



**BPC SEWERSHED PACKAGE 5 – PIPE BURST & OPEN CUT  
SAWS Solicitation No. CO-00560  
SAWS Job No. 20-4532**

**ADDENDUM NO. 1  
June 15, 2022**

To Bidder of Record:

This addendum, applicable to work referenced above, is an amendment to the bidding documents 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 in the space provided in the submitted bid proposal.

**RESPONSE TO QUESTION**

- 1. Question: 27" DR 17 HDPE Pipe is not a size normally produced. Can you let us know if you are accepting bids with other sizing of HDPE?**

Response: The rehabilitation plan sheets for Site C-42 specified the replacement of existing 27" RCP sewer mains via pipe bursting with 27" DR 17 HDPE pipe. The rehabilitation plan sheets have been modified to specify the pipe bursting with 30" DR 17 HDPE replacement pipe. Refer to item #2 in the in the Changes to Specifications section and item #1(c. & d.) in the Changes to the Plans section of this Addendum.

**CHANGES TO SPECIFICATIONS**

1. Invitation to Bidders - Replace the first paragraph in its entirety and replace with the following:

Sealed bids are requested by the San Antonio Water System for the construction of approximately 3,094 LF of 8-inch, 286 LF of 10-inch, and 579 LF of 30-inch sanitary sewer by Pipe Bursting, 1,277 LF of 8-inch and 118 LF of 10-inch sanitary sewer by Open Cut, and 1,811 LF of grout abandonment of sanitary sewer main (<15-inch), including associated manhole improvements, bypass pumping, and traffic control for the BPC Sewershed Package 5 Pipe Burst & Open Cut project, SAWS Job No. 20-4532.

- 2. Bid Proposal, BP-1 to BP-7 – Remove in its entirety and replace with the revised version attached to this Addendum. Respondents shall utilize the attached Bid Proposal when submitting a bid for this project. Failure to use the revised bid proposal may result in the bid being found non-responsive and rejected. The revised Bid Proposal includes the following updates to the Line Items:**
  - a. Quantity for Line Item Spec No. 515.1 Topsoil has increased.
  - b. Quantity for Line Item Spec No. 520.1 Hydromulch has increased.
  - c. Quantity for Line Item Spec No. 851 Existing Manhole Adjustments has decreased.
  - d. Quantity for Line Item Spec No. 855 Reconstruction of Existing Manholes has increased.

- e. Quantity for Line Item Spec No. 862.1 Abandonment of Sanitary Sewer Main (8” main) to be Grout Filled has decreased.
  - f. Line Item Spec No. 900.1 Rehabilitation of Sanitary Sewer by Pipe Burst, 27” Dia. IPS DR 17 HDPE pipe-All Depth has been removed.
  - g. Line Item Spec No. 900.1 Rehabilitation of Sanitary Sewer by Pipe Burst, 30” Dia. IPS DR 17 HDPE pipe-All Depth has been added.
  - h. Line Item Spec No. 910.2 Sewer Structure Rehabilitation (Noncircular Manholes, and Manholes Greater than 4’ Dia.) has been removed.
3. Supplemental Conditions - Instructions to Bidders #10- is replaced and is revised to read as follows:

Instructions to Bidders #10 is deleted in its entirety and replaced with the following:

If the subtotal for Mobilization does not match the sum of each of the mobilization line items **103-119**, the subtotal for Mobilization will take precedence and Mobilization line items adjusted accordingly.

If the subtotal for the Preparing Right-of Way does not match the sum of each of the Preparing Right-of Way lines **120-136**, the subtotal for Preparing Right of Way will take precedence and Preparing Right of Way line items adjusted accordingly.

Where there is an error in the extension, the San Antonio Water System Contracting Office will extend the written unit price and make any corrections necessary. Any error will be corrected, and the correct amount will be the basis for determining the bid position.

4. Special Condition SC10. San Pedro Ave. – Add the following statement after the third paragraph:

“As per Special Condition SC4, Project Requirements, the San Pedro Ave. Site shall be completed by December 15, 2022. Also, no work within the HEB parking lot may occur between November 19, 2022 through November 24, 2022 due to increased use of the parking lot expected for holiday shopping.”

5. Special Condition SC11. E. Pyron – Add the following statement after the third paragraph:

If any archeological features are encountered by the Contractor at this site, the Contractor shall adhere to the relevant requirements in SAWS Specification 804 and shall also notify:

Susan Snow  
 Archeologist  
 San Antonio Missions National Historical Park  
 Roosevelt Ave.  
 San Antonio, TX 78210  
 210-534-8875 x243 office  
 210-534-1106 fax  
 210-843-9028 mobile

CHANGES TO THE PLANS
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1. Remove the following sheets in their entirety dated 5/23/22 and replace with the revised versions attached to this Addendum:

- a. Sheet GEN-00B (2 of 143) Overall Estimated Quantities for Sets 1 and 2 – dated 6/7/2022
- b. Sheet GEN-03 (5 of 143) Set 1 of 2 Overall Quantities – dated 6/7/2022
- c. Sheet L-03 (53 of 143) Set 1 of 2 Site C-42A Sewer Rehabilitation Plan – Pipe Burst – dated 6/7/2022
- d. Sheet L-04 (54 of 143) Set 1 of 2 Site C-42B Sewer Rehabilitation Plan – Pipe Burst – dated 6/7/2022
- e. Sheet S7 (79 of 143) Set 2 of 2 Overall Quantities - dated 6/7/2022
- f. Sheet S20 (92 of 143) Set 2 of 2 Menarby Ct Traffic Control Layout – dated 6/7/2022
- g. Sheet S21 (93 of 143) Set 2 of 2 Menarby Ct Suggested Sanitary Sewer By-pass Layout – dated 6/7/2022
- h. Sheet S22 (94 of 143) Set 2 of 2 Menarby Ct Sanitary Sewer Overall Layout – dated 6/7/2022
- i. Sheet S23 (93 of 143) Set 2 of 2 Menarby Ct Sewer Plan & Profile Sta 10+00.00 to End – dated 6/7/2022

<b>CLARIFICATIONS</b>
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1. Plan Sheet GEN-00B, GEN-03, and S7 – Revised plan sheets includes updates to the Estimated Quantities per the updated Bid Proposal Line Items.
2. Plan Sheets L-03 and L-04 – Revised plan sheets specify the pipe burst to be with 30” Dia. IPS DR 17 HDPE pipe.
3. Plan Sheets S20-S23 – Revised plan sheets add requirements to remove portions of abandoned 8” sewer main within TXDOT right-of-way of Spur 377 (General Hudnell) as required for TXDOT permit approval.
4. The estimated construction cost has increased from \$3,587,399.00 to \$3,649,943.00 and has been changed on the SAWS website.

<b>END ADDENDUM 1</b>
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This Addendum, including these 3 pages, is 19 pages with attachments in its entirety.

**Attachments:**

- Bid Proposal Form (7 pages total)
- Plan Sheets GEN-00B, GEN-03, L-03, L-04, S7, S20, S21, S22, S23 (9 pages total)



**Julian P. Bielawski**  
 WESTON SOLUTIONS, INC.  
*Texas Registered Engineering Firm F-3123*

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 **330** 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

(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



**BPC Sewershed Package 5 Pipe Burst & Open Cut**  
**SAWS Job No. 20-4532**  
**Bid Proposal Line Items**  
**June 2022**

ITEM	PAY ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT PRICE	SUBTOTAL
1	103.1	REMOVE CONCRETE CURB (COSA SPEC)	LF	300	\$	\$
2	103.3	REMOVE CONCRETE SIDEWALK AND DRIVEWAYS (COSA SPEC)	SF	661	\$	\$
3	103.4	REMOVE MISCELLANEOUS CONCRETE	SF	586	\$	\$
4	203.1	TACK COAT (COSA SPEC)	GAL	511	\$	\$
5	205.2	HOT MIX ASPHALT CONCRETE TYPE B (10" COMPACTED) (COSA SPEC)	SY	78	\$	\$
6	205.4	HOT MIX ASPHALT CONCRETE TYPE D (2" COMPACTED)(COSA SPEC)	SY	5711	\$	\$
7	206.1	ASPHALT TREATED BASE (ATB) (10" COMPACTED DEPTH) (COSA SPEC)	SY	656	\$	\$
8	208.1	SALVAGING, HAULING & STOCKPILING RECLAIMABLE ASPHALT PAVEMENT (2" DEPTH) (COSA SPEC)	SY	5090	\$	\$
9	230.2	CONCRETE PAVEMENT FULL-DEPTH REPAIR (8" COMPACTED DEPTH) (COSA SPEC)	SY	121	\$	\$
10	401	FLOWABLE FILL	CY	57	\$	\$
11	500.1	CONCRETE CURB (COSA SPEC)	LF	319	\$	\$
12	502.1	CONCRETE SIDEWALKS (CONVENTIONALLY FORMED)	SY	46	\$	\$
13	503.2	PORTLAND CEMENT CONCRETE DRIVEWAY - COMMERCIAL (COSA SPEC)	SY	48	\$	\$
14	503.4	ASPHALTIC CONCRETE DRIVEWAY (COSA SPEC)	SY	22	\$	\$
15	505.1	CONCRETE RIPRAP (5" THICK)	SY	65	\$	\$
16	SP507	REMOVE AND REPLACE FENCE	LF	60	\$	\$
17	509.1	METAL BEAM GUARD RAIL (COSA SPEC)	LF	75	\$	\$
18	515.1	TOPSOIL	CY	23	\$	\$
19	SP516	ASTRO TURF	SY	35	\$	\$
20	516.1	SODDING	SY	86	\$	\$
21	520.1	HYDROMULCH	SY	194	\$	\$
22	530.7	BARRICADES, SIGNS & TRAFFIC HANDLING (HANSFORD ST.)	LS	1	\$	\$
23	530.7	BARRICADES, SIGNS & TRAFFIC HANDLING (E PYRON AVE.)	LS	1	\$	\$
24	530.7	BARRICADES, SIGNS & TRAFFIC HANDLING (MENARBY CT)	LS	1	\$	\$
25	530.7	BARRICADES, SIGNS & TRAFFIC HANDLING (SAN PEDRO AVE.)	LS	1	\$	\$
26	530.7	BARRICADES, SIGNS & TRAFFIC HANDLING (W MALONE)	LS	1	\$	\$



**BPC Sewershed Package 5 Pipe Burst & Open Cut**  
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**June 2022**

ITEM	PAY ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT PRICE	SUBTOTAL
27	530.7	BARRICADES, SIGNS, TRAFFIC HANDLING (SITE C-12)	LS	1	\$	\$
28	530.7	BARRICADES, SIGNS, TRAFFIC HANDLING (SITE C-18A/C-18B)	LS	1	\$	\$
29	530.7	BARRICADES, SIGNS, TRAFFIC HANDLING (SITE C-24)	LS	1	\$	\$
30	530.7	BARRICADES, SIGNS, TRAFFIC HANDLING (SITE C-30)	LS	1	\$	\$
31	530.7	BARRICADES, SIGNS, TRAFFIC HANDLING (SITE C-40A/C-40B)	LS	1	\$	\$
32	530.7	BARRICADES, SIGNS, TRAFFIC HANDLING (SITE C-57)	LS	1	\$	\$
33	535.1	HOT APPLIED THERMOPLASTIC PAVEMENT MARKINGS (4-IN WIDE DOUBLE SOLID YELLOW LINE) (COSA SPEC)	LF	1067	\$	\$
34	535.14	RAILROAD CROSSING SYMBOL, INCLUDING TWO R'S, CROSS BUCK & 3 TRAVERSE BARS (COSA SPEC)	EA	2	\$	\$
35	535.2	HOT APPLIED THERMOPLASTIC PAVEMENT MARKINGS (4-IN WIDE WHITE LINE) (COSA SPEC)	LF	320	\$	\$
36	535.4	8 INCH WIDE WHITE LINE	LF	36	\$	\$
37	535.7	24 INCH WIDE WHITE LINE	LF	62	\$	\$
38	537.6	PAVEMENT MARKER (TYPE I-C)	EA	24	\$	\$
39	537.8	PAVEMENT MARKER (TYPE II-A-A)	EA	28	\$	\$
40	550	TRENCH EXCAVATION SAFETY PROTECTION	LF	1631	\$	\$
41	845.1	REMOVE AND REPLACE FENCING (4' HIGH CHAIN LINK)	LF	379	\$	\$
42	SS1	REMOVE AND REPLACE FENCING (6' HIGH WOOD)	LF	369	\$	\$
43	845.1	REMOVE AND REPLACE FENCING (6' HIGH METAL PANELING)	LF	35	\$	\$
44	845.1	REMOVE AND REPLACE FENCING (4' HIGH WROUGHT IRON)	LF	32	\$	\$
45	845.1	REMOVE AND REPLACE FENCING (6' HIGH CHAIN LINK)	LF	60	\$	\$
46	845.1	REMOVE AND REPLACE FENCING (8' HIGH CHAIN LINK)	LF	50	\$	\$
47	848	8" IPS DR17 HDPE SANITARY SEWER PIPE - ALL DEPTH	LF	7	\$	\$
48	848	8" (SDR-26) (ASTM D-3034) PVC SANITARY SEWER PIPE - ALL DEPTH	LF	549	\$	\$
49	848	8" (SDR-26) (ASTM D-2241) PVC SANITARY SEWER PIPE - 160 PSI - ALL DEPTH	LF	721	\$	\$
50	848	10" (SDR-26) (ASTM D-2241) PVC SANITARY SEWER PIPE - 160 PSI ALL DEPTH	LF	118	\$	\$
51	851	EXISTING MANHOLE ADJUSTMENTS (WITH NEW RING AND WATERTIGHT COVER)	EA	15	\$	\$
52	852.6.1	SANITARY SEWER MANHOLE (0' - 6'), 4' DIA.	EA	15	\$	\$



