



Artesia Pump Station Improvements  
Solicitation Number: CO-00448-RL  
Job No.: 18-8603 and 14-6001

ADDENDUM 2  
July 23, 2021

To Bidder of Record:

This addendum, applicable to work referenced above, is an amendment to the bid proposal, plans and specifications and as such will be a part of and included in the Contract Documents. Acknowledge receipt of this addendum by entering the Addendum number and issue date on the space provided in submitted copies of the bid proposal.

<b>RESPONSES TO QUESTIONS</b>
-------------------------------

- 1. Question: Can you confirm the Contractor is responsible for sourcing a 3<sup>rd</sup> party engineer to confirm Seismic Considerations of the entire station are met? This should not be a responsibility of the pump manufacturer.**

*Response: Pump Manufacturer shall coordinate requirements with the Contractor to ensure seismic requirements as specified per Section 11110, 1-2.02 and Section 01611, 2-1 are met.*

- 2. Question: I would recommend removing the Critical Frequency Analysis requirement. This is a typical requirement for vertical turbines, not HSC units. Baseplates are filled with grout in the field, which drastically alters actual RCF value (typically several times higher than max operating speed). Any submitted value would not match value recorded in field.**

*Response: The critical frequency analysis will be removed. See Changes to Specifications Item #3 within this Addendum1.*

- 3. Question: Recommend removing coupling inertia value. This is not a required input into any analysis for this system.**

*Response: The coupling inertia requirement will be removed. See Changes to Specifications Item #3 within this Addendum.*

- 4. Question: Please remove reference to Seismic Design from this section, as it would not be provided by pump manufacturer.**

*Response: Provide as specified per Section 11110, 1-3.01.*

- 5. Question: Motors are not typically provided with any spare parts. Recommend removing motor bearings/seals.**

*Response: Provide as specified per Section 11110, 1-5.*

6. **Question:** Please remove reference to Meteorological & Seismic Design Criteria.

*Response: Provide as specified per Section 11110, 2-1 and Section 01611, 2-1.*

7. **Question:** For HSP-201, please increase maximum operating speed to 1800RPM. For HSP-202/203/204, please increase maximum operating speed to 1200RPM. Increasing speed will allow for more economic and efficient pumps/motors. It is my understanding that the existing HSP-201 is a 1800RPM unit, and existing HSP-202/203/204 are 1200RPM.

*Response: Provide as specified per Section 11110, 2-2.*

8. **Question:** Recommend upgrading pump shaft to 416SS. Recommend allowing SS shaft sleeve as alternate to bronze (NSF Certification).

*Response: The material for the pump shaft and shaft sleeve will be modified in Section 11110, 2-3. See Changes to Specifications Item #5 within this Addendum.*

9. **Question:** Recommend revising seal from cartridge type to split-seal. Cartridge type would have to be installed prior to shipping, increasing risk of damage during transit. Split seals can be installed, removed, and maintained in the field without having to remove bearing housing and upper casing.

*Response: Provide as specified per Section 11110, 2-3.*

10. **Question:** Recommend removing minimum 10 mil DFT thickness for Belzona coating and revising to only say 'per Belzona minimum recommendations'.

*Response: Provide as specified per Section 11110, 2-4.01.*

11. **Question:** Recommend removing requirement for tapered pump shaft above 2.5". I don't see any advantage of this style shaft/coupling for this application.

*Response: Provide as specified per Section 11110, 2-4.03.*

12. **Question:** Recommend raising bearing life requirements to 100k hr. This should be a standard for these pump styles.

*Response: Provide as specified per Section 11110, 2-4.07.*

13. **Question:** I'd recommend adding more detail to the structural steel baseplate description, and have attached a draft spec template that should be acceptable for this application. At minimum, there needs to be requirement about stress relieving baseplates and machining pump/motor feet to within 0.005"/ft, which also needs to be verified in field before grouting.

*Response: The baseplate and pump/motor feet design are the requirement of the pump/motor manufacturers. Provide as specified per 11110, 2-4.09.*

14. **Question:** Please confirm how many Owner/Engineer witnesses will need to be accommodated for pump performance tests.

*Response: Three representatives will need to be accommodated as specified per Section 11110, 2-7.01.*

- 15. Question: Regarding the captioned project (bid due date : July 29, 2021), when I have checked the specifications on Large Induction Motors (Section 16151) for below well pumps, we are not in the Acceptable Motor Manufacturers.**

**In regard, could you include us into one of acceptable motor vendors because we can provide the motors with competitive price and delivery?**

*Response: The motor manufacturers listed under Section 16152 – Well Pump Motors have been updated in accordance with SAWS' current list of pre-approved manufacturers. No equals. See Changes to Specifications Item #21 within this Addendum.*

- 16. Question: Can SAWS delay the submission date by 1 week or so? Can the RFCSP response of 7/30/2021 for the Artesia Pump Station Improvements project could be moved?**

*Response: The RFCSP submittal response deadline will be August 6, 2021, at 1:00 p.m. (CDT). See Changes to Specifications Items #25, #26, & #27 within this Addendum.*

- 17. Question: Spec Section 13560, 2.4 states that the 400W is accepted only and no equals. However, the 500W will need to be used for this application for the multiple outputs.**

*Response: Provide a 400W as specified per Section 13560, 2-5. The outputs will be revised within Specification 13560. See Changes to Specifications Item #6 within this Addendum.*

- 18. Question: Regarding the schedule at the end of gate valve spec 15104, the well flush line valves are called out as 12" & 16" in size. however, plan sheets 13 - 16 & 24 (out of 38) show these valves as 18" in size. please, clarify.**

*Response: Well flush line valves are 18" as shown on the Drawings. See Changes to Specifications Item #16 within this Addendum.*

- 19. Question: Regarding the schedule at the end of butterfly valve spec 15101, please confirm all, buried butterfly valves are to have eot (o/c) limit switches.**

*Response: All buried butterfly valves shall be manually operated with wrench nut. Limit switches are not required. See Changes to Specifications Item #14 within this Addendum.*

- 20. Question: Regarding the buried butterfly valves, after reviewing the plan sheets and the butterfly valve schedule, please confirm / clarify the following:**

- a. In the valve schedule, BFV-104 should be 54" in size to match plan sheet 23 of 200 - left side.
- b. In the valve schedule, BFV-105 should be 24" in size and BFV-102 should be 36" in size to match plan sheet 7 of 200.
- c. On plan sheet 7 of 200, well 5 24" BFV-100 should be moved to the 24" line below BFV-102.
- d. On plan sheet 24 of 200, BFV-116 should be changed to BFV-117.
- e. On plan sheet 27 of 200, BFV-102 should be changed to 36" in size and BFV-118 should be changed to BFV-100.
- f. On plan sheet 28 of 200, BFV-117 should be deleted to match plan sheet 7 of 200.

*Response:*

- a. BFV-104 shall be revised to 54" in valve schedule. See Changes to Specifications Item #14 within this Addendum.

- b. BFV-105 shall be revised to 24" in the valve schedule. See Changes to Specifications Item #14 within this Addendum. BFV-102 is 24" and Sheet 7 will be revised per Changes to Drawings Item #2 within this Addendum.
- c. BFV-100 shall be removed from the schedule. Additional valve BFV-118 shall be shown on the 24" line below BFV-102. See Changes to Specifications Item #14 within this Addendum.
- d. BFV-116 will remain as is on Sheet 24, but Sheet 7 will be revised per Changes to Drawings Item #2 and Changes to Specifications Item #14 within this Addendum.
- e. BFV-102 will remain as a 24" and BFV-118 will remain as shown on Sheet 27. Sheet 7 will be revised per Changes to Drawings Item #2 and Changes to Specifications Item #14 within this Addendum.
- f. BFV-117 will remain as is on Sheet 28 and Sheet 7 will be revised per Changes to Drawings Item #2 within this Addendum.

**21. Question: Ref Spec Section 02635. Please verify that you require DIPS OD HDPE Pipe/Fittings**

*Response: HDPE pipe/fittings shall be DIPS in accordance with SAWS Item No. 815.*

**22. Question: Ref Plan Page G-00-005 Sheet 5 of 200 – Piping Note #8.**

- a. "All pipe joints shall be welded for buried steel pipe. 30" and larger all diameters smaller shall be flanged connections."
- b. Please verify this note. Is it acceptable for all buried welded steel pipe connections to be field welded? Can we just provide a flange at valve connections?

*Response:*

- a. All field joints for steel pipe shall be welded. This note will be revised per Changes to Drawings Item #1 within this Addendum.
- b. All steel pipe joints shall be welded. A flange connection at the valves shall be provided as shown on the Drawings.

**23. Question: Ref Spec 15101-S01 – Butterfly Valve Schedule**

- a. Tag APS-PB-BFV-104 – The Schedule for this valve shows 48". Should this be a 54" Butterfly Valve?
- b. Tag APS-PB-BFV-117. Should this valve be tag number APS-PB-BFV-116?
- c. Tag APS-PB-BFV-105. The Schedule for this valve shows 36". Should this be a 24" Butterfly Valve?
- d. Tag APS-PB-BFV-101. Should this valve be tag number APS-PB-BFV-118?
- e. Plan Page C-01-120 Profile D-4. Sta 53+04. Please verify tag number for this 24" Butterfly Valve.
- f. Plan Page C-01-121 Profile D-4. Sta 57+10. 16" Butterfly Valve. Please provide a tag number for this valve.

*Response:*

- a. BFV-104 shall be revised to 54" in valve schedule. See Changes to Specifications Item #14 within this Addendum.
- b. BFV-117 tag shall be revised to BFV-116. See Changes to Specifications Item #14 and Changes to Drawings Item #2 within this Addendum.
- c. BFV-105 shall be revised in the valve schedule to 24". See Changes to Specifications Item #14 within this Addendum.
- d. BFV-101 shall remain. BFV-118 is on the Southeast 24" line. See Changes to Specifications Item #14 and Changes to Drawings Item #2 within this Addendum.
- e. BFV-117 is at Sta. 53+04. See Changes to Specifications Item #14 and Changes to Drawings Item #2 within this Addendum.
- f. Valve tag APS-PB-BFV-119 will be incorporated to the valve schedule. See Changes to Specifications Item #14 within this Addendum.

