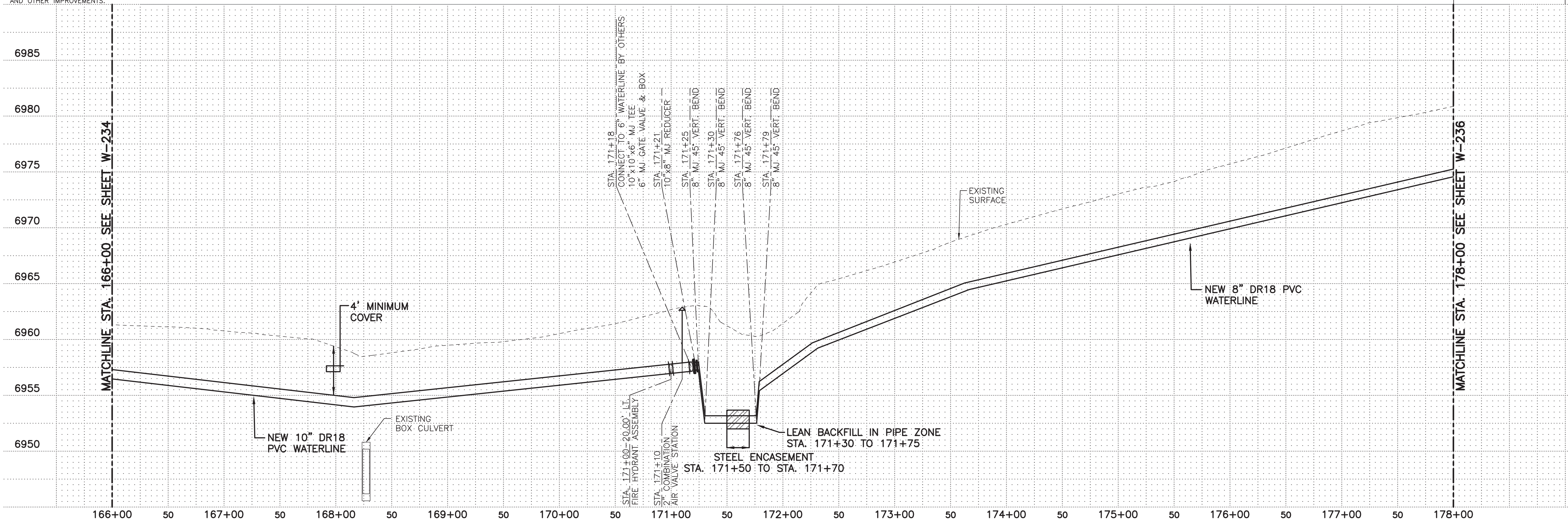


CAUTION:

NOTE THAT ALL EXISTING UTILITIES MAY NOT BE SHOWN. EXISTING SERVICE CONNECTIONS ARE NOT SHOWN. ANY EXISTING UTILITIES THAT ARE SHOWN ARE SHOWN IN APPROXIMATE LOCATION ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT ALL THE UTILITY OWNERS AND TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO ANY EXCAVATION TO DETERMINE THE ACTUAL LOCATION OF UTILITIES AND OTHER IMPROVEMENTS.

NOTES:

1. RESTRAIN ALL VALVES AND FITTINGS WITH JOINT RESTRAINT DEVICES. SEE JOINT RESTRAINT REQUIREMENTS SHEET W-502
2. CONTROL POINTS SHOWN HEREIN ARE SPECIFIC TO THIS PROJECT AND MAY NOT TRANSLATE TO ANY PUBLISHED COORDINATE SYSTEM.
3. COVER IS SHOWN AT 4 FT. MINIMUM, DEEPER DEPTHS OF COVER MAY BE REQUIRED IN SOME LOCATIONS TO MAINTAIN POSITIVE SLOPE TO AIR/VACUUM STATIONS AND AT SOME EXISTING UTILITY CROSSINGS. THESE LOCATIONS AND DETAILS WILL BE SHOWN AND NOTED ON THE DRAWINGS.
4. REFER TO SPECIAL REQUIREMENTS IN SPECIFICATION SECTION 01 12 16 FOR 15-FOOT OSHA CLEARANCE ENVELOPE AROUND HIGH VOLTAGE PNM LINES.



MOLZENCORBIN

2701 Miles Road SE  
Albuquerque, New Mexico 87106  
505 242 5700 office  
505 242 0673 fax  
MolzenCorbin.com

NOTICE OF EXTENDED PAYMENT PROVISION:  
THIS CONTRACT ALLOWS THE OWNER TO MAKE  
PAYMENT WITHIN 45 DAYS AFTER SUBMISSION  
OF AN UNDISPUTED REQUEST FOR PAYMENT

KEYED NOTES

- ① NMDOT ROW



REVISION		
SYMBOL	DATE:	BY:

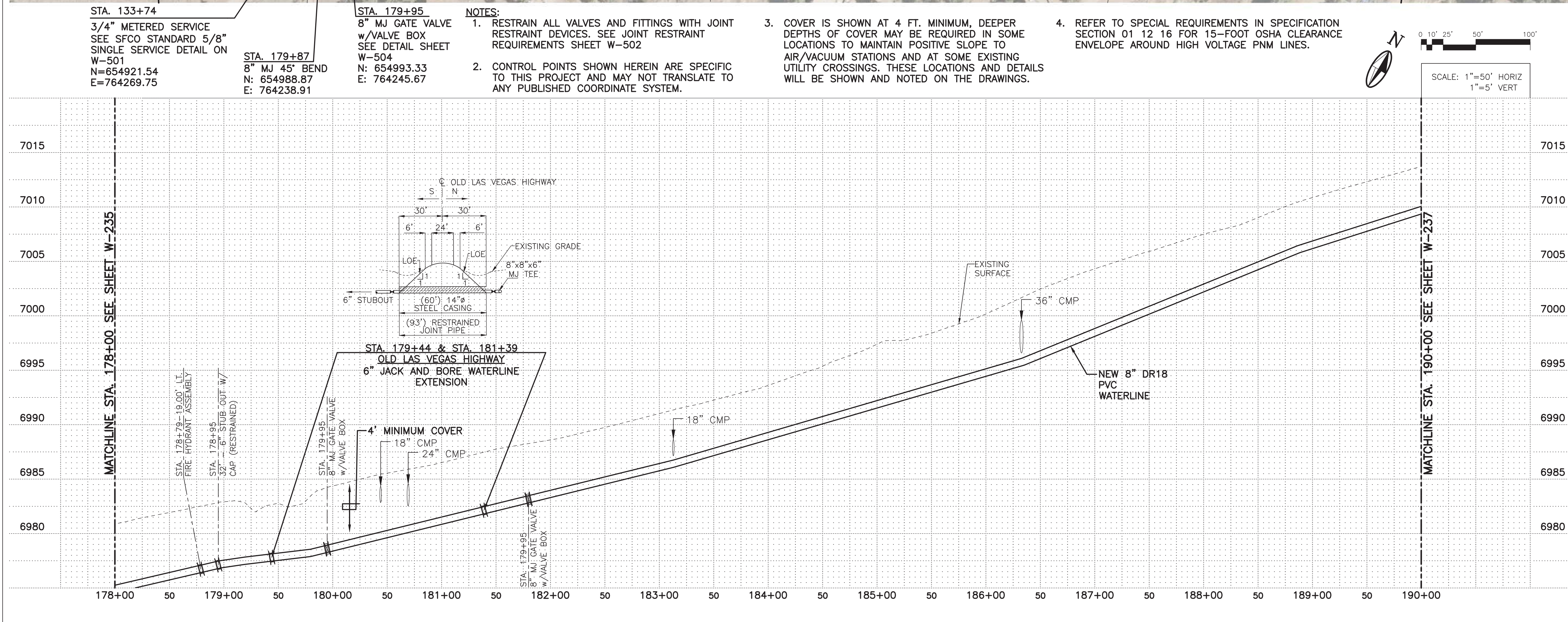
SANTA FE COUNTY  
UTILITIES DIVISION 424 NM 599, SANTA FE, NM 87507

PROJECT NAME:  
CANONCITO-ELDORADO WATERLINE

LINE 3 PLAN AND PROFILE STA. 166+00 TO 178+00

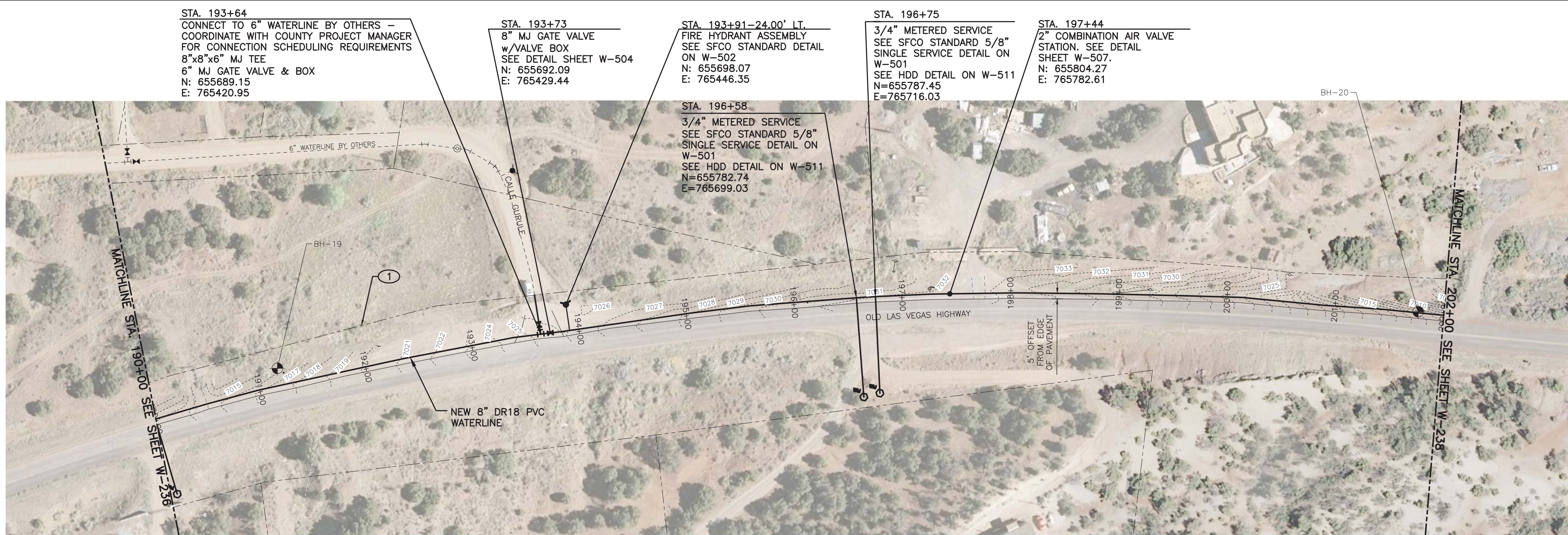
APPROVED BY: REVIEWED BY: S. MORROW  
DATE: FEBRUARY 2020  
DRAWN BY: P. DE LA ROSA  
SHEET:  
W-235





APPROVED BY:		REVIEWED BY: S. MORROW	
DATE: FEBRUARY 2020		SHEET	
DRAWN BY: P. DE LA ROSA		W-236	



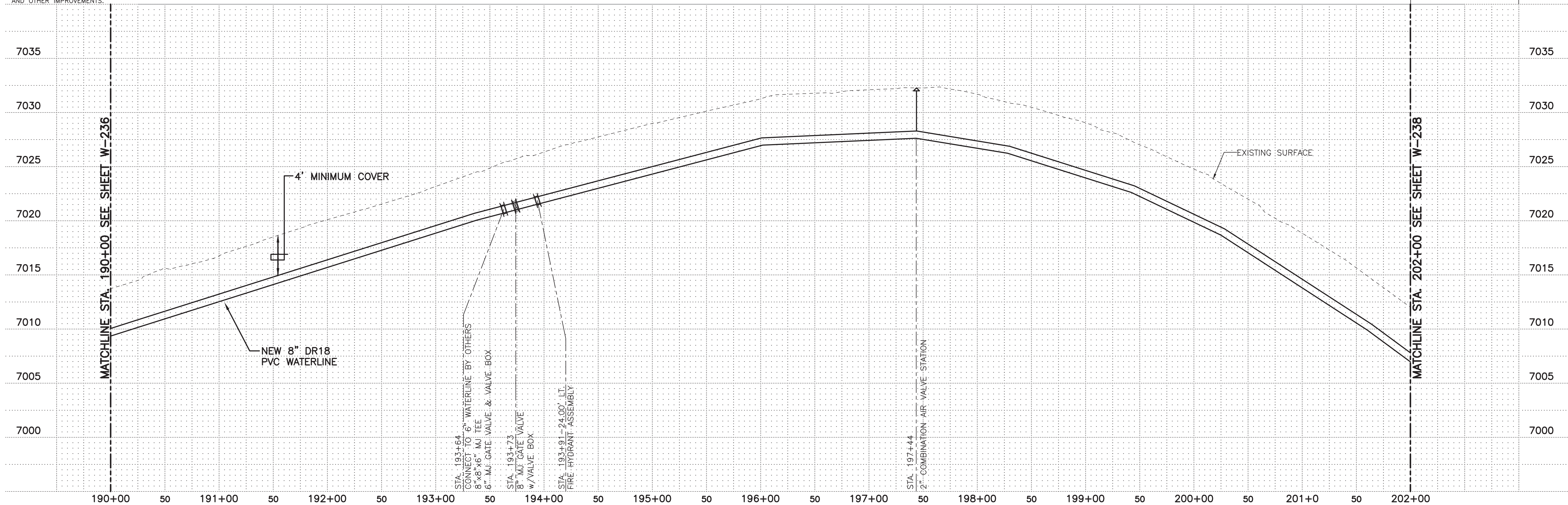
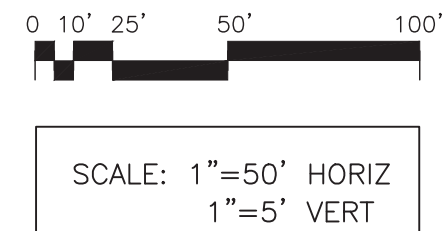


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NOTES:

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2. CONTROL POINTS SHOWN HEREIN ARE SPECIFIC TO THIS PROJECT AND MAY NOT TRANSLATE TO ANY PUBLISHED COORDINATE SYSTEM.
3. COVER IS SHOWN AT 4 FT. MINIMUM, DEEPER DEPTHS OF COVER MAY BE REQUIRED IN SOME LOCATIONS TO MAINTAIN POSITIVE SLOPE TO AIR/VACUUM STATIONS AND AT SOME EXISTING UTILITY CROSSINGS. THESE LOCATIONS AND DETAILS WILL BE SHOWN AND NOTED ON THE DRAWINGS.
4. REFER TO SPECIAL REQUIREMENTS IN SPECIFICATION SECTION 01 12 16 FOR 15-FOOT OSHA CLEARANCE ENVELOPE AROUND HIGH VOLTAGE PNM LINES.



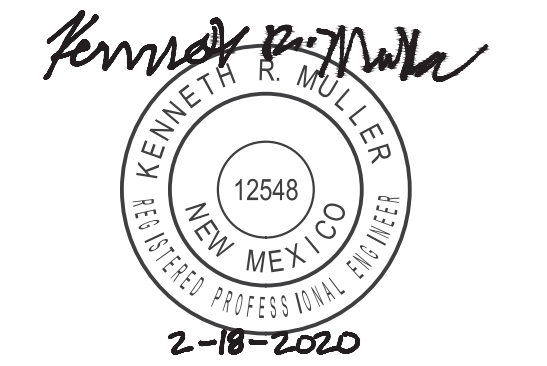
MOLZENCORBIN

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MolzenCorbin.com

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KEYED NOTES

- 1 NMDOT ROW



REVISION		
SYMBOL	DATE:	BY:

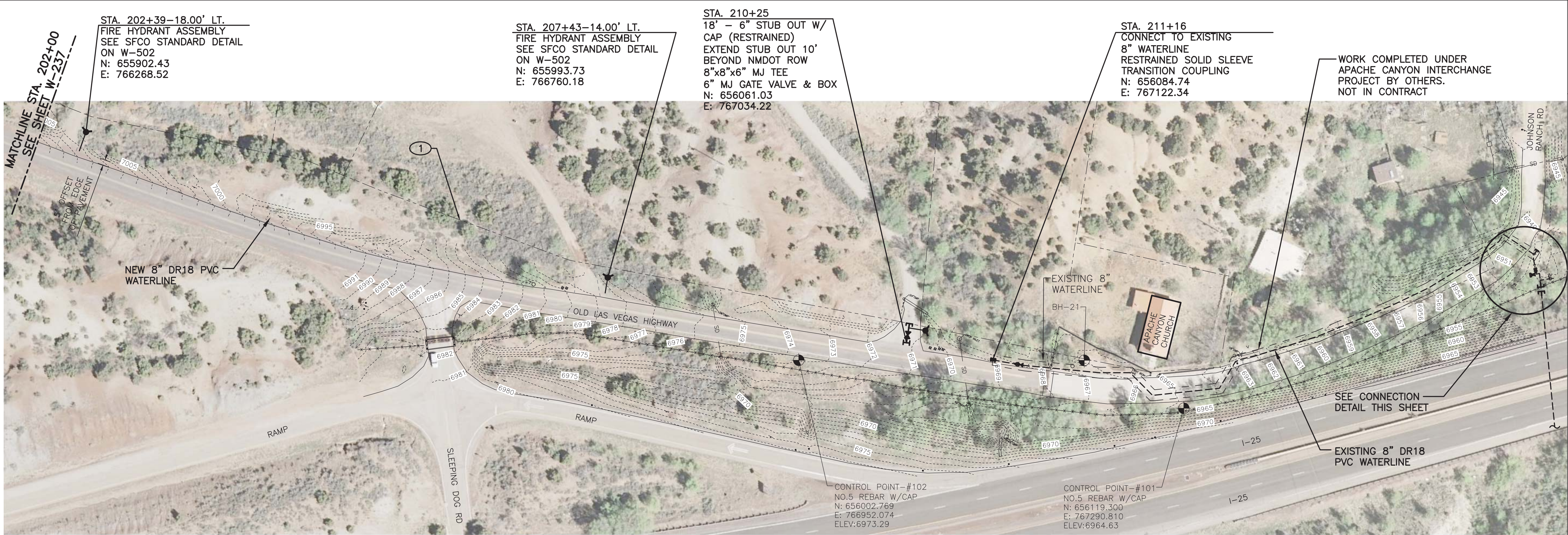
SANTA FE COUNTY  
UTILITIES DIVISION 424 NM 599, SANTA FE, NM 87507

PROJECT NAME:  
CANONCITO-ELDORADO WATERLINE

LINE 3 PLAN AND PROFILE STA. 190+00 TO 202+00

APPROVED BY: REVIEWED BY: S. MORROW  
DATE: FEBRUARY 2020  
DRAWN BY: P. DE LA ROSA  
SHEET: W-237





CAUTION:

NOTE THAT ALL EXISTING UTILITIES MAY NOT BE SHOWN. EXISTING SERVICE CONNECTIONS ARE NOT SHOWN. ANY EXISTING UTILITIES THAT ARE SHOWN ARE SHOWN IN APPROXIMATE LOCATION ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT ALL THE UTILITY OWNERS AND TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO ANY EXCAVATION TO DETERMINE THE ACTUAL LOCATION OF UTILITIES AND OTHER IMPROVEMENTS.

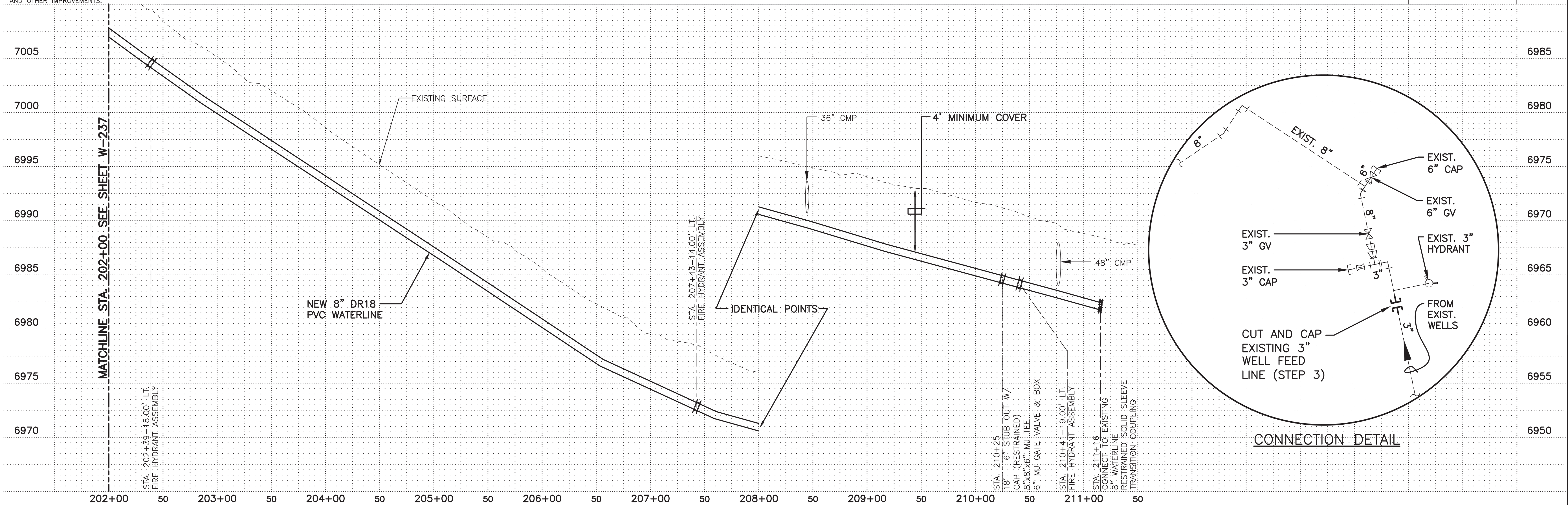
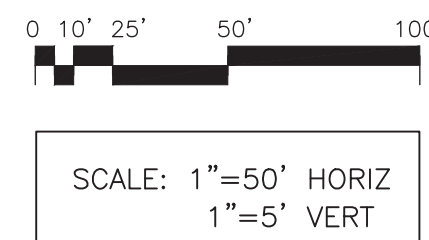
NOTES:

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2. CONTROL POINTS SHOWN HEREIN ARE SPECIFIC TO THIS PROJECT AND MAY NOT TRANSLATE TO ANY PUBLISHED COORDINATE SYSTEM.
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4. REFER TO SPECIAL REQUIREMENTS IN SPECIFICATION SECTION 01 12 16 FOR 15-FOOT OSHA CLEARANCE ENVELOPE AROUND HIGH VOLTAGE PNM LINES.
5. CONTRACTOR TO REMOVE OUT-OF-SERVICE 3" WATERLINE EXCEPT WHERE IT IS BENEATH

PAVEMENT. THE OUT-OF-SERVICE 3" LINE THAT IS BENEATH PAVEMENT WILL REMAIN IN PLACE AND WILL BE FILLED WITH FLOWABLE FILL.

KEYED NOTES

- ① NMDOT ROW



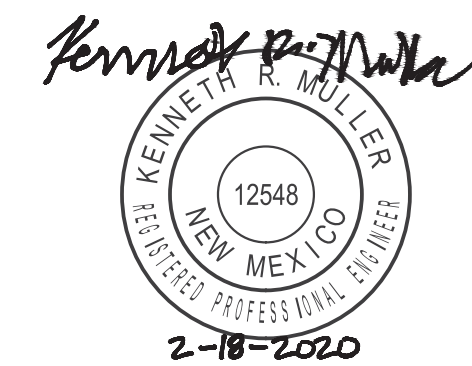
MOLZENCORBIN

2701 Miles Road SE  
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NOTICE OF EXTENDED PAYMENT PROVISION:  
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FLUSHING/CONNECTION SEQUENCE STEPS  
(REFER TO CONNECTION DETAIL)

1. COMPLETE INSTALLATION OF NEW 8" WATERLINE TO STATION 211+16 AND PLACE LINE INTO SERVICE, INCLUDING ALL CONNECTIONS TO THE CAÑONCITO REGIONAL WATER SYSTEM PHASE II PROJECT. DO NOT CONNECT TO EXISTING 8" WATERLINE AT STATION 211+16.
2. COORDINATE WITH COUNTY PROJECT MANAGER WHEN TO TURN OFF EXISTING WELL SUPPLY.
3. CUT EXISTING 3" WELL FEED LINE AND CAP BOTH SIDES OF THE CUT.
4. CONNECT TEMPORARY 4" FLUSHING HOSE TO NEW HYDRANT AT STATION 210+41 AND CONNECT HOSE TO END OF EXISTING 8" WATERLINE AT STATION 211+16. HOSE SHALL BE NSF/ANSI 61 COMPLIANT.
5. OPEN EXISTING 3" HYDRANT AND CONDUCT AN INITIAL FLUSHING OF THE EXISTING 8" AND 3" WATERLINES UNTIL THE WATER RUNS REASONABLY CLEAR.
6. DISINFECT THE EXISTING WATERLINES BY BLEEDING IN CHLORINE DISINFECTION SOLUTION AT THE FLUSH HOSE CONNECTION FOLLOWING THE PROCEDURES SPECIFIED IN AWWA C651.
7. PERFORM BACTERIOROLOGICAL TESTING AS SPECIFIED IN AWWA C651 AND PERFORM FINAL FLUSHING USING DECHLORINATION PROCEDURES SPECIFIED IN AWWA C655.
8. REMOVE TEMPORARY FLUSHING HOSE AND MAKE CONNECTION AT STATION 211+16.



