

Pipeline Replacement FY23
FPUD Job 3186

ADDENDUM A

August 3, 2022

Attention All Bidders:

The following clarifications, changes, and/or deletions to the Contract Documents are hereby made as part of the Contract Documents for the above referenced project as fully and as completely as though the same was included therein. This addendum shall be acknowledged on the face of the envelope submitted with the Bid Proposal.

This Addendum "A" includes clarifications and/or changes to the Contract Documents for the Fallbrook Public Utility District, **Job 3186, Pipeline Replacement FY23.**

Drawing revisions included in this addendum include (revised drawing set attached):

- Additional existing utility information
- Appurtenance locations have been added
- Deleted notes referencing drawings not included
- Meter sizes – all meters are ¾" unless noted otherwise on drawings
- 4" meter connection at Sta 10+00 per FPUD Standard Drawing W-3
- Sheet G-2, Water Notes - #4 Deleted requirement to complete potholing prior to submittal of shop drawings.
- Sheet G-4 Added Notes:
 - East Elder St, Sta 50+00 to Sta 71+47 must be constructed first.
 - Hawthorn St, Sta 129+20 to Orange Ave Sta 148+74, full street width 1-1/2" thick cold mill and overlay per County Standard required.

Specification revisions in this addendum include:

- Section 02743.1.05.B revised to "Pavement trench resurfacing shall be in accordance with County of San Diego Regional Standards G-24A and G-24B." Note B.1 is deleted.
- Section 02743.3.06 revised to "...place aggregate base course at a minimum thickness of 8-inches."
- Section 02743.3.09 revised to "...place asphalt concrete paving at a minimum thickness of 6-inches or 1-inch thicker than the adjacent pavement section, whichever is greater."
- Updated standard drawings (attached).
 - Jones 110 or equal compression connections can be used for service line fittings and valves.

Questions:

Please confirm or clarify is "Type A" Trench Resurfacing is intended to be used for Main Line and laterals on all locations.

- Response: For non-County roads, updated FPUD Standard Drawing provided, with only one trench type. Trench resurfacing in County Roads per County of San Diego Standards, see San Diego Regional Standard Drawing G-24A/B. Typically Type B or C from San Diego Regional Standard Drawings is required by the County depending on trench width. See additional notes provided on Sheet G-4 attached to this addendum.

Please specify which mix design will be used for plugs at the abandonments as well as the type of slurry.

- Response: Controlled low strength material per spec section 02050. 1200 psi concrete mix.

APPENDIX A

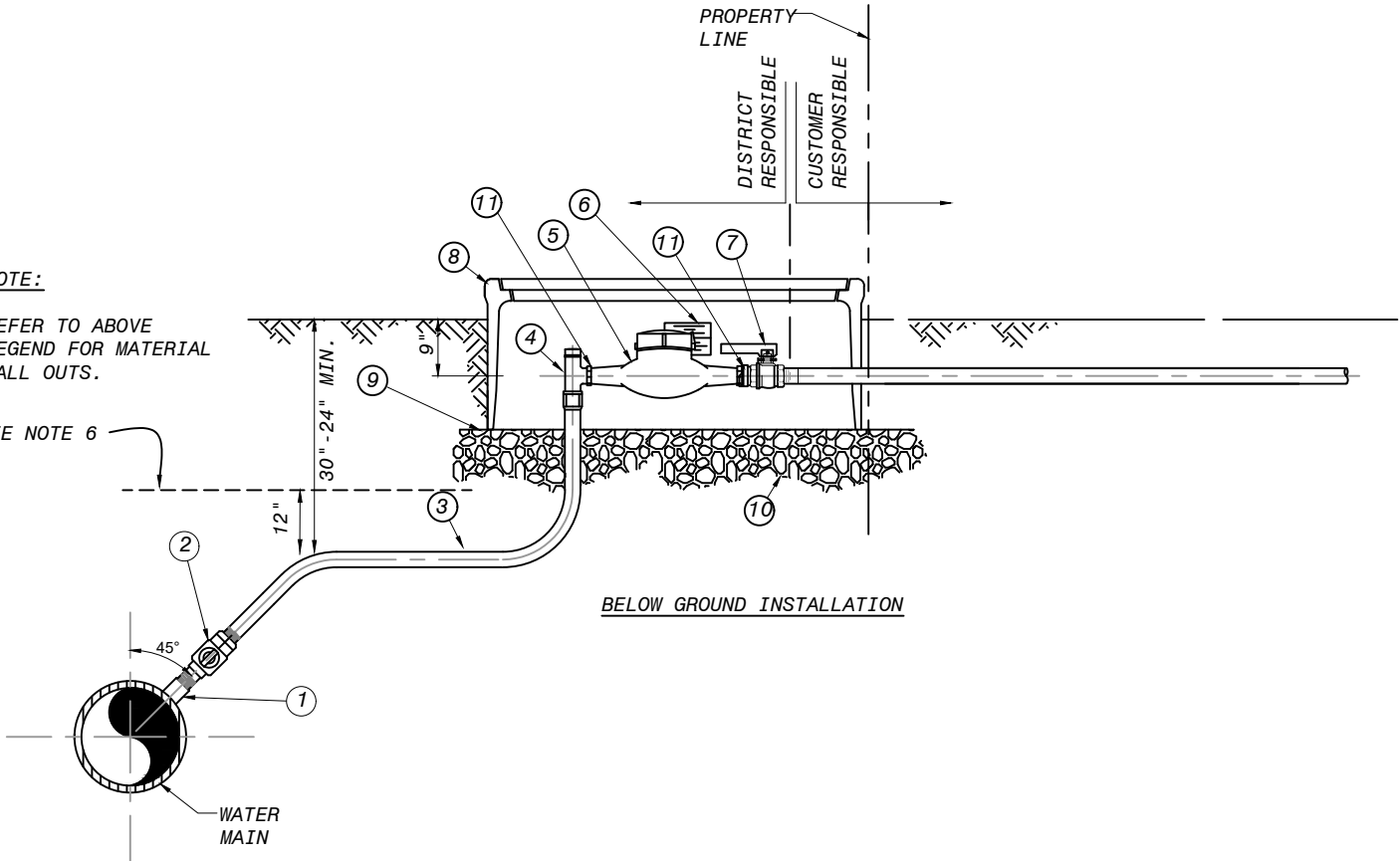
DISTRICT STANDARDS

W1	¾" THRU 2" WATER SERVICE INSTALLATION
W3	STANDARD PIPE ZONE AND TRENCH BACKFILL
W4	CONCRETE THRUST BLOCKS
W5	SERVICE OUTLET SADDLE
W6	2" BLOW OFF ASSEMBLY
W7	4" BLOW OFF ASSEMBLY
W9	6" FIRE HYDRANT ASSEMBLY
W11	1" AND 2" AIR VAC ASSEMBLY
W13	GROUND POST (BOLLARD)
W18	TYPICAL THREE VALVE TEE
W19	VALVE WELL FRAME & VALVE WELL COVER
W21	TRENCH RESURFACING

NOTE:

REFER TO ABOVE LEGEND FOR MATERIAL CALL OUTS.

SEE NOTE 6



BELOW GROUND INSTALLATION

TYPICAL CONSTRUCTION NOTES:

1. REPAIR COATING ON PIPE TO COVER WELDED COUPLING AND REPAIR COUPLING AND MALE THREADS OF CORP STOP AFTER CONNECTING PIPE. SEE W-5.
2. APPLY BITUMASTIC COMPOUND TO COUPLING AND MALE THREADS OF CORP STOP AFTER CONNECTING TO A TAR/WRAPPED STEEL PIPE.
3. PIPE THREADS SHALL BE CLEAN, SHARP AND WRAPPED WITH A PIPE THREAD SEAL TAPE.
4. WHERE METER BOX IS LOCATED IN CONCRETE OR ASPHALT TRAFFIC AREAS, CONTACT DISTRICT FOR AN APPROVED CONCRETE METER BOX.
5. WRAP BURIED FACILITIES WITH 10 MIL CALPICO TAPE OR CONTINUOUS POLYETHYLENE SLEEVE ENCASEMENT (6-MIL).
6. INSTALL BLUE UNDERGROUND WARNING TAPE, INDICATING "WATER PIPE", IN PIPE TRENCH 12" ABOVE PIPE.
7. SHALLOW SERVICE LINE INSTALLATIONS SHALL BE APPROVED BY D.E. PRIOR TO CONSTRUCTION.
8. 3/4" METER - 1" SERVICE LINE
1" METER - 1" SERVICE LINE
9. CUSTOMER IS RESPONSIBLE TO PROTECT PRIVATE FACILITIES AND TO SUPPLY PRESSURE REDUCING VALVE WHEN PRESSURE IS HIGH. REFER TO THE UNIFORM PLUMBING CODE AND PRIVATE ENGINEER REGARDING INSTALLATION OF A PRESSURE REGULATOR AFTER METER.

MATERIAL LIST

ITEM	QTY	MATERIAL	PART NO.
1		PER W-5: FORGED STEEL HALF-COUPLING, THREADED, CLASS 3000 WELDED TO PIPE WITH REINFORCING SADDLE (CML&C PIPE); OR DOUBLE STRAP, STAINLESS STEEL, TAPPING COLLAR (PVC OR DUCTILE IRON PIPE).	
2		THREADED CORP STOP, MIP x MIP THREAD BALL VALVE (T-HEAD ONLY), OR APPROVED EQUAL BY D.E.	J E-1943, J E-1956
3		CONTINUOUS TYPE "K" COPPER TUBING	SEE NOTE 8
4		ANGLE STOP: 180 deg METER SIZE 3/4" (1"X3/4") TURN, FIP X SWIVEL NUT METER SIZE 1" (1" X 1") AND LOCK WING.	JONES E-1527 JONES E-1527
5		WATER METER SUPPLIED BY DISTRICT	
6		ERT RADIO SUPPLIED AND/OR INSTALLED BY DISTRICT	
7		BRONZE BALL VALVE, JONES OR FORD WITH LOCKING WING AND BRASS HANDLE OR APPROVED EQUAL BY D.E. HANDLE: JONES - HB-34 AND FORD - J-2813	JONES E-1908W, FORD B13-332W, B13-444W-NL
8		HDPE PLASTIC METER BOX AND COVER, (GREEN) BRASS METER TAILS WITH GASKETS.	REG: 20"X26"
9		1/2" WIRE MESH 19 GAUGE, GALVANIZED COATING D, SET 1" BEYOND METER BOX DIMENSIONS	
10		6" BASE OF 3/4" ROCK	
11		USE FPU D APPROVED GASKET WASHERS. CLOTH INSERTED GASKET W/ FABRIC FINISH: 1/8" THICK	TRIPAC



Rev. Date	By	Approve
2/23/17	SMD	JB
11/3/21	SMD	AWC



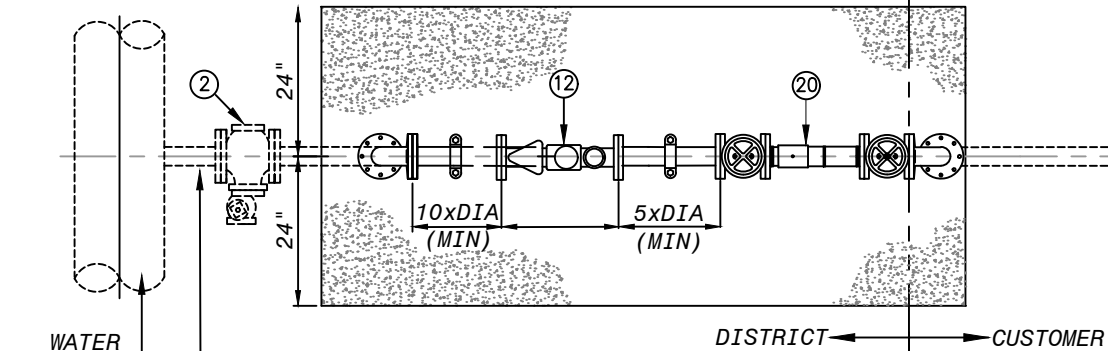
TYPICAL 3/4" THRU 1" WATER SERVICE INSTALLATION

DRAWING NO.

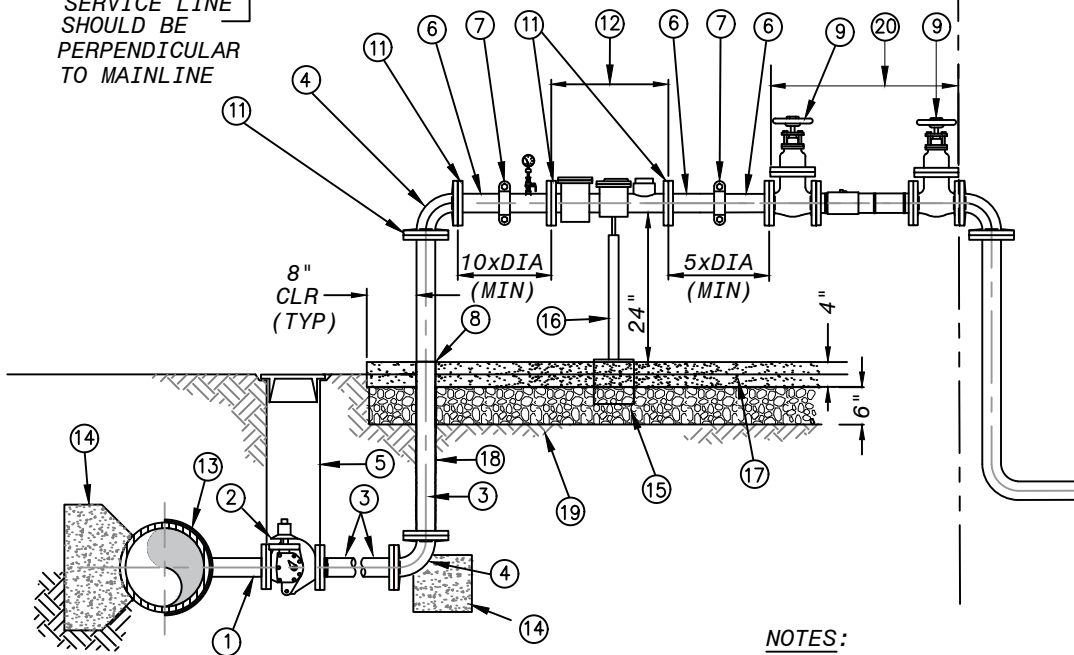
W-1

K:\RECORD FILES\DISTRICT STANDARDS\DISTRICT DRAWINGS\WATER

PLAN



PROFILE



MATERIAL LIST PER METER SIZE X" (MINIMUM)

ITEM	QTY	MATERIAL DESCRIPTION	(PART NO.)
①		X" FLANGED OUTLET PER AWWA AND DISTRICT STANDARDS	
②		X" FLANGED GATE VALVE, (OR FLANGED PLUG VALVE, WHERE PRESSURE IS GREATER THAN 250 PSI)	
③		X" DUCTILE IRON PIPE (DIP) T.2E.	
④		X" 90° DI PIPE ELBOW, FLANGED.	
⑤		VALVE WELL INSTALLATION PER DISTRICT STD. DWG NO.W-19	
⑥		X" FLANGE x GROVE END SPOOL.	
⑦		X" COUPLING, 150-LB, GALVANIZED.	
⑧		WRAP WITH FOAM TAPE FOR CONCRETE PENETRATION	
⑨		X" GATE VALVE, FLANGED	
⑩		X" COMPANION FLANGE, FLANGED, 150-LB	
⑪		WATER METER AND RADIO RTU SUPPLIED BY DISTRICT (SEE NOTE 3)	
⑫		HALF WRAP WELD SADDLE	
⑬		THRUST BLOCK, FPUD SEC 03300	
⑭		DELETED	
⑮		ADJUSTABLE STAINLESS STEEL PIPE SUPPORT FOR X" PIPING	
⑯		4" CONCRETE SLAB, #4 STEEL REBAR 12" O.C. EACH WAY GRADE 60, AT MID-DEPTH	
⑰		WRAP PER DISTRICT STANDARD WITH 8 MIL POLYETHYLENE	
⑱		BACKFILL WITH AGGREGATE BASE, (95% REL. COMPACTION)	
⑳		REDUCED PRESSURE BACKFLOW PREVENTION DEVICE AS REQUIRED AND APPROVED BY THE DISTRICT - SHALL MATCH METER SIZE.	

NOTES:

- 1) CUSTOMER IS RESPONSIBLE FOR SUPPLYING PRESSURE REDUCING VALVE (PRV) WHEN PRESSURE EXCEEDS 175 PSI. REFER TO THE UNIFORM BUILDING CODE AND A PRIVATE ENGINEER REGARDING INSTALLATION OF A PRV AFTER THE METER AND BEFORE BACKFLOW.
- 2) INSTALLATION, MATERIALS AND VALVES SHALL BE ACCORDING TO DISTRICT SPECIFICATIONS. SEE FOR MORE INFORMATION.
- 3) METER STRAINER MAY BE INCLUDED WITH METER. IF STRAINER IS USED BEFORE UPSTREAM SPOOL, LENGTH OF SPOOL CAN BE REDUCED FROM 10XDIA. TO 5xDIA. SEE DISTRICT ENG. FOR MORE INFORMATION.
- 4) PAINTING: ABOVE GROUND PIPING SHALL BE PAINTED (FOREST) GREEN, ENAMEL. DO NOT PAINT METER.

11/3/21 - CHANGED TO W-3A, WAS W-2A



REV. DATE	BY	APP'D
5/24/17	SMD	JRB
04/08/21	SMD	AWC
11/03/21	SMD	AWC

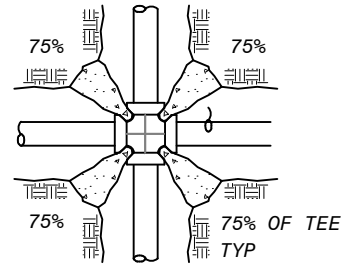
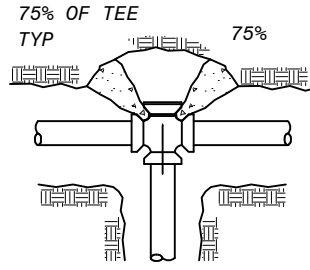
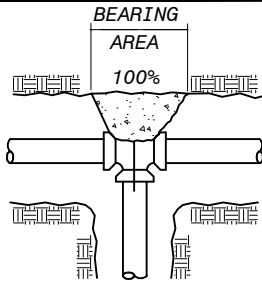


3" - 6" WATER SERVICE WITH REDUCED PRESSURE BACKFLOW DEVICE

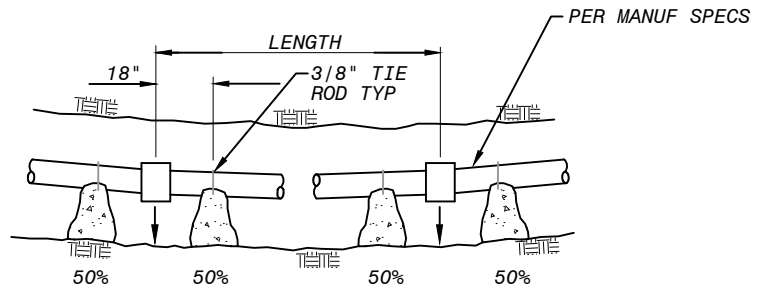
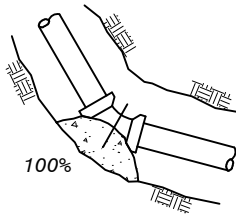
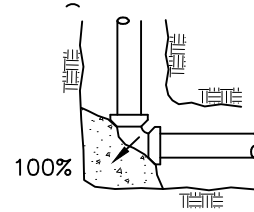
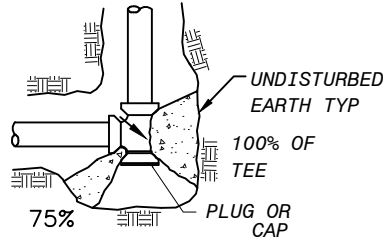
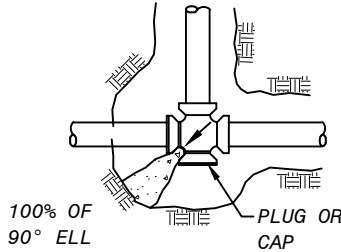
DRAWING NO.

W-3A

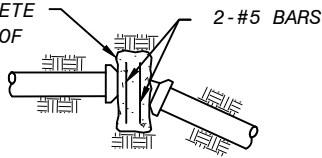
X:\RECORD FILES\DISTRICT STANDARDS\DISTRICT DRAWINGS\WATER



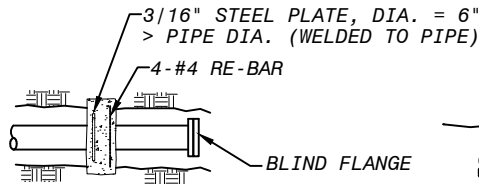
PLANS



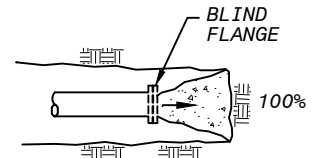
WEIGHT OF CONCRETE TO RESIST 100% OF TOTAL THRUST



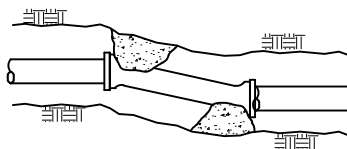
VERTICAL BEND



STEEL PIPE THRUST COLLAR



DEAD-END



DEFLECTION

NOTES:

1. IN USING THE ABOVE TABLES, USE THE MAXIMUM INTERNAL PRESSURE ANTICIPATED (i.e. HYDROSTATIC TEST PRESSURE, POSSIBLE SURGE PRESSURE DUE TO PUMP SHUT-OFF, ETC.)
2. SEE SOILS REPORT FOR BEARING STRENGTH OF SOIL. IN THE ABSENCE OF A SOILS REPORT, AN AVERAGE SOIL (SPADABLE MEDIUM CLAY) CAN BE ASSUMED TO HAVE A BEARING STRENGTH OF 2000 P.S.F.
3. ARROWS () INDICATE THRUST DIRECTION
4. FIGURE (100%) AT THRUST BLOCK INDICATES PER CENT OF TOTAL THRUST TO BE APPLIED FOR BEARING AREA.
5. CONC. FOR THRUST BLOCKS TO BE 450-C-2000
6. CONCRETE THRUST BLOCK TO BE POURED AGAINST UNDISTURBED EARTH.

MINIMUM BEARING AREAS IN SQUARE FEET PER 100 PSI OF PRESSURE					
PIPE SIZE	DEAD END OR TEE	90° ELBOW	45° ELBOW	22-1/2° ELBOW	11-1/4° ELBOW
6	3.7	5.3	2.9	1.5	0.7
8	6.4	9.1	4.9	2.5	1.3
10	9.7	13.7	7.4	3.8	1.9
12	13.7	19.4	10.5	5.3	2.7
14	18.4	26.0	14.1	7.2	3.6
16	23.8	33.6	18.2	9.3	4.7
18	24.9	42.2	22.9	11.7	5.9
20	36.6	51.8	28.0	14.3	7.2
24	52.3	73.9	40.0	20.4	10.2
30	80.4	113.7	61.6	31.4	15.8



REV. DATE	BY	APPROVED
5/24/17	SMD	JRB

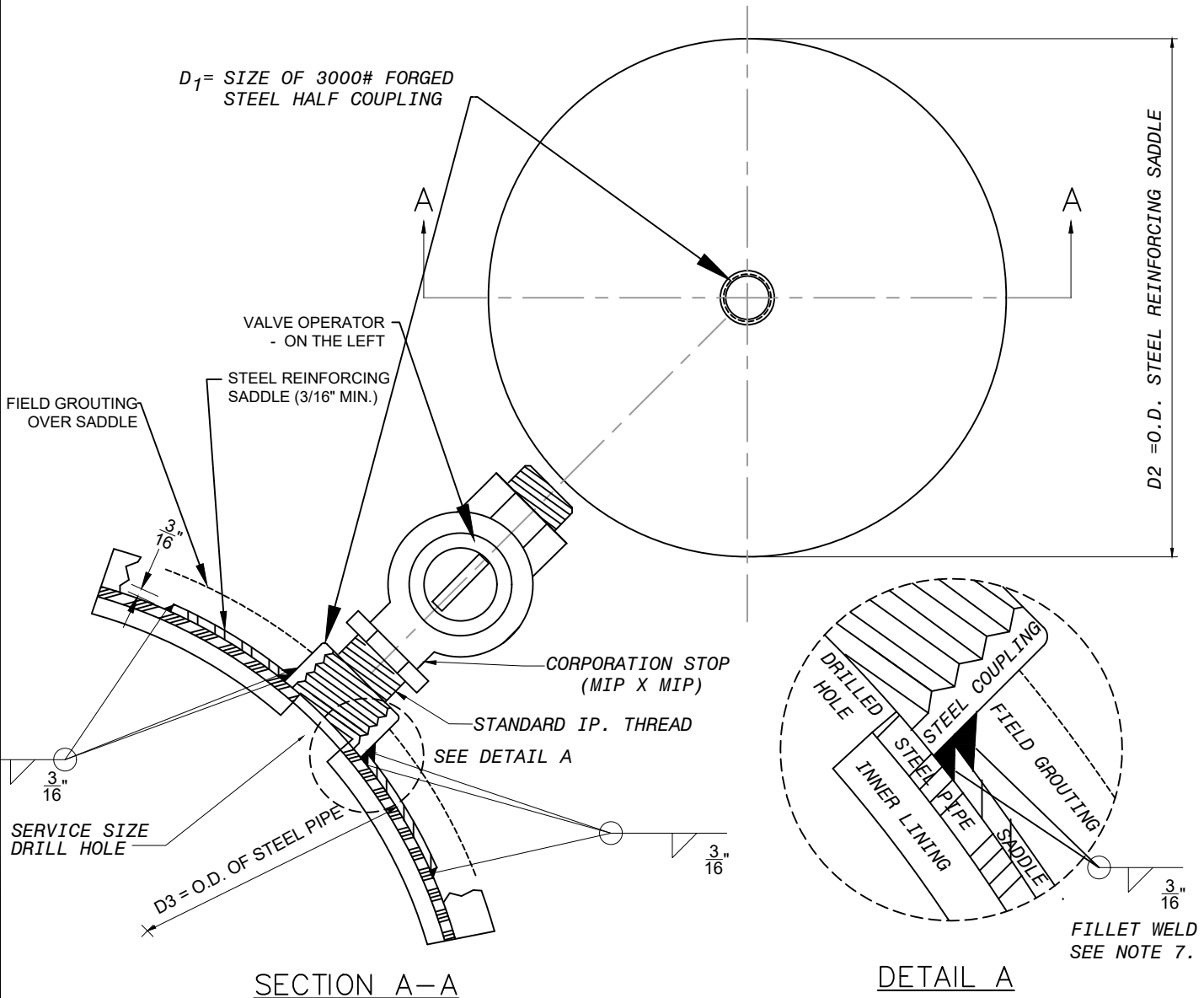


CONCRETE THRUST BLOCKS

DRAWING NO.

W-4

D_1 = SIZE OF 3000# FORGED STEEL HALF COUPLING



SECTION A-A

DETAIL A

NOTES:

1. USE DOUBLE-PASS WELDS FOR FABRICATION & FIELD WELDS.
2. SADDLE CURVATURE TO BE FORMED TO MEET PIPE DIAMETER D_3 , AS INDICATED.
3. WHEN INSTALLED. OUTLET TO BE COATED WITH SAME COATING AS PIPE.
4. SERVICE LATERALS TO BE INSTALLED AT 45° ANGLE ABOVE SPRINGLINE OF PIPE.
5. SERVICE CONNECTION CAN BE MADE WITH LINE IN SERVICE (HOT-TAPPED).
6. BUSHINGS ARE NOT ALLOWED.
7. HALF COUPLING IS PLACED ON PIPE AND FILLET WELDED PRIOR TO WELDING SADDLE AROUND COUPLING.
8. IF PIPING IS NOT HOT-TAPPED, GROUT INSIDE OF FITTING. REINFORCING SADDLE IS NOT REQUIRED.
9. IF PIPE HAS MFR WELDED COUPLINGS, SADDLES ARE NOT REQUIRED.