**24. Question: Ref Spec 15103. Ball Valves. Do you have approved manufacturers for these valves?**

*Response: Acceptable manufacturers will be added. See Changes to Specifications Item #15 within this Addendum.*

**25. Question: Ref Spec 15104 S-01 – Gate Valve Schedule. Tag Number APS-PB-GV-301, -302 & -303. These should all be 18” Gate Valves.**

*Response: Well flush line valves are 18” as shown on the Drawings. See Changes to Specifications Item #16 within this Addendum.*

**26. Question: Ref Pipe Schedule 01630-S01. – 4” Fluoride Injection. Please verify location of this pipe.**

*Response: The 4" Fluoride injection piping is existing and will be removed from the pipe schedule. See Changes to Specifications Item #1 and Changes to Drawings Item #7 within this Addendum.*

**27. Question: Ref Plan Page M-02-304 – Section #2. The Harness Coupling outside of the building is labelled as a 48” Butterfly Valve. Please verify that this should be called out as Mechanical Coupling**

*Response: The 48" Butterfly Valve callout should be replaced with Harnessed Mechanical Coupling. See Changes to Drawings Item #6 within this Addendum.*

**28. Question: Ref Plan page M-02-103 – Note #2. Please verify if the intent of this note is to reuse the existing wall sleeve or to provide a new wall sleeve?**

*Response: The existing wall sleeves will be replaced. A detail will be provided as part of a future Addendum.*

**29. Question: Ref Plan Page M-02-303 – Section #3. Please verify the dismantling Joint shown in the section is typical for Pump #3 & #4.**

*Response: A dismantling joint is required on the pump suction next to the vertical BFV for all pumps as shown on Drawing M-02-303, Section #1.*

**30. Question: Ref Plan Page M-02-303 – Section #1 – Pump #1 – Suction. Please verify that a 18” Dismantling Joint is required on top of the butterfly valve. It is not called out in this location, but appears that is what is drawn here.**

*Response: A dismantling joint is required on the pump suction next to the vertical BFV for all pumps as shown on Drawing M-02-303, Section #1.*

**31. Question: Section 11110 states that the small HSC pump should be equipped with 460V motor. During site visit, it was noted that the existing small HSC pump is actually a 4160V motor. Can we confirm that the new motor should be rated at 460V, and not 4160V? Drawing sheet E-02-605 shows 4160V to all (4) pumps.**

*Response: All the high service pumps are 4160V. Section 11110, Paragraph 1-2.04 will be revised. See Changes to Specifications Item #2 within this Addendum.*

**32. Question: What is the downthrust at design and shut-off on all three water well pumps? The motor manufacturers are going to need this to meet the bearing life specifications.**

*Response: Maximum shutoff head at the design point (7,000 GPM, 89 ft.) is 175 ft. See Changes to Specifications Item #23 within this Addendum.*

**33. Question: I have reviewed the plans and specifications for this project and found that Alterman was not listed as an approved controls contractor (PCSI). Please consider adding Alterman to the approved control contractors list. Alterman has programmers & control technicians on staff, as well as a UL508A panel shop located at our main office in Schertz, Texas.**

*Response: Approved PCSIs shall be as specified in Section 13500, 1-6.04, without exception.*

**34. Question: Ref Spec Section 15062. Please verify the material required for the flange hardware.**

- a. Are A193 GrB7 Bolts acceptable for the exposed flange hardware?
- b. Will you require a 316SS B8M Bolts for the buried flanges?

*Response:*

- a. Flange hardware shall be as indicated within Section 15062, 2-2 for Flange Bolting and Bolts and Bolt Studs.
- b. Bolts for buried flanges will be revised to type 316 stainless steel as indicated in Changes to Specifications Item #7 within this Addendum.

**35. Question: Ref Spec Section 15072. Please verify the buried t-bolt material.**

*Response: The t-bolts should be ductile iron per Section 15072, 2-1.06.e.*

**36. Question: Pipe Supports.**

- a. Pipe Supports at the Well Sites are called out to be 316SS (Drawing M-10-503)
- b. Please verify the pipe support material for the Booster Pump Station Site – Drawing M-02-502

*Response:*

- a. Pipe supports at well sites are to be 316SS as indicated on the Drawing.
- b. All indoor pipe support material are carbon steel, unless specifically noted otherwise.

**37. Question: Ref Spec 15093-S01 – Check Valves – Tag Numbers APS-PB-CV-301, -301 & -303. These are all shown on the schedule as flange end. The spec is calling for CV-5 Valves to be Wafer Style. Please verify.**

*Response: Check Valves 301, 302, and 303 shall be wafer style, not flanged. Check valves shall be dual plate check valves and comply with SAWS Standard Specification for Dual Plate Wafer Style Check Valves. See Changes to Specifications Item #13.*

**38. Question: Ref Plan Page M-02-103 – The 24” Emergency Drain – Please verify this pipe material. It is drawn with a Mechanical Coupling like it is steel pipe. Plan Page C-01-136 Shows this 24” as RCP Pipe. Please verify pipe materials.**

*Response: The 24” Emergency Drain is steel pipe and revised per Changes to Drawings Item #3 within this Addendum.*

**39. Question: Ref Plan page M-02-103 & M-02-303 – Vent & Drain Valves. Can you please provide a detail showing the material and type of valve for these Vent and Drain Valves? Please provide a size for the these shown on the vertical pipe in Section #1 – Page M-02-303**

*Response: The ball valves shown on the vertical suction pipe on Drawing M-02-303 are called out as 1" on Sheet M-02-103. Valve type VB-1 will be added to Section 15091 as indicated in Changes to Specifications Item #12 within this Addendum.*

**40. Question: Will rotor bars need to be copper to match the 4160V motor construction?**

*Response: All 4160V motors shall meet the requirements of Section 16151, 2.05.C which requires copper rotor bars.*

**41. Question: Will small motor need to be form wound to match the 4160V motor construction?**

*Response: The small high service pump motor (HSP-201) is also 4160V and shall meet the requirements of Section 16151, 2.04.B.3 which requires form wound construction.*

**42. Question: Ref Plan Page M-02-103. On the 42" Discharge Header – the plans do not show Dismantling Joints. Just wanted to verify if any were required. It appears most of the other butterfly valves show dismantling joints.**

*Response: Dismantling joints are being added adjacent to BFV-213, 214 & 215 on the 42" Discharge Pipe. See Changes to Drawings Item #4.*

**43. Question: Section 16105, Power System Study. Are the firms listed the only firms that a Prime can select to perform power system studies (i.e. – short circuit, arc flash, protection coordination, etc)? Or, is there an approval process a Prime can complete to use other firms?**

*Response: This is an or-equal specification. Firms that meet the qualification requirements of the specification may be submitted for consideration after Contract Award.*

**44. Question: Section 16152:**

- a. Plans/Specs indicate that Well Pump No. 3 is a 250HP, 1200RPM motor. Site visit confirms that Well Pump No. 3 is actually a 200HP, 1200RPM motor. Can we confirm what size is required to be provided for WP-3?
- b. Plans/Specs indicate WP-4 is 150HP, 1200RPM. There was no motor on WP-4 during site visit, but there was a 350HP, 1200RPM motor on site that was believed to be for WP-4. Can we confirm what size is required to be provided for WP-4?

*Response:*

- a. Well Pump No. 3 shall be a 250 HP, 1,800 RPM motor. Refer to Changes to Specifications Item #20 & #22 within the Addendum.
- b. The motor mentioned is not for WP-4. Well Pump No. 4 shall be a 250 HP, 1,800 RPM motor. Refer to Changes to Specifications Item #20 & #22 within the Addendum.

**45. Question: Please reference electrical drawing E-02-608 and specification 16482 concerning width of MV MCC-A and MV MCC-B. Please confirm MCC depth of 2'-6" (30") is the maximum depth allowed. This depth will limit the products available to meet the specifications for this project.**

*Response: Depth shall be as shown on Drawing E-02-608 and within Section 16482.*

**46. Question:** Please confirm the bus rating for MCC MV-A and MCC MV-B. Drawing E-02-605 shows bus rating of 1200A while drawings E-02-606 and E-02-607 show bus rating of 1000A.

*Response: Bus ratings will be revised per Changes to Drawings Item #11 & #12 within the Addendum.*

**47. Question:** Please clarify the location of the power factor correction capacitors for each medium voltage motor. The one-line indicates they are to be located with the load, however Spec 16151 for Large Induction motors states “The capacitors shall be mounted in each individual motor controller.” (16151 pg 11 of 21)

*Response: The capacitors shall be located as shown on the Drawings and will be revised per Changes to Specifications Item #19 within the Addendum.*

**48. Question:** Could we get a depth on the asphalt that is being removed?

*Response: The depths vary and will need to be field verified during construction.*

**49. Question:** Sheet 19 shows a proposed 24” storm drain with a 4’ manhole and refers (Vol. 2, sheet C-10-105) in multiple places. Looking through all of the drawings I don’t see where Vol.2 is located. Please advise.

*Response: Volume 2 begins on PDF page 201 of 238. Sheet C-10-105 is on page 211 of 238.*

**50. Question:** Can you please confirm the bid time has changed for the Artesia Pump Station Improvements from 1:00pm to 1:30pm, per the pre-bid presentation or was this an error?

*Response: Bid date and time changes have been revised in the Changes to Specifications Items #25, #26 & #27 within this Addendum.*

**51. Question:** We have some questions regarding the pumps. For us to meet the NSF 61 Classification we would like to know if you will allow the following:

- a. 2-2, HSP-201 Small Pump: 83% efficiency
- b. 2-2, HSP-202-204 Large Pumps: 625 Horse Power over 140 feet
- c. 2-3, Case: Ductile iron case ASTM A395 60-40-18
- d. 2-3, Shaft: AISI Grade 1144 or AISI Grade 4140. Both grades have greater tensile and yield strength than 1045 listed
- e. 2-3, Shaft sleeve: AISI 316
- f. 2.3, Seal: Allow Chesterton 442.
- g. 2-4.01: Please add TNEMEC N140, 2 coats Maximum DFT 18 Mils or ScotchKote 134, 1 coat Maximum 12 Mils as an acceptable coating on the interior of the casing.
- h. 2-4.03: Please allow 0.003” deflection

*Response:*

- a. Pump efficiencies shall meet the requirements as specified per Section 11110, 2-2.
- b. Horsepower shall meet the requirements as specified per Section 11110, 2-2.
- c. Casing shall meet the requirements as specified per Section 11110, 2-3.
- d. Shaft material has been revised to 416 SS per Changes to Specifications Item #5 within the Addendum.
- e. Shaft sleeve material has been revised to 316 SS per Changes to Specifications Item #5 within the Addendum.



- f. Mechanical seal shall be John Crane "Type 1" per Section 11110, 2-3.
- g. Interior of casing shall be coated as specified per Section 11110, 2-4.01.
- h. Deflection shall meet the requirements as specified per Section 11110, 2-4.03.

