



**BPC East Sewershed Package 4B
Solicitation Number: CO-00454-JP
Job No.: 21-4508**

**ADDENDUM 01
November 3, 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.

CHANGES TO SPECIFICATIONS

- 1. Table of Contents** – Add the following to the end of the Special Specifications section:
“Item 7185 – Abandonment of Sanitary Sewer.....7185-1”
- 2. Invitation to Bidders** – Remove the first sentence within the Invitation to Bidders and replace with:
“Sealed bids are requested by the San Antonio Water System for construction of approximately 4,427 LF of 8-inch to 24-inch sewer mains via Open Cut, 405 LF of 8-inch sewer main via Pipe Bursting, and 743 LF of 18-inch sewer main via CIPP for the BPC East Sewershed Package 4B Project, SAWS Job No. 21-4508.”
- 3. Bid Proposal** – Remove Bid Proposal and replace with the revised Bid Proposal attached to this Addendum. The revised Bid Proposal includes the addition of Bid Items #31, #71, #79, and #81 and modifications to Bid Items #46, #76, and #80. This version of the bid proposal should be used by bidders when submitting a bid for this project. Failure to use the revised bid proposal may result in the bid being rejected.
- 4. Statement of Bidder’s Experience** – Remove the Statement of Bidder’s Experience and replace with the Statement of Bidder’s Experience as attached to this Addendum.
- 5. Special Conditions** – Remove Project Milestone #2 and replace with the following:
“2. Project Sites N. WW White Rd, BN31, Site 11, and Site Line N should be completed first. Project Site Line N must reach final completion by June 30, 2022.”

Add the following language at the end of the Project Milestones section:
“n. “Project Site Line N” – 28 Calendar Days (substantial completion)
Final completion 30 calendar days after substantial completion.”
- 6. Special Specifications** – Add Special Specification 7185 “Abandonment of Sanitary Sewer” attached to this Addendum to the bid documents. Special Specification 7185 is applicable to sewer pipeline and manhole abandonment work inside the State’s right-of-way along North WW White Rd as indicated on sheet 54.
- 7. Rights of Entry** – Add South Park Mall Realty LLC ROE Exhibits attached to this Addendum to the end of the section.

CHANGES TO PLANS

1. **Changes to all sheets** – The total number of sheets is updated from 91 to 94 sheets.
2. **Sheet 2 – Index of Drawings** – Remove Sheet 2, Index of Drawings, and replace with revised Sheet 2 attached to this Addendum.
 - a. Addition of Sheets 83, 84, 85 (Line N).
3. **Sheet 6 – Summary of Quantities** – Remove Sheet 6, Summary of Quantities, and replace with revised Sheet 6 attached to this Addendum.
 - a. Updated Summary of Quantities includes the addition of Bid Items #31, #71, #79, and #81 and modifications to Bid Items #46, #76, and #80.
4. **Sheet 54 – WW White Rd (North) Plan and Profile** – Remove Sheet 54, WW White Rd (North) Plan and Profile, and replace with revised Sheet 54 attached to this Addendum.
5. **Sheet 83 – Line N South Park Mall – Overall Project Location and Control Suggested Bypass Plan** – Add Sheet 83 attached to this Addendum.
6. **Sheet 84 – Line N South Park Mall Plan (STA 1+00 TO STA 5+00)** – Add Sheet 84 attached to this Addendum.
7. **Sheet 85 – Line N South Park Mall Plan (STA 5+00 TO STA 8+42.94)** – Add Sheet 85 attached to this Addendum.
8. **Sheets 86 through 94** – The sheet numbering on Sheets 86 – 94 shall be updated based upon new sheet numbering as shown on Sheet 2 – Index of Drawings attached to this Addendum.

CLARIFICATIONS

1. The estimated cost for this project has changed to \$4,577,322.05 which is also now reflected on SAWS website at the following:

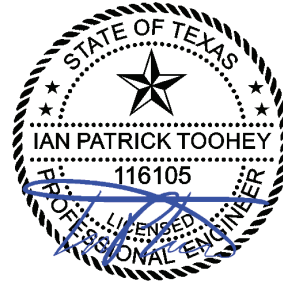
https://apps.saws.org/Business_Center/ContractSol/Drill.cfm?id=4032&View=Yes

END OF ADDENDUM

This Addendum, including these three (3) pages, is twenty-five (25) pages in its entirety.

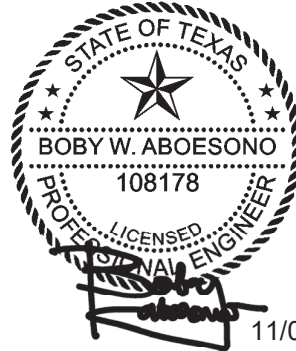
Attachments:

- 1- Revised Bid Proposal
- 2- Revised Statement of Bidder's Experience
- 3- Special Specification 7185 – Abandonment of Sanitary Sewer
- 4- South Park Mall Realty LLC ROE Exhibits
- 5- Revised Plan Sheets (2, 6, 54)
- 6- New Plan Sheets (83, 84, 85)



Digitally Signed 11/03/2021

Ian P. Toohey, P.E.
Garver



11/03/2021

Boby Aboesono, P.E.
Arcadis U.S. (TBPE F-533)



Curt W. Raabe 11/03/2021

Curt Raabe, P.E.
CDS Muery
(TBPE F-1733)

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 No(s)**. _____

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 **365** 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

ITEM NO	SPEC NO	DESCRIPTION	UNIT	EST. QUANTITY	UNIT PRICE	AMOUNT
1	103.1	Remove Concrete Curb (COSA Spec)	LF	376	\$	\$
2	103.3	Remove Sidewalk & Driveway (COSA Spec)	SF	3030	\$	\$
3	103.4	Remove Miscellaneous Concrete (COSA Spec)	SF	20	\$	\$
4	202	Prime Coat (COSA Spec)	GAL	514	\$	\$
5	203	Tack Coat (COSA Spec)	GAL	1253	\$	\$
6	205.2	Hot Mix Asphaltic Pavement- Type B (10" Comp. Depth) (COSA Spec)	SY	8	\$	\$
7	205.2	Hot Mix Asphaltic Pavement- Type B (12.5" Comp. Depth) (COSA Spec)	SY	56	\$	\$
8	205.4	Hot Mix Asphaltic Pavement- Type D (2" Comp. Depth) (COSA Spec)	SY	10718	\$	\$
9	206.1	Asphalt Treated Base (10" Comp. Depth) (COSA Spec)	SY	1355	\$	\$
10	208.1	Salvaging, Hauling, and Stockpiling Reclaimable Asphaltic Pavement (2 inches depth), (COSA Spec)	SY	10296	\$	\$
11	413.1	Flowable Fill (low strength) (6") (COSA Spec)	CY	93	\$	\$
12	500	Concrete Curb (COSA Spec)	LF	46	\$	\$
13	500	Concrete Curb and Gutter (COSA Spec)	LF	360	\$	\$
14	502	Concrete Sidewalk (COSA Spec)	SY	14	\$	\$
15	503	Asphalt Concrete Driveway (COSA Spec)	SY	132	\$	\$
16	503	Concrete Driveway (COSA SPEC)	SY	3	\$	\$
17	503	Portland Cement Concrete Driveway - Commercial (COSA Spec)	SY	85	\$	\$

ITEM NO	SPEC NO	DESCRIPTION	UNIT	EST. QUANTITY	UNIT PRICE	AMOUNT
18	503	Portland Cement Concrete Driveway (COSA Spec)	SY	314	\$	\$
19	515	Topsoil	CY	3	\$	\$
20	516.1	Bermuda Sodding	SY	59	\$	\$
21	516.2	St. Augustine Sodding	SY	101	\$	\$
22	530	Barricades, Signs, And Traffic Handling, (COSA Spec) Site 11	LS	1	\$	\$
23	530	Barricades, Signs, And Traffic Handling, (COSA Spec) Site 15A	LS	1	\$	\$
24	530	Barricades, Signs, And Traffic Handling, (COSA Spec) Site 17	LS	1	\$	\$
25	530	Barricades, Signs, And Traffic Handling, (COSA Spec) Site 20	LS	1	\$	\$
26	530	Barricades, Signs, And Traffic Handling, (COSA Spec) Site 25	LS	1	\$	\$
27	530	Barricades, Signs, And Traffic Handling, (COSA Spec) Site 28	LS	1	\$	\$
28	530	Barricades, Signs, And Traffic Handling, (COSA Spec) Site 34	LS	1	\$	\$
29	530	Barricades, Signs, and Traffic Handling, (COSA Spec) (N. WW White Rd.)	LS	1	\$	\$
30	530	Barricades, Signs, and Traffic Handling, (COSA Spec) Site BN31	LS	1	\$	\$
31	530	Barricades, Signs, and Traffic Handling, (COSA Spec) Line N	LS	1	\$	\$
32	535.1	4-inch Wide Yellow Line (COSA Spec)	LF	756	\$	\$
33	540.7	Temporary Construction Perimeter Fence (Install/Remove) Site 17	LS	1	\$	\$

ITEM NO	SPEC NO	DESCRIPTION	UNIT	EST. QUANTITY	UNIT PRICE	AMOUNT
34	540.7	Temporary Construction Perimeter Fence (Install/Remove) (N. WW White Rd.)	LS	1	\$	\$
35	550	Trench Excavation Safety Protection	LF	4427	\$	\$
36	552.1	Removal and Replacement of Existing Irrigation System (COSA Spec)	LS	1	\$	\$
37	834	Remove and Replace Fire Hydrant	EA	1	\$	\$
38	848	8" PVC SDR-26 (160 PSI) Sewer Line (0'-6')	LF	281	\$	\$
39	848	8" PVC SDR-26 (160 PSI) Sewer Line (6'-14')	LF	1477	\$	\$
40	848	8" PVC SDR-26 Sewer Line (0'-6')	LF	867	\$	\$
41	848	8" PVC SDR-26 Sewer Line (6'-14')	LF	216	\$	\$
42	848	10" PVC SDR-26 (160 PSI) Sewer Line (6'-14')	LF	926	\$	\$
43	848	10" PVC SDR-26 Sewer Line (6'-14')	LF	432	\$	\$
44	848	12" PVC SDR-26 Sewer Line (6'-14')	LF	185	\$	\$
45	848	24" PVC SDR-26 Sewer Line (6'-14')	LF	43	\$	\$
46	851	Manhole Adjustment	EA	9	\$	\$
47	852	External Drop Connection	EA	3	\$	\$
48	852	Sanitary Sewer Manhole 4' Dia. (0'-6')	EA	19	\$	\$
49	852	Extra Depth Manhole (>6')	VF	26	\$	\$
50	852.1	Sanitary Sewer Doghouse Manhole 4' Dia. (0'-6')	EA	1	\$	\$
51	854	Two-Way Sanitary Sewer Clean-Out	EA	40	\$	\$
52	854	Sanitary Sewer Laterals (SDR 26-2241, 160 PSI)	LF	345	\$	\$
53	855	Reconstruction of Existing 4' Dia. Manhole	EA	3	\$	\$