SADDLE DIMENSIONS		
SERVICE SIZE	D_1	D_2
3/4" / 1"	1-1/4"	5"
1-1/2" / 2"	2-1/2"	7"

X:\RECORD FILES\DISTRICT STANDARDS\DISTRICT DRAWINGS\WATER

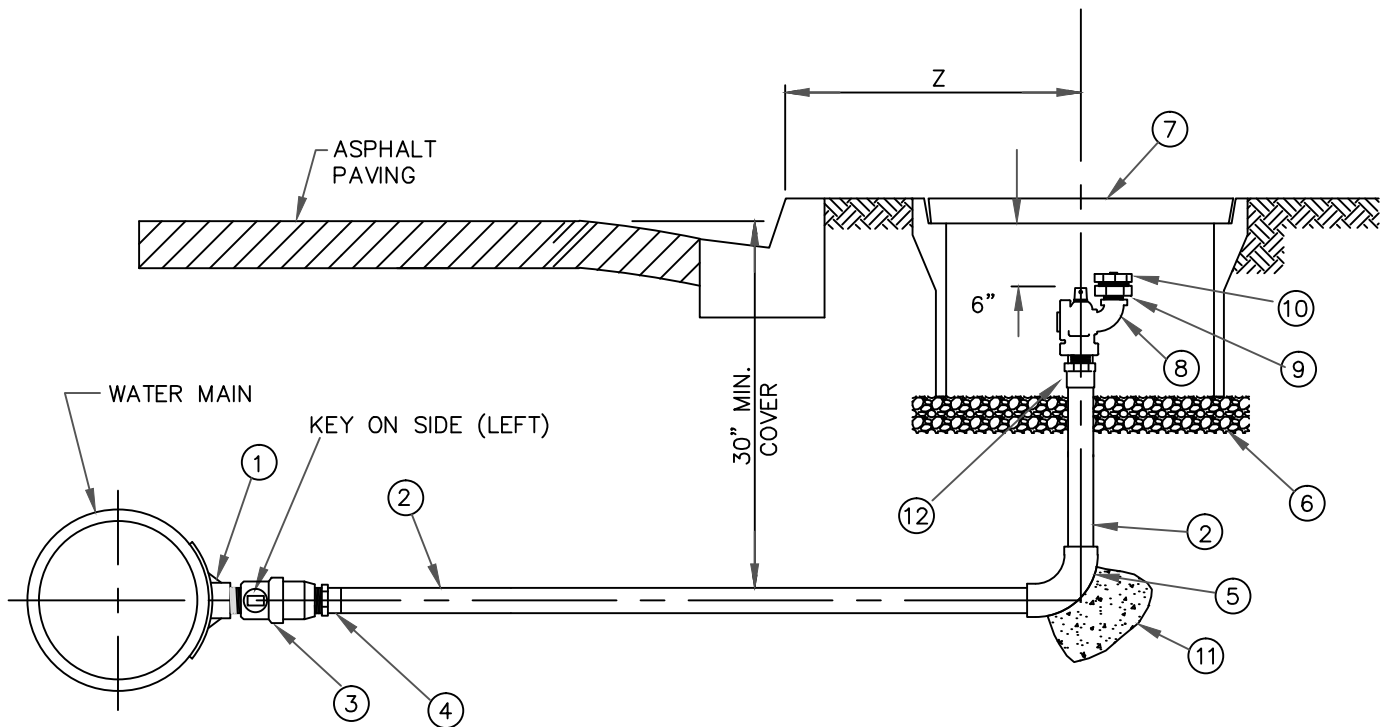
REV. DATE	BY	APPROVED
2/23/17	SMD	JB
8/28/19	SMD	AWC
11/3/21	SMD	AWC



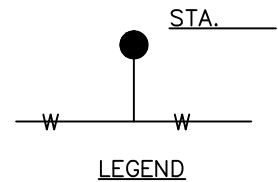
SERVICE OUTLET SADDLE

DRAWING NO.

W-5



Z = 2' FROM BACK OF SIDEWALK.
 2' FROM FACE OF CURB IF NO SIDEWALK EXISTS.



- NOTE: 1. IF BLOWOFF CANNOT BE LOCATED BEHIND OR IN THE SIDEWALK THEN IT MAY BE INSTALLED IN THE ROADWAY (IN TRAFFIC BOX). AVOID STORM GUTTER AREAS.
 2. ALL JOINTS TO BE 15% SILVER SOLDERED. NO LEAD.
 3. FOR PVC PIPE, USE S.S. SADDLE, AS LISTED IN THE APPROVED MATERIALS LIST.

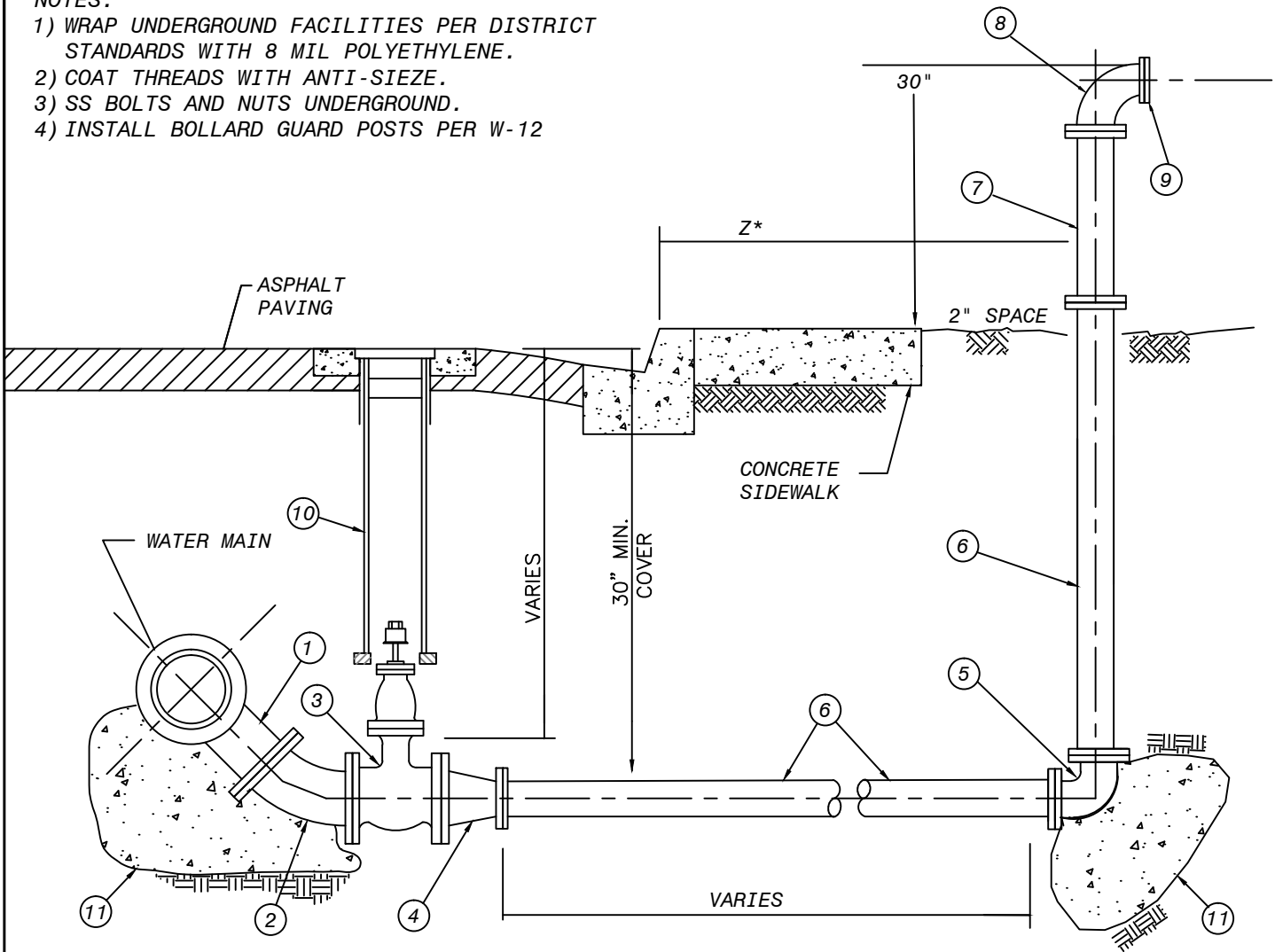
ITEM	NO.	DESCRIPTION	REMARKS
1	1	REINFORCING SADDLE, W/ 3000# FORGED STEEL COUPLING	STEEL, WELDED, HOT TAP.
2	1	2" COPPER TUBING W/ PIPE SLEEVE	BRASS OR COPPER (TYPE K)
3	1	2 INCH BALL CORP VALVE, MIP X MIP	BRASS
4	1	PIPE (SWEAT) TO THREADED FIP ADAPTER	PER STD. DWG W-4
5		2 INCH 90° SOLDERED ELBOW	BRASS OR COPPER
6	1	3/8" GRAVEL W/ 1/4" GALVANIZED METAL MESH BOTTOM	4" TO 6" DEEP
7	1	POLYMER METER BOX WITH LID, 20" X 26" X 12", TRAFFIC BOX IF IN ST.	1220-12, 1220-4 T-COVER, NOT "METER"
8	1	2" NL BLOW-OFF BALL VALVE, FIP x MIP	BRASS, McDONALD 76109BCA F 2
9	1	BRASS 2" FIP THREAD X 2 1/2" MALE NST (HOSE THREAD) ADAPTER	BRASS (FIP X MNST)
10	1	2 1/2" NST HOSE CAP (FIRE HYDRANT THREAD)	BRASS
11	1	THRUST BLOCK	PER STD. DWG W-4
12	1	2-INCH PIPE (SWEAT) TO THREADED MIP ADAPTER	BRASS / COPPER

X:\RECORD FILES\DISTRICT STANDARDS\DISTRICT DRAWINGS\WATER

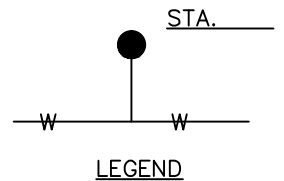
	REV. DATE	BY	APPR. D		2" BLOWOFF ASSEMBLY 6" 8"	DRAWING NO.
	5/24/17	SMD	JRB			W 6
	3/13/18	SMD	JRB			
	□/25/1□	SMD	AC			

NOTES:

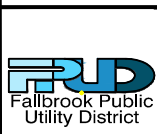
- 1) WRAP UNDERGROUND FACILITIES PER DISTRICT STANDARDS WITH 8 MIL POLYETHYLENE.
- 2) COAT THREADS WITH ANTI-SIEZE.
- 3) SS BOLTS AND NUTS UNDERGROUND.
- 4) INSTALL BOLLARD GUARD POSTS PER W-12



*Z- 2'-6" FROM BACK OF SIDEWALK.
2'-6" FROM FACE OF CURB IF NO SIDEWALK EXISTS.



ITEM	NO.	DESCRIPTION	REMARKS
1	1	6" FLANGED OUTLET - WELDED, WITH REINFORCING SADDLE	STEEL CML&C
2	1	6" 45° FLG X FLG ELL	STEEL CML&C (DIP ACCEPTABLE)
3	1	6" GATE VALVE, FLG.X FLG., 2" NUT	PER DISTRICT STANDARD 15100
4	-	6" X 4" REDUCER. FLG X FLG, STEEL	
5	1	4" FLG. 90° BEND	STEEL CML&C (DIP ACCEPTABLE)
6	1	4" CML&C STEEL PIPE - WELDED	
7	1	4" X 24" SPOOL - BREAKAWAY IF AVAILABLE	DIP FLG X FLG
8	1	4" X 4" 90 DEGREE ELL	DIP FLG X FLG
9	1	4" BLIND FLANGE	STEEL
10	-	VALVE BOX INSTALLATION PER DISTRICT STD. DWG# W-19	
11	-	THRUST BLOCK	PER FPU D STD., DET W-4



REV. DATE	BY	APPROVED
5/24/17	SMD	JRB
□23/1□	SMD	AWC

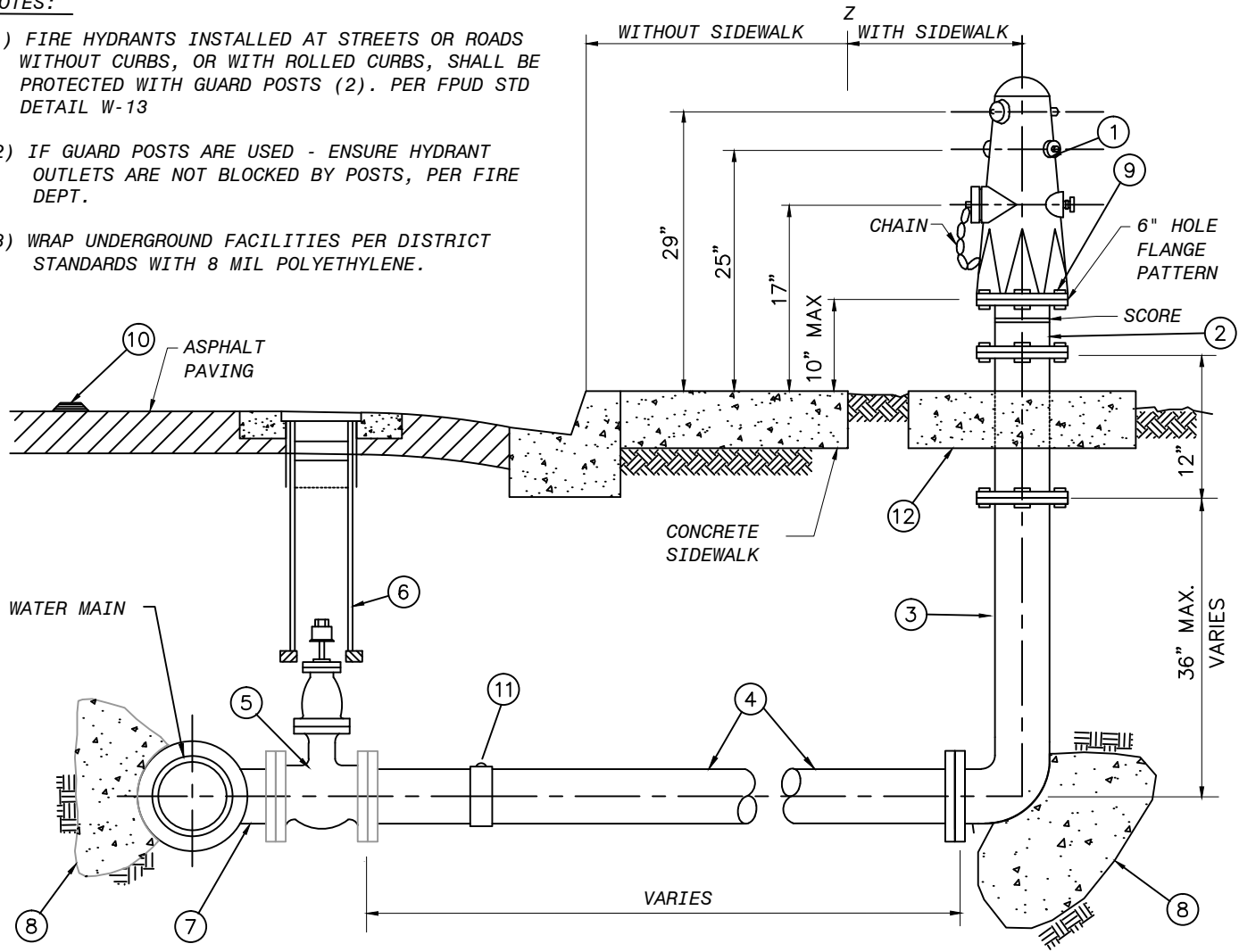


4" BLOW-OFF ASSEMBLY
(FOR PRESSURE LESS THAN 250 PSI)
(FOR 10" to 16" PIPE)

DRAWING NO.
W-7

NOTES:

- 1) FIRE HYDRANTS INSTALLED AT STREETS OR ROADS WITHOUT CURBS, OR WITH ROLLED CURBS, SHALL BE PROTECTED WITH GUARD POSTS (2). PER FPUD STD DETAIL W-13
- 2) IF GUARD POSTS ARE USED - ENSURE HYDRANT OUTLETS ARE NOT BLOCKED BY POSTS, PER FIRE DEPT.
- 3) WRAP UNDERGROUND FACILITIES PER DISTRICT STANDARDS WITH 8 MIL POLYETHYLENE.



Z 2' - 6" FROM BACK OF SIDEWALK.
 2' - 6" FROM FACE OF CURB IF NO SIDEWALK EXISTS.

DESCRIPTION	BARRELS OUTLETS
COMMERCIAL FIRE HYDRANT (MODEL J-3700)	4 PORT: 6" x 4" x 2-1/2" x 2-1/2"
SINGLE FAMILY RESIDENTIAL (MODEL J-3765)	3 PORTS: 6" x 4" x 2-1/2"

ITEM	NO.	DESCRIPTION	REMARKS
1	1	6" FIRE HYDRANT	6 BOLTS, ALL BRONZE, SAFETY YELLOW
2	1	BREAK-OFF RISER, 6" STEEL OR DUCTILE IRON	SCORED (NOT MOLDED)
3	1	DUCTILE IRON BURY ELL	
4	-	6" CML & C	
5	1	6" GATE VALVE FL OR PO	PER STANDARD SPECIFICATION
6	1	VALVE BOX INSTALLATION PER DISTRICT STD. DWG# W-19	SEE STANDARD SPECIFICATION
7	1	6" FLANGED OUTLET	PER STANDARD SPECIFICATION
8	1	THRUST BLOCK	PER FPUD STD. 03300
9	6	BREAK OFF BOLTS, THREADS UP FILL W/SILICON	PER STANDARD SPECIFICATIONS
10	1	REFLECTIVE PAVEMENT MARKER (BLUE)	PER FIRE DISTRICT REQUIREMENTS
11	-	6" BUTTSTRAP (IF NEEDED)	
12	1	4' x 4' CONCRETE PAD, 6" THICK, 520-C-2500	



REV. DATE	BY	APPROVED
5/24/17	SMD	JRB

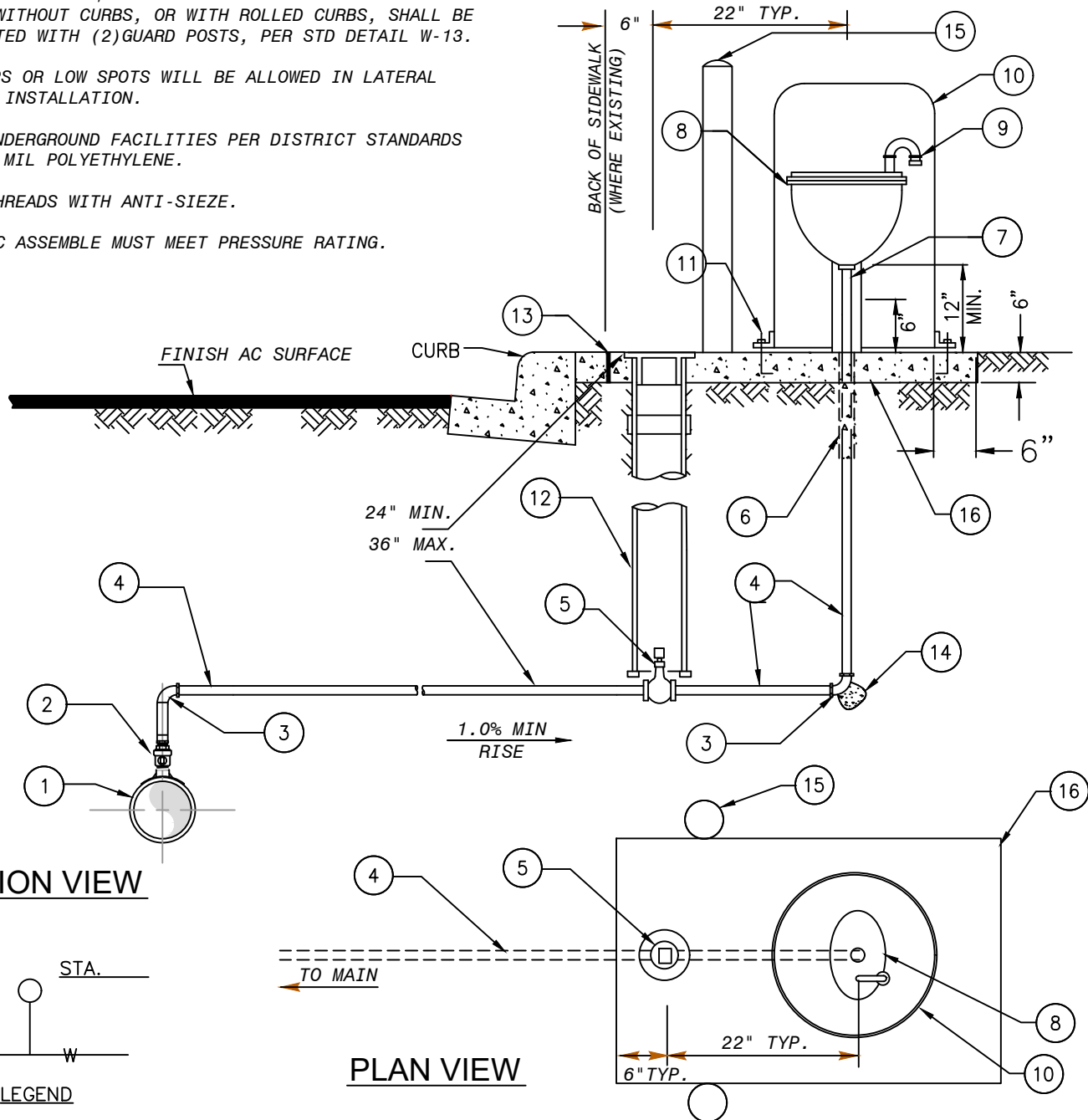


6" FIRE HYDRANT ASSEMBLY
 (FOR PRESSURE LESS THAN 250 PSI)

DRAWING NO.
W-9

NOTES:

- 1) COMBINATION AAR/AV VALVES INSTALLED AT STREETS OR ROADS WITHOUT CURBS, OR WITH ROLLED CURBS, SHALL BE PROTECTED WITH (2) GUARD POSTS, PER STD DETAIL W-13.
- 2) NO DIPS OR LOW SPOTS WILL BE ALLOWED IN LATERAL PIPING INSTALLATION.
- 3) WRAP UNDERGROUND FACILITIES PER DISTRICT STANDARDS WITH 8 MIL POLYETHYLENE.
- 4) COAT THREADS WITH ANTI-SIEZE.
- 5) AIR VAC ASSEMBLY MUST MEET PRESSURE RATING.



SECTION VIEW

PLAN VIEW

LEGEND

ITEM	SIZE & DESCRIPTION	ITEM	SIZE & DESCRIPTION
1	CML&C WATER MAIN - 6" TO 14" PIPE	9	CLOSE NIPPLE & RETURN BEND WITH INSECT SCREEN TURNED OUT
2	2" BRASS CORP STOP, MIP X MIP	10	HOUSING, 18" DIA. X 30", YELLOW, VCAS-1830
3	2" 90° COPPER ELL	11	316 SST, BOLTS ON ENCLOSURE, RED HEAD
4	COPPER OR BRASS (W/ PIPE SLEEVE)	12	VALVE CAN INSTALLATION PER DIST. STD. DWG. W-19
5	2" PLUG VALVE, W/ 2" NUT HEAD, 1/4 TURN W/ STOP.	13	1/2" EXPANSION JOINT
6	PVC TAPE DOUBLE WRAPPED, EXTEND 4" BELOW CONCRETE (MIN.)	14	THRUST BLOCK, PER FPU D SECTION 03300
7	BRASS CLOSE NIPPLE	15	GUARD POSTS PER W-13, AS REQUIRED
8	2" COMBINATION AUTOMATIC AIR RELEASE AND VACUUM RELIEF VALVE	16	6" THICK CONCRETE PAD



REV. DATE	BY	APPROVED
5/24/17	SMD	JRB
3/13/18	SMD	JRB
9/25/19	SMD	AWC
4/10/20	SMD	AWC
11/03/21	SMD	AWC

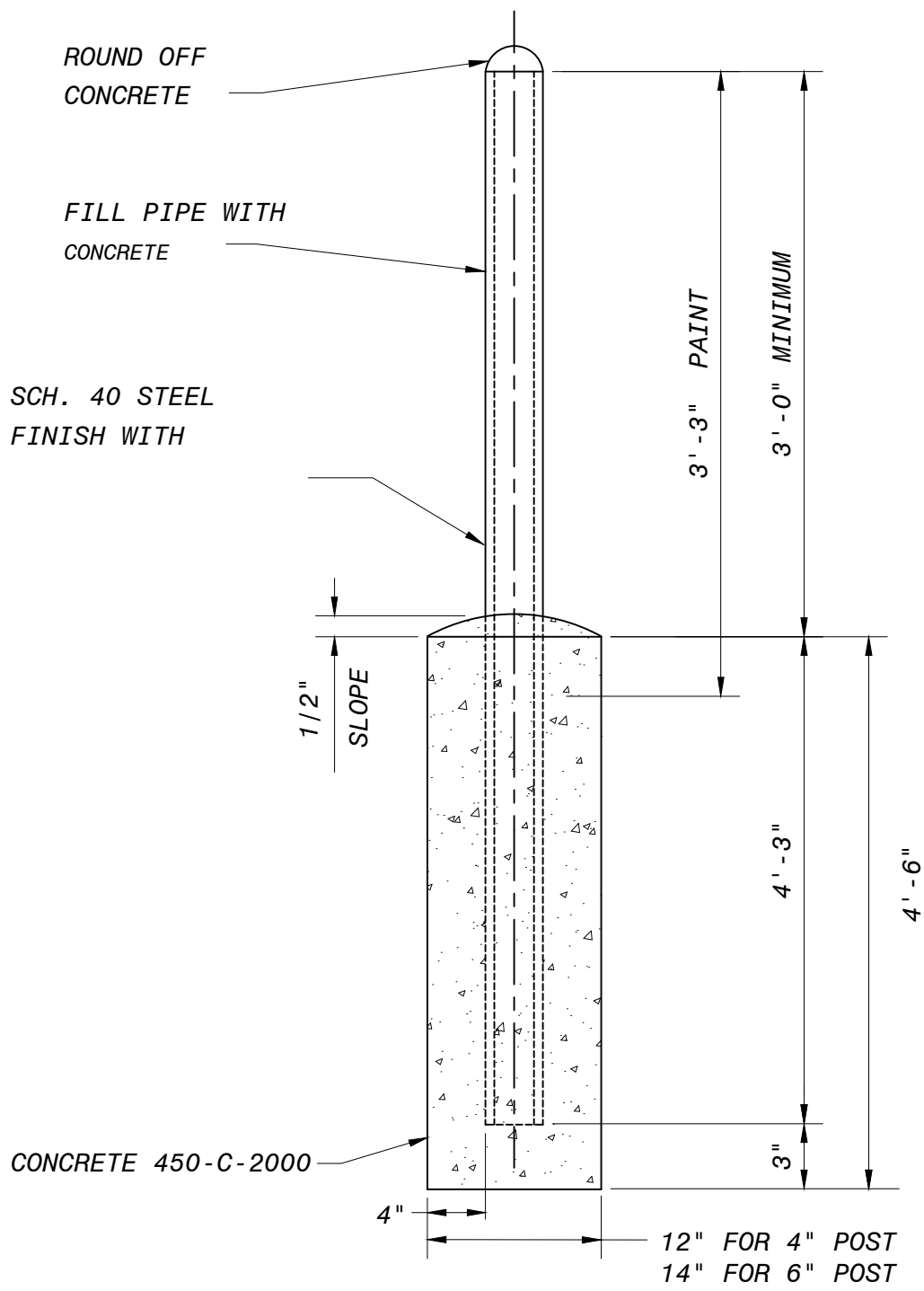


**2" COMBINATION
AUTOMATIC AIR RELEASE
AND VACUUM RELIEF VALVE**

**DRAWING NO.
W-11**

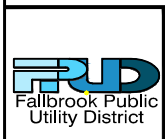
X:\RECORD FILES\DISTRICT STANDARDS\DISTRICT DRAWINGS\WATER

4" OR 6" DIA. SCH. 40 STEEL PIPE, PRIME & FINISH WITH ENAMEL SILVER



NOTES:

1. LOCATION SHALL BE AS SHOWN ON PLAN VIEW, OR AS DIRECTED IN THE FIELD BY DISTRICT ENGINEER.
2. 4" DIA. POSTS SHALL BE APPROVED BY D.E. FOR SPEED GREATER THAN 30 MPH 6" DIA. POSTS SHALL BE USED.