REVISION

SYMBOL	DATE:	BY:

SANTA FE COUNTY  
UTILITIES DIVISION 424 NM 599, SANTA FE, NM 87507

PROJECT NAME:  
CANONCITO-ELDORADO WATERLINE

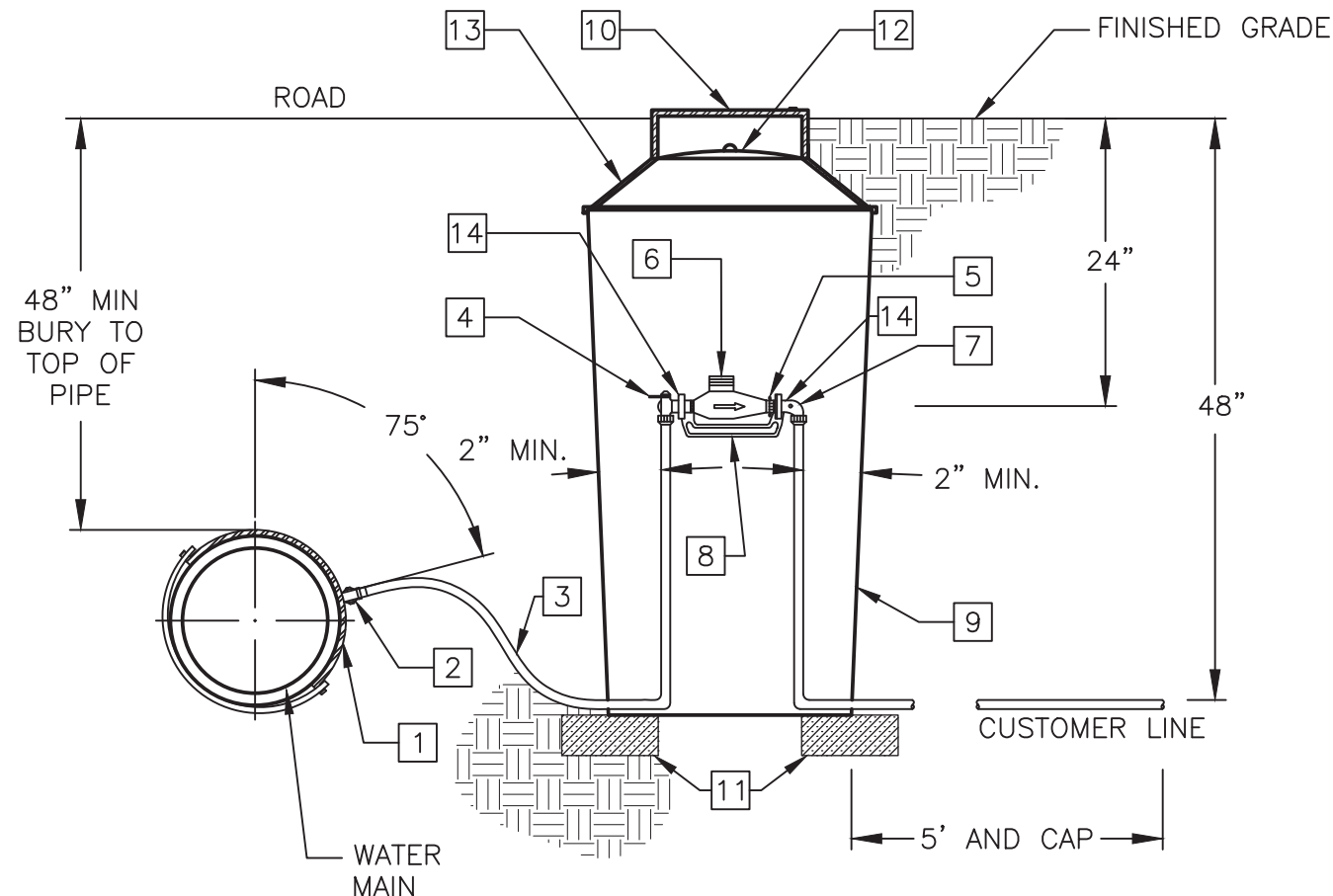
LINE 3 PLAN AND PROFILE STA. 202+00 TO 211+16

APPROVED BY: REVIEWED BY: S. MORROW  
DATE: FEBRUARY 2020 SHEET :  
DRAWN BY: P. DE LA ROSA W-238



5/8" SINGLE SERVICE DETAIL	
ITEM	ITEM
1. 3/4" SERVICE SADDLE : SEE C.23	7. 3/4" ANGLE CARTRIDGE W/DUAL CHECK VALVE: SEE C.19
2. 3/4" CORPORATION STOP : SEE C.22 (A.W.W.A. TAPERED THREAD)	8. 3/4" CAST IRON METER YOKE : SEE C.17
3. 3/4" COPPER TUBING (TYPE "K"): SEE C.13	9. 20" DIA. X 36" METER BOX : SEE C.15
4. 3/4" ANGLE VALVE : SEE C.18	10. POLYMER LID (12-5/16" DIA.) : SEE C.16
5. 3/4" EXPANSION CONNECTION : SEE C.20 (5/8" X 3/4" M.T.R. CONNECTION)	11. BLOCKS - USE AS DIRECTED BY SFC UTILITIES
6. 5/8" X 3/4" NEPTUNE T-10 WATER METER W/E-CODER R900/ REGISTER AND RADIO TRANSMITTER	12. INNER ALUMINUM FROST LID : SEE C.16
	13. DOUBLE LID COVER : SEE C.16
	14. 3/4" COPPER TUBING (TYPE "K"): SEE C.13

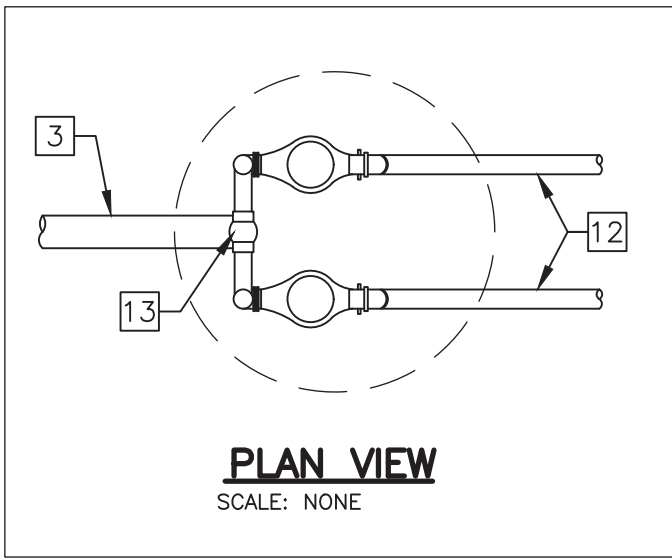
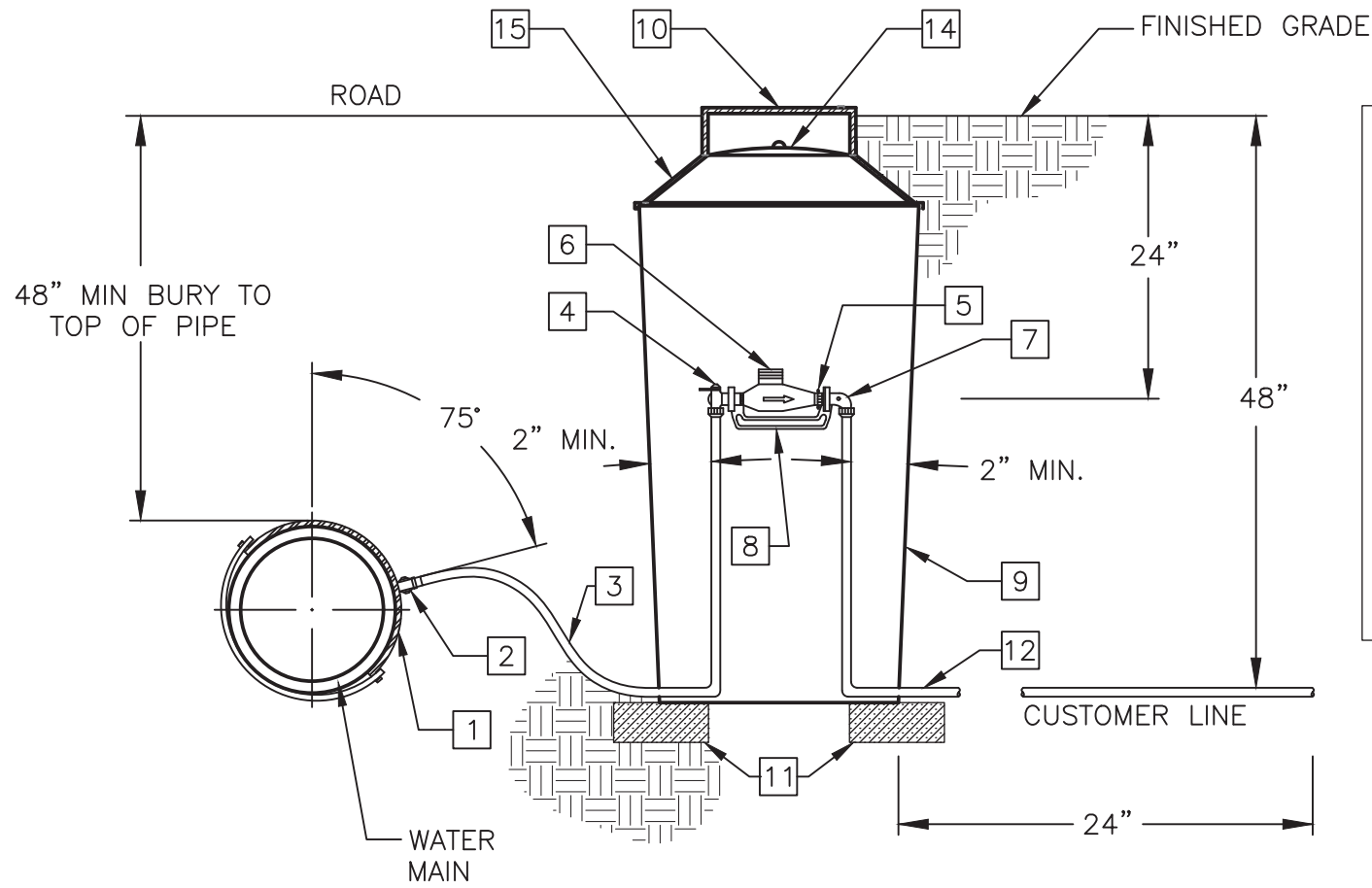
NOTE: SEE APPROVED CONSTRUCTION PLANS FOR SERVICE LOCATION DETAIL FOR PLACEMENT DIMENSIONS AND DIRECTIONS.  
NOTE: DETAILS ON THIS SHEET ARE REFERENCED FROM THE SANTA FE COUNTY WATER UTILITIES WATER AND SEWER CONSTRUCTION STANDARDS AND SPECIFICATIONS.  
SEE APPENDIX D OF PROJECT MANUAL FOR COUNTY STANDARDS SECTION C - APPROVED MATERIALS LIST.



**5/8" SINGLE SERVICE DETAIL - FOR INFORMATIONAL PURPOSES**  
NOT TO SCALE

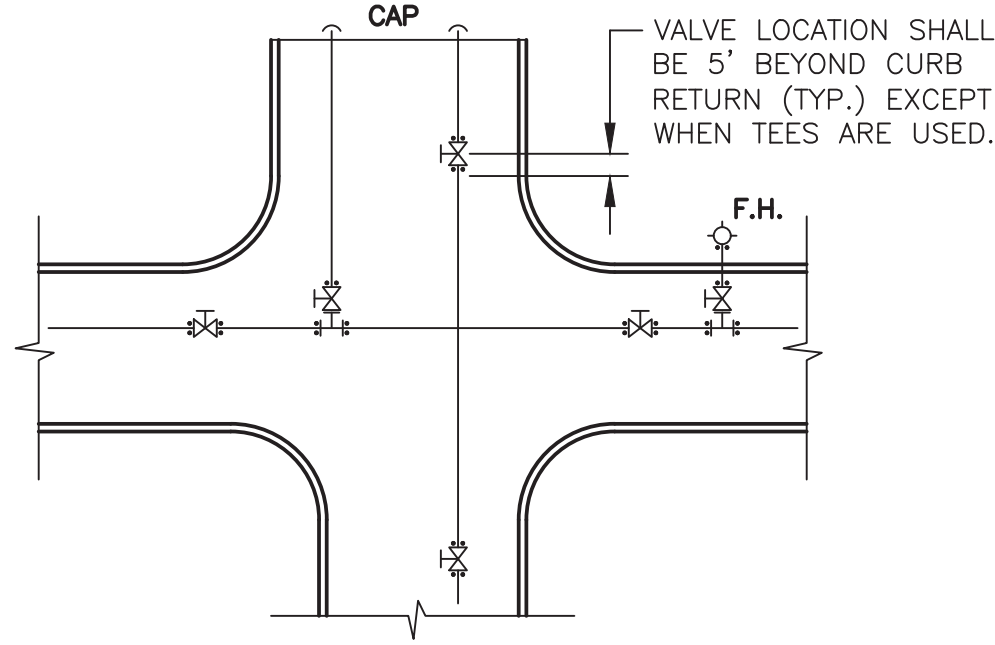
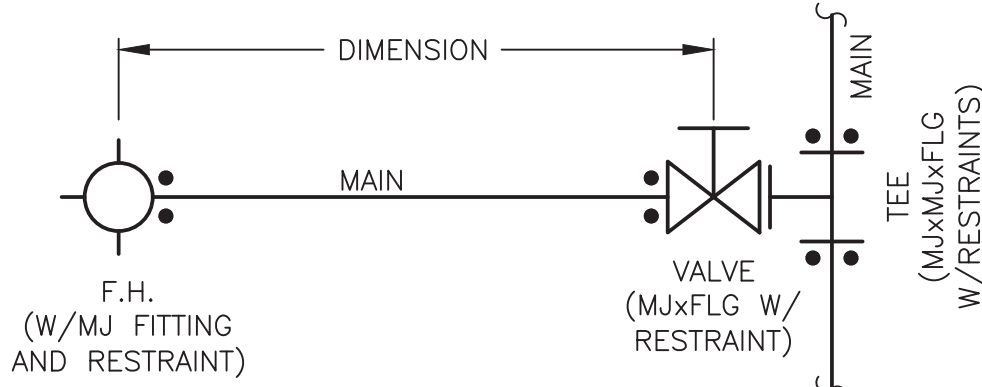
5/8" DOUBLE SERVICE DETAIL	
ITEM	ITEM
1. 1" SERVICE SADDLE : SEE C.23	8. 3/4" CAST IRON METER YOKE (2 EACH) : SEE C.17
2. 1" CORPORATION STOP : SEE C.22 (A.W.W.A. TAPERED THREAD)	9. 24" DIA. X 36" METER BOX : SEE C.15
3. 1" COPPER TUBING (TYPE "K"): SEE C.13	10. POLYMER LID (12-5/16" DIA.) : SEE C.16
4. 3/4" ANGLE VALVE (2 EACH) : SEE C.18	11. BLOCKS - USE AS DIRECTED BY SFC UTILITIES
5. 3/4" EXPANSION CONNECTION (2 EACH): SEE C.20 (5/8" X 3/4" M.T.R. CONNECTION)	12. 3/4" COPPER TUBING (TYPE "K") (2 EACH): SEE C.13
6. 5/8" X 3/4" NEPTUNE T-10 WATER METER W/E-CODER R900/ REGISTER AND RADIO TRANSMITTER	13. BRANCH PIECE : SEE C.18.1
7. 3/4" ANGLE CARTRIDGE W/DUAL CHECK VALVE: (2 EACH) SEE C.19	14. INNER ALUMINUM FROST LID : SEE C.16
	15. DOUBLE LID COVER : SEE C.16

NOTE: DETAILS ON THIS SHEET ARE REFERENCED FROM THE SANTA FE COUNTY WATER UTILITIES WATER AND SEWER CONSTRUCTION STANDARDS AND SPECIFICATIONS.  
SEE APPENDIX D OF PROJECT MANUAL FOR COUNTY STANDARDS SECTION C - APPROVED MATERIALS LIST.



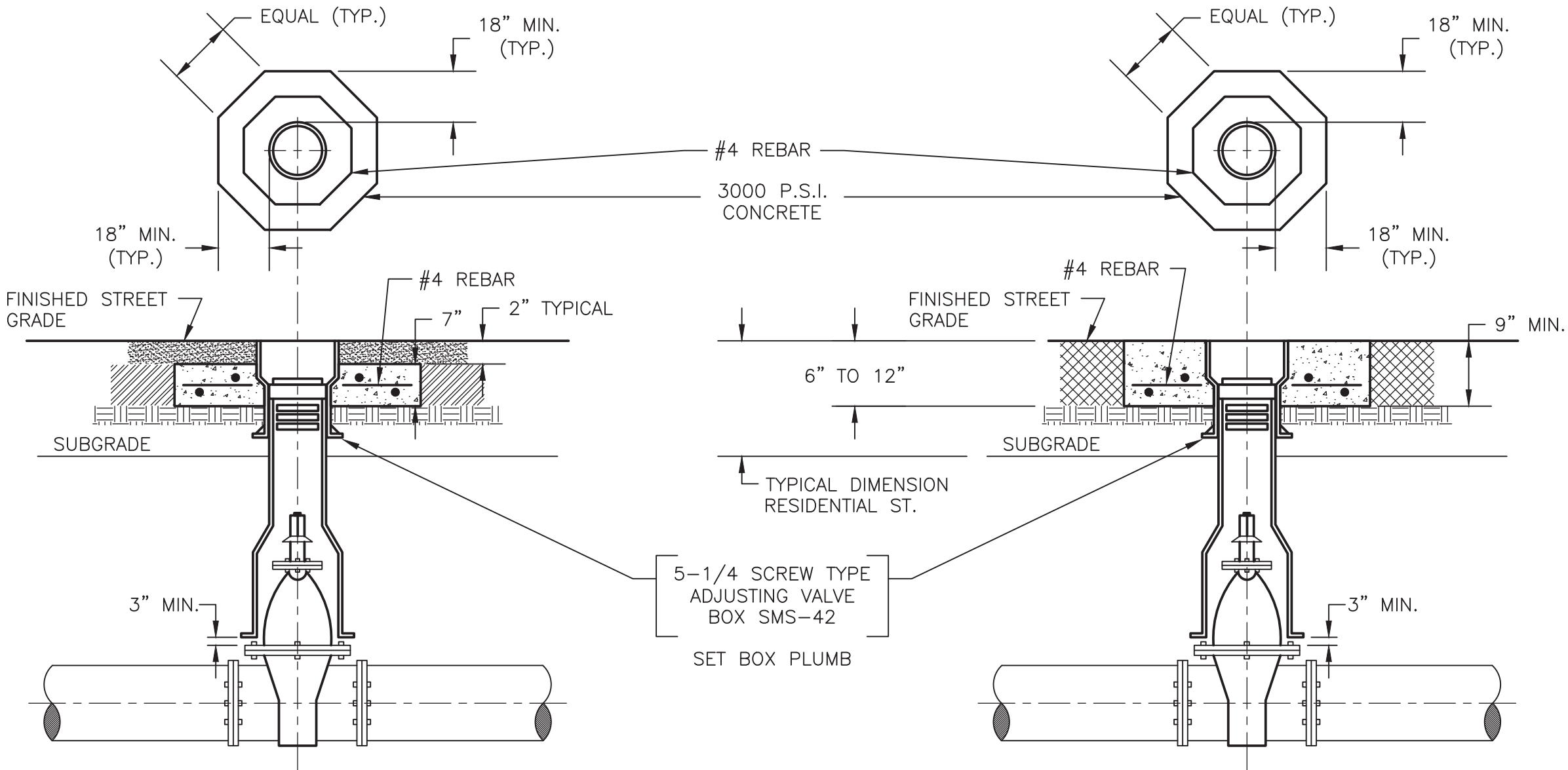
**5/8" DOUBLE SERVICE DETAIL - FOR INFORMATIONAL PURPOSES**  
NOT TO SCALE

NOTE: SEE APPROVED CONSTRUCTION PLANS FOR HYDRANT LOCATION  
DETAIL FOR PLACEMENT DIMENSIONS AND DIRECTIONS.



**VALVE INSTALLATION**

- VALVES SHALL BE LOCATED AT ROAD INTERSECTION WITH THE INTENT OF ISOLATING THE WATER DISTRIBUTION SYSTEM WITH THE N-1 RULE OR AS APPROVED BY SFC UTILITIES.
- INLINE VALVES SHALL TYPICALLY BE INSTALLED FIVE (5) FEET BEYOND THE CURB RETURN AS SHOWN IN THE DETAIL AND CONSIST OF MECHANICAL JOINT FITTINGS WITH RESTRAINTS EXCEPT WHEN USING TEES, WHICH SHALL HAVE MECHANICAL JOINT X FLANGE FITTINGS.
- VALVES ON FIRE HYDRANT LEGS SHALL HAVE MECHANICAL JOINT X FLANGE FITTINGS AND SHALL CONNECT TO FIRE HYDRANT TEE WITH THE FLANGE FITTING AND THE MECHANICAL JOINT FITTING SHALL HAVE A RESTRAINT, AS SHOWN IN THE DETAIL.
- VALVES ON TEES SHALL HAVE VALVES AND TEES WITH MECHANICAL JOINT X FLANGE FITTINGS. THE MECHANICAL JOINT FITTING SHALL HAVE A RESTRAINT AS SHOWN IN THE DETAIL.



**NEW PAVING**  
SCALE: NONE

**EXISTING PAVING**  
SCALE: NONE

**VALVE BOX INSTALLATION:**

**NEW PAVING**

VALVE BOXES SHALL BE INSTALLED AND RAISED TO GRADE IN THE FOLLOWING MANNER FOR NEW PAVING.

- VALVE BOX SHALL BE INSTALLED OVER VALVE DURING MAIN INSTALLATION. TOP OF VALVE BOX SHALL BE LEFT BELOW THE TOP OF SUB GRADE UNTIL VALVE IS READY TO BE RAISED TO FINAL GRADE.
- WHEN THE VALVE BOX IS READY TO BE RAISED, AN OCTAGON SHAPE SHALL BE CUT-OUT AROUND THE VALVE BOX FROM THE FIRST PAVING LIFT (AS SHOWN IN DETAIL) THE VALVE BOX SHALL BE RAISED TO THE FINISHED STREET GRADE; THE SOIL AROUND THE VALVE BOX SHALL BE THOROUGHLY COMPACTED IN ACCORDANCE WITH SFC STANDARDS; THE CONCRETE COLLAR (CONSISTING OF 3,000 PSI CONCRETE AND #4 REBAR) SHALL BE POURED FLUSH WITH TOP OF THE FIRST PAVING COURSE (INCLUDING HAND RODDING CONCRETE TO REMOVE VOIDS) AND THE VALVE BOX SHALL BE PROTECTED FROM VEHICULAR TRAFFIC FOR 24 HOURS.

**EXISTING PAVING**

INSTALL VALVE BOXES PER "NEW PAVING" (ABOVE) WITH THE CONCRETE COLLAR POURED FLUSH WITH THE FINISHED GRADE OF THE EXISTING PAVING WITH A SMOOTH TROWELED FINISH. NOTE: IF EXCAVATION OVER 42" SQUARE IS REQUIRED TO ADJUST VALVE BOX TO GRADE, "NEW PAVING" CONCRETE COLLAR PROCEDURES SHALL BE FOLLOWED AS WELL AS ANY NECESSARY PAVING SHALL BE COMPLETED.

**UNPAVED AREAS**

IN DIRT OR GRAVEL STREETS, TOP OF VALVE BOX AND CONCRETE COLLAR SHALL BE LEFT 6" BELOW THE STREET GRADE. IN OTHER UNPAVED AREAS, VALVE BOX AND CONCRETE COLLAR SHALL BE LEFT 2" ABOVE FINISHED GRADE OR AS DIRECTED BY SFC UTILITIES.

**PROTECTION OF VALVE BOXES:**

VALVE BOXES SHALL BE PROTECTED FROM DAMAGE, LOSS AND SHALL NOT BE FILLED WITH DIRT AND DEBRIS. VALVES MUST BE ACCESSIBLE DURING CONSTRUCTION WITH MINIMUM EXCAVATION. VALVES IDENTIFIED BY SFC UTILITIES AS KEY SHUT OFF VALVES SHALL REMAIN AT GRADE AND PROTECTED DURING ALL PHASES OF CONSTRUCTION.

**MOLZENCORBIN**

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*Kenneth R. Muller*  
KENNETH R. MULLER  
12548  
NEW MEXICO  
REGISTERED PROFESSIONAL ENGINEER  
2-18-2020

REVISION		
SYMBOL	DATE:	BY:

**SANTA FE COUNTY**  
UTILITIES DIVISION 424 NM 599, SANTA FE, NM 87507

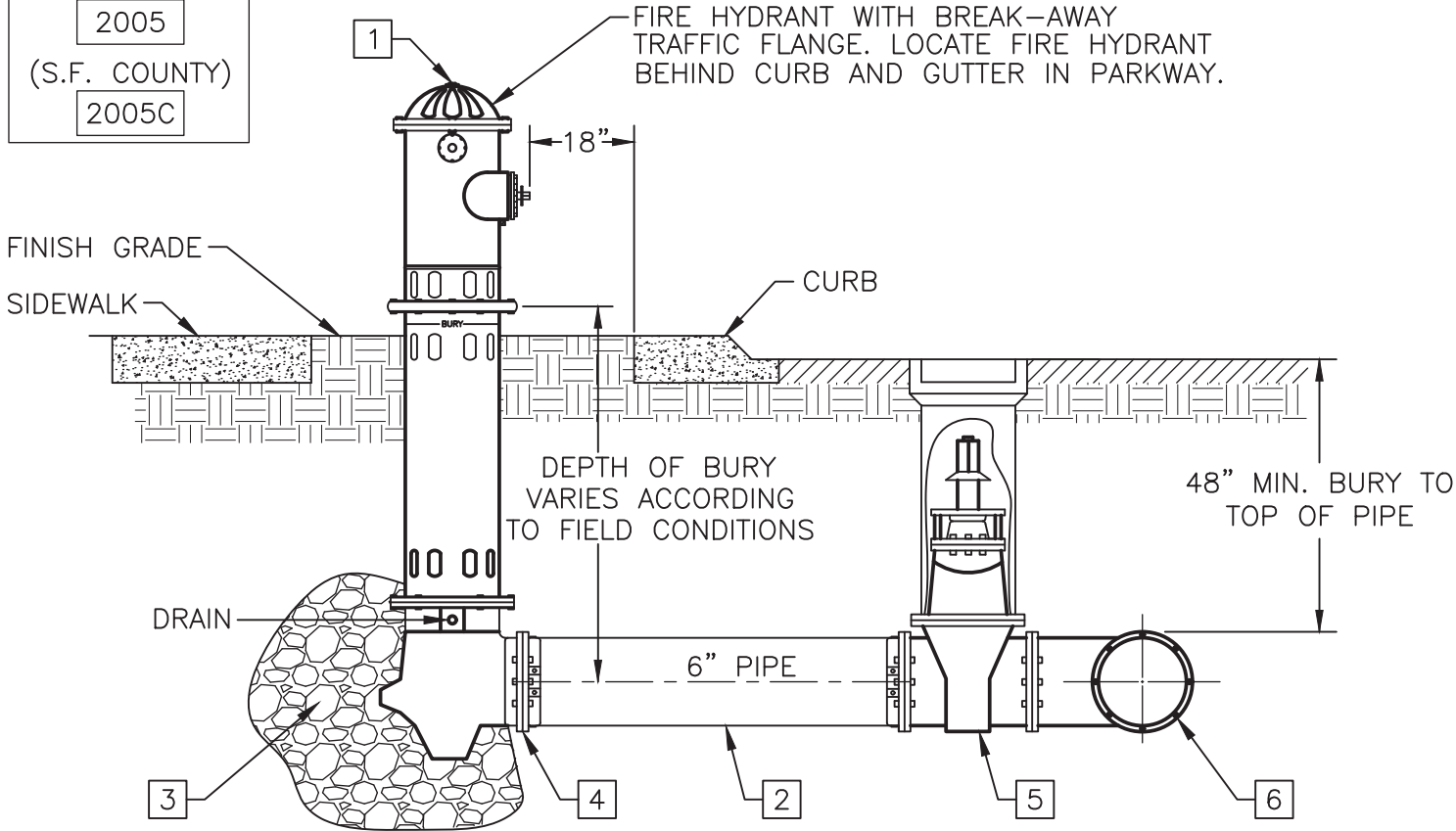
**SANTA FE COUNTY**  
PROJECT NAME:  
CANONCITO-ELDORADO WATERLINE

STANDARD WATERLINE DETAILS I

APPROVED BY: REVIEWED BY: S. MORROW  
DATE: FEBRUARY 2020 SHEET :  
DRAWN BY: J. BEHREND W-501



F.H. NUMBERS  
EXAMPLE:  
(CITY OF S.F.)  
2005  
(S.F. COUNTY)  
2005C



**KEYED NOTES:**

- 1 FIRE HYDRANT
- 2 6" PIPE
- 3 1/2 CUBIC YARD 3/8" GRAVEL DRAIN W/10 MIL PLASTIC SHEET
- 4 6" MJ RETAINER AND 6" HARNESS (IF REQUIRED)
- 5 6" MJ x FL GATE VALVE AND BOX
- 6 TEE: MJ RUN W/6" FLANGE OUTLET

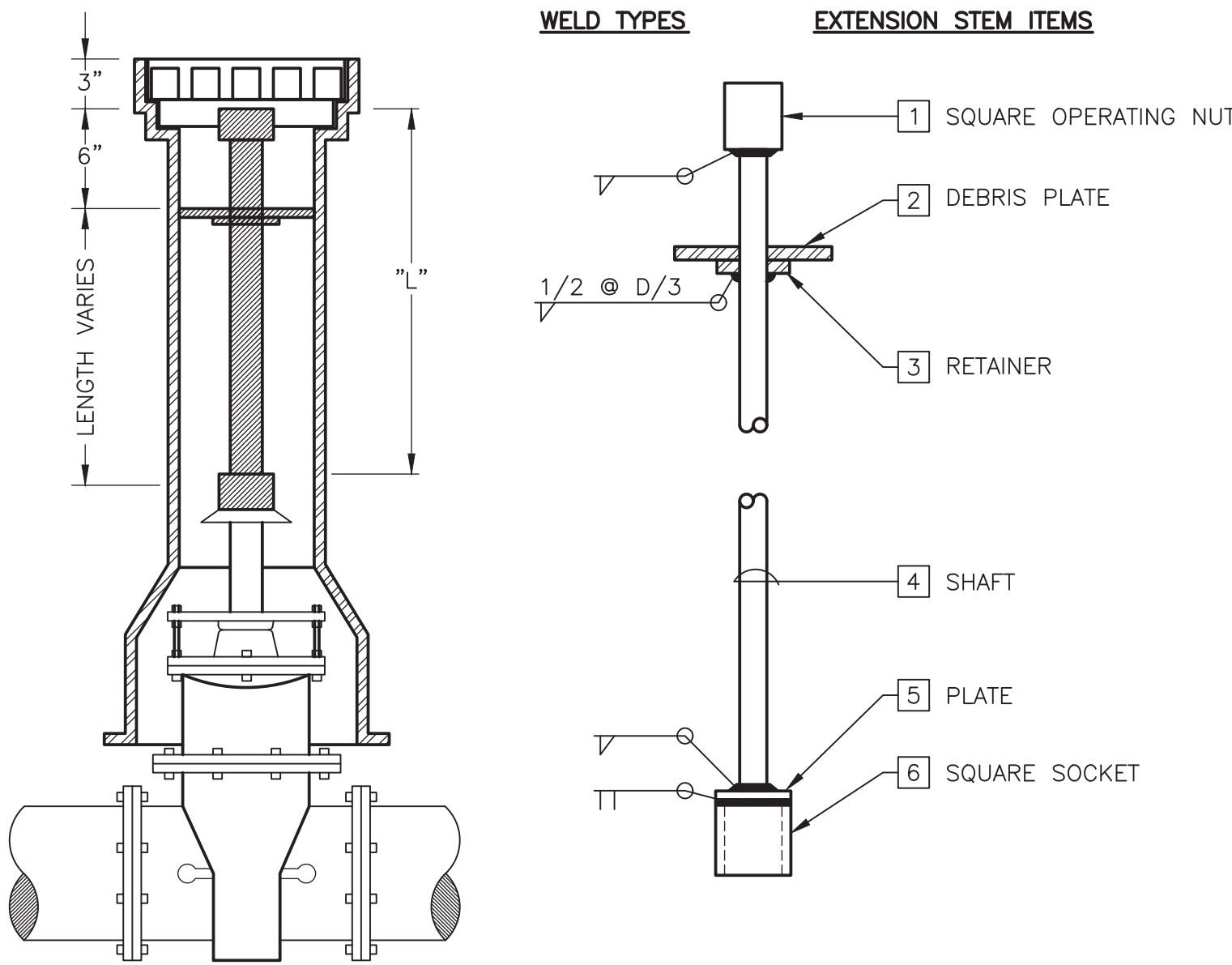
**CONSTRUCTION NOTES:**

- A. FIRE HYDRANT SHALL NOT BE INSTALLED NEAR ANY STRUCTURES AND SHALL HAVE A MINIMUM 36" CLEAR SPACE IN ALL DIRECTIONS.
- B. LOCATE HYDRANT 18" BEHIND BACK OF CURB UNLESS OTHERWISE SHOWN ON PLANS OR SPECIFICALLY DIRECTED BY SFC UTILITIES. HYDRANT TO BE SET PLUMB AND AT PROPER ELEVATION (ELEVATION PROVIDED BY DEVELOPER) HYDRANT INSTALLED AS PART OF A NEW DEVELOPMENT/EXTENSION SHALL BE A STANDARD 5' BURY HYDRANT AND SHALL BE SET TO FINISHED GRADE WITHOUT THE USE OF HYDRANT EXTENSIONS (IF AN ADJUSTMENT IS REQUIRED, RE-LAY THE WATER MAIN AND FIRE HYDRANT LEG OR INSTALL RESTRAINED OFFSET AS DIRECTED BY SFC UTILITIES.)
- C. WEEP HOLES MUST HAVE 1/4" PLUGS REMOVED AND BE FREE DRAINING INTO GRAVEL DRAIN. USE FULLY RESTRAINED JOINT FROM THE FIRE HYDRANT TO THE FLANGED CONNECTION ON VALVE.
- D. SEE TRACING WIRE DETAIL ON SHEET W-503.
- E. NATIONAL STANDARD FIRE HOSE COUPLING SCREW THREADS ARE REQUIRED IN SANTA FE COUNTY.
- F. FIRE HYDRANT SHALL BE PAINTED AND REFLECTIVE NUMBERS INSTALLED AFTER INSTALLATION, PER SPECIFICATIONS ON PAGE 7, SECTION B.4.

