



BPC CENTRAL SEWERSHED PACKAGE 6 – CIPP PROJECT

Solicitation Number: CO-00479

Job No.: 20-4503

ADDENDUM 1

SEPTEMBER 20, 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.

<p>RESPONSE TO QUESTIONS</p>

- 1. I wanted to know the process of getting considered as an alternate to the pre and post inspections on the project?**

Response: SAWS does not designate specific subcontractors to perform pre and post inspection video. Rather, subcontractors should reach out directly to prime contractors interested in bidding this project. This can be accomplished by monitoring the project Plan Holder's List (which changes daily as plans and specs are downloaded) and/or by attending or viewing the non-mandatory pre-bid meeting attendee list.

- 2. Plan S129 is missing per the Index for the BPC Central Sewershed Package 6**

Response: Plan sheet S129 was mistakenly left off the PDF when the PDF was split into two files and posted to the website. The missing sheet has been added to the plans and attached to this addendum.

- 3. Are pipeline inspection videos available for this project for download? If so, can you provide a disclaimer form for the project and the videos when you get a chance?**

Response: Previous pipeline inspection videos acquired by SAWS will be available for the contractor awarded the project but will not be released for bidding purposes.

4. **CIPP standard specification section 901.4-3.e.6 requires a soil modulus of 500 psi be used in the CIPP thickness designs, but this soil modulus is overly conservative and will produce CIPP thicknesses that are thicker than needed, which will increase the difficulty of installation and overall project cost. On previous projects, this section has been replaced with language saying the Contractor was allowed to submit calculations signed and sealed by a Texas Professional Engineer utilizing other values for soil modulus so long as those values were part of the sealed calculations, the calculation method complied with ASTM F1216, and the soil modulus utilized did not exceed 1,000psi. Please confirm that the Contractor will again be allowed to use values other than 500 psi for the soil modulus on this project.**

Response: The contractor may use a soil modulus differing from 500 psi, but must provide backup data and calculations, signed and sealed by a licensed Professional Engineer in the State of Texas, for the different soil modulus for review and approval by SAWS and the Design Engineer.

5. **CIPP standard specification section 901.4-3.e.7 specifies that the groundwater to be used in the CIPP thickness designs shall be at the ground surface or the elevation of the 100-year floodplain, whichever is greater. On previous projects, this section has been modified so that the reference to floodwater being used as a design parameter has been deleted. Please confirm that the floodwater will again not need to be considered in the CIPP thickness designs, and that this section shall be modified to simply require the groundwater depth to be at the ground surface. If floodwater loading must be included as a design parameter, please provide the elevation of the floodwater level to be applied at each of the applicable manholes on the CIPP alignments.**

Response: The design calculations shall take into account the groundwater at either the ground surface or the 100-year floodplain when the sewer main is within a delineated FEMA floodplain. A licensed Professional Engineer in the State of Texas hired by the Contractor shall determine the floodplain elevation from available FEMA Floodplain Insurance Rate Maps and studies and should be documented within the design calculations.

CHANGES TO THE SPECIFICATIONS

1. **INSTRUCTION TO BIDDERS. Page IB-4, Instruction to Bidders, 9., b. is amended to read as follows:**

- (b) Contractor agrees that, unless it is a sole proprietorship or a company with fewer than 10 full-time employees and the value of this Contract is less than \$100,000, it:
 - a. does not boycott Israel and will not do so during the term of this Contract;
 - b. does not boycott energy companies and will not do so during the term of this Contract;
 - c. does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association and will not discriminate during the term of the Contract against a firearm entity or firearm trade association;

This provision is in compliance with Chapters §2271 and 2274 of the Texas Government Code. SAWS agrees to comply with the United States and Texas Constitutions in consideration of whether to enforce this provision.

2. **BID PROPOSAL.** *The Bid Proposal page BP-1 is hereby deleted in its entirety and replaced with the revised Bid Proposal attached to this Addendum. The Bid Proposal signature page has been updated however, all line items and quantities have not changed. This update is related to new statutes from the last legislative session. The updated version must be used by Bidders when submitting a Bid for this project. Failure to do so may result in the Bid being found non-responsive and rejected.*

3. **SPECIAL PROVISION TO TECHNICAL SPECIFICATIONS.** *The Special Provisions to Technical Specifications is hereby deleted in its entirety and replaced with the revised Special Provisions to Technical Specification attached to this Addendum.*

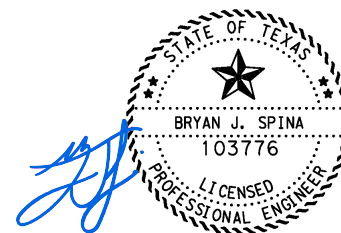
CHANGES TO PLANS

1. Page S129 is added to the plans with the page dated 8/27/2021 as this sheet was not uploaded with the original plan set.
2. Remove and replace Page S5 to the plans with the page dated 9/16/2021 as COSA floodplain notes have been added to the sheet.
3. Remove and replace Page S28 to the plans with the page dated 9/16/2021 as the 100-year floodplain has been added to the sheet.
4. Remove and replace Page S51 to the plans with the page dated 9/19/2021 as Note 3 regarding excavated soils has been added to the sheet.
5. Remove and replace Page S63 to the plans with the page dated 9/19/2021 as the storm drain within Mittman St. has been added to the sheet.
6. Remove and replace Page S78 to the plans with the page dated 9/19/2021 as Note 5 regarding existing storm inlets has been added to the sheet.
7. Remove and replace Pages S111 and S112 to the plans with the page dated 9/16/2021 as the storm drain within Aransas Ave. has been added to the sheets.
8. Remove and replace Page S133 to the plans with the page dated 9/19/2021 as the storm drain within Walters St. and Virginia Blvd. has been added to the sheet.

END OF ADDENDUM 1

This Addendum, including these three (3) pages, is twenty-three (23) pages in its entirety.

Attachments: Bid Proposal Page BP-1 (1 Page)
Special Provisions to Technical Specifications (10 Pages)
Pages S5, S28, S51, S63, S78, S111, S112,
S129, and S133 of the Plans (9 pages)



9/20/21

Bryan J. Spina, P.E., CFM
LNV, LLC
TBPLES Firm No. F-366

BID PROPOSAL

PROPOSAL OF _____, a corporation
a partnership consisting of _____
an individual doing business as _____

THE SAN ANTONIO WATER SYSTEM:

Pursuant to Instructions and Invitation to Bidders, the undersigned proposes to furnish all labor and materials as specified and perform the work required for the project as specified, in accordance with the Plans and Specifications for the following prices in the bid proposal to wit:

PLEASE SEE ATTACHED LIST OF BID ITEMS.

BIDDER'S SIGNATURE & TITLE

FIRM'S NAME (TYPE OR PRINT)

FIRM'S ADDRESS

FIRM'S PHONE NO. /FAX NO.

FIRM'S EMAIL ADDRESS

The Contractor herein acknowledges receipt of the following: Addendum Nos. _____

OWNER RESERVES THE RIGHT TO ACCEPT THE OVERALL MOST RESPONSIBLE BID.

The bidder offers to construct the Project in accordance with the Contract Documents for the contract price, and to complete the Project within **370** calendar days after the start date, as set forth in the Authorization to Proceed. **The bidder understands and accepts the provisions of the contract Documents relating to liquidated damages of the project if not completed on time.**

Complete the additional requirements of the Bid Proposal which are included on the following pages.

Statement on President's Executive Orders

Has your firm previously performed work subject to the President's Executive Orders Numbers 11246 and 11375 or any preceding similar executive orders (Numbers 10925 and 11114)? Yes No

Texas Government Code Chapter 2274 Verifications

- (1) Are you, Contractor, held or controlled by individuals who are citizens of China, Iran, North Korea, Russia or a country designated by the Governor of the State of Texas pursuant to Texas Government Code Chapter 2274? Yes No
- (2) Are you, Contractor, held or controlled by a company or other entity, including a governmental entity, that is owned or controlled by citizens of or directly controlled by the government of China, Iran, North Korea, Russia or a country designated by the Governor of the State of Texas pursuant to Texas Government Code Chapter 2274? Yes No
- (3) Are you, Contractor, headquartered in China, Iran, North Korea, Russia or a country designated by the Governor of the State of Texas pursuant to Texas Government Code Chapter 2274? Yes No

Special Provisions to Technical Specifications

Special Provisions Table of Contents

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Special Provisions to Technical Specifications

Revision to COSA Standard Specification Item 507 Chain Link Wire Fence

507.1 DESCRIPTION: DELETE this section in its entirety and **REPLACE** with the following:

This item shall govern for removal and replacement of existing fences of all types to match existing conditions and the installation of chain link fabric supported on posts with bracing and accessories and gates, wrought iron fencing and gates, tubular fencing and gates, tubular cast iron fencing and gates, wood fencing, stone/masonry fencing and posts, plastic fencing and special wire/chain link fencing and gates as specified herein, erected complete in place to match existing fencing as shown on plans or as directed by the inspector.

507.2 MATERIALS: ADD the following:

P. Non Chain Link Fences and Gates. *The material for the fence and gates includes, but is not limited to, posts, rails, caps, bars, wires, tracks, masonry, stone, concrete and all necessary fittings and appurtenances required for proper installation of the new fence and/or gate. All new non chain link fences and gates shall be constructed of the same type of material and configuration as the existing fence and/or gate. The new fence and/or gate shall appear the same as the existing fence and shall meet or exceed the quality of the materials of the existing fence and/or gate.*

507.4 CONSTRUCTION: ADD the following:

F. Non Chain Link Fences and Gates. *Construct the new fences and/or gates to match the existing fence and/or gate material and construct the fence and/or gate to meet or exceed the quality of the materials of the existing fence and/or gate.*

All fences and gates requiring welding shall be cut and welded by a qualified welder. All welding will be performed in a workman-like manner with solid joints of minimum protrusion. The gate will be constructed in such a manner to have minimal flexure. Any excessive splatter of the weld will be ground off. All new fences and gates will be primed and painted to match the existing fences and gates. A second coat will be required to cover any holidays or spots of insufficient coverage.

Painting will be by hand or spray. Areas to be painted shall be primed in accordance with paint manufacturer's recommendations. Two coats of paint shall be applied to the new fence and/or gate. The final surface will be of even color without streaks, drips, bubbles, or any other surface imperfections. Paint used shall match existing paint in color and texture.

Special Provisions to Technical Specifications

507.5 MEASUREMENT: DELETE this section in its entirety and **REPLACE** with the following:

“Remove and Replace Fence”, “Chain Link Wire Fence” and “Wrought Iron Fence” will be measured by the linear foot along the centerline of the fence from center to center of end posts, including gates to match the type and height of the existing fence unless a height or type is specified in the plans. This work shall include all end posts, foundations, angle and corner posts, and tension posts complete in place with all bracing and accessories to complete the fence.

Gates will not be measured separately but will be considered part of the overall linear footage of the fence. The work for the gate shall include all material complete in place with gate posts, all bracing and all accessories to match the existing gate material and type.

507.6 PAYMENT: DELETE this section in its entirety and **REPLACE** with the following:

“Remove and Replace Fence”, “Chain Link Wire Fence” and “Wrought Iron Fence” as measured as prescribed above, will be paid for at the contract unit price bid per linear foot for “Remove and Replace Fence”, “Chain Link Wire Fence” and “Wrought Iron Fence” which price shall be full compensation for furnishing and installing all fencing materials, end posts, angle and corner posts, tension posts, caps, tension wires, top rail, painting, welding, vertical bars, cross bars, and all connection fittings and accessories; digging post holes or setting into retaining wall and structures; furnishing and placing concrete for setting posts; foundations, masonry, wood, all hauling and hauling charges; and for all manipulation, labor, tools, equipment, and incidentals necessary to complete the work.