**52. Question: Ref Sheet # M-02-104. Pump #1 -Suction. They call this a 16" x 14" Reducing. Sheet M-02-303 shows this as 18". Please verify this should be 18" x 14" Reducing 90 bend.**

*Response: The reducing elbow to HSP #1 shall be 18" x 14". See Changes to Drawings Item #6 within this Addendum.*

**53. Question: Ref Sheet # M-02-304 Section #1 & #3. Pipe Supports. You call out Detail A/C M-02-502 for the supports. Please verify if you want a Type A Support or a Type C Support.**

*Response: As noted under Detail C on Sheet M-02-502 the Contractor can utilize either Detail A or Detail C for pipe supports.*

**54. Question: Ref Sheet M-02-103. 48" Suction Header & 42" Discharge Header. Please verify all the supports for these lines are type "C" – Concrete Pipe Supports**

*Response: See response to Question 53.*

**55. Question: Ref Sheet M-02-103 – Just to the left of BFV-215 – you show an additional flange. Is this supposed to be a dismantling joint at this location?**

*Response: Referenced flange will be deleted per Changes to Drawings Item #4 within this Addendum.*

**56. Question: Are there any Domestic material requirements for this project?**

*Response: Domestic material requirements are not required for this project.*

**57. Question: On sheet L-01-102, note 6, do all of the references to "new bed areas" pertain just to the 3 ea. Crepe Myrtles, or are all of the seeded areas shown on this drawing considered "new bed areas"?**

*Response: Note 6 on Sheet L-01-102 only refers to the new crepe myrtle beds.*

**58. Question: Will the Evaluation Criteria Form be available in Word format?**

*Response: The Evaluation Criteria form will be provided in Word format as a separate Attachment to this Addendum.*

**59. Question: Can you provide any thickness detail for the Storage Tank area or we're going to assume that the thickness is 7" with one bed of #4 rebar as shown in detail 1 drawing C-01-509.**

*Response: All concrete pavement shall be in accordance with Detail 1 on Sheet C-01-509.*

**60. Question: Drawing S-02-301 indicates drilled piers and does not indicate imported material subgrade below the proposed vault. Please confirm.**

*Response: Select fill placement below the proposed vault is modified in the Changes to Drawings Item #8 within this Addendum.*

**61. Question:** Section 11110, 2.3 specifies the John Crane Type 1 mechanical seal. We checked with John Crane and the Type 1 seal does not have NSF-61 Certification. To supply pumps with NSF-61 Certification (as specified in 11110, 2-1), the mechanical seals must also have NSF-61 Certification. To use the specified mechanical seal manufacturer, John Crane, the mechanical seals would have to be the type 3740 split seal to meet NSF-61 Certification. We also checked with Chesterton and they can offer the 1810 or the S10 Cassette Cartridge seal which has NSF-61 Certification. However, those seals are only available in a certain size range and are available on the HSP-201 but are not available in the size range required for the large pumps HSP-202 - HSP-204. The Chesterton 442 split seal is a third option from Chesterton that is NSF-61 Certified and is available on the 4 pumps. Please define if the mechanical seals must be NSF-61 Certified (which would subsequently allow NSF-61 Certified pumps) for all size pumps. Please define the materials of construction requirements for the mechanical seal.

*Response: Mechanical seal shall be John Crane "Type 1" per Section 11110, 2-3.*

**62. Question:** Please provide panelboard schedule for existing panel P1.

*Response: Panelboard LC should be revised to P1. See Changes to Drawings Item #10 within the Addendum.*

**63. Question:** Panel LC is not shown on the existing one-line on E-02-601 or Power drawings, however a panel schedule is provided for it on E-02-603. Please identify the location and feeder for this panel.

*Response: Panelboard LC should be revised to P1. See Changes to Drawings Item #10 within the Addendum.*

**64. Question:** Our most efficient selection for this project for HSP-202/3/4 has a 20" suction and 18" discharge. Please confirm if 20" Minimum pump suction is acceptable. A 20x24 spool piece could be provided allowing for 24" suction.

*Response: Minimum suction nozzle size shall be 24" as specified in Section 11110, 2-2.*

**65. Question:** Our NSF61 Certification is based on specific materials of construction that SAWS has approved on multiple past projects.

- a. Please confirm casing wear ring material Nitronic 60 or Nickel Aluminum Bronze, ASTM B148-C958 is acceptable.
- b. Please confirm impeller wear ring material Nickel Aluminum Bronze, ASTM B148-C958 is acceptable.
- c. Please confirm shaft material Steel, AISI 4140 or ASTM A322 GR 4340 is acceptable.
- d. Please confirm shaft sleeve material Nickel Aluminum Bronze, ASTM B148-C958 is acceptable.
- e. John Crane Type 1 seal is not NSF61 Certified. Please revise mechanical seal to Chesterton, non-split, NSF61 certified seal.

*Response:*

- a. Casing wear rings shall meet the requirements as specified per Section 11110, 2-3. Alternative materials from that specified will be considered after Contract Award.
- b. Impeller wear rings shall meet the requirements as specified per Section 11110, 2-3. Alternative materials from that specified will be considered after Contract Award.
- c. Shaft material was revised to 416 SS per Changes to Specifications Item #5 within the Addendum.
- d. Shaft sleeve material was revised to 316 SS per Changes to Specifications Item #5 within the Addendum.
- e. Mechanical seal shall be John Crane "Type 1" per Section 11110, 2-3.

**66. Question: We respectfully request a bid date extension for this project. The current bid date of 7/30 conflicts with 2 other regional utility projects bidding within 30 minutes on the same day.?**

*Response: See response to Question 16.*

<b>CHANGES TO THE SPECIFICATIONS</b>
--------------------------------------

- 1. Section 01630-S01, Page 2 of 2:** Delete the following from the schedule:  
  
4" – Fluoride – Fluoride Injection - PVC
- 2. Section 11110, Page 2 of 12, 1-2.04:** Delete paragraph in its entirety and Replace with the following:  
  
Power supply for all the pumping units shall be 4160 volts, 60 Hz, 3 phase. Refer to Section 16151 for additional motor requirements.
- 3. Section 11110, Page 2, 1-3.01:** Delete the following submittal requirements: "Critical Frequency Analysis" and "Data on pump, coupling, and motor polar moment of inertia, WR<sup>2</sup>"
- 4. Section 11110, Page 6, 2-2:** Delete the last paragraph in its entirety and Replace with the following:  
  
Pumps shall be manufactured by Fairbanks-Nijhuis, Patterson, Flowserve, or Goulds ITT without exception.
- 5. Section 11110, Page 6, 2-3:** Replace the pump shaft and shaft sleeve material with the following:  
  
Shaft – Martensitic Stainless-Steel Type 416  
Shaft Sleeve – Stainless-Steel, AISI Type 316
- 6. Section 13560, Page 3, 2-5, B.8:** Delete the paragraph in its entirety and Replace with the following:  
  
Outputs: Provide EtherNetIP or 4-20mA output as indicated in the instrument schedule and on the Drawings; and two pulse signals for totalizing, alarm, or serial communication output, unless otherwise noted.
- 7. Section 15062, Page 14, 2-2:** In the Flange Bolting Material section, Add the following:  
  
Exposed flange hardware shall be carbon steel Grade B7. Buried flange hardware shall be Type 316 stainless steel Grade B8M.
- 8. Section 15062, Page 18, 2-3.01:** Delete the second paragraph in its entirety and Replace with the following:  
  
Ends of pipe, fittings, and specials for field-welded lap joints, as shown within the drawings shall have both the bell and the spigot expanded by pressing, if necessary, (not rolling) to obtain the required shape and welding tolerances.
- 9. Section 15062, Page 18, 2-3.07:** Delete the paragraph in its entirety and Replace with the following:  
  
Steel pipe connections to buried concrete pipe or cast or ductile iron pipe shall be made with an insulated flange per Section 13110 Impressed Current Cathodic Protection for Pipelines.

10. **Section 15062, Page 30, 3-4.04:** Delete the last sentence of the paragraph and Replace with the following:

Refer to Section 13110 and the drawings for insulated flange joint requirements.

11. **Section 15062, Page 31, 3-4.06:** Delete the third paragraph in its entirety and Replace with the following:

Refer to the drawings for field-welded lap joint details and requirements. The field welding shall be performed so that the interior lining, the exterior coating, and the field applied joint coating are not damaged.

12. **Section 15091, Page 1, 2-1.01:** Delete "Not Used." and Replace with the following:

<p>VB-1</p> <p>Ball valves indicated on the mechanical drawings for water service for metallic piping systems</p> <p>2 inch and smaller</p>	Rating	500 psi nonshock cold WOG
	Code	MSS SP-110
	Type	In-line, two piece, end entry, full port
	Body/Bonnet	ASTM B584–C84400 bronze
	Trim	
	Seat	Reinforced Teflon
	Ball	Brass, or chrome plated brass
	Stem	Brass or bronze
	Thrust Washer	Reinforced Teflon
	Stem Seal	Teflon or Viton
	End Connection	Threaded End
	Temp. Limitations	-20 to 400°F
	Valve Operator	Lever
	Manufacturers	Conbraco Industries "Apollo 77-100 Series"; Powell "Fig 4210T"

13. **Schedule 15093-S01:** Make the following revisions to the schedule.

- a. Delete CV-5 from tag numbers APS-PB-CV- 301, 302, and 303 and replace with See Note 2.
- b. Delete F designation from tag numbers APS-PB-CV- 301, 302, and 303 and replace with P designation.
- c. Add Note 2: Refer to SAWS Standard Specification for Dual Plate Wafer Style Check Valves.

14. **Section 15101-S01:** Delete the AWWA Butterfly Valves Schedule and Replace with the revised schedule in this Addendum included as Attachment 2.

15. **Section 15103, Page 4:** Add new Paragraph 2-6 as follows:

2-6. MANUFACTURERS. Acceptable manufacturers are Pratt, G.A. Industries, Valmatic, and DeZurik without exception.

16. **Section 15104-S01:** For tag numbers APS-PB-GV- 301, 302, and 303, Revise the current listed size of 12" and 16", and replace each with 18".

**17. Section 16150, Page 6, 2.01.A:** Add the following to the list of acceptable manufacturers:

- 5. Toshiba
- 6. Baldor

**18. Section 16151, Page 7, 2.01.A:** Add the following to the list of acceptable manufacturers:

- 5. Toshiba
- 6. Baldor

**19. Section 16151, Page 11 of 21, 2.03-M:** Delete the Paragraph in its entirety and replace with the following:

M. The Contractor shall coordinate with the motor manufacturer and Division [16] motor control manufacturer to provide the correct capacitor kVAR to correct the power factor as specified.

**20. Section 16152, Page 1:** Add new Paragraph 1-1.01:

1-1.01. Coordination: Motors for Well Pump Nos. 3, 4, and 5 shall be purchased and stored in accordance with Paragraph 1-5. Do not install motors. Motors for Well 3, 4, and 5 will be installed under another improvements project that will begin before completion of this project.