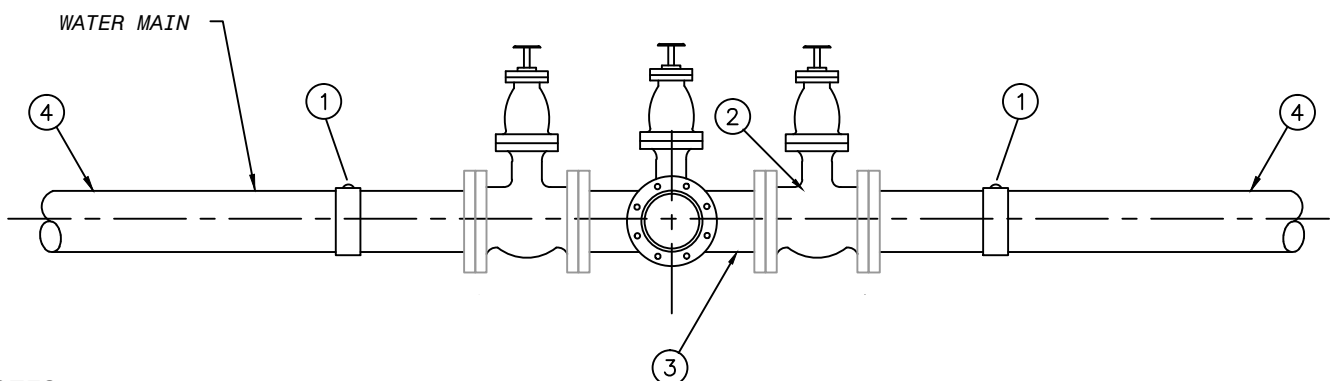
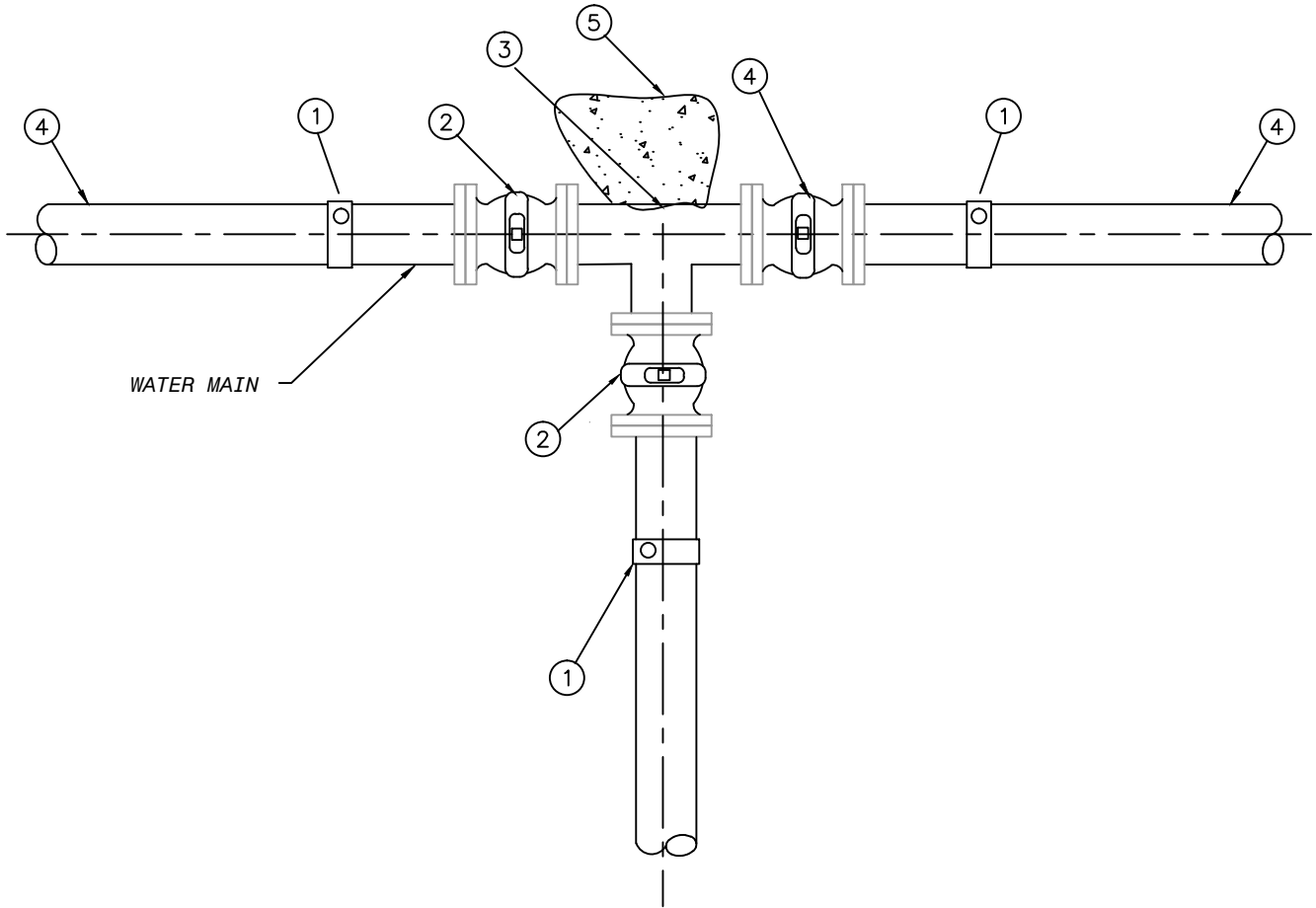


REV. DATE	BY	APPROVED
5/24/17	SMD	JRB



**GROUND POST
(BOLLARD)**

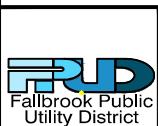
DRAWING NO.
W-13



NOTES:

- 1) WRAP UNDERGROUND FACILITIES PER DISTRICT STANDARDS WITH 8 MIL POLYETHYLENE.
- 2) PIPE JOINTS SHALL BE ALL WELDED, WITH WELDED BUTT STRAPS, (1) - AS NEEDED.

- (1) BUTT STRAP W/ HANDHOLE
- (2) GATE VALVE
- (3) TEE
- (4) CML&C STEEL PIPE
- (5) THRUST BLOCK PER W-5



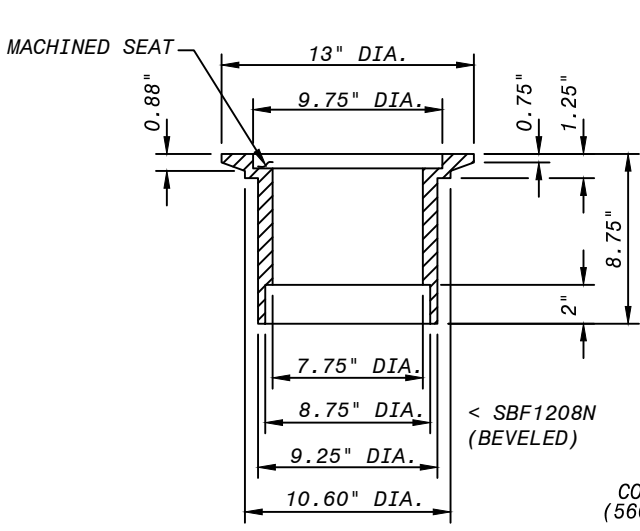
REV. DATE	BY	APPROVED
7/12/17	SMD	JRB



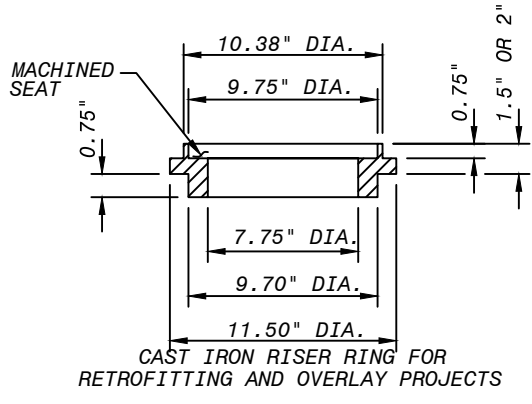
TYPICAL
THREE VALVE TEE

DRAWING NO.

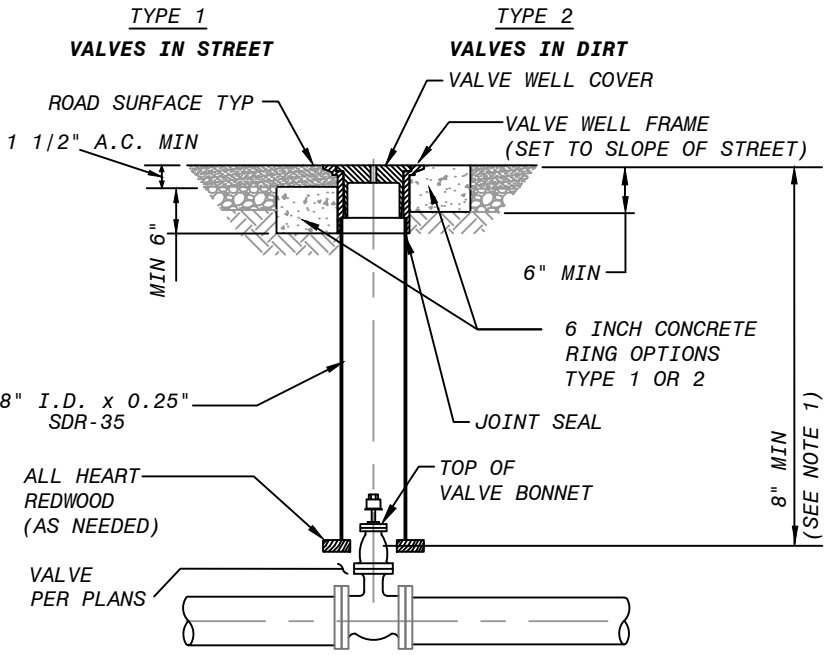
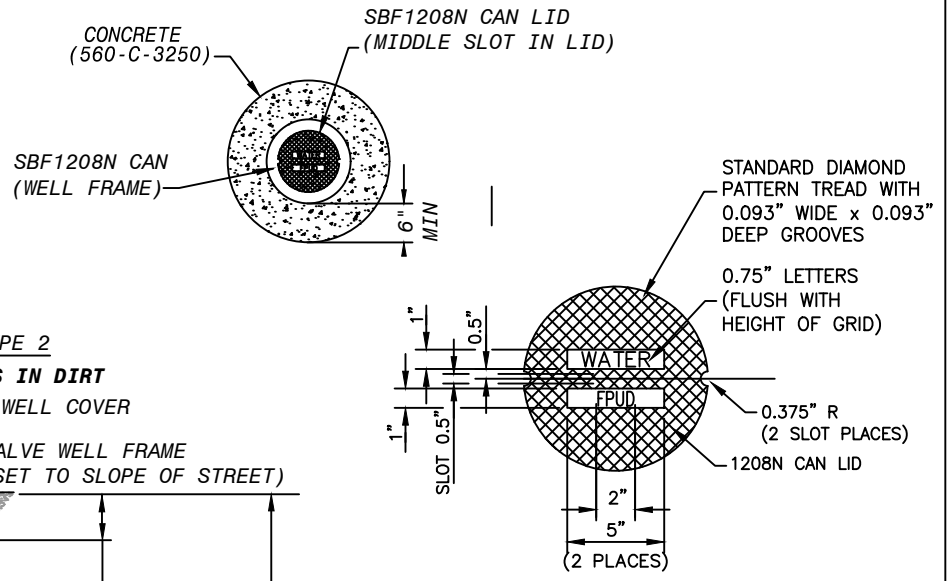
W-18



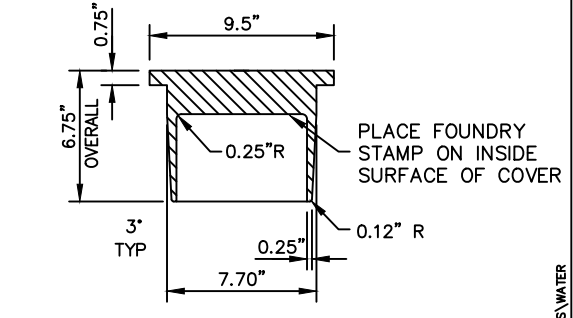
CAST IRON VALVE WELL FRAME



CAST IRON RISER RING FOR RETROFITTING AND OVERLAY PROJECTS



VALVE WELL AND FRAME FOR NEW INSTALLATIONS



VALVE COVER / LID FOR NEW INSTALLATIONS

- NOTES:**
1. FOR GATE VALVES, PROVIDE VALVE KEY EXTENSION WHERE THIS DIMENSION EXCEEDS 60 INCHES. WHEN NEEDED, EXTENSIONS SHOULD RESULT IN VALVE NUTS BETWEEN 12 AND 14-INCHES DEEP FROM FINISH GRADE.
 2. THE SURFACE OF THE VALVE WELL COVER SHALL MATCH THE STREET CROSS SLOPE AND PROFILE.

VALVE COVER PAINT COLOR CHART:

ALL INLINE VALVES	SILVER
B.O.s, DRAINS, AIR VACS	SILVER
FIRE HYDRANTS	YELLOW
RECYCLED WATER	PURPLE
CLOSED INLINE VALVES	RED

11/3/21 - W-20 COMBINED WITH W-19



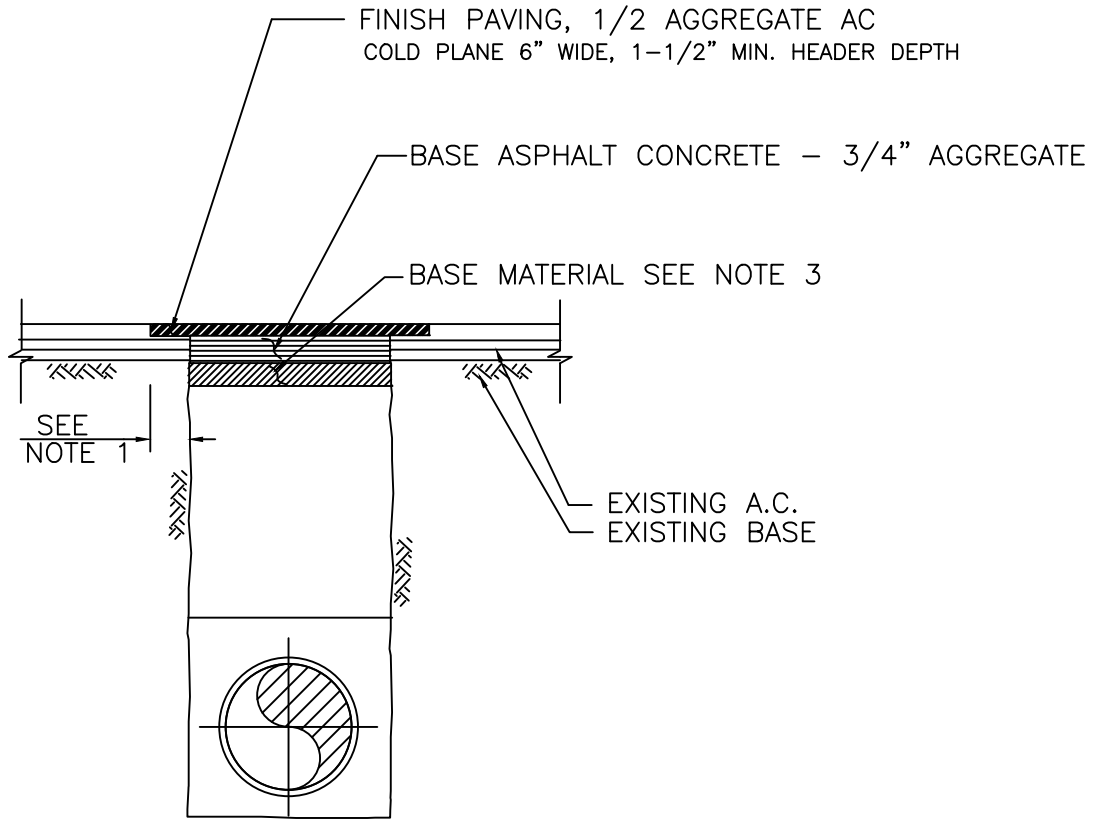
REV. DATE	BY	APPROVED
5/24/17	SMD	JRB
6/25/20	SMD	AWC
11/03/21	SMD	AWC



VALVE WELL FRAME AND VALVE WELL COVER

DRAWING NO.
W-19

X:\RECORD FILES\DISTRICT STANDARDS\DISTRICT DRAWINGS\WATER



TYPE A

NOTES:

- 1) HEADER DEPTH OF 1.5" SHALL BE GRINDED FROM BASE PAVING AND EXISTING PAVING IN PREPARATION FOR FINISH PAVING LAYER OF 1/2" A.C. ASPHALT.
 - A) FOR TRENCHES LESS THAN 3 FEET HEADER GRIND SHALL BE 6-INCHES (MINIMUM) ON ALL EDGES.
 - B) FOR TRENCHES 3 FEET AND GREATER HEADER GRIND SHALL BE 12-INCHES (MINIMUM) ON ALL EDGES.
- 2) EXISTING A.S. SHALL BE CUT AND REMOVED IN SUCH A MANNER SO AS NOT TO TEAR, BULGE OR DISPLACE ADJACENT PAVEMENT. EDGES SHALL BE CLEAN AND VERTICAL. ALL CUTS SHALL BE PARALLEL OR PERPENDICULAR TO STREET CENTERLINE, WHEN PRACTICAL.
- 3) BASE MATERIAL TO BE PLACED TO DEPTH OF EXISTING BASE, OR 6-INCHES MINIMUM. A.C. MAY BE SUBSTITUTED FOR BASE MATERIAL. COMPACT TO 95%.
- 4) ASPHALT CONCRETE RESURFACING:
 - A) MINIMUM TOTAL THICKNESS SHALL BE 1-INCH GREATER THAN EXISTING A.C. OR 3-INCHES MINIMUM.
 - B) A.C. SHALL BE HOT PLANT MIX CALTRANS SPEC GRADE C2PG 64-10.
 - C) BASE PAVING SHALL BE 3/4" AGGREGATE. FINISH PAVING SHALL BE 1/2" AGGREGATE AND INSTALLED PER NOTE 1.
- 5) ALL A.C RESURFACING SHALL BE SEALED WITH AN EMULSIFIED ASPHALT AND COVERED WITH SAND. CHIP SEALING MAY BE APPLIED AS REQUIRED BY AGENCY.
- 6) SLOUGHING OF TRENCH UNDER PAVEMENT SHALL BE CAUSE FOR REQUIRING ADDITIONAL PAVEMENT AND BASE.
- 7) COUNTY ROADS SHALL BE PAVED ACCORDING TO SAN DIEGO COUNTY ROAD PAVING STANDARDS.

X:\RECORD FILES\DISTRICT STANDARDS\DISTRICT DRAWINGS\WATER

	Rev.Date	By	Apprv'd		TRENCH RESURFACING TYPE A	DRAWING NO.
	5/24/17	SMD	JRB			W-21
	6/25/20	SMD	AWC			
	11/03/21	SMD	AWC			

PLANS FOR CONSTRUCTION

WATERLINE REPLACEMENT FY23

FALLBROOK PUBLIC UTILITY DISTRICT

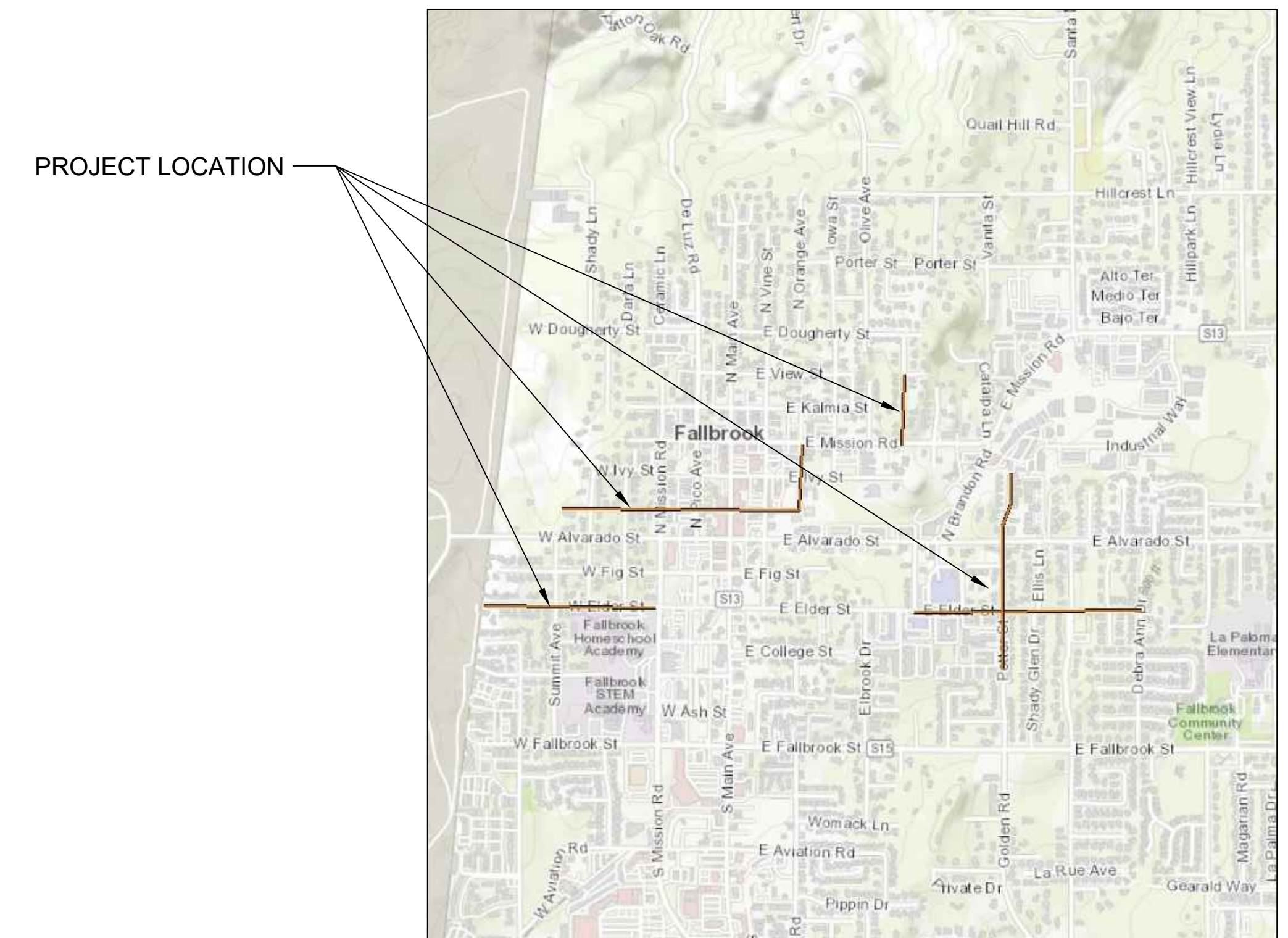
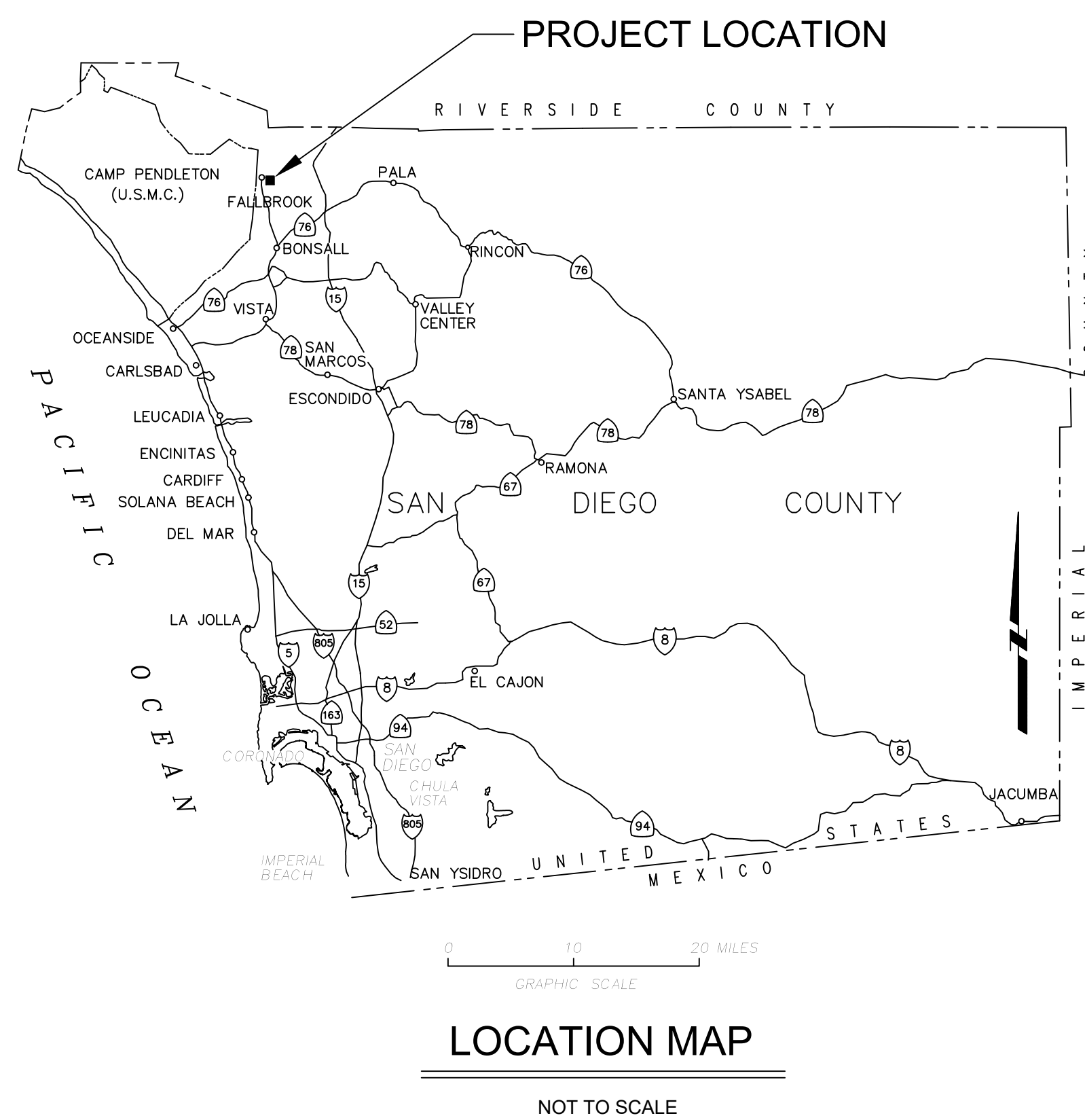
JOB # 3186
JULY 2022

BOARD OF DIRECTORS

DAVE BAXTER	PRESIDENT
JENNIFER DE MEO	DIRECTOR
KEN ENDTER	DIRECTOR
DON MCDUGAL	DIRECTOR
CHARLEY WOLK	VICE PRESIDENT
JACK BEBEE	GENERAL MANAGER

INDEX SHEET

NO.	SHEET	DESCRIPTION
1	G-1	COVER
2	G-2	CONSTRUCTION NOTES
3	G-3	ABBREVIATIONS/LEGEND
4	G-4	INDEX MAP
5	C-01	PLAN AND PROFILE STA. 10+00 - 16+00
6	C-02	PLAN AND PROFILE STA. 16+00 - 22+00
7	C-03	PLAN AND PROFILE STA. 22+00 - 27+37
8	C-04	PLAN AND PROFILE STA. 50+00 - 56+00
9	C-05	PLAN AND PROFILE STA. 56+00 - 62+00
10	C-06	PLAN AND PROFILE STA. 62+00 - 68+00
11	C-07	PLAN AND PROFILE STA. 68+00 - 71+42
12	C-08	PLAN AND PROFILE STA. 80+00 - 85+00
13	C-09	PLAN AND PROFILE STA. 85+00 - 94+00
14	C-10	PLAN AND PROFILE STA. 94+00 - 100+00
15	C-11	PLAN AND PROFILE STA. 100+00 - 101+92
16	C-12	PLAN AND PROFILE STA. 120+00 - 126+00
17	C-13	PLAN AND PROFILE STA. 126+00 - 132+00
18	C-14	PLAN AND PROFILE STA. 132+00 - 138+00
19	C-15	PLAN AND PROFILE STA. 138+00 - 143+50
20	C-16	PLAN AND PROFILE STA. 143+50 - 148+71
21	C-17	PLAN AND PROFILE STA. 220+00 - 225+50
22	C-18	PLAN AND PROFILE STA. 225+50 - 226+30



GENERAL NOTES

- ALL WORK SHALL BE DONE IN CONFORMANCE WITH THESE PLANS, THE CONTRACT SPECIFICATIONS, THE STANDARD SPECIFICATIONS AND STANDARD DRAWINGS OF THE FALLBROOK PUBLIC UTILITY DISTRICT, AND THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREEN BOOK-LATEST EDITION).
- WHENEVER "GREEN BOOK" IS REFERENCED, IT STANDS FOR THE "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION", LATEST EDITION. THE GREEN BOOK, INCLUDING REGIONAL SUPPLEMENTS, AND THE FALLBROOK PUBLIC UTILITY DISTRICT STANDARD SPECIFICATIONS AND STANDARD DRAWINGS, LATEST EDITION, SHALL BE INCLUDED AS PART OF THESE PLANS AND SPECIFICATIONS.
- THE CONTRACTOR SHALL OBTAIN AND HAVE AVAILABLE ON THE JOB SITE COPIES OF APPLICABLE STANDARDS SHOWN ON THESE PLANS AT ALL TIMES AND SPECIFICATIONS AND BE FAMILIAR WITH THEIR REQUIREMENTS. CONTRACTOR SHALL REMOVE ALL DEBRIS AND TRASH DURING AND AFTER CONSTRUCTION.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE MOST RECENT EDITION OF THE UNIFORM BUILDING CODE AT THE TIME OF CONSTRUCTION.
- CAL-OSHA PERMITS SHALL BE REQUIRED FOR ANY TRENCH WORK OVER FIVE (5) FEET IN DEPTH. EVIDENCE MUST BE PRESENTED TO FALLBROOK PUBLIC UTILITY DISTRICT PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL OBTAIN A COPY OF AB 3020 AND OTHER STATE LAW RELATING TO UNDERGROUND EXCAVATING AND BE FAMILIAR WITH ALL REQUIREMENTS. COPIES MAY BE OBTAINED FROM (USA) BY CALLING 1-800-422-4133.
- THE CONTRACTOR SHALL SUBMIT THE PROPOSED CONSTRUCTION SCHEDULE FOR ALL WORK TO BE PERFORMED UNDER THIS CONTRACT TO THE ENGINEER FOR APPROVAL NO LESS THAN TEN (10) DAYS BEFORE SCHEDULED START OF WORK. PROPOSED SCHEDULE SHALL BE IN WRITING AND SHALL IDENTIFY DAYS AND HOURS OF CONSTRUCTION, ANTICIPATED STREET CLOSURE PERIODS AND COORDINATION REQUIREMENTS FOR ALL AFFECTED PUBLIC AGENCIES AND PRIVATE COMPANIES THAT HAVE FACILITIES WITHIN THE WORK AREA. ANY MODIFICATIONS TO THE APPROVED SCHEDULE SHALL BE SUBMITTED TO THE ENGINEER NO LESS THAN THREE (3) DAYS BEFORE SUCH MODIFICATIONS ARE REQUIRED.
- CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE GOVERNMENTAL AND LOCAL LAWS, REGULATIONS, AND ORDINANCES WITH REGARD TO TRAFFIC SAFETY, WORK HOURS, OPERATING HOURS, NOISE AND AIR POLLUTION, AND SANITARY CONDITIONS.
- CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED FOR COMPLETION OF THE WORK.
- CONTRACTOR SHALL PROVIDE FPUD 14 DAYS ADVANCE NOTICE OF SYSTEM SHUTDOWN FOR CONNECTIONS IN ACCORDANCE WITH THE SPECIFICATIONS.
- CONTRACTOR SHALL PROVIDE ALL MATERIALS NECESSARY FOR THE COMPLETION OF THE WORK SPECIFIED IN THE CONTRACT DOCUMENTS.
- CONTRACTOR SHALL PROVIDE CONSTRUCTION STAKING IN ACCORDANCE WITH THE SPECIFICATIONS.
- CONTRACTOR SHALL MEET WITH THE DISTRICT INSPECTOR PRIOR TO STARTING CONSTRUCTION AND SHALL NOTIFY THE DISTRICT 5 DAYS PRIOR TO BEGINNING CONSTRUCTION SO THAT INSPECTION CAN BE PROVIDED.
- THE CONTRACTOR SHALL AND HEREBY DOES GUARANTEE ALL WORK FOR A PERIOD OF ONE YEAR AFTER THE DATE OF ACCEPTANCE OF THE WORK BY THE DISTRICT AND SHALL REPAIR OR REPLACE ANY OR ALL SUCH WORK, TOGETHER WITH ANY OTHER WORK WHICH MAY BE DISPLACED IN SO DOING, THAT MAY PROVE DEFECTIVE IN WORKMANSHIP AND/OR MATERIALS WITHIN THE ONE YEAR PERIOD FROM DATE OF ACCEPTANCE WITHOUT EXPENSE WHATSOEVER TO THE DISTRICT.