**BPC Sewershed Package 5 Pipe Burst & Open Cut**  
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ITEM	PAY ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT PRICE	SUBTOTAL
53	852.6.1	SANITARY SEWER MANHOLE (0'-6') (COPPER E80 LL), 4' DIA.	EA	2	\$	\$
54	852.6.1	SANITARY SEWER DROP MANHOLE (0' - 6'), 4' DIA.	EA	2	\$	\$
55	852.6.1	SANITARY SEWER DOGHOUSE MANHOLE (0' - 6'), 4' DIA.	EA	3	\$	\$
56	852.6.1	SANITARY SEWER DOGHOUSE DROP MANHOLE (0'-6'), 5' DIA.	EA	1	\$	\$
57	852.6.2	EXTRA DEPTH SANITARY SEWER MANHOLE (> 6'), 4' DIA.	VF	44	\$	\$
58	852.6.2	EXTRA DEPTH SANITARY SEWER DROP MANHOLE (> 6'), 4' DIA.	VF	15	\$	\$
59	852.6.2	EXTRA DEPTH SANITARY SEWER DOGHOUSE MANHOLE (> 6'), 4' DIA.	VF	10	\$	\$
60	852.6.2	EXTRA DEPTH SANITARY SEWER DOGHOUSE DROP MANHOLE (0'-6'), 5' DIA.	VF	15	\$	\$
61	854	SANITARY SEWER LATERAL	LF	293	\$	\$
62	854	8" SANITARY SEWER LATERALS	LF	90	\$	\$
63	854.1	CLEANOUT (TWO-WAY) FOR SANITARY SEWER LATERAL	EA	19	\$	\$
64	855	RECONSTRUCTION OF EXISTING MANHOLES	EA	12	\$	\$
65	858	CONCRETE ENCASEMENT, CRADLES, SADDLES & COLLARS	CY	5	\$	\$
66	860	VERTICAL STACKS	VF	63	\$	\$
67	862.1	ABANDONMENT OF SANITARY SEWER MAIN (6" MAIN) TO BE GROUT FILLED	LF	610	\$	\$
68	862.1	ABANDONMENT OF SANITARY SEWER MAIN (8" MAIN) TO BE GROUT FILLED	LF	528	\$	\$
69	862.1	ABANDONMENT OF SANITARY SEWER MAIN (10" MAIN) TO BE GROUT FILLED	LF	59	\$	\$
70	862.1	ABANDONMENT OF SANITARY SEWER MAIN (12" MAIN) TO BE GROUT FILLED	LF	614	\$	\$
71	864-S2	BYPASS PUMPING (LARGE DIAMETER SANITARY SEWER) (SITE C-42A/C-42B)	LS	1	\$	\$
72	864-S2	BYPASS PUMPING, LARGE DIAMETER SANITARY SEWER (E PYRON AVE.)	LS	1	\$	\$
73	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) SITE C-4	LS	1	\$	\$
74	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) SITE C-11	LS	1	\$	\$
75	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) SITE C-12	LS	1	\$	\$
76	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) SITE C-16	LS	1	\$	\$
77	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) SITE C-17	LS	1	\$	\$
78	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) (SITE C-18A/C-18B)	LS	1	\$	\$



**BPC Sewershed Package 5 Pipe Burst & Open Cut**  
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ITEM	PAY ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT PRICE	SUBTOTAL
79	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) SITE C-21B	LS	1	\$	\$
80	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) SITE C-24	LS	1	\$	\$
81	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) SITE C-30	LS	1	\$	\$
82	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) (SITE C-40A/C-40B)	LS	1	\$	\$
83	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) (SITE C-42A/C-42B)	LS	1	\$	\$
84	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) SITE C-57	LS	1	\$	\$
85	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) (HANSFORD ST.)	LS	1	\$	\$
86	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) (E PYRON AVE.)	LS	1	\$	\$
87	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) (MENARBY CT.)	LS	1	\$	\$
88	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) (SAN PEDRO AVE.)	LS	1	\$	\$
89	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) (W MALONE AVE)	LS	1	\$	\$
90	866	SANITARY SEWER MAIN TELEVISION PRE INSPECTION (8" - 15") WITH CLEANING	LF	5057	\$	\$
91	866	SEWER MAIN TELEVISION INSPECTION (27" AND LARGER) WITH CLEANING AND PRE INSPECTION	LF	579	\$	\$
92	866	SANITARY SEWER MAIN TELEVISION POST INSPECTION (8" - 15")	LF	1417	\$	\$
93	900.1	REHABILITATION OF SANITARY SEWER BY PIPE BURST, 8" DIA. IPS DR17 HDPE PIPE- ALL DEPTH	LF	3094	\$	\$
94	900.1	REHABILITATION OF SANITARY SEWER BY PIPE BURST, 10" DIA. IPS DR17 HDPE PIPE- ALL DEPTH	LF	286	\$	\$
95	900.1	REHABILITATION OF SANITARY SEWER BY PIPE BURST, 30" DIA. IPS DR17 HDPE PIPE- ALL DEPTH	LF	579	\$	\$
96	910.1	MANHOLE REHABILITATION (STANDARD MANHOLES 4' DIA.)	VF	118	\$	\$
97	1103	POINT REPAIRS (UP to 9 LF) - 8" DIA. - ALL DEPTH	EA	3	\$	\$
98	1103	POINT REPAIRS (UP to 9 LF) - 10" DIA. - ALL DEPTH	EA	1	\$	\$
99	1103.5	OBSTRUCTION REMOVAL - 18" OR SMALLER DIA. - REMOTE CONTROL - ALL DEPTH	EA	2	\$	\$
100	1109.1	SANITARY SEWER LATERAL RECONNECTIONS - OPEN CUT EXCAVATION - ALL DEPTH	EA	38	\$	\$
101	6001	PORTABLE CHANGEABLE MESSAGE SIGN (TXDOT SPEC.)	EA	2	\$	\$
102	SS 3300	SANITARY SEWER PRIVATE LATERAL ( 4"-6") (INCLUDING COSA PERMIT AND LICENSED PLUMBER)	LF	600	\$	\$
		SUB TOTAL (ITEMS 1-102)				
103	100	MOBILIZATION (SITE C-4)	LS	1	\$	\$





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ITEM	PAY ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT PRICE	SUBTOTAL
104	100	MOBILIZATION (SITE C-11)	LS	1	\$	\$
105	100	MOBILIZATION (SITE C-12)	LS	1	\$	\$
106	100	MOBILIZATION (SITE C-16)	LS	1	\$	\$
107	100	MOBILIZATION (SITE C-17)	LS	1	\$	\$
108	100	MOBILIZATION (SITE C-18A/C-18B)	LS	1	\$	\$
109	100	MOBILIZATION (SITE C-21B)	LS	1	\$	\$
110	100	MOBILIZATION (SITE C-24)	LS	1	\$	\$
111	100	MOBILIZATION (SITE C-30)	LS	1	\$	\$
112	100	MOBILIZATION (SITE C-40A/C-40B)	LS	1	\$	\$
113	100	MOBILIZATION (SITE C-42A/C-42B)	LS	1	\$	\$
114	100	MOBILIZATION (SITE C-57)	LS	1	\$	\$
115	100	MOBILIZATION (HANSFORD ST.)	LS	1	\$	\$
116	100	MOBILIZATION (E PYRON AVE.)	LS	1	\$	\$
117	100	MOBILIZATION (MENARBY CT)	LS	1	\$	\$
118	100	MOBILIZATION (SAN PEDRO AVE.)	LS	1	\$	\$
119	100	MOBILIZATION (W MALONE)	LS	1	\$	\$
		<b>SUB TOTAL MOBILIZATION (ITEMS 103-119) *</b>				\$
120	101	PREPARING RIGHT-OF-WAY (SITE C-4)	LS	1	\$	\$
121	101	PREPARING RIGHT-OF-WAY (SITE C-11)	LS	1	\$	\$
122	101	PREPARING RIGHT-OF-WAY (SITE C-12)	LS	1	\$	\$
123	101	PREPARING RIGHT-OF-WAY (SITE C-16)	LS	1	\$	\$
124	101	PREPARING RIGHT-OF-WAY (SITE C-17)	LS	1	\$	\$
125	101	PREPARING RIGHT-OF-WAY (SITE C-18A/C-18B)	LS	1	\$	\$
126	101	PREPARING RIGHT-OF-WAY (SITE C-21B)	LS	1	\$	\$
127	101	PREPARING RIGHT-OF-WAY (SITE C-24)	LS	1	\$	\$
128	101	PREPARING RIGHT-OF-WAY (SITE C-30)	LS	1	\$	\$



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**June 2022**

ITEM	PAY ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT PRICE	SUBTOTAL	
129	101	PREPARING RIGHT-OF-WAY (SITE C-40A/C-40B)	LS	1	\$	\$	
130	101	PREPARING RIGHT-OF-WAY (SITE C-42A/C-42B)	LS	1	\$	\$	
131	101	PREPARING RIGHT-OF-WAY (SITE C-57)	LS	1	\$	\$	
132	101	PREPARING RIGHT-OF-WAY (HANSFORD ST.)	LS	1	\$	\$	
133	101	PREPARING RIGHT-OF-WAY (E PYRON AVE.)	LS	1	\$	\$	
134	101	PREPARING RIGHT-OF-WAY (MENARBY CT)	LS	1	\$	\$	
135	101	PREPARING RIGHT-OF-WAY (SAN PEDRO AVE.)	LS	1	\$	\$	
136	101	PREPARING RIGHT-OF-WAY (W MALONE)	LS	1	\$	\$	
		<b>SUB TOTAL PREPARING RIGHT-OF-WAY (ITEMS 120-136) **</b>				\$	\$
137	SC5	CPS ENERGY ALLOWANCE	ALW	1	\$ 15,000.00	\$ 15,000.00	
138	SC6	UNION PACIFIC RAILROAD FLAGGERS	ALW	1	\$ 200,000.00	\$ 200,000.00	
139	SC6	UPRR PERMIT EXTENSION ALLOWANCE	ALW	1	\$ 20,000.00	\$ 20,000.00	
<p>*Sub Total of Mobilization shall be limited to a maximum of 10% of the Sub Total of Items 1 to 102</p> <p>**Sub Total of Preparing Right-Of-Way shall be limited to a maximum of 5% of the Sub Total of Items 1 to 102</p> <p>Mobilization and Preparing Right-of-Way shall be limited to the maximum percentage shown. If the percentage exceeds the allowable maximum stated for mobilization and or preparing right-of-way, SAWS reserves the right to cap the amount at the percentages shown and adjust the extensions of the bid items accordingly.</p>							
<b>TOTAL BID PRICE (TO INCLUDE LINE ITEMS 1-102, 103-119, 120-136, 137-139)</b>						\$	