**21. Section 16152, Page 1 & 2, 1-3.01.B:** Add the following to the list of acceptable manufacturers:

- 5. Toshiba
- 6. Baldor

**22. Section 16152, Page 4, 2-1.02.B:** Delete Paragraph in its entirety and Replace with the following:

Horsepower:

- 1. Well Pump 3: 250 HP
- 2. Well Pump 4: 250 HP
- 3. Well Pump 5: 250 HP

**23. Section 16152, Page 4, 2-1.02:** Add the following new Paragraph E:

E. Maximum shutoff head at the design point (7,000 GPM, 89 ft.) is 175 ft.

**24. Section 16152, Page 5, 2-1.03.A.5:** Delete Paragraph in its entirety and Replace with the following:

Speed:

- 1. Well Pump 3: 1,800 RPM
- 2. Well Pump 4: 1,800 RPM
- 3. Well Pump 5: 1,800 RPM

**25. REQUEST FOR COMPETITIVE SEALED PROPOSALS.** The second sentence of the seventh paragraph is hereby modified to read as follows:

**“Proposals will be received electronically only, until 1:00 PM (CDT), August 6, 2021.”**

**26. REQUEST FOR COMPETITIVE SEALED PROPOSALS.** The last paragraph is hereby modified to read as follows:

“Respondents will need to submit a request by **August 5, 2021 at 1:00 PM (CDT)** to receive access to the File Transfer Protocol (FTP) site via email to [roxanne.lockhart@saws.org](mailto:roxanne.lockhart@saws.org). Respondent’s email requesting access to the FTP site shall provide the legal name of Respondent’s company and the intended recipient’s email address and phone number. No requests for FTP site access will be accepted after **August 5, 2021 at 1:00 PM (CDT)**.”

**27. ELECTRONIC PROPOSAL OPENING INSTRUCTIONS.** The header and first two paragraphs are hereby modified to read as follows:

**“ARTESIA PUMP STATION IMPROVEMENTS  
Solicitation Number: CO-00448-RL**

**ELECTRONIC PROPOSAL OPENING INSTRUCTIONS**

**August 6, 2021 at 1:00 PM (CDT)**

In order to receive **electronic proposals** for this RFCSP, SAWS will utilize a SAWS secured File Transfer Protocol (FTP) site. Only Respondents submitting as Prime Contractors will need to submit their request prior to **August 5, 2021 by 1:00 pm (CDT)** to receive access to the FTP site via email to **Roxanne.Lockhart@saws.org**. Respondent’s email shall provide the legal name of the Respondent’s company and the intended recipient’s email address and phone number. No requests for FTP site access will be accepted after **August 5, 2021 by 1:00 pm (CDT)**. Once a Respondent is approved for access, an email with a hyperlink to the FTP site and a unique password for the Respondent will be provided to the Respondent’s email recipient.

Once access is received, Respondents may upload the required documents per the revised Respondent’s Proposal Checklist any time before **August 6, 2021 at 1:00 PM (CDT)**. **Please ensure to allow sufficient time should Respondents experience technical difficulties in uploading the required documents. No changes to the proposal price can be made once the proposal has been submitted.**

**28. WAGE DECISIONS.** Delete the “Building” type wage decision (General Decision Number: TX20210231 Dated 05/07/2021) in its entirety and replace with the revised “Building” type wage rate decision version (General Decision Number: TX20210231 Dated 07/09/2021) in this Addendum included as Attachment 1.

<b>CHANGES TO THE DRAWINGS</b>
--------------------------------

1. On Sheet 5 (G-00-005) under Piping Notes, Note No. 8, Delete note in its entirety and Replace with the following:  
  
8. All pipe joints shall be welded for buried steel pipe.
2. Delete Sheet 7 (G-00-007) and Replace with the revised Sheet 7 in this Addendum included as Attachment 3.
3. On Sheet 49 (C-01-136) Revise the callout for the 24” Emergency Drain from “24” RCP” to “24” Steel Pipe”.

4. On Sheet 76 (M-02-103), Make the following revisions:
  - a. Add a dismantling joint adjacent to each of BFV-213, 214 & 215 on the 42" Discharge Pipe.
  - b. Delete the set of flanges on the 42" Discharge Pipe to the south of BFV-215.
  - c. The buried mechanical coupling shown on each of the suction and discharge pipes leaving the building should be in bold linework as new.
  
5. On Sheet 77 (M-02-104), Revise the callout on HSP-201 suction pipe reducing elbow from "16"x14"" to "18"x14"".
  
6. On Sheet 81 (M-02-304), Make the following revisions:
  - a. In Section 1, Add a dismantling joint adjacent to each of BFV-213, 214 & 215 on the 42" Discharge Pipe.
  - b. In Section 2, Replace the "48" Butterfly Valve" callout on the piping outside of the building structure with "48" Harnessed Mechanical Coupling".
  
7. On Sheet 85 (M-03-101), On the Plan, Delete the callout on the fluoride metering pump discharge "Contractor shall connect new fluoride piping above grade to existing piping below grade" in its entirety and Replace with the following:

"Contractor shall protect existing 4" vertical containment pipe and fluoride feed tubing. Extend and seal the 4" containment pipe through the new building wall and connect the new metering pump discharge piping to the existing feed tubing inside the new building."
  
8. On Sheet 111 (S-02-301), Section 1 & 2, Add the following Note 6 to the subgrade below the new vault structure:

6. Provide 12" of compacted Select Fill below the vault floor slab extending a minimum of 2 feet beyond the footing perimeter on all sides.
  
9. On Sheet 153 (E-02-108):
  - a. Add exit lighting over the inside exit door for each of the four rooms along the east wall. Place them on circuit LA-30.
  - b. Place the two "CE" light fixtures outside the exit door on the east wall on circuit LA-51.
  - c. Add a dual receptacle to the circuit LA-14 shown on the northeast corner of the Operations Room
  
10. On Sheet 157 (E-02-603): On Panelboard LC, Revise the following:
  - a. Revise PANELBOARD field from "LC" to "P1".
  - b. Revise the SERVICE field from "120/208V, 3PH, 4W" to "480V, 3PH"
  - c. Delete the descriptions shown in the MOUNTING, BUS TYPE, BUS RATING, FEED, MAINS, and SPD fields.
  - d. Revise the LOCATION field from "Control Corridor" to "Pump Room".
  
11. On Sheet 159 (E-02-605), Revise the horsepower for WP-4 from "150" to "250" and WP-5 from "200" to "250".
  
12. On Sheet 160 (E-02-606), Revise the horsepower for WP-4 from "150" to "250" and Revise the Bus A amperage from "1000A" to "1200A".

13. On Sheet 161 (E-02-607), Revise the horsepower for WP-5 from “200” to “250” and Revise the Bus B amperage from “1000A” to “1200A”.
14. On Sheet 163 (E-02-609), on Circuit 11, Revise the description to read “At South Security Gate – 10 kVA”.
15. On Sheet 168 (E-02-614):
  - a. On Panelboard LA (SECTION 1), Circuit LA-21, 23 Revise breaker size from “20/2” to “50/2”. Revise wire size from “12” to “8”. Revise conduit size from “3/4” to “1”.
  - b. On Panelboard LA (SECTION 2), Circuit LA-43, 45 Revise breaker size from “40/2” to “50/2”. Revise conduit size from “3/4” to “1”.
  - c. On Panelboard LA (SECTION 2), Circuit LA-44, 46 Revise label from “FCU-1” to “FCU-2”.
16. Delete Volume 2 – Sheet 13 (M-10-101) and Replace with the revised Sheet in this Addendum included as Attachment 4.
17. Delete Volume 2 – Sheet 14 (M-10-102) and Replace with the revised Sheet in this Addendum included as Attachment 5.
18. Delete Volume 2 – Sheet 15 (M-10-103) and Replace with the revised Sheet in this Addendum included as Attachment 6.

<b>CLARIFICATIONS</b>
-----------------------

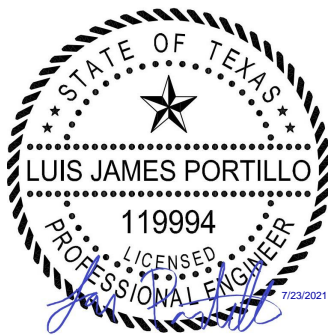
None

<b>END OF ADDENDUM</b>
------------------------

This Addendum, including these sixteen (16) pages, is thirty-three (33) pages with attachments in its entirety.

**Attachments:**

1. Wage Decision “Building” Type – General Decision Number: TX20210231 – 07/09/2021 (8 pages)
2. AWWA Butterfly Valve Schedule 15101-S01 (5 Pages)
3. Volume 1 – Sheet 7 of 200 (G-00-007)
4. Volume 2 – Sheet 13 of 38 (M-10-101)
5. Volume 2 – Sheet 14 of 38 (M-10-102)
6. Volume 2 – Sheet 15 of 38 (M-10-103)
7. Evaluation Criteria Form (Word Format) - Separate Attachment to this Addendum (31 pages)



Luis James Portillo, P.E.  
Black & Veatch



Maxwell J. Wallack, P.E.  
Arcadis



"General Decision Number: TX20210231 07/09/2021

Superseded General Decision Number: TX20200231

State: Texas

Construction Type: Building

County: Bexar County in Texas.

BUILDING CONSTRUCTION PROJECTS (does not include single family homes or apartments up to and including 4 stories).

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.95 for calendar year 2021 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.95 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2021. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

Modification Number	Publication Date
0	01/01/2021
1	03/12/2021
2	05/07/2021
3	07/09/2021

ASBE0087-014 03/02/2020

Rates Fringes

ASBESTOS WORKER/HEAT & FROST  
 INSULATOR (Duct, Pipe and  
 Mechanical System Insulation)....\$ 23.97                    10.79

-----  
 BOIL0074-003 01/01/2017

                                 Rates                    Fringes

BOILERMAKER.....\$ 28.00                    22.35

-----  
 ELEC0060-003 07/27/2020

                                 Rates                    Fringes

ELECTRICIAN (Communication  
 Technician Only).....\$ 29.60                    15%+5.45

-----  
 ELEC0060-004 07/27/2020

                                 Rates                    Fringes

ELECTRICIAN (Excludes Low  
 Voltage Wiring).....\$ 29.60                    18%+5.45

-----  
 ELEV0081-001 01/01/2021

                                 Rates                    Fringes

ELEVATOR MECHANIC.....\$ 43.31                    36.365

FOOTNOTES:

A. 6% under 5 years based on regular hourly rate for all  
 hours worked. 8% over 5 years based on regular hourly rate  
 for all hours worked.

