3.4</td>
<td>Provide (On-Going) Corrective Actions, Issue Resolution &amp; Technical Support</td>
<td>325 days</td>
<td>Mon 6/1/21</td>
<td>Wed 6/29/20</td>
<td>SAWS,VASS,AMI,EPI,MDMS</td>
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<tr>
<td>635</td>
<td>3.4.1</td>
<td>Monitor Progress in accordance with Program Management Plans</td>
<td>325 days</td>
<td>Mon 6/1/21</td>
<td>Wed 6/29/20</td>
<td>SAWS,VASS,AMI,EPI,MDMS</td>
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<tr>
<td>636</td>
<td>3.4.2</td>
<td>Provide Corrective Actions for Deviations from PMP's</td>
<td>325 days</td>
<td>Mon 6/1/21</td>
<td>Wed 6/29/20</td>
<td>SAWS,VASS,AMI,EPI,MDMS</td>
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<tr>
<td>637</td>
<td>3.5</td>
<td>Support Meter Asset Management</td>
<td>128 days</td>
<td>Wed 7/20/20</td>
<td>Fri 2/26/21</td>
<td>SAWS,VASS,AMI,EPI,MDMS</td>
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<tr>
<td>638</td>
<td>3.5.1</td>
<td>Understand existing Asset Management Policies and Process</td>
<td>14 days</td>
<td>Wed 7/20/20</td>
<td>Tue 10/20/20</td>
<td>SAWS,VASS,AMI,EPI,MDMS</td>
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<td>639</td>
<td>3.5.2</td>
<td>Develop Asset Management Strategy</td>
<td>14 days</td>
<td>Wed 7/20/20</td>
<td>Tue 11/17/20</td>
<td>SAWS,VASS,AMI,EPI,MDMS</td>
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<td>3.5.3</td>
<td>Develop &quot;To-Be&quot; processes</td>
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<td>Wed 10/21/20</td>
<td>Tue 11/17/20</td>
<td>SAWS,VASS,AMI,EPI,MDMS</td>
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<tr>
<td>641</td>
<td>3.5.4</td>
<td>Install, Configure and Integrate WDOMS</td>
<td>55 days</td>
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<td>Tue 1/12/21</td>
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ConnectH2O - Integrated Master Schedule (IMS) - October Board Meeting
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TO: San Antonio Water System Board of Trustees

FROM: Jose De La Cruz, Director, Customer Service and Mary Bailey, Vice President, Customer Experience and Strategic Initiatives

THROUGH: Robert R. Puente, President/Chief Executive Officer

SUBJECT: AMENDMENT TO CONSULTING SERVICES CONTRACT IN CONNECTION WITH THE CONNECTH2O PROGRAM

Board Action Date: October 6, 2020

SUMMARY AND RECOMMENDATION:

The attached resolution approves 1) an amendment to a consulting services contract with VASS Solutions, LLC ("VASS Solutions"), a non-local, SBE-certified firm, for consulting services related to the ConnectH2O Program to reallocate tasks and funds thereon from Phase 3 to Phase 1&2 and 2) an amendment to Resolution No. 19-165 by approving the expenditure of an additional not to exceed amount of $518,721.00 for Phase 1&2 of the contract, and directing staff to return for approval to proceed with Phase 3 and funding in an amount not to exceed $6,206,459.00 (a reduction of $518,721.00 from Amendment No. 19-165’s $6,725,180.00) in the event staff recommends proceeding to Phase 3.

- On July 2, 2019, through Resolution 19-165, the San Antonio Water System (SAWS) Board authorized the award of a contract to VASS Solution for consulting and program management services related to the ConnectH2O Program, an advanced metering infrastructure (AMI) initiative. This contract provides services for three separate phases of the ConnectH2O Program.

- Phase 1 of the project focuses on setting up the program infrastructure and gathering requirements for the AMI system in 2019, while Phase 2 consists of the vendor selection process and design and deployment of an AMI pilot. The Board authorized expenditures under the VASS Solutions’ contract not to exceed $1,967,556.00 for these two phases.