Gates will not be paid for separately but is considered subsidiary to the fencing and shall include furnishing all materials; fabrication, preparation, hauling, handling charges, painting, welding, and erecting; including gate and gate posts, post caps, braces, cross bars, vertical bars, wire mesh, concrete footings, miscellaneous fitting and fastenings, latches, hinges, electronics, wheels, tracks, stops and holding devices; and for all manipulation labor, tools, concrete for setting posts, equipment and incidentals necessary to complete installation.

All other language in Specification Item 507 shall remain in full force.

Special Provisions to Technical Specifications

Revision to COSA Standard Specification Item 530 Barricades, Signs, and Traffic Handling

530.5 MEASUREMENT: DELETE this section in its entirety and **REPLACE** with the following:

This item will be measured per “Lump Sum” Project Site as outlined on the plans that may contain one or more sewer segment Compkeys.

530.6 PAYMENTS: DELETE this section in its entirety and **REPLACE** with the following:

This item will be paid at the contract per “Lump Sum” for each Project Site as outlined on the plans that may contain one or more sewer segment Compkeys. This price shall be full compensation for furnishing all labor, materials, supplies, equipment, signs (including electronic portable changeable message signs) and incidentals necessary to complete the work as specified. The per “Lump Sum” bid price for each location will be paid for as follows:

- 1. When initial set-up and operation begins, 20% of the per “Lump Sum” cost will be paid for that location.*
- 2. 70% of the per “Lump Sum” cost will be paid over equal monthly payments (estimated from the baseline schedule or other documentation approved by the Inspector) during the course of the project for each location.*
- 3. 10% of the remaining per “Lump Sum” cost will be paid upon an acceptable removal and/or disassembly of all components of the barricades and signing for each location.*

Failure to complete the work within time allowed in the project contract due to approving designs, testing, material shortages, closed construction season, curing periods, and testing periods will not qualify for additional compensation. When additional work is added by an approved field alteration or when work is suspended for the convenience of the Owner, through no fault of the contractor, additional compensation may be paid to the Contractor.

Special Provisions to Technical Specifications

530.7 PAYMENT: **DELETE** this section in its entirety and **REPLACE** with the following:

- Item 530.1 – Barricades, Signs and Traffic Handling (Site 2) – LS*
- Item 530.1 – Barricades, Signs and Traffic Handling (Site 4) – LS*
- Item 530.1 – Barricades, Signs and Traffic Handling (Site 5) – LS*
- Item 530.1 – Barricades, Signs and Traffic Handling (Site 6) – LS*
- Item 530.1 – Barricades, Signs and Traffic Handling (Site 7) – LS*
- Item 530.1 – Barricades, Signs and Traffic Handling (Site 9) – LS*
- Item 530.1 – Barricades, Signs and Traffic Handling (Site 10) – LS*
- Item 530.1 – Barricades, Signs and Traffic Handling (Site 11) – LS*
- Item 530.1 – Barricades, Signs and Traffic Handling (Site 12) – LS*
- Item 530.1 – Barricades, Signs and Traffic Handling (Site 13) – LS*
- Item 530.1 – Barricades, Signs and Traffic Handling (Site 14) – LS*
- Item 530.1 – Barricades, Signs and Traffic Handling (Site 15) – LS*
- Item 530.1 – Barricades, Signs and Traffic Handling (Site 16) – LS*
- Item 530.1 – Barricades, Signs and Traffic Handling (Site 18) – LS*
- Item 530.1 – Barricades, Signs and Traffic Handling (Site 19) – LS*
- Item 530.1 – Barricades, Signs and Traffic Handling (Site 20) – LS*
- Item 530.1 – Barricades, Signs and Traffic Handling (Site 22) – LS*
- Item 530.1 – Barricades, Signs and Traffic Handling (Site 23) – LS*
- Item 530.1 – Barricades, Signs and Traffic Handling (Site 25) – LS*

All other language in Specification Item 530 shall remain in full force.

Special Provisions to Technical Specifications

Revision to COSA Specification Item 540 Temporary Erosion, Sedimentation, and Water Pollution Prevention and Control

540.4(A)(1) SW3P: DELETE this section in its entirety and **REPLACE** with the following:

Prepare and implement the Storm Water Pollution Prevention Plan (SW3P) for the project site in accordance with the specific or general storm water permit requirements.

540.4(A)(2) PRECONSTRUCTION SUBMITTALS: ADD the following:

(c) Stormwater Pollution Prevention Plan (SWPPP). Contractor shall prepare and submit a Stormwater Pollution Prevention Plan with all documents designed and signed by either a Licensed Engineer (Texas), Certified Professional in Erosion and Sedimentation Control (CPESC) or Licensed Landscape Architect. The Contractor's SWPPP shall reflect the Contractor's planned sequencing of work, selected construction methods, staging area(s), etc.

540.4(B)(3) MAINTENANCE: ADD the following:

Erosion control best management practice inspections can only be performed by Licensed Engineers, CPESC, Certified Erosion, Sediment and Stormwater Inspector (CESSWI) or Certified Inspector of Sediment and Erosion Control (CISEC).

540.5 MEASUREMENT: DELETE the third paragraph of the section starting with "When the need for control measures can not be attributed to..." in its entirety and **REPLACE** with the following:

Temporary erosion, sedimentation, and water pollution prevention and control will be measured by the "Lump Sum" for the entire project, inclusive of all items identified in the plans and in this specification. Payment will be made after satisfactory completion of the work.

540.6 PAYMENT: DELETE this section in its entirety and **REPLACE** with the following:

This item will be paid for at the contract "Lump Sum" price for the entire project, which price shall be full compensation for the work herein specified, including furnishing of all materials, equipment, tools, labor, and incidentals necessary to complete the work in compliance with the plans and specifications.

540.7 BID ITEM: DELETE this section in its entirety and **REPLACE** with the following:

Item 540.1 - Temporary Erosion, Sedimentation, and Water Pollution Prevention and Control.

All other language in Specification Item 540 shall remain in full force.

Special Provisions to Technical Specifications

Revision to SAWS Standard Specification Item 852 Sanitary Sewer Manholes

852.4.5: DELETE this section in its entirety and **REPLACE** with the following:

For rehabilitated manholes; apply an approved cementitious coating followed by an approved epoxy coating. Kerneos SewperCoat 2000HS and PG, applied at the required one inch thick application, is the only product which does not require a subsequent epoxy coating.

852.4.7: DELETE this section in its entirety and **REPLACE** with the following:

For reconstructed manholes; apply an approved cementitious coating followed by an approved epoxy coating. Kerneos SewperCoat 2000HS and PG, applied at the required one inch thick application, is the only product which does not require a subsequent epoxy coating.

All other language in Specification Item 852 shall remain in full force.

Special Provisions to Technical Specifications

Revision to SAWS Standard Specification Item 853 Sanitary Sewer Glass Fiber Reinforced Polyester (FRP) Manholes and Structures

853.5.6: DELETE this section in its entirety and **REPLACE** with the following:

Backfill Material: An approved flowable fill material shall be used for backfilling operations. See DD -852 Drawing Series.

All other language in Specification Item 853 shall remain in full force.

Special Provisions to Technical Specifications

Revision to SAWS Standard Specification Item 854 Sanitary Sewer Laterals

854.6 PAYMENT: DELETE this section in its entirety and **REPLACE** with the following:

Sanitary sewer laterals shall be paid for at the contract bid price per linear foot complete in place for the type, and size constructed. Price shall be full compensation for furnishing all materials, including pipe, pipe fittings (to include wyes, tees, bends), concrete encasement at connection to flexible coupling, pumping, bedding, trenching or boring, trench protection, backfilling, tamping, tree protection, cutting pavement, surface restoration, removing and replacing sidewalk, removing and replacing curb and gutter, and sodding removal and re-installation to match existing conditions and surface structures of whatever type encountered and replacement with whatever type specified per applicable item specification and other incidentals required to complete the work.

When the minimum separation distances for any water and sewer piping facilities cannot be maintained per 30 TAC §217.53, contractor shall install SDR-26 PVC pipe (150 psi pressure rated). There shall be no additional payment for higher pressure rated pipe.

Payment for the installation of the two-way cleanout shall be paid per each under the applicable line item and shall include both a heavy-duty cast iron cap and a water-tight threaded PVC cap secured to the PVC riser located beneath the cast iron cap. Only one-way cleanouts are required on the termination point of a dead-end main.

All other language in Specification Item 854 shall remain in full force.

Special Provisions to Technical Specifications

Revision to SAWS Specification Item 901 Rehabilitation of Sanitary Sewer By Cured-In-Place Pipe (Hot Water)

901.4.3.e.6).a: ADD the following:

The contractor may use a soil modulus differing from 500 psi, but must provide backup data and calculations, signed and sealed by a licensed Professional Engineer in the State of Texas, for the different soil modulus for review and approval by SAWS and the Design Engineer.

901.4.3.e.7).a: ADD the following:

The design calculations shall take into account the groundwater at either the ground surface or the 100-year floodplain when the sewer main is within a delineated FEMA floodplain. A licensed Professional Engineer in the State of Texas hired by the Contractor shall determine the floodplain elevation from available FEMA Floodplain Insurance Rate Maps and studies and should be documented within the design calculations.

All other language in Specification Item 901 shall remain in full force.

- END -

TRENCH EXCAVATION SAFETY PROTECTION:

1. CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAIN EMPLOYEE OR STRUCTURAL/DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITE(S) WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES, THE CONTRACTOR'S IMPLEMENTATION OF THE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLIES WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS.
2. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAIN EMPLOYEE OF SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.
3. ALL UTILITIES SHOWN ARE APPROXIMATE ONLY BASED ON THE BEST AVAILABLE DATA HOWEVER THE CONTRACTOR SHALL FIELD VERIFY THE EXACT LOCATION OF EACH UTILITY PRIOR TO CONSTRUCTION.
4. CONTRACTOR SHALL BE REQUIRED TO REMOVE EXISTING SANITARY SEWER, LATERALS AND MANHOLES AS A NON-SEPARATE PAY ITEM (NSPI).

CPS ENERGY NOTES:

1. CALL THE TEXAS STATE WIDE ONE CALL LOCATOR NUMBER 1-800-344-8377, 48 HOURS BEFORE BEGINNING ANY EXCAVATION.
2. DUE TO FEDERAL REGULATIONS TITLE 49, PART 192.181, CPS ENERGY MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES. THE CONTRACTOR MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE IN THE PROJECT AREA.
3. THE PROJECT MUST BE GAS LEAK SURVEYED PRIOR TO THE FINAL OVERLAY. ALLOW 10 WORKING DAYS FOR THE LEAK SURVEY AND ALLOW AN ADDITIONAL 10 WORKING DAYS FOR VALVE ADJUSTMENTS. THE CONTRACTOR MUST COORDINATE THE SURVEY AND THE ADJUSTMENTS THROUGH THE PROJECT INSPECTOR.
4. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROTECTING CPS ENERGY OVERHEAD AND UNDERGROUND ELECTRIC FACILITIES IF ADJACENT TO WORK AREAS.

AT&T NOTE:

"THE EXISTENCE AND LOCATION OF UNDERGROUND CABLE INDICATED ON THE PLANS ARE TAKEN FROM THE BEST RECORDS AVAILABLE AND ARE NOT GUARANTEED TO BE ACCURATE, CONTRACTOR TO CONTACT THE TELEPHONE COMPANY CABLE LOCATOR 48 HOURS PRIOR TO EXCAVATION AT 1-800-828-5127. CONTRACTOR IS TO PROTECT AND SUPPORT TELEPHONE COMPANY PLANT DURING CONSTRUCTION."