B. Holidays: New Year's Day; Memorial Day; Independence Day;  
 Labor Day; Thanksgiving Day; Friday after Thanksgiving Day;  
 Christmas Day; and Veterans Day.

-----  
 ENGI0450-002 04/01/2014

                                 Rates                    Fringes

POWER EQUIPMENT OPERATOR  
 Cranes.....\$ 34.85                    9.85

-----  
 IRON0066-013 06/01/2020

	Rates	Fringes
IRONWORKER, STRUCTURAL.....	\$ 23.45	6.83

-----  
 IRON0084-011 06/01/2020

	Rates	Fringes
IRONWORKER, ORNAMENTAL.....	\$ 25.26	7.13

-----  
 PLUM0142-009 07/01/2020

	Rates	Fringes
HVAC MECHANIC (HVAC Electrical Temperature Control Installation Only).....	\$ 30.25	13.36
HVAC MECHANIC (HVAC Unit Installation Only).....	\$ 30.25	13.36
PIPEFITTER (Including HVAC Pipe Installation).....	\$ 31.90	13.76
Including HVAC Pipe Installation		
PLUMBER (Excludes HVAC Pipe Installation).....	\$ 31.90	13.76
Excludes HVAC Pipe Installation		

-----  
 SFTX0669-002 04/01/2021

	Rates	Fringes
SPRINKLER FITTER (Fire Sprinklers).....	\$ 31.68	22.50

-----  
 SHEE0067-004 04/01/2021

	Rates	Fringes
Sheet metal worker Excludes HVAC Duct Installation.....	\$ 27.58	15.76
HVAC Duct Installation Only.	\$ 27.58	15.76

-----  
 SUTX2014-006 07/21/2014

	Rates	Fringes
BRICKLAYER.....	\$ 22.15	0.00

CARPENTER (Acoustical Ceiling Installation Only).....	\$ 17.83	0.00
CARPENTER (Form Work Only).....	\$ 13.63	0.00
CARPENTER, Excludes Acoustical Ceiling Installation, Drywall Hanging, Form Work, and Metal Stud Installation.....	\$ 16.86	4.17
CAULKER.....	\$ 15.00	0.00
CEMENT MASON/CONCRETE FINISHER...	\$ 22.27	5.30
DRYWALL FINISHER/TAPER.....	\$ 13.81	0.00
DRYWALL HANGER AND METAL STUD INSTALLER.....	\$ 15.18	0.00
ELECTRICIAN (Low Voltage Wiring Only).....	\$ 20.39	3.04
IRONWORKER, REINFORCING.....	\$ 12.27	0.00
LABORER: Common or General.....	\$ 10.75	0.00
LABORER: Mason Tender - Brick...	\$ 11.88	0.00
LABORER: Mason Tender - Cement/Concrete.....	\$ 12.00	0.00
LABORER: Pipelayer.....	\$ 11.00	0.00
LABORER: Roof Tearoff.....	\$ 11.28	0.00
LABORER: Landscape and Irrigation.....	\$ 8.00	0.00
OPERATOR: Backhoe/Excavator/Trackhoe.....	\$ 15.98	0.00
OPERATOR: Bobcat/Skid Steer/Skid Loader.....	\$ 14.00	0.00
OPERATOR: Bulldozer.....	\$ 14.00	0.00
OPERATOR: Drill.....	\$ 14.50	0.00

OPERATOR: Forklift.....	\$ 12.50	0.00
OPERATOR: Grader/Blade.....	\$ 23.00	5.07
OPERATOR: Loader.....	\$ 12.79	0.00
OPERATOR: Mechanic.....	\$ 18.75	5.12
OPERATOR: Paver (Asphalt, Aggregate, and Concrete).....	\$ 16.03	0.00
OPERATOR: Roller.....	\$ 12.00	0.00
PAINTER (Brush, Roller and Spray), Excludes Drywall Finishing/Taping.....	\$ 13.07	0.00
ROOFER.....	\$ 12.00	0.00
TILE FINISHER.....	\$ 11.32	0.00
TILE SETTER.....	\$ 14.94	0.00
TRUCK DRIVER: Dump Truck.....	\$ 12.39	1.18
TRUCK DRIVER: Flatbed Truck.....	\$ 19.65	8.57
TRUCK DRIVER: Semi-Trailer Truck.....	\$ 12.50	0.00
TRUCK DRIVER: Water Truck.....	\$ 12.00	4.11

-----  
WELDERS - Receive rate prescribed for craft performing  
operation to which welding is incidental.

=====  
Note: Executive Order (EO) 13706, Establishing Paid Sick Leave  
for Federal Contractors applies to all contracts subject to the  
Davis-Bacon Act for which the contract is awarded (and any  
solicitation was issued) on or after January 1, 2017. If this  
contract is covered by the EO, the contractor must provide  
employees with 1 hour of paid sick leave for every 30 hours  
they work, up to 56 hours of paid sick leave each year.  
Employees must be permitted to use paid sick leave for their  
own illness, injury or other health-related needs, including  
preventive care; to assist a family member (or person who is  
like family to the employee) who is ill, injured, or has other

health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

-----

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

#### Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

#### Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and

the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

#### Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

---

#### WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests

for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

=====

END OF GENERAL DECISION"



Schedule 15101-S01  
AWWA Butterfly Valves Schedule

1.010	1.020	1.031	1.040	1.060	1.070	1.080	1.090	2.010	2.020	8.010	8.020	8.040	8.041	8.050	8.060
Tag Number	Size (in)	Application	Type of Installation(2)	AWWA Class(3)	Maximum Non- Shock Shutoff Pressure (psi)	Maximum Differential Pressure (psi)	Maximum Velocity (ft/s)	Type of Manual Actuator(4)	Limit Switches(6)	Extensions Stems	Position Indicator for Buried Valve Actuators	Cast Iron Operating Stands	Fabricated Steel Operating Stands	Torque Tubes	Extension bonnet
APS-PB-BFV-301	20	WELL NO. 3 DISCHARGE	AG	150B-F			16	HW		No	No	No	No	No	No
APS-PB-BFV-302	20	WELL NO. 3 DISCHARGE	AG	150B-F			16	HW		No	No	No	No	No	No
APS-PB-BFV-303	20	WELL NO. 4 DISCHARGE	AG	150B-F			16	HW		No	No	No	No	No	No
APS-PB-BFV-304	20	WELL NO. 4 DISCHARGE	AG	150B-F			16	HW		No	No	No	No	No	No
APS-PB-BFV-305	20	WELL NO. 5 DISCHARGE	AG	150B-F			16	HW		No	No	No	No	No	No
APS-PB-BFV-306	20	WELL NO. 5 DISCHARGE	AG	150B-F			16	HW		No	No	No	No	No	No
APS-PB-BFV-104	54	WELL PIPING	B20	150B-F			16	WN		Yes	No	No	No	No	No
APS-PB-BFV-105	24	WELL PIPING	B20	150B-F			16	WN		Yes	No	No	No	No	No
APS-PB-BFV-106	36	WELL PIPING	B20	150B-F			16	WN		Yes	No	No	No	No	No
APS-PB-BFV-107	36	WELL PIPING (BYPASS)	B20	150B-F			16	WN		Yes	No	No	No	No	No
APS-PB-BFV-108	36	TANK SUCTION (OUTLET)	B20	150B-F			16	WN		Yes	No	No	No	No	No
APS-PB-BFV-116	48	TANK SUCTION (OUTLET)	B20	150B-F			16	WN		Yes	No	No	No	No	No

Schedule 15101-S01  
 AWWA Butterfly Valves Schedule

Tag Number	Size	Application	Type of Installation(2)	AWWA Class(3)	Maximum Non-Shock Shutoff Pressure	Maximum Differential Pressure	Maximum Velocity	Type of Manual Actuator(4)	Limit Switches(6)	Extensions Stems	Position Indicator for Buried Valve Actuators	Cast Iron Operating Stands	Fabricated Steel Operating Stands	Torque Tubes	Extension bonnet
APS-PB-BFV-202	48	SUCTION HEADER	IP	150B-F			16	HW		No	No	No	No	No	No
APS-PB-BFV-203	48	SUCTION HEADER	IP	150B-F			16	HW		No	No	No	No	No	No
APS-PB-BFV-204	18	PUMP SUCTION	IP	150B-F			16	CW		No	No	No	No	No	No
APS-PB-BFV-205	30	PUMP SUCTION	IP	150B-F			16	CW		No	No	No	No	No	No
APS-PB-BFV-206	30	PUMP SUCTION	IP	150B-F			16	CW		No	No	No	No	No	No
APS-PB-BFV-207	30	PUMP SUCTION	IP	150B-F			16	CW		No	No	No	No	No	No
APS-PB-BFV-208	16	PUMP DISCHARGE	IP	150B-F			16	HW		No	No	No	No	No	No
APS-PB-BFV-209	24	PUMP DISCHARGE	IP	150B-F			16	HW		No	No	No	No	No	No
APS-PB-BFV-210	24	PUMP DISCHARGE	IP	150B-F			16	HW		No	No	No	No	No	No
APS-PB-BFV-211	24	PUMP DISCHARGE	IP	150B-F			16	HW		No	No	No	No	No	No
APS-PB-BFV-212	42	DISCHARGE HEADER	IP	150B-F			16	HW		No	No	No	No	No	No
APS-PB-BFV-213	42	DISCHARGE HEADER	IP	150B-F			16	HW		No	No	No	No	No	No
APS-PB-BFV-214	42	DISCHARGE HEADER	IP	150B-F			16	HW		No	No	No	No	No	No
APS-PB-BFV-215	42	DISCHARGE HEADER	IP	150B-F			16	HW		No	No	No	No	No	No
APS-PB-BFV-216	42	DISCHARGE HEADER	IP	150B-F			16	HW		No	No	No	No	No	No

Schedule 15101-S01  
AWWA Butterfly Valves Schedule

Tag Number	Size	Application	Type of Installation(2)	AWWA Class(3)	Maximum Non-Shock Shutoff Pressure	Maximum Differential Pressure	Maximum Velocity	Type of Manual Actuator(4)	Limit Switches(6)	Extensions Stems	Position Indicator for Buried Valve Actuators	Cast Iron Operating Stands	Fabricated Steel Operating Stands	Torque Tubes	Extension bonnet
APS-PB-BFV-101	24	YARD DISCHARGE	B20	150B-F			16	WN		Yes	No	No	No	No	No
APS-PB-BFV-102	24	YARD DISCHARGE	B20	150B-F			16	WN		Yes	No	No	No	No	No
APS-PB-BFV-103	30	YARD DISCHARGE	B20	150B-F			16	WN		Yes	No	No	No	No	No
APS-PB-BFV-109	30	YARD DISCHARGE	B20	150B-F			16	WN		Yes	No	No	No	No	No
APS-PB-BFV-110	42	YARD DISCHARGE	B20	150B-F			16	WN		Yes	No	No	No	No	No
APS-PB-BFV-111	42	YARD DISCHARGE	B20	150B-F			16	WN		Yes	No	No	No	No	No
APS-PB-BFV-112	42	YARD DISCHARGE	B20	150B-F			16	WN		Yes	No	No	No	No	No
APS-PB-BFV-113	42	YARD DISCHARGE	B20	150B-F			16	WN		Yes	No	No	No	No	No
APS-PB-BFV-114	42	YARD DISCHARGE	B20	150B-F			16	WN		Yes	No	No	No	No	No
APS-PB-BFV-115	42	YARD DISCHARGE	B20	150B-F			16	WN		Yes	No	No	No	No	No
APS-PB-BFV-117	24	YARD DISCHARGE	B20	150B-F			16	WN		Yes	No	No	No	No	No
APS-PB-BFV-118	24	YARD DISCHARGE	B20	150B-F			16	WN		Yes	No	No	No	No	No
APS-PB-BFV-119	16	YARD DISCHARGE	B20	150B-F			16	WN		Yes	No	No	No	No	No

Schedule 15101-S01  
AWWA Butterfly Valves Schedule

Notes:

(1) Actuators designated "O-C" are for "Open-Close" service. Actuators designated "M" are for "Modulating" service.