GENERAL NOTES (CONTINUED)

- AS-BUILT DRAWINGS: THE CONTRACTOR SHALL MAINTAIN CURRENT BLACKLINE OR BLUELINE DRAWINGS DURING CONSTRUCTION NEATLY MARKED IN RED INK TO REFLECT THE AS-BUILT CONDITIONS. CONTRACTOR SHALL MAKE UPDATES TO THE AS-BUILT DRAWINGS ON A DAILY BASIS.
- CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, AND THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
- LOCATION AND ELEVATION OF IMPROVEMENTS TO BE MET BY WORK OF THIS CONTRACT SHALL BE CONFIRMED BY FIELD MEASUREMENTS PRIOR TO CONSTRUCTION OF NEW WORK. CONTRACTOR SHALL MAKE EXPLORATORY EXCAVATIONS AND LOCATE EXISTING UNDERGROUND FACILITIES SUFFICIENTLY IN ADVANCE OF CONSTRUCTION TO PERMIT REVISIONS TO THESE PLANS, IF NECESSARY, DUE TO THE ACTUAL LOCATIONS OF EXISTING FACILITIES.
- THE EXISTENCE AND LOCATION OF EXISTING UNDERGROUND FACILITIES SHOWN ON THESE PLANS ARE APPROXIMATE AND WERE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. THE CONTRACTOR SHALL TAKE PRECAUTIONARY MEASURES TO PROTECT ANY EXISTING FACILITY SHOWN HEREON AND ANY OTHER WHICH IS NOT OF RECORD OR NOT SHOWN ON THESE PLANS.
- THE CONTRACTOR SHALL VERIFY THE EXISTENCE AND LOCATION OF ALL UTILITIES BEFORE COMMENCING WORK TO PERMIT REVISIONS TO PLANS IF REVISIONS ARE NECESSARY BECAUSE OF ACTUAL LOCATION OF EXISTING FACILITIES. NOTICE OF THE PROPOSED WORK SHALL BE GIVEN TO THE FOLLOWING AGENCIES AT LEAST TWO (2) WORKING DAYS PRIOR TO EXCAVATION. CONTRACTOR SHALL REQUEST MARKOUT OF UNDERGROUND UTILITIES BY CALLING THE BELOW LISTED REGIONAL NOTIFICATION CENTER FOR AN INQUIRY IDENTIFICATION NUMBER:

UNDERGROUND SERVICE ALERT: 1-800-422-4133 OR 811
- THE CONTRACTOR SHALL DESIGN, CONSTRUCT, AND MAINTAIN ALL SAFETY DEVICES, INCLUDING SHORING AND BRACING, AND SHALL BE SOLELY RESPONSIBLE FOR CONFORMING TO ALL APPLICABLE LOCAL, STATE, AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS, AND REGULATIONS. STRUCTURES HAVE BEEN DESIGNED FOR OPERATIONAL LOADS ON COMPLETED STRUCTURES; DURING CONSTRUCTION STRUCTURES SHALL BE PROTECTED BY BRACING AND BALANCING WHEREVER EXCESSIVE LOADS MAY OCCUR. PROVIDE SHEETING, SHORING, BRACING, OR EQUIVALENT METHOD FOR:
 - PROTECTION OF LIFE AND LIMB WHICH SHALL CONFORM TO APPLICABLE SAFETY ORDERS;
 - PROTECTION OF EXISTING UNDERGROUND AND ABOVE-GROUND PRIVATE AND PUBLIC IMPROVEMENTS; AND
 - THE REMEDY OF ANY AND ALL CONDITIONS ENCOUNTERED, REGARDLESS OF DEPTH, (INCLUDING, BUT NOT LIMITED TO TRENCH SLOUGHING, PAVEMENT SEPARATION, ETC.) DURING THE CONSTRUCTION OF THE PROJECT.
- ALL CONCRETE TESTING REQUIRED BY THE DISTRICT WILL BE AT THE EXPENSE OF THE CONTRACTOR.
- DISTRICT INSPECTOR SHALL BE FURNISHED THREE (3) CUT SHEETS.
- APPROVAL OF THIS PLAN BY FPUD DOES NOT CONSTITUTE A REPRESENTATION AS TO THE ACCURACY OF THE LOCATION OF, OR THE EXISTENCE OR NONEXISTENCE OF ANY UNDERGROUND UTILITY PIPE OR STRUCTURE WITHIN THE LIMITS OF THIS PROJECT.

GENERAL NOTES (CONTINUED)

- NO REVISIONS SHALL BE MADE TO THESE PLANS WITHOUT THE APPROVAL OF THE FPUD DISTRICT ENGINEER OR ON-SITE DISTRICT INSPECTOR.
 - CONTRACTOR TO USE ALL NEW MATERIAL UNLESS INDICATED OTHERWISE IN THE CONTRACT DOCUMENTS.
 - CONTRACTOR SHALL SUBMIT THE REDLINE AS-BUILTS TO THE ENGINEER OF WORK ONCE THE PROJECT HAS BEEN COMPLETED.
 - SPECIFIC NOTES AND DETAILS ON THE DRAWINGS SHALL TAKE PRECEDENCE OVER THESE GENERAL NOTES IN CASE OF CONFLICT.
 - UPON COMPLETION OF EACH DAY'S WORK, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LEAVING THE WORK AREA FREE OF HAZARDS, AND SHALL PROVIDE ALL NECESSARY TEMPORARY SIGNS, WARNING DEVICES, BARRICADES AND TEMPORARY TRAFFIC PLATES. TEMPORARY ACCESS IS TO BE PROVIDED TO ALL ADJACENT RESIDENCES AND BUSINESSES DURING NON-CONSTRUCTION HOURS.
 - THE CONTRACTOR SHALL PROTECT ALL EXPOSED AREAS OF THE SITE DURING THE CONSTRUCTION PERIOD AGAINST EROSION OR OTHER DAMAGE. ANY AND ALL SITE DAMAGE FROM THE CONTRACTOR'S ACTIVITIES SHALL BE REPAIRED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER AT NO ADDITIONAL COST TO FALLBROOK PUBLIC UTILITY DISTRICT.
 - THE CONTRACTOR SHALL EXERCISE DUE CARE TO AVOID INJURY TO EXISTING IMPROVEMENTS OR FACILITIES, UTILITY FACILITIES, ADJACENT PROPERTY, AND TREES AND SHRUBBERY THAT ARE NOT TO BE REMOVED. CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR ALL HARDSCAPE, LANDSCAPE, LANDSCAPE IRRIGATION, PAVEMENT, ASPHALT BERMS, CHAINLINK FENCE, ETC TO ORIGINAL CONDITION.
 - CONTRACTOR SHALL NOTIFY THE OWNER OF ANY ACTIONS PRESENTED HEREIN THAT HE CONSIDERS UNSAFE.
 - THE CONTRACTOR SHALL PROTECT ALL SURVEY MONUMENTATION. IF ANY SURVEYING MONUMENTS ARE DISTURBED OR DESTROYED, THE CONTRACTOR SHALL RETAIN A LICENSED SURVEYOR TO RE-ESTABLISH AND RECORD THE MONUMENT CHANGE PER STATE LAW.
 - ALL LANDSCAPING WHICH IS DISTURBED DURING CONSTRUCTION SHALL BE REPLACED IN-KIND, AND SHOULD BE INCLUDED IN THE BID PROCESS FOR WHICH THESE ITEMS ARE A PART OF. TREES WHICH ARE TEMPORARILY REMOVED SHALL BE REPLACED AT LOCATIONS DIRECTED BY FALLBROOK PUBLIC UTILITY DISTRICT FIELD REPRESENTATIVE.
- CONTRACTOR'S RESPONSIBILITIES:**
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND PROTECT ALL EXISTING UTILITIES. LOCATIONS SHOWN ON THE DRAWINGS ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE THE IMPROVEMENTS THAT WILL BE AFFECTED BY WORK UNDER THIS CONTRACT. ALL IMPROVEMENTS DISTURBED BY CONTRACTOR SHALL BE REPLACED IN KIND TO ORIGINAL CONDITION OR BETTER.
 - WHERE CONTRACTOR DISTURBS AREAS OUTSIDE EDGE OF PAVING AREA SHALL BE SEEDED PER SECTION 02202.
 - CONTRACTOR TO DOCUMENT ALL EXISTING PAINTED MARKINGS, STRIPING AND PAVEMENT MARKERS PRIOR TO CONSTRUCTION TO BE REPLACED IN KIND.
 - "PROTECT IN PLACE", EXCAVATION AT EXISTING CULVERT STRUCTURES TO BE COMPLETED BY HAND METHODS TO AVOID DAMAGE TO EXISTING STRUCTURES AND ANY DAMAGE BY THE CONTRACTOR OR THE CONTRACTOR'S ACTIVITIES, SHALL BE REPAIRED OR REPLACED IN KIND AT NO ADDITIONAL COST AND TO THE SATISFACTION OF FPUD.
 - MAINTAIN A MINIMUM OF 12" CLEARANCE BETWEEN THE BOTTOM OF THE EXISTING CMP CULVERTS AND TOP OF THE NEW WATER MAIN.

CONTRACTOR'S RESPONSIBILITIES (CONTINUED)

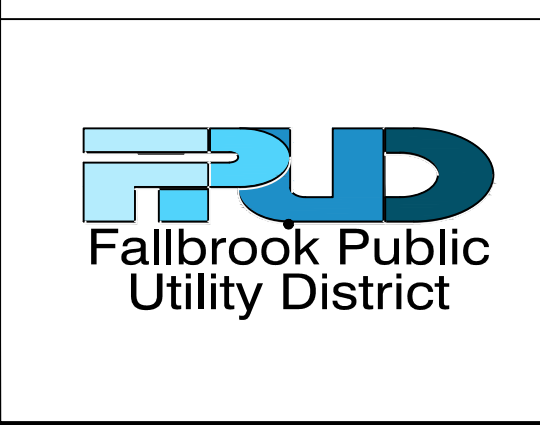
- WHERE PAVEMENT CUTS ARE ALLOWED, A TACK COAT OF ASPHALTIC EMULSION OR PAVING ASPHALT SHALL BE APPLIED TO ALL VERTICAL CONTACT SURFACES. THE JOINT SHALL BE PRE-HEATED USING HAND TORCHES AND THE PRE-HEATING OPERATION SHALL CONTINUE DURING THE RAKING PROCESS TO ENSURE A WELL-BONDED JOINT. ALL JOINTS SHALL BE SEALED WITH AN ASPHALT BINDER GRADE DETERMINED BY THE GEOGRAPHICAL LOCATION AS NOTED ON THE CALTRANS "PAVEMENT CLIMATE REGIONS" MAP.

WATER NOTES

- CONTRACTOR SHALL INSTALL THRUST BLOCKS PER FPUD STD. DWG W-4 FOR ALL VALVES AND FITTINGS (BENDS, CROSSES, AND TEES) SHOWN ON THE CONTRACT DRAWINGS.
- CONTRACTOR TO HAVE ALL FITTINGS AND PIPE MATERIALS INSPECTED PRIOR TO START OF CONSTRUCTION.
- ALL WATER PIPES SHALL BE INSTALLED PER FPUD STANDARD DRAWING W-3.
- CONTRACTOR SHALL POTHOLE TO VERIFY THE PIPELINE SIZE, LOCATION AND DEPTH AT EACH TIE-IN LOCATIONS AND UTILITY CROSSINGS. CONTRACTOR SHALL CONFIRM THAT HE HAS PROPER FITTINGS AND ADAPTERS TO COMPLETE REPLACEMENT PRIOR TO ANY SHUT DOWN.
- CONTRACTOR SHALL DISINFECT PIPELINE ACCORDING TO SECTION 15041 OF THE FPUD CONSTRUCTION STANDARDS.
- CONTRACTOR SHALL CONDUCT PRESSURE TEST ACCORDING TO SECTION 15044 OF THE FPUD CONSTRUCTION STANDARDS.
- UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL HIRE A VIDEO COMPANY APPROVED BY THE DISTRICT TO VIDEO TAPE WATER MAINS. THE DISTRICT ENGINEER SHALL REVIEW SAID CCTV FOOTAGE IN DVD FORMAT FOR POTENTIAL CONSTRUCTION DEFECTS PRIOR TO ACCEPTANCE OF THE PROJECT. PAYMENT FOR ALL SUCH SERVICES SHALL BE BORNE BY THE CONTRACTOR.

DEWATERING NOTES

- GROUNDWATER MAY BE HIGH AND SEASONALLY VARIABLE AT EXCAVATIONS. DEWATERING SYSTEMS SHALL EFFECTIVELY INTERCEPT AND REMOVE WATER FROM SURROUNDING STRATA AND THUS PREVENT ITS ENTRY INTO THE EXCAVATION. THE EMPLOYMENT OF ANY OF THE AVAILABLE ALTERNATIVES TO ACHIEVE THIS OBJECTIVE MAY BE REQUIRED. RELIANCE SHALL NOT BE PLACED SOLELY ON SHEETING TO PROTECT WORK AREAS. THE ALTERNATIVE USE OF SYSTEM OF INTERLOCKING SHEET PILING WITH BRACES OR ANCHORAGE SUPPLEMENTED BY DEWATERING MEASURES OR OTHER MEANS WHICH MAY BE SUITABLE, SHALL BE PERMITTED.
- PROVIDE ALL EQUIPMENT, LABOR, MATERIALS, TOOLS, AND INCIDENTALS NECESSARY TO DESIGN, CONSTRUCT, INSTALL AND OPERATE DEWATERING FACILITIES FOR CONSTRUCTION OF THIS WORK SUCH THAT ALL UNDERGROUND AND BELOW-GRADE WORK IS PERFORMED OR INSTALLED IN DRY EXCAVATIONS.
- CONTRACTOR SHALL OBTAIN A DEWATERING PERMIT FROM REGIONAL WATER QUALITY CONTROL BOARD FOR ANY SITE DEWATERING AS A PART OF THIS CONTRACT.



REVISIONS			
NO.	BY	DATE	REMARKS
1	AC	8/3/2022	ADDENDUM 1 REVISIONS

WATERLINE REPLACEMENT FY22-23
FALLBROOK PUBLIC UTILITY DISTRICT
 990 E. MISSION ROAD, FALLBROOK, CA

GENERAL
CONSTRUCTION NOTES

DWG No. G-02
 JOB NO: 3186
 SHEET: 2 of 22

ABBREVIATIONS

AC	ASPHALT CONCRETE	PED	PEDESTAL
AV	AIR & VACUUM VALVE	PP	POWER POLE
BO	BLOWOFF	PSI	POUNDS PER SQUARE INCH
CBL	CABLE	PVT	PRIVATE
CL	CENTERLINE	FPUD	FALLBROOK PUBLIC UTILITY DISTRICT
CML&C	CEMENT MORTAR LINED & COATED STEEL PIPE	RJ	RESTRAINED JOINT
CONC	CONCRETE	ROW	RIGHT OF WAY
Ø, DIA	DIAMETER	RW	RECYCLED WATER
DIP, DI	DUCTILE IRON PIPE	SEW, S	SEWER
DRN	DRAIN	STA	STATION
DWC	DRAWING	STL	STEEL
DWY	DRIVE WAY	STD	STANDARD
ELEC, E	ELECTRIC	TP	TELEPHONE POLE
EOP	EDGE OF PAVEMENT	TOP	TOP OF PIPE
EOR	EDGE OF DIRT ROAD	TW	TIMES WARNER CABLE
EX., EXIST	EXISTING	TYP	TYPICAL
FH	FIRE HYDRANT	WL, W	WATER LINE
GS	GROUND SURFACE	WM	WATER METER
GV	GATE VALVE	X-ING	CROSSING
LAT	LATERAL		
MJ	MECHANICAL JOINT		
MB	MAIL BOX		
OHE	OVERHEAD ELECTRIC		

LEGEND

	PROPOSED CML & C PIPE
	EXISTING WATER PIPE
	EXISTING RECYCLED WATER PIPE
	EXISTING TELEPHONE LINE
	EXISTING OVERHEAD ELECTRICAL LINE
	EXISTING UNDERGROUND ELECTRICAL LINE
	PROPERTY LINE
	RIGHT OF WAY
	EASEMENT LINE
	EXISTING FENCE
	STL GAS PIPE
	SEWER MAIN
	SLOPE
	EDGE OF PAVEMENT

	— GATE VALVE
	— BUTTERFLY VALVE
	— AIR VAC
	— DRAIN, BLOW-OFF WITH OFF ROAD BOX
	— EXISTING FIRE HYDRANT
	— EXISTING WATER METER
	— GAS METER
	— SEWER CLEANOUT
	— SEWER MH
	— TELEPHONE RISER, ATT RISER
	— POWER POLE, TEL POLE
	— THRUST BLOCK
	— ADDITIONAL HORIZ. OR VERT. BEND AS REQUIRED



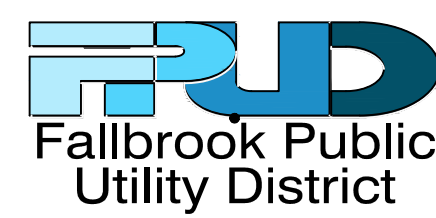
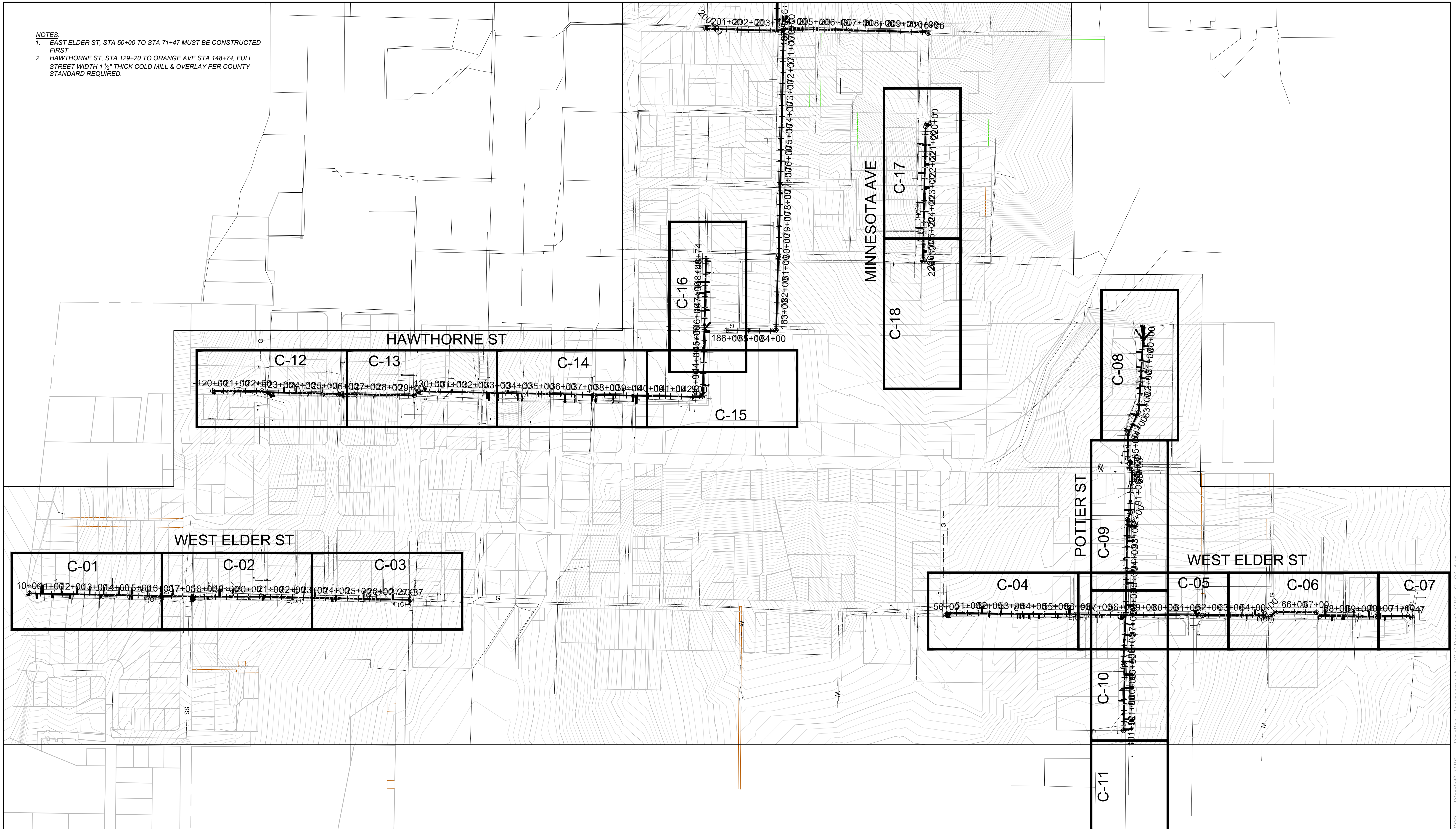
REVISIONS			
NO.	BY	DATE	REMARKS
1	AC	8/3/2022	ADDENDUM 1 REVISIONS

WATERLINE REPLACEMENT FY22-23
FALLBROOK PUBLIC UTILITY DISTRICT
 990 E. MISSION ROAD, FALLBROOK, CA

GENERAL
ABBREVIATIONS AND LEGEND

DWG No. **G-03**
 JOB NO: **3186**
 SHEET: **3** of **22**

- NOTES:
 1. EAST ELDER ST, STA 50+00 TO STA 71+47 MUST BE CONSTRUCTED FIRST
 2. HAWTHORNE ST, STA 129+20 TO ORANGE AVE STA 148+74, FULL STREET WIDTH 1 1/2" THICK COLD MILL & OVERLAY PER COUNTY STANDARD REQUIRED.

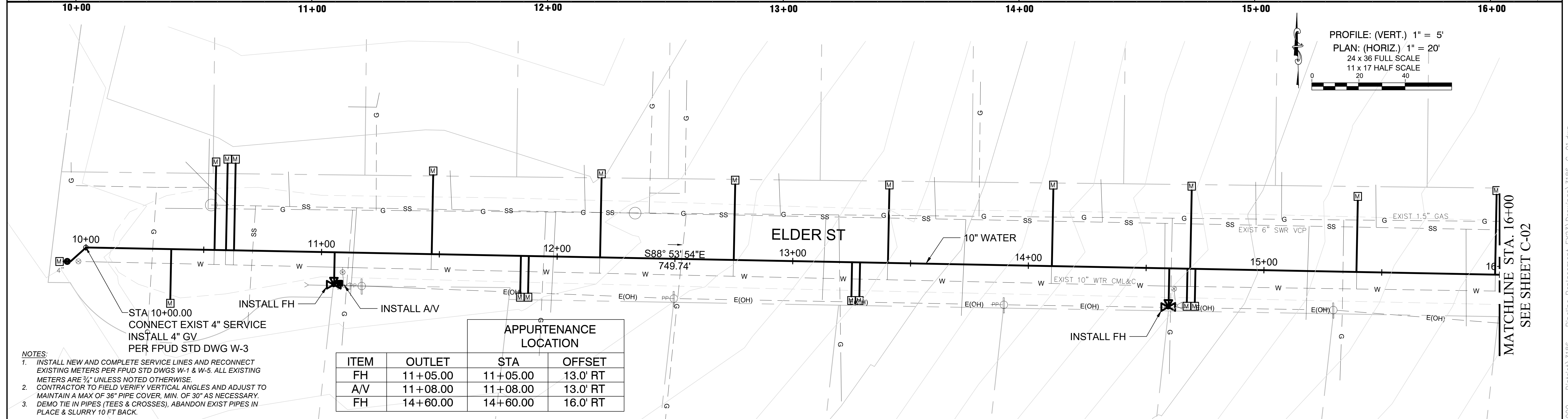
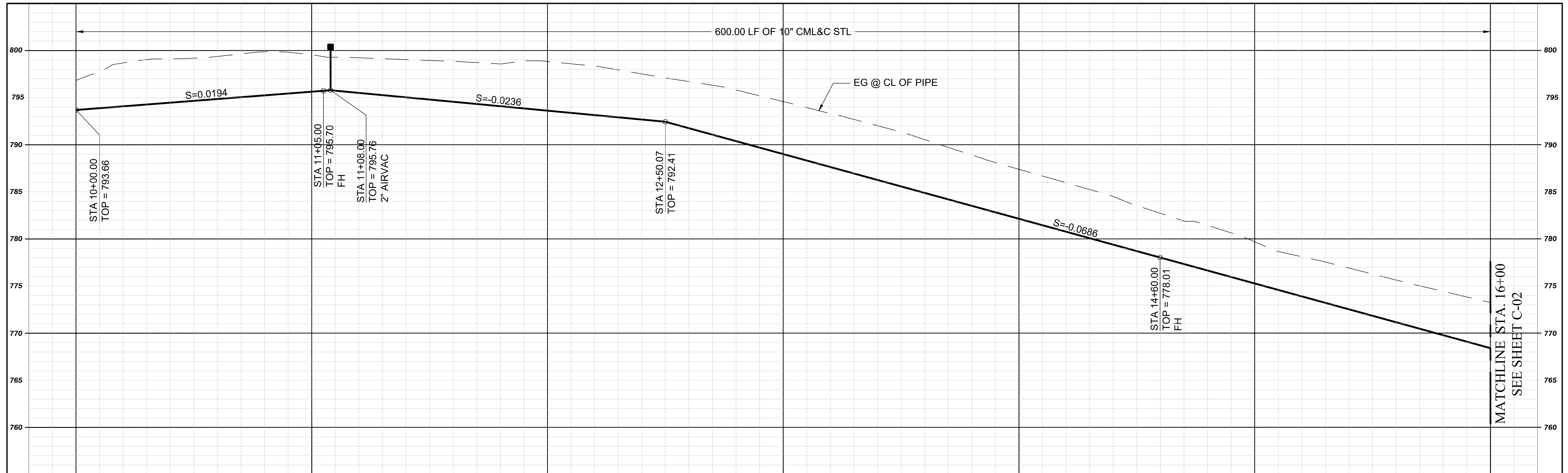


REVISIONS			
NO.	BY	DATE	REMARKS
1	AC	8/3/2022	ADDENDUM 1 REVISIONS

WATERLINE REPLACEMENT FY22-23
FALLBROOK PUBLIC UTILITY DISTRICT
 990 E. MISSION ROAD, FALLBROOK, CA

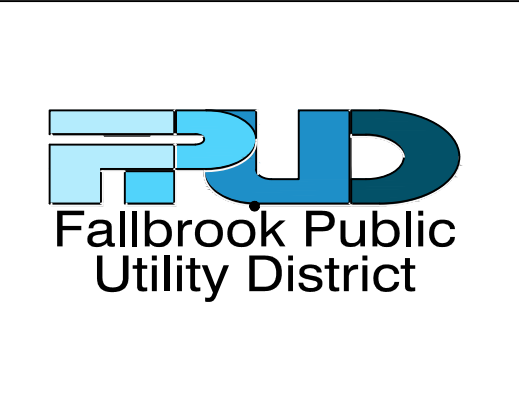
GENERAL
 INDEX MAP

DWG No. **G-04**
 JOB NO: **3186**
 SHEET: **4** of **22**



- NOTES:**
- INSTALL NEW AND COMPLETE SERVICE LINES AND RECONNECT EXISTING METERS PER FPU D STD DWGS W-1 & W-5. ALL EXISTING METERS ARE 3/4\"/>
 - CONTRACTOR TO FIELD VERIFY VERTICAL ANGLES AND ADJUST TO MAINTAIN A MAX OF 36\"/>
 - DEMO TIE IN PIPES (TEES & CROSSES), ABANDON EXIST PIPES IN PLACE & SLURRY 10 FT BACK.