TREE PROTECTION AND MANAGEMENT NOTES:

- 1) PLANS MUST BE SHARED WITH THE CITY OF SAN ANTONIO'S CITY ARBORIST AT LEAST TWO WEEKS PRIOR TO INITIATING FIELD ACTIVITIES.
- 2) IT SHALL BE THE RESPONSIBILITY OF THE COORDINATION MEMORANDUM HOLDER TO MAINTAIN A COPY OF THE APPROVED TREE PLANS, APPROVED TREE COORDINATION MEMORANDUM AND THE CONDITIONS OF APPROVAL IMPOSED BY THE CITY ARBORIST READILY AVAILABLE AT THE SITE AT ALL TIMES DURING WHICH AUTHORIZED WORK IS IN PROGRESS.
- 3) TREE PROTECTION MAY BE REQUIRED ON A CASE BY CASE BASIS BY A REPRESENTATIVE FROM THE CITY'S ARBORIST OFFICE, INCLUDING DURING THE PRE-CONSTRUCTION INSPECTION.
- 4) 35-511 (E) A PROTECTIVE BARRIER, BEGINNING AT THE OUTSIDE OF THE DRIPLINE OF THE TREE, TO PROTECT THE ROOT PROTECTION ZONE SHALL BE ERECTED AND MAINTAINED PRIOR TO AND UNTIL CONSTRUCTION IS COMPLETED.
- 5) 35-477 (H) AMENDMENTS. NOTIFICATION AND APPROVAL OF THE CITY ARBORIST ARE REQUIRED IF CHANGES NEED TO BE MADE TO THE PLANS THAT WILL IMPACT PROTECTED TREES OR THE ROOT PROTECTION ZONE OF PROTECTED TREES. APPROVAL OF THE CHANGES MUST BE RECEIVED FROM THE CITY ARBORIST, IN WRITING, BEFORE COMMENCEMENT OF ANY WORK THAT IS THE SUBJECT OF THE CHANGE OR FIELD ADJUSTMENT. FAILURE TO COMPLY WITH THESE REQUIREMENTS MAY RESULT IN A STOP WORK ORDER, A PENALTY OF \$2000.00, OR BOTH. CONTRACTOR IS RESPONSIBLE FOR PROVIDING A LICENSED TREE MAINTENANCE PROFESSIONAL THROUGHOUT THE PROJECT PER CITY OF SAN ANTONIO ORDINANCE ARTICLE VIII SEC. 21-171.
- 6) CONTRACTOR IS RESPONSIBLE FOR PROVIDING A LICENSED TREE MAINTENANCE PROFESSIONAL THROUGHOUT THE PROJECT FOR TREE RELATED ACTIVITIES PER CITY OF SAN ANTONIO ORDINANCE ARTICLE VIII SEC. 21-171.

- 7) 35-477 (J) IT SHALL BE THE RESPONSIBILITY OF THE PLAN HOLDER TO MAINTAIN A COPY OF THE DATA AND DRAWINGS REQUIRED BY THIS SECTION, AND THE CONDITIONS OF THE CITY ARBORIST, READILY AVAILABLE AT THE SITE AT ALL TIMES DURING WHICH THE AUTHORIZED WORK IS IN PROGRESS.
- 8) AVOID CUTTING ROOTS LARGER THAN ONE (1) INCH IN DIAMETER WHEN EXCAVATING NEAR EXISTING TREES. EXCAVATION BENEATH THE DRIPLINE SHALL PROCEED WITH CAUTION. ROOTS WILL BE CUT WITH A ROCK SAW OR BY HAND NOT AN EXCAVATOR OR OTHER CONSTRUCTION EQUIPMENT.
- 9) 35-523 (K) (4) ALL BROKEN BRANCHES & EXPOSED ROOTS OF SIGNIFICANT, HERITAGE OR MITIGATION TREES SHALL BE CUT CLEANLY. TREE ROOTS SHALL BE CUT WITH A SAW AND PAINTED PRIOR TO EXCAVATION WITH EQUIPMENT.
- 10) STAGING, PARKING, STORAGE, EMPLOYEE PARKING, ETC.,:
 - A) ALL CONSTRUCTION ACCESS AND STAGING AREAS WILL NEED TO BE SURVEYED AND ASSOCIATED TREE IMPACTS WILL NEED TO BE ACCOUNTED FOR IN THE PRESERVATION PLAN.
 - B) STAGING, PARKING, AND MATERIAL STORAGE AREAS AND PROJECT LIMITS OF CLEARANCE MUST BE DISCUSSED AND APPROVED WITH THE INSPECTOR DURING THE PRE-CONSTRUCTION/FENCING INSPECTION.
 - C) NO EQUIPMENT, VEHICLES OR MATERIALS SHALL OPERATE OR BE STORED WITHIN THE ROOT PROTECTION ZONE OF ANY TREE NEAR THE PROJECT.
 - D) 35-523 (K) (5) ALL OFFSITE STAGING, STORAGE, PROJECT TRAILERS, EMPLOYEE PARKING, ETC. ARE REQUIRED TO OBTAIN AND COMPLY WITH A TEMPORARY USES CERTIFICATE OF OCCUPANCY.
- 11) 21-170 (B) ALL WOUNDS TO THE TRUNK, LIMBS, AND ROOT SYSTEM OF OAK TREES IN THE CITY THAT EXPOSE SAPWOOD SHALL BE PAINTED WITHIN 30 MIN. OF THE WOUND WITH ASPHALTIC, EXTERIOR OIL OR LATEX BASED PAINT.
- 12) 35-523 (J) (1) ROOT PROTECTION ZONE:
 - A) A ROOT PROTECTION ZONE MUST BE ESTABLISHED AROUND THE TRUNK OF EACH TREE PRESERVED OR MITIGATION TREE. THE ROOT PROTECTION ZONE SHALL BE AN AREA DEFINED BY AN AVERAGE RADIUS EXTENDING OUTWARD FROM THE TRUNK OF THE TREE A DISTANCE OF ONE (1) LINEAR FOOT FOR EACH INCH (DBH).
 - B) THE ROOT PROTECTION ZONE AREA SHALL BE PRESERVED AT NATURAL GRADE, WITH NATURAL GROUND COVER.
 - C) NO EQUIPMENT, VEHICLES OR MATERIALS SHALL BE STORED WITHIN THE ROOT PROTECTION ZONE OF ANY TREE NEAR THE PROJECT.
 - D) NO CUTTING, FILLING, TRENCHING, ROOT DISTURBANCE, SOIL DISTURBANCE, OR CONSTRUCTION IMPACTS SHALL OCCUR CLOSER TO THE TRUNK THAN ONE-HALF (1/2) THE ROOT PROTECTION ZONE RADIUS EXCEPT IN PARKING AREAS WHERE APPROVED ALTERNATIVE MATERIALS AND METHODS ARE USED. CONSTRUCTION MAY BE AS CLOSE AS FIVE (5) FEET FROM THE ROOT FLARES ON ONE (1) SIDE OF THE TREE. THE IMPERVIOUS COVER MAY ENCR OACH WITHIN THE ROOT PROTECTION ZONE IF SAID ENCR OACHMENT IS APPROVED BY THE CITY ARBORIST.

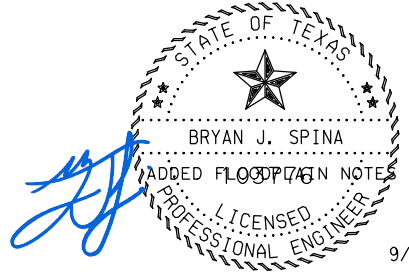


4. CONSTRUCTION SPOILS WILL NOT BE ALLOWED TO BE DEPOSITED ANYWHERE WITHIN A DRAINAGE EASEMENT, RIGHT-OF-WAY OR FLOODPLAIN WITHIN THE LIMITS OF THE PROJECT AND SHALL BE DISPOSED OFFSITE IN COMPLIANCE WITH CURRENT APPLICABLE REGULATIONS.
5. NO STRUCTURE, FENCES, WALLS, LANDSCAPING, OR OTHER OBSTRUCTIONS THAT IMPEDE DRAINAGE SHALL BE PLACED WITHIN THE LIMITS OF THE DRAINAGE EASEMENTS SHOWN ON THE CONSTRUCTION DOCUMENTS.
6. UPON COMPLETION OF TRENCHING, THE AREA WILL BE BACKFILLED AND COMPACTED TO ITS ORIGINAL CONDITION. TRENCHES/BORE PITS TO BE OPEN AND UNATTENDED LONGER THAN 24 HOURS SHALL BE PROTECTED TO WITHSTAND ALL HYDRODYNAMIC AND HYDROSTATIC FORCES AND PREVENT DOWNSTREAM IMPACTS. TRENCHES/BORE PITS TO BE OPEN LONGER THAN 30 DAYS AFTER STARTING EXCAVATION SHALL BE BACKFILLED WITH A SEMI-PERMANENT REPAIR BACKFILL.



FLOODPLAIN NOTES:

1. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN ALL REQUIRED STORM WATER PERMITS, FEES, AND APPROVALS. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PERMITS REQUIRED FOR CONSTRUCTION IN DRAINAGE EASEMENTS, RIGHT-OF-WAYS, AND FLOODPLAINS.
2. THE CONTRACTOR SHALL NOTIFY STORM WATER ENGINEERING AT LEAST 24 HOURS PRIOR TO THE INSTALLATION OF ANY DRAINAGE FACILITY WITHIN A DRAINAGE EASEMENT OR STREET RIGHT-OF-WAY NOT INDICATED ON THE CONSTRUCTION PLANS.
3. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING EXISTING DRAINAGE FACILITIES FROM DAMAGE. ANY DAMAGE TO EXISTING DRAINAGE SYSTEMS, WHETHER OR NOT SHOWN ON THE PLANS, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR AT HIS EXPENSE. THE CONTRACTOR SHALL NOTIFY STORM WATER ENGINEERING AT 210-207-8052 AS SOON AS CONFLICTS WITH UTILITIES ARE ENCOUNTERED OR ANY DRAINAGE SYSTEM IS DAMAGED DURING CONSTRUCTION.



NO	DATE	DESCRIPTION	DWG	CHK
Δ	9/16/21	ADDED FLOODPLAIN NOTES		

REVISIONS

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TPELS REGISTERED FIRM NO. ENGINEERING FIRM F-366 SURVEYING FIRM 10126502
 PH. (210) 822-2232