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ESTIMATED QUANTITIES				
ITEM NO.	SPEC. NO.	ITEM DESCRIPTION	UNIT	TOTAL
1	103.1	REMOVE CONCRETE CURB (COSA SPEC)	LF	300
2	103.3	REMOVE CONCRETE SIDEWALK AND DRIVEWAYS (COSA SPEC)	SF	661
3	103.4	REMOVE MISCELLANEOUS CONCRETE	SF	586
4	203.1	TACK COAT (COSA SPEC)	GAL	511
5	205.2	HOT MIX ASPHALT CONCRETE TYPE B (10" COMPACTED) (COSA SPEC)	SY	78
6	205.4	HOT MIX ASPHALT CONCRETE TYPE D (2" COMPACTED)(COSA SPEC)	SY	5711
7	206.1	ASPHALT TREATED BASE (ATB) (10" COMPACTED DEPTH) (COSA SPEC)	SY	656
8	208.1	SALVAGING, HAULING & STOCKPILING RECLAIMABLE ASPHALT PAVEMENT (2" DEPTH) (COSA SPEC)	SY	5090
9	230.2	CONCRETE PAVEMENT FULL-DEPTH REPAIR (8" COMPACTED DEPTH) (COSA SPEC)	SY	121
10	401	FLOWABLE FILL	CY	57
11	500.1	CONCRETE CURB (COSA SPEC)	LF	319
12	502.1	CONCRETE SIDEWALKS (CONVENTIONALLY FORMED)	SY	46
13	503.2	PORTLAND CEMENT CONCRETE DRIVEWAY - COMMERCIAL (COSA SPEC)	SY	48
14	503.4	ASPHALTIC CONCRETE DRIVEWAY (COSA SPEC)	SY	22
15	505.1	CONCRETE RIPRAP (5" THICK)	SY	65
16	SP507	REMOVE AND REPLACE FENCE	LF	60
17	509.1	METAL BEAM GUARD RAIL (COSA SPEC)	LF	75
18	515.1	TOPSOIL	CY	23
19	SP516	ASTRO TURF	SY	35
20	516.1	SODDING	SY	86
21	520.1	HYDROMULCH	SY	194
22	530.7	BARRICADES, SIGNS & TRAFFIC HANDLING (HANSFORD ST.)	LS	1
23	530.7	BARRICADES, SIGNS & TRAFFIC HANDLING (E PYRON AVE.)	LS	1
24	530.7	BARRICADES, SIGNS & TRAFFIC HANDLING (MENARBY CT)	LS	1
25	530.7	BARRICADES, SIGNS & TRAFFIC HANDLING (SAN PEDRO AVE.)	LS	1
26	530.7	BARRICADES, SIGNS & TRAFFIC HANDLING (W MALONE)	LS	1
27	530.7	BARRICADES, SIGNS, TRAFFIC HANDLING (SITE C-12)	LS	1
28	530.7	BARRICADES, SIGNS, TRAFFIC HANDLING (SITE C-18A/C-18B)	LS	1
29	530.7	BARRICADES, SIGNS, TRAFFIC HANDLING (SITE C-24)	LS	1
30	530.7	BARRICADES, SIGNS, TRAFFIC HANDLING (SITE C-30)	LS	1
31	530.7	BARRICADES, SIGNS, TRAFFIC HANDLING (SITE C-40A/C-40B)	LS	1
32	530.7	BARRICADES, SIGNS, TRAFFIC HANDLING (SITE C-57)	LS	1
33	535.1	HOT APPLIED THERMOPLASTIC PAVEMENT MARKINGS (4-IN WIDE DOUBLE SOLID YELLOW LINE) (COSA SPEC)	LF	1067
34	535.14	RAILROAD CROSSING SYMBOL, INCLUDING TWO R'S, CROSS BUCK & 3 TRAVERSE BARS (COSA SPEC)	EA	2
35	535.2	HOT APPLIED THERMOPLASTIC PAVEMENT MARKINGS (4-IN WIDE WHITE LINE) (COSA SPEC)	LF	320
36	535.4	8 INCH WIDE WHITE LINE	LF	36
37	535.7	24 INCH WIDE WHITE LINE	LF	62
38	537.6	PAVEMENT MARKER (TYPE I-C)	EA	24
39	537.8	PAVEMENT MARKER (TYPE II-A-A)	EA	28
40	550	TRENCH EXCAVATION SAFETY PROTECTION	LF	1631
41	845.1	REMOVE AND REPLACE FENCING (4' HIGH CHAIN LINK)	LF	379
42	551	REMOVE AND REPLACE FENCING (6' HIGH WOOD)	LF	369
43	845.1	REMOVE AND REPLACE FENCING (6' HIGH METAL PANELING)	LF	35
44	845.1	REMOVE AND REPLACE FENCING (4' HIGH WROUGHT IRON)	LF	32
45	845.1	REMOVE AND REPLACE FENCING (6' HIGH CHAIN LINK)	LF	60
46	845.1	REMOVE AND REPLACE FENCING (8' HIGH CHAIN LINK)	LF	50
47	848	8" IPS DR17 HDPE SANITARY SEWER PIPE - ALL DEPTH	LF	7
48	848	8" (SDR-26) (ASTM D-3034) PVC SANITARY SEWER PIPE - ALL DEPTH	LF	549
49	848	8" (SDR-26) (ASTM D-2241) PVC SANITARY SEWER PIPE - 160 PSI - ALL DEPTH	LF	721
50	848	10" (SDR-26) (ASTM D-2241) PVC SANITARY SEWER PIPE - 160 PSI ALL DEPTH	LF	118
51	851	EXISTING MANHOLE ADJUSTMENTS (WITH NEW RING AND WATERTIGHT COVER)	EA	15
52	852.6.1	SANITARY SEWER MANHOLE (0' - 6'), 4' DIA.	EA	15
53	852.6.1	SANITARY SEWER MANHOLE (0'-6') (COPPER E80 LL), 4' DIA.	EA	2
54	852.6.1	SANITARY SEWER DROP MANHOLE (0' - 6'), 4' DIA.	EA	2
55	852.6.1	SANITARY SEWER DOGHOUSE MANHOLE (0' - 6'), 4' DIA.	EA	3
56	852.6.1	SANITARY SEWER DOGHOUSE DROP MANHOLE (0'-6'), 5' DIA.	EA	1
57	852.6.2	EXTRA DEPTH SANITARY SEWER MANHOLE (> 6'), 4' DIA.	VF	44
58	852.6.2	EXTRA DEPTH SANITARY SEWER DROP MANHOLE (> 6'), 4' DIA.	VF	15
59	852.6.2	EXTRA DEPTH SANITARY SEWER DOGHOUSE MANHOLE (> 6'), 4' DIA.	VF	10
60	852.6.2	EXTRA DEPTH SANITARY SEWER DOGHOUSE DROP MANHOLE (0'-6'), 5' DIA.	VF	15
61	854	SANITARY SEWER LATERAL	LF	293
62	854	8" SANITARY SEWER LATERALS	LF	90
63	854.1	CLEANOUT (TWO-WAY) FOR SANITARY SEWER LATERAL	EA	19
64	855	RECONSTRUCTION OF EXISTING MANHOLES	EA	12
65	858	CONCRETE ENCASMENT, CRADLES, SADDLES & COLLARS	CY	5
66	860	VERTICAL STACKS	VF	63
67	862.1	ABANDONMENT OF SANITARY SEWER MAIN (6" MAIN) TO BE GROUT FILLED	LF	610
68	862.1	ABANDONMENT OF SANITARY SEWER MAIN (8" MAIN) TO BE GROUT FILLED	LF	528
69	862.1	ABANDONMENT OF SANITARY SEWER MAIN (10" MAIN) TO BE GROUT FILLED	LF	59

70	862.1	ABANDONMENT OF SANITARY SEWER MAIN (12" MAIN) TO BE GROUT FILLED	LF	614
71	864-52	BYPASS PUMPING (LARGE DIAMETER SANITARY SEWER) (SITE C-42A/C-42B)	LS	1
72	864-52	BYPASS PUMPING, LARGE DIAMETER SANITARY SEWER (E PYRON AVE.)	LS	1
73	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) SITE C-4	LS	1
74	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) SITE C-11	LS	1
75	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) SITE C-12	LS	1
76	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) SITE C-16	LS	1
77	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) SITE C-17	LS	1
78	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) (SITE C-18A/C-18B)	LS	1
79	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) SITE C-21B	LS	1
80	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) SITE C-24	LS	1
81	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) SITE C-30	LS	1
82	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) (SITE C-40A/C-40B)	LS	1
83	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) (SITE C-42A/C-42B)	LS	1
84	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) SITE C-57	LS	1
85	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) (HANSFORD ST.)	LS	1
86	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) (E PYRON AVE.)	LS	1
87	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) (MENARBY CT.)	LS	1
88	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) (SAN PEDRO AVE.)	LS	1
89	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) (W MALONE AVE)	LS	1
90	866	SANITARY SEWER MAIN TELEVISION PRE INSPECTION (8" - 15") WITH CLEANING	LF	5057
91	866	SEWER MAIN TELEVISION INSPECTION (27" AND LARGER) WITH CLEANING AND PRE INSPECTION	LF	579
92	866	SANITARY SEWER MAIN TELEVISION POST INSPECTION (8" - 15")	LF	1417
93	900.1	REHABILITATION OF SANITARY SEWER BY PIPE BURST, 8" DIA. IPS DR17 HDPE PIPE- ALL DEPTH	LF	3094
94	900.1	REHABILITATION OF SANITARY SEWER BY PIPE BURST, 10" DIA. IPS DR17 HDPE PIPE- ALL DEPTH	LF	286
95	900.1	REHABILITATION OF SANITARY SEWER BY PIPE BURST, 30" DIA. IPS DR17 HDPE PIPE- ALL DEPTH	LF	579
96	910.1	MANHOLE REHABILITATION (STANDARD MANHOLES 4' DIA.)	VF	118
97	1103	POINT REPAIRS (UP to 9 LF) - 8" DIA. - ALL DEPTH	EA	3
98	1103	POINT REPAIRS (UP to 9 LF) - 10" DIA. - ALL DEPTH	EA	1
99	1103.5	OBSTRUCTION REMOVAL - 18" OR SMALLER DIA. - REMOTE CONTROL - ALL DEPTH	EA	2
100	1109.1	SANITARY SEWER LATERAL RECONNECTIONS - OPEN CUT EXCAVATION - ALL DEPTH	EA	38
101	6001	PORTABLE CHANGEABLE MESSAGE SIGN (TXDOT SPEC.)	EA	2
102	SS 3300	SANITARY SEWER PRIVATE LATERAL ( 4"-6") (INCLUDING COSA PERMIT AND LICENSED PLUMBER)	LF	600
103	100	MOBILIZATION (SITE C-4)	LS	1
106	100	MOBILIZATION (SITE C-11)	LS	1
104	100	MOBILIZATION (SITE C-12)	LS	1
105	100	MOBILIZATION (SITE C-16)	LS	1
107	100	MOBILIZATION (SITE C-17)	LS	1
108	100	MOBILIZATION (SITE C-18A/C-18B)	LS	1
109	100	MOBILIZATION (SITE C-21B)	LS	1
110	100	MOBILIZATION (SITE C-24)	LS	1
111	100	MOBILIZATION (SITE C-30)	LS	1
112	100	MOBILIZATION (SITE C-40A/C-40B)	LS	1
113	100	MOBILIZATION (SITE C-42A/C-42B)	LS	1
114	100	MOBILIZATION (SITE C-57)	LS	1
115	100	MOBILIZATION (HANSFORD ST.)	LS	1
116	100	MOBILIZATION (E PYRON AVE.)	LS	1
117	100	MOBILIZATION (MENARBY CT)	LS	1
118	100	MOBILIZATION (SAN PEDRO AVE.)	LS	1
119	100	MOBILIZATION (W MALONE)	LS	1
120	101	PREPARING RIGHT-OF-WAY (SITE C-4)	LS	1
121	101	PREPARING RIGHT-OF-WAY (SITE C-11)	LS	1
122	101	PREPARING RIGHT-OF-WAY (SITE C-12)	LS	1
123	101	PREPARING RIGHT-OF-WAY (SITE C-16)	LS	1
124	101	PREPARING RIGHT-OF-WAY (SITE C-17)	LS	1
125	101	PREPARING RIGHT-OF-WAY (SITE C-18A/C-18B)	LS	1
126	101	PREPARING RIGHT-OF-WAY (SITE C-21B)	LS	1
127	101	PREPARING RIGHT-OF-WAY (SITE C-24)	LS	1
128	101	PREPARING RIGHT-OF-WAY (SITE C-30)	LS	1
129	101	PREPARING RIGHT-OF-WAY (SITE C-40A/C-40B)	LS	1
130	101	PREPARING RIGHT-OF-WAY (SITE C-42A/C-42B)	LS	1
131	101	PREPARING RIGHT-OF-WAY (SITE C-57)	LS	1
132	101	PREPARING RIGHT-OF-WAY (HANSFORD ST.)	LS	1
133	101	PREPARING RIGHT-OF-WAY (E PYRON AVE.)	LS	1
134	101	PREPARING RIGHT-OF-WAY (MENARBY CT)	LS	1
135	101	PREPARING RIGHT-OF-WAY (SAN PEDRO AVE.)	LS	1
136	101	PREPARING RIGHT-OF-WAY (W MALONE)	LS	1
137	SC5	CPS ENERGY ALLOWANCE	ALW	1
138	SC6	UNION PACIFIC RAILROAD FLAGGERS	ALW	1
139	SC6	UPRR PERMIT EXTENSION ALLOWANCE	ALW	1