- Phase 3 of the consulting services contract focuses on the full deployment of the AMI system across the SAWS territory. The contract outlines the tasks to be performed by VASS Solutions and the related fees during this phase. Resolution 19-165 requires that staff return to the Board after the completion of the pilot for approval to proceed with Phase 3 and authorization of funding in an amount not to exceed $6,725,180.00 for that phase.

- Two tasks included in Phase 3 of the VASS Solutions’ contract (Task 3.1 and 3.2) need to be completed prior to commencing the full deployment of the ConnectH2O Program. They include assessing the pilot data and information upon completion of the pilot, revising internal business processes for full deployment, revising the system architecture design and
support in finalizing contracts for full deployment, all of which will need to be completed prior to commencing the full deployment of the ConnectH2O Program. Fees for these services total $518,721.00.

- This resolution request the approval of a contract amendment to move tasks 3.1 and 3.2 from Phase 3 to Phase 2 and an amendment to Resolution No. 19-165 to authorize additional funding for Phases 1 & 2 in an amount not to exceed $518,721.00, bringing the total authorization for Phases 1 & 2 not to exceed $2,486,277.00, and directing staff to return for approval to proceed with Phase 3 and funding in an amount not to exceed $6,206,459.00 in the event staff recommends proceeding to Phase 3.

Staff recommends that the Board approve this resolution.

**FINANCIAL IMPACT:**

This amendment to the consulting services contract does not change the total contract value of $8,692,736.00, but will reallocate an amount not to exceed of $518,721.00 from Phase 3 to Phases 1 & 2 for post-pilot consulting and program management services that will be provided by VASS Solutions (Company: 1000; Accounting Unit: 1000000; Account: 115000; Job Number: 19-8604 Automated Meter Infrastructure).

The following table summarizes the financial impact of this contract amendment:

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<td>$518,721.00</td>
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<td>($518,721.00)</td>
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Total cumulative contract amount: $8,692,736.00
RESOLUTION NO.

OF THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES APPROVING AN AMENDMENT TO A CONSULTING SERVICES CONTRACT WITH VASS SOLUTIONS, INC. TO REALLOCATE FUNDS IN AN AMOUNT NOT TO EXCEED $518,721.00 TO PHASE 1 & 2 FROM PHASE 3 THEREBY INCREASING THE TOTAL AMOUNT AUTHORIZED UNDER THE CONTRACT FOR PHASE 1 & 2 TO $2,486,277.00; AMENDING RESOLUTION 19-165 BY APPROVING ADDITIONAL EXPENDITURES OF FUNDS FOR PHASES 1 & 2 OF THE CONNECTH2O PROGRAM IN AN AMOUNT NOT TO EXCEED $518,721.00 FROM THE PROJECT FUND AND DIRECTING STAFF TO RETURN FOR APPROVAL TO PROCEED WITH PHASE 3 AND FUNDING IN AN AMOUNT NOT TO EXCEED $6,206,459.00 IN THE EVENT STAFF RECOMMENDS PROCEEDING TO PHASE 3; AUTHORIZING THE PRESIDENT/CHIEF EXECUTIVE OFFICER OR HIS DULY APPOINTED DESIGNEE TO EXECUTE THIS AMENDMENT TO THE CONSULTING SERVICES CONTRACT WITH VASS SOLUTIONS INC., AND TO PAY VASS SOLUTIONS, INC. AN AMOUNT NOT TO EXCEED $2,486,277.00 FOR PHASES 1 & 2 OF THE CONNECTH2O PROGRAM; FINDING THE RESOLUTION TO HAVE BEEN CONSIDERED PURSUANT TO THE LAWS GOVERNING OPEN MEETINGS; PROVIDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, the San Antonio Water System (the “System”) Board awarded a consulting services contract to VASS Solutions, Inc. (“VASS Solutions”) on July 2, 2019 (Resolution 19-165), to provide consulting and program management services related to the three separate phases of the ConnectH2O Program, an advanced metering infrastructure (AMI) initiative; and