BPC CENTRAL SEWERSHED PACKAGE 6 - CIPP SEWER PLANS

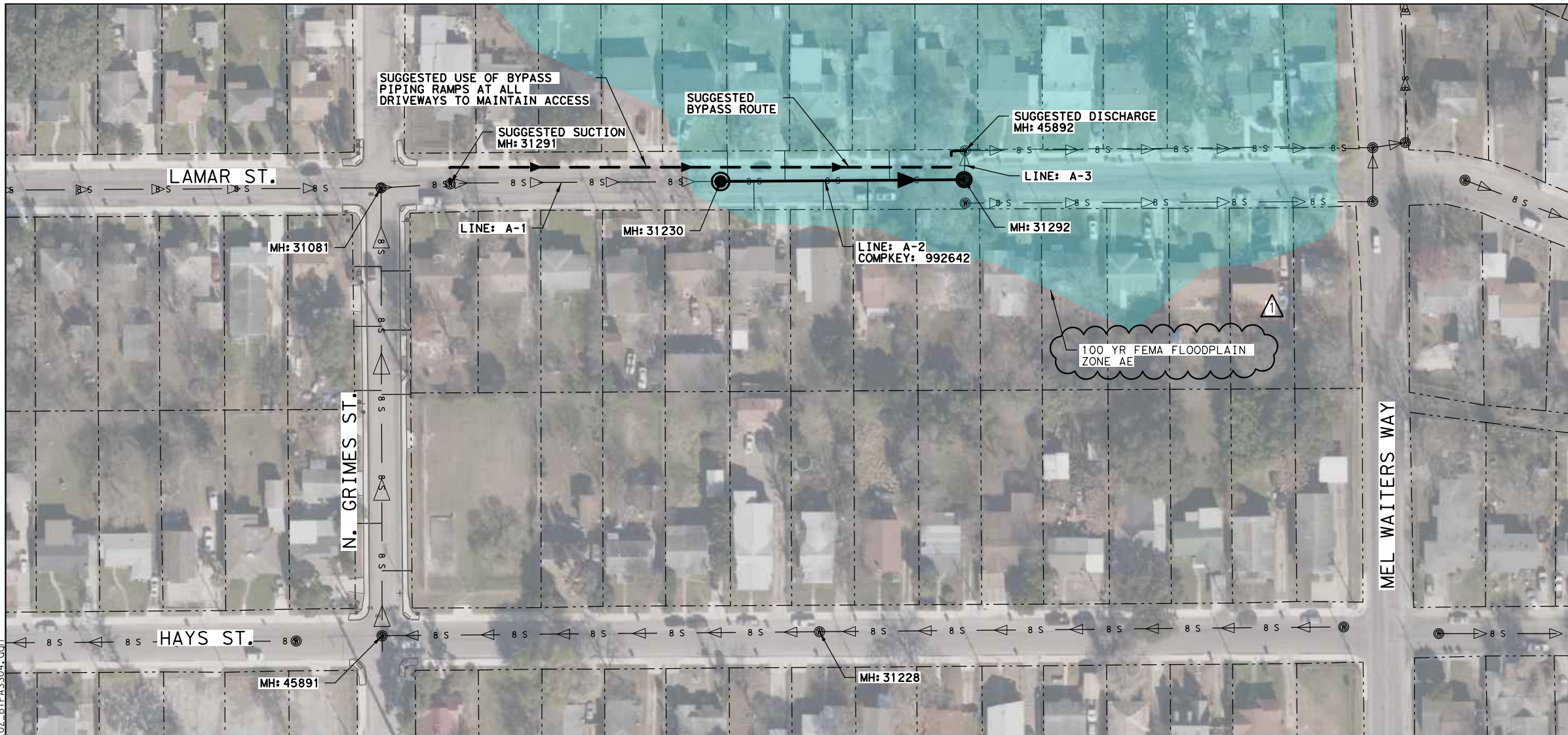
GENERAL NOTES SHEET 2 OF 2

SCALE: N.T.S.

MAP No(s).	DATE: 9/16/2021
SAWS JOB NO.: 20-4503	S5
DRWN BY: DSGN BY: CHKD BY:	

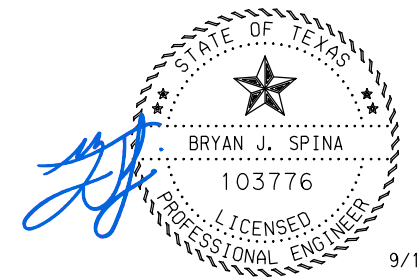
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SANITARY SEWER BYPASS

1. ALL WORK FOR BYPASS PUMPING SHALL BE DONE IN ACCORDANCE TO SAWS SPECIFICATION NO. 864 BYPASS PUMPING.
2. THE CONTRACTOR SHALL FIELD VERIFY MANHOLE INVERTS AND SANITARY SEWER LINE SLOPES PRIOR TO COMMENCING BYPASS WORK.
3. DRIVEWAYS SHALL REMAIN ACCESSIBLE AT ALL TIMES.
4. FLOW DATA DOES NOT INCLUDE INFLOW/INFILTRATION.



9/16/2021

SITE 5 - COMPKEY 992642 SANITARY SEWER PIPE FULL FLOW DATA							
LINE	COMPKEY	FROM SAWS MH	TO SAWS MH	DIAMETER	SLOPE	LENGTH (FT)	Q _{full} (GPM)
A-1		31291	31230	8	1.80%	206	729
A-2	992642	31230	31292	8	0.30%	204	298
A-3		31292	45892	8	0.60%	23	421

NO	DATE	DESCRIPTION	DWG	CHK
Δ	9/16/21	ADDED FLOODPLAIN		

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TRPELS REGISTERED FIRM NO. ENGINEERING FIRM F-366 SURVEYING FIRM 10126502

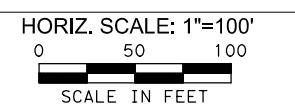
PH. (210) 822-2232

WWW.LNVINC.COM



BPC CENTRAL SEWERSHED PACKAGE 6 - CIPP SEWER PLANS

**SITE 5
COMPKEY 992642
SUGGESTED SANITARY SEWER
BYPASS LAYOUT**

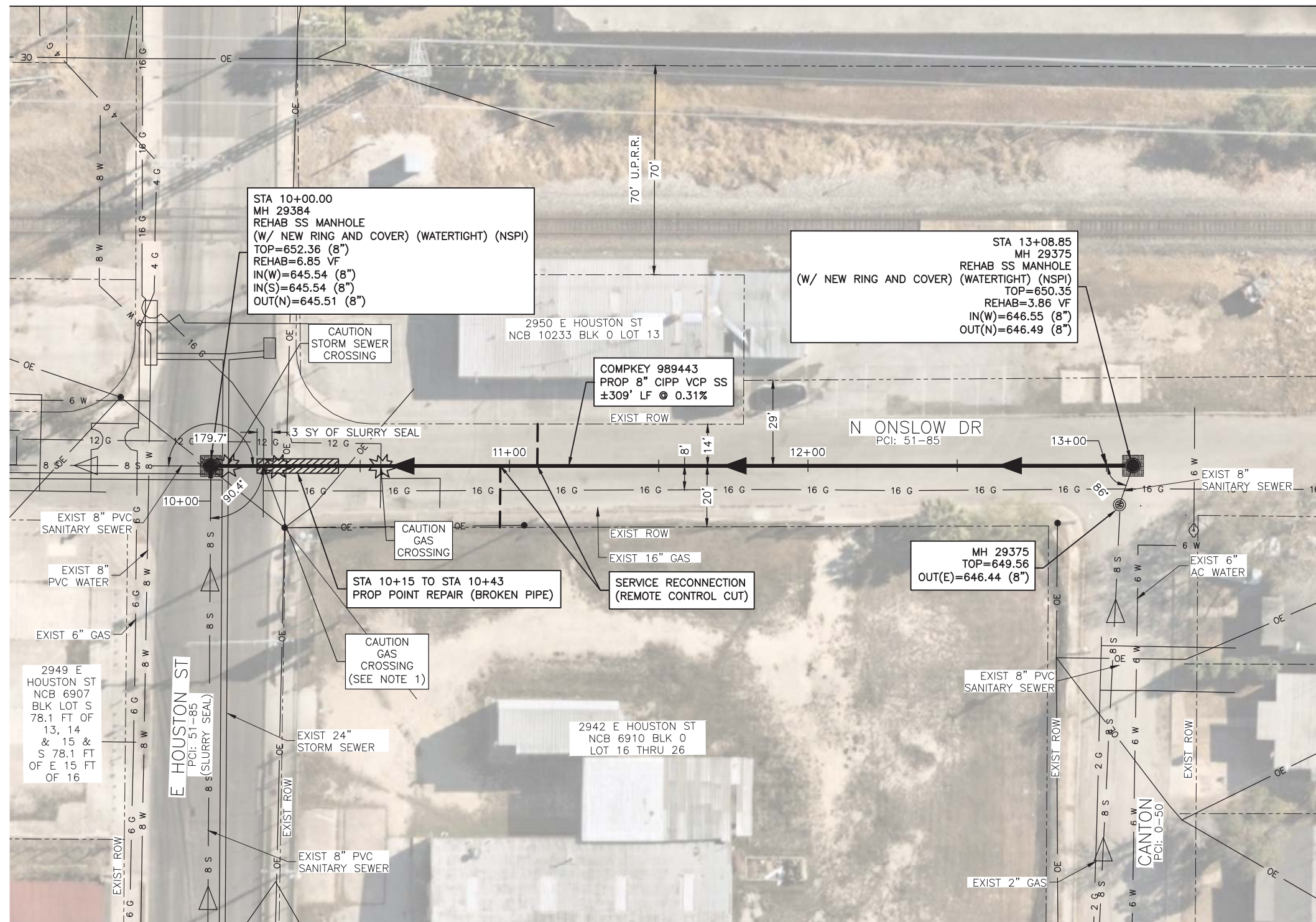


SEE SHEET S26 FOR PROPERTY INFORMATION

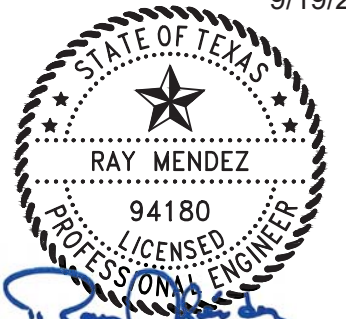
- LEGEND**
- ⊙ EXIST MANHOLE
 - ⊙ REHAB MANHOLE
 - ⊙ REPLACE MANHOLE
 - > PROP SANITARY SEWER
 - -> SUGESSTED BYPASS ROUTE

MAP No(s).	DATE: 9/16/2021
SAWS JOB NO.: 20-4503	S28
DRWN BY: DSGN BY: CHKD BY:	

ITEM#	DESCRIPTION	UNIT	QTY
203	TACK COAT	GAL	2
205	HOT MIX ASPHALTIC CONCRETE PAVEMENT (10" TYPE B)	SY	17
205	HOT MIX ASPHALTIC CONCRETE PAVEMENT (2" TYPE D)	SY	20
207	SINGLE COURSE BITUMINOUS SLURRY SEAL	SY	3
530	BARRICADES, SIGNS & TRAFFIC HANDLING (SITE 7)	LS	1
550	TRENCH EXCAVATION SAFETY PROTECTION	LF	28
865	BYPASS PUMPING, SMALL DIAMETER SANITARY SEWER (SITE 7)	LS	1
866	PRE-CONSTRUCTION SANITARY SEWER MAIN TELEVISION INSPECTION (8"-15" MAIN)	LF	309
901	8" CIPP SANITARY SEWER PIPE, ALL DEPTHS	LF	309
910	MANHOLE REHABILITATION (INCLUDES REPLACEMENT OF RING & COVER)	VF	10.7
1103	POINT REPAIRS FOR 8" DIAMETER (ALL DEPTHS)	EA	1
1103	EXTRA LENGTH POINT REPAIR FOR 8" DIAMETER (ALL DEPTHS)	LF	8
1109	SERVICE RECONNECTION, ALL DEPTHS (W/ REMOTE CONTROL CUT DEVICE)	EA	2



9/19/2021



LEGEND	
— S	WASTE WATER
— W	WATER
— G	BURIED GAS
— OT	OH TEL
— UGT	BURIED TEL
— OE	OH ELEC
— OE/OT	OH ELEC/OH TEL
—	FENCE
○	CLEAN OUT
⊕	FIRE HYDRANT
⊕	WATER METER
⊕	WATER VALVE
⊕	TELE PEDESTAL
⊕	LIGHT POLE
⊕	POWER POLE
⊕	GUY WIRE
⊕	SIGN
⊕	MAIL BOX
⊕	EXIST MANHOLE
⊕	REHAB MANHOLE
⊕	REPLACE MANHOLE
▶	PROP SS RECONNECT
---	LATERAL
---	EXIST SS LATERAL
○	CLEAN OUT
⊕	GAS, WATER, ELEC, UG & STORM DRAIN CROSSING
▒	CONCRETE
▒	PAVEMENT RESTORATION
▒	TRENCH REPAIR
▒	POINT REPAIR
— X —	GROUT & ABANDON