WESTON SOLUTIONS, INC.  
70 NE LOOP 410, SUITE 600  
SAN ANTONIO, TEXAS 78216-5842  
TEXAS REGISTERED ENGINEERING FIRM F-3123  
BPC SEWERSHED PACKAGE 5 - PIPE BURST AND OPEN CUT  
OVERALL ESTIMATED QUANTITIES  
FOR SETS 1 AND 2



NOTES	INITIALS	DATE
DESIGNED BY	JB	05/22
REVIEWED BY	RK	05/22
SCALE:	AS SHOWN	
SHEET NO.	GEN-00B 02 OF 143	

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ESTIMATED QUANTITIES				
ITEM NO.	SPEC. NO.	ITEM DESCRIPTION	UNIT	TOTAL
1	103.1	REMOVE CONCRETE CURB (COSA SPEC)	LF	264
2	103.3	REMOVE CONCRETE SIDEWALK AND DRIVEWAYS (COSA SPEC)	SF	150
3	203.1	TACK COAT (COSA SPEC)	GAL	296
4	205.4	HOT MIX ASPHALT CONCRETE TYPE D (2" COMPACTED)(COSA SPEC)	SY	2961
5	206.1	ASPHALT TREATED BASE (ATB) (10" COMPACTED DEPTH) (COSA SPEC)	SY	494
6	208.1	SALVAGING, HAULING & STOCKPILING RECLAIMABLE ASPHALT PAVEMENT (2" DEPTH) (COSA SPEC)	SY	2400
7	230.2	CONCRETE PAVEMENT FULL-DEPTH REPAIR (8" COMPACTED DEPTH) (COSA SPEC)	SY	121
8	401	FLOWABLE FILL	CY	57
9	500.1	CONCRETE CURB (COSA SPEC)	LF	288
10	502.1	CONCRETE SIDEWALKS (CONVENTIONALLY FORMED)	SY	37
11	503.4	ASPHALTIC CONCRETE DRIVEWAY (COSA SPEC)	SY	22
12	SP516	ASTRO TURF	SY	35
13	516.1	SODDING	SY	86
14	530.7	BARRICADES, SIGNS, TRAFFIC HANDLING (SITE C-12)	LS	1
15	530.7	BARRICADES, SIGNS, TRAFFIC HANDLING (SITE C-18A/C-18B)	LS	1
16	530.7	BARRICADES, SIGNS, TRAFFIC HANDLING (SITE C-24)	LS	1
17	530.7	BARRICADES, SIGNS, TRAFFIC HANDLING (SITE C-30)	LS	1
18	530.7	BARRICADES, SIGNS, TRAFFIC HANDLING (SITE C-40A/C-40B)	LS	1
19	530.7	BARRICADES, SIGNS, TRAFFIC HANDLING (SITE C-57)	LS	1
20	535.1	HOT APPLIED THERMOPLASTIC PAVEMENT MARKINGS (4-IN WIDE DOUBLE SOLID YELLOW LINE) (COSA SPEC)	LF	267
21	535.2	HOT APPLIED THERMOPLASTIC PAVEMENT MARKINGS (4-IN WIDE WHITE LINE) (COSA SPEC)	LF	40
22	535.7	24 INCH WIDE WHITE LINE	LF	62
23	537.8	PAVEMENT MARKER (TYPE II-A-A)	EA	16
24	550	TRENCH EXCAVATION SAFETY PROTECTION	LF	1149
25	845.1	REMOVE AND REPLACE FENCING (4' HIGH CHAIN LINK)	LF	379
26	SS1	REMOVE AND REPLACE FENCING (6' HIGH WOOD)	LF	369
27	845.1	REMOVE AND REPLACE FENCING (6' HIGH METAL PANELING)	LF	35
28	845.1	REMOVE AND REPLACE FENCING (4' HIGH WROUGHT IRON)	LF	32
29	845.1	REMOVE AND REPLACE FENCING (6' HIGH CHAIN LINK)	LF	60
30	845.1	REMOVE AND REPLACE FENCING (8' HIGH CHAIN LINK)	LF	50
31	848	8" IPS DR17 HDPE SANITARY SEWER PIPE - ALL DEPTH	LF	7
32	848	8" (SDR-26) (ASTM D-3034) PVC SANITARY SEWER PIPE - ALL DEPTH	LF	497
33	848	8" (SDR-26) (ASTM D-2241) PVC SANITARY SEWER PIPE - 160 PSI - ALL DEPTH	LF	396
34	848	10" (SDR-26) (ASTM D-2241) PVC SANITARY SEWER PIPE - 160 PSI - ALL DEPTH	LF	13
35	851	EXISTING MANHOLE ADJUSTMENTS (WITH NEW RING AND WATERTIGHT COVER)	EA	14
36	852.6.1	SANITARY SEWER MANHOLE (0' - 6'), 4' DIA.	EA	11
37	852.6.1	SANITARY SEWER DROP MANHOLE (0' - 6'), 4' DIA.	EA	2
38	852.6.1	SANITARY SEWER DOGHOUSE MANHOLE (0' - 6'), 4' DIA.	EA	1
39	852.6.2	EXTRA DEPTH SANITARY SEWER MANHOLE (> 6'), 4' DIA.	VF	24
40	852.6.2	EXTRA DEPTH SANITARY SEWER DROP MANHOLE (> 6'), 4' DIA.	VF	15
41	852.6.2	EXTRA DEPTH SANITARY SEWER DOGHOUSE MANHOLE (> 6'), 4' DIA.	VF	1
42	854	SANITARY SEWER LATERAL	LF	154
43	854.1	CLEANOUT (TWO-WAY) FOR SANITARY SEWER LATERAL	EA	13
44	855	RECONSTRUCTION OF EXISTING MANHOLES	EA	12
45	860	VERTICAL STACKS	VF	63
46	862.1	ABANDONMENT OF SANITARY SEWER MAIN (8" MAIN) TO BE GROUT FILLED	LF	300
47	864-S2	BYPASS PUMPING (LARGE DIAMETER SANITARY SEWER) (SITE C-42A/C-42B)	LS	1
48	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) SITE C-4	LS	1
49	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) SITE C-11	LS	1
50	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) SITE C-12	LS	1
51	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) SITE C-16	LS	1
52	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) SITE C-17	LS	1
53	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) (SITE C-18A/C-18B)	LS	1
54	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) SITE C-21B	LS	1
55	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) SITE C-24	LS	1
56	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) SITE C-30	LS	1
57	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) (SITE C-40A/C-40B)	LS	1
58	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) (SITE C-42A/C-42B)	LS	1
59	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) SITE C-57	LS	1
60	866	SANITARY SEWER MAIN TELEVISION PRE INSPECTION (8" - 15") WITH CLEANING	LF	4209
61	866	SEWER MAIN TELEVISION INSPECTION (27" AND LARGER) WITH CLEANING AND PRE INSPECTION	LF	579
62	866	SANITARY SEWER MAIN TELEVISION POST INSPECTION (8" - 15")	LF	935
63	900.1	REHABILITATION OF SANITARY SEWER BY PIPE BURST, 8" DIA. IPS DR17 HDPE PIPE- ALL DEPTH	LF	3094

64	900.1	REHABILITATION OF SANITARY SEWER BY PIPE BURST, 10" DIA. IPS DR17 HDPE PIPE- ALL DEPTH	LF	286
65	900.1	REHABILITATION OF SANITARY SEWER BY PIPE BURST, 30" DIA. IPS DR17 HDPE PIPE- ALL DEPTH	LF	579
66	910.1	MANHOLE REHABILITATION (STANDARD MANHOLES 4' DIA.)	VF	109
67	1103	POINT REPAIRS (UP TO 9 LF) - 8" DIA. - ALL DEPTH	EA	3
68	1103	POINT REPAIRS (UP TO 9 LF) - 10" DIA. - ALL DEPTH	EA	1
69	1103.5	OBSTRUCTION REMOVAL - 18" OR SMALLER DIA. - REMOTE CONTROL - ALL DEPTH	EA	2
70	1109.1	SANITARY SEWER LATERAL RECONNECTIONS - OPEN CUT EXCAVATION - ALL DEPTH	EA	38
71	6001	PORTABLE CHANGEABLE MESSAGE SIGN (TXDOT SPEC.)	EA	2
72	SS 3300	SANITARY SEWER PRIVATE LATERAL ( 4"-6") (INCLUDING COSA PERMIT AND LICENSED PLUMBER)	LF	600
73	100	MOBILIZATION (SITE C-4)	LS	1
74	100	MOBILIZATION (SITE C-11)	LS	1
75	100	MOBILIZATION (SITE C-12)	LS	1
76	100	MOBILIZATION (SITE C-16)	LS	1
77	100	MOBILIZATION (SITE C-17)	LS	1
78	100	MOBILIZATION (SITE C-18A/C-18B)	LS	1
79	100	MOBILIZATION (SITE C-21B)	LS	1
80	100	MOBILIZATION (SITE C-24)	LS	1
81	100	MOBILIZATION (SITE C-30)	LS	1
82	100	MOBILIZATION (SITE C-40A/C-40B)	LS	1
83	100	MOBILIZATION (SITE C-42A/C-42B)	LS	1
84	100	MOBILIZATION (SITE C-57)	LS	1
85	101	PREPARING RIGHT-OF-WAY (SITE C-4)	LS	1
86	101	PREPARING RIGHT-OF-WAY (SITE C-11)	LS	1
87	101	PREPARING RIGHT-OF-WAY (SITE C-12)	LS	1
88	101	PREPARING RIGHT-OF-WAY (SITE C-16)	LS	1
89	101	PREPARING RIGHT-OF-WAY (SITE C-17)	LS	1
90	101	PREPARING RIGHT-OF-WAY (SITE C-18A/C-18B)	LS	1
91	101	PREPARING RIGHT-OF-WAY (SITE C-21B)	LS	1
92	101	PREPARING RIGHT-OF-WAY (SITE C-24)	LS	1
93	101	PREPARING RIGHT-OF-WAY (SITE C-30)	LS	1
94	101	PREPARING RIGHT-OF-WAY (SITE C-40A/C-40B)	LS	1
95	101	PREPARING RIGHT-OF-WAY (SITE C-42A/C-42B)	LS	1
96	101	PREPARING RIGHT-OF-WAY (SITE C-57)	LS	1
97	SC5	CPS ENERGY ALLOWANCE	ALW	1



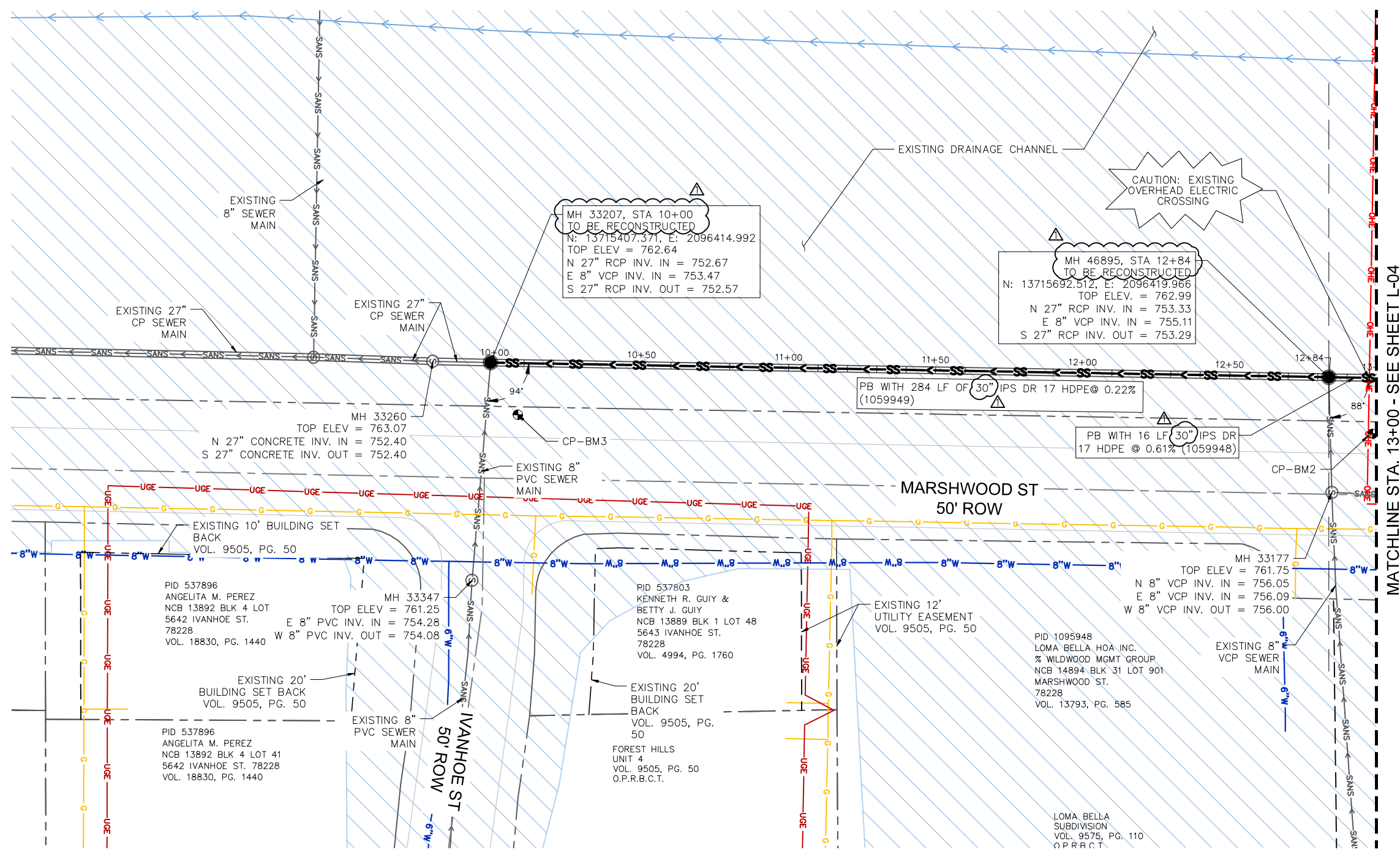
WESTON SOLUTIONS, INC.  
 70 NE LOOP 410, SUITE 600  
 SAN ANTONIO, TEXAS 78216-5842  
 TEXAS REGISTERED ENGINEERING FIRM F-3123  
 BPC SEWERSHED PACKAGE 5 - PIPE BURST AND OPEN CUT  
 OVERALL QUANTITIES