ITEM NO	SPEC NO	DESCRIPTION	UNIT	EST. QUANTITY	UNIT PRICE	AMOUNT
54	858	Concrete Encasement, Cradles, Saddles and Collars	CY	41	\$	\$
55	859	Reconstruction of Existing Manholes using Polymer Concrete Manholes - 108" x 108" Vault	EA	3	\$	\$
56	859	Reconstruction of Existing Manholes using Polymer Concrete Manholes - 96" Dia. Manhole	EA	3	\$	\$
57	860	Vertical Stacks	VF	8	\$	\$
58	862	Abandon Existing Sewer Line Site 25	LS	1	\$	\$
59	862	Abandon Existing Sewer Lines Site 28	LS	1	\$	\$
60	862	Abandon Existing Sewer Lines Site BN31	LS	1	\$	\$
61	864-S1	Bypass Pumping Small Diameter Sanitary Sewer, (<24") Site 11	LS	1	\$	\$
62	864-S1	Bypass Pumping Small Diameter Sanitary Sewer, (<24") Site 15	LS	1	\$	\$
63	864-S1	Bypass Pumping Small Diameter Sanitary Sewer, (<24") Site 17	LS	1	\$	\$
64	864-S1	Bypass Pumping Small Diameter Sanitary Sewer, (<24") Site 20	LS	1	\$	\$
65	864-S1	Bypass Pumping Small Diameter Sanitary Sewer, (<24") Site 25	LS	1	\$	\$
66	864-S1	Bypass Pumping Small Diameter Sanitary Sewer, (<24") Site 27	LS	1	\$	\$
67	864-S1	Bypass Pumping Small Diameter Sanitary Sewer, (<24") Site 28	LS	1	\$	\$
68	864-S1	Bypass Pumping Small Diameter Sanitary Sewer, (<24") Site 34	LS	1	\$	\$

ITEM NO	SPEC NO	DESCRIPTION	UNIT	EST. QUANTITY	UNIT PRICE	AMOUNT
69	864-S1	Bypass Pumping Small Diameter Sanitary Sewer, (<24") (N. WW White Rd.)	LS	1	\$	\$
70	864-S1	Bypass Pumping Small Diameter Sanitary Sewer, (<24") Site BN31	LS	1	\$	\$
△ 71	864-S1	Bypass Pumping Small Diameter Sanitary Sewer, (<24") Line N	LS	1	\$	\$
72	864-S2	Bypass Pumping Large Diameter, (>=24") Site 35	LS	1	\$	\$
73	864-S2	Bypass Pumping Large Diameter, (>=24") Site 36	LS	1	\$	\$
74	864-S2	Bypass Pumping Large Diameter, (>=24") Site 37	LS	1	\$	\$
75	866	Sewer Main Television Inspection - 8" through 15"	LF	4263	\$	\$
△ 76	866	Sewer Main Television Inspection - 15" through 24"	LF	786	\$	\$
77	900	Pipe Bursting - 8" Sanitary Sewer Main (5'-7' Depth)	LF	145	\$	\$
78	900	Pipe Bursting - 8" Sanitary Sewer Main (8'-15' Depth)	LF	260	\$	\$
△ 79	901	Rehabilitation of Sanitary Sewer by Cured-In-Place Pipe (Hot Water) - 18" (All Depths)	LF	743	\$	\$
△ 80	910	Rehabilitation of Existing 4' Dia. Manhole	VF	97	\$	\$
△ 81	1103	Obstruction Removal - Remote Device	EA	2	\$	\$
82	1109	Service Reconnections - Open Cut	EA	3	\$	\$
83	SS 2010	Fence Removal and Replacement Site 25	LS	1	\$	\$

ITEM NO	SPEC NO	DESCRIPTION	UNIT	EST. QUANTITY	UNIT PRICE	AMOUNT
84	SS 2010	Fence Removal and Replacement (N. WW White Rd.)	LS	1	\$	\$
85	SS 3001	Power Pole Bracing	EA	12	\$	\$
86	SS 3300	Sanitary Sewer Private Laterals (4"-6") (Including COSA Permit & Licensed Plumber)	LF	1775	\$	\$
87	SS 801	Tree Protection	EA	2	\$	\$
88	SS 802	Tree Pruning	EA	1	\$	\$
89	TXDOT SS7185	Grout Abandonment Sewer Main	LF	432	\$	\$
SUBTOTAL (ITEMS 1-89)				\$		
90	MOBILIZATION AND DEMOBILIZATION, MAX 10% OF LINE ITEMS 1-89			L.S.	\$	\$
91	PREPARING ROW, MAX 5% OF LINE ITEMS 1-89			L.S.	\$	\$

Mobilization, demobilization, and Prep of ROW shall be limited to the maximum percentage shown. **If the percentage exceeds the allowable maximum stated for mobilization, demobilization, and preparation of ROW, SAWS reserves the right to cap the amount at percentages shown and adjust the extensions of the bid items accordingly.**

TOTAL BID PRICE (TO INCLUDE LINE ITEMS 1-89 AND 90-91)	\$
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STATEMENT OF BIDDER'S EXPERIENCE

**BPC East Sewershed Package 4B
SAWS Job No. 21-4508
SAWS Solicitation No. CO-00454**

A. Please complete **all** the fields below.

Bidder must answer all questions completely and all information must be clear, accurate and comprehensive.

If all fields are not completed, the Bid is at risk for being rejected due to non-responsiveness.

It is not acceptable to indicate "See attached".

Project A-1 is to have been completed by the Bidder.

- Project A-1 demonstrates construction of a minimum of 3,000 LF by Open Cut construction for sanitary sewer mains 8-inches and larger.
- Project A-1 was completed between 2016 and 2021.

Project A-1 Description

Name of Project: _____ Location: _____

Scope of Work: _____

Pipe Sizes: _____ Pipe Lengths: _____

Owner Name: _____ Owner Title: _____

Owner Phone Number: _____ Construction Cost: _____

Project Start Date: _____ Project End Date: _____

Additional Information: _____

*Owner is defined as entity the Bidder performed work for (i.e. City, County, Utility, State, etc.). Bidder must provide a specific name with contact information that has been previously verified. The design engineer may not serve as reference for the Bidder.

Project A-2 is to have been completed by the Bidder.

- Project A-2 demonstrates construction of a minimum of 3,000 LF by Open Cut construction for sanitary sewer mains 8-inches and larger.
- Project A-2 was completed between 2016 and 2021.
- Project A-2 shall be different than Project A-1.

Project A-2 Description

Name of Project: _____ Location: _____

Scope of Work: _____

Pipe Sizes: _____ Pipe Lengths: _____

Owner Name: _____ Owner Title: _____

Owner Phone Number: _____ Construction Cost: _____

Project Start Date: _____ Project End Date: _____

Additional Information: _____

*Owner is defined as entity the Bidder performed work for (i.e. City, County, Utility, State, etc.). Bidder must provide a specific name with contact information that has been previously verified. The design engineer may not serve as reference for the Bidder.

Project A-3 is to have been completed by the Bidder or Subcontractor.

- Project A-3 demonstrates construction of a minimum of 500 LF by Pipe Bursting construction for sanitary sewer mains 8-inches and larger.
- Project A-3 was completed between 2016 and 2021.
- Project A-3 may be the same as Project A-1 or Project A-2, if project meets all the experience requirements listed.

Project A-3 Description

Name of Project: _____ Location: _____
Scope of Work: _____
Pipe Sizes: _____ Pipe Lengths: _____
Owner Name: _____ Owner Title: _____
Owner Phone Number: _____ Construction Cost: _____
Project Start Date: _____ Project End Date: _____
Additional Information: _____

*Owner is defined as entity the Bidder performed work for (i.e. City, County, Utility, State, etc.). Bidder must provide a specific name with contact information that has been previously verified. The design engineer may not serve as reference for the Bidder.

Project A-4 is to have been completed by the Bidder or Subcontractor.

- Project A-4 demonstrates construction of a minimum of 500 LF by CIPP construction for sanitary sewer mains 8-inches and larger.
- Project A-4 was completed between 2016 and 2021.

Project A-4 Description

Name of Project: _____ Location: _____

Scope of Work: _____

Pipe Sizes: _____ Pipe Lengths: _____

Owner Name: _____ Owner Title: _____

Owner Phone Number: _____ Construction Cost: _____

Project Start Date: _____ Project End Date: _____

Additional Information: _____

*Owner is defined as entity the Bidder performed work for (i.e. City, County, Utility, State, etc.). Bidder must provide a specific name with contact information that has been previously verified. The design engineer may not serve as reference for the Bidder.

Special Specification 7185

Abandonment of Sanitary Sewer

Mains

1. DESCRIPTION

- 1.1. **Scope of Work.** Provide and install complete sanitary sewer construction and adjustments in conformity with the details shown on the plans, as described herein, in compliance with the Texas Department of Transportation's Utility Accommodation Policy (UAP)(Title 43, T.A.C., Sections 21.31-21.55) or as directed.

Reference specifications of the American Society for Testing and Materials (ASTM), American Water Works Association (AWWA) and American National Standards Institute (ANSI) will mean the latest standard in effect on the date of the proposal.

1.2. Definitions

- 1.2.1. Sanitary Sewer Main. Sanitary Sewer Main is defined as that portion of the sanitary sewer system which collects the wastewater from the service laterals, including stub outs from the nearest manhole, to the point of final destination.

- 1.2.2. Grouting of Sewer Mains. This item will govern the grouting of existing sewer mains with diameter of larger than 4-in. for the purposes of abandonment underneath roadways, paved areas, and at other designated locations. The location of this Work is as shown on the Contract Document plans and/or as encountered in the field during construction. The Contractor must, unless otherwise specified, furnish all labor, materials, equipment, tools and all other appurtenances necessary to abandon sewer lines segments in place by filling them with flowable cementitious low strength grout including plugs, bulkheads, excavation and backfill at locations as required to completely fill the line to be abandoned in place to protect against future collapse of the line.

2. MATERIALS

All materials furnished for this project will be new. A manufacturer's certificate of compliance will be acceptable for quality control.

- 2.1. **Grout.** When shown on the plans for various applications, the grout is to be a cement/sand/water mixture as approved. It will have a consistency such that it will flow into and completely fill all voids.

2.2. Submittals.

1. Proposed Mix Design Report for grout.
2. Submit manufacturers data for proposed plugs and detail of bulkhead.
3. Technical information for equipment and operations procedures including projected injection rate, grout pressure, method of controlling grout pressure, bulkhead and vent design and number of stages of grout application.
4. Submit project specific plan for abandonment at least 15 days prior to commencing grouting activities, describe proposed sequence, access points and other information pertinent for completion of Work.
5. Cement-based grout/flowable fill with self-leveling and non-shrink characteristics.
6. Unconfined compressive strength: Minimum 100 psi at 56 days as determined based on

average three tests for same placement. Present at least three acceptable strength tests for proposed mix design in mix design report.

3. CONSTRUCTION

3.1. **Abandon Sewer Lines.** Abandonment of existing sewer lines will be in accordance with the requirements under the "Grouting of Sewer Mains" section of this Special Specification.