NO	DATE	DESCRIPTION	DWG	CHK
1	9/17/2021	ADDED SOIL EXCAVATION NOTE	LG	JAS

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BPC CENTRAL SEWERSHED PACKAGE 6A
SEWER PLANS

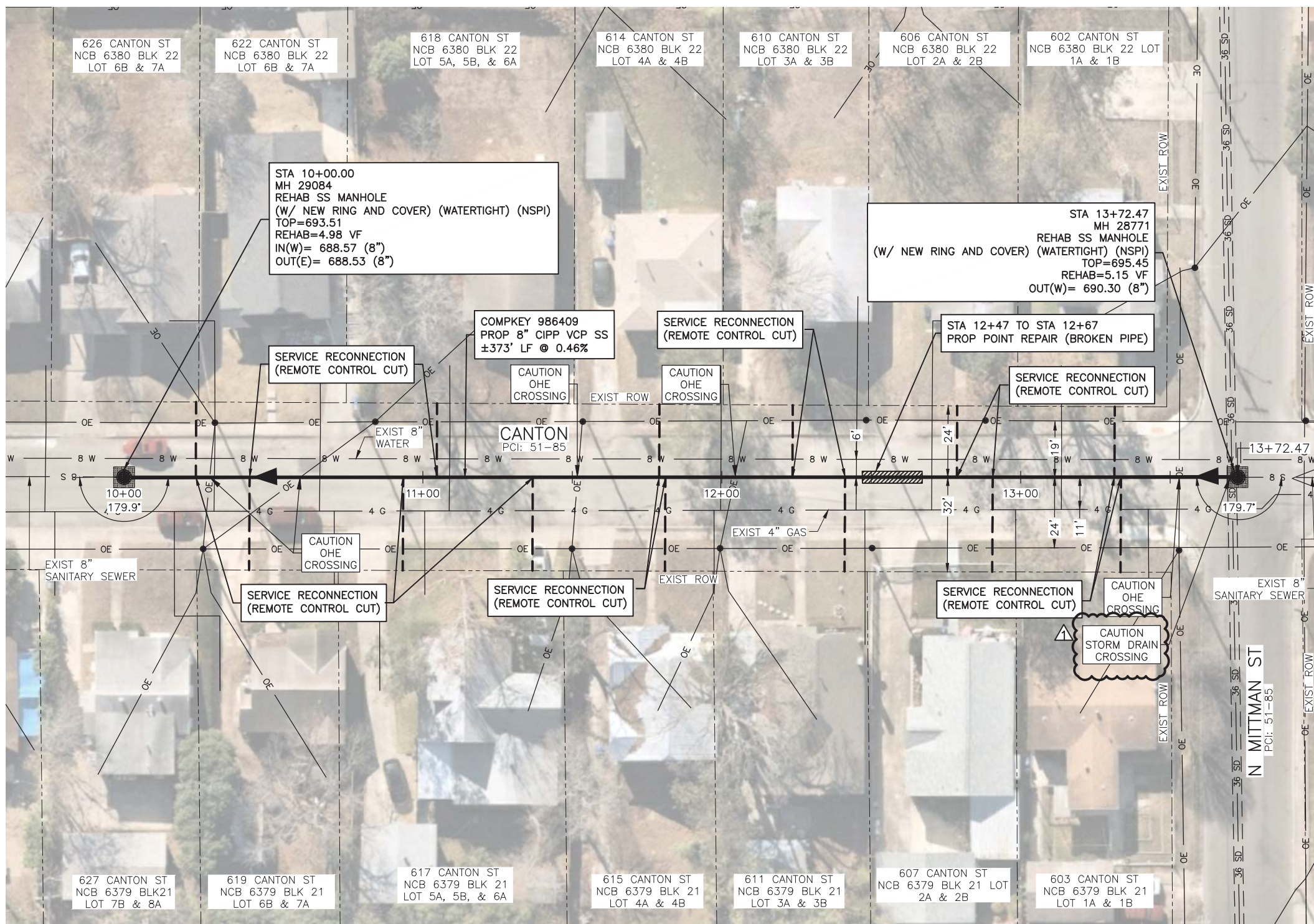
SITE 7
COMPKEY: 989443
SEWER PLAN
STA 10+00.00 TO END

HORIZ. SCALE: 1"=40'
0 20 40
SCALE IN FEET

MAP No(s).	DATE: 9/16/2021
SAWS JOB NO.: 20-4503	S51
DRWN BY: TAM, LG	DSGN BY: JAS III
CHKD BY: RA	

- NOTES:
- CONTRACTOR SHALL PERFORM COORDINATION WITH CPS ENERGY INSPECTOR SO THEY ARE PRESENT DURING CONSTRUCTION FOR EXCAVATION THROUGH BACKFILL.
 - THE CONTRACTOR SHALL BE AWARE THAT THERE ARE LOCATIONS WHERE OPEN CUT SANITARY SEWER WORK WILL CROSS A 16" CPS ENERGY GAS MAIN. THE CONTRACTOR MAY NOT USE MECHANICAL DIGGING EQUIPMENT TO DIG WITHIN 5' OF THE GAS MAIN AND MAY ONLY DIG USING HYDRO-EXCAVATION EQUIPMENT OR HAND DIGGING. ALSO BEFORE DIGGING WITHIN 5' OF THE 16" GAS MAIN, THE CONTRACTOR SHALL CONTACT THE CPS ENERGY LOCATE OFFICE AT (210) 353-3575 TO HAVE AN NRI INSPECTOR ON-SITE TO MONITOR DIGGING WITHIN 5' OF THE 16" GAS MAIN.
 - ALL EXCAVATED SOIL SHALL BE USED ON SITE AS BACKFILL AND NO SOIL SHOULD BE HAULED OFF FROM THE SITE DUE TO POTENTIAL CONTAMINATION (NSPI). IF SOIL NEEDS TO BE HAULED OFF, THE CONTRACTOR SHALL HAVE THE SOIL TESTED AND DISPOSED OF PROPERLY AT A LICENSED LANDFILL (NSPI).

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 Last plotted by: Lillian Garza, Plot Style: ---, Plot Scale: 1:2.5649, Plot Date: 9/17/2021 10:21 AM, Plotter used: None



ITEM#	DESCRIPTION	UNIT	QTY
203	TACK COAT	GAL	1.6
205	HOT MIX ASPHALTIC CONCRETE PAVEMENT (10" TYPE B)	SY	14
205	HOT MIX ASPHALTIC CONCRETE PAVEMENT (2" TYPE D)	SY	16
530	BARRICADES, SIGNS & TRAFFIC HANDLING (SITE 10)	LS	1
550	TRENCH EXCAVATION SAFETY PROTECTION	LF	20
865	BYPASS PUMPING, SMALL DIAMETER SANITARY SEWER (SITE 10)	LS	1
866	PRE-CONSTRUCTION SANITARY SEWER MAIN TELEVISION INSPECTION (8"-15" MAIN)	LF	373
901	8" CIPP SANITARY SEWER PIPE, ALL DEPTHS	LF	373
910	MANHOLE REHABILITATION (INCLUDES REPLACEMENT OF RING & COVER)	VF	10.1
1103	POINT REPAIRS FOR 8" DIAMETER (ALL DEPTHS)	EA	1
1109	SERVICE RECONNECTION, ALL DEPTHS (W/ REMOTE CONTROL CUT DEVICE)	EA	13

9/19/2021



LEGEND

- S WASTE WATER
- W WATER
- G BURIED GAS
- OT OH TEL
- UGT BURIED TEL
- OE OH ELEC
- OE/OT OH ELEC/OH TEL
- FENCE
- CLEAN OUT
- ⊕ FIRE HYDRANT
- ⊕ WATER METER
- ⊕ WATER VALVE
- ⊕ TELE PEDESTAL
- LIGHT POLE
- POWER POLE
- GUY WIRE
- ⊕ SIGN
- ⊕ MAIL BOX
- ⊕ EXIST MANHOLE
- ⊕ REHAB MANHOLE
- REPLACE MANHOLE
- ▶ PROP SS RECONNECT
- LATERAL
- - - EXIST SS LATERAL
- CLEAN OUT
- ⊕ GAS, WATER, ELEC, UG & STORM DRAIN CROSSING
- ▒ CONCRETE
- ▒ PAVEMENT RESTORATION
- ▒ TRENCH REPAIR
- ▒ POINT REPAIR
- X- GROUT & ABANDON

NO	DATE	DESCRIPTION	DWG	CHK
9/17/2021	ADDED STORM DRAIN		LG	JAS

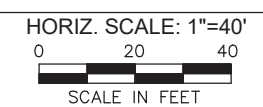
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BPC CENTRAL SEWERSHED PACKAGE 6A
SEWER PLANS

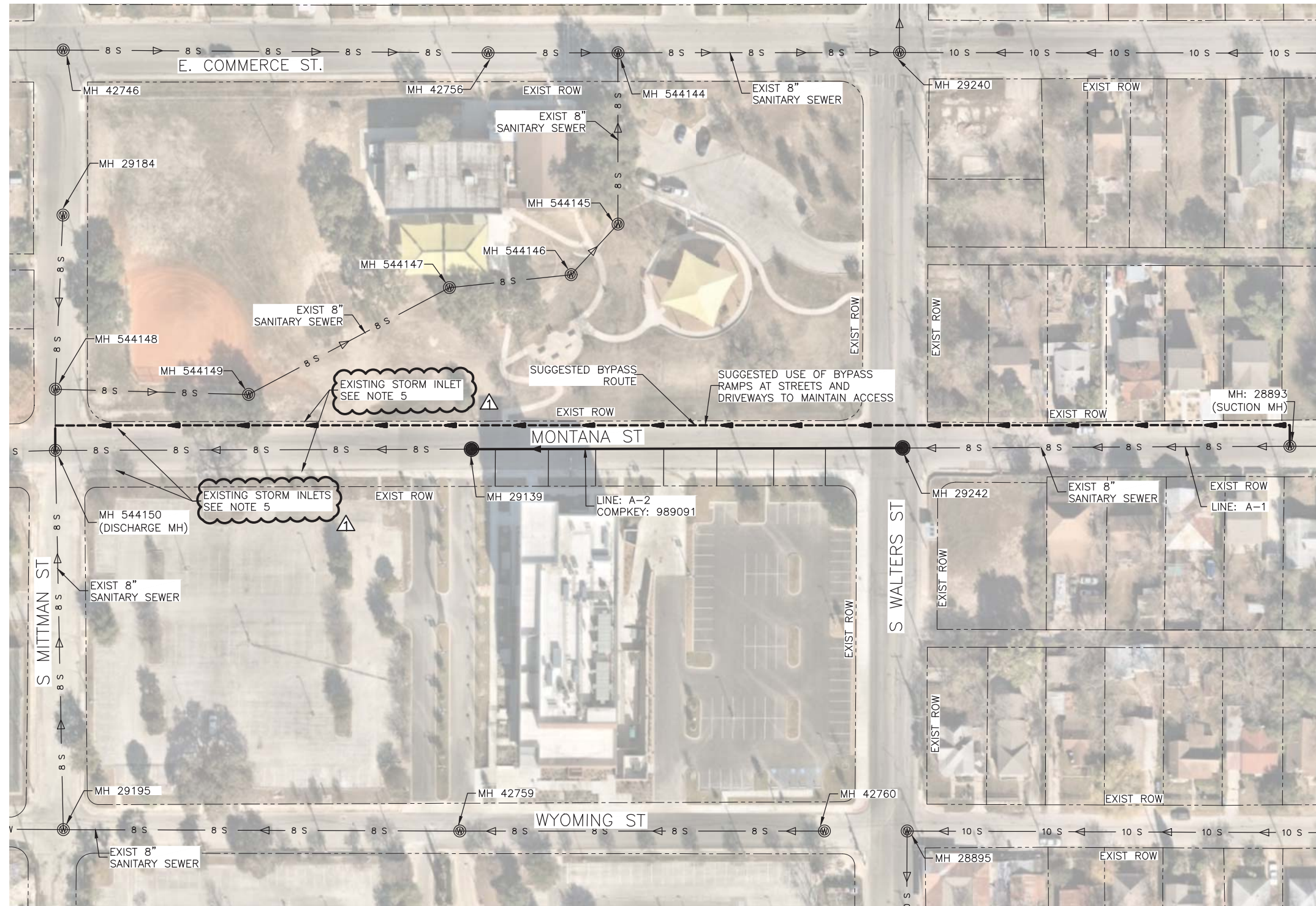
SITE 10
COMPKEY: 986409
SEWER PLAN
STA 10+00.00 TO END