WHEREAS, Phase 1 of the Program focuses on setting up the program infrastructure and gathering requirements for the AMI system, Phase 2 consists of the vendor selection process and design and deployment of an AMI pilot, and Phase 3 focuses on the full deployment of the AMI system across the System’s territory; and

WHEREAS, Resolution 19-165 authorizes expenditures to VASS Solutions in amount not to exceed $1,967,556.00 for Phases 1 & 2 and requires that staff return to the Board after the completion of the pilot for approval to proceed with Phase 3 and authorization of funding in an amount not to exceed $6,725,180.00 for that phase; and
WHEREAS, two tasks included in Phase 3 of the VASS Solutions’ contract (Task 3.1 and 3.2) involve assessing the pilot data and information upon completion of the pilot, revising internal business processes for full deployment, revising the system architecture design and support in finalizing contracts for full deployment, all of which will need to be completed prior to commencing the full deployment of the ConnectH2O Program; and

WHEREAS, moving Tasks 3.1 and 3.2 to Phase 2 requires the reallocation of funds from Phase 3 to Phases 1 & 2 of $518,721.00; and

WHEREAS, the San Antonio Water System Board of Trustees desires to (i) approve an amendment to a consulting services contract with VASS Solutions to reallocate funds in the amount not to exceed $518,721.00 to Phase 1 & 2 from Phase 3 thereby increasing the total amount authorized under the contract for Phase 1 & 2 to $2,486,277.00, (ii) amend Resolution No. 19-165 by approving the additional expenditures of funds for Phases 1 & 2 of the ConnectH2O Program in an amount not to exceed $518,721.00 from the Project Fund and directing staff to return for approval to proceed with Phase 3 and funding in an amount not to exceed $6,206,459.00 in the event staff recommends proceeding to Phase 3, and (iii) authorize the President/Chief Executive Officer or his duly appointed designee to execute this amendment to the consulting services contract with VASS Solutions, and to pay VASS Solutions an amount not to exceed $2,486,277.00 for Phases 1 & 2 of the ConnectH2O Program; now, therefore:

BE IT RESOLVED BY THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES:

1. That an amendment to the consulting services contract with VASS Solutions to reallocate funds in the amount not to exceed $518,721.00 to Phase 1 & 2 from Phase 3 thereby increasing the total amount authorized under the contract for Phase 1 & 2 to $2,486,277.00 is hereby approved.

2. That Resolution No. 19-165 is hereby amended by approving the expenditure of additional funds for Phases 1 & 2 of the ConnectH2O Program in an amount not to exceed $518,721.00 from the Project Fund and directing staff to return for approval to proceed with Phase 3 and funding in an amount not to exceed $6,206,459.00 in the event staff recommends proceeding to Phase 3.

3. That the President/Chief Executive Officer or his duly appointed designee is hereby authorized to execute an amendment to the consulting services contract with VASS Solutions, and to pay VASS Solutions an amount not to exceed $2,486,277.00 for Phases 1 & 2 of the ConnectH2O Program.

4. It is officially found, determined and declared that the meeting at which this resolution is adopted was open to the public, and that public notice of the time, place and subject matter of the public business to be conducted at such meeting, including this resolution, was given to all as required by the Texas Codes Annotated, as amended, Title 5, Chapter 551, Government Code.
5. If any part, section, paragraph, sentence, phrase or word of this resolution is for any reason held to be unconstitutional, illegal, inoperative or invalid, or if any exception to or limitation upon any general provision herein contained is held to be unconstitutional, illegal, invalid or ineffective, the remainder of this resolution shall nevertheless stand effective and valid as if it had been enacted without the portion held to be unconstitutional, illegal, invalid or ineffective.

6. This resolution becomes effective immediately upon its passage.

PASSED AND APPROVED this 6th day of October, 2020.

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Jelynne LeBlanc Burley, Chairwoman

ATTEST:

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Secretary