3.2. **Grouting of Sewer Mains.** Abandoning and grouting of sewer lines must not occur until all existing sewer mains and services have been transferred to a relocated sewer line or another line as designated in the Contract Documents. The Contractor will be responsible for the satisfactory coordination of the pipe abandonments with other construction and activities in the area. Delays in work resulting from lack of coordination must not be cause for additional compensation. Any work involving or impacting asbestos concrete pipe must be in accordance with the specifications.

Remove or pump out any free standing wastewater in compliance with TCEQ and EARZ requirements prior to starting grout placement.

Place grout/flowable fill using concrete or grout pumps capable of continuous delivery at planned placement rate to fill volume between placement points not to exceed 500 linear feet at a time. Pump grout/flowable fill through bulkheads constructed for placement of PVC pipes or other methods to contain grout in line to be abandoned. These pipes will be used for injection points or vents during placement. Place grout/flowable fill under pressure into properly vented open system until grout emerges from vent pipes indicating pipe is completely filled. Pumping must be completed under sufficient pressure to overcome friction and to fill sewer main from downstream to upstream end. Remediate areas where grout/flowable fill did not fill voids in sewer main by pressure grouting from inside sewer main or from surface if necessary. Plug each end of the sewer main being abandoned. Ensure that concrete is placed around plug/bulkhead and around pipe including bedding area, such that it is not penetrable by groundwater and that bedding at this location is not a conduit for groundwater. The method of installation must meet the requirement of completely filling the existing sewer main and any voids adjacent to it.

Backfill to grade above pipe left in place. Place and compact backfill in compliance with the Special Specifications.

Remove, transport, and dispose of spoils. Spoils including pipe, unused grout/flowable fill and other unsuitable materials must be hauled to a facility permitted to accept the material. The abandonment method must provide for the release of air. When intermediate points are required to be constructed for the abandonment of the system, they must be a part of the abandonment project process. The method must provide for the isolation of sewer mains to be grouted from sewer mains that are abandoned in place without grouting as shown on the plans.

Mains to be abandoned must be grouted only if required by the contract documents and payment as per these specifications is provided.

3.3. **Abandon Manhole.** Manholes existing on sewer lines replaced by new sewer piping and which are no longer needed for the revised sewer network are to be classified as "Abandon Manhole". Work required on an abandoned manhole is to consist of installing a permanent concrete plug on all pipes within the manhole, removing the top of the manhole (e.g., cover, frame, grade rings, cone, etc.) to an elevation of 2-ft. below proposed subgrade or existing grade, whichever is the lower elevation, and

backfilling the manhole with a grout material as specified. The ring and cover of the manholes are to be removed and delivered to Sanitary Sewer Owners facility designated by the Engineer. If directed, drainage holes are to be drilled in the bottom of manhole walls prior to backfilling.

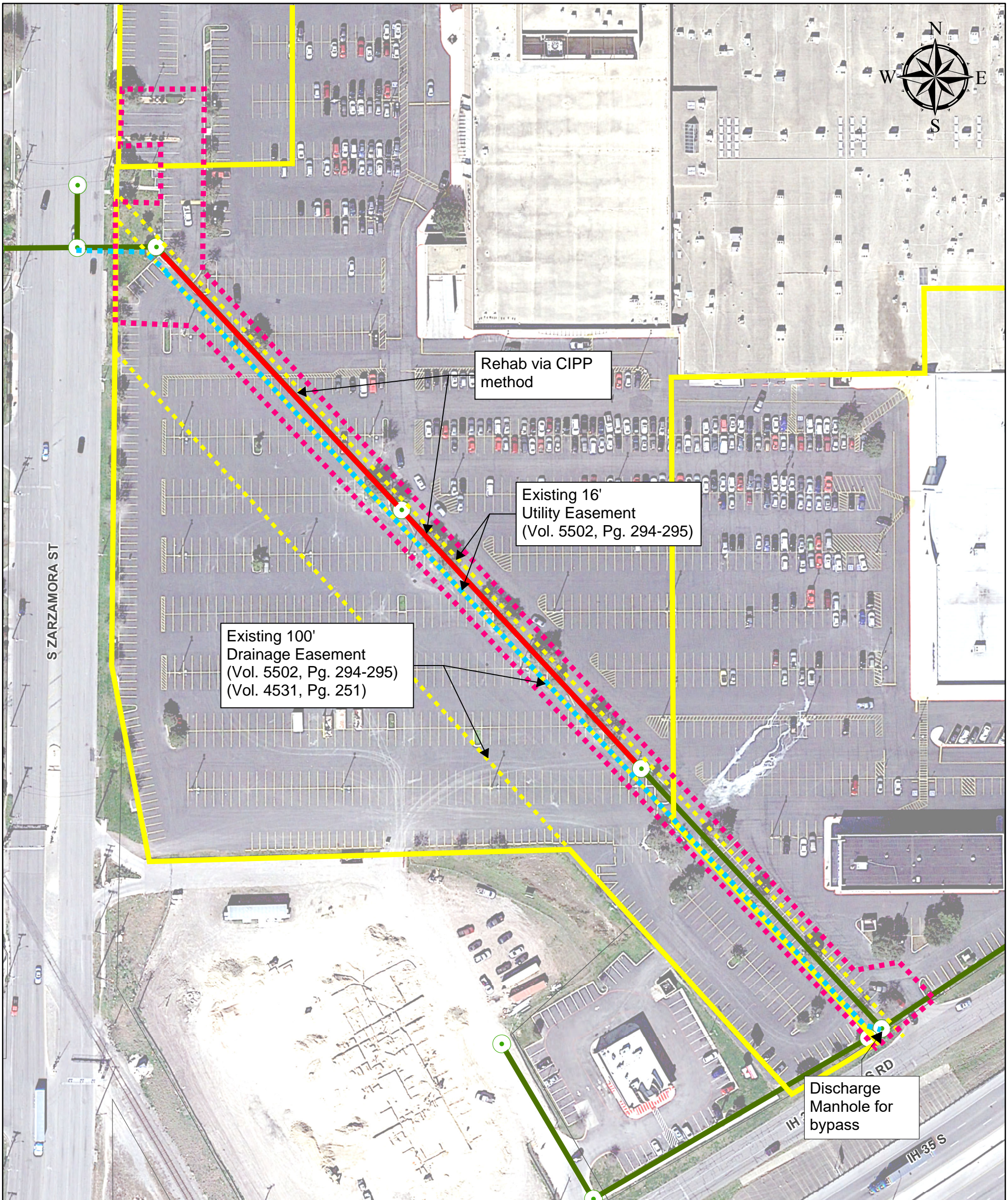
4. MEASUREMENT








Grouting of Abandoned Sewer Mains

All type of pipe abandonment with grout, including asbestos-concrete pipe, will be paid for at the contract bid price per linear foot for all size diameter of pipe, irrespective of the depth of the main, which will include the cost of removing the content within the pipe, cleaning, grouting, plugging, capping and abandoning all pipe, pipe bend section and all other appurtenances, and for dewatering, trenching, excavation and backfill, removal, transportation and disposal and all material or work necessary to properly abandon the pipe. In addition, the abandonment and grouting work for the sewer mains will also include grouting and abandonment of existing sewer manhole that will no longer be in service a result to the sewer main abandonment. No separate measurement will be done for work to abandon and grout existing sewer manhole as described in this specification.

5. PAYMENT

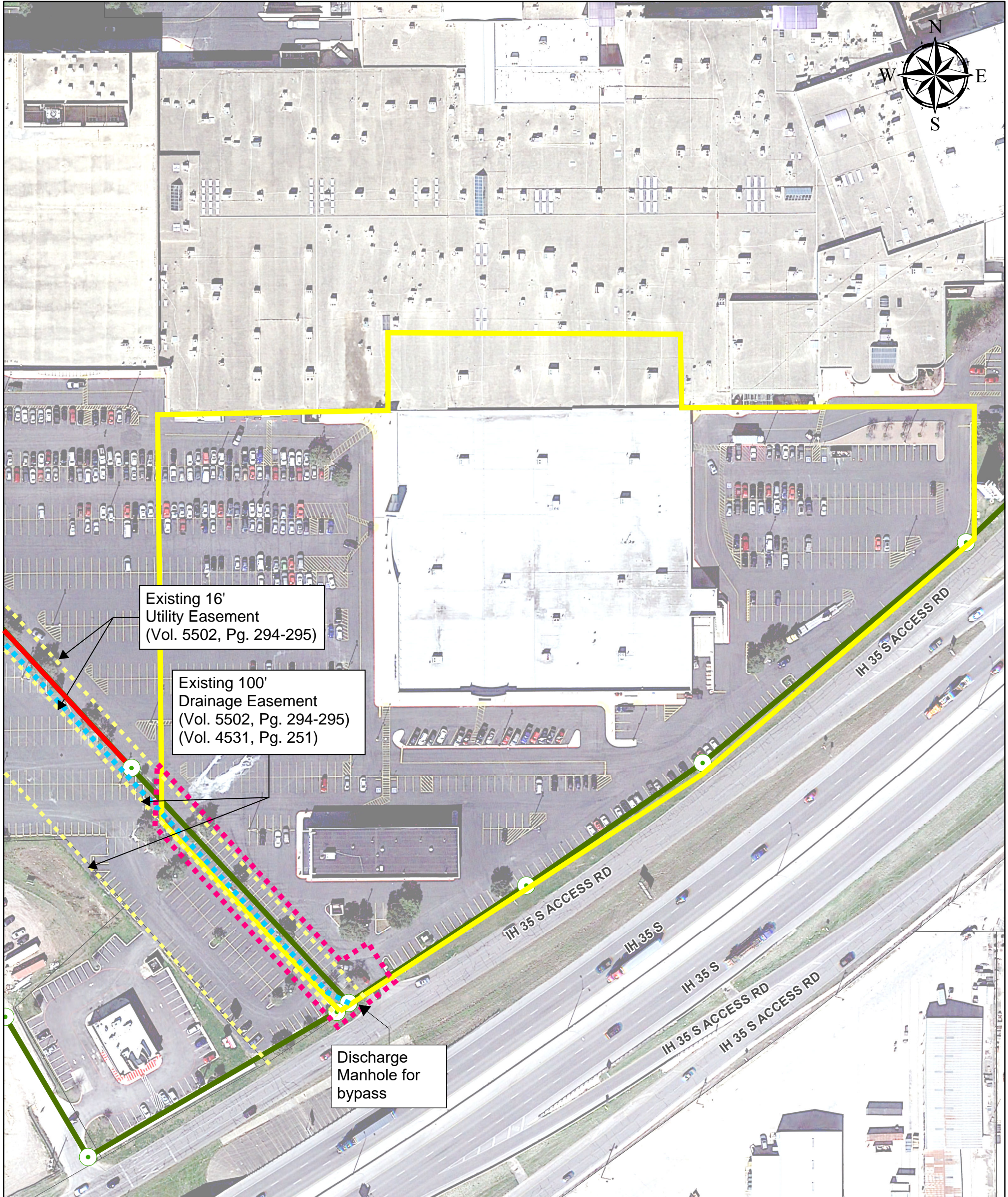
Grouting of Sewer Mains. Payment for "Grout Abandonment Sewer Main" will be made on the contract unit price per linear foot per each size diameter of pipe complete in place at locations shown on the plans. The item shall also include abandonment and grouting work for existing sewer manhole to be abandoned. Said price will be full compensation for furnishing all materials, labor, equipment, tools and incidentals necessary to complete the work described in this specification.