MAP No(s).	DATE: 9/16/2021
SAWS JOB NO.: 20-4503	S63
DRWN BY: TAM, LG	DSGN BY: JAS III
CHKD BY: RA	

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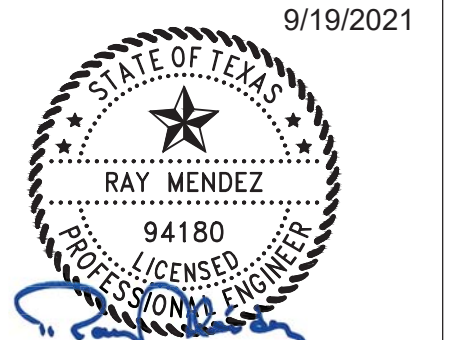


SITE 12 - COMPKEY 989091 SANITARY SEWER PIPE FULL FLOW DATA							
LINE	COMPKEY	FROM SAWS MH	TO SAWS MH	DIAMETER	SLOPE	LENGTH (FT)	Q_FULL (GPM)
A-1		28993	29242	8	2.40%	363	842.02
A-2	989091	29242	29139	8	2.49%	367	857.66

SEE SHEET S76 FOR PROPERTY INFORMATION

- LEGEND**
- ⊙ EXIST MANHOLE
 - ⊙ REHAB MANHOLE
 - REPLACE MANHOLE
 - PROP SANITARY SEWER
 - - - SUGESSTED BYPASS ROUTE

- SANITARY SEWER BYPASS**
1. ALL WORK FOR BYPASS PUMPING SHALL BE DONE IN ACCORDANCE TO SAWS SPECIFICATION NO. 864 BYPASS PUMPING.
 2. THE CONTRACTOR SHALL FIELD VERIFY MANHOLE INVERTS AND SANITARY SEWER LINE SLOPES PRIOR TO COMMENCING BYPASS WORK.
 3. FLOW DATA DOES NOT INCLUDE INFLOW/INFILTRATION.
 4. THE CONTRACTOR SHALL COORDINATE WITH PROPERTY OWNERS TO MINIMIZE WATER USAGE DURING THE HOURS OF OPERATION FOR THE SEWER REHABILITATION. IN THE EVENT MINIMIZING WATER USAGE IS NOT FEASIBLE, CONTRACTOR SHALL PUMP AND HAUL, AS NEEDED, TO ELIMINATE ANY IMPACTS TO RESIDENTS.
 5. THE CONTRACTOR SHALL ENSURE THE BYPASS LINE DOES NOT OBSTRUCT STORM RUNOFF CAPTURE AT THE EXISTING STORM INLET IN THE EVENT THE LINE IS OPERATIONAL DURING STORM EVENTS.



NO	DATE	DESCRIPTION	DWG	CHK
9/17/2021	ADDED STORM DRAIN NOTE		LG	JAS

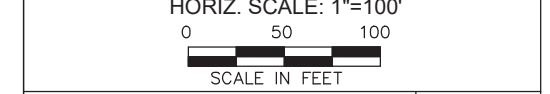
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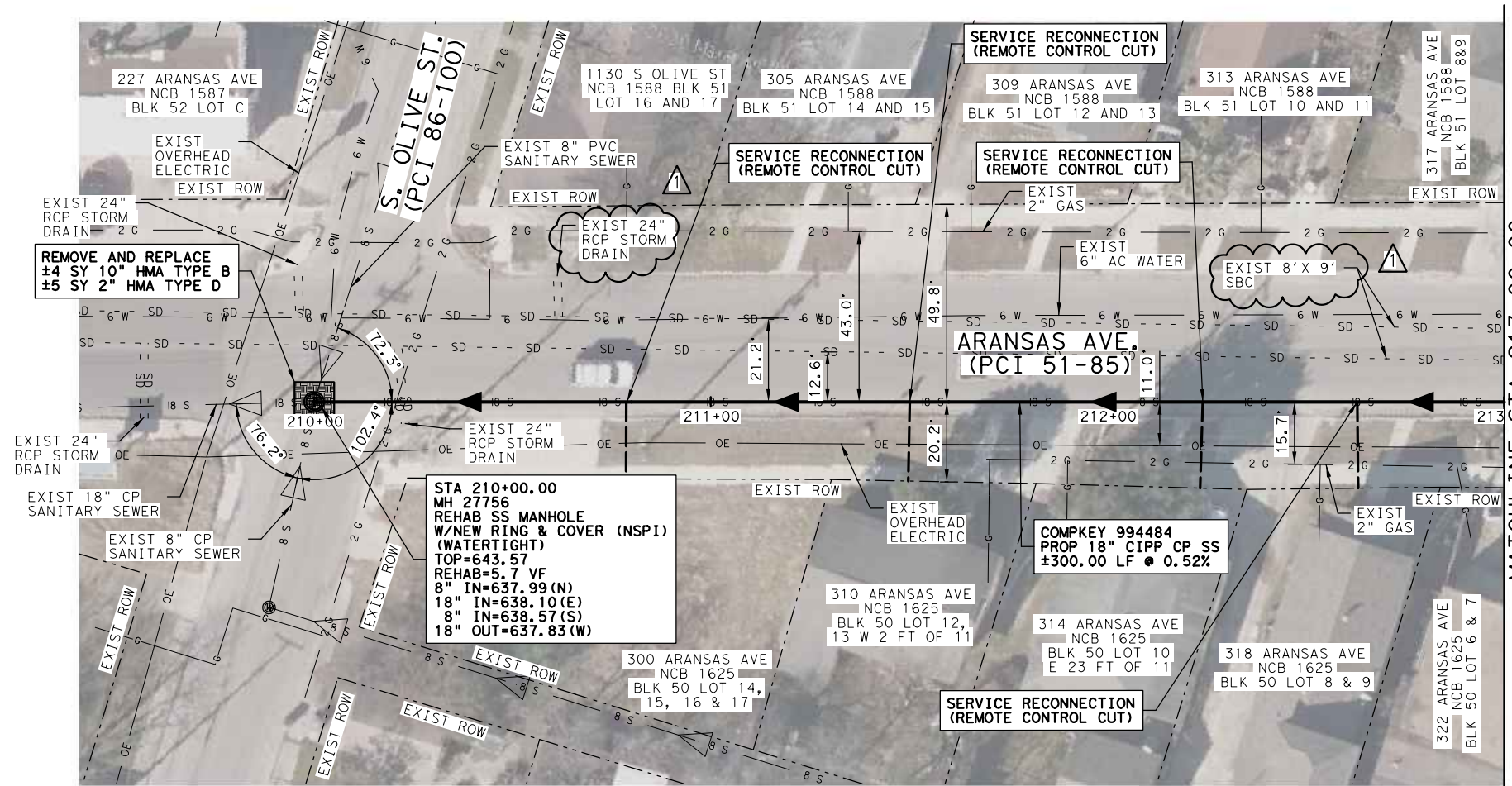
BPC CENTRAL SEWERSHED PACKAGE 6A SEWER PLANS

SITE 12
COMPKEY: 989091
SUGGESTED SANITARY SEWER BYPASS LAYOUT

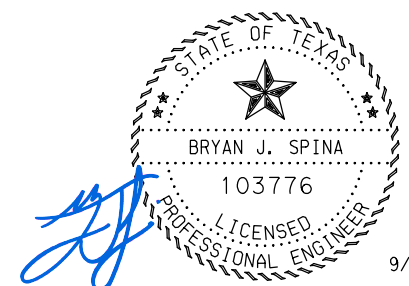


MAP No(s).	DATE: 9/16/2021
SAWS JOB NO.: 20-4503	S78
DRWN BY: TAM, LG	DSGN BY: JAS III
CHKD BY: RA	

ITEM #	DESCRIPTION	UNIT	QTY
203	TACK COAT	GAL	1
205	HOT MIX ASPHALTIC CONCRETE PAVEMENT (10" TYPE B)	SY	4
205	HOT MIX ASPHALTIC CONCRETE PAVEMENT (2" TYPE D)	SY	5
530	BARRICADES, SIGNS & TRAFFIC HANDLING (SITE 16)	LS	1
858	CONCRETE ENCASEMENT, CRADLES, SADDLES & COLLARS	CY	0.42
865	BYPASS PUMPING, SMALL DIAMETER SANITARY SEWER (SITE 16)	LS	1
866	PRE-CONSTRUCTION SANITARY SEWER MAIN TELEVISION INSPECTION (>15" MAIN)	LF	300
901	18" CIPP SANITARY SEWER PIPE, ALL DEPTHS	LF	300
910	MANHOLE REHABILITATION (INCLUDES REPLACEMENT OF RING & COVER)	VF	5.7
1109	SERVICE RECONNECTION, ALL DEPTHS (W/ REMOTE CONTROL CUT DEVICE)	EA	4



MATCHLINE STA 213+00.00
SEE SHEET S112



9/16/2021

NOTE:
1. EXISTING SEWER LATERALS SHOWN BASED ON TELEVISIONING AND BLOCK MAPS. CONTRACTOR TO FIELD VERIFY LOCATION OF SEWER LATERALS.

LEGEND	
— S	WASTE WATER
— W	WATER
— G	BURIED GAS
— OT	OH TEL
— UGT	BURIED TEL
— OE	OH ELEC
— OE/OT	OH ELEC/OH TEL
—	FENCE
○	CLEAN OUT
⊕	FIRE HYDRANT
⊗	WATER METER
⊘	WATER VALVE
●	POWER POLE
+	GUY WIRE
⊕	SIGN
⊞	MAIL BOX
⊙	EXIST MANHOLE
⊚	REHAB MANHOLE
⊛	REPLACE MANHOLE
➤	PROP SS
—	RECONNECT LATERAL
—	EXIST SS LATERAL
○	CLEAN OUT
⊛	GAS, WATER, ELEC, UGT & STORM DRAIN CROSSING
⊞	TRENCH REPAIR
⊞	POINT REPAIR
—x—	GROUT & ABANDON
■	MILL AND OVERLAY

NO	DATE	DESCRIPTION	DWG	CHK
1	9/16/21	ADDED STORM DRAIN		

REVISIONS

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BPC CENTRAL SEWERSHED PACKAGE 6 - CIPP SEWER PLANS

SITE 16
COMPKEY 994484
SEWER PLAN
STA 210+00.00 TO STA 213+00.00
SHEET 1 OF 2

HORIZ. SCALE: 1"=40'