**FIRE HYDRANT ASSEMBLY DETAIL**

SCALE: NONE

NOTE: DETAILS ON THIS SHEET ARE REFERENCED FROM THE SANTA FE COUNTY WATER UTILITIES WATER AND SEWER CONSTRUCTION STANDARDS AND SPECIFICATIONS.



1. 2" x 2" x 2" BAR
2. 5" DIA. PLATE 3/16" WITH 1-3/8" DIA. HOLE
3. 1-3/8" DIA. HEAVY WASHER
4. 1" DIA. SCHEDULE 40 STEEL PIPE (L < 6")  
1-1/4" DIA. SCHEDULE 40 STEEL PIPE (L > 6")
5. 2-1/2" x 2-1/2" x 1/4" PLATE
6. 2-1/2" x 2-1/2" x 1/4" TUBING

**VALVE STEM EXTENSION DETAIL**

SCALE: NONE

NOTE: ALL STEEL TO BE SAW OR MACHINE CUT.

THRUSTS RESTRAINT TABLE BENDS, TEES, CAPS/VALVES, & REDUCERS (RESTRAINED JOINT LENGTHS IN FEET)													
DIAMETER (IN.)	HORIZONTAL BENDS				CAPS/PLUGS /VALVES	SIZE / PLUGS Lg/ Sm/ Run X Br.	TEES						REDUCERS
	11-1/4" L <sub>R</sub>	22-1/2" L <sub>R</sub>	45" L <sub>R</sub>	90" L <sub>R</sub>			Run L <sub>R</sub>	Branch L <sub>R</sub>	Run L <sub>R</sub>	Branch L <sub>R</sub>	Run L <sub>R</sub>	Branch L <sub>R</sub>	
4	FJO	2	5	12	35	4X4	FJO	28	5	8	10	FJO	N/A
6	2	3	7	17	47	6X6	FJO	42	5	21	10	FJO	N/A
8	2	4	9	23	62	6X4	FJO	26	5	FJO	10	FJO	24
10	3	5	11	27	75	8X8	FJO	57	5	36	10	10	N/A
12	3	6	13	32	88	8X6	FJO	40	5	13	10	FJO	26
						8X4	FJO	23	5	FJO	10	FJO	45
						10X10	FJO	69	5	48	10	21	N/A
DIAMETER (IN.)	11-1/4" L <sub>R</sub>	22-1/2" L <sub>R</sub>	45" L <sub>R</sub>	90" L <sub>R</sub>		10X8	FJO	55	5	29	10	FJO	25
						10X6	FJO	39	5	4	10	FJO	46
						10X4	FJO	21	5	FJO	10	FJO	61
						12X12	FJO	83	5	61	10	34	N/A
4	3/2	7/4	14/9	N/A		12X10	FJO	68	5	42	10	10	43
6	5/3	9/6	20/12	N/A		12X8	FJO	54	5	22	10	FJO	47
8	6/4	12/7	26/15	N/A		12X6	FJO	37	5	FJO	10	FJO	64
10	7/4	15/9	31/18	N/A		12X4	FJO	18	5	FJO	10	FJO	77
12	9/5	18/10	37/21	N/A									

**JOINT RESTRAINT TABLE**

TABLE: THIS TABLE IS BASED ON THE EBAA IRON MEGA LUG JOINT CALCULATIONS PROGRAM WITH THE FOLLOWING INPUT CRITERIA: 3.5FT DEPTH OF BURY (CONSERVATIVE); TRENCH TYPE 4: PVC PIPE MATERIAL: GM SOIL TYPE: 150 PSI TEST PRESSURE: 1.5 SAFETY FACTOR. SPECIFIC CALCULATIONS FOR RESTRAINED LENGTHS ARE REQUIRED FOR CONDITIONS NOT COVERED BY THIS TABLE.

**L<sub>R</sub>**: LENGTH OF RESTRAINED PIPE, IN FEET, FOR EACH SIDE OF THE FITTING.

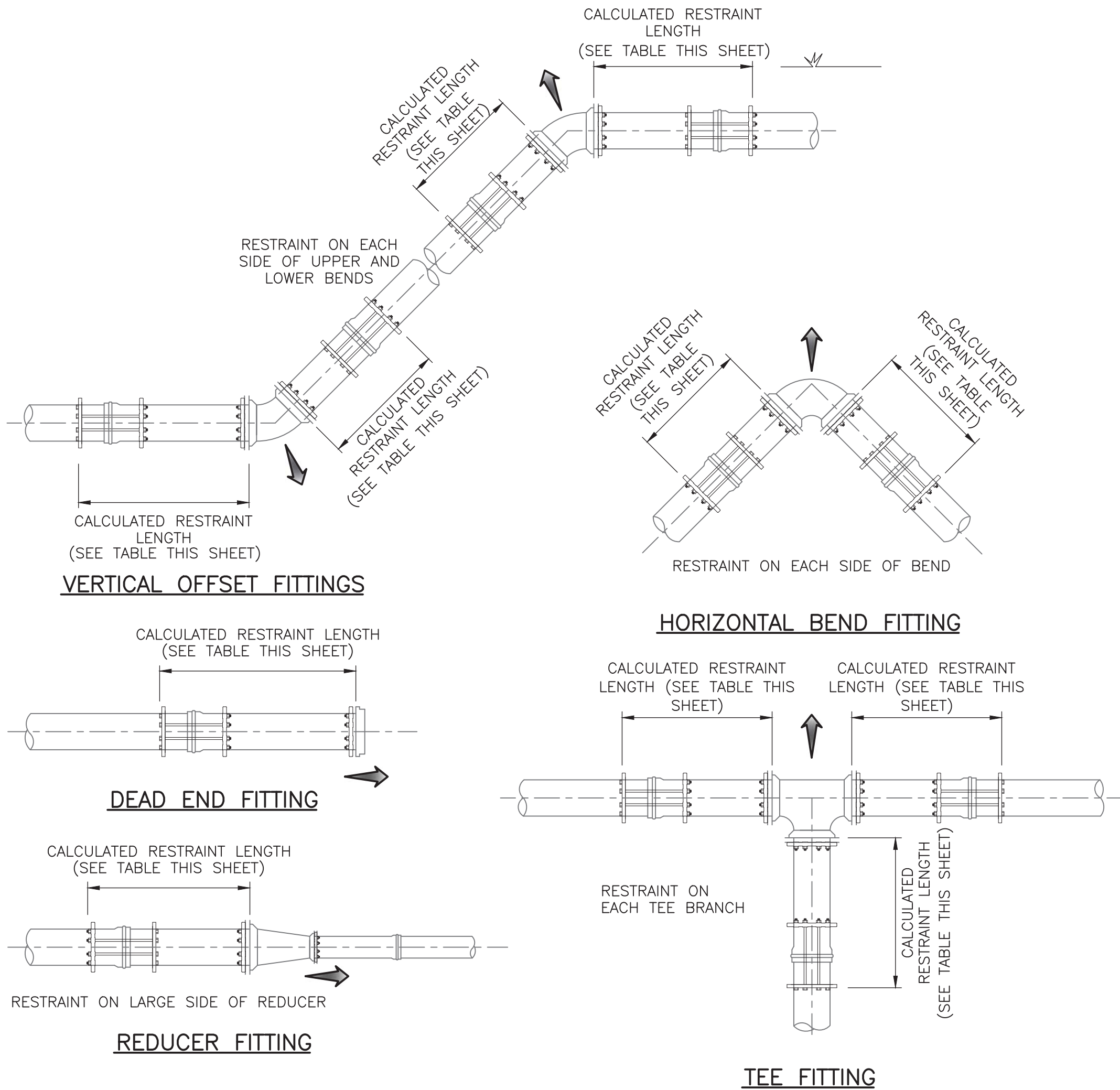
MINIMUM RESTRAINED LENGTH: A MINIMUM RESTRAINED LENGTH OF 5 FT. FROM THE FITTING JOINT IS RECOMMENDED. VERTICAL OFFSETS SHALL BE COMPLETELY RESTRAINED BETWEEN THE TOP VERTICAL FITTING AND THE BOTTOM VERTICAL FITTING.

FJO: FITTING JOINT ONLY – THIS INCLUDES AT LEAST A 1 FT. LENGTH OF RESTRAINED PIPE BEYOND THE FITTING JOINT.

VERTICAL OFFSET: USE 11-1/2' BENDS OR 22-1/2' BENDS WHEREVER POSSIBLE DUE TO THE SHORTER RESTRAINED LENGTH REQUIREMENTS.

CAPS/PLUGS: CONCRETE BLOCKING MAY BE REQUIRED BY SFC UTILITIES ON A CASE-BY-CASE BASIS IN ADDITION TO MECHANICAL RESTRAINT.

PIPE LENGTH: PIPING SHALL BE LAID OUT TO MINIMIZE PIPE JOINTS NEAR FITTINGS. WHEREVER POSSIBLE, FULL 20 FT. PIPE LENGTHS SHALL BE UTILIZED WHEN CONNECTING TO FITTINGS OR VALVES. NO PIPE BELL JOINTS SHALL BE USED WHERE FITTINGS ARE LESS THAN 20 FT. APART.



**PIPE RESTRAINT REQUIREMENTS**

SCALE: NONE

**MOLZENCORBIN**

2701 Miles Road SE  
Albuquerque, New Mexico 87106  
505 242 5700 office  
505 242 0673 fax  
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NOTICE OF EXTENDED PAYMENT PROVISION:  
THIS CONTRACT ALLOWS THE OWNER TO MAKE  
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OF AN UNDISPUTED REQUEST FOR PAYMENT



REVISION		
SYMBOL	DATE:	BY:

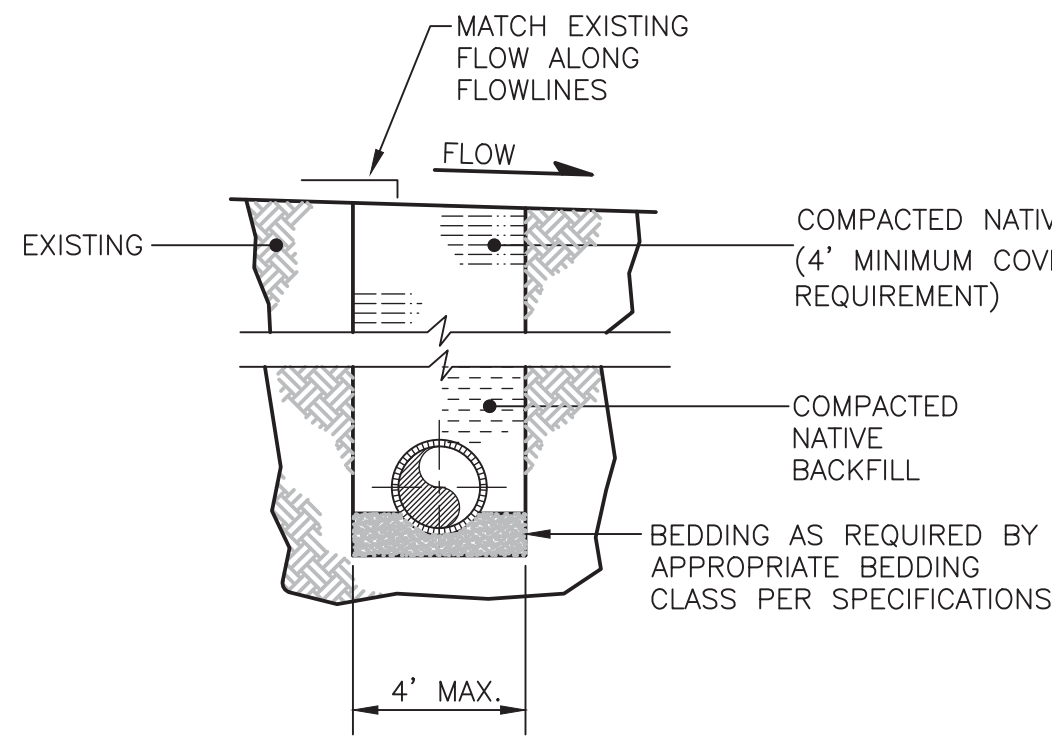
**SANTA FE COUNTY**  
UTILITIES DIVISION 424 NM 599, SANTA FE, NM 87507

PROJECT NAME:  
CANONCITO-ELDORADO WATERLINE

STANDARD WATERLINE DETAILS II

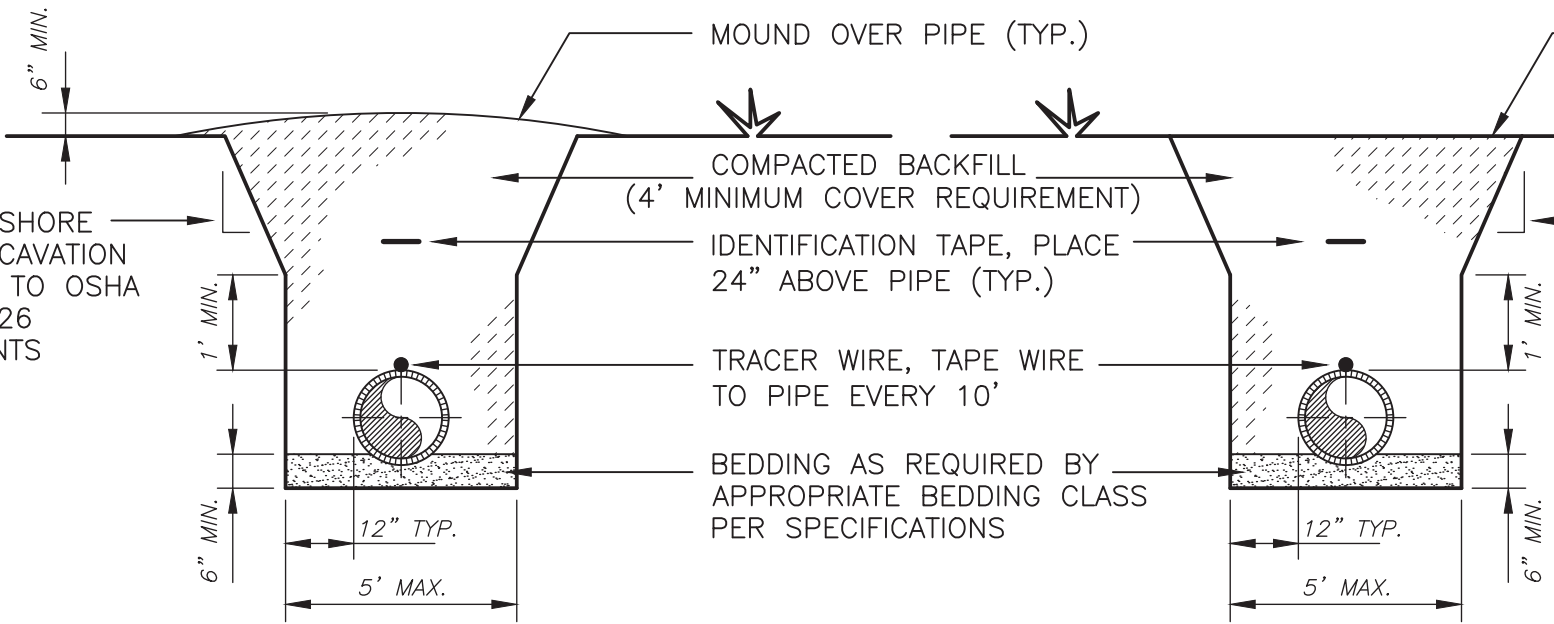
APPROVED BY: REVIEWED BY: S. MORROW  
DATE: FEBRUARY 2020 SHEET :  
DRAWN BY: J. BEHREND W-502





ARROYO CROSSINGS

SLOPE OR SHORE  
TRENCH EXCAVATION  
ACCORDING TO OSHA  
CFR 29 1926  
REQUIREMENTS



UNTRAVELED AREAS

UNPAVED ROAD TRENCH  
(INCLUDING UNPAVED ALLEYS AND DRIVEWAYS)

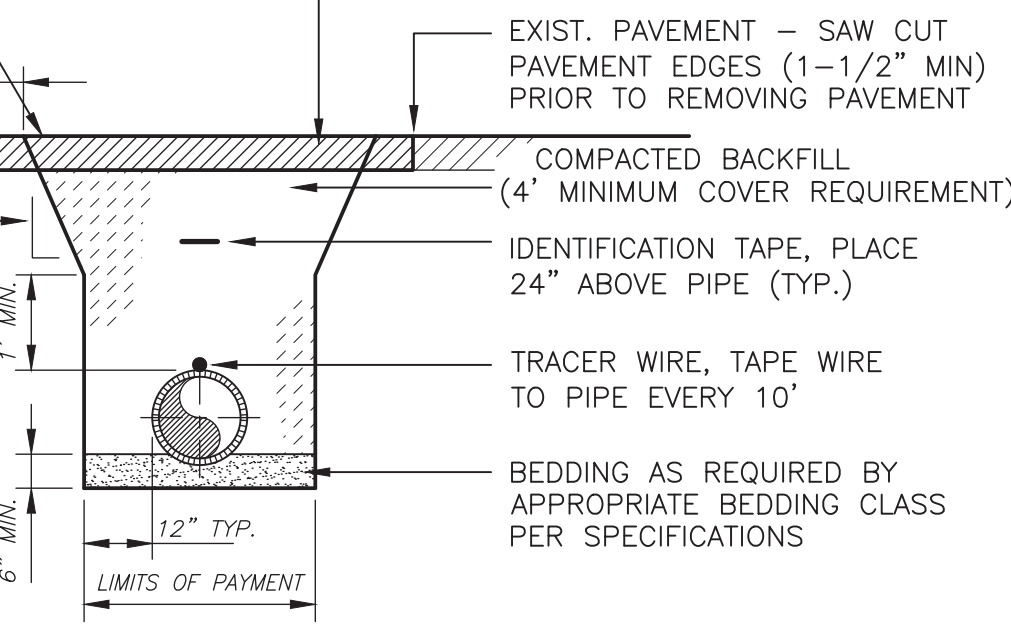
GENERAL NOTES FOR TRENCHING:

1. PIPE BEDDING REQUIREMENTS, SEE SPECIFICATIONS
2. PIPE IDENTIFICATION TAPE REQUIREMENTS, SEE SPECIFICATIONS
3. TRENCH BACKFILL COMPACTION REQUIREMENTS, SEE SPECIFICATIONS
4. 4' MINIMUM COVER REQUIREMENT ABOVE PIPE.

TRENCH COMPACTION DETAILS

SCALE: NONE

SLOPE OR SHORE TRENCH  
EXCAVATION ACCORDING TO  
OSHA CFR 29 1926  
REQUIREMENTS



PAVED ROAD TRENCH

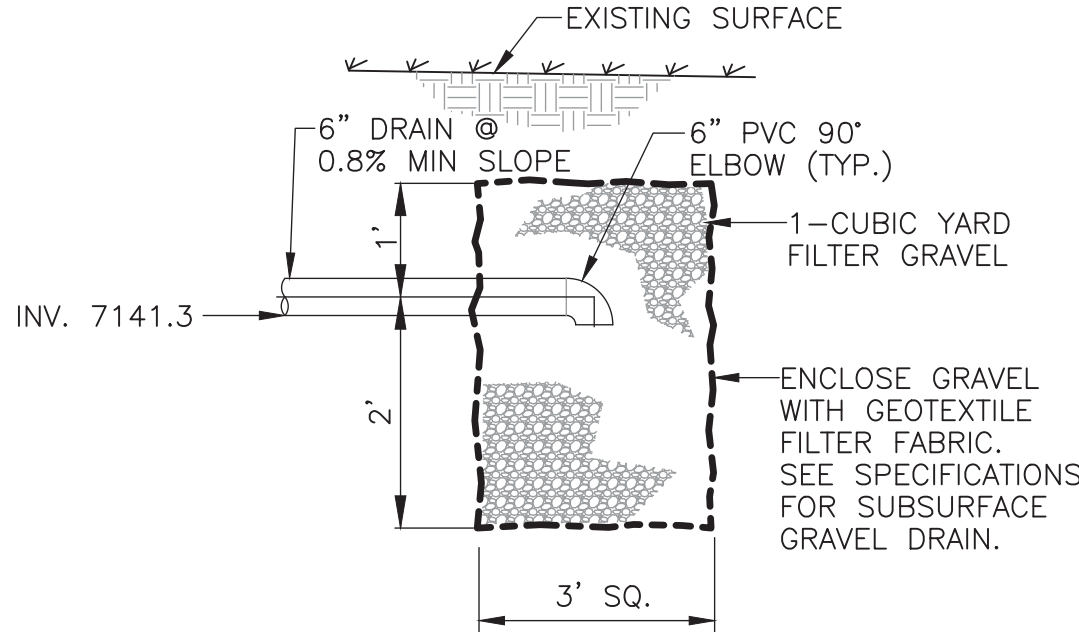
TRENCH BACKFILL REQUIREMENTS

- PAVED TRAVELED AREAS:
1. 90% ASTM D1557 COMPACTION.
  2. TOP 12" BELOW SUBGRADE, 95% ASTM D1557 COMPACTION.

- UNPAVED TRAVELED AREAS:
1. 90% ASTM D1557 COMPACTION.

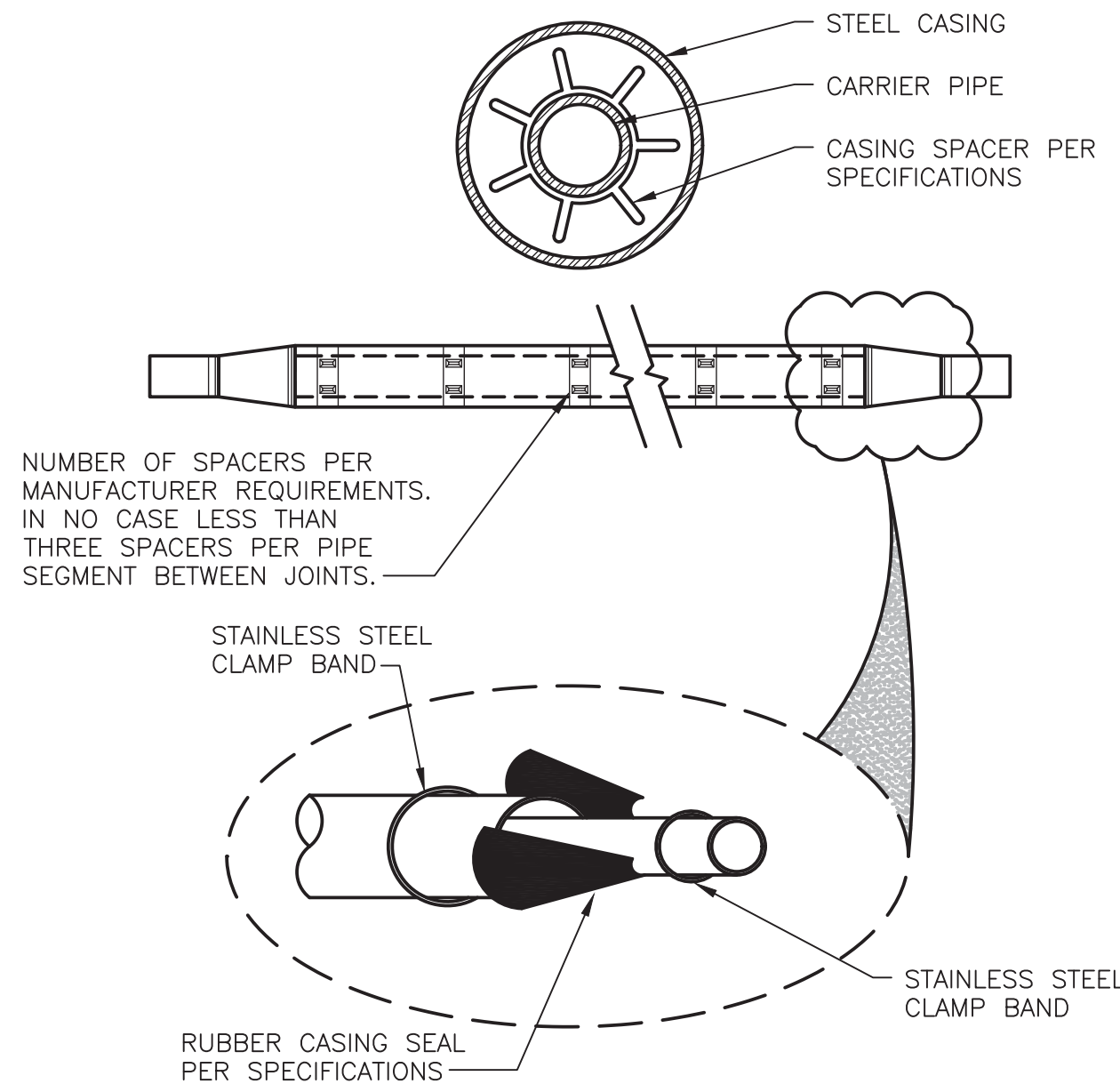
- UNTRAVELED AREAS:
1. 90% ASTM D1557 COMPACTION.

- WITHIN ROADWAY PRISM:
1. 95% ASTM D1557 COMPACTION.