Legend	
	Sewer Main to be rehabilitated
	Existing Main
	Property Line
	Manhole
	Bypass Route
	Access Area
	Existing Easement

Summary:
 Right of Entry for access area.
 Sewer pipeline to be rehabilitated via cured in place pipe (CIPP) method.

Owner: SOUTH PARK MALL REALTY LLC & SOUTH PARK CH LLC & SOUTH PARK NASSIM LLC
Address: 2310 SW MILITARY DR & 2400 SW MILITARY DR
BCAD ID: 992063 & 440729
Legal: NCB 12328 BLOCK LOT W IRR 325.99 FT OF 2 2012 SPLIT PER LEASE AGREEMENT & NCB 9503 BLK LOT 18,19, 20 & 21



Legend	
	Sewer Main to be rehabilitated
	Existing Main
	Property Line
	Manhole
	Bypass Route
	Access Area
	Existing Easement

Summary:
 Right of Entry for access area.
 Sewer pipeline to be rehabilitated via CIPP method.

Owner: SOUTH PARK MALL REALTY LLC & SOUTH PARK CH LLC & SOUTH PARK NASSIM LLC
Address: SW MILITARY DR
BCAD ID: 1174171
Legal: NCB 12328 BLOCK LOT S IRR 496.88 FT OF 2

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 Last plotted by: De La Cruz, Ashon J. Plot Style: Garver Standard Half.ctb Plot Scale: 1:2 Plot Date: 11/22/2021 10:34 AM Plotter Used: \\gfyvdc02\Canon IR C4080 PS

GENERAL	
SHT. NO.	DESCRIPTION
01	COVER
02	INDEX OF DRAWINGS
03	ABBREVIATIONS
04	SAWS GENERAL NOTES
05	GENERAL CIVIL NOTES AND LEGEND
06	SUMMARY OF QUANTITIES
07	SITE MAPS & CONTROL POINTS 1
08	SITE MAPS & CONTROL POINTS 2
09	SITE MAPS & CONTROL POINTS 3
10	SITE MAPS & CONTROL POINTS 4
11	WW WHITE (NORTH) SURVEY CONTROL
12	LAN CONTROL SHEET

SANITARY SEWER IMPROVEMENTS, BYPASS PLANS & TRAFFIC CONTROL

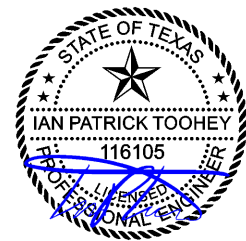
SHT. NO.	DESCRIPTION
13	SITE 11-COMPKEY 997074 STA.10+00-11+12 PIPE BURSTING
14	SITE 11-COMPKEY 997074-BYPASS PLAN - PIPE BURSTING
15	SITE 11-COMPKEY 997074-TRAFFIC CONTROL PLAN - PIPE BURSTING
16	SITE 15 -COMPKEY 1049932 & 1052004 REPLACEMENT & POINT REPAIR
17	SITE 15 -COMPKEY 1052004 STA.14+00-17+68 REPLACEMENT & POINT REPAIR
18	SITE 15 -COMPKEY 1049932 & 1052004 BYPASS PLAN REPLACEMENT
19	SITE 17 - COMPKEY 2389341 STA. 10+00 - 13+38 REPLACEMENT
20	SITE 17 - COMPKEY 2389341 BYPASS PLAN REPLACEMENT
21	SITE 17-COMPKEY 2389341-TRAFFIC CONTROL PLAN - REPLACEMENT
22	SITE 20 - COMPKEY 998897 - STA. 10+00 - 11+85 REPLACEMENT
23	SITE 20- COMPKEY 998897 - PAVEMENT REPLACEMENT
24	SITE 20 -COMPKEY 998897 BYPASS PLAN REPLACEMENT
25	SITE 20-COMPKEY 998897-TRAFFIC CONTROL PLAN - REPLACEMENT
26	SITE 25 - COMPKEY 1010539 - STA. 10+00 - 10+54 REPLACEMENT
27	SITE 25 - COMPKEY 1010539 BYPASS PLAN REPLACEMENT
28	SITE 25-COMPKEY 1010539 -TRAFFIC CONTROL PLAN - REPLACEMENT
29	SITE 27 - COMPKEY 3141411 - 10+00 - 12+60 PIPE BURST
30	SITE 27 - COMPKEY 3141411 BYPASS PLAN PIPE BURST
31	SITE 28 - COMPKEY 2388938A - 10+00 - 14+00 - INSTALLATION
32	SITE 28 - COMPKEY 2388938A - 14+00 - 15+48 - INSTALLATION
33	SITE 28 - COMPKEY 2388938B - 10+00 - 14+00 - INSTALLATION
34	SITE 28 - COMPKEY 2388938B - 14+00 - 18+00 - INSTALLATION
35	SITE 28 - COMPKEY 2388938B - 18+00 - 18+64 - INSTALLATION
36	SITE 28 - COMPKEY 2388938C - 10+00 - 11+10 -INSTALLATION
37	SITE 28 - COMPKEY 2388938 - ABANDONMENT PLAN
38	SITE 28-COMPKEY 2388938 BYPASS PLAN REPLACEMENT
39	SITE 28 - COMPKEY 2388938A -TRAFFIC CONTROL PLAN - REPLACEMENT & MH REHAB
40	SITE 28 - COMPKEY 2388938B -TRAFFIC CONTROL PLAN - REPLACEMENT & MH REHAB
41	SITE 28 - COMPKEY 2388938C -TRAFFIC CONTROL PLAN - REPLACEMENT & MH REHAB
42	SITE 34 - COMPKEY 1004800 - STA. 10+00-14+00 REPLACEMENT
43	SITE 34 - COMPKEY 996890, 994905 STA. 14+00-17+00 REPLACEMENT
44	SITE 34 - COMPKEY 994905 STA. 17+00-19+26 REPLACEMENT
45	SITE 34 - COMPKEY 994905, 996890,1004800 BYPASS PLAN
46	SITE 34 - COMPKEY 994905, 996890,1004800 -TRAFFIC CONTROL PLAN - REPLACEMENT
47	SITE 35 - COMPKEY 1004364 STA. 10+00-10+31 REPLACEMENT
48	SITE 35 - COMPKEY 1004364 BYPASS PLAN
49	SITE 36 - COMPKEY 994552 STA.10+00-10+14 REPLACEMENT
50	SITE 36 - COMPKEY 994552 BYPASS PLAN
51	SITE 37 - COMPKEY 997109 STA. 10+00-10+13 REPLACEMENT
52	SITE 37 - COMPKEY 997109 BYPASS PLAN


ARCADIS COMPKEY 1008520	
SHT. NO.	DESCRIPTION
53	SYMBOLS AND ABBREVIATIONS
54	WW WHITE RD (NORTH) PLAN AND PROFILE STA 10+00 TO STA 14+41.74 COMPKEY 1008520
55	BYPASS PUMPING PLAN SEGMENT 1008520 MILLING RD/ N WW WHITE RD
56	PHASE 1 TRAFFIC CONTROL PLAN SEGMENT 1008520 MILLING RD/ N WW WHITE RD 1 OF 2
57	PHASE 1 TRAFFIC CONTROL PLAN SEGMENT 1008520 MILLING RD/ N WW WHITE RD 2 OF 2
58	PHASE 2 TRAFFIC CONTROL PLAN SEGMENT 1008520 MILLING RD/ N WW WHITE RD 1 OF 2
59	PHASE 2 TRAFFIC CONTROL PLAN SEGMENT 1008520 MILLING RD/ N WW WHITE RD 2 OF 2
60	DETOUR PLAN SEGMENT 1008520 MILLING RD/ N WW WHITE RD
61	WW WHITE (NORTH) TREE PROTECTION AND SWPPP PLAN
62	TREE PROTECTION DETAILS
63	TEMPORARY SWPPP CONTROL MEASURES (1 OF 2)
64	TEMPORARY SWPPP CONTROL MEASURES (2 OF 2)
65	CITY OF SAN ANTONIO CONCRETE DRIVEWAY STANDARDS
66	CITY OF SAN ANTONIO MISCELLANEOUS CONSTRUCTION STANDARDS
67	TXDOT TEMP. EROSION, SEDIMENT & WATER POLLUTION CONTROL MEASURES
68	DETAILS TXDOT STANDARD DETAILS BC (1) - 14
69	DETAILS TXDOT STANDARD DETAILS BC (2) - 14
70	DETAILS TXDOT STANDARD DETAILS BC (3) - 14
71	DETAILS TXDOT STANDARD DETAILS BC (4) - 14
72	DETAILS TXDOT STANDARD DETAILS BC (5) - 14
73	DETAILS TXDOT STANDARD DETAILS BC (6) - 14
74	DETAILS TXDOT STANDARD DETAILS BC (7) - 14
75	DETAILS TXDOT STANDARD DETAILS BC (8) - 14
76	DETAILS TXDOT STANDARD DETAILS BC (9) - 14
77	DETAILS TXDOT STANDARD DETAILS BC (10) - 14
78	DETAILS TXDOT STANDARD DETAILS BC (11) - 14
79	DETAILS TXDOT STANDARD DETAILS BC (12) - 14

LAN BN31-COMPKEY 975893	
SHT. NO.	DESCRIPTION
80	PLAN AND PROFILE SHEET
81	CONCEPTUAL BYPASS SHEET
82	TCP/PAVEMENT REPAIR SHEET


CDS MUERY-COMPKEY 975926 & 975975	
SHT. NO.	DESCRIPTION
83	OVERALL PROJECT LOCATION AND CONTROL SUGGESTED BYPASS PLAN
84	LINE N PLAN (STA. 1+00 TO STA. 5+00)
85	LINE N PLAN (STA. 5+00 TO STA. 8+42.94)

STANDARD DETAILS	
SHT. NO.	DESCRIPTION
86	GENERAL DETAILS 1
87	SANITARY SEWER DETAILS-1
88	SANITARY SEWER DETAILS-2
89	SANITARY SEWER DETAILS-3
90	COSA TBCS 1
91	COSA TBCS 2
92	COSA TBCS 3
93	COSA TBCS 4
94	COSA TREE PRESERVATION




 Registration No. F-5713
 13750 San Pedro Avenue
 Suite 350
 San Antonio, TX 78232
 (210) 447-6250