APPURTENANCE LOCATION			
ITEM	OUTLET	STA	OFFSET
FH		11+05.00	13.0' RT
A/V		11+08.00	13.0' RT
FH		14+60.00	16.0' RT

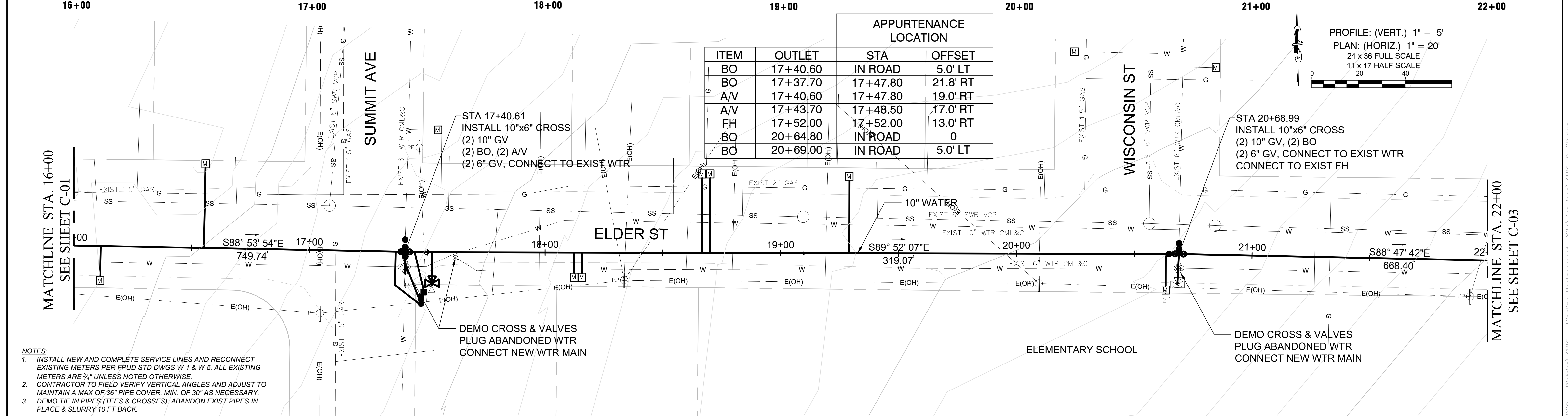
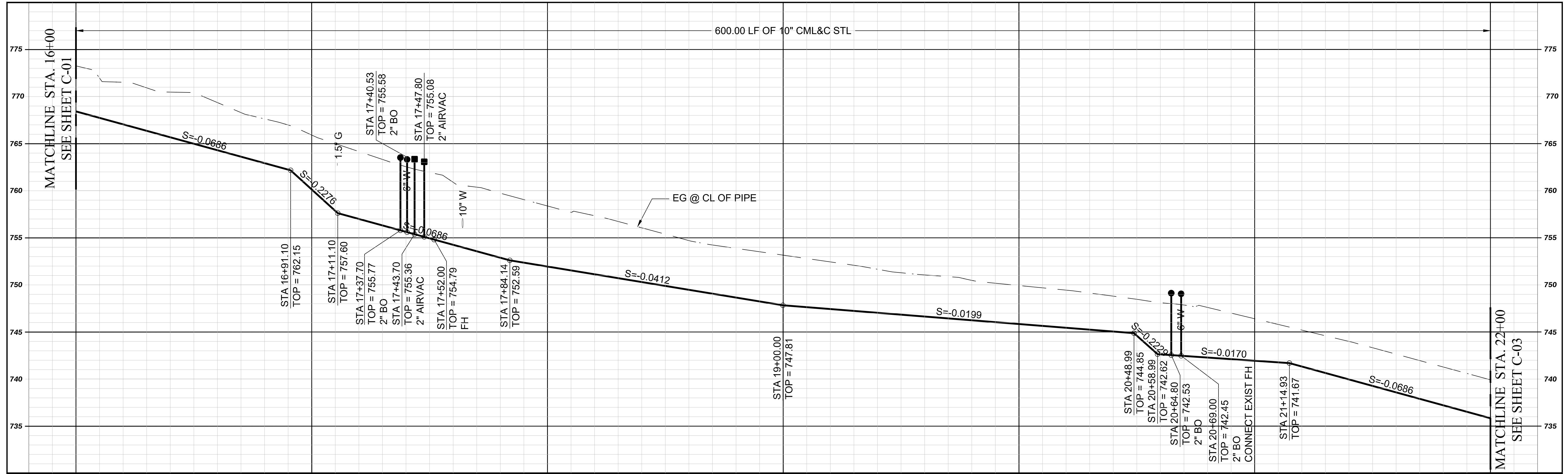


REVISIONS			
NO.	BY	DATE	REMARKS
1	AC	8/3/2022	ADDENDUM 1 REVISIONS

WATERLINE REPLACEMENT FY22-23
FALLBROOK PUBLIC UTILITY DISTRICT
 990 E. MISSION ROAD, FALLBROOK, CA

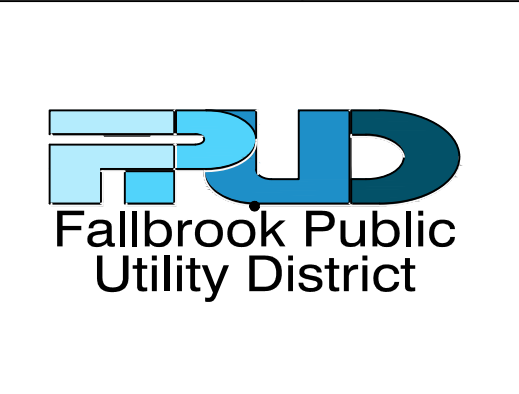
CIVIL
PLAN AND PROFILE STA.
10+00 TO 16+00
ELDER ST

DWG No. **C-01**
 JOB NO: **3186**
 SHEET: **5** of **22**



APPURTENANCE LOCATION			
ITEM	OUTLET	STA	OFFSET
BO	17+40.60	IN ROAD	5.0' LT
BO	17+37.70	17+47.80	21.8' RT
A/V	17+40.60	17+47.80	19.0' RT
A/V	17+43.70	17+48.50	17.0' RT
FH	17+52.00	17+52.00	13.0' RT
BO	20+64.80	IN ROAD	0
BO	20+69.00	IN ROAD	5.0' LT

- NOTES
- INSTALL NEW AND COMPLETE SERVICE LINES AND RECONNECT EXISTING METERS PER FPU D STD DWGS W-1 & W-5. ALL EXISTING METERS ARE 3/4" UNLESS NOTED OTHERWISE. CONTRACTOR TO FIELD VERIFY VERTICAL ANGLES AND ADJUST TO MAINTAIN A MAX OF 36" PIPE COVER, MIN. OF 30" AS NECESSARY.
 - DEMO TIE IN PIPES (TEES & CROSSES), ABANDON EXIST PIPES IN PLACE & SLURRY 10 FT BACK.

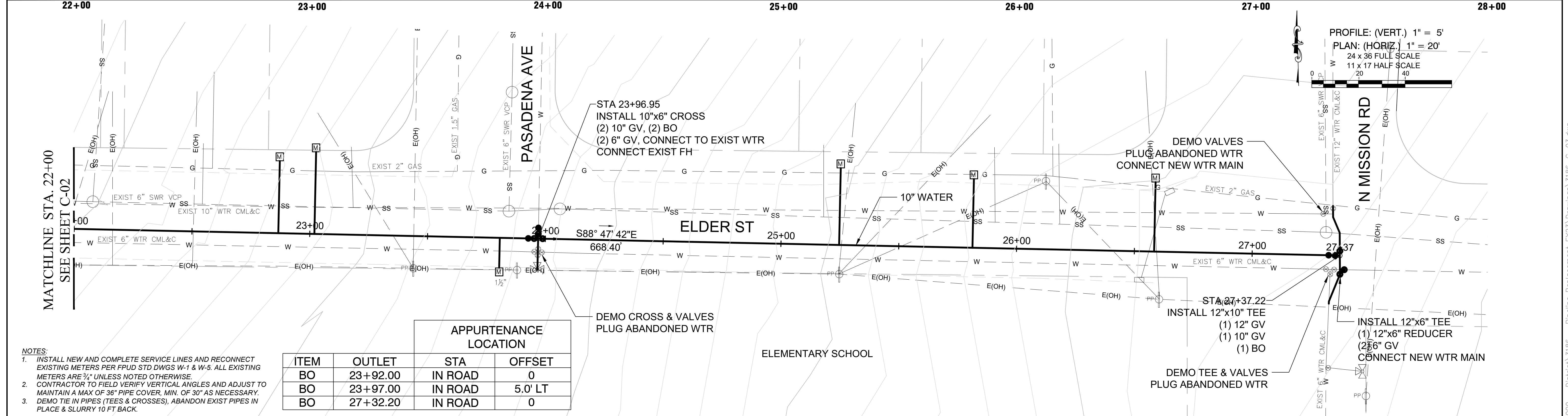
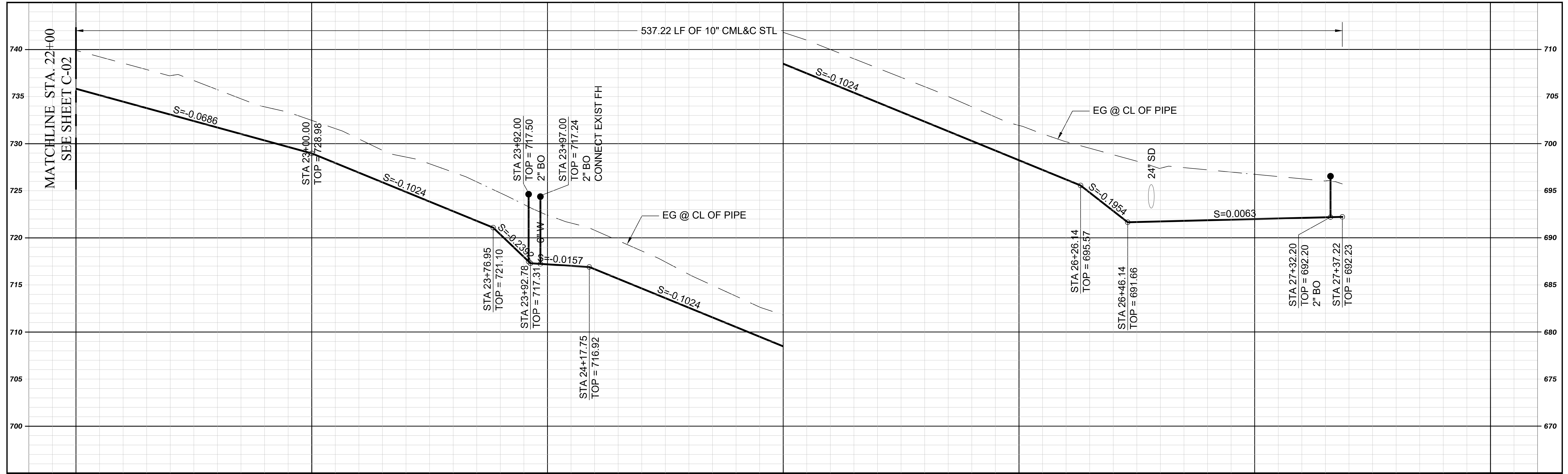


REVISIONS			
NO.	BY	DATE	REMARKS
1	AC	8/3/2022	ADDENDUM 1 REVISIONS

WATERLINE REPLACEMENT FY22-23
FALLBROOK PUBLIC UTILITY DISTRICT
 990 E. MISSION ROAD, FALLBROOK, CA

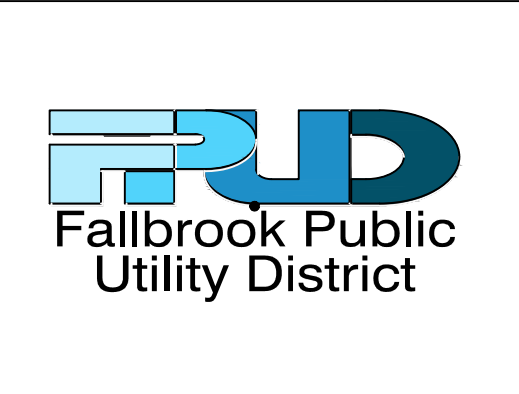
CIVIL
PLAN AND PROFILE STA.
16+00 TO 22+00
ELDER ST

DWG No. **C-02**
 JOB NO: **3186**
 SHEET: **6** of **22**



- NOTES**
- INSTALL NEW AND COMPLETE SERVICE LINES AND RECONNECT EXISTING METERS PER FLUID STD DWGS W-1 & W-5. ALL EXISTING METERS ARE 3/4" UNLESS NOTED OTHERWISE. CONTRACTOR TO FIELD VERIFY VERTICAL ANGLES AND ADJUST TO MAINTAIN A MAX OF 36" PIPE COVER, MIN. OF 30" AS NECESSARY.
 - DEMO TIE IN PIPES (TEES & CROSSSES), ABANDON EXIST PIPES IN PLACE & SLURRY 10 FT BACK.

APPURTENANCE LOCATION			
ITEM	OUTLET	STA	OFFSET
BO	23+92.00	IN ROAD	0
BO	23+97.00	IN ROAD	5.0' LT
BO	27+32.20	IN ROAD	0

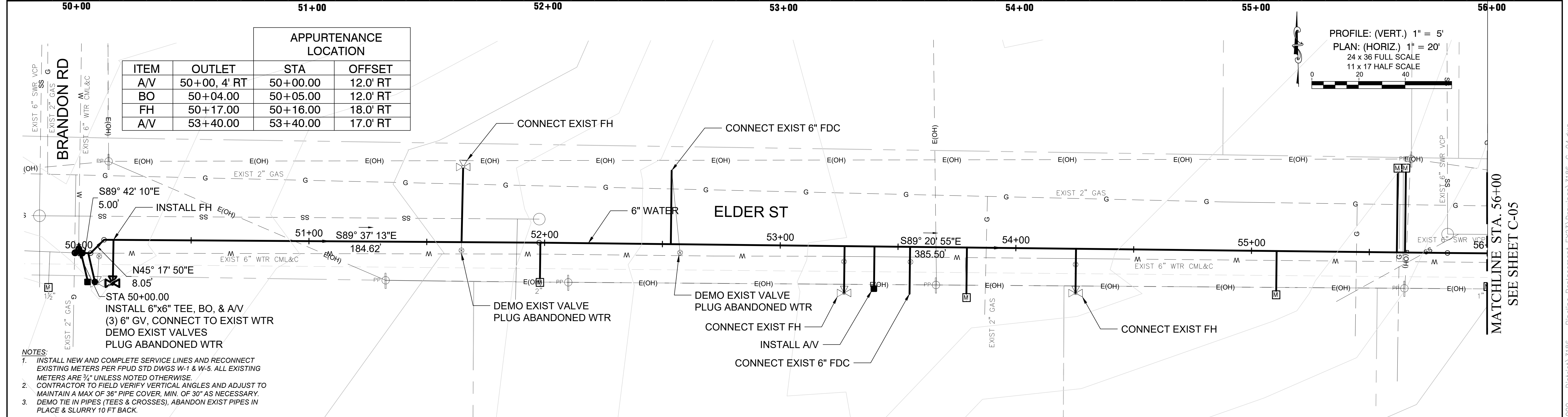
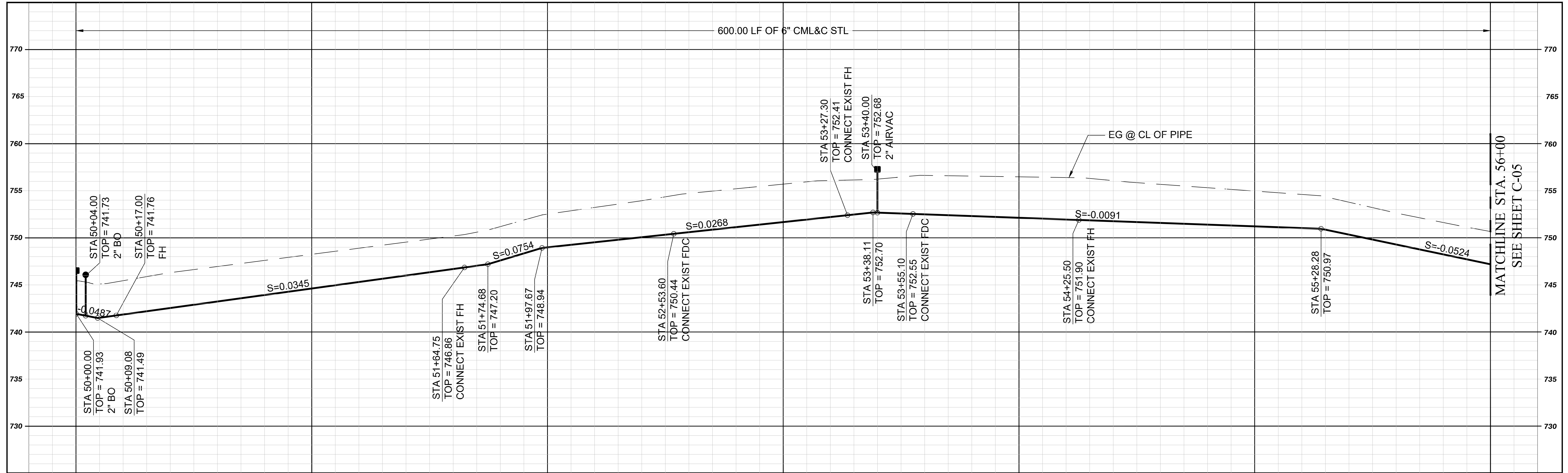


REVISIONS			
NO.	BY	DATE	REMARKS
1	AC	8/3/2022	ADDENDUM 1 REVISIONS

WATERLINE REPLACEMENT FY22-23
FALLBROOK PUBLIC UTILITY DISTRICT
 990 E. MISSION ROAD, FALLBROOK, CA

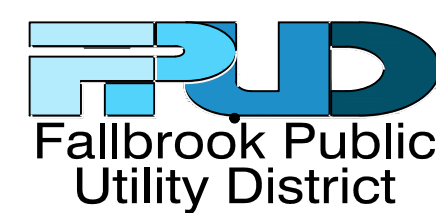
CIVIL
PLAN AND PROFILE STA.
22+00 TO 27+33
ELDER ST

DWG No. **C-03**
 JOB NO: **3186**
 SHEET: **7** of **22**



APPURTENANCE LOCATION			
ITEM	OUTLET	STA	OFFSET
A/V	50+00, 4' RT	50+00.00	12.0' RT
BO	50+04.00	50+05.00	12.0' RT
FH	50+17.00	50+16.00	18.0' RT
A/V	53+40.00	53+40.00	17.0' RT

- NOTES:
- INSTALL NEW AND COMPLETE SERVICE LINES AND RECONNECT EXISTING METERS PER FPU D STD DWGS W-1 & W-5. ALL EXISTING METERS ARE 3/4" UNLESS NOTED OTHERWISE.
 - CONTRACTOR TO FIELD VERIFY VERTICAL ANGLES AND ADJUST TO MAINTAIN A MAX OF 36" PIPE COVER. MIN. OF 30" AS NECESSARY.
 - DEMO TIE IN PIPES (TEES & CROSSES), ABANDON EXIST PIPES IN PLACE & SLURRY 10 FT BACK.

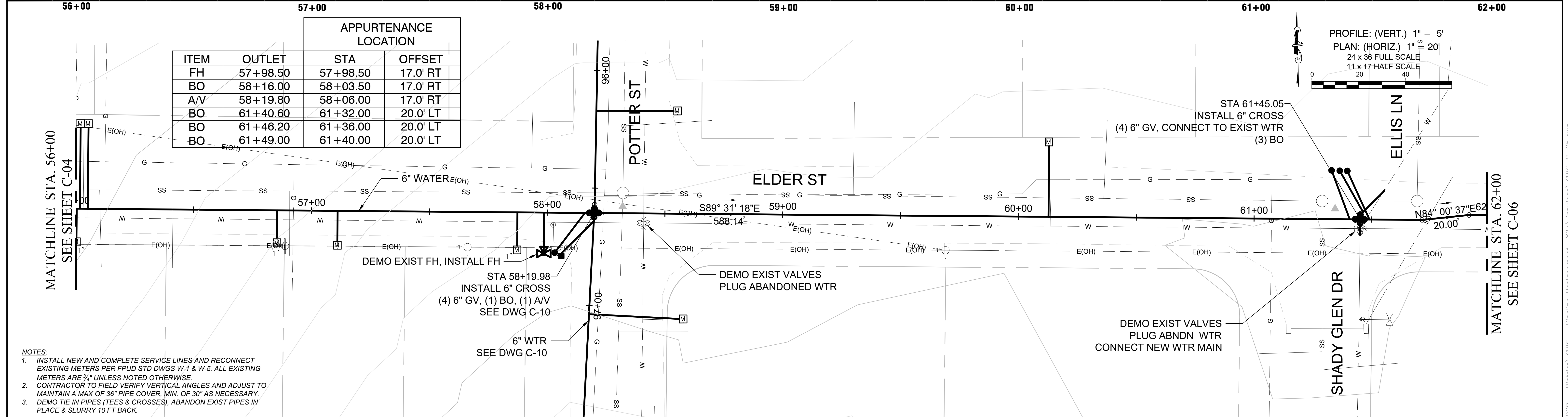
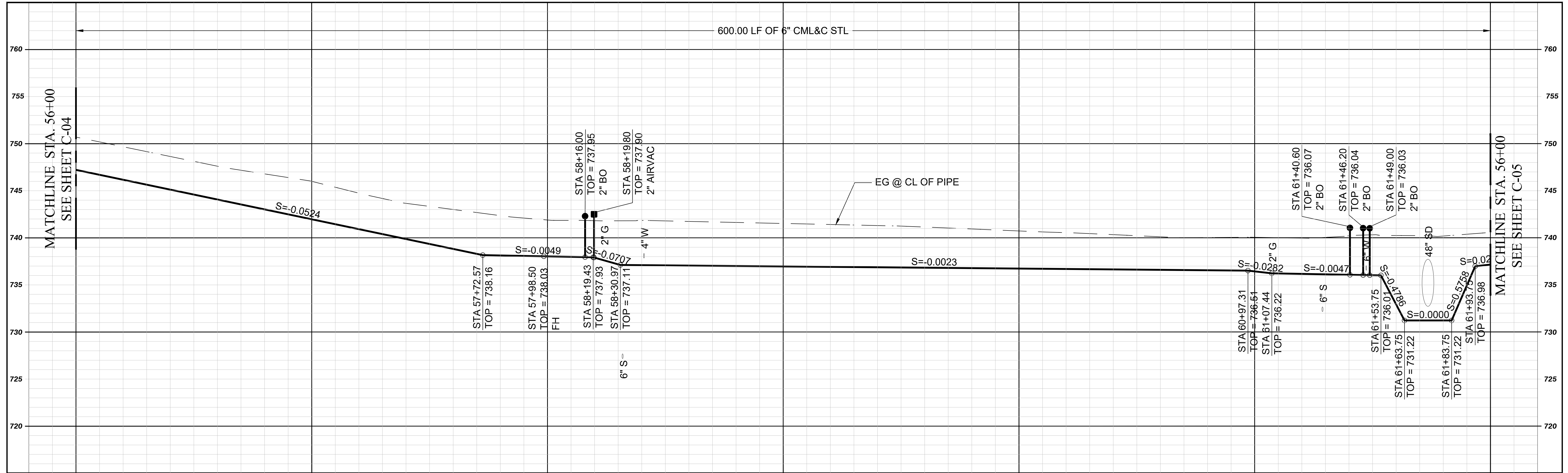


REVISIONS			
NO.	BY	DATE	REMARKS
1	AC	8/3/2022	ADDENDUM 1 REVISIONS

WATERLINE REPLACEMENT FY22-23
FALLBROOK PUBLIC UTILITY DISTRICT
 990 E. MISSION ROAD, FALLBROOK, CA

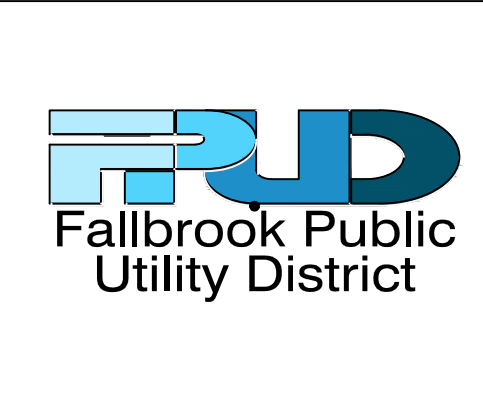
CIVIL
PLAN AND PROFILE STA.
50+00 TO 56+00
ELDER ST

DWG No. **C-04**
 JOB NO: **3186**
 SHEET: **8** of **22**



APPURTENANCE LOCATION			
ITEM	OUTLET	STA	OFFSET
FH	57+98.50	57+98.50	17.0' RT
BO	58+16.00	58+03.50	17.0' RT
A/V	58+19.80	58+06.00	17.0' RT
BO	61+40.60	61+32.00	20.0' LT
BO	61+46.20	61+36.00	20.0' LT
BO	61+49.00	61+40.00	20.0' LT

- NOTES
- INSTALL NEW AND COMPLETE SERVICE LINES AND RECONNECT EXISTING METERS PER FPU D STD DWGS W-1 & W-5. ALL EXISTING METERS ARE 3/4" UNLESS NOTED OTHERWISE. CONTRACTOR TO FIELD VERIFY VERTICAL ANGLES AND ADJUST TO MAINTAIN A MAX OF 36" PIPE COVER, MIN. OF 30" AS NECESSARY.
 - DEMO TIE IN PIPES (TEES & CROSSES), ABANDON EXIST PIPES IN PLACE & SLURRY 10 FT BACK.