SUBSURFACE GRAVEL DRAIN DETAIL

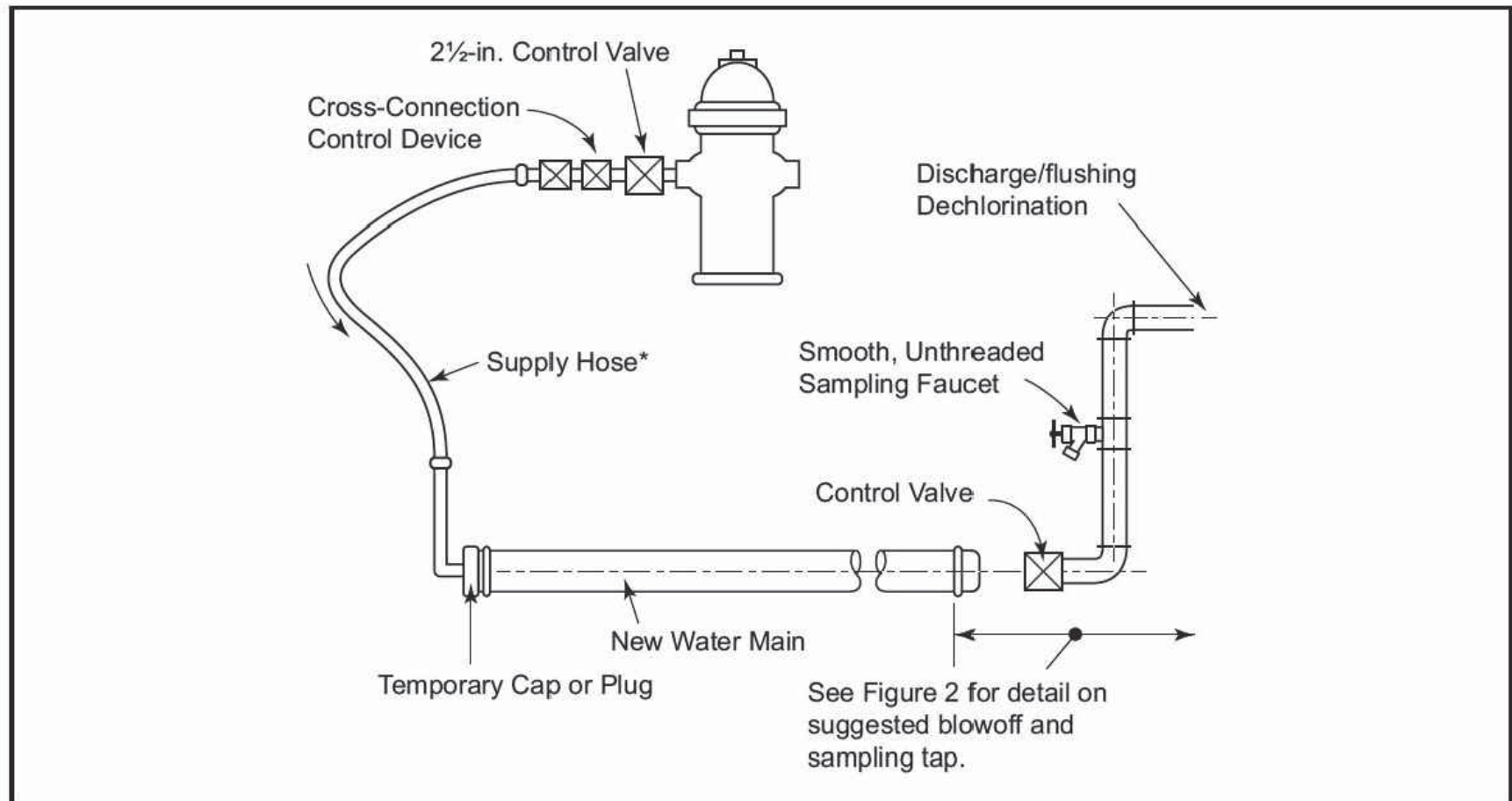
NOT TO SCALE



CARRIER PIPE (NOMINAL SIZE)	STEEL CASING DIAMETER AND WALL THICKNESS
6"	14" SCHEDULE 30
8"	16" SCHEDULE 30
10"	18" STANDARD CLASS
12"	22" STANDARD CLASS
14"	26" SCHEDULE 20
16"	28" SCHEDULE 20
20"	30" 0.375" WALL
24"	36" 0.375" WALL
3/4"-2" CU TUBING	4" SCHEDULE 40 PVC
3/4"-2" CU TUBING	4" SCHEDULE 40 STEEL

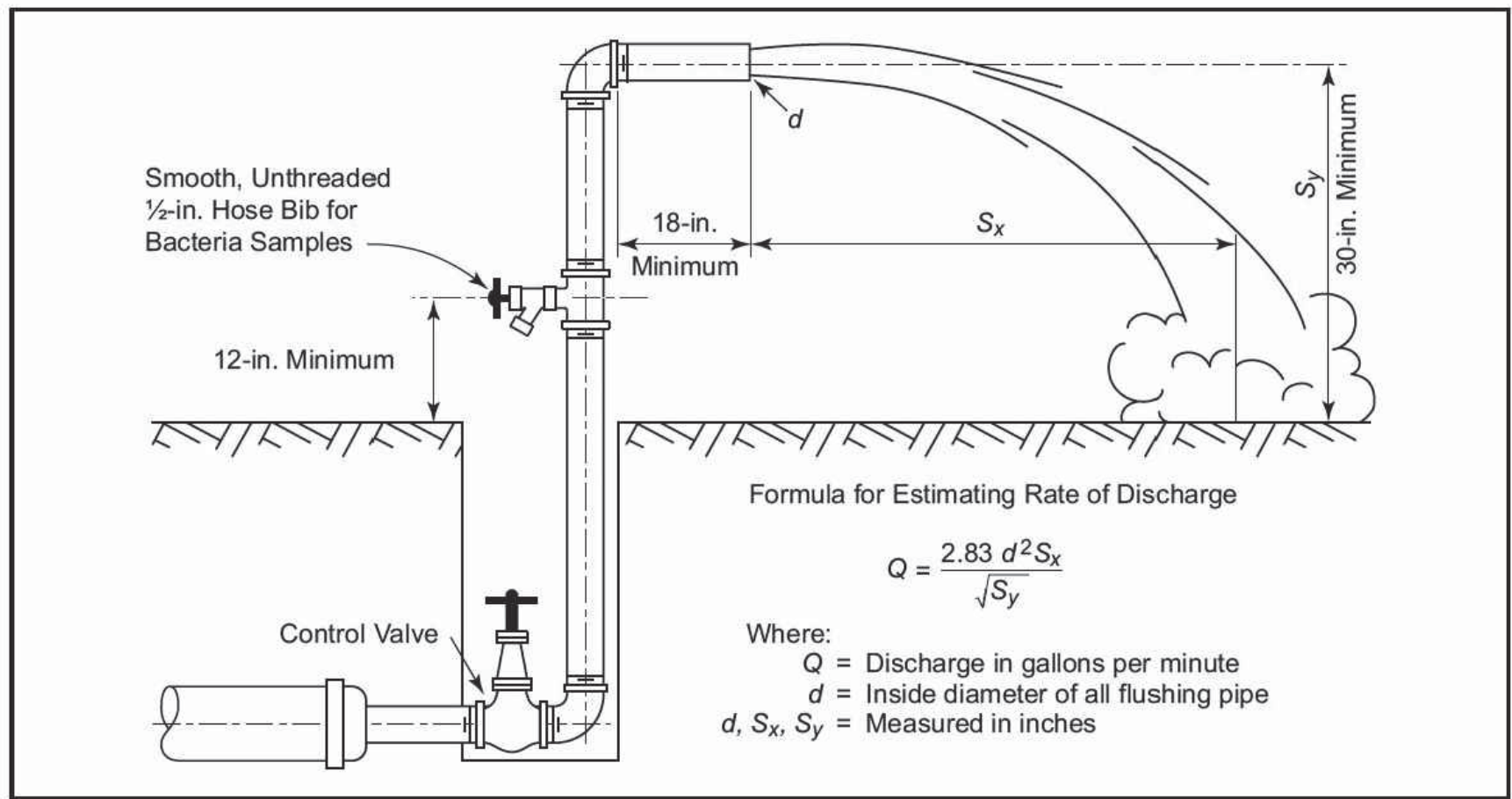
PIPE CASING DETAIL  
FOR WATER OR SEWER PROJCTS

NOT TO SCALE



NOTE: Figure 1 applies to pipes with diameters 4 in. (100 mm) through 12 in. (300 mm). Larger sizes must be handled on a case-by-case basis.

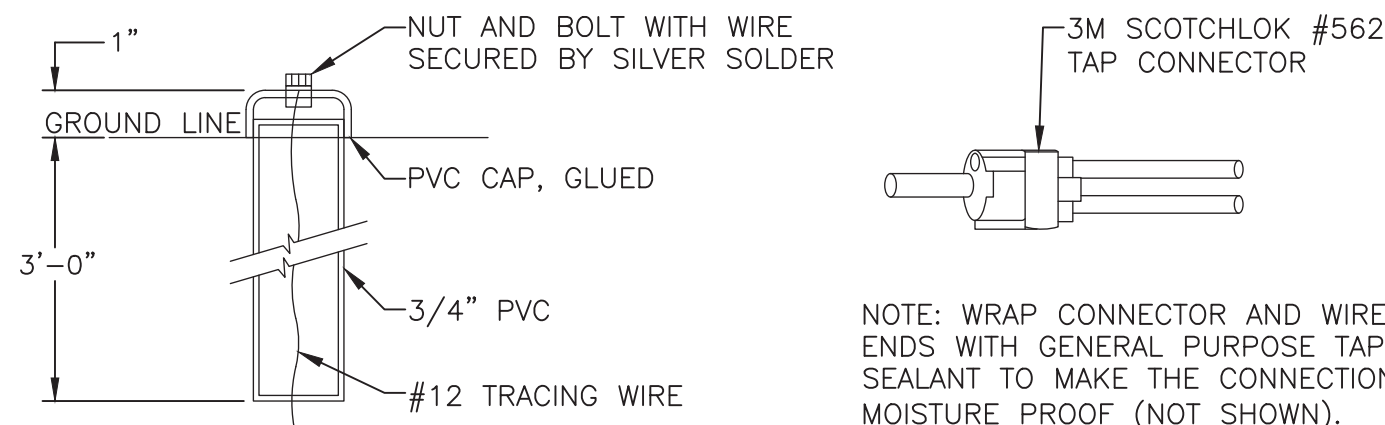
\*Clean potable-water hose only. Size and number of taps per Table 3. This hose must be removed during the hydrostatic pressure test.



NOTE: This figure applies to pipes up to and including 8-in. (200-mm) diameter.

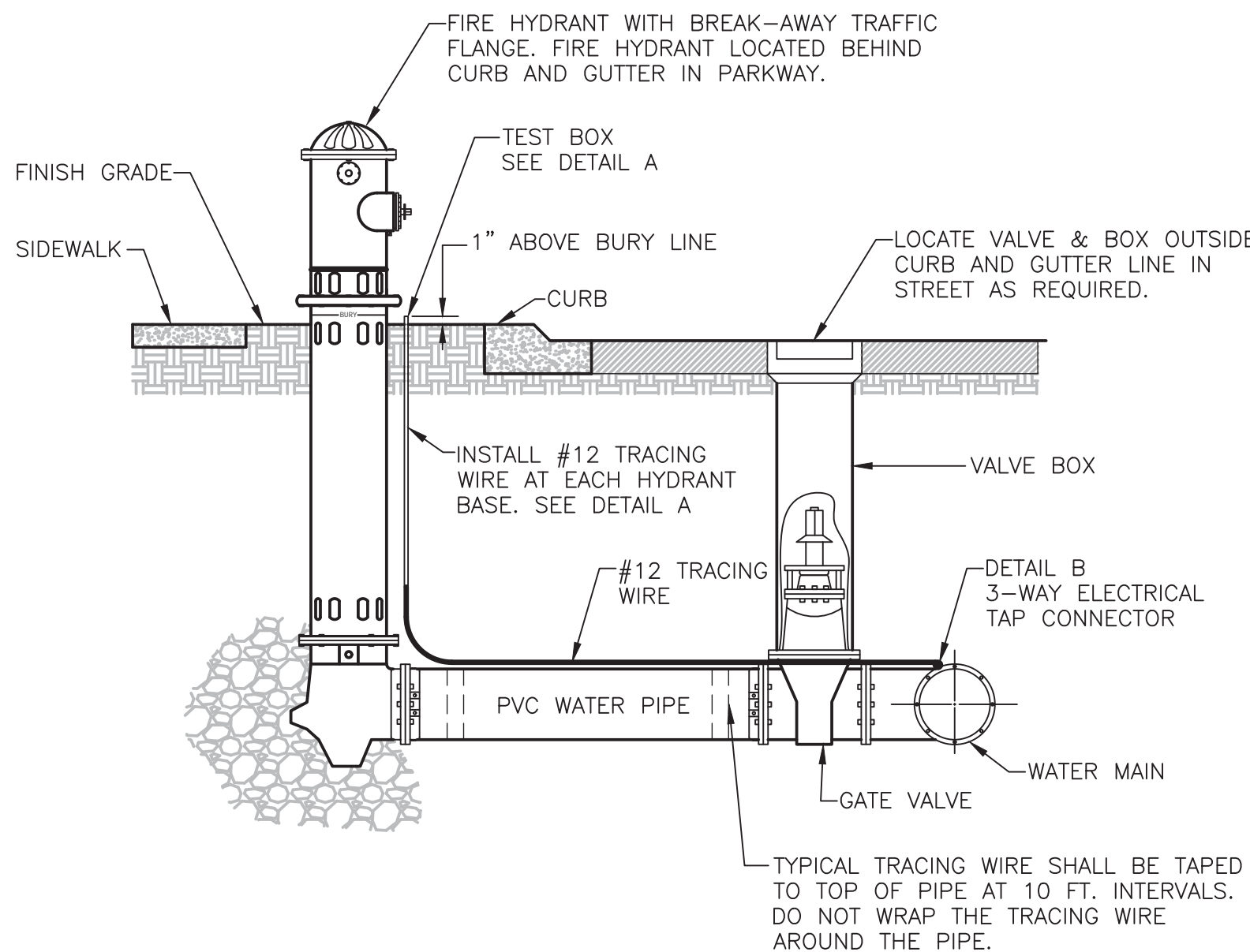
Figure 2 Suggested combination blowoff and sampling tap

SUGGESTED TEMPORARY FLUSHING/SAMPLING  
CONNECTIONS FROM AWWA C651



DETAIL A  
TEST BOX

DETAIL B  
ELECTRICAL TAP CONNECTOR



TRACING WIRE DETAIL

NOT TO SCALE

MOLZENCORBIN

2701 Miles Road SE  
Albuquerque, New Mexico 87106  
505 242 5700 office  
505 242 0673 fax  
MolzenCorbin.com

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REVISION		
SYMBOL	DATE:	BY:

SANTA FE COUNTY  
UTILITIES DIVISION 424 NM 599, SANTA FE, NM 87507

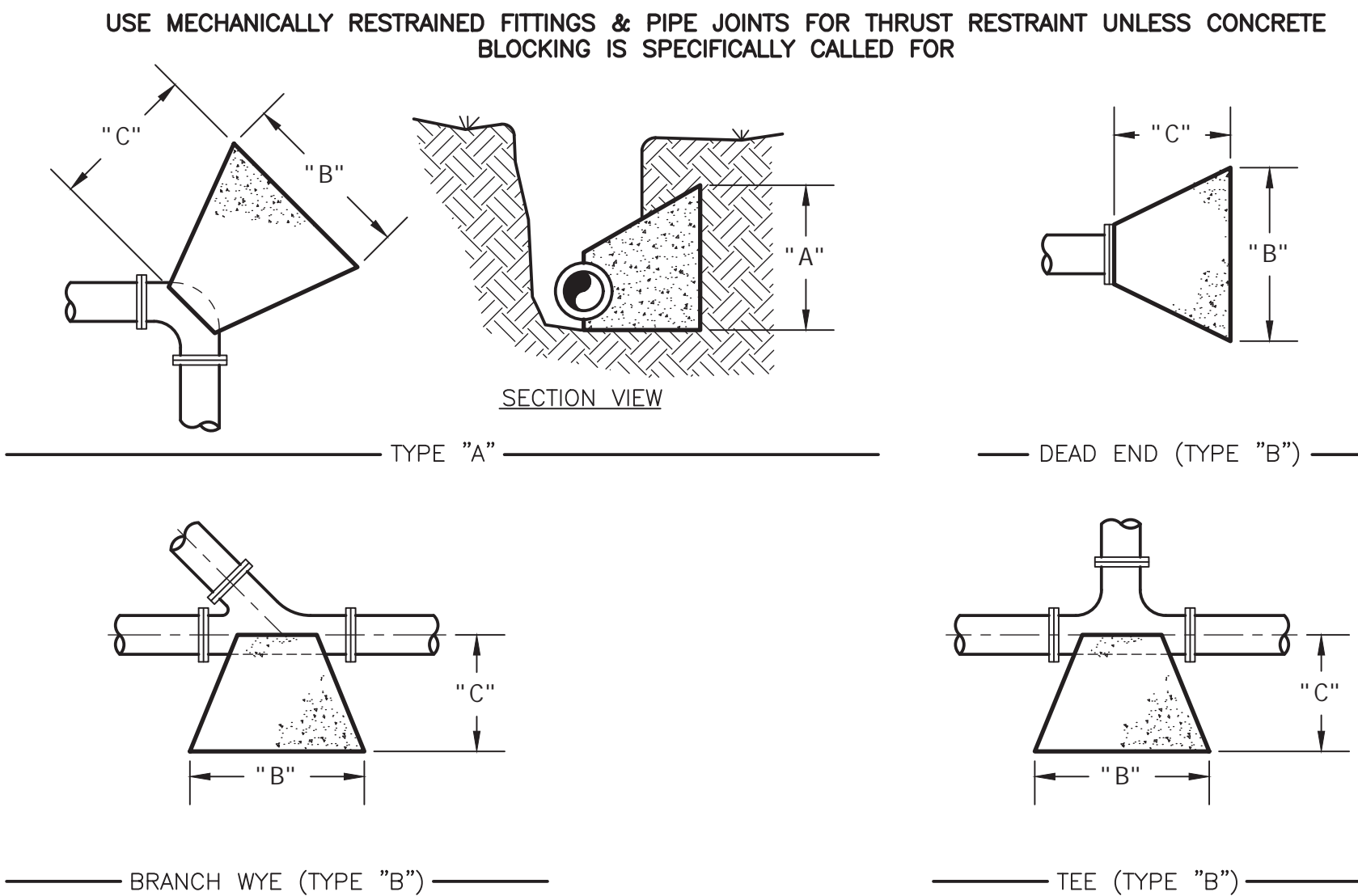
PROJECT NAME:  
CANONCITO-ELDORADO WATERLINE



STANDARD WATERLINE DETAILS III

APPROVED BY:	REVIEWED BY: S. MORROW	SHEET :
DATE: FEBRUARY 2020		W-503
DRAWN BY: J. BEHREND		



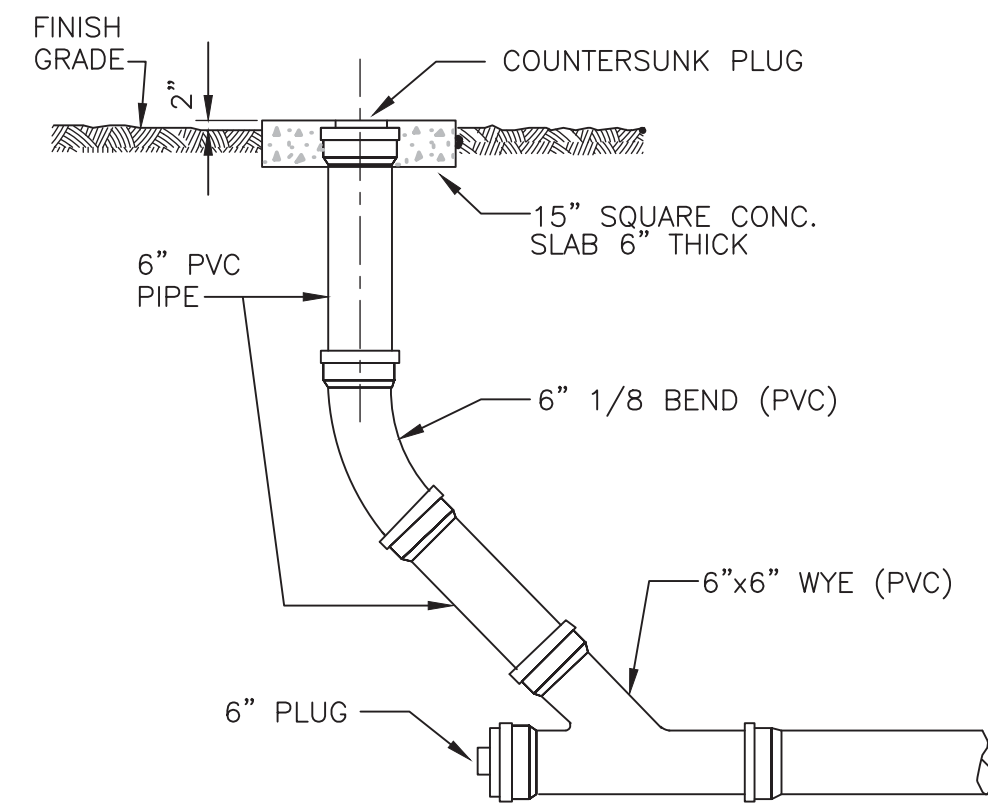


**CONCRETE THRUST BLOCKING DETAIL**  
NOT TO SCALE

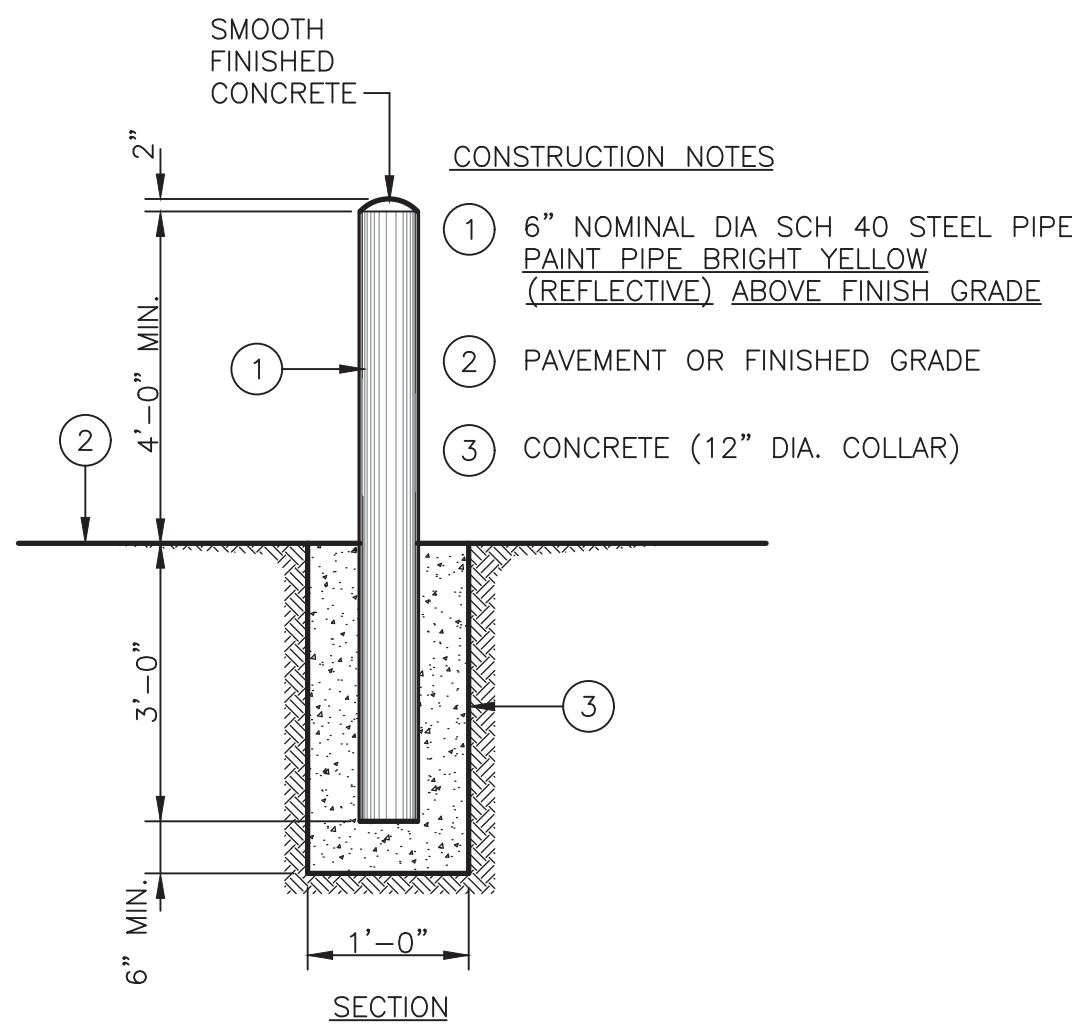
THRUST BLOCK SIZING TABLE

PIPE DIAMETER	TYPE "A" BENDS												TYPE "B" FITTINGS		
	11-1/4'			22-1/2'			45'			90'					
	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
4"	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
6"	12	12	12	12	12	12	12	18	12	18	24	12	12	24	12
8"	12	12	12	12	18	12	18	24	12	24	30	18	18	30	12
10"	12	12	12	12	24	12	20	30	12	24	42	18	24	36	18
12"	12	18	12	18	24	12	24	36	18	32	48	24	24	42	18
14"	12	24	12	18	36	18	30	42	24	36	60	24	30	48	24
16"	18	24	24	24	36	24	30	40	24	42	66	24	36	54	24
18"	18	30	24	24	40	24	36	54	24	48	72	24	42	60	24
20"	20	30	24	30	42	24	42	60	24	54	80	24	42	76	24
24"	24	36	24	36	54	24	48	72	24	66	96	30	54	80	30

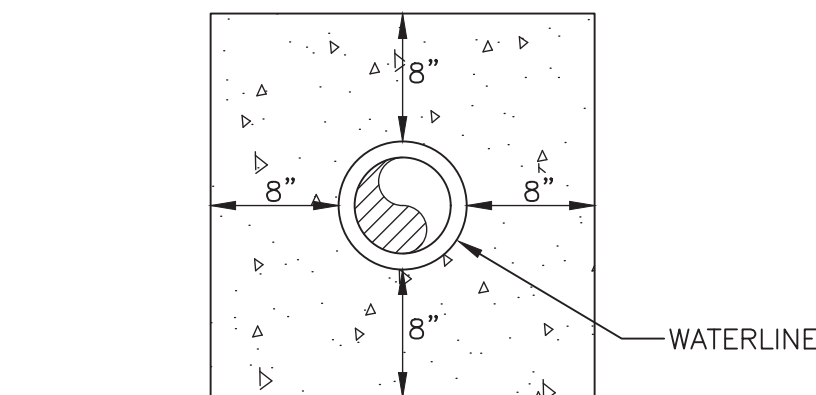
- TABLE BASED ON 200 P.S.I. (130 P.S.I. WORKING PRESSURE) AND 3000 LB/FT<sup>2</sup> ALLOWABLE SOIL BEARING PRESSURE.
- USE TEE OUTLET DIAMETER TO DETERMINE THRUST BLOCK SIZING. USE BRANCH DIAMETER ON WYE TO DETERMINE THRUST BLOCK SIZING.
- THE "C" DIMENSION LISTED IS A MINIMUM DIMENSION. CONCRETE BLOCKING MUST BE POURED TO THE UNDISTURBED SOIL OF THE TRENCH WALL.