No.	Revision	Drawn	Approved	Date
1	Addendum No. 1	AJD		11/21


REVISIONS
 BPC EAST SEWERSHED
 PACKAGE 4B
 INDEX OF DRAWINGS

DEVELOPER: SAN-ANTONIO-WATER-SYSTEM
 CONT. BUDGET PROJ. 00-00-00

SUBMITTED _____
 APPROVED _____

MAP No. 000-000
 SECT. No. _____
 DR. ADG/KS/CK. IT JOB No. 21-4508

SHEET
 02
 OF 94

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ITEM NO	SPEC NO	DESCRIPTION	UNIT	ESTIMATED QUANTITY
1	103.1	Remove Concrete Curb (COSA Spec)	LF	376
2	103.3	Remove Sidewalk & Driveway (COSA Spec)	SF	3030
3	103.4	Remove Miscellaneous Concrete (COSA Spec)	SF	20
4	202	Prime Coat (COSA Spec)	GAL	514
5	203	Tack Coat (COSA Spec)	GAL	1253
6	205.2	Hot Mix Asphaltic Pavement- Type B (10" Comp. Depth) (COSA Spec)	SY	8
7	205.2	Hot Mix Asphaltic Pavement- Type B (12.5" Comp. Depth) (COSA Spec)	SY	56
8	205.4	Hot Mix Asphaltic Pavement- Type D (2" Comp. Depth) (COSA Spec)	SY	10718
9	206.1	Asphalt Treated Base (10" Comp. Depth) (COSA Spec)	SY	1355
10	208.1	Salvaging, Hauling, and Stockpiling Reclaimable Asphaltic Pavement (2 inches depth), (COSA Spec)	SY	10296
11	413.1	Flowable Fill (low strength) (6") (COSA Spec)	CY	93
12	500	Concrete Curb (COSA Spec)	LF	46
13	500	Concrete Curb and Gutter (COSA Spec)	LF	360
14	502	Concrete Sidewalk (COSA Spec)	SY	14
15	503	Asphalt Concrete Driveway (COSA Spec)	SY	132
16	503	Concrete Driveway (COSA SPEC)	SY	3
17	503	Portland Cement Concrete Driveway - Commercial (COSA Spec)	SY	85
18	503	Portland Cement Concrete Driveway (COSA Spec)	SY	314
19	515	Topsoil	CY	3
20	516.1	Bermuda Sodding	SY	59
21	516.2	St. Augustine Sodding	SY	101
22	530	Barricades, Signs, And Traffic Handling, (COSA Spec) Site 11	LS	1
23	530	Barricades, Signs, And Traffic Handling, (COSA Spec) Site 15A	LS	1
24	530	Barricades, Signs, And Traffic Handling, (COSA Spec) Site 17	LS	1
25	530	Barricades, Signs, And Traffic Handling, (COSA Spec) Site 20	LS	1
26	530	Barricades, Signs, And Traffic Handling, (COSA Spec) Site 25	LS	1
27	530	Barricades, Signs, And Traffic Handling, (COSA Spec) Site 28	LS	1
28	530	Barricades, Signs, And Traffic Handling, (COSA Spec) Site 34	LS	1
29	530	Barricades, Signs, and Traffic Handling, (COSA Spec) (N. WW White Rd.)	LS	1
30	530	Barricades, Signs, and Traffic Handling, (COSA Spec) Site BN31	LS	1
31	530	Barricades, Signs, and Traffic Handling, (COSA Spec) Line N	LS	1
32	535.1	4-inch Wide Yellow Line (COSA Spec)	LF	756
33	540.7	Temporary Construction Perimeter Fence (Install/Remove) Site 17	LS	1
34	540.7	Temporary Construction Perimeter Fence (Install/Remove) (N. WW White Rd.)	LS	1

ITEM NO	SPEC NO	DESCRIPTION	UNIT	ESTIMATED QUANTITY
35	550	Trench Excavation Safety Protection	LF	4427
36	552.1	Removal and Replacement of Existing Irrigation System (COSA Spec)	LS	1
37	834	Remove and Replace Fire Hydrant	EA	1
38	848	8" PVC SDR-26 (160 PSI) Sewer Line (0'-6')	LF	281
39	848	8" PVC SDR-26 (160 PSI) Sewer Line (6'-14')	LF	1477
40	848	8" PVC SDR-26 Sewer Line (0'-6')	LF	867
41	848	8" PVC SDR-26 Sewer Line (6'-14')	LF	216
42	848	10" PVC SDR-26 (160 PSI) Sewer Line (6'-14')	LF	926
43	848	10" PVC SDR-26 Sewer Line (6'-14')	LF	432
44	848	12" PVC SDR-26 Sewer Line (6'-14')	LF	185
45	848	24" PVC SDR-26 Sewer Line (6'-14')	LF	43
46	851	Manhole Adjustment	EA	9
47	852	External Drop Connection	EA	3
48	852	Sanitary Sewer Manhole 4' Dia. (0'-6')	EA	19
49	852	Extra Depth Manhole (>6')	VF	26
50	852.1	Sanitary Sewer Doghouse Manhole 4' Dia. (0'-6')	EA	1
51	854	Two-Way Sanitary Sewer Clean-Out	EA	40
52	854	Sanitary Sewer Laterals (SDR 26-2241, 160 PSI)	LF	345
53	855	Reconstruction of Existing 4' Dia. Manhole	EA	3
54	858	Concrete Encasement, Cradles, Saddles and Collars	CY	41
55	859	Reconstruction of Existing Manholes using Polymer Concrete Manholes - 108" x 108" Vault	EA	3
56	859	Reconstruction of Existing Manholes using Polymer Concrete Manholes - 96" Dia. Manhole	EA	3
57	860	Vertical Stacks	VF	8
58	862	Abandon Existing Sewer Line Site 25	LS	1
59	862	Abandon Existing Sewer Lines Site 28	LS	1
60	862	Abandon Existing Sewer Lines Site BN31	LS	1
61	864-S1	Bypass Pumping Small Diameter Sanitary Sewer, (<24") Site 11	LS	1
62	864-S1	Bypass Pumping Small Diameter Sanitary Sewer, (<24") Site 15	LS	1
63	864-S1	Bypass Pumping Small Diameter Sanitary Sewer, (<24") Site 17	LS	1
64	864-S1	Bypass Pumping Small Diameter Sanitary Sewer, (<24") Site 20	LS	1
65	864-S1	Bypass Pumping Small Diameter Sanitary Sewer, (<24") Site 25	LS	1
66	864-S1	Bypass Pumping Small Diameter Sanitary Sewer, (<24") Site 27	LS	1
67	864-S1	Bypass Pumping Small Diameter Sanitary Sewer, (<24") Site 28	LS	1
68	864-S1	Bypass Pumping Small Diameter Sanitary Sewer, (<24") Site 34	LS	1

ITEM NO	SPEC NO	DESCRIPTION	UNIT	ESTIMATED QUANTITY
69	864-S1	Bypass Pumping Small Diameter Sanitary Sewer, (<24") (N. WW White Rd.)	LS	1
70	864-S1	Bypass Pumping Small Diameter Sanitary Sewer, (<24") Site BN31	LS	1
71	864-S1	Bypass Pumping Small Diameter Sanitary Sewer, (<24") Line N	LS	1
72	864-S2	Bypass Pumping Large Diameter, (>=24") Site 35	LS	1
73	864-S2	Bypass Pumping Large Diameter, (>=24") Site 36	LS	1
74	864-S2	Bypass Pumping Large Diameter, (>=24") Site 37	LS	1
75	866	Sewer Main Television Inspection - 8" through 15"	LF	4263
76	866	Sewer Main Television Inspection - 15" through 24"	LF	786
77	900	Pipe Bursting - 8" Sanitary Sewer Main (5'-7' Depth)	LF	145
78	900	Pipe Bursting - 8" Sanitary Sewer Main (8'-15' Depth)	LF	260
79	901	Rehabilitation of Sanitary Sewer by Cured-In-Place Pipe (Hot Water) - 18" (All Depths)	LF	743
80	910	Rehabilitation of Existing 4' Dia. Manhole	VF	97
81	1103	Obstruction Removal - Remote Device	EA	2
82	1109	Service Reconnections - Open Cut	EA	3
83	SS 2010	Fence Removal and Replacement Site 25	LS	1
84	SS 2010	Fence Removal and Replacement (N. WW White Rd.)	LS	1
85	SS 3001	Power Pole Bracing	EA	12
86	SS 3300	Sanitary Sewer Private Laterals (4"-6") (Including COSA Permit & Licensed Plumber)	LF	1775
87	SS 801	Tree Protection	EA	2
88	SS 802	Tree Pruning	EA	1
89	TXDOT SS7185	Grout Abandonment Sewer Main	LF	432

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GARVER Registration No. F-5713
13750 San Pedro Avenue
Suite 350
San Antonio, TX 78232
(210) 447-6250