0 20 40
SCALE IN FEET

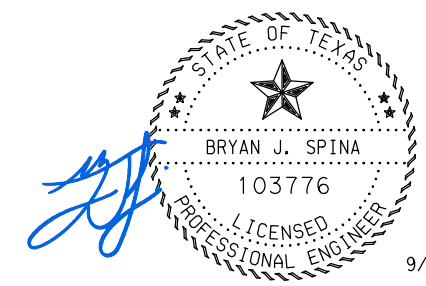
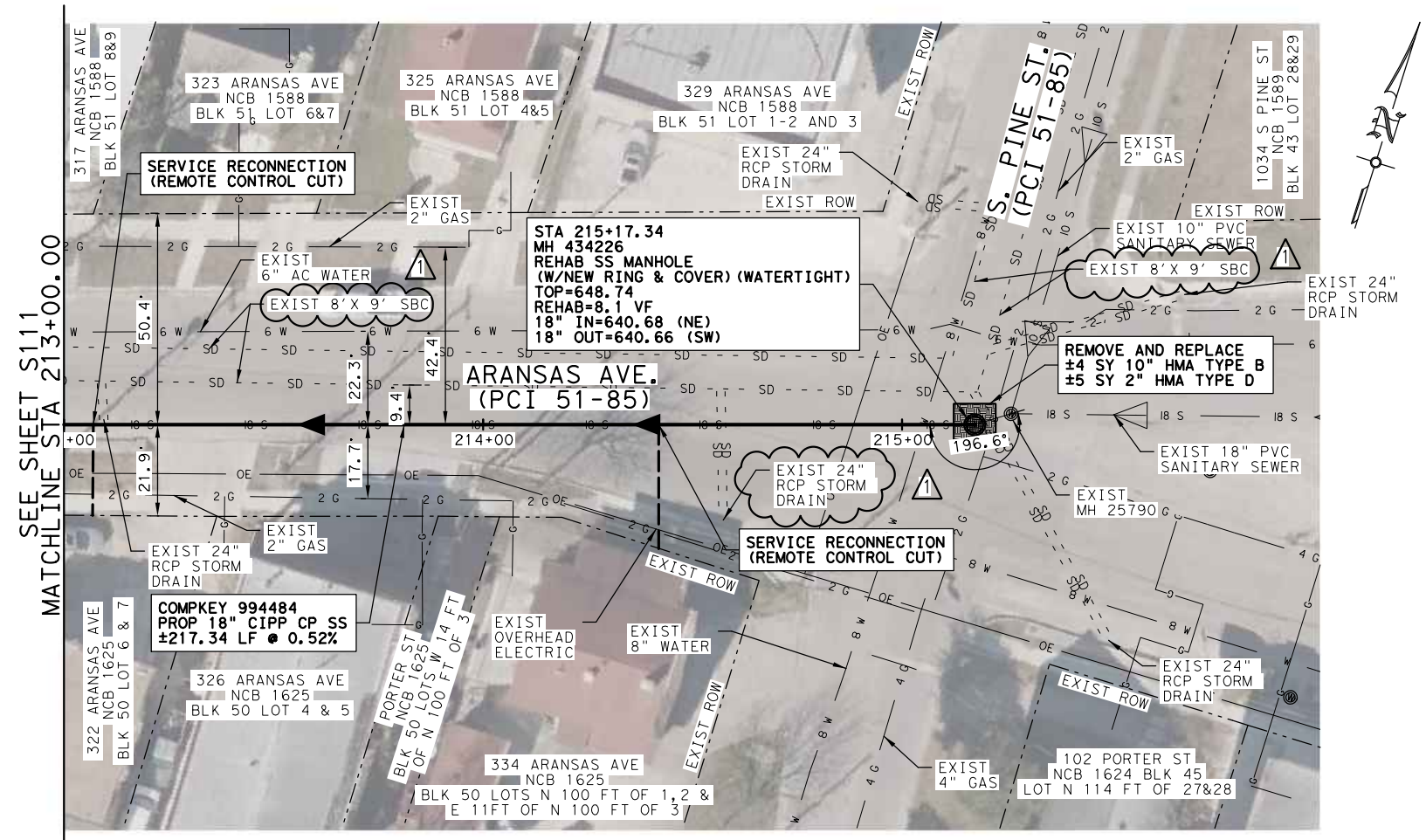
MAP No(s):
SAWS JOB NO.: 20-4503

DATE: 9/16/2021

DRWN BY: DSGN BY: CHKD BY: **S111**

Plotted by: rigoMontemayor
9/16/2021
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ITEM #	DESCRIPTION	UNIT	QTY
203	TACK COAT	GAL	1
205	HOT MIX ASPHALTIC CONCRETE PAVEMENT (10" TYPE B)	SY	4
205	HOT MIX ASPHALTIC CONCRETE PAVEMENT (2" TYPE D)	SY	5
858	CONCRETE ENCASUREMENT, CRADLES, SADDLES & COLLARS	CY	0.42
866	PRE-CONSTRUCTION SANITARY SEWER MAIN TELEVISION INSPECTION (>15" MAIN)	LF	217
901	18" CIPP SANITARY SEWER PIPE, ALL DEPTHS	LF	217
910	MANHOLE REHABILITATION (INCLUDES REPLACEMENT OF RING & COVER)	VF	8.1
1109	SERVICE RECONNECTION, ALL DEPTHS (W/ REMOTE CONTROL CUT DEVICE)	EA	2



9/16/2021

NOTE:
 1. EXISTING SEWER LATERALS SHOWN BASED ON TELEVISIONING AND BLOCK MAPS. CONTRACTOR TO FIELD VERIFY LOCATION OF SEWER LATERALS.

LEGEND	
— S	WASTE WATER
— W	WATER
— G	BURIED GAS
— OT	OH TEL
— UGT	BURIED TEL
— OE	OH ELEC
— OE/OT	OH ELEC/OH TEL
—	FENCE
○	CLEAN OUT
⊕	FIRE HYDRANT
⊗	WATER METER
⊘	WATER VALVE
●	POWER POLE
+	GUY WIRE
⊕	SIGN
⊞	MAIL BOX
⊙	EXIST MANHOLE
⊚	REHAB MANHOLE
⦿	REPLACE MANHOLE
▶	PROP SS
—	RECONNECT LATERAL
—	EXIST SS LATERAL
○	CLEAN OUT
⊕	GAS, WATER, ELEC, UGT & STORM DRAIN CROSSING
⊞	TRENCH REPAIR
⊞	POINT REPAIR
—X—	GROUT & ABANDON
■	MILL AND OVERLAY

NO	DATE	DESCRIPTION	DWG	CHK
1	9/16/21	ADDED STORM DRAIN		

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SAN ANTONIO WATER SYSTEM

BPC CENTRAL SEWERSHED PACKAGE 6 - CIPP SEWER PLANS

SITE 16
COMPKEY 994484
SEWER PLAN
STA 213+00.00 TO END
SHEET 2 OF 2

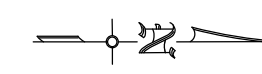
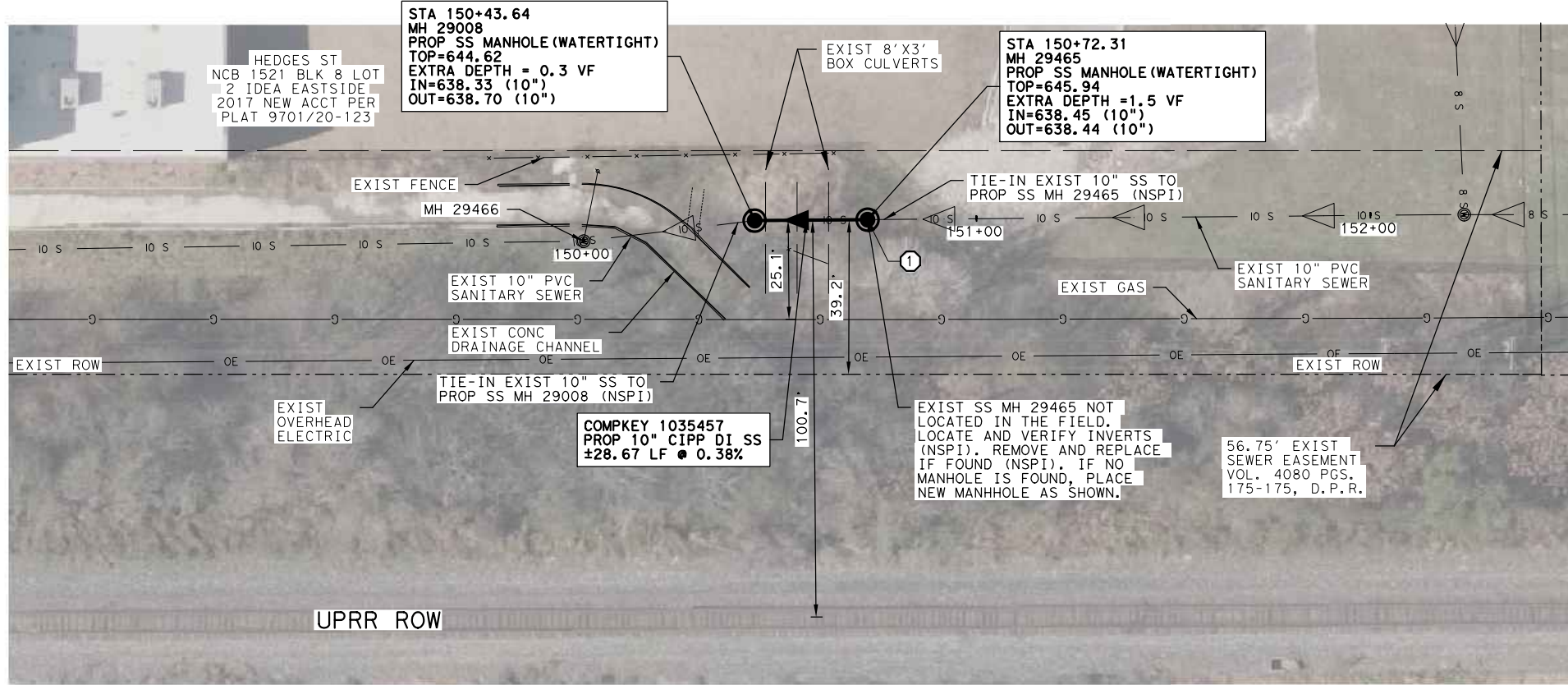
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 SCALE IN FEET

MAP No(s):
 SAWS JOB NO.: 20-4503
 DATE: 9/16/2021

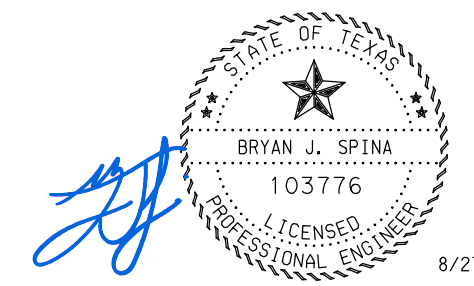
DRWN BY: DSGN BY: CHKD BY: **S112**

Plotted by: rigoonremoyor
 9/16/2021
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ITEM #	DESCRIPTION	UNIT	QTY
515	TOPSOIL	CY	8
520	HYDROMULCH	SY	16
530	BARRICADES, SIGNS & TRAFFIC HANDLING (SITE 19)	LS	1
852.1	SANITARY SEWER MANHOLE (0'-6')	EA	2
852.3	EXTRA DEPTH MANHOLE (>6')	VF	1.8
858	CONCRETE ENCASUREMENT, CRADLES, SADDLES & COLLARS	CY	1
865	BYPASS PUMPING, SMALL DIAMETER SANITARY SEWER (SITE 19)	LS	1
866	PRE-CONSTRUCTION SANITARY SEWER MAIN TELEVISION INSPECTION (8"-15" MAIN)	LF	29
901	10" CIPP SANITARY SEWER PIPE, ALL DEPTHS	LF	29



① INVERTS BASED ON UPSTREAM AND DOWNSTREAM MANHOLE INVERTS. MANHOLE 29465 NOT LOCATED IN THE FIELD AND MAY BE BURIED. CONTRACTOR TO FIELD VERIFY LOCATION AND EXIST SEWER INVERT (NSPI).