**CLEANOUT TO GRADE**  
N.T.S.

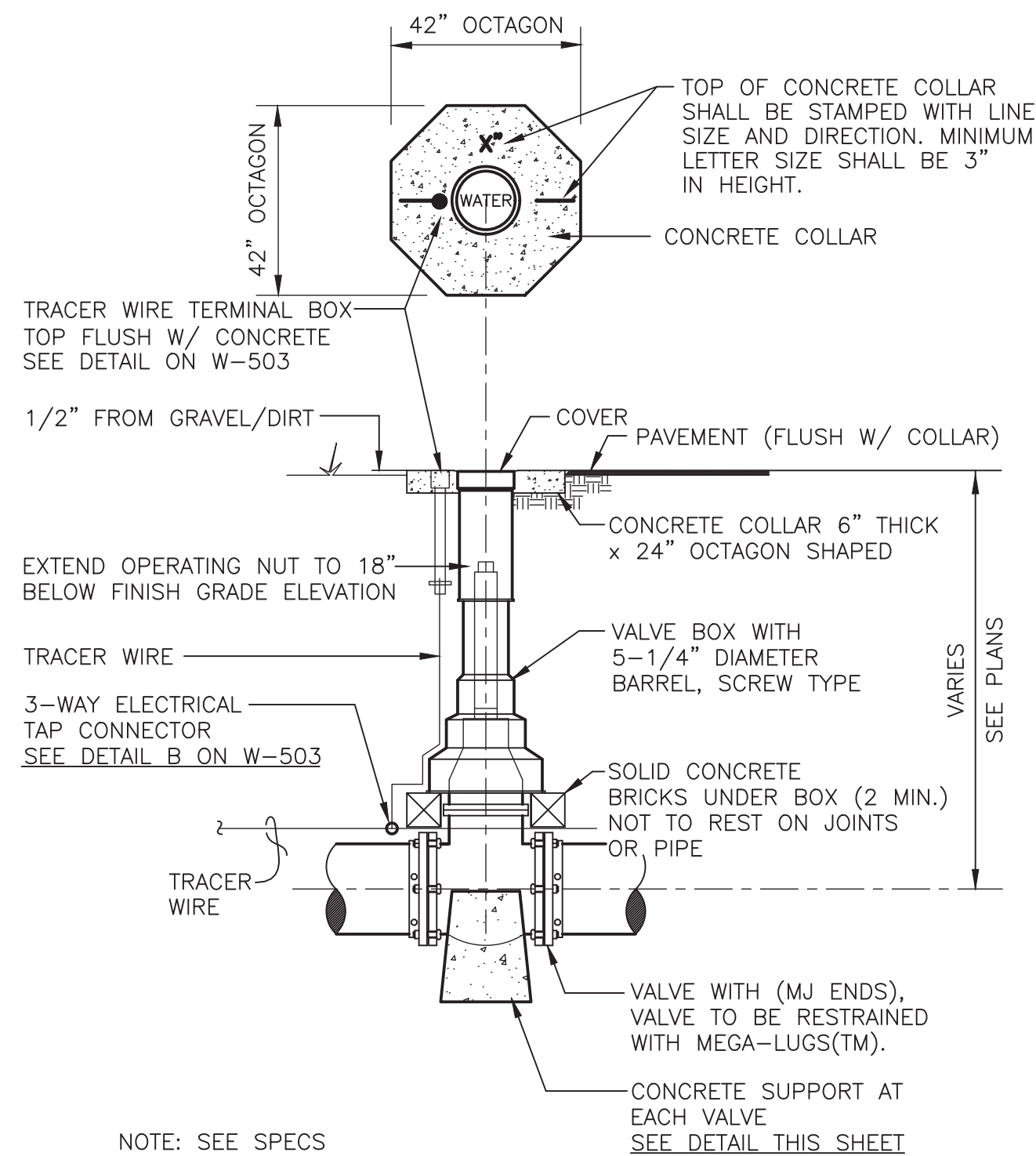


**PIPE BOLLARD - DETAIL**  
SCALE: NONE



**CONCRETE ENCASEMENT DETAIL**  
NO SCALE

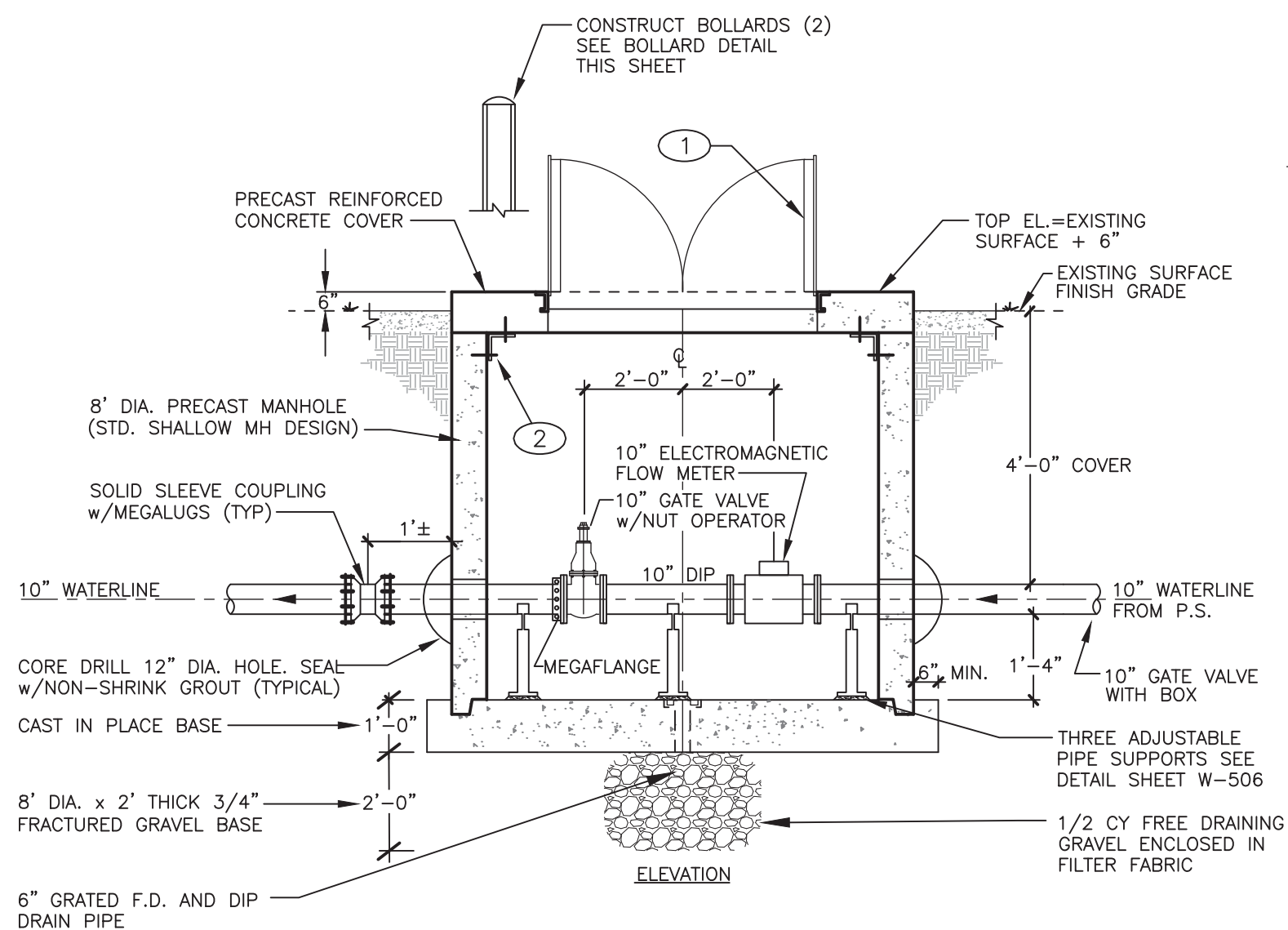
SEE PLANS FOR LOCATION



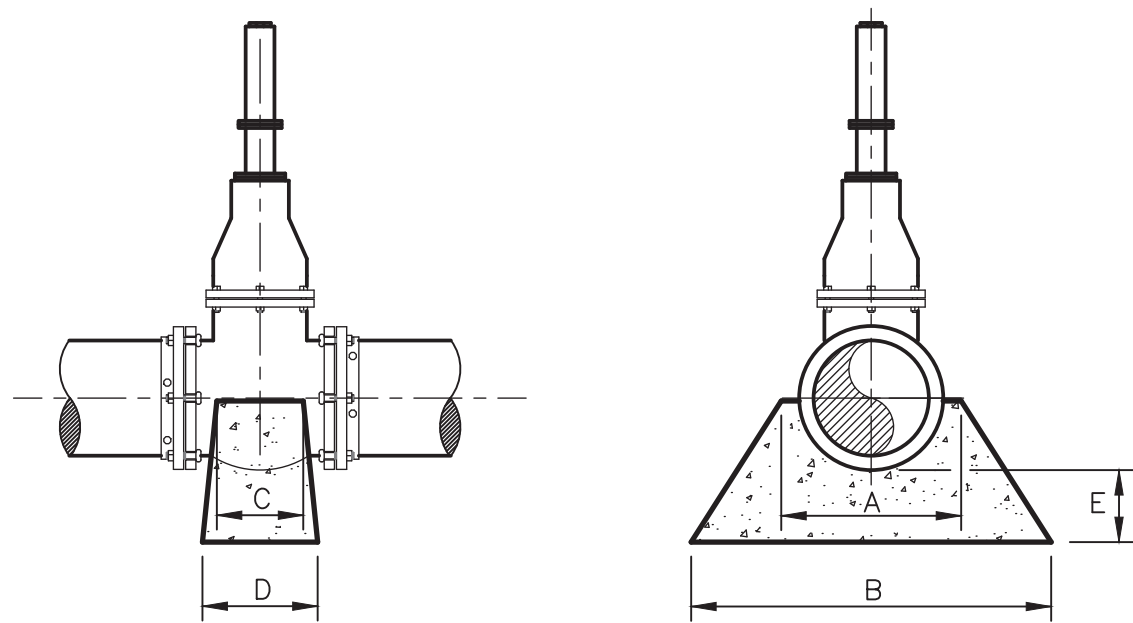
**NOTE: GATE VALVES TO BE USED FOR 12" AND SMALLER**  
**TYPICAL DETAIL FOR GATE VALVES**  
SCALE: NONE

**KEYED NOTES**

- ALUMINUM HINGED HATCH.
  - 36" x 48" CLEAR OPENING
  - TWO LEAVES
  - 300 PSF LOAD RATING
  - FRAME EMBEDDED IN PRECAST CONCRETE COVER.
  - SS HOLD OPEN ARM WITH RELEASE HANDLE
  - SS SLAM LOCK WITH REMOVABLE KEY
  - NEOPRENE GASKET.
  - BITUMINOUS COATING ON EMBEDDED SURFACES.
  - ALUMINUM FRAME AND REINFORCED 1/4" DIAMOND TREAD COVER PLATE.
  - RECESSED LIFT HANDLES.
  - SPRING ASSIST HINGES
- S.S. ANCHOR PLATES WITH 1/4" S.S. CHEMICAL ADHESIVE ANCHOR BOLTS. FOUR (4) PLATES REQUIRED.



**METER VAULT AT HONDO 2 P.S. - DETAIL**  
SCALE: NONE



CONCRETE VALVE SUPPORT TABLE

VALVE SIZE	A	B	C	D	E
4"	10"	20"	4"	6"	6" MIN.
6"	12"	22"	4"	8"	6" MIN.
8"	12"	22"	4"	8"	6" MIN.
10"	14"	24"	4"	8"	6" MIN.
12"	16"	24"	4"	8"	6" MIN.
14"	20"	28"	6"	12"	6" MIN.
16"	24"	36"	6"	12"	6" MIN.
18"	30"	36"	6"	12"	6" MIN.
24"	36"	42"	8"	12"	8" MIN.

**CONCRETE VALVE SUPPORT DETAILS**  
SCALE: NONE

**MOLZENCORBIN**

2701 Miles Road SE  
Albuquerque, New Mexico 87106  
505 242 5700 office  
505 242 0673 fax  
MolzenCorbin.com

NOTICE OF EXTENDED PAYMENT PROVISION:  
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SYMBOL	DATE:	BY:

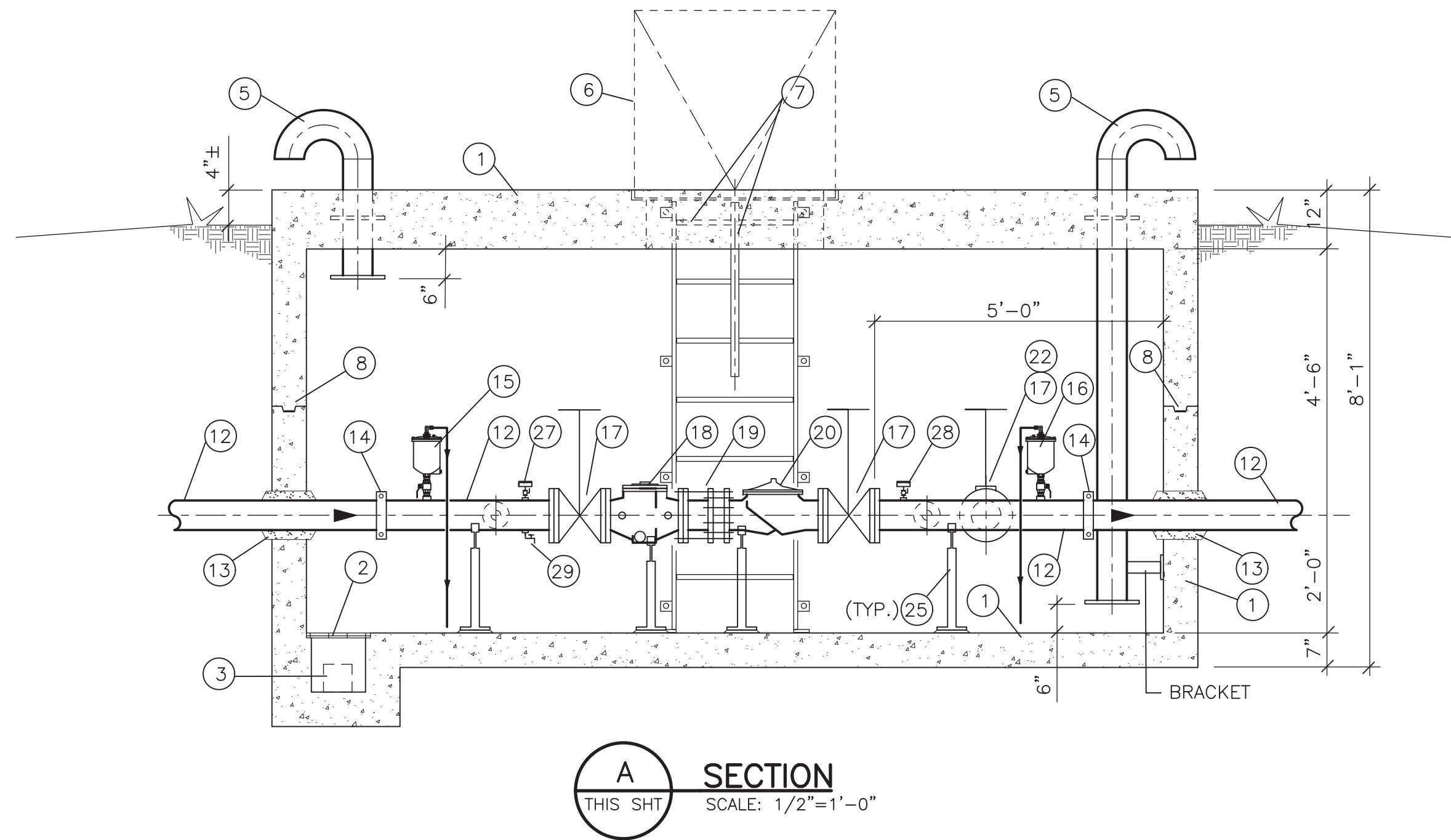
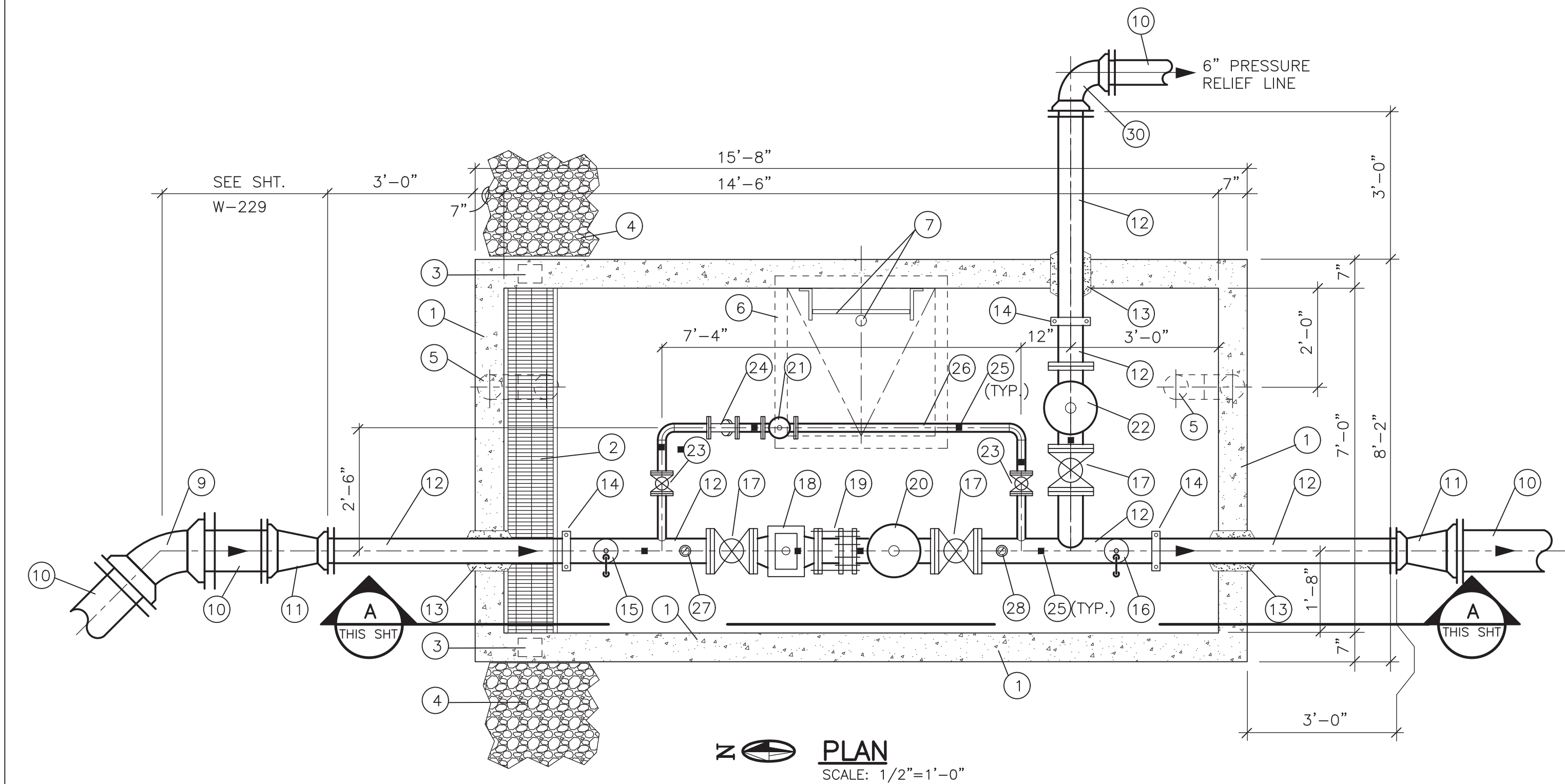
**SANTA FE COUNTY**  
UTILITIES DIVISION 424 NM 599, SANTA FE, NM 87507

PROJECT NAME:  
CANONCITO-ELDORADO WATERLINE

STANDARD WATERLINE DETAILS IV

APPROVED BY: REVIEWED BY: S. MORROW  
DATE: FEBRUARY 2020 SHEET :  
DRAWN BY: P. DE LA ROSA W-504





GENERAL NOTES:

1. REFER TO SHEET W-229 FOR LOCATION AND PIPING CONTINUATION.

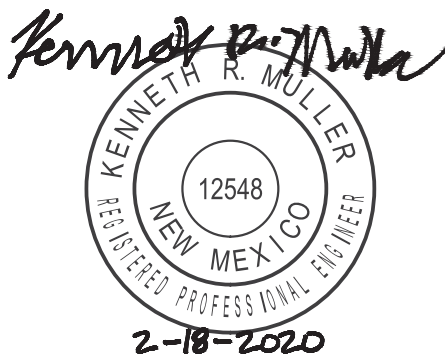
KEYED NOTES: PRV STATION EQUIPMENT AND PIPING

- 1 PRECAST CONCRETE UTILITY VAULT, TWO PIECE, WHITE INTERIOR COATING, EXTERIOR DAMPPROOFING, RATED FOR 300 PSF LIVE LOAD.
- 2 DRAIN SUMP, 11"W X 12" D X 7'-0"L, WITH 1" DEEP ALUMINUM GRATING COVER.
- 3 KNOCKOUTS IN VAULT WALLS AT BOTH ENDS OF SUMP, TO BE OPENED PRIOR TO COMPLETION OF VAULT INSTALLATION.
- 4 0.5 CUBIC YARD OF FREE DRAINING GRAVEL AT EACH KNOCKOUT. WRAP GRAVEL IN FILTER FABRIC.
- 5 4" GALVANIZED STEEL VENT WITH 24 MESH STAINLESS STEEL SCREEN ATTACHED TO OUTSIDE GOOSENECK AND VALMATIC FROSTSAFE® TWO-WAY AIR DAMPER ON INSIDE OPENING.
- 6 HINGED ALUMINUM ACCESS COVER, 36" X 36" SINGLE LEAF, SPRING ASSIST HOLD-OPEN ARM, AND SLAM LOCK HANDLE WITH PADLOCK HASP, RATED FOR 300 PSF LIVE LOAD.
- 7 ALUMINUM LADDER, 24" WIDE, 12" RUNG SPACING, KNURLED RUNGS, WITH TELESCOPING SAFETY POST, BRACKETS, FOR WALL AND FLOOR MOUNTING.
- 8 PRECAST KEYWAY INSTALLED WITH PREFORMED MASTIC SEALANT. GROUT SEAL INTERIOR AND EXTERIOR OF JOINTS PRIOR TO BACKFILLING.
- 9 10" DIP 45 DEGREE BEND, MJ, RESTRAINED.
- 10 10" PVC WATERLINE.
- 11 10" X 6" DIP REDUCER, MJ, RESTRAINED.
- 12 FABRICATED WELDED STEEL PIPING, AWWA C200, SCHEDULE 40, WITH FUSION BONDED NSF/ANSI 61 CERTIFIED EPOXY COATING PER AWWA C213.
- 13 NON-SHRINK GROUT.
- 14 GROOVED AND SHOULDERED JOINT, FLEX STYLE.
- 15 2" COMBINATION AIR VALVE WITH STAINLESS STEEL BALL ISOLATION VALVE AND 2" PVC DRAIN PIPE TO FLOOR, THREAD-O-LET PIPE TAP.
- 16 2" VACUUM RELIEF VALVE WITH STAINLESS STEEL BALL ISOLATION VALVE AND 2" PVC DRAIN PIPE TO FLOOR, THREAD-O-LET PIPE TAP.
- 17 6" GATE VALVE, FL, NRS, WITH HANDWHEEL.
- 18 6" H STYLE STRAINER, CLA-VAL MODEL X43H, WITH FUSION BONDED NSF/ANSI 61 CERTIFIED EPOXY COATING, OR ENGINEER REVIEWED EQUIVALENT.
- 19 6" DISMANTLING JOINT, CLASS D FLANGE, FUSION BONDED NSF/ANSI 61 CERTIFIED EPOXY COATING.
- 20 6" PRESSURE REDUCING VALVE WITH PRESSURE SUSTAINING FEATURE, FL.
- 21 2" LOW FLOW PRESSURE REDUCING VALVE WITH PRESSURE SUSTAINING FEATURE, FL.
- 22 6" PRESSURE RELIEF VALVE, FL.
- 23 2" GATE VALVE, CAST IRON, FL, NRS, WITH HANDWHEEL, FUSION BONDED NSF/ANSI 61 CERTIFIED EPOXY COATING.
- 24 2" WYE STRAINER, CAST IRON, FL, FUSION BONDED NSF/ANSI 61 CERTIFIED EPOXY COATING.
- 25 ADJUSTABLE GALVANIZED PIPE SUPPORT WITH 1/2" GROUT PAD.
- 26 2" TYPE 304 WELDED STAINLESS STEEL PIPE SCHEDULE 10.
- 27 4" PRESSURE GAUGE ASSEMBLY, 0-200 PSI, BACK MOUNT INSTALLED WITH DIAL FACING UP, THREAD-O-LET PIPE TAP.
- 28 4" PRESSURE GAUGE ASSEMBLY, 0-60 PSI, BACK MOUNT INSTALLED WITH DIAL FACING UP, THREAD-O-LET PIPE TAP.
- 29 3/4" SAMPLING BIBB, SMOOTH SPIGOT FOR COLLECTING BACTERIOLOGICAL SAMPLES, THREAD-O-LET PIPE TAP.
- 30 6" DIP 90 DEGREE BEND, MJ, RESTRAINED.

MOLZENCORBIN

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REVISION		
SYMBOL	DATE:	BY:

SANTA FE COUNTY  
UTILITIES DIVISION 424 NM 599, SANTA FE, NM 87507

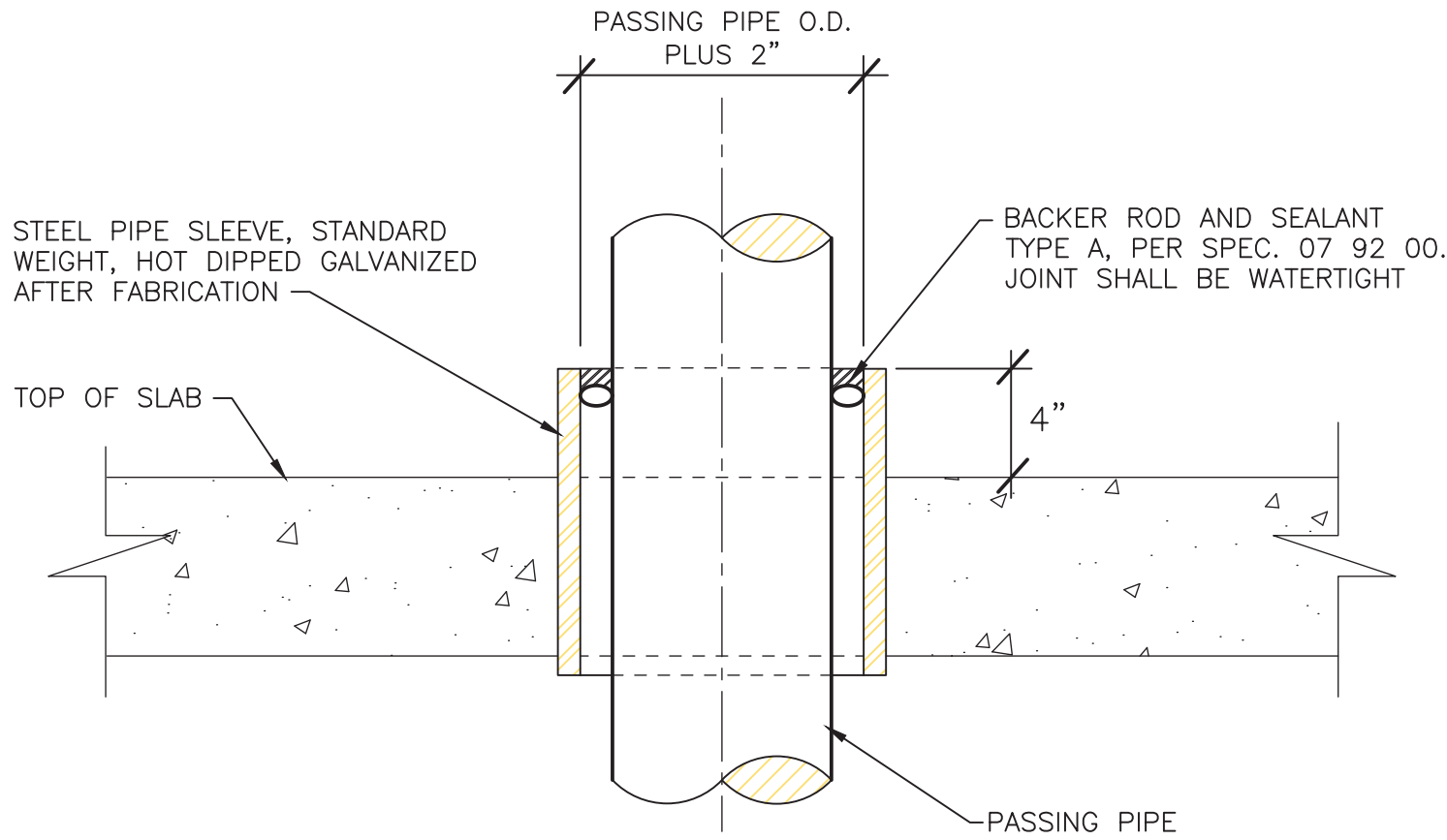
PROJECT NAME:  
CANONCITO-ELDORADO WATERLINE

PVR STATION DETAILS

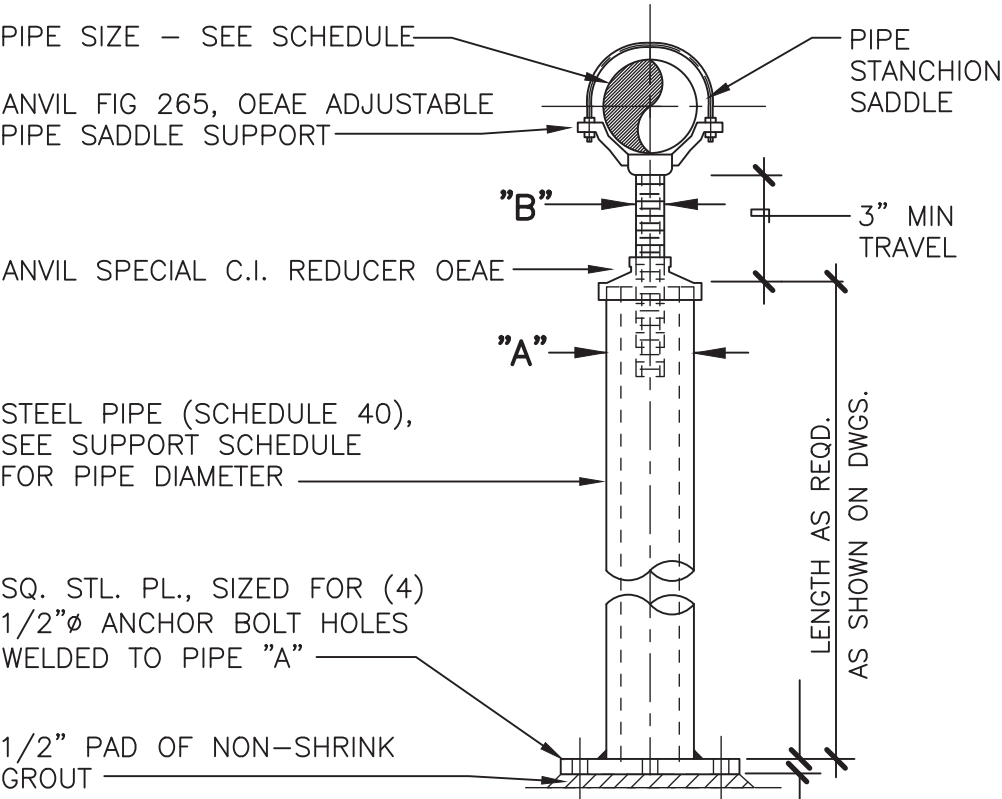
APPROVED BY: REVIEWED BY: S. MORROW  
DATE: FEBRUARY 2020 SHEET :  
DRAWN BY: C. J. SPINELLO W-505





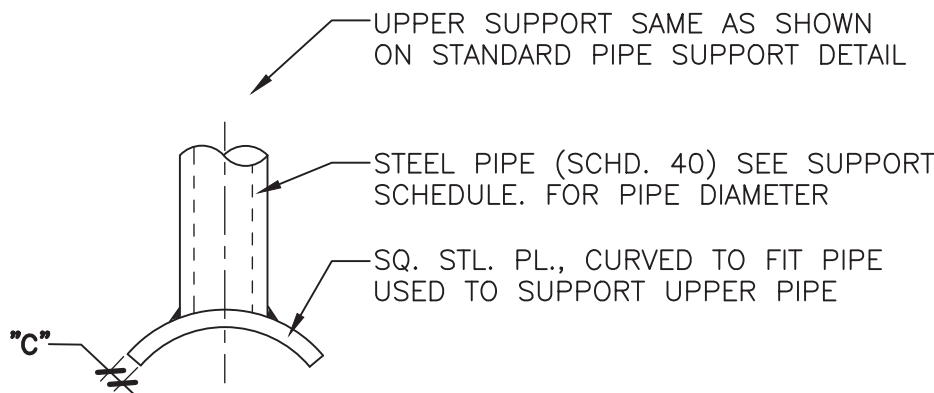


**SLAB PIPE PENETRATION**  
SCALE: NONE



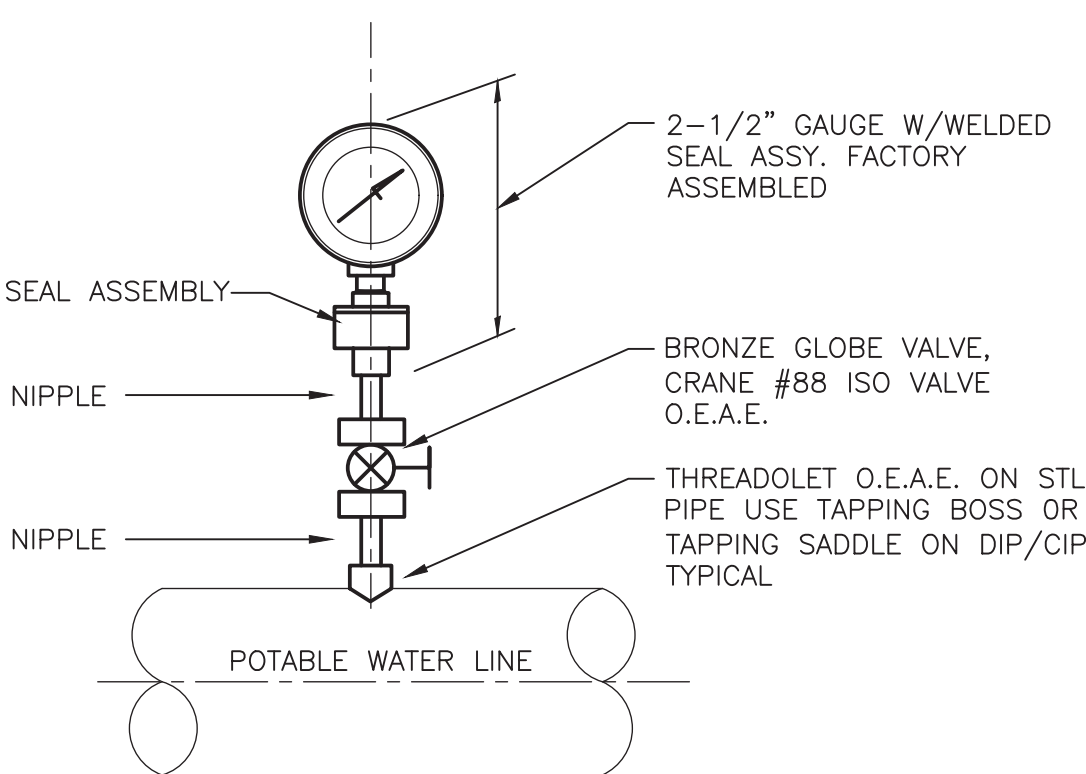
NOTE: UNIT TO BE HOT DIPPED GALVANIZED AFTER FABRICATION.