(2) Abbreviations for installation types are as follows:

B4	Buried, depth of 4 feet [1.2 m] or less
B20	Buried, depth greater than 4 feet [1.2 m] but 20 feet [6.1 m] or less
Bxx	Buried, depth greater than 20 feet [6.1 m], actual depth of xx feet
SV20	Submerged or vaulted, depth 20 feet [6.1 m] or less
SVxx	Submerged or vaulted, depth greater than 20 feet [6.1 m], actual depth of xx feet
IP	In plant
AG	Above Grade

(3) Suffix letters define valve ends as follows:

F	Flanged
W	Wafer
MJ	Mechanical joint
S	Single Flange

(4) Abbreviations for actuator types are as follows:

WN	Wrench Nut
LVR	Lever
CW	ChainWheel
HW	HandWheel

(5) If a value is indicated, the leakage test shall be performed using this pressure value rather than the pressure indicated by the AWWA class.

(6) Abbreviations for limit switches on manual and cylinder operated valves.

EOT	End of travel (open - close)
PSS	Pump start - stop (two intermediate positions)
ELSCH	See electrical schematics

(7) Abbreviations for electronic or electric actuator housing.

WP	Weatherproof
SUB	Submersible [xx = depth of submergence] (SUBxx)
EXP	Explosion proof

(8) Cylinder actuators shall have torque safety factors applied in accordance with AWWA C504.

Schedule 15101-S01  
AWWA Butterfly Valves Schedule

(9) Abbreviations for control devices are as indicated.

Table 1: Control Devices				
Abbreviations	Open-Close Push Button	Open-Stop- Close Push Button	Local-Off-Remote	Red and Green Indicator Lights
A	Required		Required	Required
B	Required		Required	
C		Required	Required	Required
D		Required	Required	
E		Required		
F	Required			
G	Required			Required
H		Required		Required

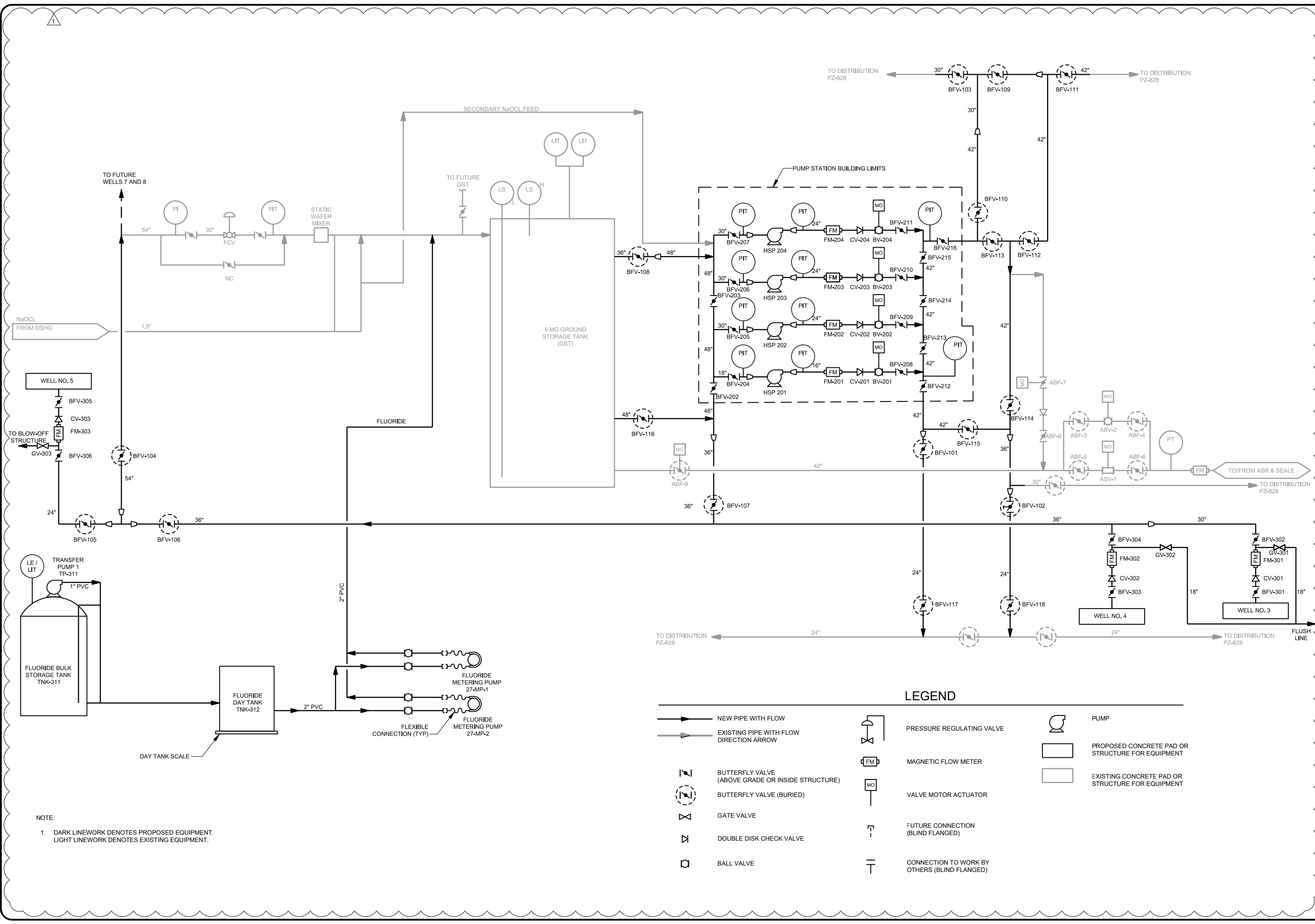
(10) Abbreviations for electric actuator types are as follows:

- SE        Standard Electric
- IE        Intelligent Electric
- NE        Networked Electric

(11) Abbreviation for remote control station types:

- CS Control Station without Indicating Lights
- CIS Control Station with Indicating Lights

END OF SCHEDULE

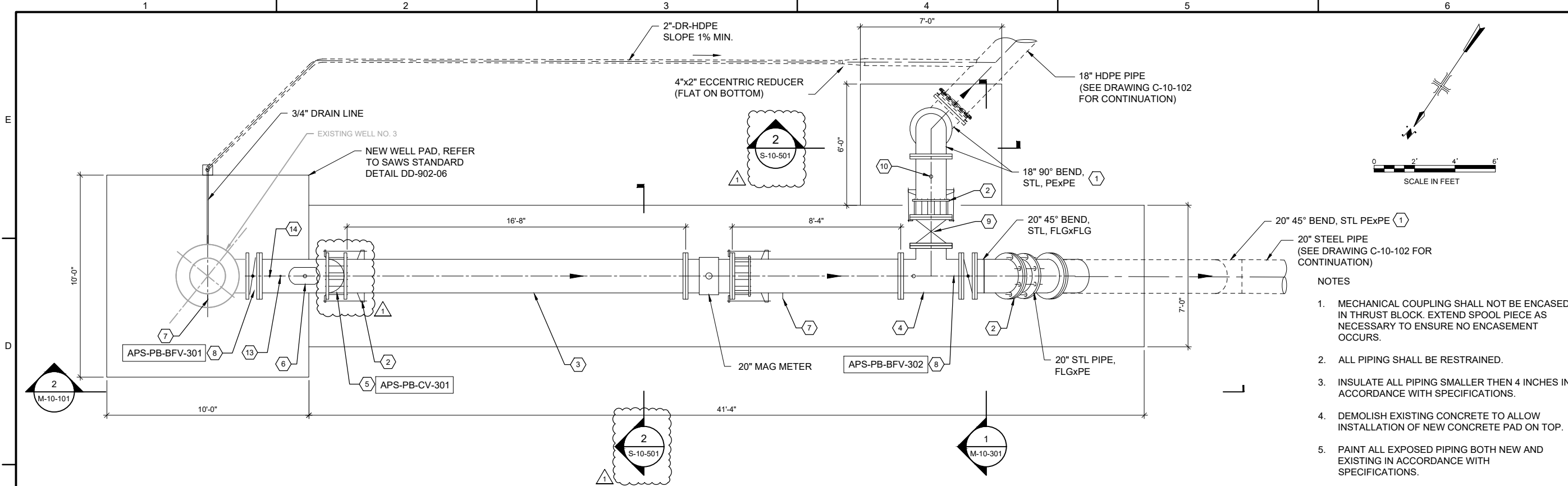


NOTE:  
 1. DARK LINEWORK DENOTES PROPOSED EQUIPMENT.  
 LIGHT LINEWORK DENOTES EXISTING EQUIPMENT.