NOTES	INITIALS	DATE
DESIGNED BY	JB	05/22
REVIEWED BY	RK	05/22
SCALE:	AS SHOWN	
SHEET NO.	GEN-03 05 OF 143	

NO.	BY	DATE	REVISION DESCRIPTION
1	JB	06/07/22	ADDENDUM 1

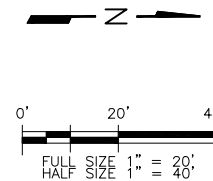
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MATCHLINE STA. 13+00 - SEE SHEET L-04

**LEGEND**

- |  |  |  |                           |
|--|--|--|---------------------------|
|  | EXISTING CONTOUR- MAJOR                |  | PROPOSED UTILITY - SEWER  |
|  | EXISTING CONTOUR- MINOR                |  | EXISTING SEWER MANHOLE    |
|  | EXISTING UTILITY- SEWER                |  | PROPOSED SEWER MANHOLE    |
|  | EXISTING UTILITY- WATER                |  | EXISTING CHAIN LINK FENCE |
|  | EXISTING UTILITY- GAS                  |  | EXISTING WOODEN FENCE     |
|  | EXISTING UTILITY- UNDERGROUND ELECTRIC |  | EXISTING PARCEL BOUNDARY  |
|  | EXISTING UTILITY- OVERHEAD ELECTRIC    |  | EXISTING BUILDING SETBACK |
|  | EXISTING DRAINAGE DITCH                |  | EXISTING EASEMENT         |
|  | EXISTING STORM PIPELINE                |  | EXISTING TREE             |



- NOTES:**
1. THE EXISTING UTILITIES THAT ARE BEING SHOWN IN THE PLANS ARE TAKEN FROM BEST AVAILABLE DATA. BEFORE COMMENCING CONSTRUCTION, THE CONTRACTOR SHALL FIELD VERIFY ALL UTILITY CROSSINGS, ELEVATIONS, AND LOCATIONS. ANY UTILITY DISCREPANCY SHALL BE REPORTED TO THE DESIGN ENGINEER.
  2. CONTRACTOR SHALL EXECUTE CAUTION WHEN EXCAVATING AROUND EXISTING UTILITIES.
  3. FLOODPLAIN DEVELOPMENT PERMIT SHALL BE OBTAINED BY SANS BEFORE COMMENCING CONSTRUCTION.
  4. THE CONTRACTOR SHALL REVIEW THE GEOTECHNICAL REPORTS PROVIDED WITH THE BID PACKAGE FOR SITE CONDITIONS. REFER TO SPECIFICATIONS - SPECIAL CONDITIONS SECTION SC2 TO OBTAIN THE GEOTECHNICAL REPORTS.
  5. EQUIPMENT AND MATERIALS MAY NOT BE STORED OVERNIGHT IN THE FEMA 100-YEAR FLOODPLAIN. ALL WORK ON SITE MUST COMPLY WITH SWPPP STANDARDS SET FORTH BY TCEQ AND APPROVED BY THE CITY OF SAN ANTONIO. IN ADDITION, THE CHANNEL MUST BE RESTORED TO PREVIOUS GRADES, SEEDED AND STABILIZED IF NECESSARY WITH EROSION CONTROL MATTING. PUBLIC WORKS STORM WATER MUST HAVE ACCESS TO THE CHANNEL FOR THEIR EQUIPMENT FOR MAINTENANCE.
  6. CONTRACTOR SHALL USE CARE AND CAUTION DURING PIPE BURSTING OPERATIONS TO REDUCE IMPACTS TO THE EXISTING MANHOLE WALLS.

ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
855	RECONSTRUCTION OF EXISTING MANHOLES	EA	2
864-S2	BYPASS PUMPING LARGE DIAMETER SANITARY SEWER (SITE C-42A & C-42B)	LS	1
865	BYPASS PUMPING SMALL DIAMETER SANITARY SEWERS (SITE C-42A & C-42B)	LS	1
866	SEWER MAIN TELEVISION INSPECTION (27" AND LARGER) WITH CLEANING AND PRE INSPECTION	LF	300
900.1	REHABILITATION OF SANITARY SEWER BY PIPE BURST, 30" DIA. PIPE ISP DR17 HDPE - ALL DEPTH	LF	300

BENCHMARK COORDINATE DATUM				
BM	NORTHING	EASTING	ELEVATION	DESCRIPTION
CP-BM1	13716040.048	2096494.791	764.14	MAG NAIL WITH SHINER STAMPED "MTR ENGINEERING" ON CURB
CP-BM2	13715707.631	2096439.215	761.05	MAG NAIL WITH SHINER STAMPED "MTR ENGINEERING" ON CONCRETE
CP-BM3	13715416.673	2096432.756	760.08	MAG NAIL WITH SHINER STAMPED "MTR ENGINEERING" ON CONCRETE

NO.	REV.	DATE	REVISION DESCRIPTION
1	JB	06/07/22	ADDENDUM 1



**WESTON SOLUTIONS, INC.**  
 70 NE LOOP 410, SUITE 600  
 SAN ANTONIO, TEXAS 78216-5842  
 TEXAS REGISTERED ENGINEERING FIRM F-3123  
 BPC SEWERSHED PACKAGE 5 - PIPE BURST AND OPEN CUT  
 SITE C-42A  
 SEWER REHABILITATION PLAN - PIPE BURST

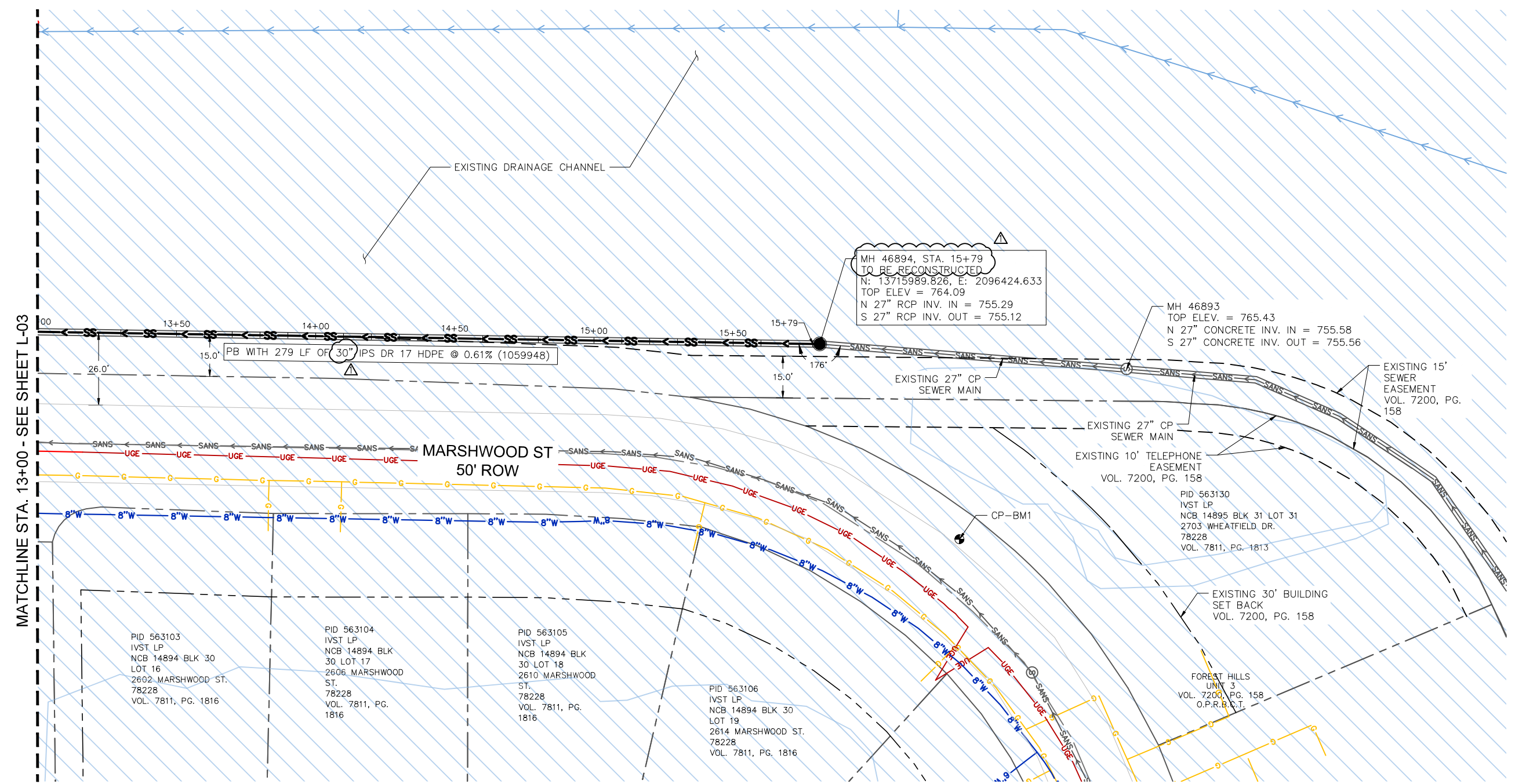
**San Antonio Water System**  
**SAWS**  
 JOB NO. 20-4532

NOTES	INITIALS	DATE
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REVIEWED BY	RK	05/22

SCALE: AS SHOWN

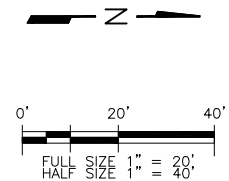
SHEET NO. L-03  
53 OF 143

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**LEGEND**

	EXISTING CONTOUR- MAJOR		PROPOSED UTILITY - SEWER
	EXISTING CONTOUR- MINOR		EXISTING SEWER MANHOLE
	EXISTING UTILITY- SEWER		PROPOSED SEWER MANHOLE
	EXISTING UTILITY- WATER		EXISTING CHAIN LINK FENCE
	EXISTING UTILITY- GAS		EXISTING WOODEN FENCE
	EXISTING UTILITY- UNDERGROUND ELECTRIC		EXISTING PARCEL BOUNDARY
	EXISTING UTILITY- OVERHEAD ELECTRIC		EXISTING BUILDING SETBACK
	EXISTING DRAINAGE DITCH		EXISTING EASEMENT
	EXISTING STORM PIPELINE		EXISTING TREE



- NOTES:**
1. THE EXISTING UTILITIES THAT ARE BEING SHOWN IN THE PLANS ARE TAKEN FROM BEST AVAILABLE DATA. BEFORE COMMENCING CONSTRUCTION, THE CONTRACTOR SHALL FIELD VERIFY ALL UTILITY CROSSINGS, ELEVATIONS, AND LOCATIONS. ANY UTILITY DISCREPANCY SHALL BE REPORTED TO THE DESIGN ENGINEER.
  2. CONTRACTOR SHALL EXECUTE CAUTION WHEN EXCAVATING AROUND EXISTING UTILITIES.
  3. FLOODPLAIN DEVELOPMENT PERMIT SHALL BE OBTAINED BY SAWS BEFORE COMMENCING CONSTRUCTION.
  4. CONTRACTOR SHALL USE CARE AND CAUTION DURING PIPE BURSTING OPERATIONS TO REDUCE IMPACTS TO THE EXISTING MANHOLE WALLS.