SUPPORT SCHEDULE:		
PIPE SIZE	"B" THRD. PIPE NIPPLE	"C" BASE PLATE
4" OR LESS	1-1/2"	3/8"
4" TO 12"	2-1/2"	3/8"
14" TO 16"	3"	1/2"
18" TO 20"	3-1/2"	1/2"
24" TO 36"	4"	1/2"

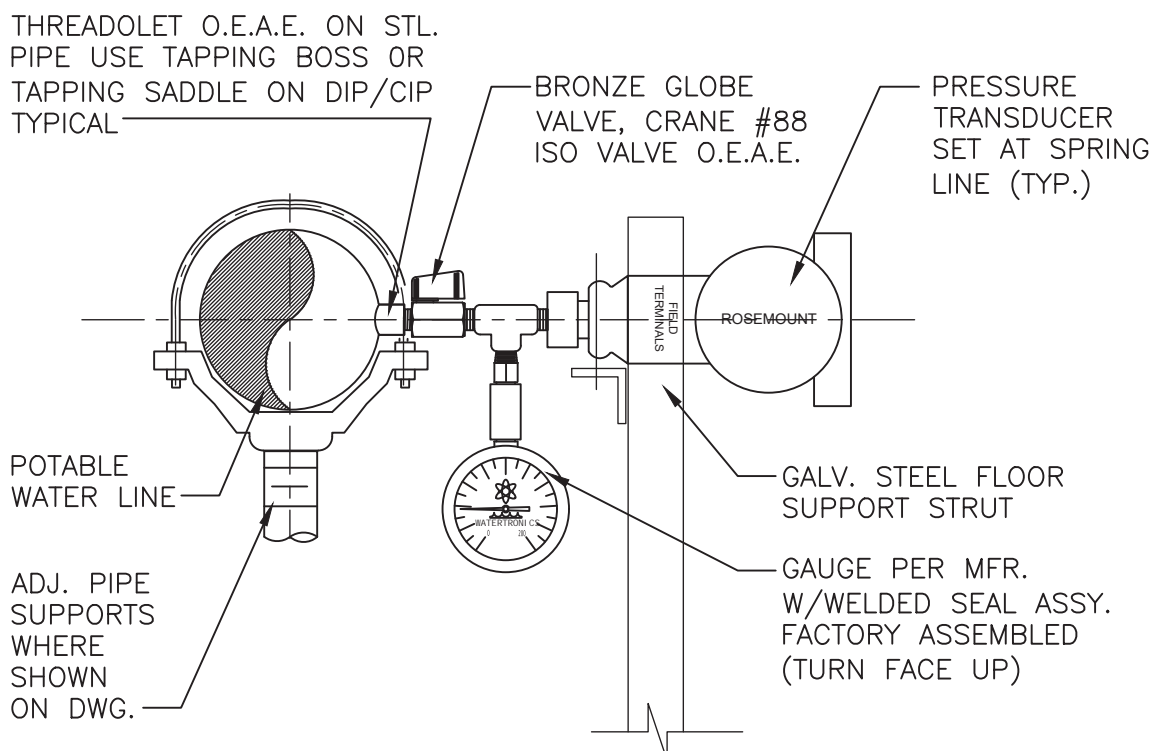


NOTE: BOTTOM PLATE MODIFIED FOR SPECIAL LOCATIONS - SEE DWGS. FOR "MODIFIED SUPPORT"

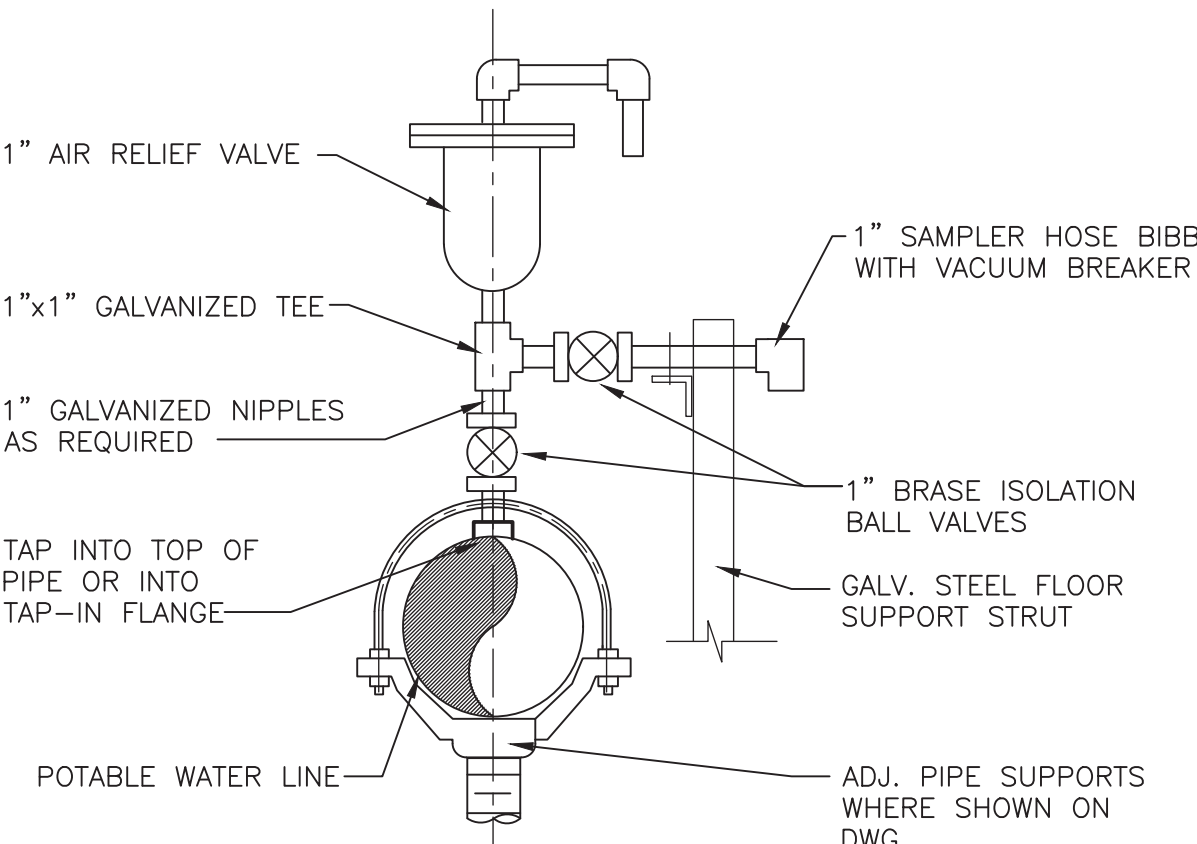
**ADJUSTABLE STANDARD PIPE SUPPORT DETAIL**  
SCALE: NONE



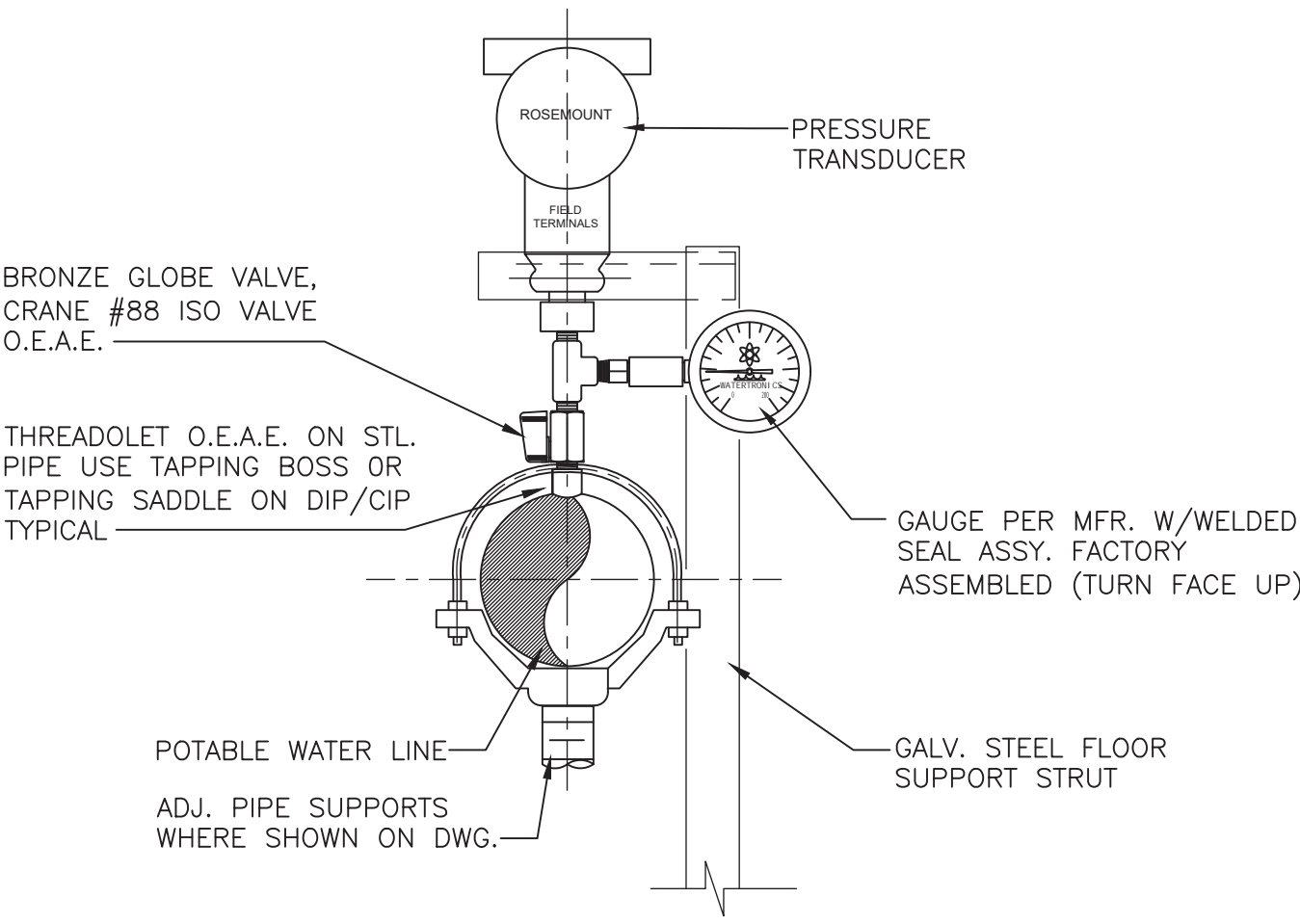
**POTABLE WATER TYPICAL PRESSURE GAUGE DETAIL**  
SCALE: NONE



**POTABLE WATER TYPICAL PRESSURE GAUGE DETAIL - (HORIZONTAL) W/ PRESSURE TRANSDUCER**  
SCALE: NONE



**SAMPLE TAP FIGURE**  
NO SCALE



**POTABLE WATER TYPICAL PRESSURE GAUGE DETAIL - (VERTICAL) W/ PRESSURE TRANSDUCER**  
SCALE: NONE

**MOLZENCORBIN**

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*Kenneth R. Miller*  
KENNETH R. MILLER  
12548  
NEW MEXICO  
REGISTERED PROFESSIONAL ENGINEER  
2-18-2020

REVISION		
SYMBOL	DATE:	BY:

**SANTA FE COUNTY**  
UTILITIES DIVISION 424 NM 599, SANTA FE, NM 87507

**SANTA FE COUNTY**  
PROJECT NAME:  
CANONCITO-ELDORADO WATERLINE

**STANDARD DETAILS**

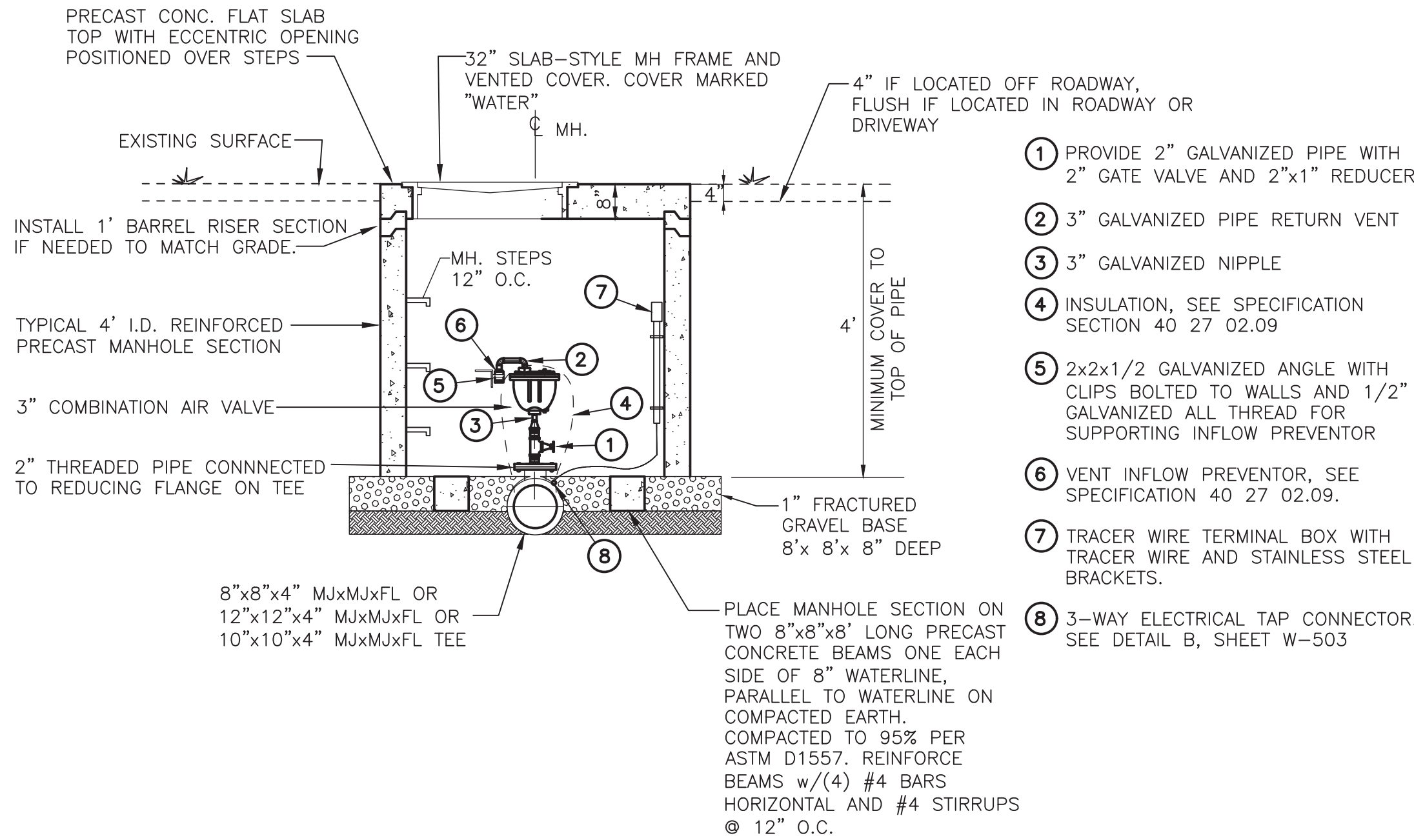
APPROVED BY: REVIEWED BY: S. MORROW  
DATE: FEBRUARY 2020 SHEET :  
DRAWN BY: C. SPINELLO W-506



MOLZENCORBIN

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Albuquerque, New Mexico 87106  
505 242 5700 office  
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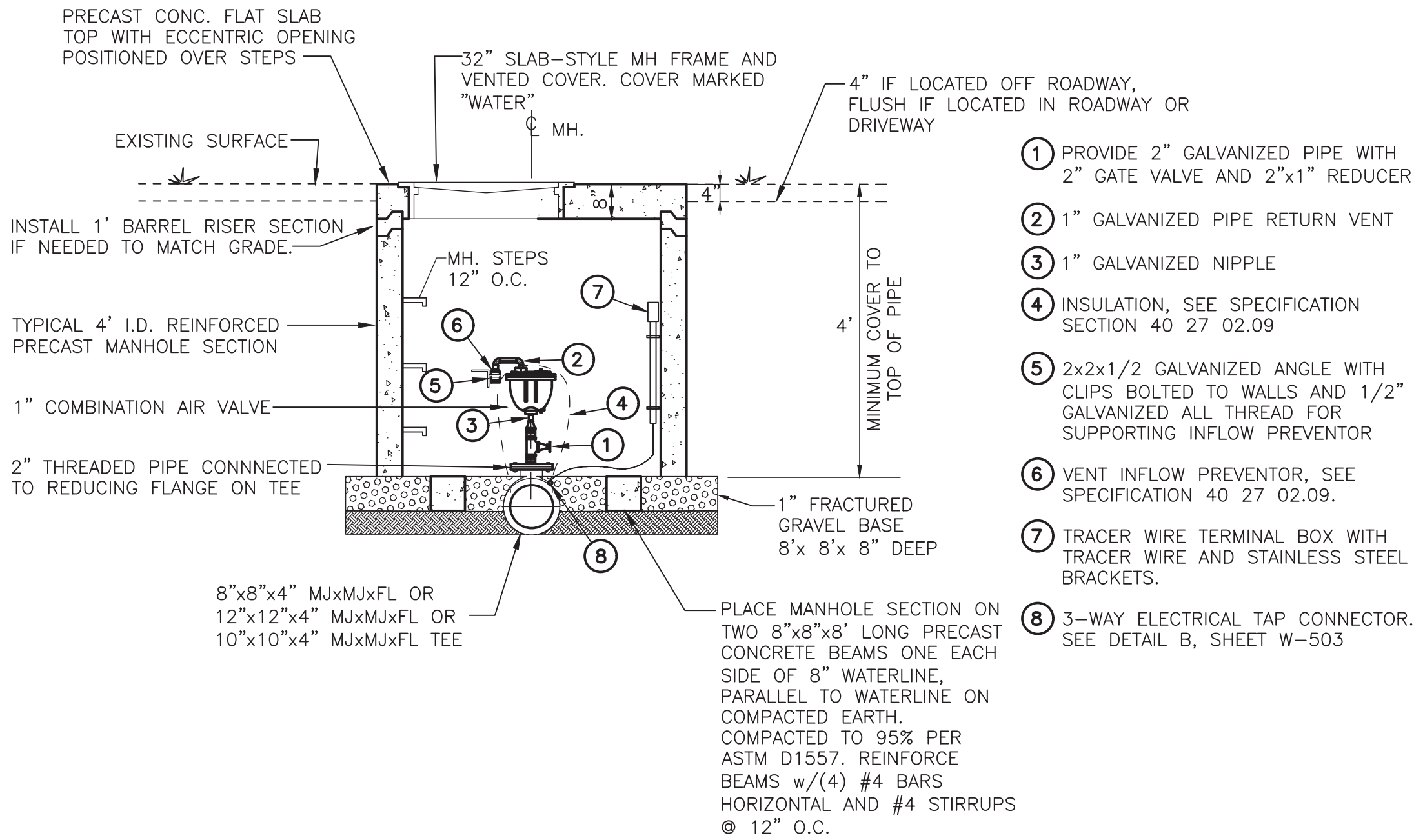


WATER COMBINATION AIR VALVE STATION

3" MODEL - SINGLE BODY

SCALE: NONE

NOTE:  
SEE SPECS.



WATER COMBINATION AIR VALVE STATION

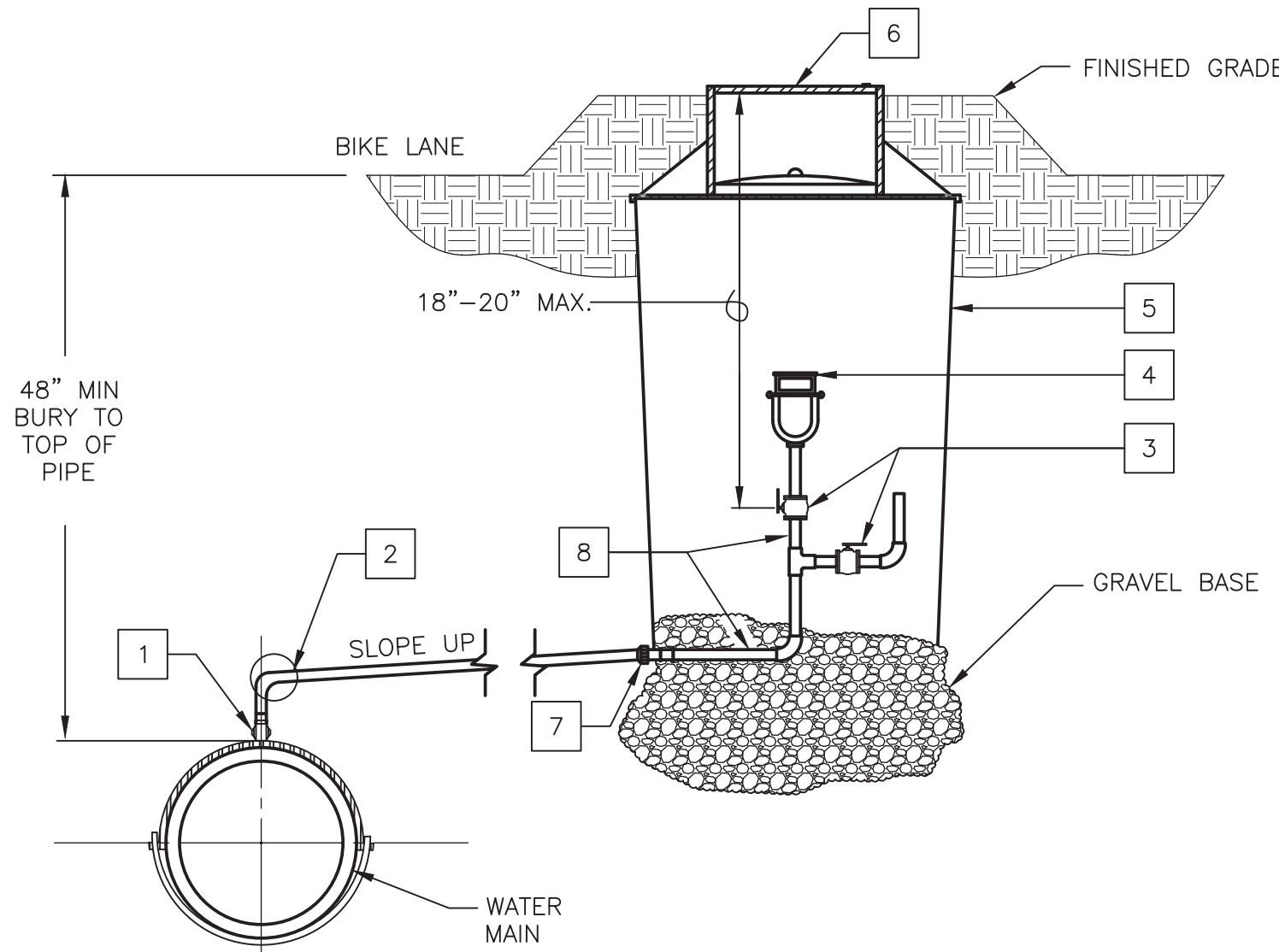
1" MODEL - SINGLE BODY

SCALE: NONE

NOTE:  
SEE SPECS.

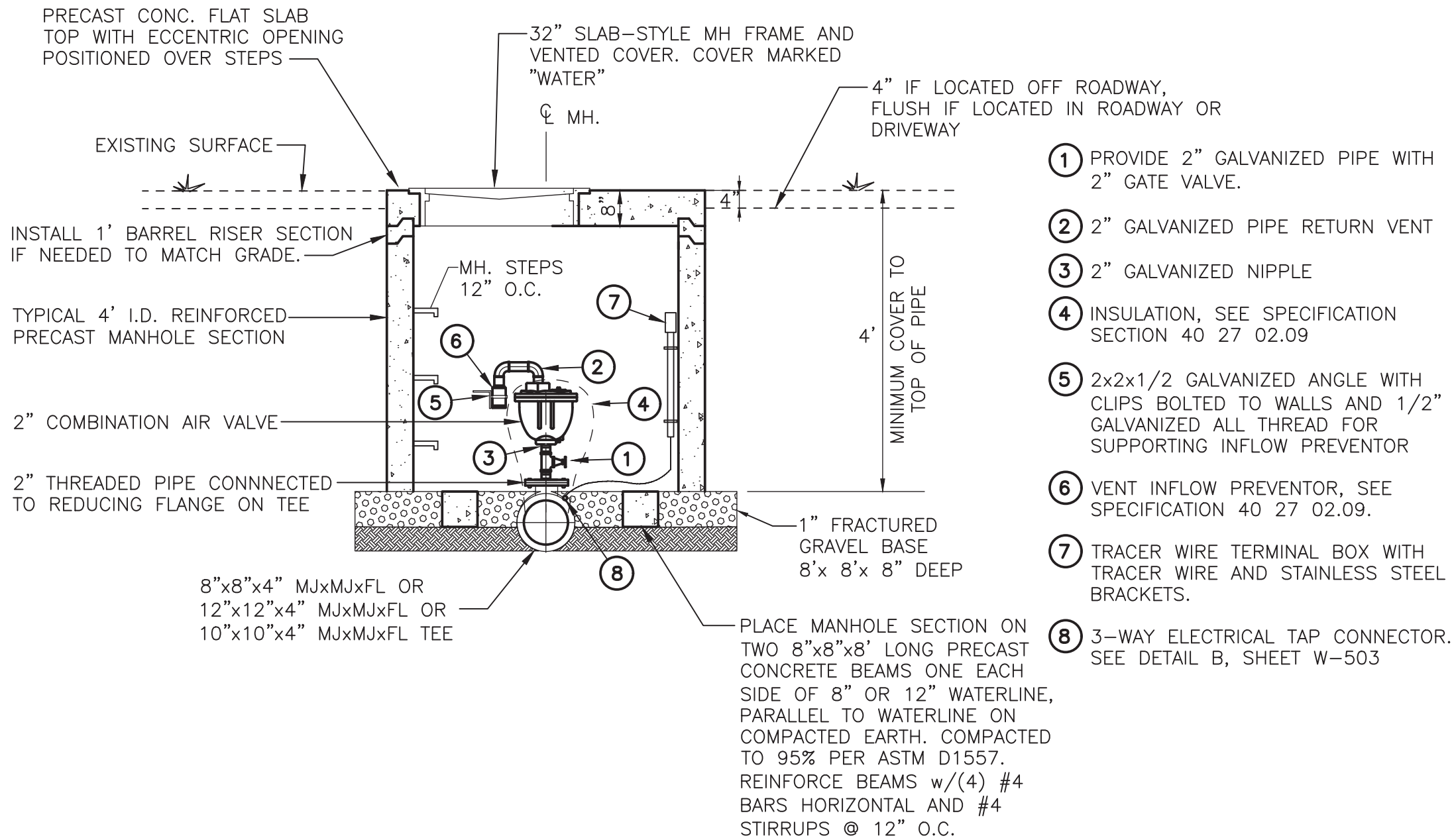
1", 2", AND 3" COMBINATION AIR VALVE DETAIL	
ITEM	ITEM
1. 1", 2", OR 3" TAPPING SADDLE	6. 36" MONITOR RING WITH 20" COVER
2. 1", 2", OR 3" CORPORATION COCK (A.W.W.A TAPERED THREAD)	7. 1", 2", OR 3" ADAPTER COUPLING
3. 1", 2", OR 3" TYPE "K" COPPER	8. 1", 2", OR 3" THREADED BRASS PIPE
4. 1", 2", OR 3" BRASS BALL VALVE	
5. 1", 2", OR 3" NPT COMBINATION AIR VALVE & PRESSURE UNIT: CRESPIN C10 OR C20 WITH PROTECT-TOP	
6. 36"x36" - 20# POLYETHYLENE METER BOX	

NOTE: SEE APPROVED CONSTRUCTION PLANS FOR SERVICE LOCATION DETAIL FOR PLACEMENT DIMENSIONS AND DIRECTIONS.