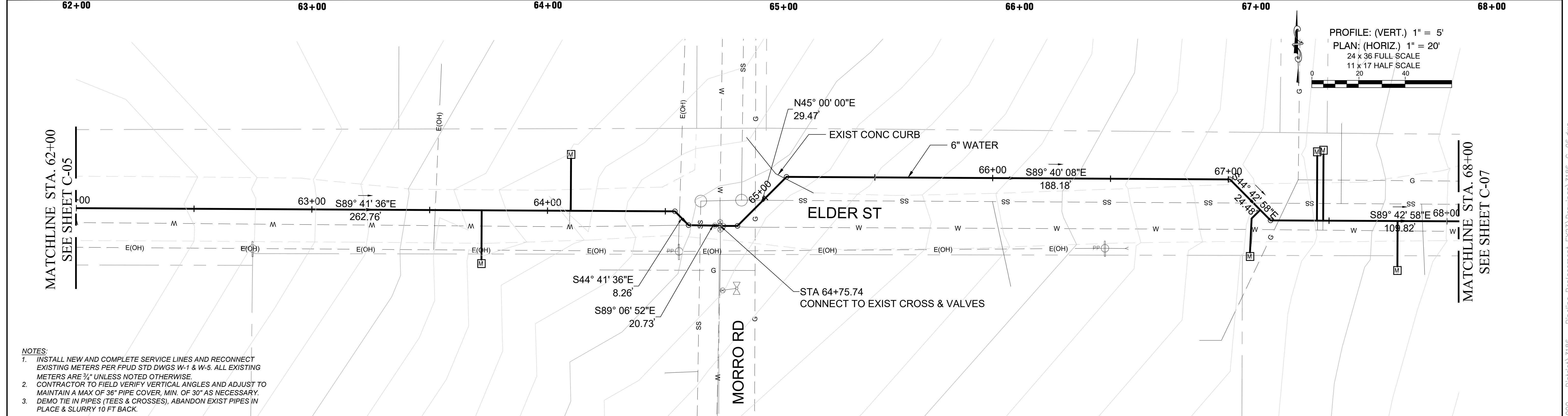
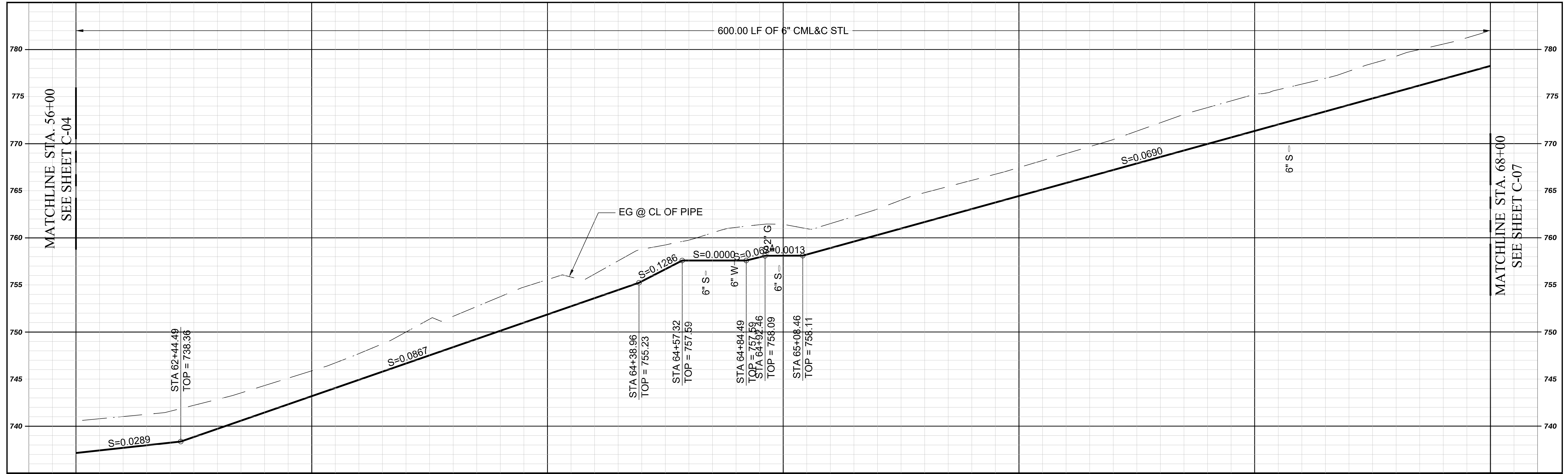


REVISIONS			
NO.	BY	DATE	REMARKS
1	AC	8/3/2022	ADDENDUM 1 REVISIONS

WATERLINE REPLACEMENT FY22-23
FALLBROOK PUBLIC UTILITY DISTRICT
 990 E. MISSION ROAD, FALLBROOK, CA

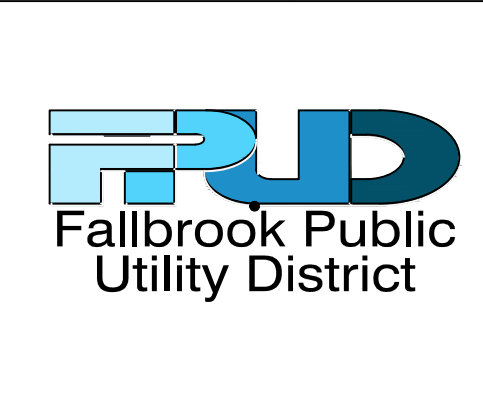
CIVIL
PLAN AND PROFILE STA. 50+00 TO 56+00
ELDER ST

DWG No. **C-05**
 JOB NO: **3186**
 SHEET: **9** of **22**



- NOTES**
- INSTALL NEW AND COMPLETE SERVICE LINES AND RECONNECT EXISTING METERS PER FPU D STD DWGS W-1 & W-5. ALL EXISTING METERS ARE 3/4" UNLESS NOTED OTHERWISE.
 - CONTRACTOR TO FIELD VERIFY VERTICAL ANGLES AND ADJUST TO MAINTAIN A MAX OF 36" PIPE COVER, MIN. OF 30" AS NECESSARY.
 - DEMO TIE IN PIPES (TEES & CROSSES), ABANDON EXIST PIPES IN PLACE & SLURRY 10 FT BACK.

PROFILE: (VERT.) 1" = 5'
 PLAN: (HORIZ.) 1" = 20'
 24 x 36 FULL SCALE
 11 x 17 HALF SCALE

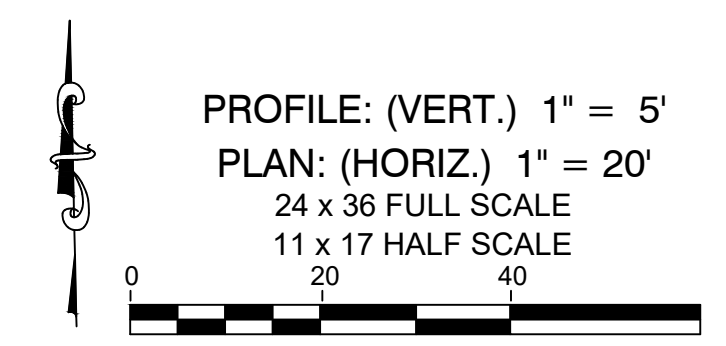
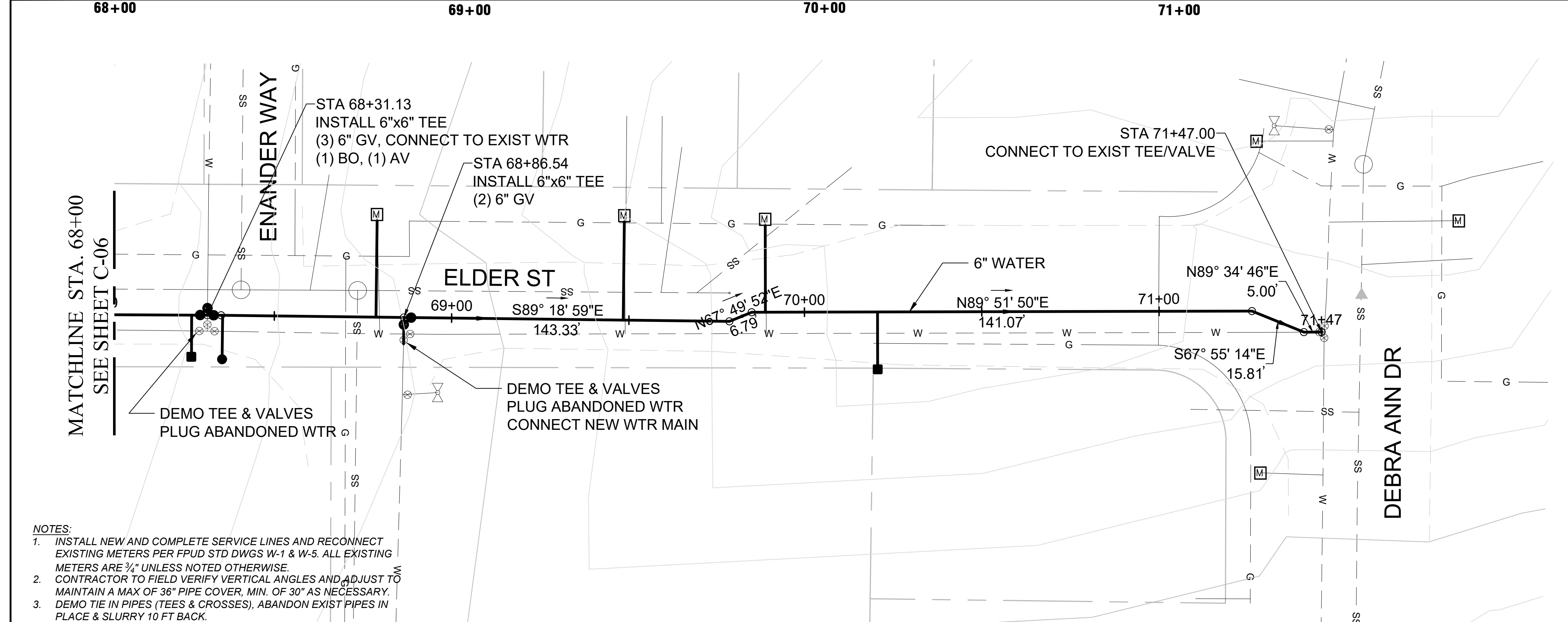
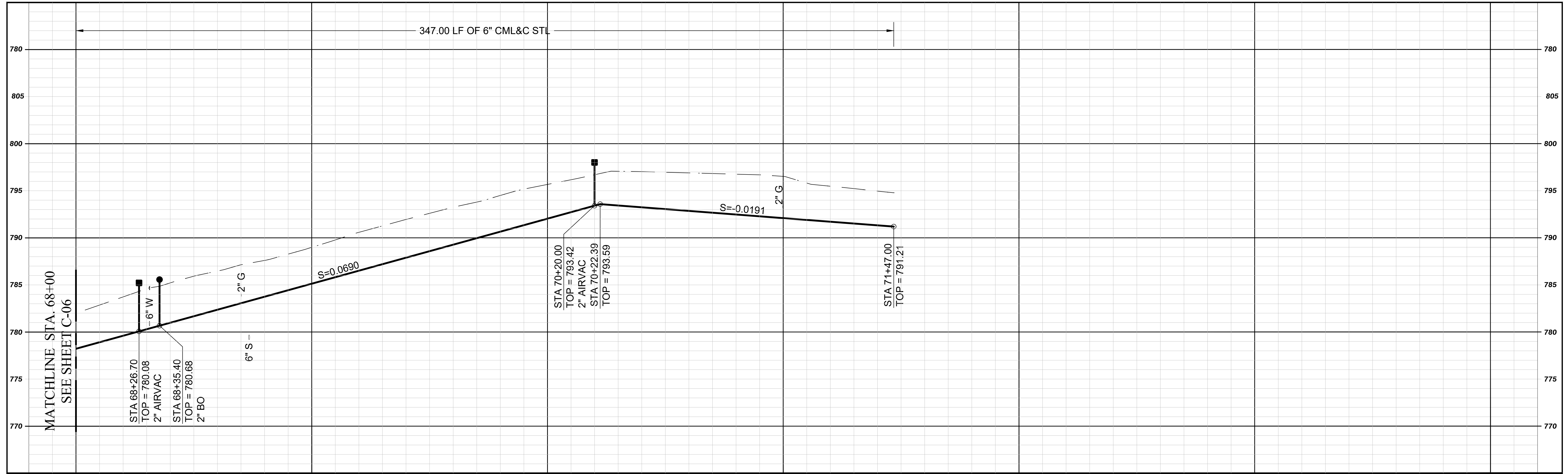


REVISIONS			
NO.	BY	DATE	REMARKS
1	AC	8/3/2022	ADDENDUM 1 REVISIONS

WATERLINE REPLACEMENT FY22-23
FALLBROOK PUBLIC UTILITY DISTRICT
 990 E. MISSION ROAD, FALLBROOK, CA

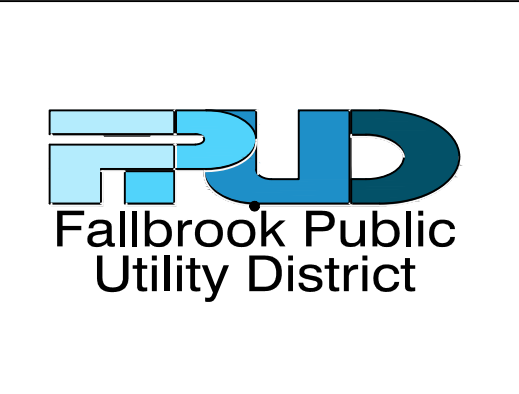
CIVIL
PLAN AND PROFILE STA.
62+00 TO 68+00
ELDER ST

DWG No. **C-06**
 JOB NO: **3186**
 SHEET: **10** of **22**



- NOTES**
1. INSTALL NEW AND COMPLETE SERVICE LINES AND RECONNECT EXISTING METERS PER FPUUD STD DWGS W-1 & W-5. ALL EXISTING METERS ARE 3/4\"/>
 - 2. CONTRACTOR TO FIELD VERIFY VERTICAL ANGLES AND ADJUST TO MAINTAIN A MAX OF 36\"/>
 - 3. DEMO TIE IN PIPES (TEES & CROSSES), ABANDON EXIST PIPES IN PLACE & SLURRY 10 FT BACK.

APPURTENANCE LOCATION			
ITEM	STA	STA	OFFSET
A/V	68+26.70	68+26.70	12.0' RT
BO	68+35.40	68+35.40	12.0' RT
A/V	70+20.00	70+20.00	12.0' RT

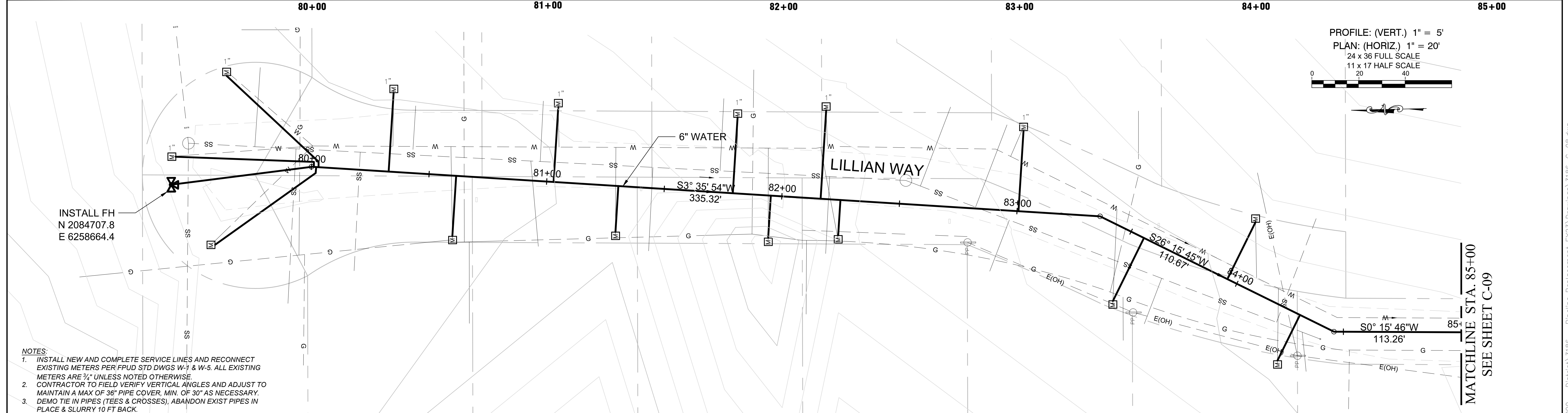
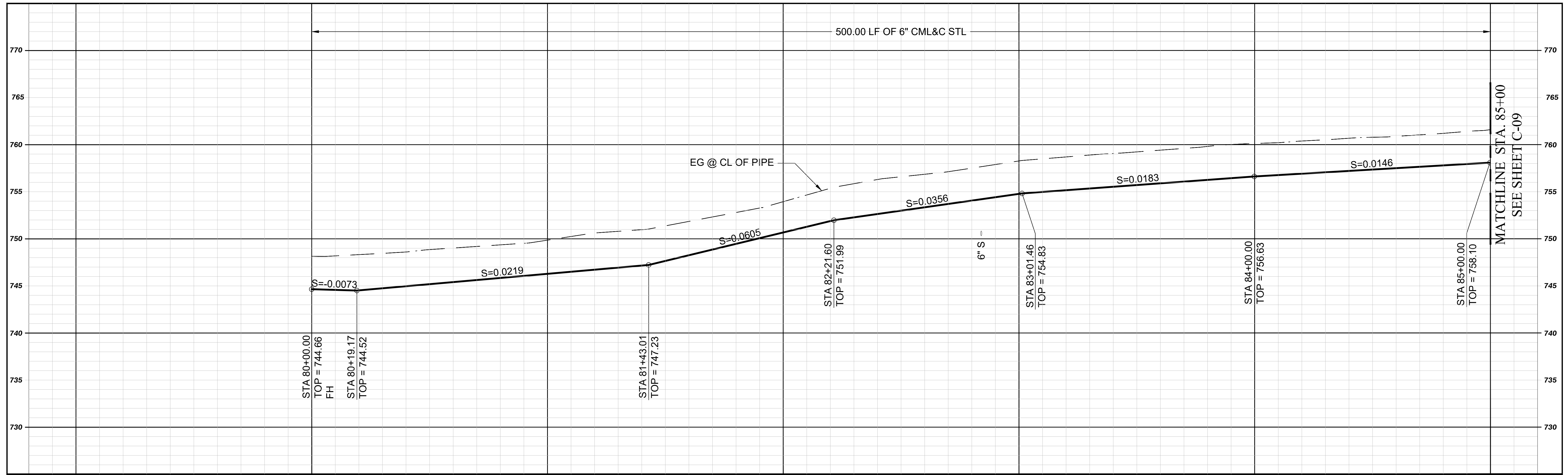


REVISIONS			
NO.	BY	DATE	REMARKS
1	AC	8/3/2022	ADDENDUM 1 REVISIONS

WATERLINE REPLACEMENT FY22-23
FALLBROOK PUBLIC UTILITY DISTRICT
 990 E. MISSION ROAD, FALLBROOK, CA

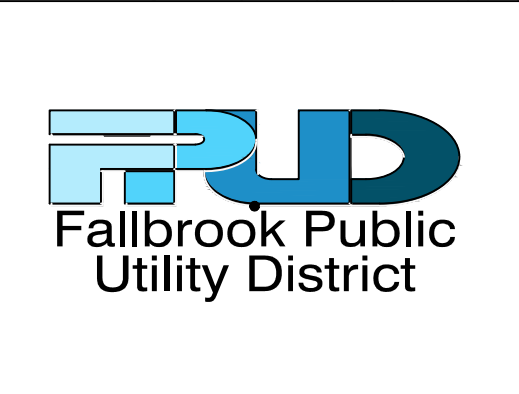
CIVIL
PLAN AND PROFILE STA.
68+00 TO 71+47
ELDER ST

DWG No. C-07
 JOB NO: 3186
 SHEET: 11 of 22



PROFILE: (VERT.) 1" = 5'
 PLAN: (HORIZ.) 1" = 20'
 24 x 36 FULL SCALE
 11 x 17 HALF SCALE

- NOTES:
1. INSTALL NEW AND COMPLETE SERVICE LINES AND RECONNECT EXISTING METERS PER FPU D STD DWGS W-1 & W-5. ALL EXISTING METERS ARE 3/4" UNLESS NOTED OTHERWISE. CONTRACTOR TO FIELD VERIFY VERTICAL ANGLES AND ADJUST TO MAINTAIN A MAX OF 36" PIPE COVER, MIN. OF 30" AS NECESSARY.
 2. DEMO TIE IN PIPES (TEES & CROSSES), ABANDON EXIST PIPES IN PLACE & SLURRY 10 FT BACK.



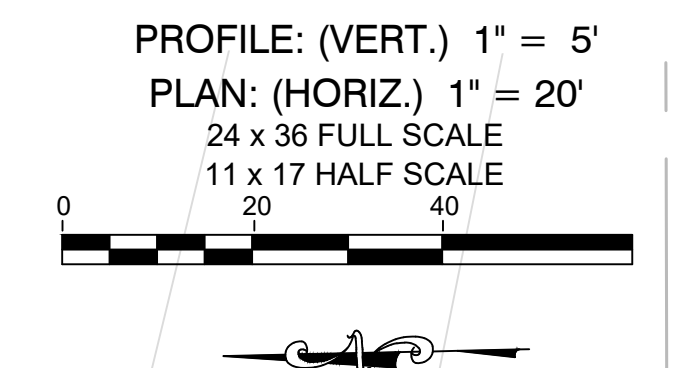
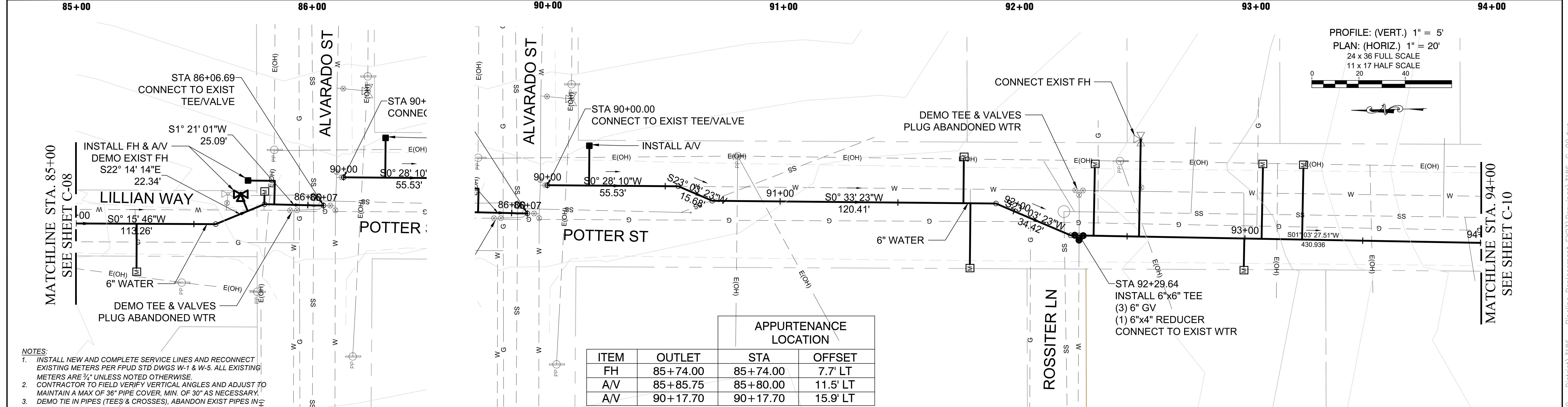
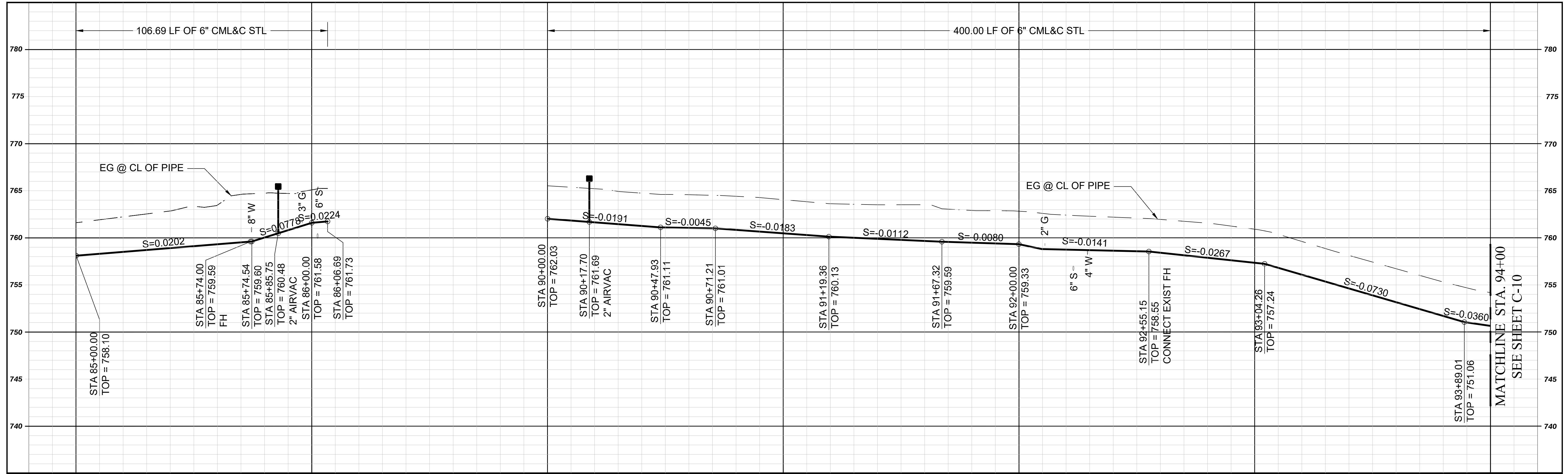
REVISIONS			
NO.	BY	DATE	REMARKS
1	AC	8/3/2022	ADDENDUM 1 REVISIONS

WATERLINE REPLACEMENT FY22-23
FALLBROOK PUBLIC UTILITY DISTRICT
 990 E. MISSION ROAD, FALLBROOK, CA

CIVIL
PLAN AND PROFILE STA. 80+00 TO 85+00
LILLIAN WAY

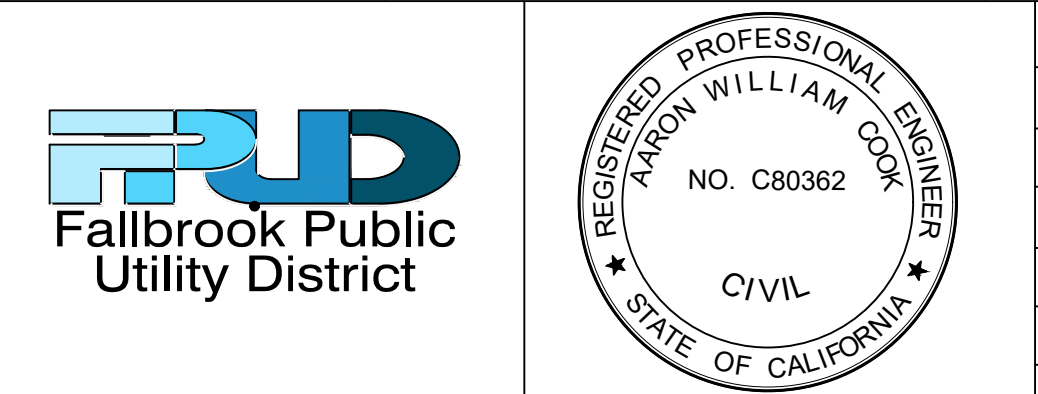
DWG No. **C-08**
 JOB NO: **3186**
 SHEET: **12** of **22**

DWG PATH: X:\JOB FILES\3000 - District\3186 - Pipeline Replacement\FY23\Drawings\3186-C-08.dwg



- NOTES**
1. INSTALL NEW AND COMPLETE SERVICE LINES AND RECONNECT EXISTING METERS PER FPU D STD DWGS W-1 & W-5. ALL EXISTING METERS ARE 3/4" UNLESS NOTED OTHERWISE. CONTRACTOR TO FIELD VERIFY VERTICAL ANGLES AND ADJUST TO MAINTAIN A MAX OF 36" PIPE COVER. MIN. OF 30" AS NECESSARY.
 2. DEMO TIE IN PIPES (TEES & CROSSES), ABANDON EXIST PIPES IN PLACE & SLURRY 10 FT BACK.