No.	Revision	Drawn	Approved	Date
△	Addendum No. 1	AJD		11/21

REVISIONS

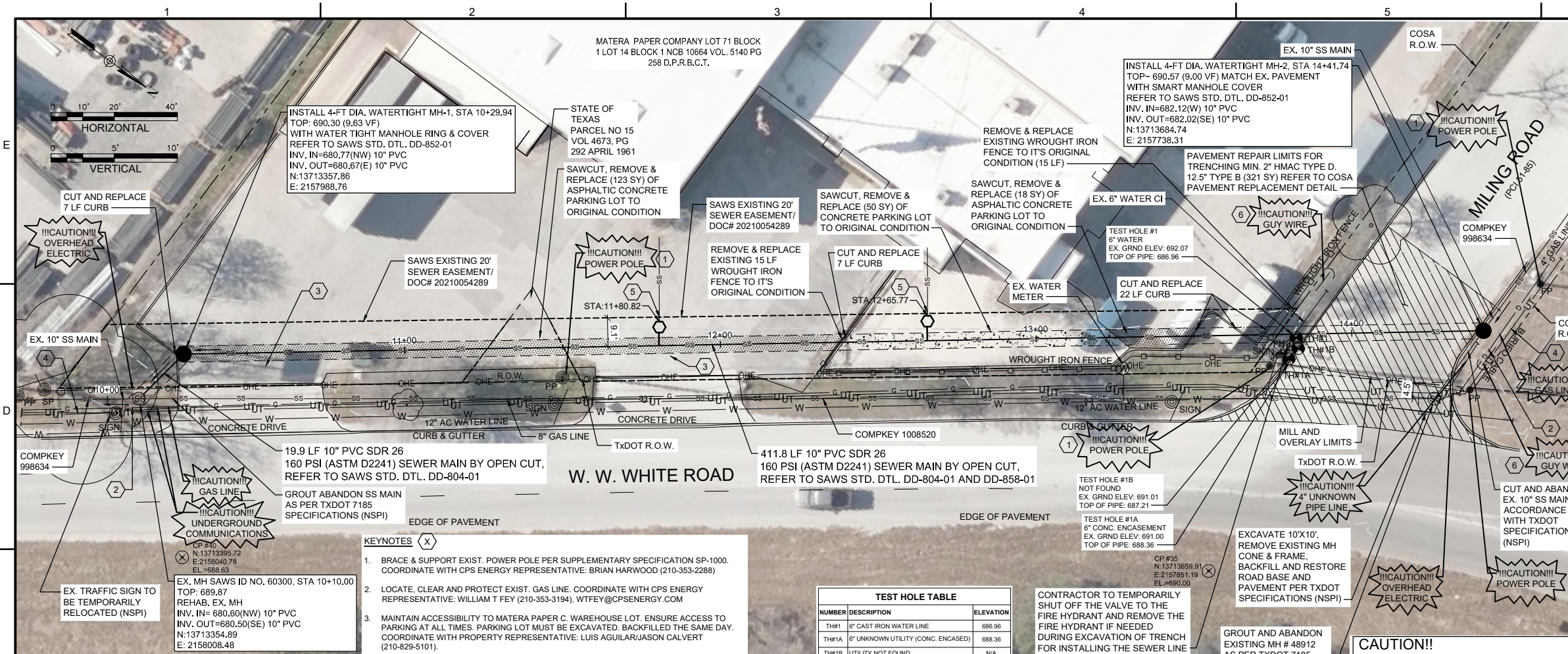
BPC EAST SEWERSHED PACKAGE 4B

SUMMARY OF QUANTITIES

DEVELOPER: SAN-ANTONIO-WATER-SYSTEM
CONT. BUDGET PROJ. 00-00-00

SUBMITTED _____
APPROVED _____

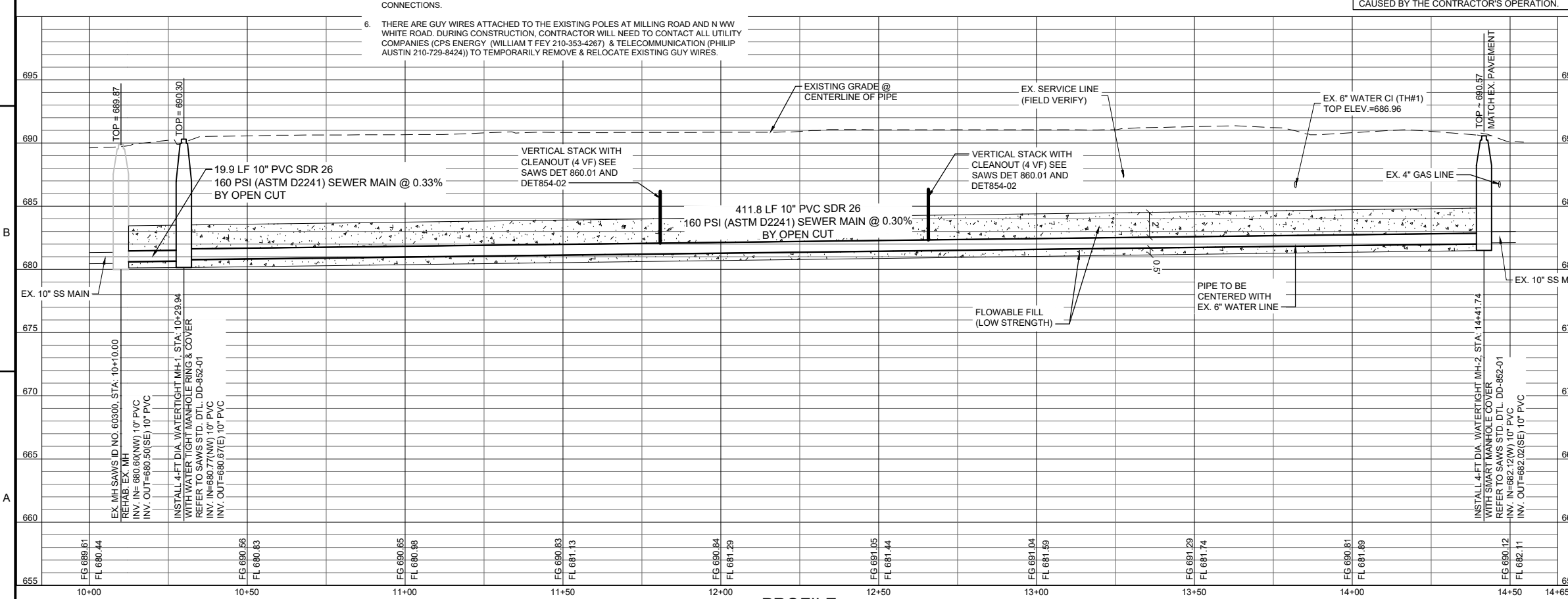
MAP No. 000-000 SHEET 06
SECT. No. _____ OF 94
DR. ADG/KS/CK. IT JOB No. 21-4508



TEST HOLE TABLE

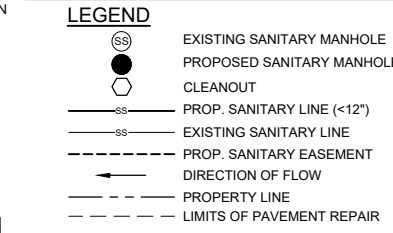
NUMBER	DESCRIPTION	ELEVATION
TH#1	6" CAST IRON WATER LINE	686.96
TH#1A	6" UNKNOWN UTILITY (CONC. ENCASED)	688.36
TH#1B	UTILITY NOT FOUND	N/A

PLAN



PROFILE


ITEM	DESCRIPTION	UNIT	QTY
103.00	REMOVE CONCRETE CURB	LF	36
103.00	REMOVE CONCRETE SIDEWALKS & DRIVEWAYS	SF	2690
202.10	PRIME COAT	GAL	75
203.00	TACK COAT	GAL	113
205.00	HOT MIX ASPHALTIC PAVEMENT, TYPE B (12.5" COMP. DEPTH)	SY	56
205.00	HOT MIX ASPHALTIC PAVEMENT, TYPE D (2" COMP. DEPTH)	SY	320
206.00	SALVAGING, HAULING & STOCKPILING RECLAIMABLE ASPHALTIC PAVEMENT (2" DEPTH)	SY	320
413.10	FLOWABLE FILL (LOW STRENGTH) (6")	CY	88
500.00	CONCRETE CURB AND GUTTER (COSA SPEC)	LF	36
503.20	PORTLAND CEMENT CONCRETE DRIVEWAYS (COMMERCIAL) (COSA SPEC)	SY	299
503.40	ASPHALTIC CONCRETE DRIVEWAY (COSA SPEC)	SY	145
515.00	TOPSOIL	CY	3
516.00	BERMUDA SODDING	SY	27
530.10	BARRICADES, SIGNS, AND TRAFFIC HANDLING (COSA SPEC) (COMPKEY 1008520)	LS	1
540.70	TEMPORARY CONSTRUCTION PERIMETER FENCE (INSTALL/REMOVE)	LS	1
550.00	TRENCH EXCAVATION SAFETY PROTECTION	LF	432
848.00	10" PVC SDR-26 SEWER LINE (6'-14')	LF	432
852.00	SANITARY SEWER MANHOLE 4' DIA. (8'-6")	EA	2
852.00	EXTRA DEPTH MANHOLES (GREATER THAN 6')	VF	7
854.00	TWO-WAY SANITARY SEWER CLEAN-OUT	EA	2
860.00	VERTICAL STACKS	VF	8
TXDOT 557.198	GROUT ABANDONMENT SEWER MAIN	LF	432
864.00	SMALL DIAMETER BYPASS PUMPING SYSTEM	LS	1
866.00	POST SEWER MAIN TELEVISION INSPECTION (8'-24')	LF	432
SS 801	TREE PROTECTION	EA	2
SS 802	TREE PRUNING	EA	1
SS 910.	MANHOLE REHABILITATION (STANDARD MANHOLES 4'-8" DIAMETER)	VF	10
SS 3001	POWER POLE BRACING	EA	3
3300.00	SANITARY SEWER PRIVATE LATERALS (4'-6") (INCLUDING COSA PERMIT & LICENSED PLUMBER)	LF	50
2010	FENCE REMOVAL AND REPLACEMENT	LS	1
834	REMOVE AND REPLACE FIRE HYDRANT	EA	1



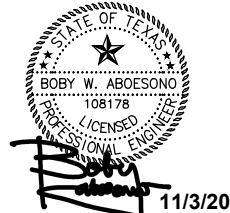
- NOTES:**
- SEE TREE PROTECTION NOTES AND TREE PROTECTION DETAILS ON SHEET DET-01.
 - SEE SAWS GENERAL CONSTRUCTION NOTES FOR SMARTLID MANHOLE COVER.
 - TRENCH PROTECTION SAFETY PER OSHA REQUIREMENTS. FOR EXCAVATION DEEPER THAN 20', A TRENCH SAFETY PLAN DESIGNED BY A TEXAS LICENSED ENGINEER (SIGNED AND SEALED) SHALL BE SUBMITTED AS PRODUCT DATA TO SAWS AND ENGINEER.
 - ALL SANITARY SEWER MAIN CONSTRUCTION SHALL COMPLY WITH SAWS SPEC 848, REF TO SAWS STD. DTL. DD-804-01.
 - ALL SANITARY SEWER MANHOLE CONSTRUCTION SHALL COMPLY WITH SAWS SPEC 852, REF TO SAWS STD. DTL. DD-852-01 TO 09.
 - ALL SANITARY SEWER LATERAL CONSTRUCTION SHALL COMPLY WITH SAWS SPEC 854, REF TO SAWS STD. DTL. DD-854-02.
 - CONSTRUCTION OF CONCRETE ENCASEMENT, CRADLES, SADDLES AND COLLARS SHALL COMPLY WITH SAWS SPEC 858, REF TO SAWS STD. DTL. DD-858-01 TO 02.
 - ABANDONMENT OF SANITARY SEWER MAINS AND MANHOLES SHALL COMPLY WITH SAWS SPEC 862.
 - ALL PAVING REPLACEMENT SHALL COMPLY WITH COSA SPEC 511, REF TO SHEET DET-04.
 - GAS MAINS TO BE SUPPORTED AND PROTECTED IF EXPOSED, DURING CONSTRUCTION.
 - CONTRACTOR SHALL NOT USE MECHANICAL DIGGING METHODS TO EXPOSE THE 2" OF GAS MAIN AND SHALL COORDINATE WITH CPS ENERGY A MINIMUM OF 2 WEEKS PRIOR TO PLANNED EXCAVATION AROUND GAS MAIN TO SCHEDULE A CPS INSPECTOR TO BE ON SITE.
 - CONTRACTOR SHALL PROVIDE MANHOLES WITH WATER TIGHT RING AND COVER.
 - SMART MANHOLE COVERS: THE CONTRACTOR SHALL NOTIFY SAWS EOC AT 210-704-SAWS (210-233-7297) AND EITHER AMERICA ESPINOZA AT 210-233-2934 OR JOSE A. MARTINEZ AT 210-233-3071 A MINIMUM OF 72 HOURS, NOT COUNTING WEEKENDS OR SAWS HOLIDAYS, BEFORE WORKING ON THE PIPE OR MANHOLE, IN ORDER TO HAVE SAWS REMOVE THE SMART COVER. ANY DAMAGE DONE TO THE SMART COVER WILL BE CHARGED TO THE CONTRACTOR THROUGH A CHANGE ORDER.

TRENCH EXCAVATION SAFETY PROTECTION:

- CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/ GEOTECHNICAL/ SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS, 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.
- SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED 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.