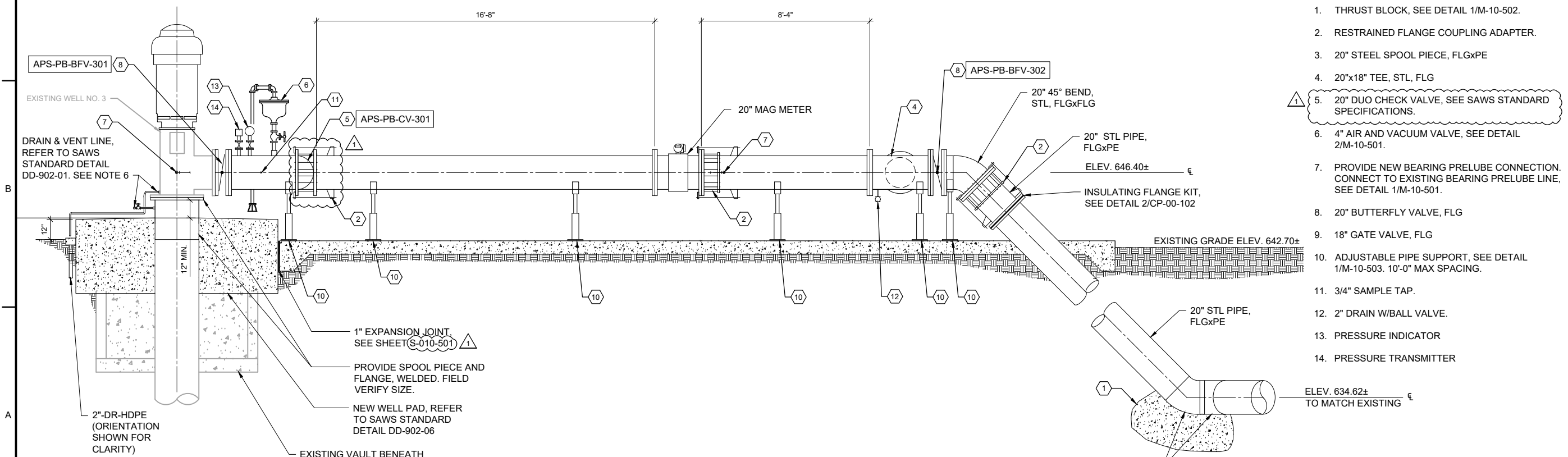
LEGEND			
	NEW PIPE WITH FLOW		PUMP
	EXISTING PIPE WITH FLOW DIRECTION ARROW		PROPOSED CONCRETE PAD OR STRUCTURE FOR EQUIPMENT
	BUTTERFLY VALVE (ABOVE GRADE OR INSIDE STRUCTURE)		EXISTING CONCRETE PAD OR STRUCTURE FOR EQUIPMENT
	BUTTERFLY VALVE (BURIED)		FUTURE CONNECTION (BLIND FLANGED)
	GATE VALVE		CONNECTION TO WORK BY OTHERS (BLIND FLANGED)
	DOUBLE DISK CHECK VALVE		
	BALL VALVE		

1									
ADDENDUM NO.2 DATE: 7/14/21 REVISIONS AND RECORD OF ISSUE NO. BY CK JAP 1 BR LJP XREF1: BORDER.dwg XREF2: XREF3: SA/VED:RAM49830_7/14/2021 7:57:17 PM XREF4: PLOTTED:RAM49830_29/02/2021 10:38:22 AM XREF5: USER:RAM49830 DWG VER:1004									
<b>SAN ANTONIO WATER SYSTEM</b> ARTESIA PUMP STATION IMPROVEMENTS GENERAL PROCESS FLOW DIAGRAM									
DESIGNED: DMD DETAILED: VD CHECKED: RKW APPROVED: LJP DATE: 05/21/2021									
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE									
B&V PROJECT NO. 401218 SAWS JOB NO. 18-8603									
<b>G-00-007</b> SHEET 7 OF 200									

D401218



**1 WELL NO. 3 PLAN**



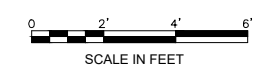
**2 WELL NO. 3 SECTION**

- NOTES
- MECHANICAL COUPLING SHALL NOT BE ENCASED IN THRUST BLOCK. EXTEND SPOOL PIECE AS NECESSARY TO ENSURE NO ENCASEMENT OCCURS.
  - ALL PIPING SHALL BE RESTRAINED.
  - INSULATE ALL PIPING SMALLER THEN 4 INCHES IN ACCORDANCE WITH SPECIFICATIONS.
  - DEMOLISH EXISTING CONCRETE TO ALLOW INSTALLATION OF NEW CONCRETE PAD ON TOP.
  - PAINT ALL EXPOSED PIPING BOTH NEW AND EXISTING IN ACCORDANCE WITH SPECIFICATIONS.
  - WELL HEAD VENT TO REMAIN AT SAME ELEVATION WHEN NEW SUPPORT PAD IS POURED. ENSURE CONCRETE PAD DOES NOT COVER OR IMPACT WELL VENT.

7. CONTRACTOR TO VERIFY RESTRAINED FLANGE COUPLING ADAPTER AND CHECK VALVE ARE COMPATIBLE.

KEYNOTES "X"

- THRUST BLOCK, SEE DETAIL 1/M-10-502.
- RESTRAINED FLANGE COUPLING ADAPTER.
- 20" STEEL SPOOL PIECE, FLGxPE
- 20"x18" TEE, STL, FLG
- 20" DUO CHECK VALVE, SEE SAWS STANDARD SPECIFICATIONS.
- 4" AIR AND VACUUM VALVE, SEE DETAIL 2/M-10-501.
- PROVIDE NEW BEARING PRELUBE CONNECTION. CONNECT TO EXISTING BEARING PRELUBE LINE, SEE DETAIL 1/M-10-501.
- 20" BUTTERFLY VALVE, FLG
- 18" GATE VALVE, FLG
- ADJUSTABLE PIPE SUPPORT, SEE DETAIL 1/M-10-503. 10'-0" MAX SPACING.
- 3/4" SAMPLE TAP.
- 2" DRAIN W/BALL VALVE.
- PRESSURE INDICATOR
- PRESSURE TRANSMITTER



ARTESIA PUMP STATION  
WELL IMPROVEMENTS

NO.	DATE	REVISION	BY
1	07/21	ADDENDUM NO. 3	MW

COPYRIGHT: ARCADIS U.S., INC.  
DATE: MAY 2021  
PROJECT NO.: 30036982  
DESIGNED BY: M.WALLACK  
DRAWN BY: N.CANDELAS  
CHECKED BY: R.STANDIFER

SHEET TITLE

MECHANICAL

EXISTING WELL NO. 3  
MODIFICATIONS  
PLAN AND SECTION

SCALE: AS SHOWN

SHEET **M-10-101**  
13 OF 38



SAN ANTONIO  
WATER SYSTEM



ARTESIA PUMP STATION  
WELL IMPROVEMENTS

NO.	DATE	REVISION	BY
1	07/21	ADDENDUM NO. 3	MW

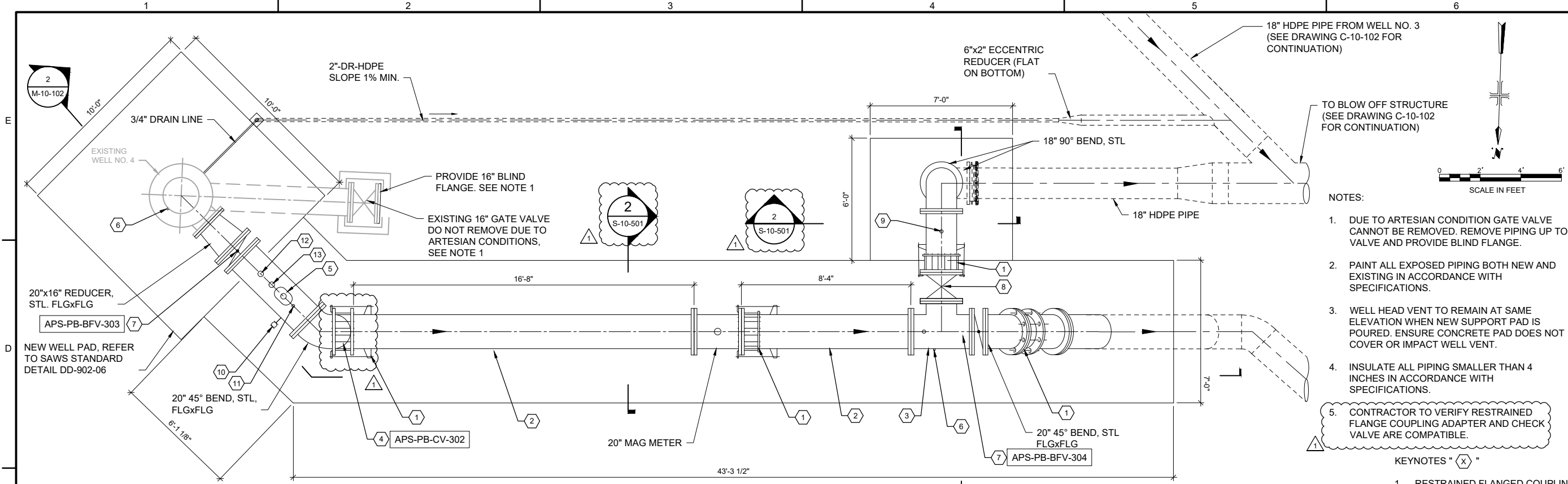
COPYRIGHT: ARCADIS U.S., INC.  
 DATE: MAY 2021  
 PROJECT NO.: 30036982  
 DESIGNED BY: M.WALLACK  
 DRAWN BY: N.CANDELAS  
 CHECKED BY: R.STANDIFER