ESTIMATED QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
855	RECONSTRUCTION OF EXISTING MANHOLES	EA	1
866	SEWER MAIN TELEVISION INSPECTION (27" AND LARGER) WITH CLEANING AND PRE INSPECTION	LF	279
900.1	REHABILITATION OF SANITARY SEWER BY PIPE BURST, 30" DIA. PIPE - ALL DEPTH	LF	279

BENCHMARK COORDINATE DATUM

BM	NORTHING	EASTING	ELEVATION	DESCRIPTION
CP-BM1	13716040.048	2096494.791	764.14	MAG NAIL WITH SHINER STAMPED "MTR ENGINEERING" ON CURB
CP-BM2	13715707.631	2096439.215	761.05	MAG NAIL WITH SHINER STAMPED "MTR ENGINEERING" ON CONCRETE
CP-BM3	13715416.673	2096432.756	760.08	MAG NAIL WITH SHINER STAMPED "MTR ENGINEERING" ON CONCRETE

COSA PCI  
 MARSHWOOD: 97.18  
 (TO BE VERIFIED BY COSA)

NO. REV.	DATE	REVISION DESCRIPTION
1	06/07/22	APPENDUM 1

WESTON SOLUTIONS, INC.  
 70 NE LOOP 410, SUITE 600  
 SAN ANTONIO, TEXAS 78216-5842  
 TEXAS REGISTERED ENGINEERING FIRM F-3123  
 BPC SEWERSHED PACKAGE 5 - PIPE BURST AND OPEN CUT  
 SITE C-42B  
 SEWER REHABILITATION PLAN - PIPE BURST

**San Antonio Water System**

NOTES INITIALS DATE

DESIGNED BY JB 05/22

REVIEWED BY RK 05/22

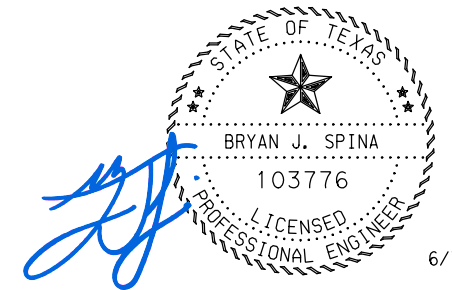
SCALE: AS SHOWN

SHEET NO. L-04  
 54 OF 143

PROJECT QUANTITIES

ITEM #	DESCRIPTION	UNIT	SET 2 OF 2					TOTAL QUANTITY
			1	2	3	4	5	
			HANSFORD ST.	E. PYRON AVE.	MENARBY CT.	SAN PEDRO AVE.	W. MALONE	
103.1	REMOVE CONCRETE CURB (COSA SPEC)	LF	10	-	21	-	5	36
103.3	REMOVE SIDEWALK & DRIVEWAYS (COSA SPEC)	SF	-	-	81	-	430	511
103.4	REMOVE MISCELLANEOUS CONCRETE	SF	-	-	486	100	-	586
203.1	TACK COAT (COSA SPEC)	GAL	-	-	6	-	209	215
205.2	HOT MIX ASPHALT CONCRETE TYPE B (10" COMPACTED) (COSA SPEC)	SY	48	-	30	-	-	78
205.4	HOT MIX ASPHALT CONCRETE TYPE D (2" COMPACTED) (COSA SPEC)	SY	60	-	601	-	2089	2750
206.1	ASPHALT TREATED BASE (ATB) (10" COMPACTED DEPTH) (COSA SPEC)	SY	-	-	-	-	162	162
208.1	SALVAGING, HAULING & STOCKPILING RECLAIMABLE ASPHALT PAVEMENT (2" DEPTH) (COSA SPEC)	SY	-	-	601	-	2089	2690
500.1	CONCRETE CURB (COSA SPEC)	LF	10	-	21	-	-	31
502.1	CONCRETE SIDEWALKS (CONVENTIONALLY FORMED)	SY	-	-	9	-	-	9
503.2	PORTLAND CEMENT CONCRETE DRIVEWAY - COMMERCIAL (COSA SPEC)	SY	-	-	-	-	48	48
505.1	CONCRETE RIPRAP (5" THICK)	SY	-	-	54	11	-	65
SP507	REMOVE AND REPLACE FENCE*	LF	-	60	-	-	-	60
509.1	METAL BEAM GUARD RAIL (COSA SPEC)	LF	43.75	-	31.25	-	-	75.00
515.1	TOPSOIL	CY	-	3	20.00	-	-	23
520.1	HYDROMULCH	SY	-	14	180.00	-	-	194
530.7	BARRICADES, SIGNS & TRAFFIC HANDLING (HANSFORD ST.)	LS	1	-	-	-	-	1
530.7	BARRICADES, SIGNS & TRAFFIC HANDLING (E PYRON AVE.)	LS	-	1	-	-	-	1
530.7	BARRICADES, SIGNS & TRAFFIC HANDLING (MENARBY CT)	LS	-	-	1	-	-	1
530.7	BARRICADES, SIGNS & TRAFFIC HANDLING (SAN PEDRO AVE.)	LS	-	-	-	1	-	1
530.7	BARRICADES, SIGNS & TRAFFIC HANDLING (W MALONE)	LS	-	-	-	-	1	1
535.1	HOT APPLIED THERMOPLASTIC PAVEMENT MARKINGS (4-IN WIDE DOUBLE SOLID YELLOW LINE) (COSA SPEC)	LF	-	-	-	-	800	800
535.2	HOT APPLIED THERMOPLASTIC PAVEMENT MARKINGS (4-IN WIDE WHITE LINE) (COSA SPEC)	LF	-	-	-	-	280	280
535.4	8 INCH WIDE WHITE LINE	LF	-	-	-	-	36	36
535.14	RAILROAD CROSSING SYMBOL, INCLUDING TWO R'S, CROSS BUCK & 3 TRAVERSE BARS (COSA SPEC)	EA	-	-	-	-	2	2
537.6	PAVEMENT MARKER (TYPE I-C)	EA	-	-	-	-	24	24
537.8	PAVEMENT MARKER (TYPE II-A-A)	EA	-	-	-	-	12	12
550	TRENCH EXCAVATION SAFETY PROTECTION	LF	105	-	52	-	325	482
848	8" (SDR-26) (ASTM D-3034) PVC SANITARY SEWER PIPE - ALL DEPTH	LF	-	-	52	-	-	52
848	8" (SDR-26) (ASTM D-2241) PVC SANITARY SEWER PIPE - PSI 160 - ALL DEPTH	LF	-	-	-	-	325	325
848	10" (SDR-26) (ASTM D-2241) PVC SANITARY SEWER PIPE - PSI 160 - ALL DEPTH	LF	105	-	-	-	-	105
851	EXISTING MANHOLE ADJUSTMENTS (WITH NEW RING AND WATERTIGHT COVER)	EA	-	-	-	1	-	1
852.6.1	SANITARY SEWER MANHOLE (0'-6'), 4' DIA.	EA	1	-	1	-	2	4
852.6.1	SANITARY SEWER MANHOLE (0'-6') (COPPER E80 LL), 4' DIA.	EA	2	-	-	-	-	2
852.6.1	SANITARY SEWER DOGHOUSE MANHOLE (0'-6'), 4' DIA.	EA	-	-	-	-	2	2
852.6.1	SANITARY SEWER DOGHOUSE DROP MANHOLE (0'-6'), 5' DIA.	EA	-	1	-	-	-	1
852.6.2	EXTRA DEPTH SANITARY SEWER MANHOLE (>6'), 4' DIA.	VF	12.3	-	-	-	8.2	20.5
852.6.2	EXTRA DEPTH SANITARY SEWER DOGHOUSE MANHOLE (>6'), 4' DIA.	VF	-	-	-	-	8.6	8.6
852.6.2	EXTRA DEPTH SANITARY SEWER DOGHOUSE DROP MANHOLE (>6'), 5' DIA.	VF	-	14.3	-	-	-	14.3
854	SANITARY SEWER LATERAL	LF	27	-	-	-	112	139
854	8" SANITARY SEWER LATERALS	LF	-	90	-	-	-	90
854.1	CLEANOUT (TWO-WAY) FOR SANITARY SEWER LATERAL	EA	1	2	-	-	3	6
858	CONCRETE ENCASUREMENT, CRADLES, SADDLES & COLLARS	CY	1.2	0.6	0.6	-	0.6	3.0
862.1	ABANDONMENT OF SANITARY SEWER MAIN (6" MAIN) TO BE GROUT FILLED	LF	-	-	-	610	-	610
862.1	ABANDONMENT OF SANITARY SEWER MAIN (8" MAIN) TO BE GROUT FILLED	LF	-	-	228	-	-	228
862.1	ABANDONMENT OF SANITARY SEWER MAIN (10" MAIN) TO BE GROUT FILLED	LF	59	-	-	-	-	59
862.1	ABANDONMENT OF SANITARY SEWER MAIN (12" MAIN) TO BE GROUT FILLED	LF	-	614	-	-	-	614
864-S2	BYPASS PUMPING, LARGE DIAMETER SANITARY SEWER (E PYRON AVE.)	LS	-	1	-	-	-	1
865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) (HANSFORD ST.)	LS	1	-	-	-	-	1
865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) (E PYRON AVE.)	LS	-	1	-	-	-	1
865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) (MENARBY CT.)	LS	-	-	1	-	-	1
865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) (SAN PEDRO AVE.)	LS	-	-	-	1	-	1
865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) (W MALONE AVE)	LS	-	-	-	-	1	1
866	SANITARY SEWER MAIN TELEVISION PRE INSPECTION (8"-15") WITH CLEANING	LF	105	-	52	366	325	848
866	SANITARY SEWER MAIN TELEVISION POST INSPECTION (8"-15")	LF	105	-	52	-	325	482
910.1	MANHOLE REHABILITATION (STANDARD MANHOLES 4' DIA.)	VF	-	-	5.1	2.8	-	7.9
SC6A	UNION PACIFIC RAILROAD FLAGGERS	ALW	-	-	-	-	-	1
SC6B	UPRR PERMIT EXTENSION ALLOWANCE	ALW	-	-	-	-	-	1
100	MOBILIZATION (HANSFORD ST.)	LS	1	-	-	-	-	1
100	MOBILIZATION (E PYRON AVE.)	LS	-	1	-	-	-	1
100	MOBILIZATION (MENARBY CT)	LS	-	-	1	-	-	1
100	MOBILIZATION (SAN PEDRO AVE.)	LS	-	-	-	1	-	1
100	MOBILIZATION (W MALONE)	LS	-	-	-	-	1	1
101	PREPARATION OF RIGHT-OF-WAY (HANSFORD ST.)	LS	1	-	-	-	-	1
101	PREPARATION OF RIGHT-OF-WAY (E PYRON AVE.)	LS	-	1	-	-	-	1
101	PREPARATION OF RIGHT-OF-WAY (MENARBY CT)	LS	-	-	1	-	-	1
101	PREPARATION OF RIGHT-OF-WAY (SAN PEDRO AVE.)	LS	-	-	-	1	-	1
101	PREPARATION OF RIGHT-OF-WAY (W MALONE)	LS	-	-	-	-	1	1

\* TO BE USED AS NEEDED AND AS DIRECTED BY SAWS INSPECTOR AND/OR ENGINEER



6/7/2022

1	05/26/22	REVISED BY ADDENDUM #1		
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NO	DATE	DESCRIPTION	DWG	CHK
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**LNV**  
an Ardurra Company  
8918 TESORO DR. SUITE 401  
SAN ANTONIO, TX 78217  
PH. (210) 822-2232  
WWW.LNVINC.COM