APPURTENANCE LOCATION			
ITEM	OUTLET	STA	OFFSET
FH	85+74.00	85+74.00	7.7' LT
A/V	85+85.75	85+80.00	11.5' LT
A/V	90+17.70	90+17.70	15.9' LT

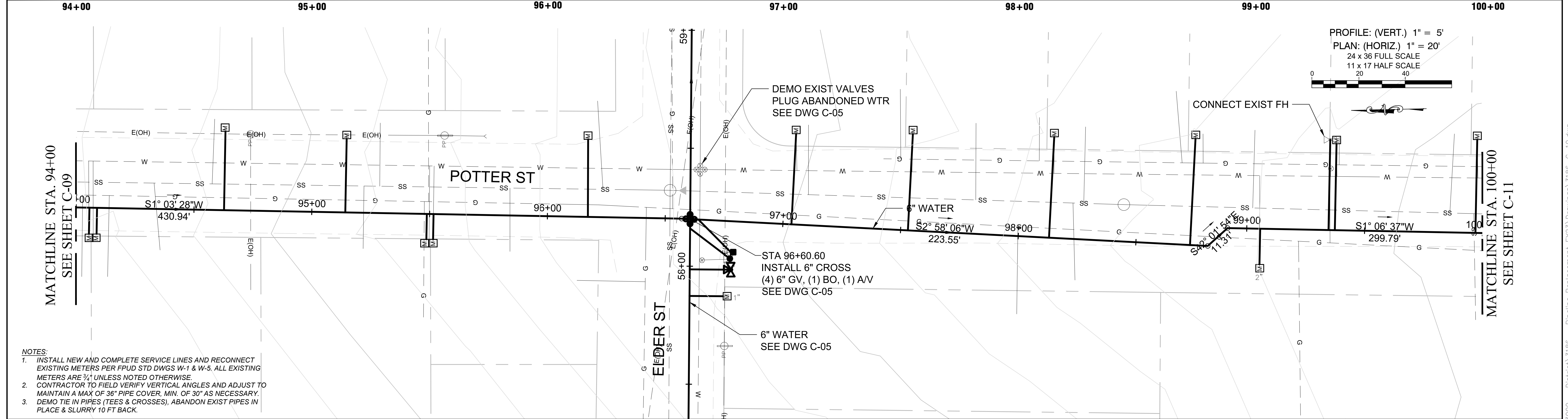
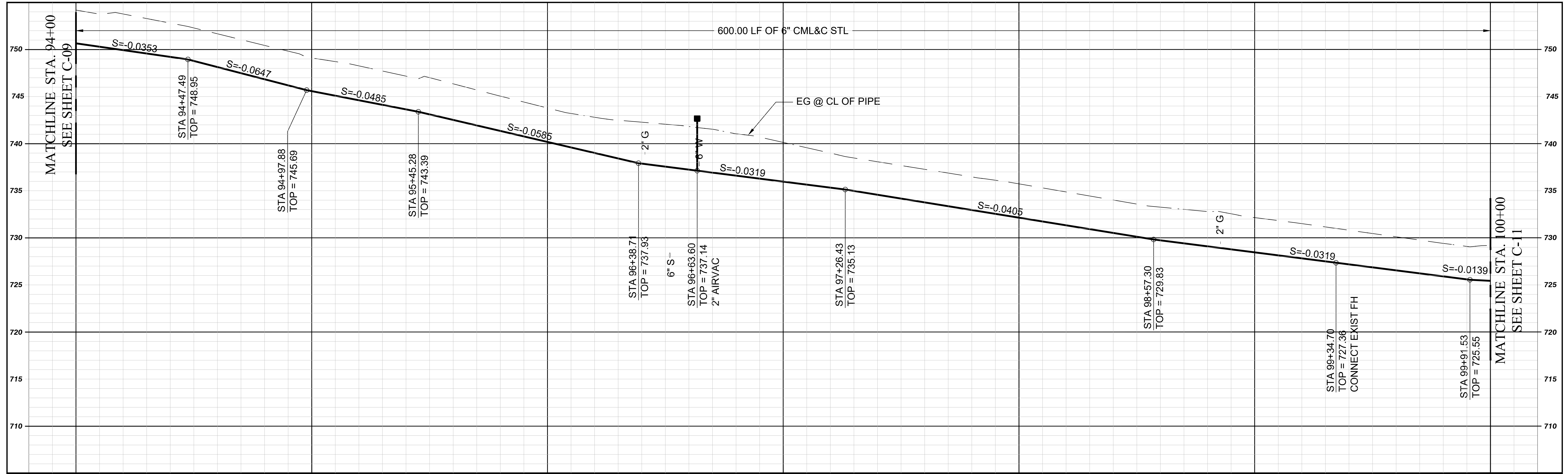


REVISIONS			
NO.	BY	DATE	REMARKS
1	AC	8/3/2022	ADDENDUM 1 REVISIONS

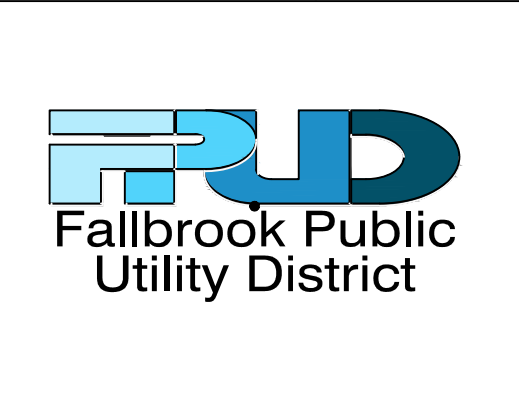
WATERLINE REPLACEMENT FY22-23
FALLBROOK PUBLIC UTILITY DISTRICT
 990 E. MISSION ROAD, FALLBROOK, CA

CIVIL
PLAN AND PROFILE STA. 85+00 TO 94+00
POTTER ST

DWG No. **C-09**
 JOB NO: **3186**
 SHEET: **13** of **22**



- NOTES**
1. INSTALL NEW AND COMPLETE SERVICE LINES AND RECONNECT EXISTING METERS PER FPU D STD DWGS W-1 & W-5. ALL EXISTING METERS ARE 3/4" UNLESS NOTED OTHERWISE. CONTRACTOR TO FIELD VERIFY VERTICAL ANGLES AND ADJUST TO MAINTAIN A MAX OF 36" PIPE COVER, MIN. OF 30" AS NECESSARY.
 2. DEMO TIE IN PIPES (TEES & CROSSES), ABANDON EXIST PIPES IN PLACE & SLURRY 10 FT BACK.

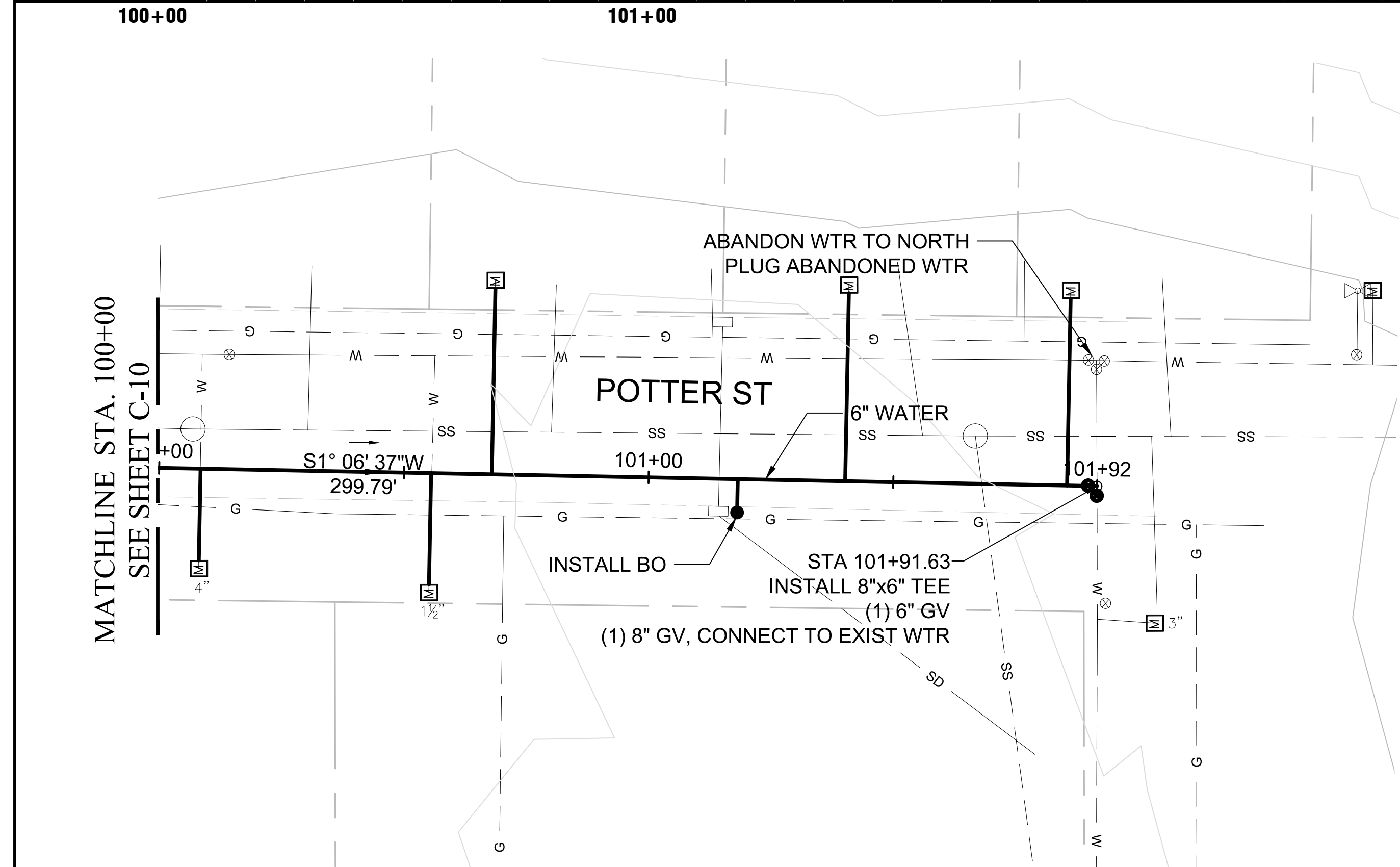
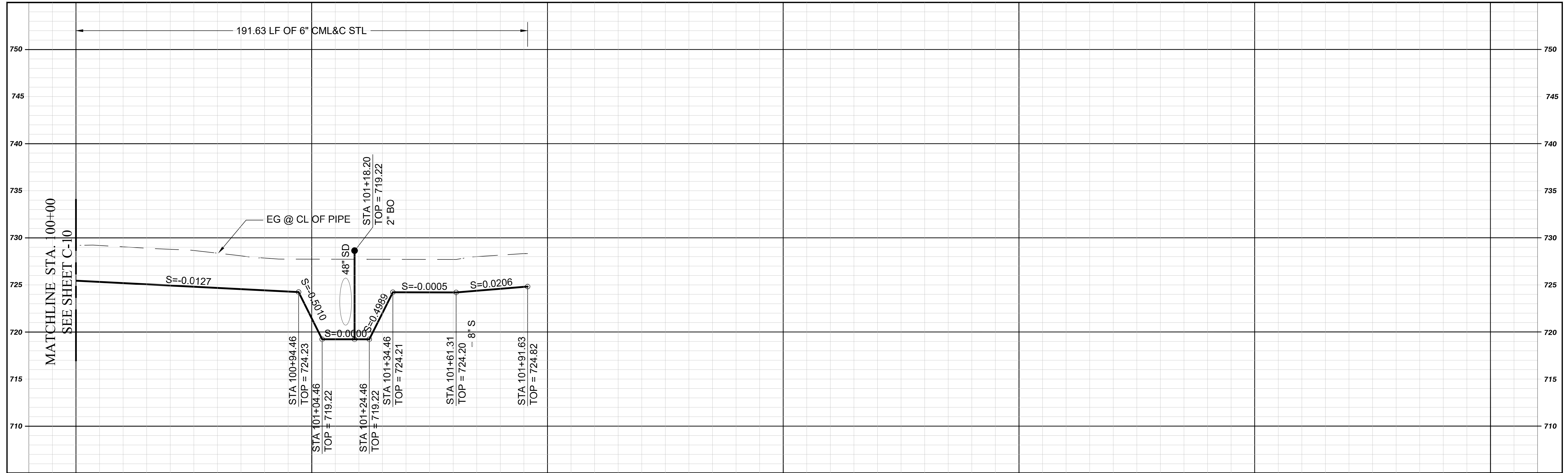


REVISIONS			
NO.	BY	DATE	REMARKS
1	AC	8/3/2022	ADDENDUM 1 REVISIONS

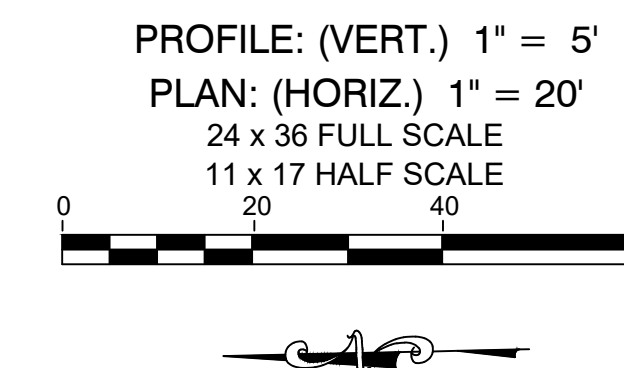
WATERLINE REPLACEMENT FY22-23
FALLBROOK PUBLIC UTILITY DISTRICT
 990 E. MISSION ROAD, FALLBROOK, CA

CIVIL
PLAN AND PROFILE STA.
94+00 TO 100+00
POTTER ST

DWG No. **C-10**
 JOB NO: **3186**
 SHEET: **14** of **22**



APPURTENANCE LOCATION			
ITEM	OUTLET	STA	OFFSET
BO	101+18.20	101+18.20	6.9' RT

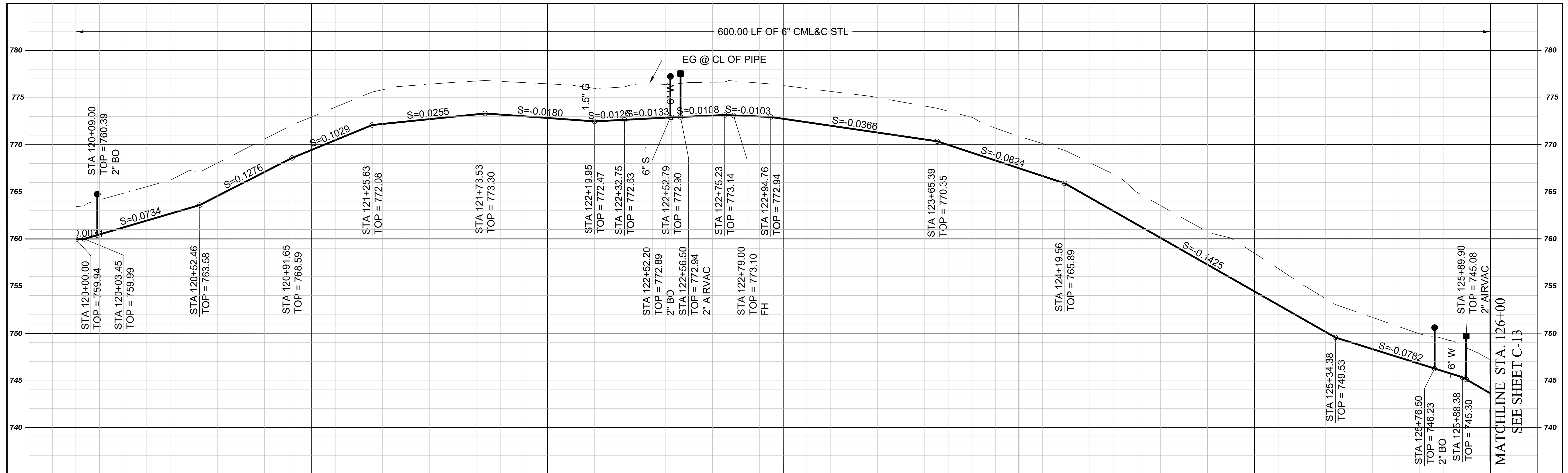


REVISIONS			
NO.	BY	DATE	REMARKS
1	AC	8/3/2022	ADDENDUM 1 REVISIONS

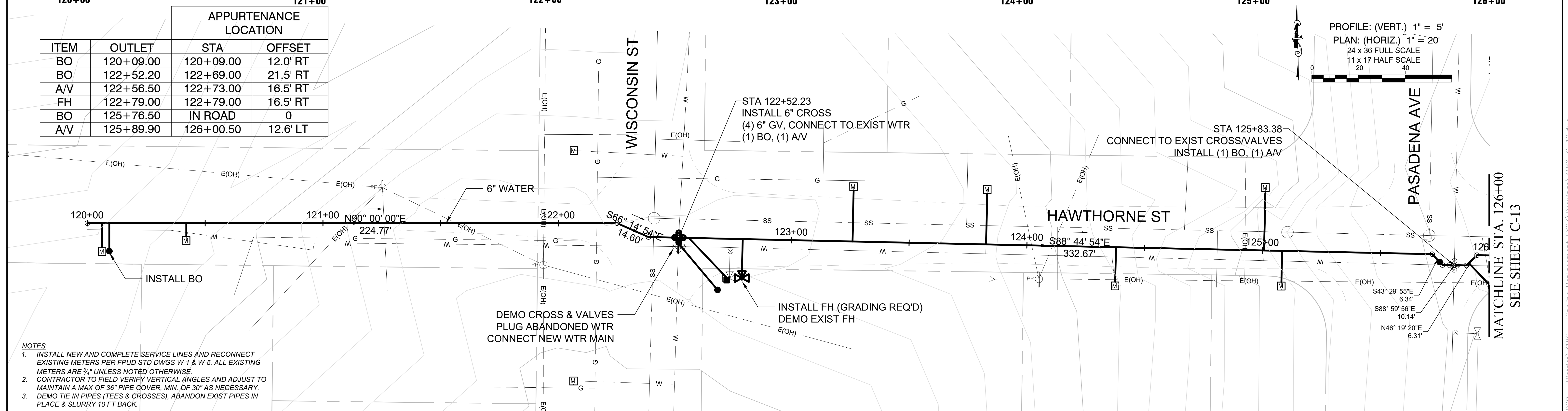
WATERLINE REPLACEMENT FY22-23
FALLBROOK PUBLIC UTILITY DISTRICT
 990 E. MISSION ROAD, FALLBROOK, CA

CIVIL
PLAN AND PROFILE STA.
100+00 TO 101+92
POTTER ST

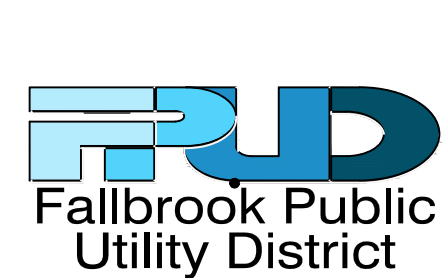
DWG No. **C-11**
 JOB NO: **3186**
 SHEET: **15** of **22**



APPURTENANCE LOCATION			
ITEM	OUTLET	STA	OFFSET
BO	120+09.00	120+09.00	12.0' RT
BO	122+52.20	122+69.00	21.5' RT
A/V	122+56.50	122+73.00	16.5' RT
FH	122+79.00	122+79.00	16.5' RT
BO	125+76.50	IN ROAD	0
A/V	125+89.90	126+00.50	12.6' LT



- NOTES
- INSTALL NEW AND COMPLETE SERVICE LINES AND RECONNECT EXISTING METERS PER FPU D STD DWGS W-1 & W-5. ALL EXISTING METERS ARE 3/4" UNLESS NOTED OTHERWISE. CONTRACTOR TO FIELD VERIFY VERTICAL ANGLES AND ADJUST TO MAINTAIN A MAX OF 36" PIPE COVER. MIN. OF 30" AS NECESSARY.
 - DEMO TIE IN PIPES (TEES & CROSSES), ABANDON EXIST PIPES IN PLACE & SLURRY 10 FT BACK.

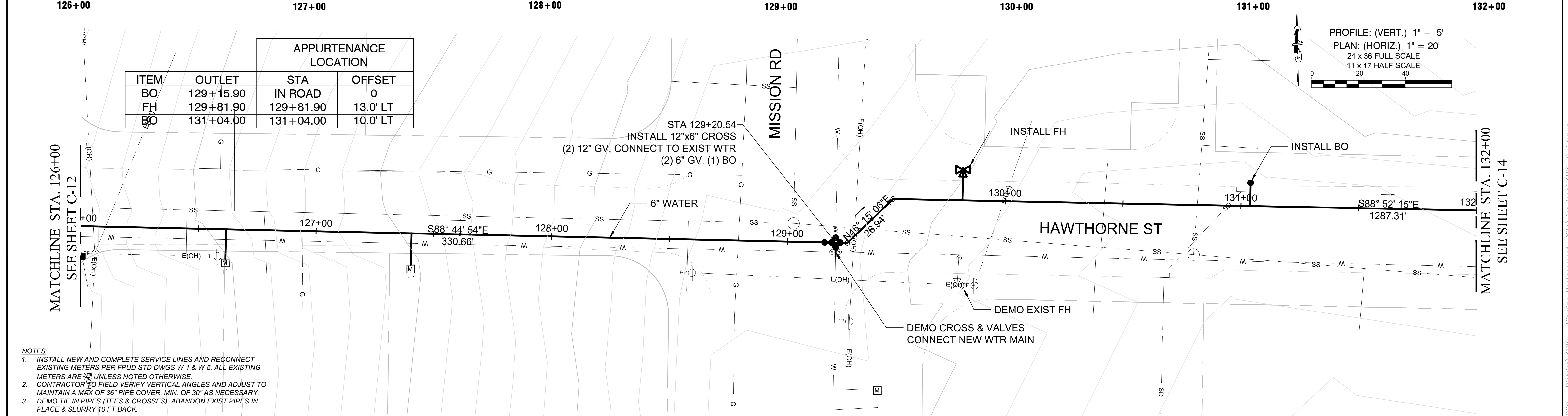
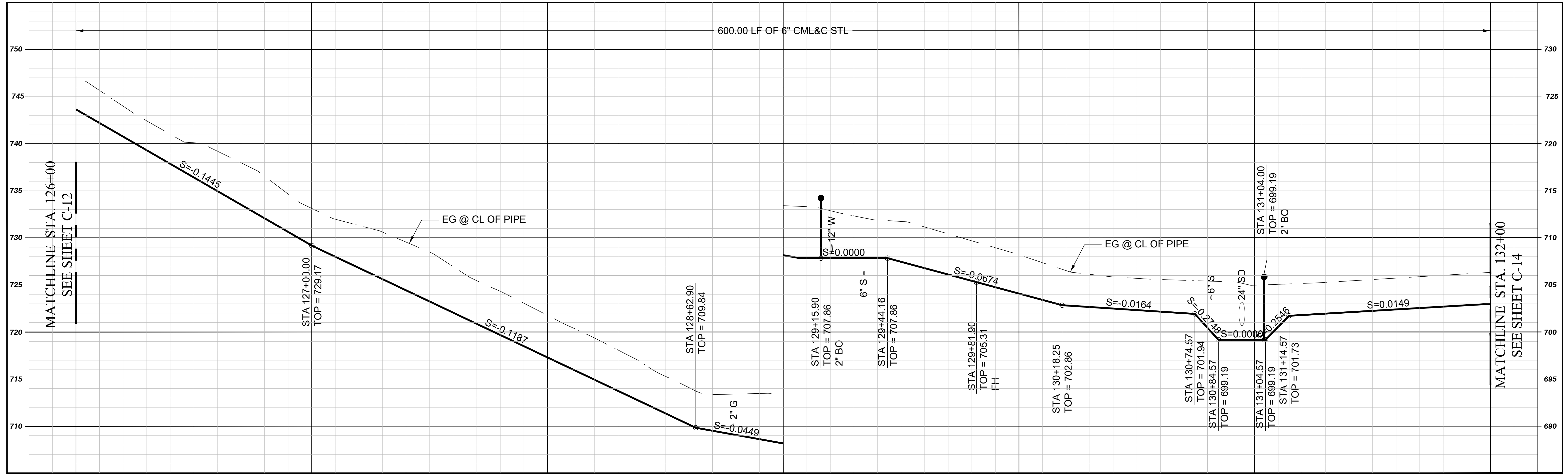


REVISIONS			
NO.	BY	DATE	REMARKS
1	AC	8/3/2022	ADDENDUM 1 REVISIONS

WATERLINE REPLACEMENT FY22-23
FALLBROOK PUBLIC UTILITY DISTRICT
 990 E. MISSION ROAD, FALLBROOK, CA

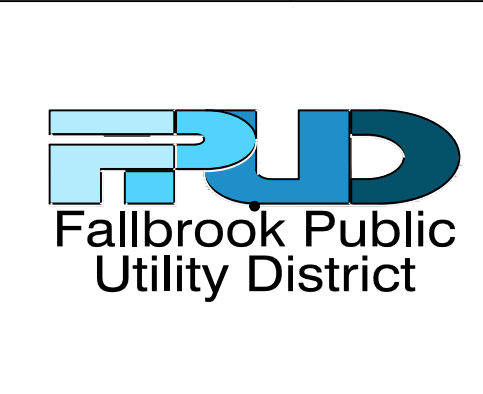
CIVIL
PLAN AND PROFILE STA.
120+00 TO 126+00
HAWTHORNE ST

DWG No. **C-12**
 JOB NO: **3186**
 SHEET: **16** of **22**



APPURTENANCE LOCATION			
ITEM	OUTLET	STA	OFFSET
BO	129+15.90	IN ROAD	0
FH	129+81.90	129+81.90	13.0' LT
BO	131+04.00	131+04.00	10.0' LT

- NOTES
- INSTALL NEW AND COMPLETE SERVICE LINES AND RECONNECT EXISTING METERS PER FPU D STD DWGS W-1 & W-5. ALL EXISTING METERS ARE TO REMAIN UNLESS NOTED OTHERWISE.
 - CONTRACTOR TO FIELD VERIFY VERTICAL ANGLES AND ADJUST TO MAINTAIN A MIN OF 36" PIPE COVER, MIN. OF 30" AS NECESSARY.
 - DEMO TIE IN PIPES (TEES & CROSSES), ABANDON EXIST PIPES IN PLACE & SLURRY 10 FT BACK.

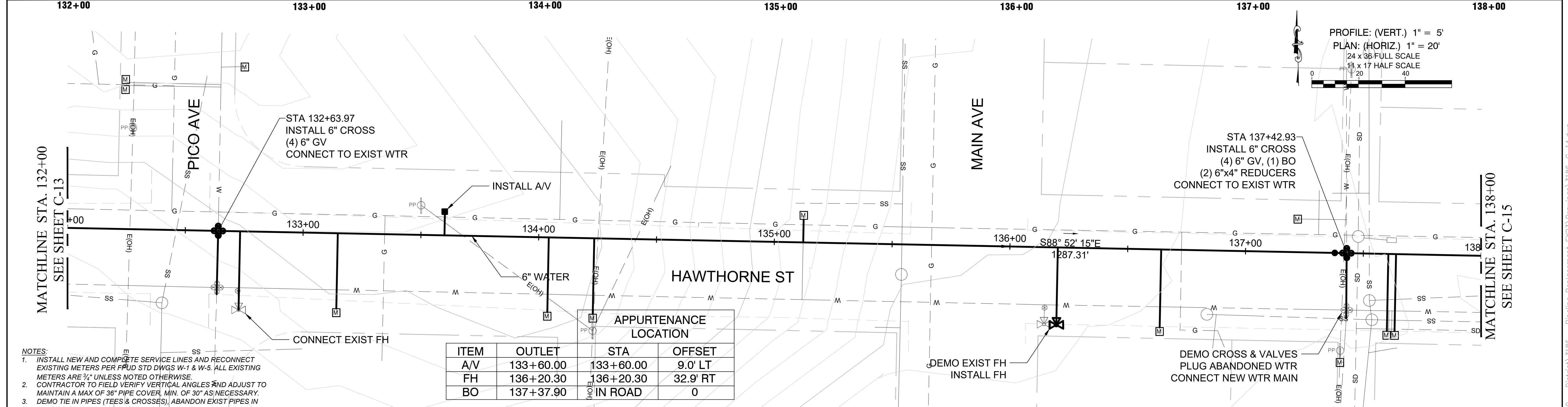
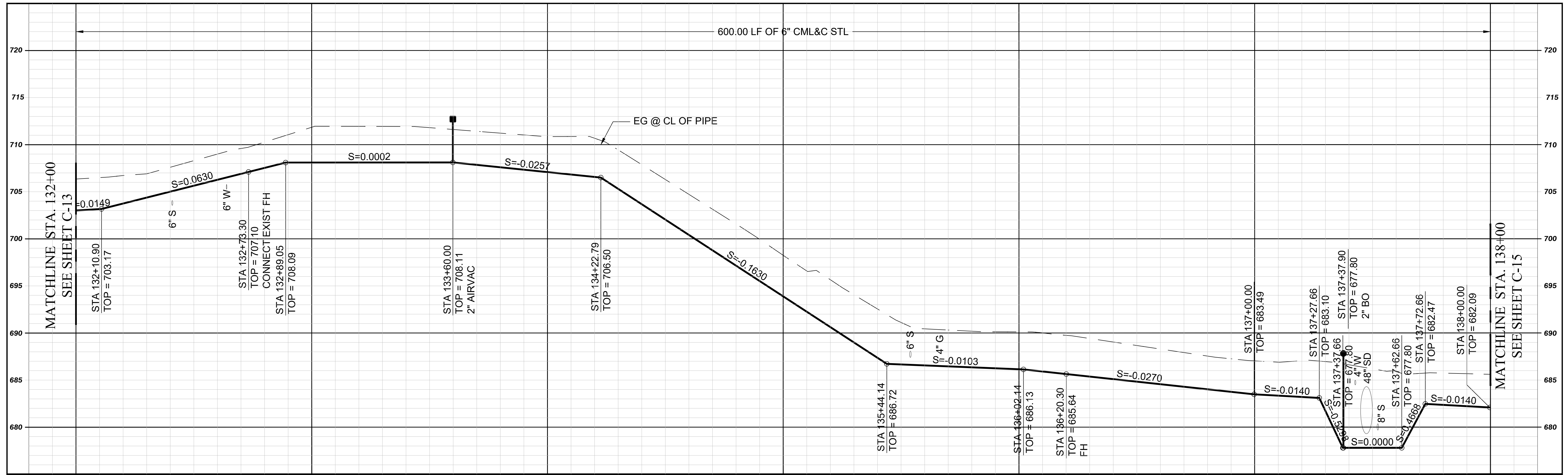


REVISIONS			
NO.	BY	DATE	REMARKS
1	AC	8/3/2022	ADDENDUM 1 REVISIONS

WATERLINE REPLACEMENT FY22-23
FALLBROOK PUBLIC UTILITY DISTRICT
 990 E. MISSION ROAD, FALLBROOK, CA

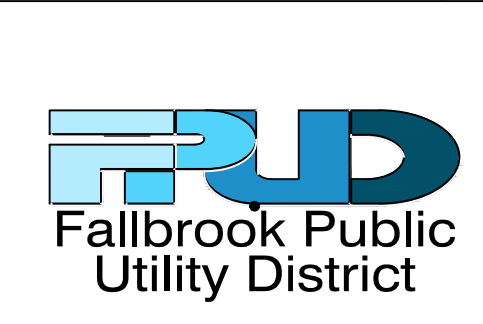
CIVIL
PLAN AND PROFILE STA.
126+00 TO 132+00
HAWTHORNE ST

DWG No. **C-13**
 JOB NO: **3186**
 SHEET: **17** of **22**



- NOTES:
1. INSTALL NEW AND COMPLETE SERVICE LINES AND RECONNECT EXISTING METERS PER FIELD STD DWGS W-1 & W-5. ALL EXISTING METERS ARE 3/4" UNLESS NOTED OTHERWISE. CONTRACTOR TO FIELD VERIFY VERTICAL ANGLES AND ADJUST TO MAINTAIN A MAX OF 36" PIPE COVER, MIN. OF 30" AS NECESSARY.
 2. DEMO TIE IN PIPES (TEES & CROSSES), ABANDON EXIST PIPES IN PLACE & SLURRY 10 FT BACK.