FIRM REGISTRATION NUMBER: F-533



11/3/2021

SAN ANTONIO WATER SYSTEM



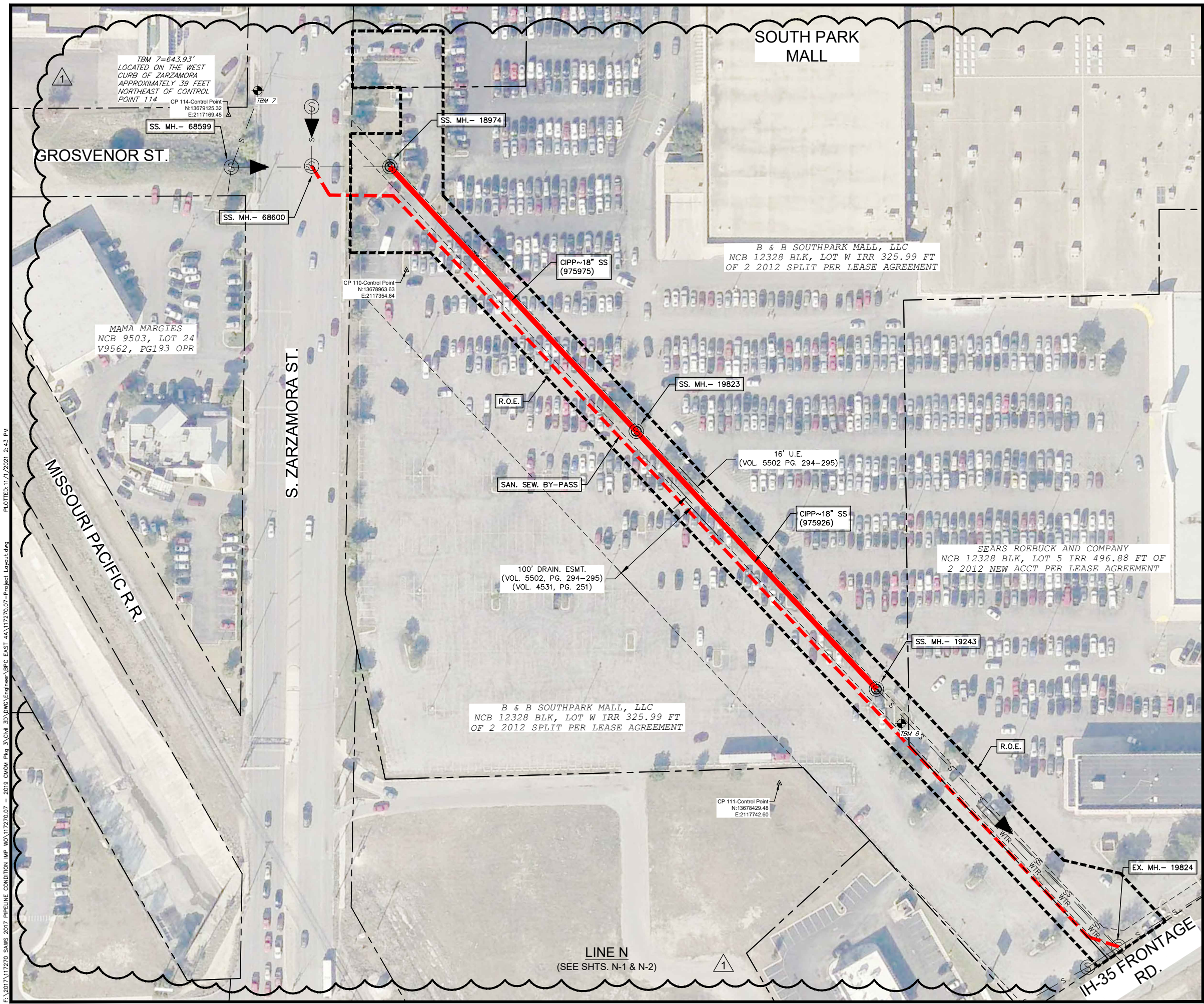
BPC EAST SEWERSHED PACKAGE 4B JOB NO. 21-4508

NO.	DATE	REVISION	BY
1	11/3/21	ADDENDUM NO. 1	BWA

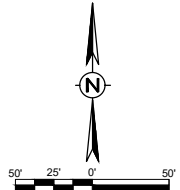
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DATE: OCTOBER 2021
PROJECT NO.: 02196080C.0000
DESIGNED BY: B.ABOESONO
DRAWN BY: N. CANDELAS
CHECKED BY: J. RECK

SHEET TITLE: **WW WHITE RD (NORTH) PLAN AND PROFILE STA 10+00 TO STA 14+1.74 COMPKEY 1008520**

SCALE: AS SHOWN
SHEET: **C-01**
54 OF 94



PROJECT SITE MAP



LEGEND

- PROP. SAN. SEW. ALIGNMENT
- - - - - PROP. BY-PASS
- PROP. RIGHT-OF-ENTRY

100% DESIGN

CDS Muery F-1733

CURT W. RAABE
74693
PROFESSIONAL ENGINEER
11/1/2021

CDS muery
ENGINEERS | SURVEYORS
100 NE Loop 410, Ste. 300 | San Antonio, Texas 78216
(210) 581-1111 | TBPE No. F-1733 | TBPLS No. 100495-00

REV. NO.	DATE	DESCRIPTION	BY
1	2021/11/01	ADDENDUM NO. 1- ADDED SHEET	

SAN ANTONIO WATER SYSTEM

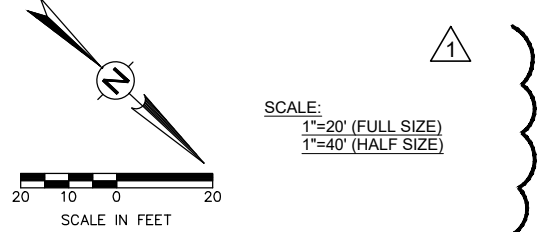
**BPC EAST SEWERSHED PACKAGE 4B
LINE N - SOUTH PARK MALL**

**OVERALL PROJECT
LOCATION AND CONTROL
SUGGESTED BYPASS PLAN**

DATE: NOVEMBER 2021	SAWS PROJECT NO. 21-4508	SHEET G-8
DESIGN: CWR	CDS PROJECT NO. 117270.07	83 OF 94
DRAWN: IL		
CHECKED: MR		

EA:2021\117270.SAWS_2017_PIPELINE_CONDITION_MP_NO\117270.07 - 2019_CADD_Pkg_3\CADD_3D\DWG\Engineer\BPC_EAST_4A\117270.07-Project_Layout.dwg PLOTTED:11/1/2021 2:43 PM

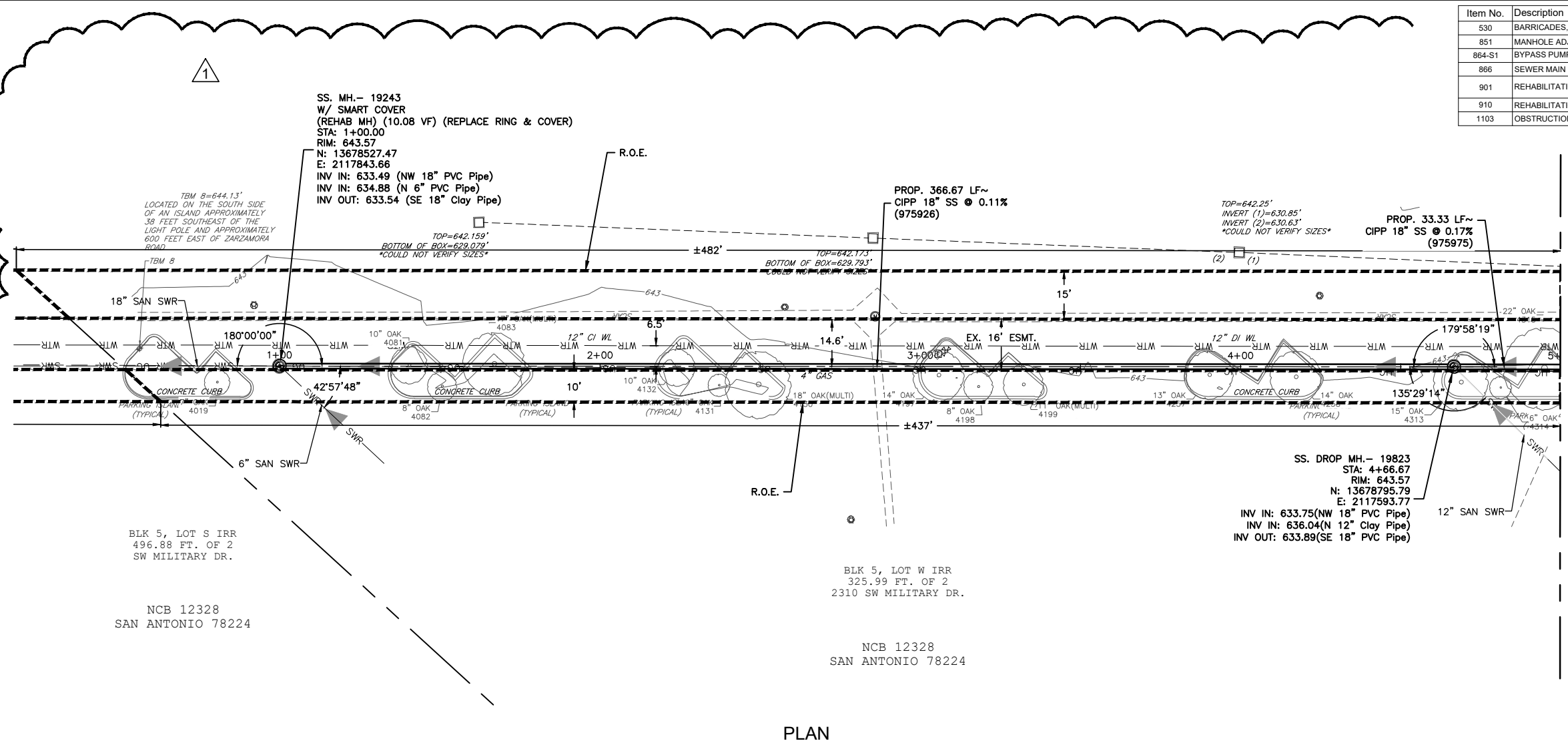
Item No.	Description	Unit	Quantity
530	BARRICADES, SIGNS AND TRAFFIC HANDLING (COSA SPEC) LINE N	LS	1
851	MANHOLE ADJUSTMENT	EA	1
864-S1	BYPASS PUMPING SMALL DIAMETER SANITARY SEWER (< 24") LINE N	LS	1
866	SEWER MAIN TELEVISION INSPECTION - 15" THROUGH 24"	LF	400
901	REHABILITATION OF SANITARY SEWER BY CURED-IN-PLACE PIPE (HOT WATER) - 18" (ALL DEPTHS)	LF	400
910	REHABILITATION OF EXISTING 4' DIA. MANHOLE	VF	11
1103	OBSTRUCTION REMOVAL - REMOTE DEVICE	EA	1