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



BPC SEWERSHED PACKAGE 5 - PIPE BURST AND OPEN CUT SET 2 OF 2

OVERALL QUANTITIES

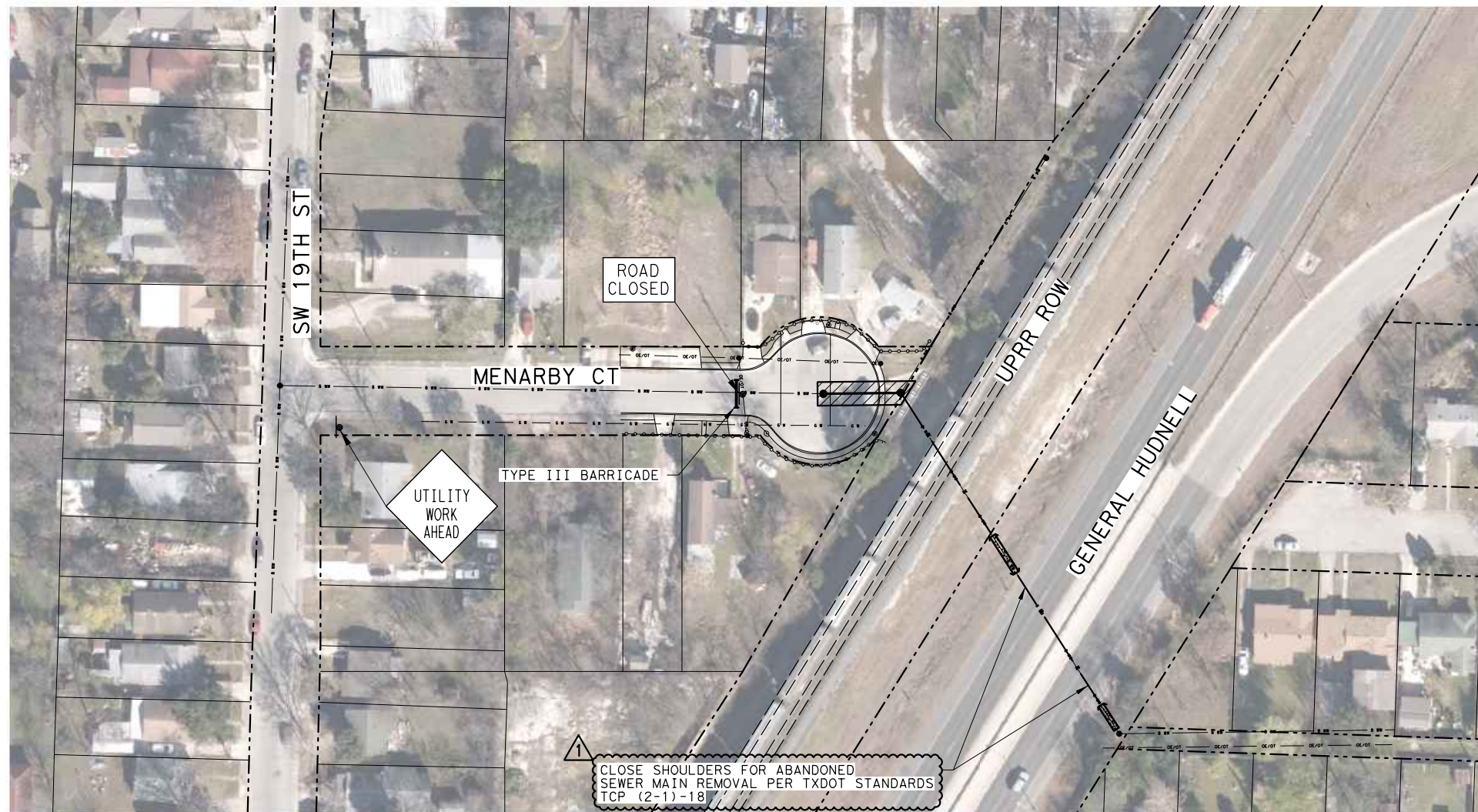
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S7

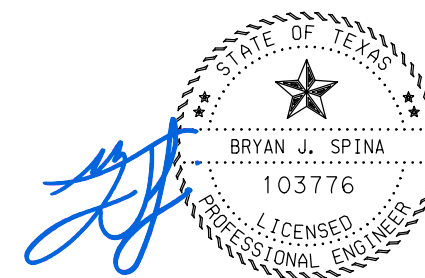
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LEGEND

- CHANNELIZING DEVICE
- ← TRAFFIC CONTROL DIRECTION
- ▶ PORTABLE MESSAGE BOARD
- PROP TCP STRIPING/BUTTONS
- TYPE III BARRICADES
- ▨ WORK ZONE



6/7/2022

NO	DATE	DESCRIPTION	DWG	CHK
1	05/26/22	REVISED BY ADDENDUM #1		

REVISIONS



8918 TESORO DR, SUITE 401 PH. (210) 822-2232  
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SAN ANTONIO WATER SYSTEM

BPC SEWERSHED PACKAGE 5 -  
 PIPE BURST AND OPEN CUT  
 SET 2 OF 2

MENARBY CT  
 TRAFFIC CONTROL LAYOUT

HORIZ. SCALE: 1"=100'

0 50 100

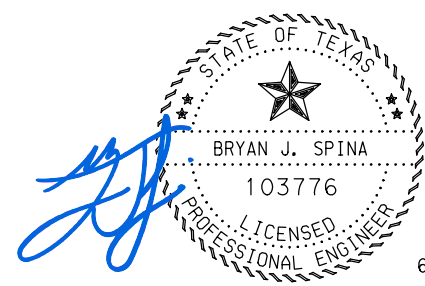


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SAWS JOB NO.: 20-4532	S20
DRWN BY: DSGN BY: CHKD BY:	



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6/7/2022

1	05/26/22	REVISED BY ADDENDUM #1		

NO	DATE	DESCRIPTION	DWG	CHK
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**REVISIONS**

BPC SEWERSHED PACKAGE 5 -  
PIPE BURST AND OPEN CUT  
SET 2 OF 2

**MENARBY CT  
SUGGESTED SANITARY SEWER  
BY-PASS LAYOUT**

HORIZ. SCALE: 1"=50'  
0 25 50  
SCALE IN FEET

MAP No(s):	DATE: 6/7/2022
SAWS JOB NO.: 20-4532	
DRWN BY:	DSGN BY:
	CHKD BY:

**S21**

MENARBY PLACE MAIN SANITARY SEWER PIPE FULL FLOW DATA							
LINE	COMPKEY	FROM SAWS MH	TO SAWS MH	DIAMETER	SLOPE	LENGTH (FT)	Q <sub>full</sub> (GPM)
G-1		96581	87295	8	0.11%	188	188

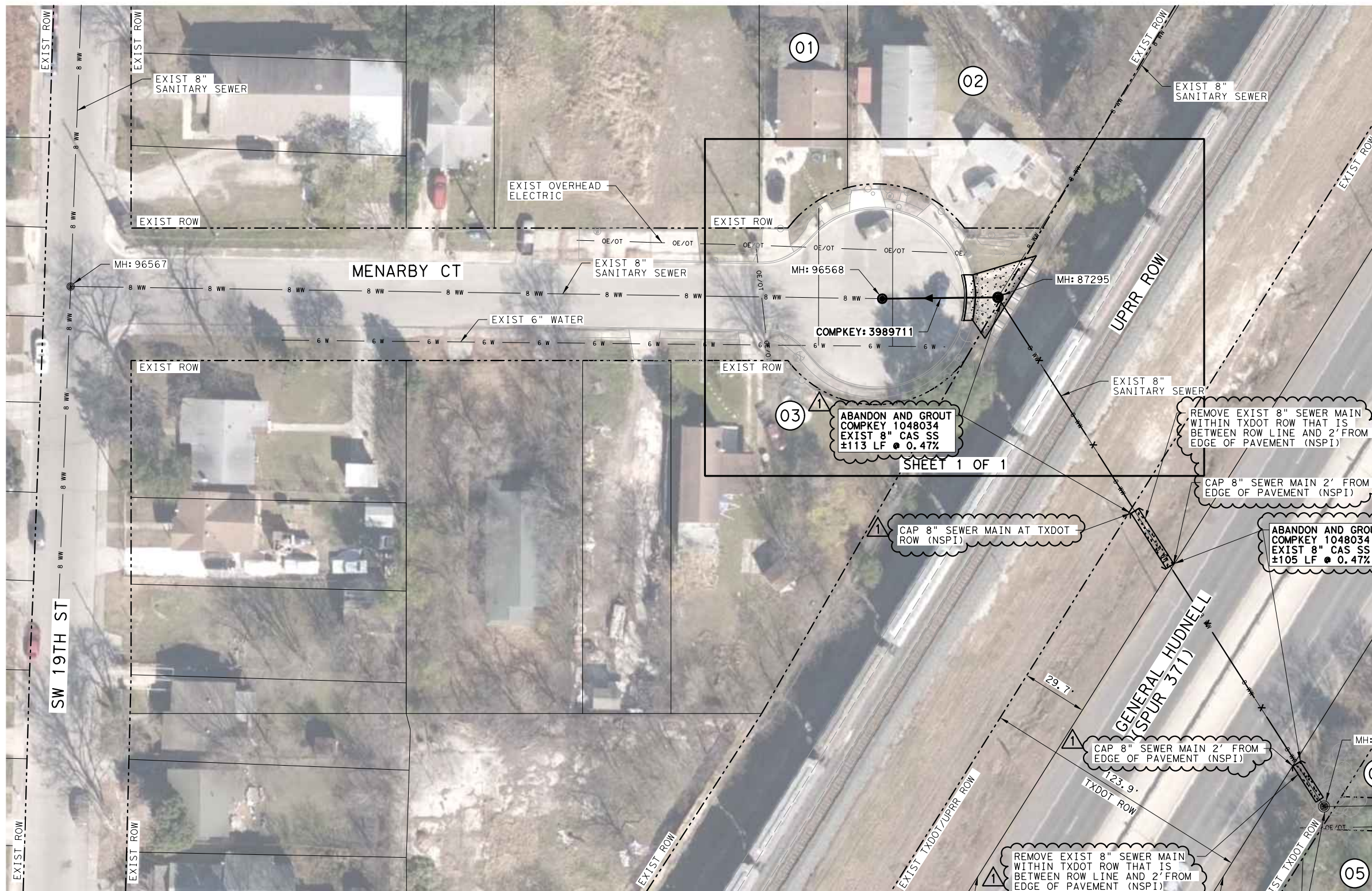
**SANITARY SEWER BYPASS**

1. THE CONTRACTOR SHALL FIELD VERIFY MANHOLE INVERTS AND SANITARY SEWER LINE SLOPES PRIOR TO COMMENCING BYPASS WORK.
2. THE CONTRACTOR SHALL MAINTAIN SEWAGE FLOW IN THE CONSTRUCTION AREA IN ORDER TO PREVENT BACKUP AND/OR OVERFLOW INTO ADJACENT DITCHES, STORM SEWERS AND WATERWAYS.
3. FLOW DATA DOES NOT INCLUDE INFLOW/INFILTRATION.

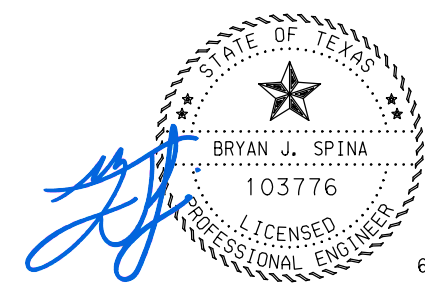
SEE SHEET S22 FOR  
PROPERTY INFORMATION

- LEGEND**
- ⊙ EXIST SS MANHOLES
  - WW — WW EXIST SANITARY SEWER
  - >—>—> PROP SANITARY SEWER
  - ⊙ PROP MANHOLES
  - - - - - SUGGESTED BYPASS ROUTE
  - == == == == EXIST RR TRACKS

6/7/2022  
 Plotted by: j.inocencio  
 St:\Projects\SAWS\190044 2019 SSORP Engineering Design Services\000\20-Drawings\Plans\Civil\190044\MENARBY\*OVERALL01.dgn



- NOTES:
1. REMOVAL OF 8" SEWER MAIN, TRENCHING, AND BACKFILL ARE SUBSIDIARY TO ITEM 101 PREPARATION OF RIGHT-OF-WAY (NSPI).
  2. AS PER SPECIAL CONDITION SC4 PROJECT REQUIREMENTS, SECTION B, A TXDOT PERMIT IS REQUIRED AND THE CONTRACTOR SHALL NOTIFY SAWS AS REQUIRED BY THE SPECIAL CONDITION SO SAWS MAY ACQUIRE THE PERMIT FOR THE CONTRACTOR.