APPURTENANCE LOCATION			
ITEM	OUTLET	STA	OFFSET
A/V	133+60.00	133+60.00	9.0' LT
FH	136+20.30	136+20.30	32.9' RT
BO	137+37.90	IN ROAD	0

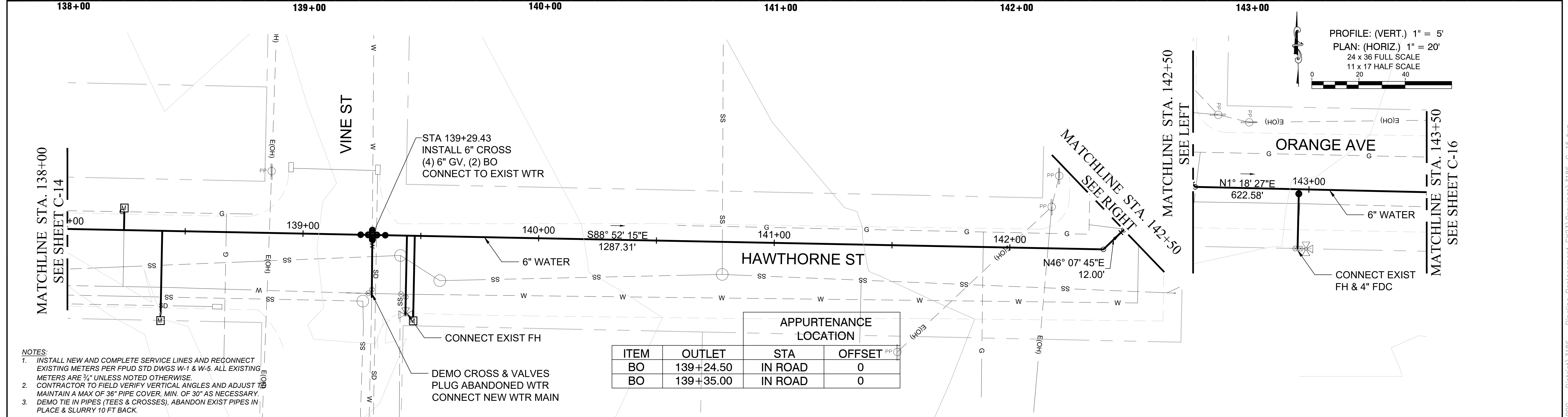
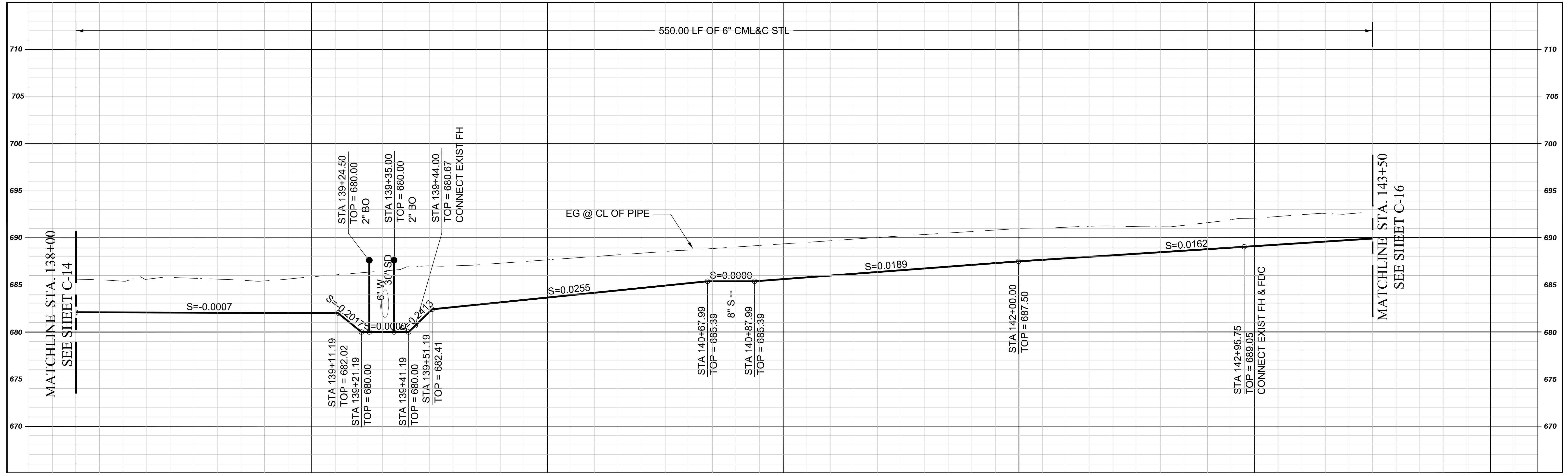


REVISIONS			
NO.	BY	DATE	REMARKS
1	AC	8/3/2022	ADDENDUM 1 REVISIONS

WATERLINE REPLACEMENT FY22-23
FALLBROOK PUBLIC UTILITY DISTRICT
 990 E. MISSION ROAD, FALLBROOK, CA

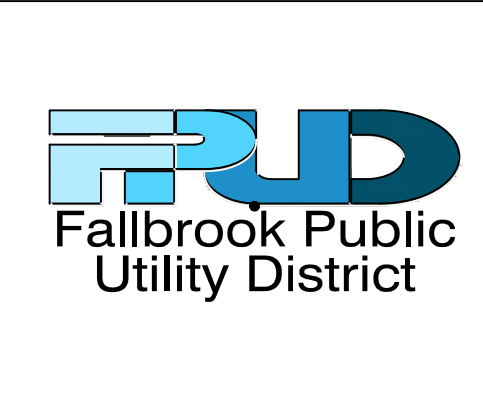
CIVIL
PLAN AND PROFILE STA.
132+00 TO 138+00
HAWTHORNE ST

DWG No. **C-14**
 JOB NO: **3186**
 SHEET: **18** of **22**



- NOTES**
- INSTALL NEW AND COMPLETE SERVICE LINES AND RECONNECT EXISTING METERS PER FPU D STD DWGS W-1 & W-5. ALL EXISTING METERS ARE 3/4" UNLESS NOTED OTHERWISE. CONTRACTOR TO FIELD VERIFY VERTICAL ANGLES AND ADJUST TO MAINTAIN A MAX OF 36" PIPE COVER. MIN. OF 30" AS NECESSARY.
 - DEMO TIE IN PIPES (TEES & CROSSES), ABANDON EXIST PIPES IN PLACE & SLURRY 10 FT BACK.

APPURTENANCE LOCATION			
ITEM	OUTLET	STA	OFFSET
BO	139+24.50	IN ROAD	0
BO	139+35.00	IN ROAD	0

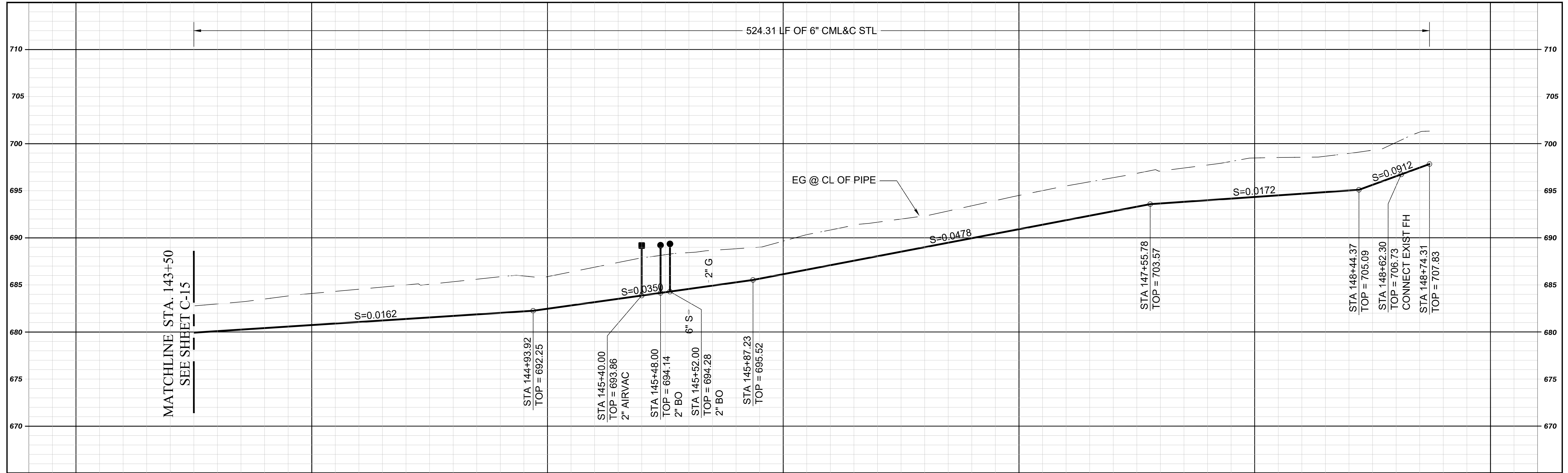


REVISIONS			
NO.	BY	DATE	REMARKS
1	AC	8/3/2022	ADDENDUM 1 REVISIONS

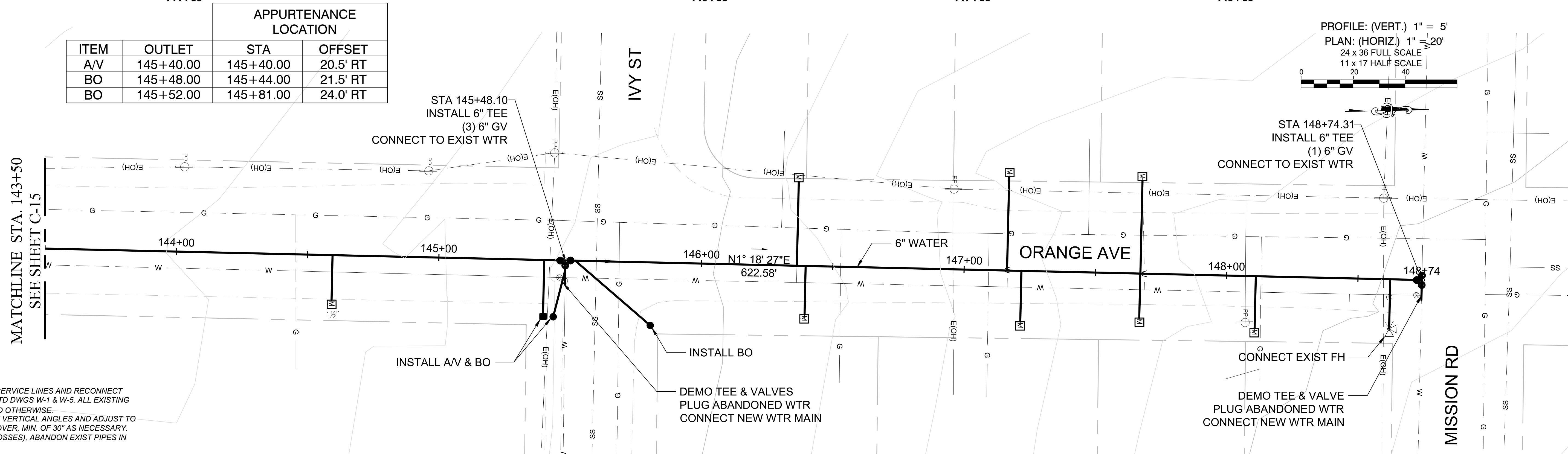
WATERLINE REPLACEMENT FY22-23
FALLBROOK PUBLIC UTILITY DISTRICT
 990 E. MISSION ROAD, FALLBROOK, CA

CIVIL
PLAN AND PROFILE STA.
138+00 TO 143+50
HAWTHORNE ST

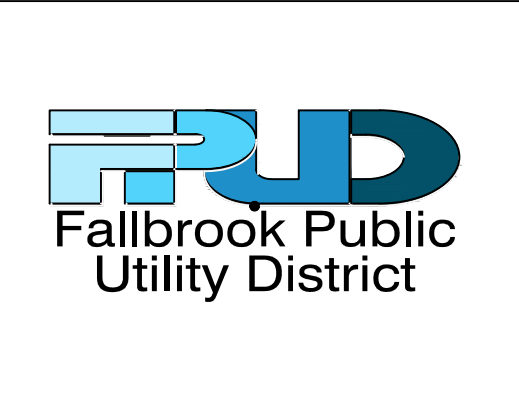
DWG No. **C-15**
 JOB NO: **3186**
 SHEET: **19** of **22**



APPURTENANCE LOCATION			
ITEM	OUTLET	STA	OFFSET
A/V	145+40.00	145+40.00	20.5' RT
BO	145+48.00	145+44.00	21.5' RT
BO	145+52.00	145+81.00	24.0' RT



- NOTES:**
- INSTALL NEW AND COMPLETE SERVICE LINES AND RECONNECT EXISTING METERS PER FPD STD DWGS W-1 & W-5. ALL EXISTING METERS ARE 3/4\"/>



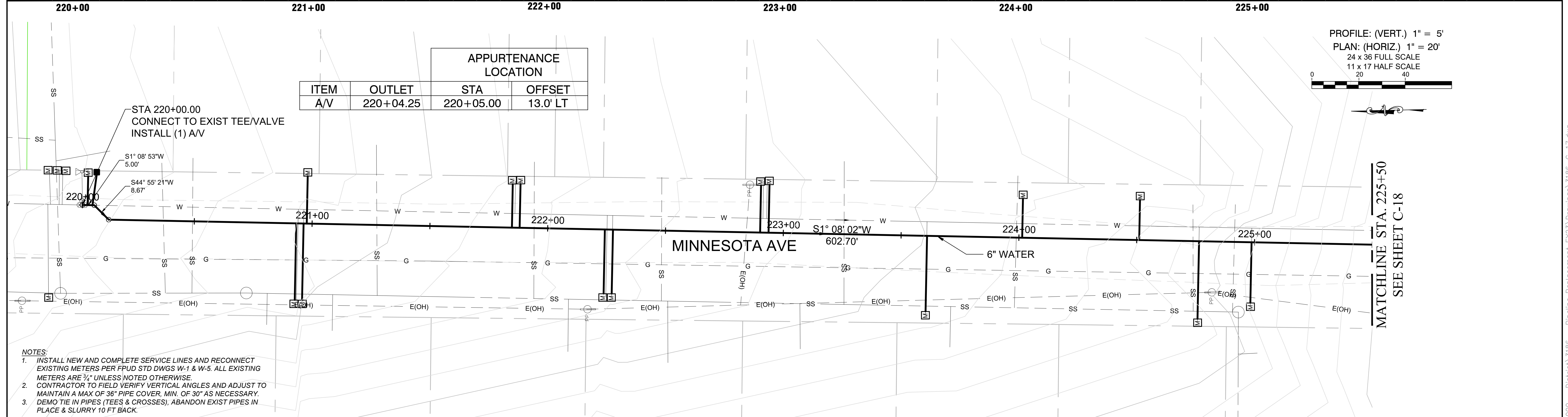
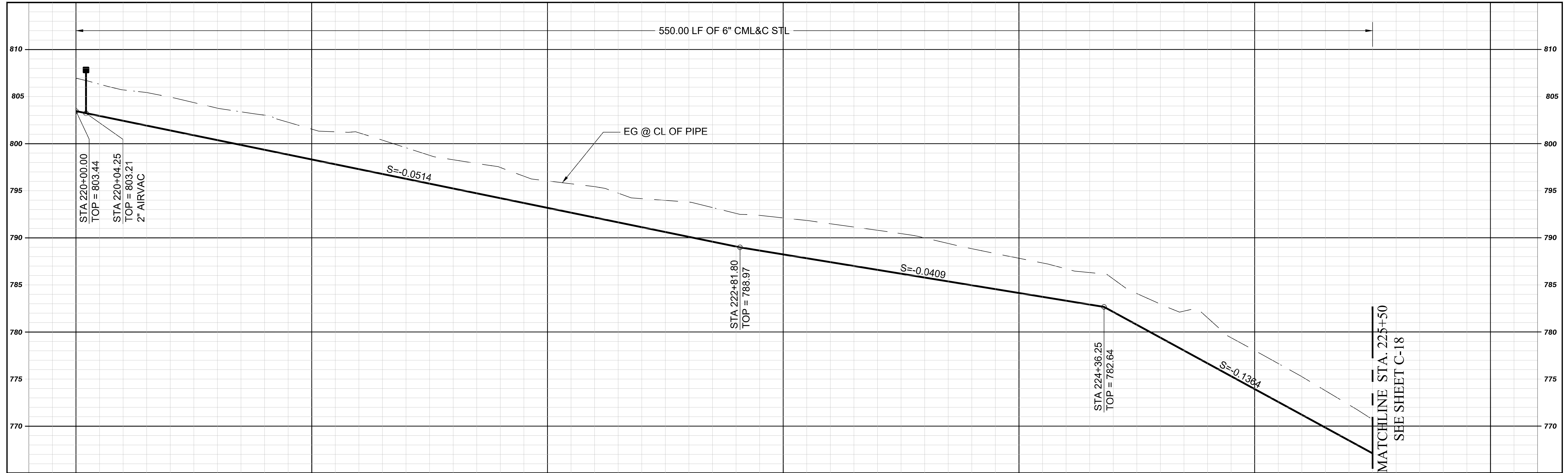
REVISIONS			
NO.	BY	DATE	REMARKS
1	AC	8/3/2022	ADDENDUM 1 REVISIONS

WATERLINE REPLACEMENT FY22-23
FALLBROOK PUBLIC UTILITY DISTRICT
 990 E. MISSION ROAD, FALLBROOK, CA

CIVIL
PLAN AND PROFILE STA.
143+50 TO 148+71
ORANGE AVE

DWG No. **C-16**
 JOB NO: **3186**
 SHEET: **20** of **22**

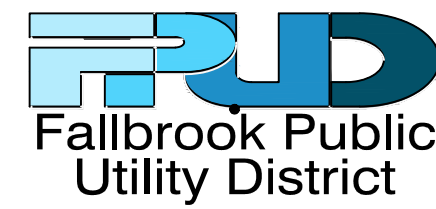
DWG PATH: X:\JOB FILES\3000 - District\3186 - Pipeline Replacement\FY23\Drawings\3186-C-16.dwg



APPURTENANCE LOCATION			
ITEM	OUTLET	STA	OFFSET
A/V	220+04.25	220+05.00	13.0' LT

PROFILE: (VERT.) 1" = 5'
 PLAN: (HORIZ.) 1" = 20'
 24 x 36 FULL SCALE
 11 x 17 HALF SCALE

- NOTES
- INSTALL NEW AND COMPLETE SERVICE LINES AND RECONNECT EXISTING METERS PER FPU D STD DWGS W-1 & W-5. ALL EXISTING METERS ARE 3/4" UNLESS NOTED OTHERWISE.
 - CONTRACTOR TO FIELD VERIFY VERTICAL ANGLES AND ADJUST TO MAINTAIN A MAX OF 36" PIPE COVER. MIN. OF 30" AS NECESSARY.
 - DEMO TIE IN PIPES (TEES & CROSSES), ABANDON EXIST PIPES IN PLACE & SLURRY 10 FT BACK.

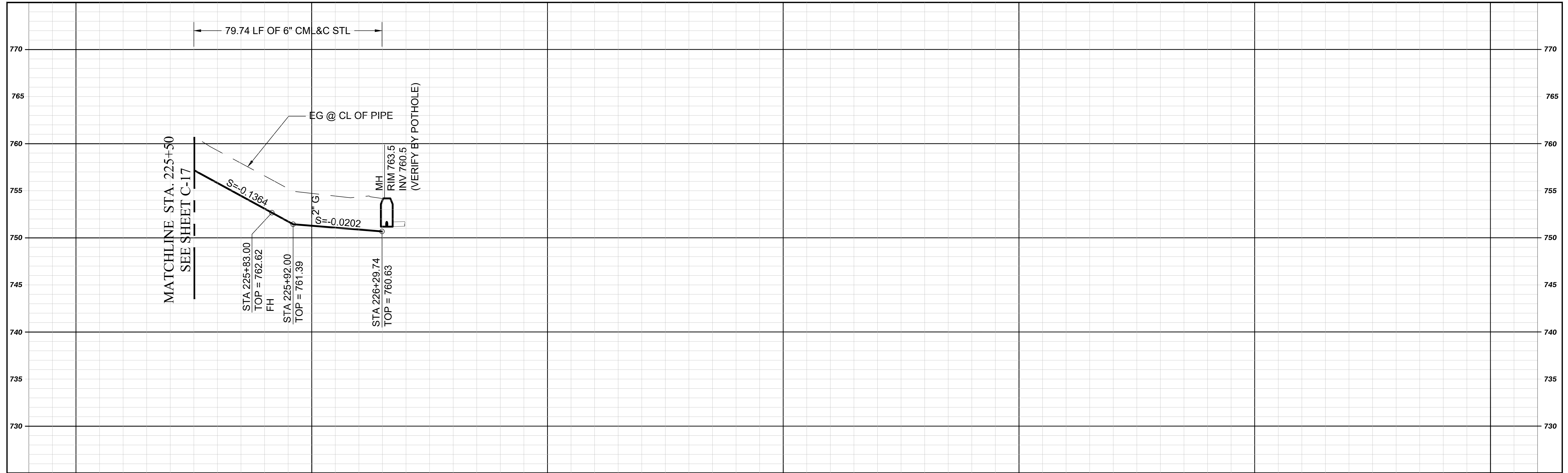


REVISIONS			
NO.	BY	DATE	REMARKS
1	AC	8/3/2022	ADDENDUM 1 REVISIONS

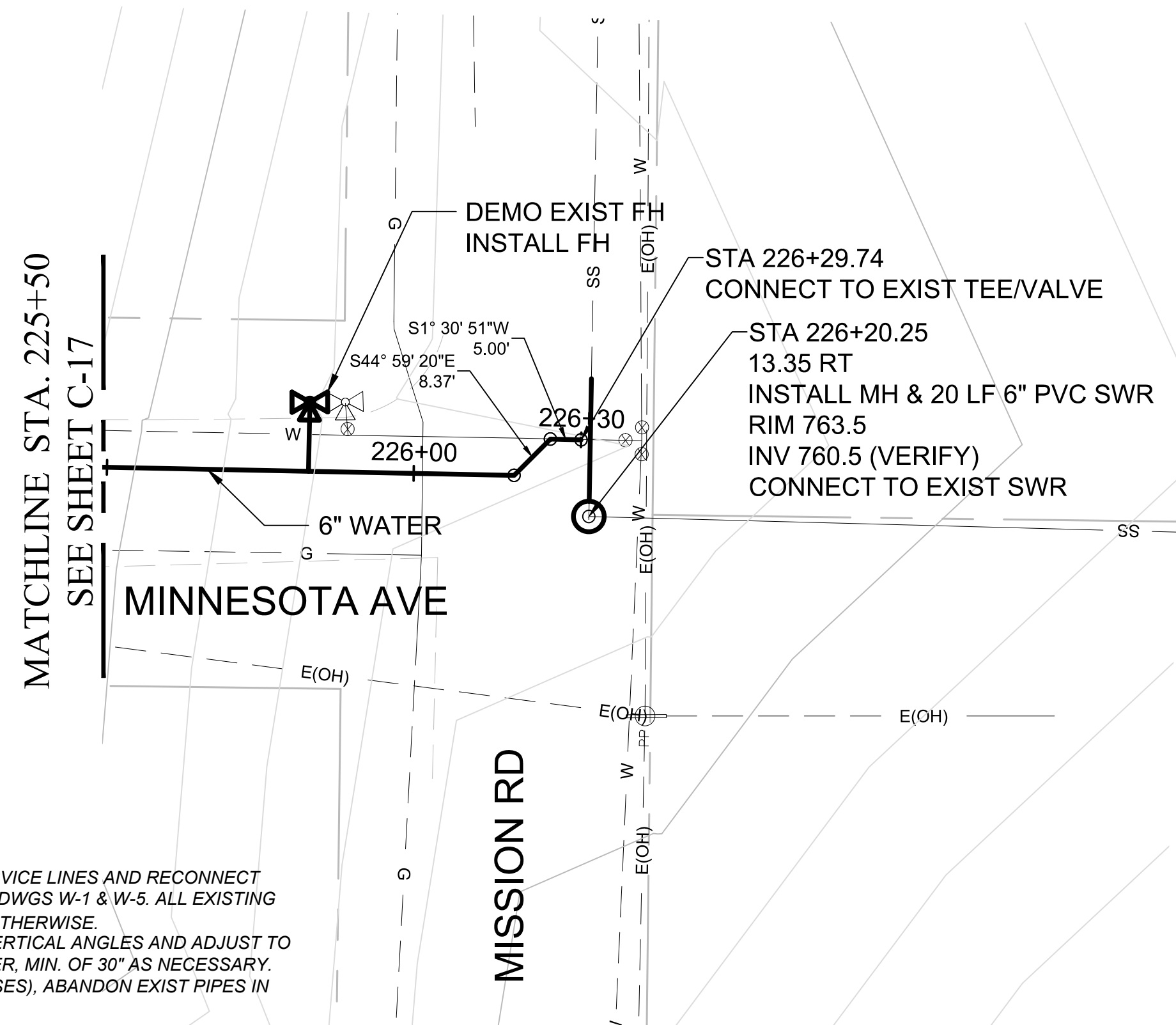
WATERLINE REPLACEMENT FY22-23
FALLBROOK PUBLIC UTILITY DISTRICT
 990 E. MISSION ROAD, FALLBROOK, CA

CIVIL
PLAN AND PROFILE STA.
220+00 TO 225+50
MINNESOTA AVE

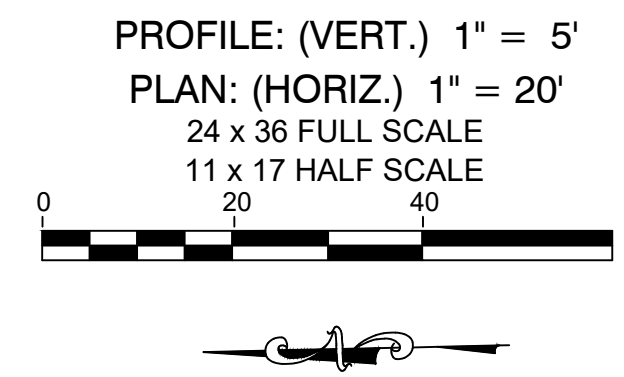
DWG No. **C-17**
 JOB NO: **3186**
 SHEET: **21** of **22**



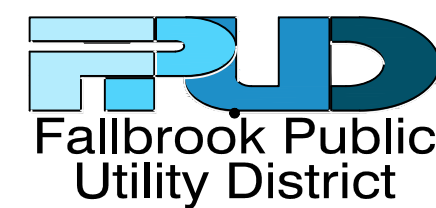
226+00



APPURTENANCE LOCATION			
ITEM	OUTLET	STA	OFFSET
FH	225+83.00	225+83.00	11.3' LT



- NOTES
- INSTALL NEW AND COMPLETE SERVICE LINES AND RECONNECT EXISTING METERS PER FPU D STD DWGS W-1 & W-5. ALL EXISTING METERS ARE 3/4" UNLESS NOTED OTHERWISE. CONTRACTOR TO FIELD VERIFY VERTICAL ANGLES AND ADJUST TO MAINTAIN A MAX OF 36" PIPE COVER, MIN. OF 30" AS NECESSARY.
 - DEMO TIE IN PIPES (TEES & CROSSES), ABANDON EXIST PIPES IN PLACE & SLURRY 10 FT BACK.



REVISIONS			
NO.	BY	DATE	REMARKS
1	AC	8/3/2022	ADDENDUM 1 REVISIONS

WATERLINE REPLACEMENT FY22-23
FALLBROOK PUBLIC UTILITY DISTRICT
 990 E. MISSION ROAD, FALLBROOK, CA

CIVIL
PLAN AND PROFILE STA.
225+50 TO 226+30
MINNESOTA AVE

DWG No. **C-18**
 JOB NO: **3186**
 SHEET: **22** of **22**