8/27/2021

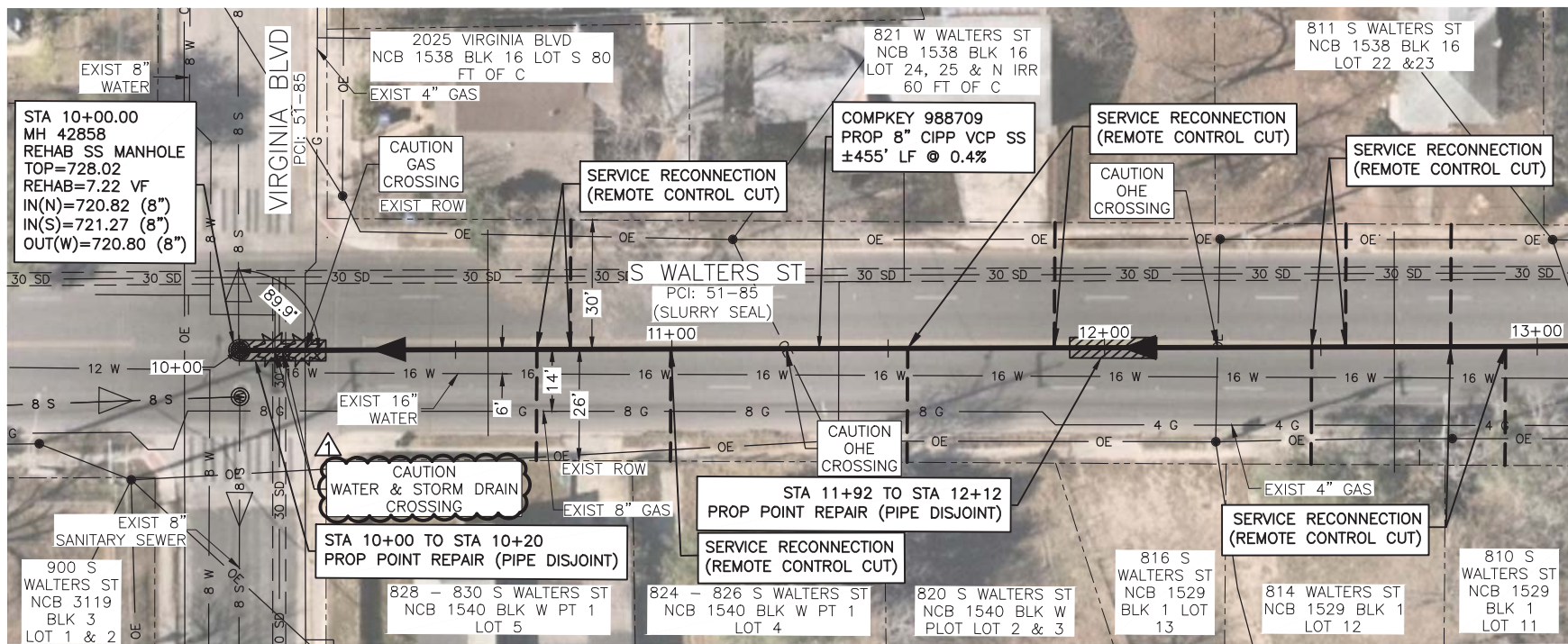
NOTE:
 1. CONTRACTOR TO COORDINATE WITH IDEA EASTSIDE SCHOOL TO CONDUCT CONSTRUCTION DURING NON-SCHOOL PERIODS. CONTACT SCHOOL AT (210)-239-4800.

LEGEND

- S — WASTE WATER
- W — WATER
- G — BURIED GAS
- OT — OH TEL
- UGT — BURIED TEL
- OE — OH ELEC
- OE/OT — OH ELEC/OH TEL
- FENCE
- CLEAN OUT
- ⊕ FIRE HYDRANT
- ⊗ WATER METER
- ⊗ WATER VALVE
- POWER POLE
- ⊕ GUY WIRE
- ⊕ SIGN
- ⊕ MAIL BOX
- ⊕ EXIST MANHOLE
- ⊕ REHAB MANHOLE
- ⊕ REPLACE MANHOLE
- PROP SS
- RECONNECT LATERAL
- EXIST SS LATERAL
- CLEAN OUT
- ☆ GAS, WATER, ELEC, UGT & STORM DRAIN CROSSING
- ▨ TRENCH REPAIR
- ▨ POINT REPAIR
- X— GROUT & ABANDON
- MILL AND OVERLAY

NO	DATE	DESCRIPTION	DWG	CHK
REVISIONS				
 <small>an Ardurra Company</small>				
<small>8918 TESORO DR, SUITE 401 SAN ANTONIO, TX 78217</small>				
<small>PH. (210) 822-2232 WWW.LNVINC.COM</small>				
 SAN ANTONIO WATER SYSTEM				
BPC CENTRAL SEWERSHED PACKAGE 6 - CIPP SEWER PLANS				
SITE 19 COMPKEY 1035457 SEWER PLAN STA 150+00.00 TO END				
HORIZ. SCALE: 1"=40' 		VERT. SCALE: 1"=10' 		
<small>MAP No(s):</small>				
<small>SAWS JOB NO.: 20-4503</small>				
<small>DRWN BY:</small>		<small>DSGN BY:</small>		<small>CHKD BY:</small>
				S129

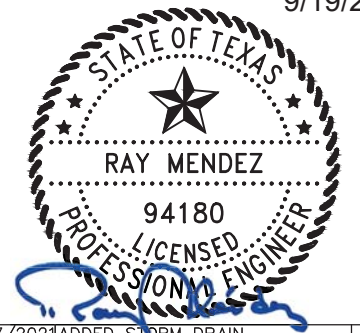
Plotted by: r\gononremayor
 8/27/2021
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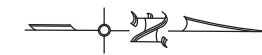
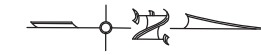
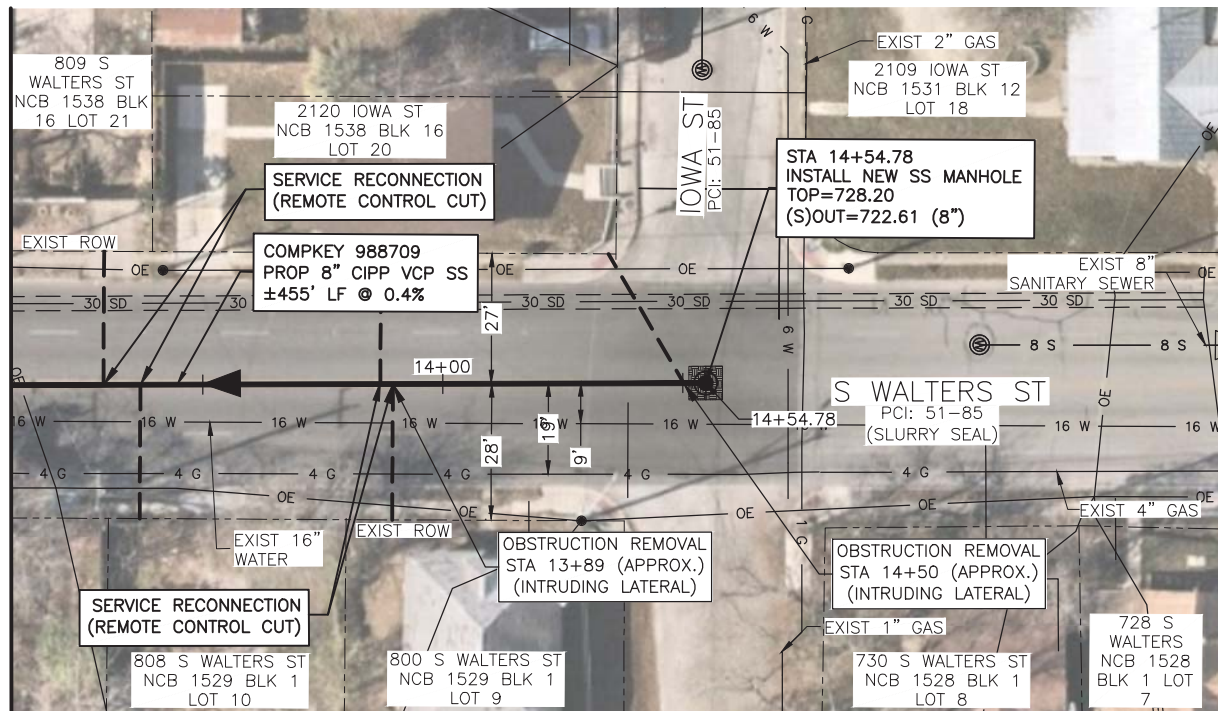
MATCH LINE STA 13+10

ITEM#	DESCRIPTION	UNIT	QTY
203	TACK COAT	GAL	2.7
205	HOT MIX ASPHALTIC CONCRETE PAVEMENT (12" TYPE B)	SY	22
205	HOT MIX ASPHALTIC CONCRETE PAVEMENT (3" TYPE C)	SY	27
207	SINGLE COURSE BITUMINOUS SLURRY SEAL	SY	27
413.2	FLOWABLE FILL (LOW STRENGTH)	CY	1
530	BARRICADES, SIGNS & TRAFFIC HANDLING (SITE 20)	LS	1
550	TRENCH EXCAVATION SAFETY PROTECTION	LF	40
852.1	SANITARY SEWER MANHOLE (0'-6")	EA	1
865	BYPASS PUMPING, SMALL DIAMETER SANITARY SEWER (SITE 20)	LS	1
866	PRE-CONSTRUCTION SANITARY SEWER MAIN TELEVISION INSPECTION (8"-15" MAIN)	LF	455
901	8" CIPP SANITARY SEWER PIPE, ALL DEPTHS	LF	455
910	MANHOLE REHABILITATION (INCLUDES REPLACEMENT OF RING & COVER)	VF	7.2
1103	POINT REPAIRS FOR 8" DIAMETER (ALL DEPTHS)	EA	2
1103	OBSTRUCTION REMOVAL BY REMOTE DEVICE, 8" TO 15" DIAMETER, ALL DEPTHS	EA	2
1109	SERVICE RECONNECTION, ALL DEPTHS (W/ REMOTE CONTROL CUT DEVICE)	EA	13

9/19/2021



MATCH LINE STA 13+10



LEGEND	
— S	WASTE WATER
— W	WATER
— G	BURIED GAS
— OT	OH TEL
— UGT	BURIED TEL
— OE	OH ELEC
— OE/OT	OH ELEC/OH TEL
—	FENCE
○	CLEAN OUT
⊕	FIRE HYDRANT
⊗	WATER METER
⊕	WATER VALVE
⊗	TELE PEDESTAL
○	LIGHT POLE
●	POWER POLE
⊕	GUY WIRE
⊗	SIGN
⊕	MAIL BOX
⊗	EXIST MANHOLE
⊕	REHAB MANHOLE
●	REPLACE MANHOLE
▶	PROP SS RECONNECT LATERAL
---	EXIST SS LATERAL
○	CLEAN OUT
⊕	GAS, WATER, ELEC, UG & STORM DRAIN CROSSING
▒	CONCRETE
▒	PAVEMENT RESTORATION
▒	TRENCH REPAIR
▒	POINT REPAIR
—X—	GROUT & ABANDON

NO	DATE	DESCRIPTION	DWG	CHK
1	9/17/2021	ADDED STORM DRAIN	LG	JAS

LNV
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SAN ANTONIO, TX 78217
PH: (210) 822-2232
WWW.LNVINC.COM

MENDEZ ENGINEERING
Registration # F-14070
12950 Country Parkway, Suite 120
San Antonio, Texas 78216
Office: 210-802-0808
www.MendezEngineering.com



BPC CENTRAL SEWERSHED PACKAGE 6A
SEWER PLANS

SITE 20
COMPKEY: 988709
SEWER PLAN
STA 10+00.00 TO END

HORIZ. SCALE: 1"=40'

SCALE IN FEET

MAP No(s).	DATE: 9/16/2021
SAWS JOB NO.: 20-4503	S133
DRWN BY: TAM, LG	DSGN BY: JAS III
CHKD BY: RA	

File: G:\Projects\2020\2005 SAWS SSORP PK6 - LNV\Civil\2005 SAWS SSORP PK6 C-49 988709.dwg, Last Saved: 9/17/2021 10:17 AM, Last saved by: Lgarza
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