6/7/2022

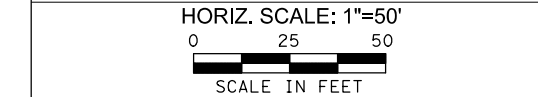
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NO	DATE	DESCRIPTION	DWG	CHK

**LNV**  
 an Ardurra Company  
 TPELS REGISTERED FIRM NO.  
 ENGINEERING FIRM F-366  
 SURVEYING FIRM 10126502  
 8918 TESORO DR, SUITE 401 PH. (210) 822-2232  
 SAN ANTONIO, TX 78217  
 WWW.LNVINC.COM



BPC SEWERSHED PACKAGE 5 -  
 PIPE BURST AND OPEN CUT  
 SET 2 OF 2

**MENARBY CT  
 SANITARY SEWER  
 OVERALL LAYOUT**

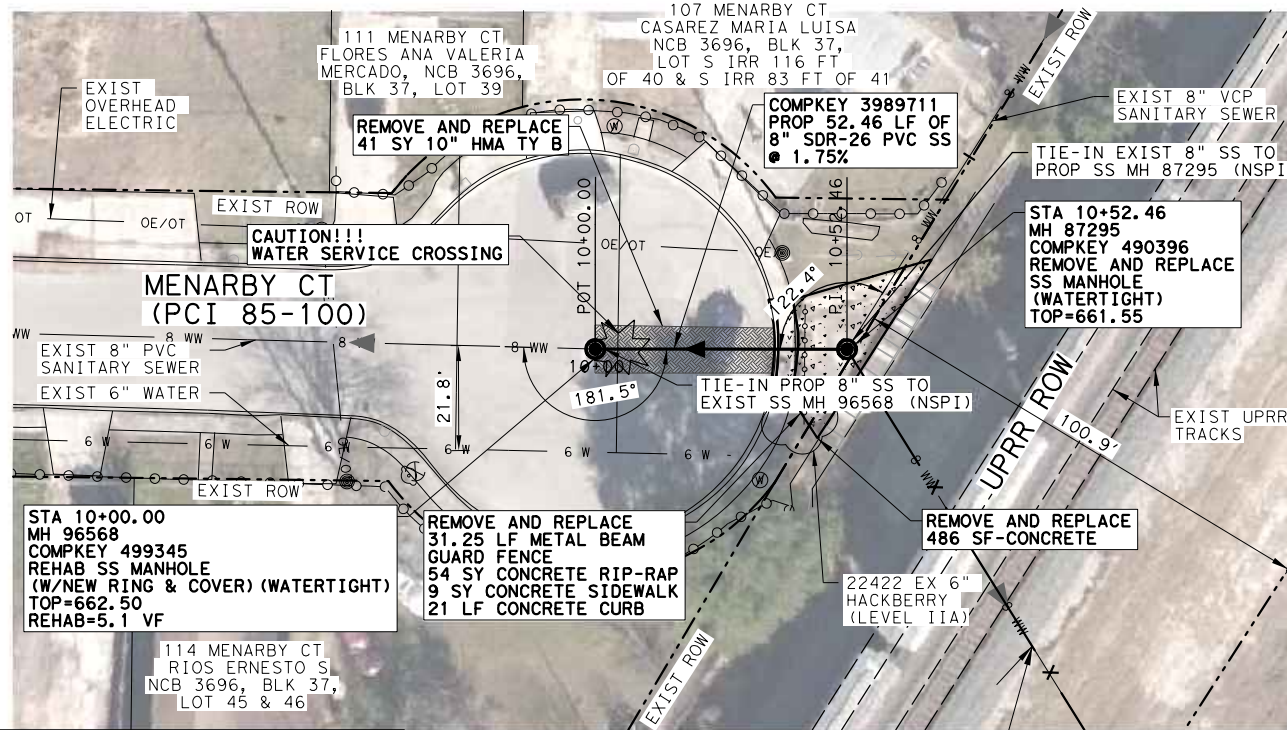


MAP No(s):	DATE: 6/7/2022
SAWS JOB NO.: 20-4532	
DRWN BY:	CHKD BY:
<b>S22</b>	

**PROPERTY INFORMATION**

PARCEL NO.	PROPERTY ID	Address	NCB	BLOCK	LOT
1	150931	111 MENARBY CT	3696	37	39
2	150932	107 MENARBY CT	3696	37	S IRR 116 FT OF 40 & S IRR 83 FT OF 41
3	150937	114 MENARBY CT	3696	37	45 & 46
4	457352	254 ARAPAHOE DR	10479	5	21 & E IRR 55 FT OF 20
5	457337	523 DARBY BLVD	10479	5	3

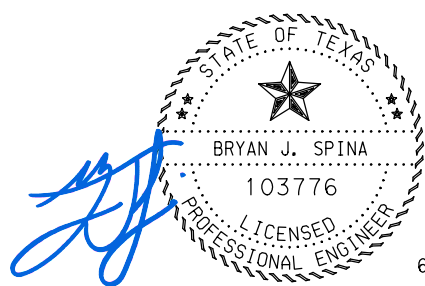
PLUG COMPEY 1048034 AT MH 16496 AND LEAVE MH 16496 IN SERVICE (NSPI).



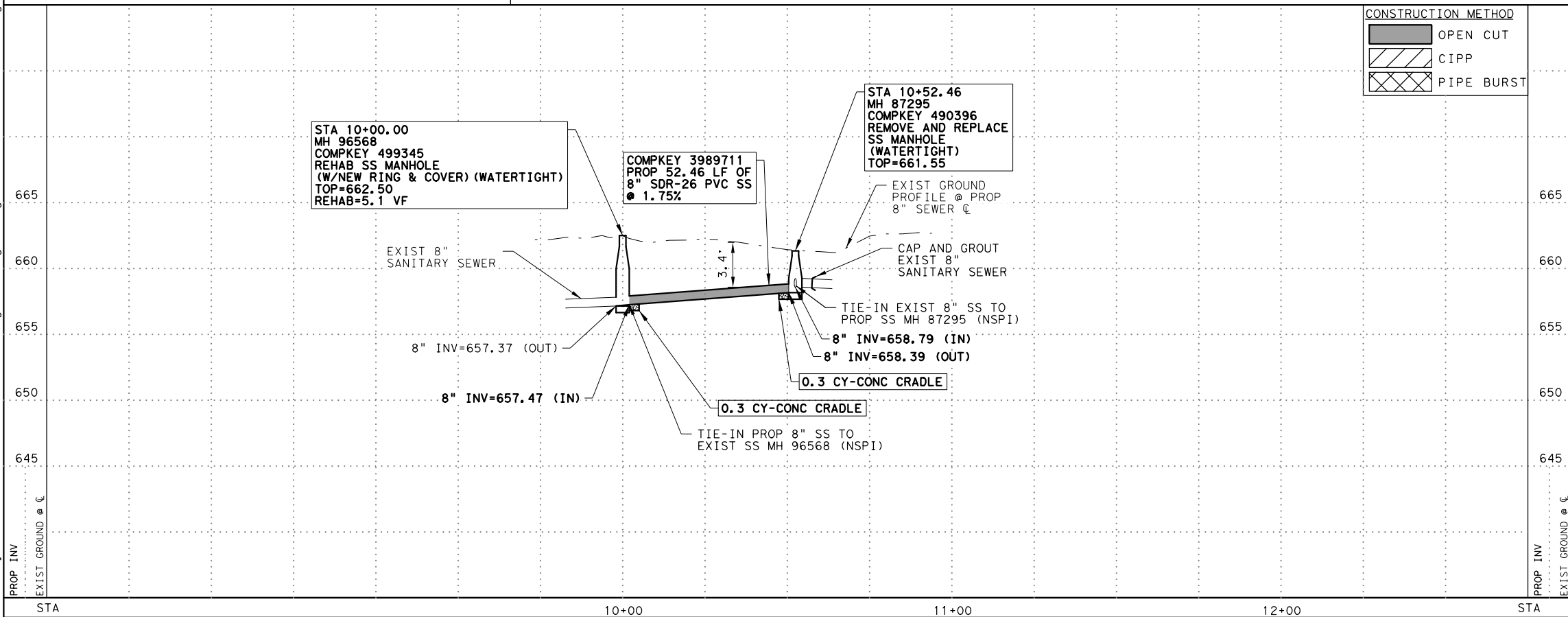
ITEM #	DESCRIPTION	UNIT	QTY
100	MOBILIZATION (MENARBY CT)	LS	1
101	PREPARATION OF RIGHT-OF-WAY (MENARBY CT)	LS	1
103.1	REMOVE CONCRETE CURB (COSA SPEC)	LF	21
103.3	REMOVE SIDEWALK & DRIVEWAYS (COSA SPEC)	SF	81
103.4	REMOVE MISCELLANEOUS CONCRETE	SF	486
205.2	HOT MIX ASPHALT CONCRETE TYPE B (10" COMPACTED) (COSA SPEC)	SY	30
500.1	CONCRETE CURB (COSA SPEC)	LF	21
502.1	CONCRETE SIDEWALKS (CONVENTIONALLY FORMED)	SY	9
505.1	CONCRETE RIPRAP (5" THICK)	SY	54
509.1	METAL BEAM GUARD RAIL (COSA SPEC)	LF	31.3
515.1	TOPSOIL	CY	20
520.1	HYDROMULCH	SY	180
530.7	BARRICADES, SIGNS & TRAFFIC HANDLING (MENARBY CT)	LS	1
550	TRENCH EXCAVATION SAFETY PROTECTION	LF	52
848	8" (SDR-26) (ASTM D-3034) PVC SANITARY SEWER PIPE - ALL DEPTH	LF	52
852.6.1	SANITARY SEWER MANHOLE (0'-6'), 4' DIA.	EA	1
858	CONCRETE ENCASEMENT, CRADLES, SADDLES & COLLARS	CY	0.6
862.1	ABANDONMENT OF SANITARY SEWER MAIN (8" MAIN) TO BE GROUT FILLED	LF	228
865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) (MENARBY CT.)	LS	1
866	SANITARY SEWER MAIN TELEVISION PRE INSPECTION (8"-15") WITH CLEANING	LF	52
866	SANITARY SEWER MAIN TELEVISION POST INSPECTION (8"-15")	LF	52
910.1	MANHOLE REHABILITATION (STANDARD MANHOLES 4' DIA.)	VF	5.1

- NOTE:
- SEWER MAIN CROSSES WATER SERVICES. WATER SERVICES ARE TO BE PROTECTED DURING CONSTRUCTION.
  - SEGMENT IS WITHIN THE 100 YEAR FLOODPLAIN
  - CONTRACTOR TO REPAIR ANY DISTURBED GRADE ADJACENT TO THE CONCRETE RIP-RAP SIDE SLOPES FOR THE EXISTING FLUME AT MENARBY CT. (NSPI)
  - FOR REQUIRED ABANDONMENT AND REMOVAL OF COMPKEY 1048034 SEE SHEET S22 AND NOTE THAT TXDOT PERMIT AND UPRR WILL BE REQUIRED FOR THIS WORK. PERMITS WILL BE ACQUIRED BY SAWS AS NOTED IN THE SPECIFIC CONDITIONS.

SEE SHEET S22 FOR LIMITS OF GROUT ABANDONMENT AND REMOVAL OF EXIST 8" SANITARY SEWER



6/7/2022



**CONSTRUCTION METHOD**

- OPEN CUT
- CIPP
- PIPE BURST

**LEGEND**

- WW - WASTE WATER
- W - WATER
- G - BURIED GAS
- ROW LINE
- UGT - BURIED TEL
- OE - OH UTILITIES
- FENCE
- FIRE HYDRANT
- WATER METER
- WATER VALVE
- TELE PEDESTAL
- LIGHT POLE
- POWER POLE
- GUY WIRE
- SIGN
- EXIST MANHOLE
- REHAB MANHOLE
- PROP MANHOLE
- PROP SS
- FLOW DIRECTION
- PROP SS LATERAL
- EXIST SS LATERAL
- ABANDON SS LATERAL
- CLEAN OUT
- UTILITY CROSSING
- TRENCH REPAIR
- CONCRETE REPAIR
- 24" STEEL CASING
- CONC ENCASEMENT
- ABANDON & GROUT
- SUE LOCATIONS

1 05/26/22 REVISED BY ADDENDUM #1

NO	DATE	DESCRIPTION	DWG	CHK
REVISIONS				

**LNV**  
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SAN ANTONIO, TX 78217  
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**SAWS**  
SAN ANTONIO WATER SYSTEM

BPC SEWERSHED PACKAGE 5 - PIPE BURST AND OPEN CUT SET 2 OF 2

**MENARBY CT SEWER PLAN & PROFILE STA 10+00.00 TO END SHEET 1 OF 1**

HORIZ. SCALE: 1"=40'  
VERT. SCALE: 1"=10'

SCALE IN FEET

MAP No(s):  
SAWS JOB NO.: 20-4532  
DRWN BY: DSGN BY: CHKD BY: S23

DATE: 6/7/2022

6/7/2022 P:\Projects\SAWS\190044 2019 SSORP Engineering Design Services\000\20-Drawings\Plans\Civil\190044\*P&P\MENARBY\*01.dgn