SHEET TITLE  
MECHANICAL

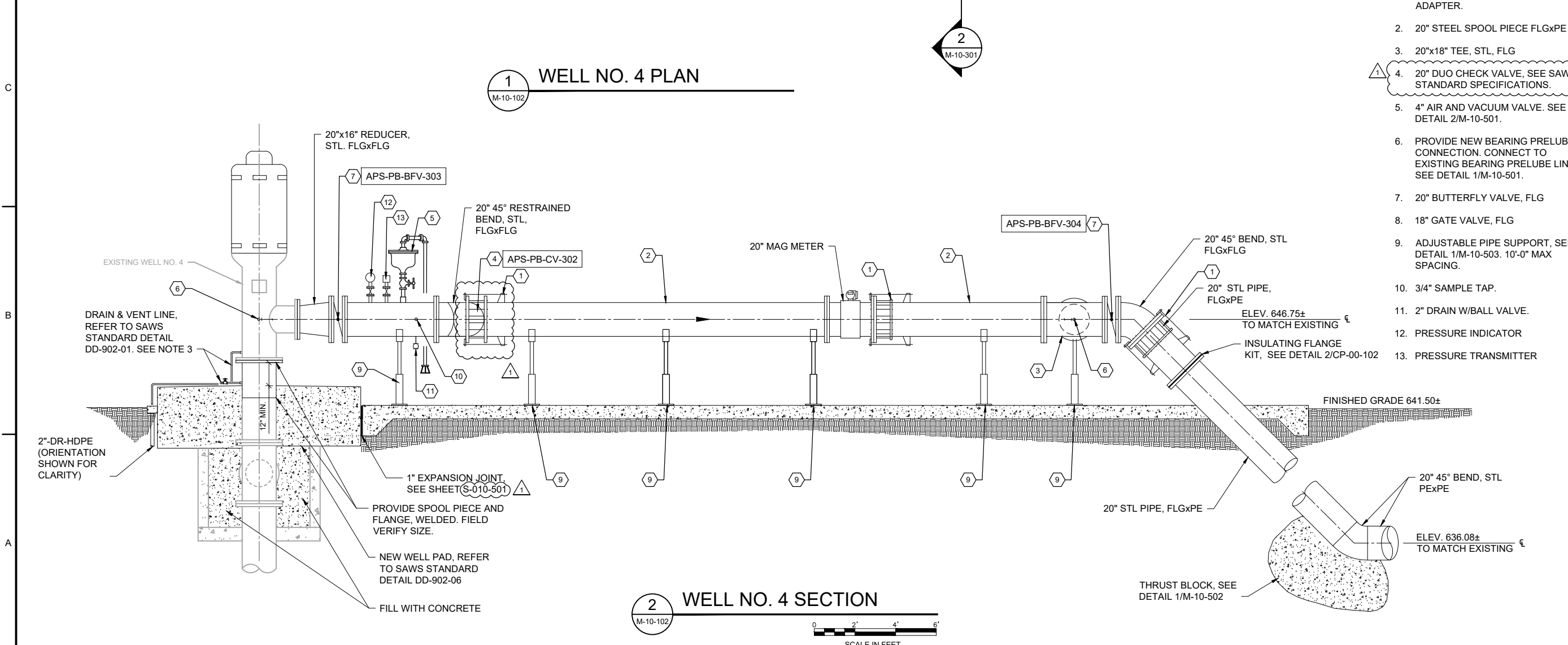
EXISTING WELL  
NO. 4  
MODIFICATIONS  
PLAN AND SECTION

SCALE: AS SHOWN

SHEET **M-10-102**  
14 OF 38



**1** WELL NO. 4 PLAN  
M-10-102



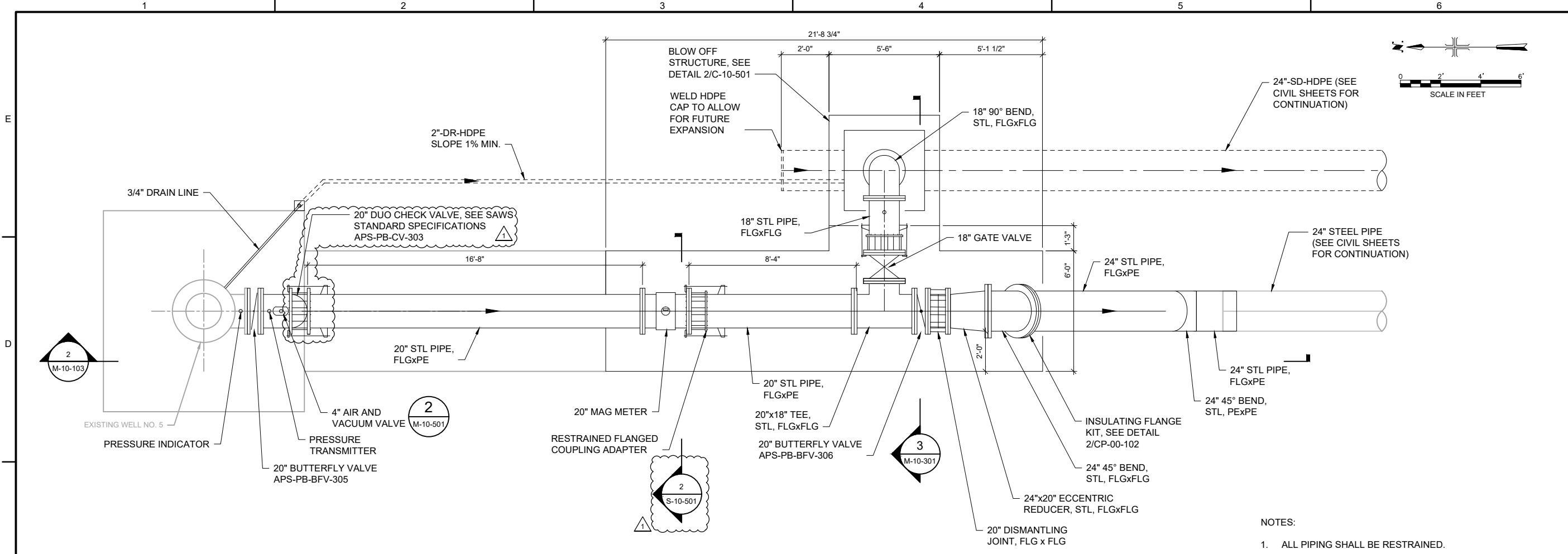
**2** WELL NO. 4 SECTION  
M-10-102

- NOTES:
1. DUE TO ARTESIAN CONDITION GATE VALVE CANNOT BE REMOVED. REMOVE PIPING UP TO VALVE AND PROVIDE BLIND FLANGE.
  2. PAINT ALL EXPOSED PIPING BOTH NEW AND EXISTING IN ACCORDANCE WITH SPECIFICATIONS.
  3. WELL HEAD VENT TO REMAIN AT SAME ELEVATION WHEN NEW SUPPORT PAD IS POURED. ENSURE CONCRETE PAD DOES NOT COVER OR IMPACT WELL VENT.
  4. INSULATE ALL PIPING SMALLER THAN 4 INCHES IN ACCORDANCE WITH SPECIFICATIONS.
  5. CONTRACTOR TO VERIFY RESTRAINED FLANGE COUPLING ADAPTER AND CHECK VALVE ARE COMPATIBLE.

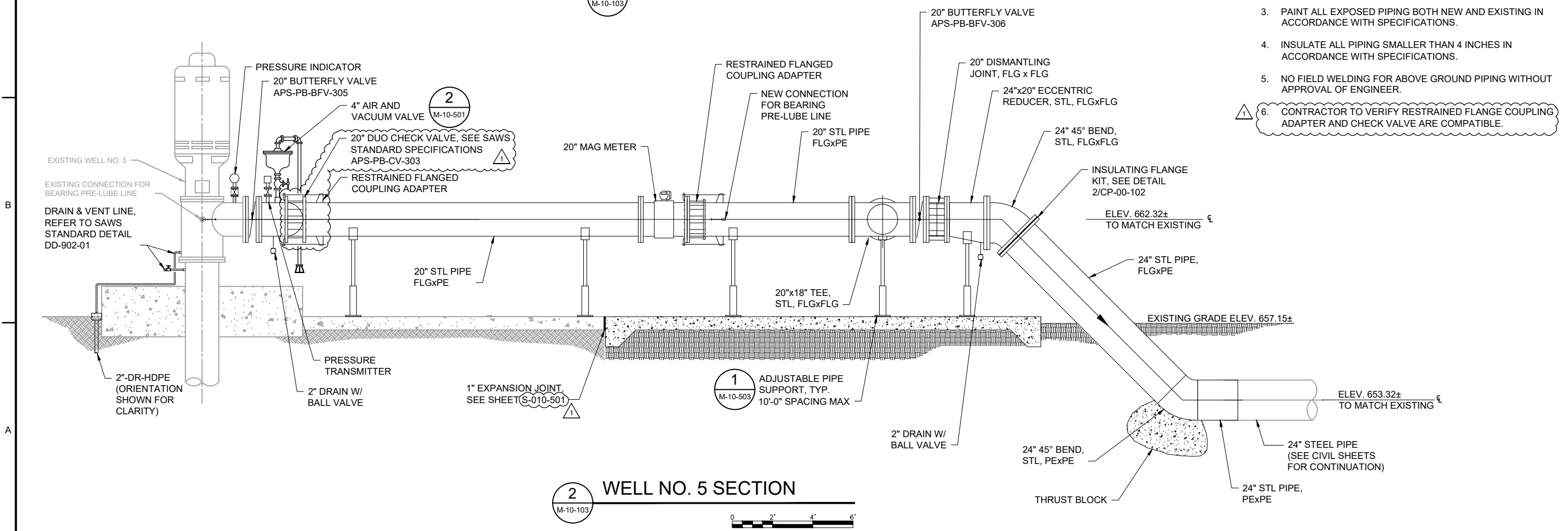
KEYNOTES "X"

1. RESTRAINED FLANGED COUPLING ADAPTER.
2. 20" STEEL SPOOL PIECE FLGxPE
3. 20"x18" TEE, STL, FLG
4. 20" DUO CHECK VALVE, SEE SAWS STANDARD SPECIFICATIONS.
5. 4" AIR AND VACUUM VALVE. SEE DETAIL 2/M-10-501.
6. PROVIDE NEW BEARING PRELUBE CONNECTION. CONNECT TO EXISTING BEARING PRELUBE LINE, SEE DETAIL 1/M-10-501.
7. 20" BUTTERFLY VALVE, FLG
8. 18" GATE VALVE, FLG
9. ADJUSTABLE PIPE SUPPORT, SEE DETAIL 1/M-10-503. 10'-0" MAX SPACING.
10. 3/4" SAMPLE TAP.
11. 2" DRAIN W/BALL VALVE.
12. PRESSURE INDICATOR
13. PRESSURE TRANSMITTER





**1 WELL NO. 5 PLAN**



**2 WELL NO. 5 SECTION**

- NOTES:
- ALL PIPING SHALL BE RESTRAINED.
  - SEE SPECIFICATIONS FOR PIPE SUPPORT SPACING REQUIREMENTS.
  - PAINT ALL EXPOSED PIPING BOTH NEW AND EXISTING IN ACCORDANCE WITH SPECIFICATIONS.
  - INSULATE ALL PIPING SMALLER THAN 4 INCHES IN ACCORDANCE WITH SPECIFICATIONS.
  - NO FIELD WELDING FOR ABOVE GROUND PIPING WITHOUT APPROVAL OF ENGINEER.
  - CONTRACTOR TO VERIFY RESTRAINED FLANGE COUPLING ADAPTER AND CHECK VALVE ARE COMPATIBLE.



NO.	DATE	REVISION	BY
1	07/21	ADDENDUM NO. 3	MW

COPYRIGHT: ARCADIS U.S., INC.  
DATE: MAY 2021  
PROJECT NO.: 30036982  
DESIGNED BY: M.WALLACK  
DRAWN BY: N.CANDELAS  
CHECKED BY: R.STANDIFER

SHEET TITLE  
**MECHANICAL**  
**EXISTING WELL NO. 5 MODIFICATIONS PLAN AND SECTION**  
SCALE: AS SHOWN  
SHEET **M-10-103**  
15 OF 38