1", 2", AND 3" COMBINATION AIR VALVE DETAIL

NOT TO SCALE



WATER COMBINATION AIR VALVE STATION

2" MODEL - SINGLE BODY

SCALE: NONE

NOTE:  
SEE SPECS.

Kenneth R. Muller  
12548  
NEW MEXICO  
REGISTERED PROFESSIONAL ENGINEER  
2-18-2020

REVISION		
SYMBOL	DATE:	BY:

SANTA FE COUNTY  
UTILITIES DIVISION 424 NM 599, SANTA FE, NM 87507

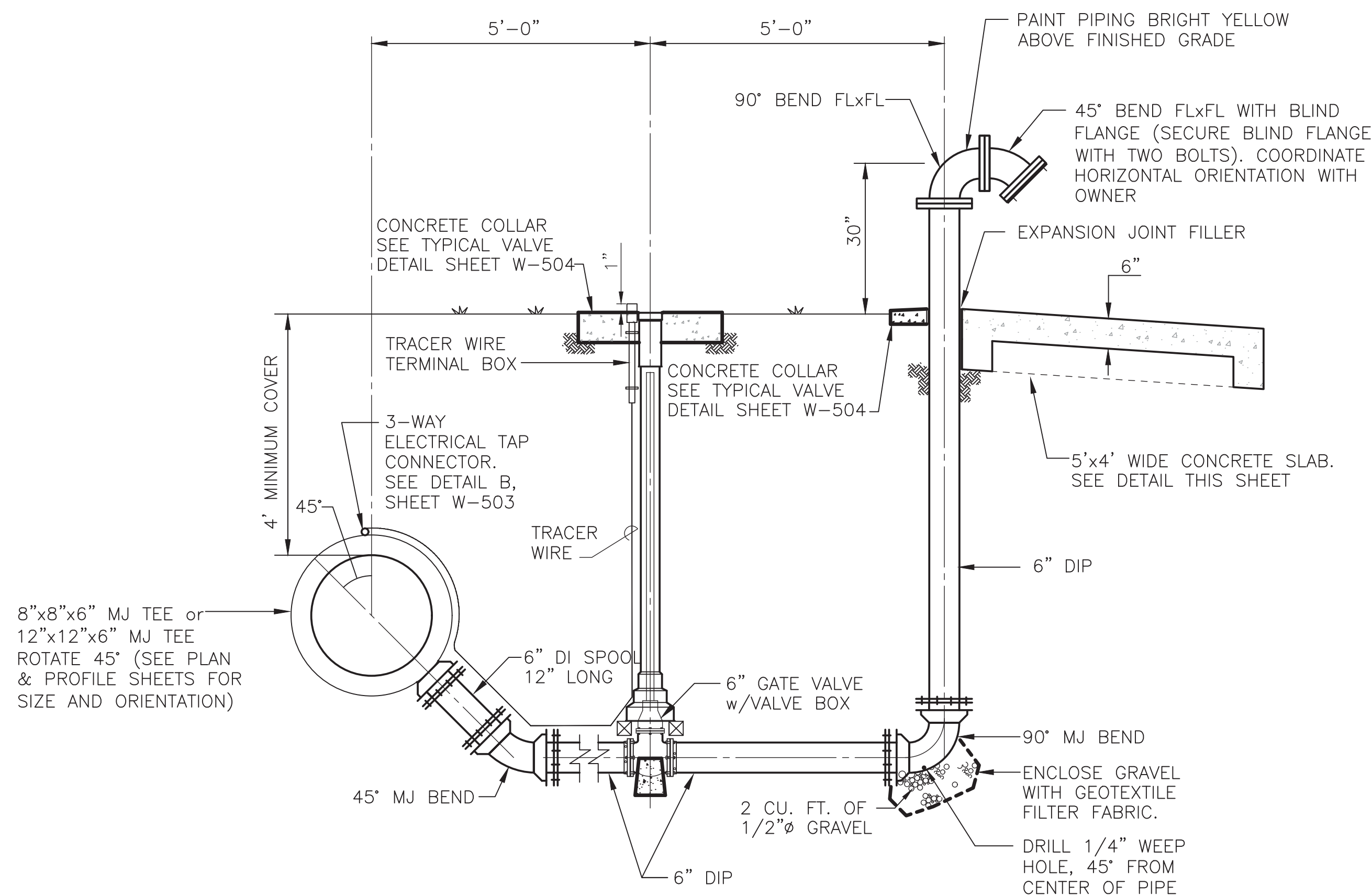
PROJECT NAME:  
CANONCITO-ELDORADO WATERLINE

COMBINATION AIR VALVE DETAILS

APPROVED BY: REVIEWED BY: S. MORROW  
DATE: FEBRUARY 2020 SHEET :  
DRAWN BY: J. MARTINEZ W-507

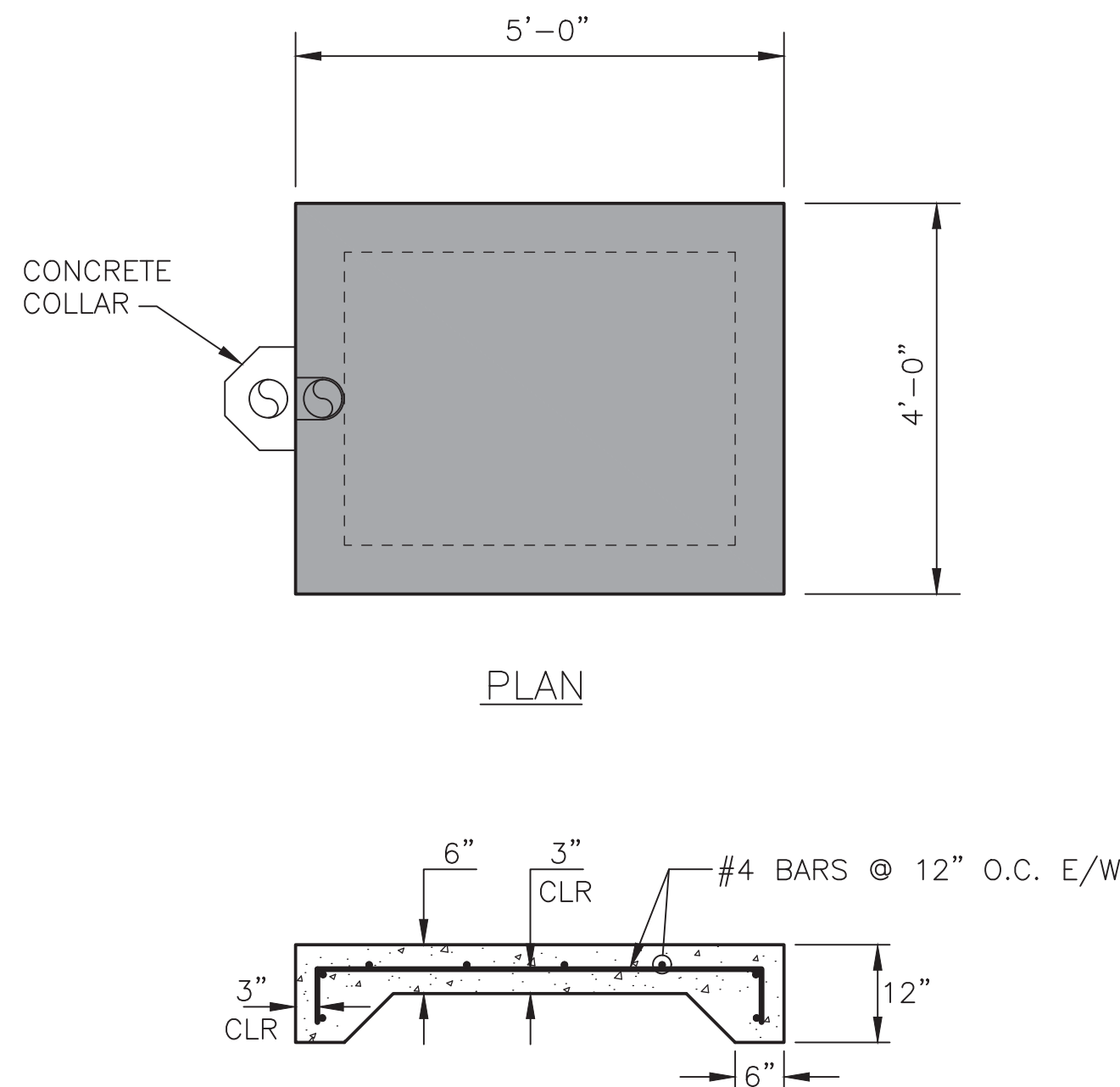


Feb 19, 2020 -- 6:47am  
I:\SANTA FE COUNTY\SG\184-11 Canoncito Eldorado Waterline\DWG\WSF-508.dwg

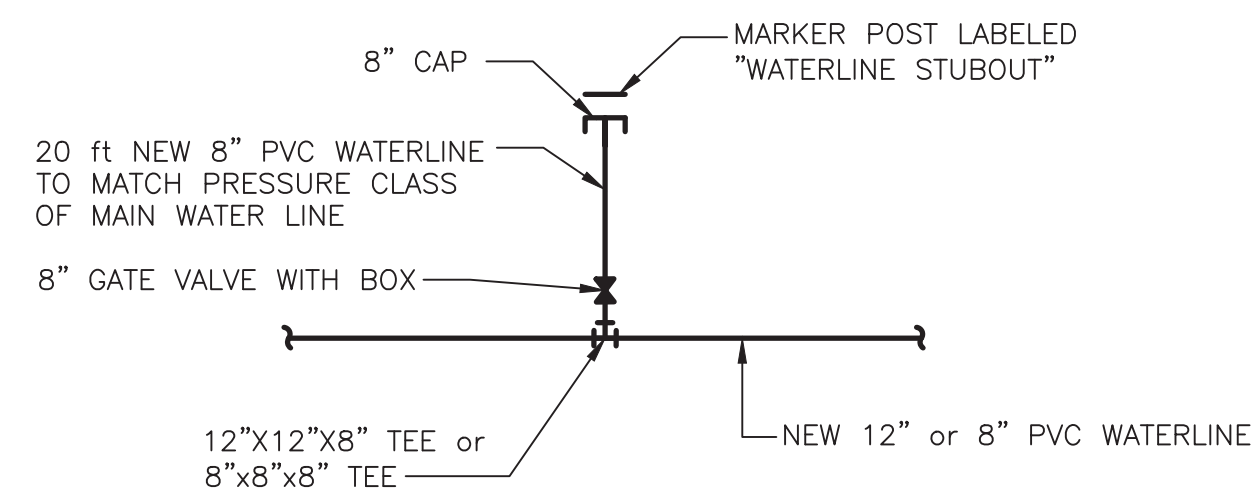


NOTE:  
RESTRAIN ALL FITTINGS AND VALVE  
WITH MEGALUG JOINT RESTRAINT DEVICES.

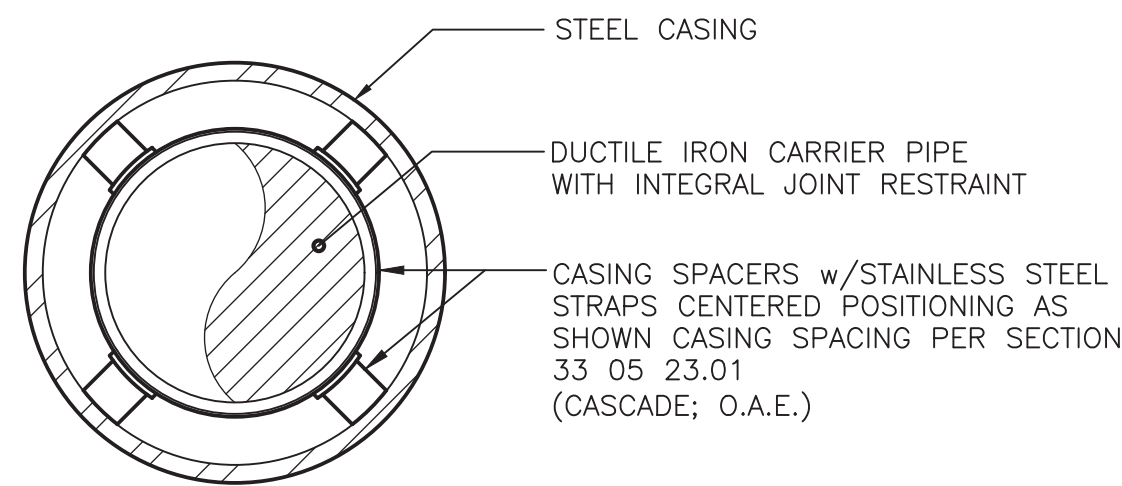
**FLUSHING PORT DETAIL**  
NO SCALE



**CONCRETE SLAB**  
NO SCALE



**CONNECTION DETAIL 1**  
SCALE: NONE  
REFER TO PLAN AND PROFILE SHEETS FOR WATERLINE  
SIZE AND ORIENTATION. RESTRAIN ALL JOINTS

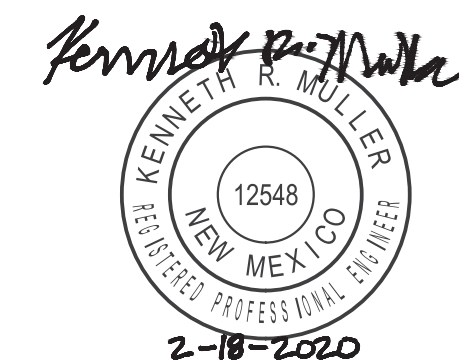


**CASING SPACER DETAIL FOR DUCTILE IRON CARRIER PIPE**  
SCALE: NONE  
REFER TO SECTION 33 05 23.01 - JACKING AND BORING FOR REQUIREMENTS

## MOLZENCORBIN

2701 Miles Road SE  
Albuquerque, New Mexico 87106  
505 242 5700 office  
505 242 0673 fax  
MolzenCorbin.com

NOTICE OF EXTENDED PAYMENT PROVISION:  
THIS CONTRACT ALLOWS THE OWNER TO MAKE  
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OF AN UNDISPUTED REQUEST FOR PAYMENT



REVISION		
SYMBOL	DATE:	BY:

**SANTA FE COUNTY**  
UTILITIES DIVISION 424 NM 599, SANTA FE, NM 87507

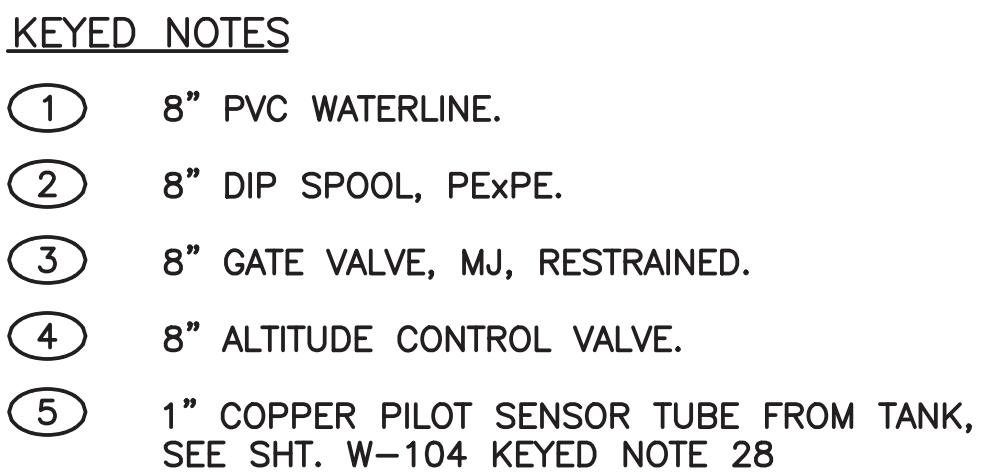
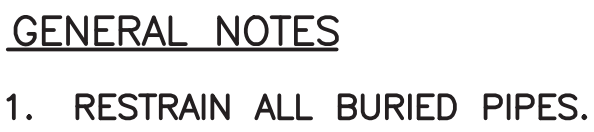
**SANTA FE COUNTY**  
PROJECT NAME:  
CANONCITO-ELDORADO WATERLINE

STANDARD WATERLINE DETAILS V

APPROVED BY: REVIEWED BY: S. MORROW  
DATE: FEBRUARY 2020  
DRAWN BY: J. MARTINEZ  
SHEET :  
W-508



NOTICE OF EXTENDED PAYMENT PROVISION:  
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*Kenneth R. Muller*



2-18-2020

[illegible]

**SANTA FE COUNTY**  
UTILITIES DIVISION 424 NM 599, SANTA FE, NM 87507

PROJECT NAME:  
CANONCITO-ELDORADO WATERLINE



### ALTITUDE VALVE VAULT DETAIL

APPROVED BY:		REVIEWED BY: S. MORROW	
DATE: FEBRUARY 2020		SHEET :	
DRAWN BY: P. DE LA ROSA		W-509	



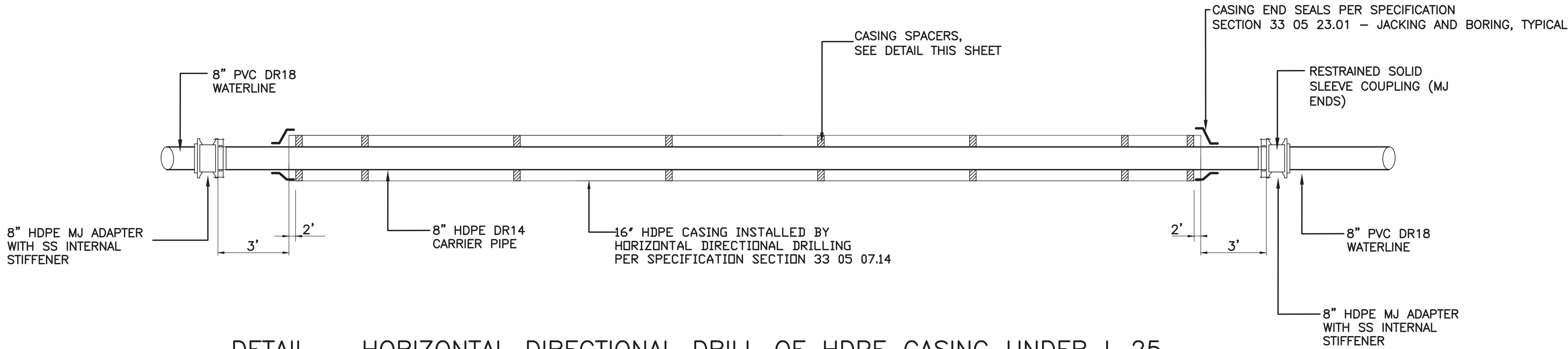




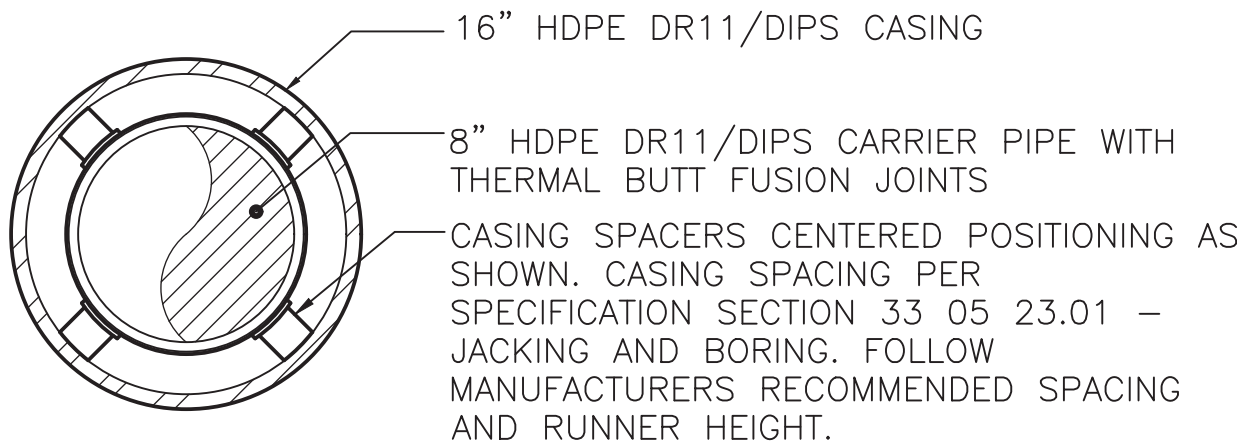
MOLZENCORBIN

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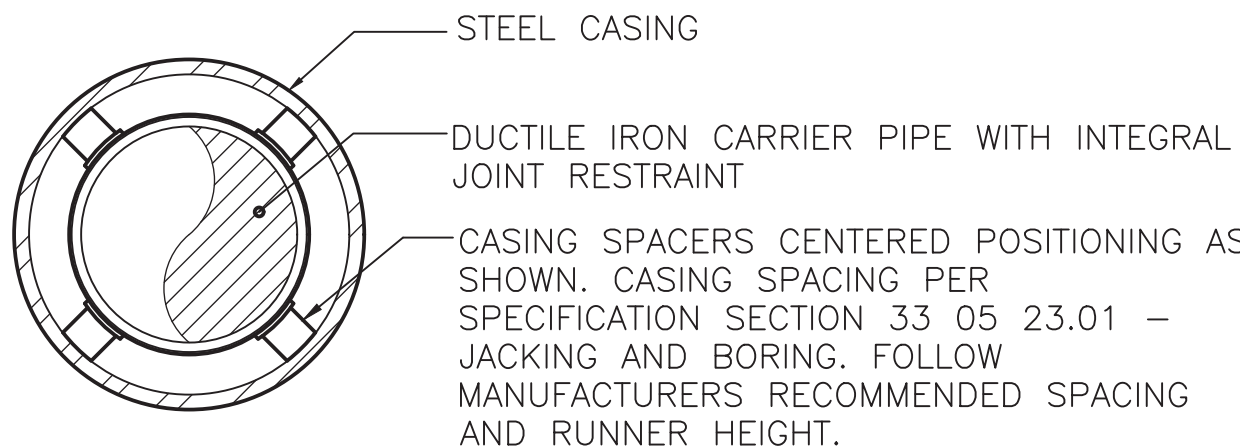


DETAIL – HORIZONTAL DIRECTIONAL DRILL OF HDPE CASING UNDER I-25  
SCALE: NONE  
SEE SHEET W-222 FOR HDD LOCATIONS



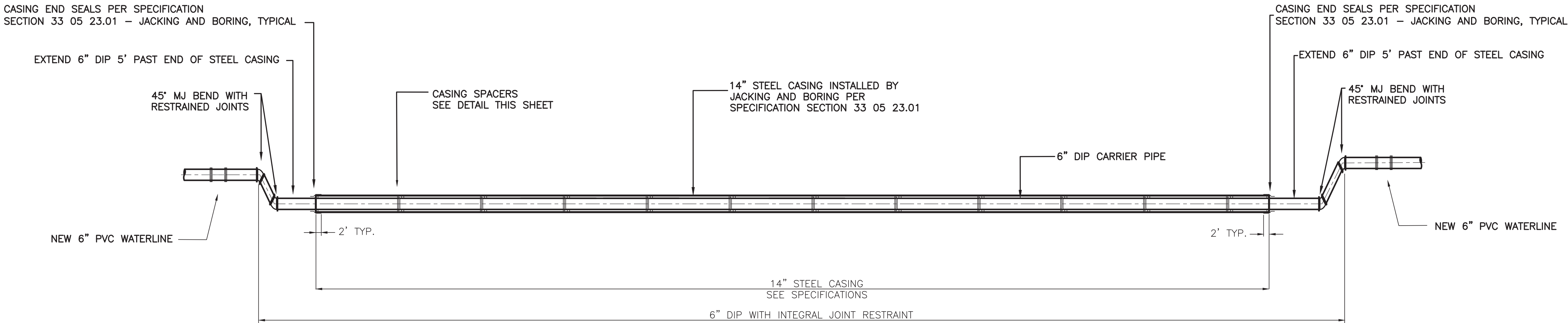
CASING SPACER DETAIL FOR HDPE CARRIER PIPE

SCALE: NONE  
REFER TO SECTION 33 05 23.01 – JACKING AND BORING, FOR CASING SPACER AND END SEAL REQUIREMENTS.



CASING SPACER DETAIL FOR DUCTILE IRON CARRIER PIPE

SCALE: NONE  
REFER TO SECTION 33 05 23.01 – JACKING AND BORING, FOR CASING SPACER AND END SEAL REQUIREMENTS



JACK AND BORE CROSSING STANDARD DETAIL



REVISION		
SYMBOL	DATE:	BY:

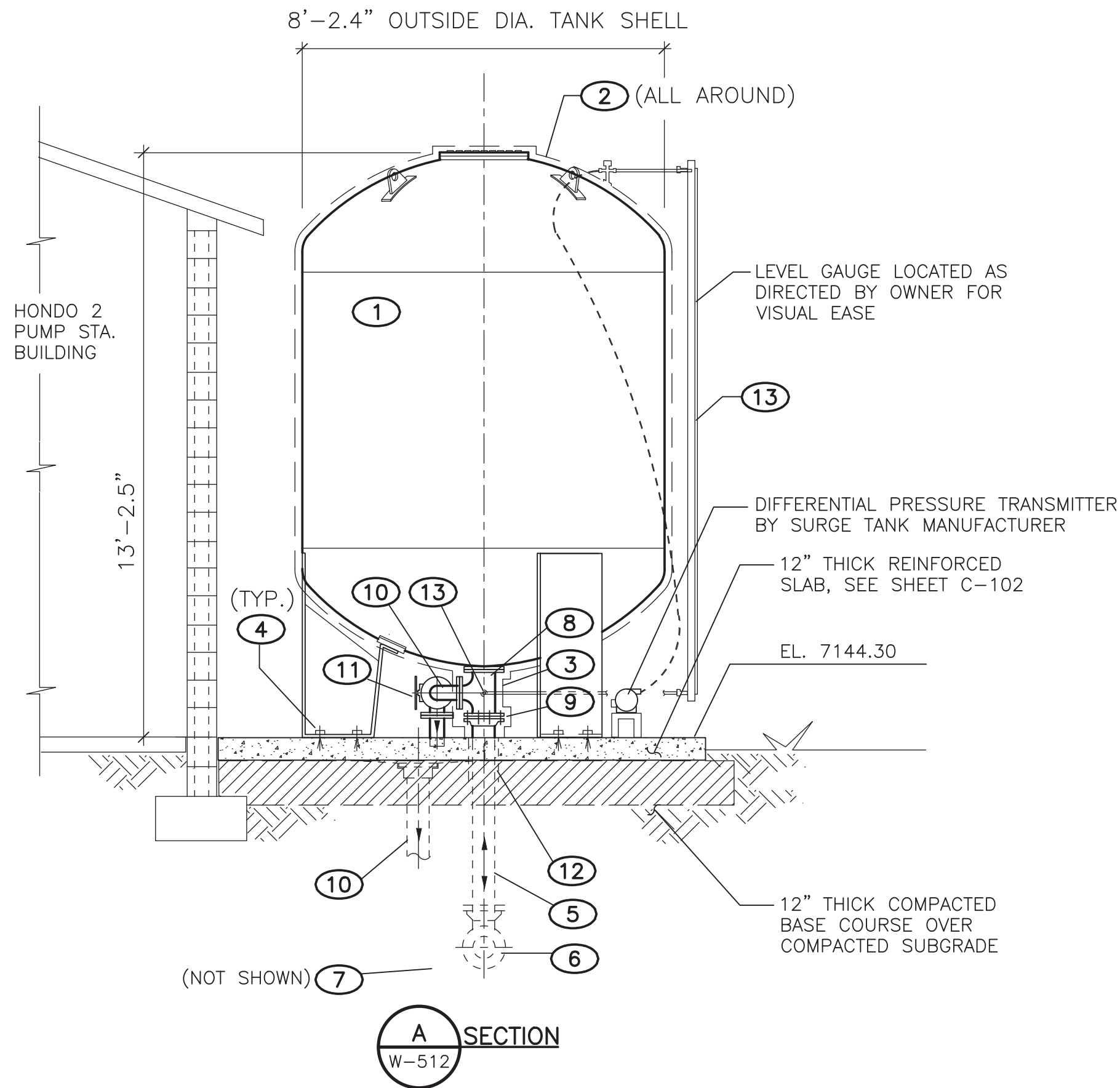
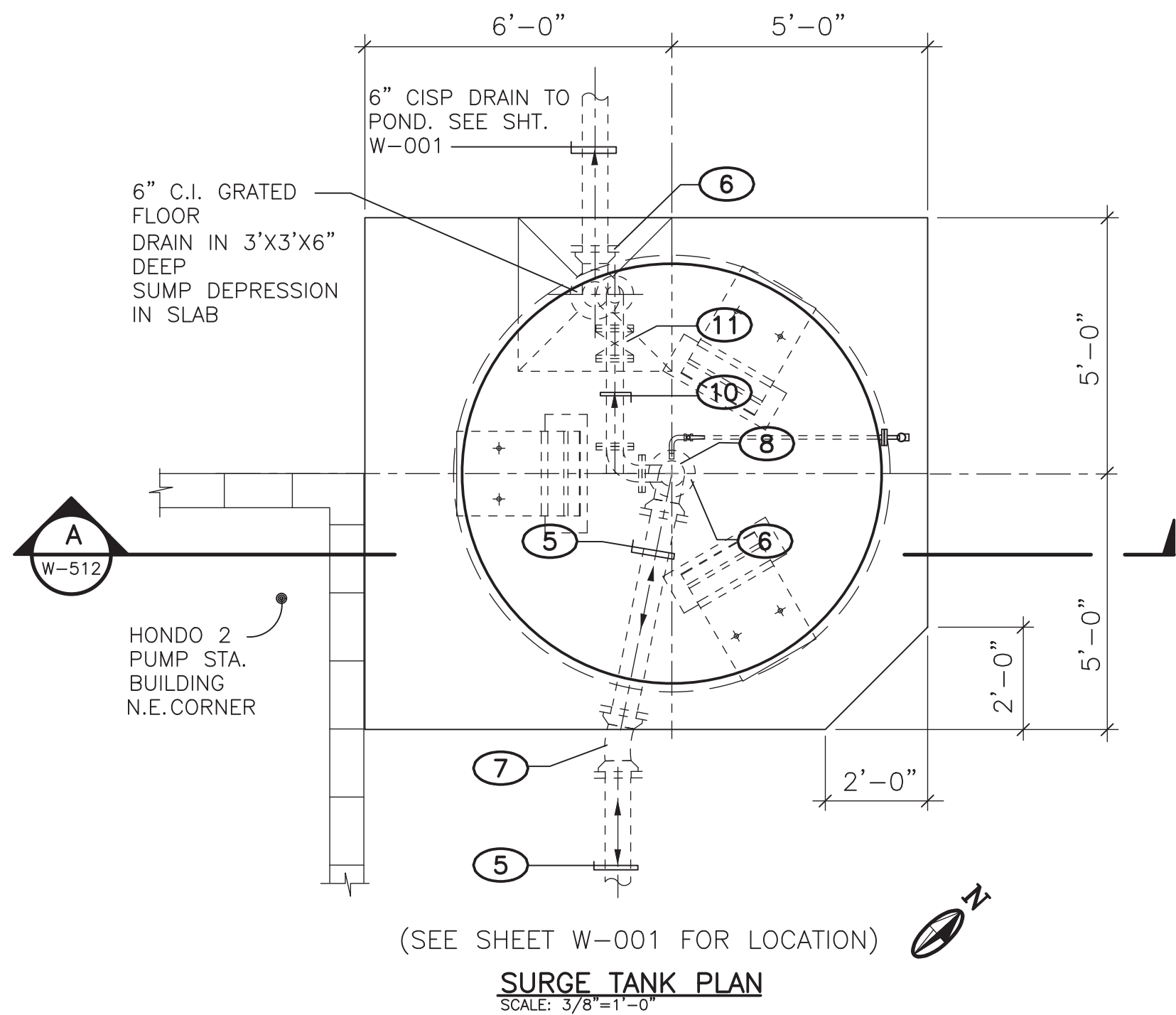
SANTA FE COUNTY  
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PROJECT NAME:  
CANONCITO-ELDORADO WATERLINE