LEGEND

- PROPOSED SAN. SEW. MANHOLE
- PROPOSED SAN. SEW.
- PROPOSED SAN. SEW. LATERAL
- PROPOSED SAN. SEW. CLEANOUT
- P.V.M.T. REPLACEMENT
- MILL & OVERLAY
- EXISTING SAN. SEW. LATERAL
- EXISTING SAN. SEW. SERVICE W/ CLEANOUT
- CONTROL POINT
- BASELINE
- EXISTING R.O.W. (ASSUMED)
- EXISTING SAN. SEW.
- EXISTING OVERHEAD UTILITY
- EXISTING UNDERGROUND ELECTRIC
- EXISTING UNDERGROUND GAS MAIN
- EXISTING UNDERGROUND TELEPHONE
- EXISTING UNDERGROUND COMM./FIBER OPTIC LINE
- EXISTING WATER LINE
- EXISTING RECYCLE MAIN
- EXISTING GAS LINE
- RIGHT-OF-WAY/ PROPERTY LINE
- EASEMENT LINE
- EXISTING WOOD FENCE
- EXISTING CHAIN LINK FENCE
- EXISTING IRON FENCE
- EXISTING EDGE OF ASPHALT
- EXISTING POWER POLE W/GUY WIRE
- EXISTING ELECTRICAL PEDESTAL
- EXISTING SANITARY SEWER MANHOLE
- EXISTING MANHOLE
- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- EXISTING WATER METER
- EXISTING GAS METER
- EXISTING GAS VALVE
- EXISTING SIGN
- EXISTING TREE/VEGETATION

MATCHLINE STA. 5+00.00
(FOR CONTINUATION, SEE SHIT. N-2)



PLAN

LINE N
SEGMENTS: 975926 & 975975

CAUTION:
EXISTING ELECTRICAL LINES PRESENT. CONTRACTOR TO EXERCISE CAUTION WHEN WORKING AROUND ELECTRICAL LINES.

CAUTION:
EXISTING GAS LINES PRESENT. CONTRACTOR TO EXERCISE CAUTION WHEN WORKING AROUND GAS LINES.

NOTE
LOCATIONS AND DEPTHS OF EXISTING UTILITIES AND SERVICE LATERALS SHOWN ON PLANS ARE UNDERSTOOD TO BE APPROXIMATE. ACTUAL LOCATIONS AND DEPTHS MUST BE FIELD VERIFIED BY THE CONTRACTOR AT LEAST ONE WEEK PRIOR TO CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE UTILITY SERVICE LINES AS REQUIRED FOR CONSTRUCTION AND TO PROTECT THEM DURING CONSTRUCTION AT NO COST TO SAWS.

TRENCH EXCAVATION SAFETY PROTECTION

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED 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. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED 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.

100% DESIGN

CDS muery
ENGINEERS | SURVEYORS
100 NE Loop 410, Ste. 300 | San Antonio, Texas 78216
(210) 581-1111 | TBPE No. F-1733 | TBPLS No. 100495-00

REV. NO.	DATE	DESCRIPTION	BY
1	2021/11/01	ADDENDUM NO. 1- ADDED SHEET	

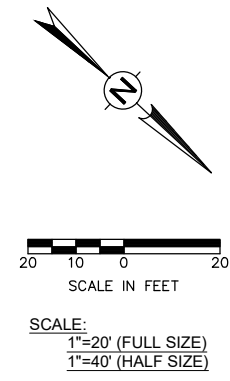
BPC EAST SEWERSHED PACKAGE 4B
LINE N - SOUTH PARK MALL

LINE N
PLAN (STA. 1+00 TO STA. 5+00)

DATE: NOVEMBER 2021	SAWS PROJECT NO. 21-4508	SHEET N-1 84 OF 94
DESIGN: CWR	CDS PROJECT NO. 117270.07	
DRAWN: IL		
CHECKED: MR		

PLOTED: 11/1/2021 2:47 PM
F:\2021\117270 SANIS 2017 PIPELINE CONDITION IMP NO.117270.07 - 2019 CADD Pkg 3\Cadd 3D\DWG\Engineer\BPC EAST 4A\117270.07-Zarzamora PB.dwg

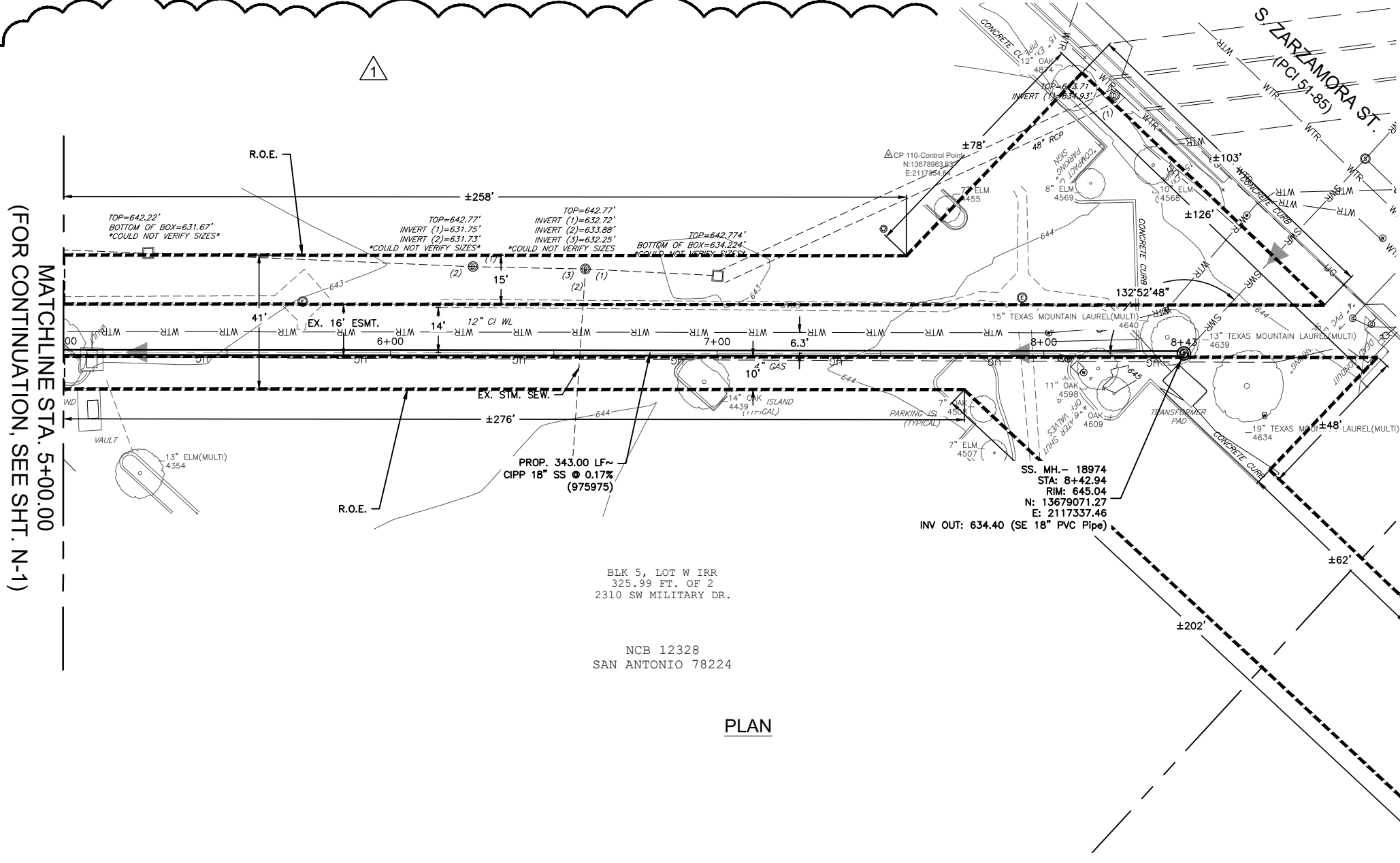
Item No.	Description	Unit	Quantity
866	SEWER MAIN TELEVISION INSPECTION - 15" THROUGH 24"	LF	343
901	REHABILITATION OF SANITARY SEWER BY CURED-IN-PLACE PIPE (HOT WATER) - 18" (ALL DEPTHS)	LF	343
1103	OBSTRUCTION REMOVAL - REMOTE DEVICE	EA	1



LEGEND

- PROPOSED SAN. SEW. MANHOLE
- PROPOSED SAN. SEW.
- PROPOSED SAN. SEW. LATERAL
- PROPOSED SAN. SEW. CLEANOUT
- P/V.M. REPLACEMENT
- MILL & OVERLAY
- EXISTING SAN. SEW. LATERAL
- EXISTING SAN. SEW. SERVICE W/ CLEANOUT
- CONTROL POINT
- BASELINE
- EXISTING R.O.W. (ASSUMED)
- EXISTING SAN. SEW.
- EXISTING OVERHEAD UTILITY
- EXISTING UNDERGROUND ELECTRIC
- EXISTING UNDERGROUND GAS MAIN
- EXISTING UNDERGROUND TELEPHONE
- EXISTING UNDERGROUND COMM./FIBER OPTIC LINE
- EXISTING WATER LINE
- EXISTING RECYCLE MAIN
- EXISTING GAS LINE
- RIGHT-OF-WAY/ PROPERTY LINE
- EASEMENT LINE
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- EXISTING POWER POLE W/GUY WIRE
- EXISTING ELECTRICAL PEDESTAL
- EXISTING SANITARY SEWER MANHOLE
- EXISTING MANHOLE
- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- EXISTING WATER METER
- EXISTING GAS METER
- EXISTING GAS VALVE
- EXISTING SIGN
- EXISTING TREE/VEGETATION

MATCHLINE STA. 5+00.00
(FOR CONTINUATION, SEE SHT. N-1)



PLAN

TRENCH EXCAVATION SAFETY PROTECTION

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED 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. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED 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.

CAUTION:
EXISTING ELECTRICAL LINES PRESENT. CONTRACTOR TO EXERCISE CAUTION WHEN WORKING AROUND ELECTRICAL LINES.

**LINE N
SEGMENT: 975975**

CAUTION:
EXISTING GAS LINES PRESENT. CONTRACTOR TO EXERCISE CAUTION WHEN WORKING AROUND GAS LINES.

NOTE
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100% DESIGN

REV. NO.	DATE	DESCRIPTION	BY
1	2021/11/01	ADDENDUM NO. 1- ADDED SHEET	
		BPC EAST SEWERSHED PACKAGE 4B LINE N - SOUTH PARK MALL LINE N PLAN (STA. 5+00 TO STA. 8+42.94)	
DATE: NOVEMBER 2021	SAWS PROJECT NO. 21-4508	SHEET N-2	
DESIGN: CWR	CDS PROJECT NO. 117270.07	85 OF 94	
DRAWN: IL			
CHECKED: MR			

PLOTTED: 11/1/2021 2:46 PM
F:\2021\117270 SAWS 2017 PIPELINE CONDITION IMP NO.117270.07 - 2019 CADD Pkg 3\Cadd 3D\DWG\Engineer\BPC EAST 4A\117270.07-Zarzamora PB.dwg