HORIZONTAL DIRECTIONAL DRILL AND  
JACK AND BORE STANDARD DETAIL

APPROVED BY: REVIEWED BY: S. MORROW  
DATE: FEBRUARY 2020 SHEET :  
DRAWN BY: A. TRUJILLO W-511





#### GENERAL NOTES

1. FREEZE PROTECT ALL EXPOSED TANK PIPING.

#### KEYED NOTES:

- 1 BLADDER-STYLE SURGE TANK, 3434 GALLONS.
- 2 TANK HEAT TRACING BLANKETS WITH 2" OF INSULATION AND ALUMINUM JACKET.
- 3 PIPE HEAT TRACING, 2" INSULATION AND ALUMINUM JACKET.
- 4 S.S. ANCHOR BOLTS AS RECOMMENDED BY SURGE TANK MANUFACTURER.
- 5 6" DIP
- 6 90° 6" DIP BEND, MJ, RESTRAINED.
- 7 11.25' 6" DIP BEND, MJ, RESTRAINED.
- 8 6" STEEL TEE WITH 4" DRAIN BRANCH AND LEVEL GAUGE TAP, FL, ANSI CLASS 150 LB.
- 9 6" FLANGED COUPLING ADAPTER.
- 10 4" DIP FLANGED DRAIN WITH 90° BENDS AT OUTLET AND TANK TAP, AND ADJUSTABLE GALVANIZED PIPE SUPPORT.
- 11 4" FLANGED GATE VALVE WITH HANDWHEEL OPERATOR.
- 12 PIPE SLAB PENETRATION, SEE DETAIL SHEET W-506.
- 13 LEVEL GAUGE ASSEMBLY AND DIFFERENTIAL PRESSURE TRANSMITTER, INCLUDING PIPING, TUBING, HEAT TRACE AND BLANKETS, INSULATION, JACKETS, SOLENOID VALVES, CONTROLS AND CONTROL PANEL BY SURGE TANK SUPPLIER. SUPPLIER SHALL COORDINATE INSTALLATION OF ELECTRICAL ITEMS WITH CONTRACTOR.

#### MOLZENCORBIN

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*Kenneth R. Miller*  
KENNETH R. MILLER  
12548  
NEW MEXICO  
REGISTERED PROFESSIONAL ENGINEER  
2-18-2020

REVISION		
SYMBOL	DATE:	BY:

**SANTA FE COUNTY**  
UTILITIES DIVISION 424 NM 599, SANTA FE, NM 87507

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PROJECT NAME:  
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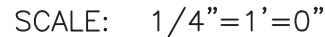
HONDO 2 PUMP STA.  
SURGE TANK

APPROVED BY: S. MORROW  
DATE: FEBRUARY 2020  
DRAWN BY: C. SPINELLO

REVIEWED BY: S. MORROW  
SHEET :  
W-512







A. CONTRACTORS AND SUB-CONTRACTORS SHALL CAREFULLY REVIEW THE CONSTRUCTION DOCUMENTS. INFORMATION REGARDING THE COMPLETE WORK IS DISPERSED THROUGHOUT THE DOCUMENT SET AND CANNOT BE ACCURATELY DETERMINED WITHOUT REFERENCE TO THE COMPLETE DOCUMENT SET.

B. COORDINATE WITH THE WORK OF OTHER TRADES, EQUIPMENT FURNISHED BY OTHERS, REQUIREMENTS OF THE OWNER, AND WITH THE CONSTRAINTS OF THE CONDITIONS AT THE PROJECT SITE.

C. DRAWINGS FOR HVAC ARE DIAGRAMMATIC, SHOWING THE GENERAL LOCATION, TYPE, LAYOUT, AND EQUIPMENT REQUIRED. PROVIDE, CONNECTIONS, ACCESSORIES, OFFSETS AND MATERIALS NECESSARY FOR A COMPLETE FUNCTIONAL SYSTEM INSTALLATION.

D. EXACT LOCATION OF ALL MECHANICAL ITEMS SHALL BE COORDINATED WITH ARCHITECTURAL PLANS. WHERE INSTALLATION CONFLICTS, FINAL LOCATIONS SHALL BE APPROVED AND OBTAINED FROM ENGINEER.

E. ALL JOINTS AND SEAMS ON SUPPLY, OUTSIDE AIR, RETURN AND EXHAUST DUCTS, ROUND OR RECTANGULAR, MUST BE SEALED AIR TIGHT PER SMACNA STANDARDS. CONSTRUCT ALL DUCTS, CASINGS, PLENUMS, ETC., FROM GALVANIZED STEEL SHEETS. SHEETS SHALL BE FREE OF BLISTERS, SILVERS, PITS, AND IMPERFECTLY GALVANIZED SPOTS. REINFORCING ANGLES AND BARS, AND DUCT SUPPORT MATERIALS SHALL BE GALVANIZED STEEL. DUCT CONSTRUCTION AND GAUGES SHALL BE PER SMACNA STANDARDS.

F. COORDINATE WITH OTHER TRADES TO AVOID CONFLICTS AND MAINTAIN SERVICEABILITY TO DAMPERS AND EQUIPMENT.

G. DUCTWORK OR PIPE PENETRATIONS THRU ASSEMBLIES SHALL BE CAULKED AIRTIGHT BY MEANS OF A APPROVED CAULKING MATERIAL.

H. SUPPORTS FROM ROOF DECK ARE NOT PERMITTED. ALL EQUIPMENT SHALL BE RIGIDLY SUPPORTED FROM THE BUILDING STRUCTURE BY MEANS OF HANGER ASSEMBLIES PROPERLY SELECTED AND SIZED FOR THE APPLICATION IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.

I. TEST AND BALANCE EXHAUST SYSTEM TO AIR FLOW INDICATED ON PLANS. AIR OUTLETS ARE REQUIRED TO BE ADJUSTED WITHIN 5% OF THE DESIGN. AIR HANDLING EQUIPMENT IS REQUIRED TO BE ADJUSTED WITHIN 5%. TAB AGENCY SHALL PERFORM THE WORK IN ACCORDANCE WITH THE LATEST EDITION OF AABC OR NEBB PROCEDURAL STANDARDS FOR TAB OF ENVIRONMENTAL SYSTEMS.

J. IDENTIFY EXHAUST FAN WITH NAMEPLATE. IDENTIFY WITH AIR HANDLING UNIT IDENTIFICATION NUMBER AND AREA SERVED.

A. SEWER AND VENT PIPING BELOW GRADE SHALL BE ONE OF THE FOLLOWING:

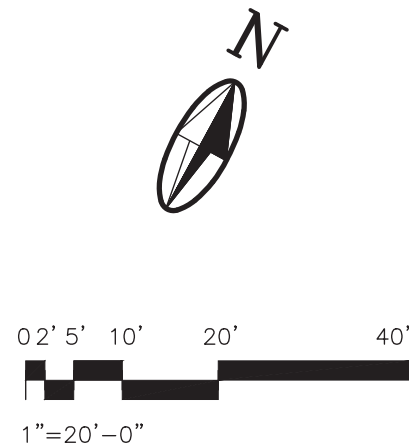
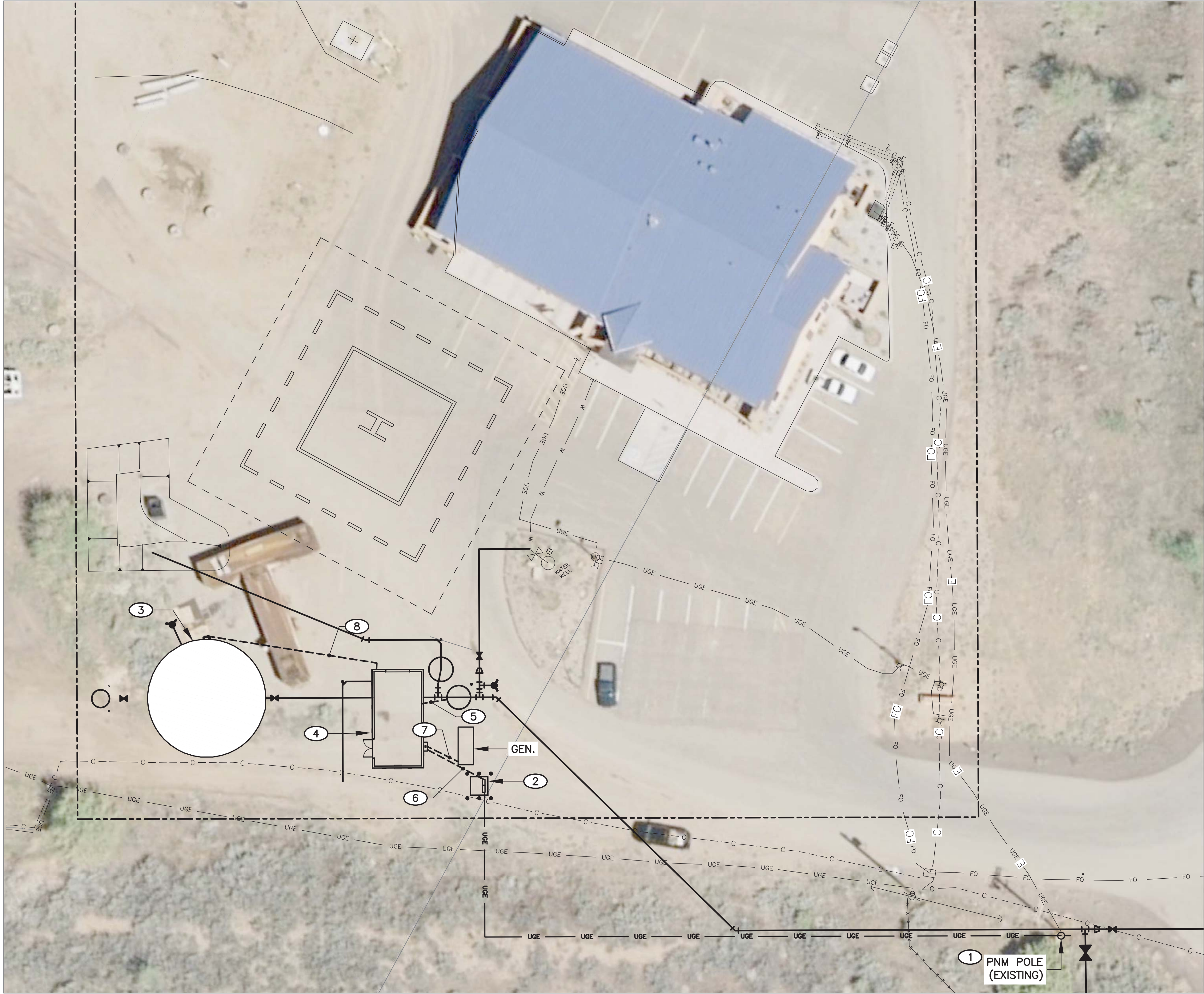
- 1. PVC PIPE: ASTM D2665, DWV. USE PVC FITTINGS, ASTM D2665. JOINTS: ASTM D2855 SOLVENT WELD WITH ASTM D2564 SOLVENT CEMENT.
- 2. CAST IRON SOIL PIPE: ASTM A74, SERVICE WEIGHT, BELL AND SPIGOT ENDS. USE CAST IRON FITTINGS, ASTM A74. JOINTS: HUB AND SPIGOT, CISPI HSN COMPRESSION TYPE WITH ASTM C564 NEOPRENE GASKETS OR LEAD AND OAKUM. JOINTS MANUFACTURED BY TYLER LUBRIFAST OR EQUIVALENT.

B. SEWER, AND VENT PIPING ABOVE GRADE SHALL BE ONE OF THE FOLLOWING:

- 1. PVC PIPE: PVC PIPE: ASTM D2665, DWV. USE PVC FITTINGS, ASTM D2665. JOINTS: ASTM D2855 SOLVENT WELD WITH ASTM D2564 SOLVENT CEMENT.
- 2. CAST IRON PIPE: CISPI 301, HUBLESS, SERVICE WEIGHT. FITTINGS: CAST IRON, CISPI 301. JOINTS: CISPI 310, NEOPRENE GASKETS AND STAINLESS STEEL CLAM AND SHIELD ASSEMBLIES.

1. PROVIDE AND INSTALL LOUVER. SIZE AS INDICATED ON DRAWINGS. BOTTOM OF LOUVER AT 36" ABOVE FINISHED FLOOR.
2. T-STAT CONTROLLER. SEE ELECTRICAL DRAWINGS FOR FURTHER DETAIL.
3. PROVIDE AND INSTALL EXHAUST FAN. TEST AND BALANCE EXHAUST FAN TO CFM INDICATED ON SCHEDULE. CENTER OF FAN AT AROUND 8' ABOVE FINISHED FLOOR.
4. PROVIDE AND INSTALL ELECTRIC UNIT HEATER. BOTTOM OF HEATER SET AT 8' ABOVE FINISHED FLOOR.
5. PROVIDE AND INSTALL FLOOR DRAIN AS SCHEDULED.
6. SEE CIVIL DRAWINGS FOR CONTINUATION.
7. PROVIDE AND INSTALL SEWER AND VENT PIPING SYSTEM. SIZE AS INDICATED ON DRAWINGS.
8. PROVIDE AND INSTALL VENT THRU ROOF.
9. PROVIDE AND INSTALL DOUBLE CLEAN OUT (DCO).





KEYED NOTES: #

1. COORDINATE WITH PNM FOR CONSTRUCTION OF EXTENSION OF UNDERGROUND PRIMARY ELECTRICAL SERVICE. REFER TO E-601 FOR ONE-LINE DIAGRAM.
2. FORM AND POUR TRANSFORMER PAD IN PROPOSED LOCATION IN ACCORDANCE WITH PNM STANDARDS. FINAL LOCATION TO BE IDENTIFIED BY PNM. INSTALL GUARD POSTS AS REQUIRED BY PNM. PROVIDE METER ENCLOSURE WITH METER SOCKET. MOUNT METER ON STRUT ADJACENT TO TRANSFORMER. CONSTRUCT IN ACCORDANCE WITH PNM STANDARDS.
3. STORAGE TANK. REFER TO E-103 FOR ELECTRICAL EQUIPMENT DETAILS.
4. BOOSTER PUMP STATION BUILDING. REFER TO E-101 AND E-102 FOR ELECTRICAL EQUIPMENT DETAILS.
5. CONDUIT WITH MANUFACTURER SUPPLIED CABLE FOR FLOW METER AND REMOTE TRANSMITTER CONNECTION. REFER TO E-101 FOR TRANSMITTER LOCATION. REFER TO W-106 FOR NOZZLE FLANGE DETAIL. COORDINATE CONDUIT SIZE WITH FLOW METER MANUFACTURER.
6. RUN CONDUIT WITH CONDUCTORS FROM TRANSFORMER TO ATS. STUB UP IN TRANSFORMER LOW VOLTAGE COMPARTMENT; CONNECT. REFER TO E-601 FOR ONE-LINE DIAGRAM AND SCHEDULES.
7. RUN CONDUIT WITH CONDUCTORS FROM GENERATOR TO ATS. REFER TO E-601 FOR ONE-LINE DIAGRAM AND SCHEDULES.
8. CONDUIT FOR TANK INSTRUMENTATION POWER AND CONTROL. REFER TO E-103 FOR DETAILS.

MOLZENCORBIN


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REVISION		
SYMBOL	DATE:	BY:

SANTA FE COUNTY  
UTILITIES DIVISION 424 NM 599, SANTA FE, NM 87507



**SANTA FE COUNTY**

PROJECT NAME:  
CANONCITO-ELDORADO WATERLINE

HONDO 2 PUMP STATION / TANK  
ELECTRICAL SITE PLAN

APPROVED BY:	REVIEWED BY:	R. HANKS
DATE: FEBRUARY 2020		SHEET :
DRAWN BY: N. WILHELM		E-001



MOLZENCORBIN

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GENERAL NOTES:

1. REFER TO PANEL SCHEDULES ON E-601 FOR PANEL CONNECTION CONTACT NUMBER.

KEYED NOTES: #

1. BOOSTER CONTROL PANEL (BCP) SUPPLIED WITH SKID; SINGLE POINT POWER CONNECTION WITH INDIVIDUAL DISCONNECTING MEANS FOR EACH PUMP VFD.
2. EXHAUST FAN STARTER. REFER TO E-601 FOR WIRING DIAGRAM AND SCHEDULES.
3. THERMOSTAT SUPPLIED WITH HEATER. REFER TO M-101 FOR SEQUENCE OF OPERATIONS. CONNECT TO HEATER AS RECOMMENDED BY MANUFACTURER.
4. ALL THE HEATING SYSTEM COMPONENTS FOR THE SURGE TANK TO BE INSTALLED BY ELECTRICAL CONTRACTOR UNDER GUIDANCE OF THE SURGE TANK MANUFACTURER.
5. ALL THE LEVEL CONTROL COMPONENTS FOR THE SURGE TANK TO BE INSTALLED BY THE CONTRACTOR UNDER THE GUIDANCE OF THE SURGE TANK MANUFACTURER.

R. Hanks  
ROBERT A. HANKS  
NEW MEXICO  
23949  
PROFESSIONAL ENGINEER  
2-18-20

REVISION

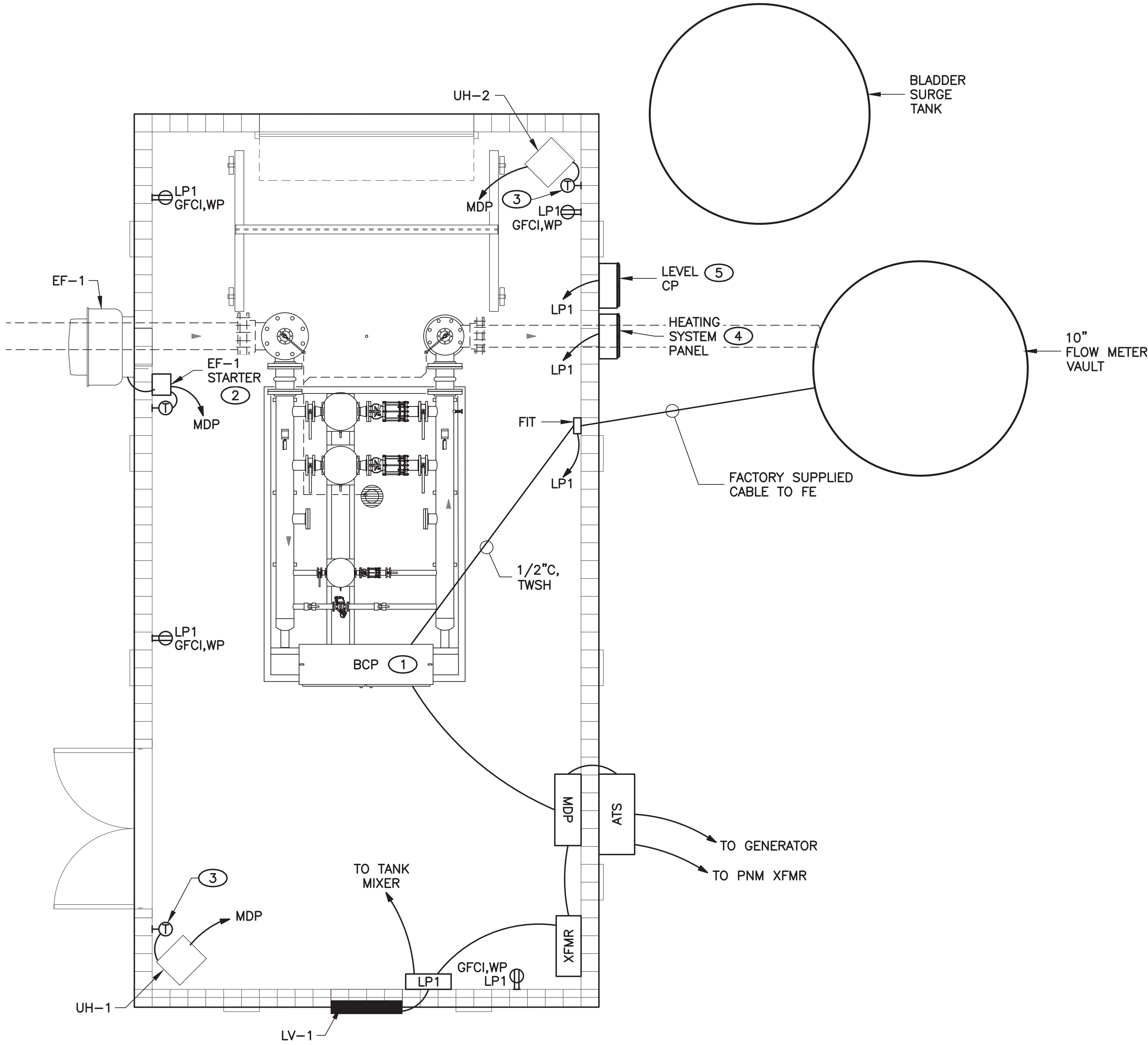
SYMBOL	DATE:	BY:

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UTILITIES DIVISION 424 NM 599, SANTA FE, NM 87507

PROJECT NAME:  
CANONCITO-ELDORADO WATERLINE

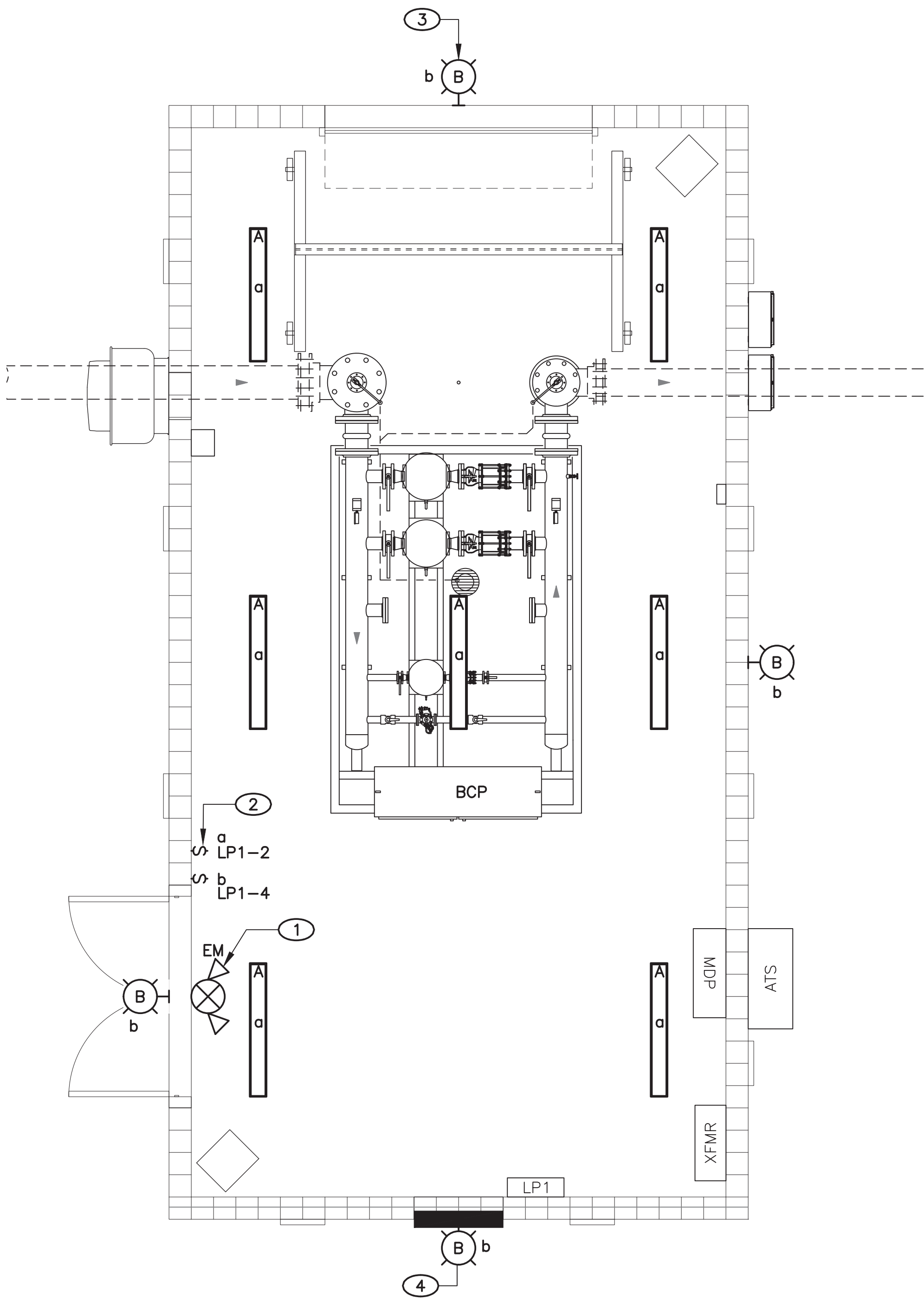
HONDO 2 PUMP STATION  
ELECTRICAL POWER PLAN

APPROVED BY: REVIEWED BY: R. HANKS  
DATE: FEBRUARY 2020 SHEET :  
DRAWN BY: N. WILHELM E-101



HONDO 2 BOOSTER STATION POWER PLAN  
SCALE: 3/8"=1'-0"





HONDO 2 BOOSTER STATION LIGHTING PLAN  
SCALE: 3/8"=1'-0"

KEYED NOTES: #

1. MOUNT COMBINATION EXIT SIGN AND BATTERY BACKUP EGRESS LIGHT FIXTURE ON THE WALL 18" ABOVE DOOR.
2. INSTALL OCCUPANCY SENSOR AND INTERLOCK IT WITH LIGHT TYPE "A".
3. INSTALL LIGHT FIXTURE 9'-6" AFG. TYPICAL 4.
4. SHOWN HERE FOR DRAFTING PURPOSES. COORDINATE LIGHT HEIGHT WITH LOUVER LOCATION.

LUMINAIRE SCHEDULE								
TYPE	DESCRIPTION	VOLTS	MOUNTING	LUMENS	WATTAGE	MANUFACTURER	MODEL	Q-TY
A	4' LENGTH, LED ENCLOSED AND GASKETED.	120	SURFACE	5358	47	COLUMBIA	LXEM4-40ML-RFA-EU	7
B	EXTERIOR WALL PACK WITH BATTERY BACKUP OPTION. PHOTOCONTROL OPTION.	120	EXTERIOR WALL	2868	28	HUBBELL	LNC2-12L-120V-4K-3-BRONZE-BBU-PC	4
EM	WHITE THERMOPLASTIC EXIT. RED LETTERS. ARCHITECTURAL LED COMBINATION EXIT / EMERGENCY LIGHT.	120	SURFACE	-	1.65	DUALITE	EVCURW	1

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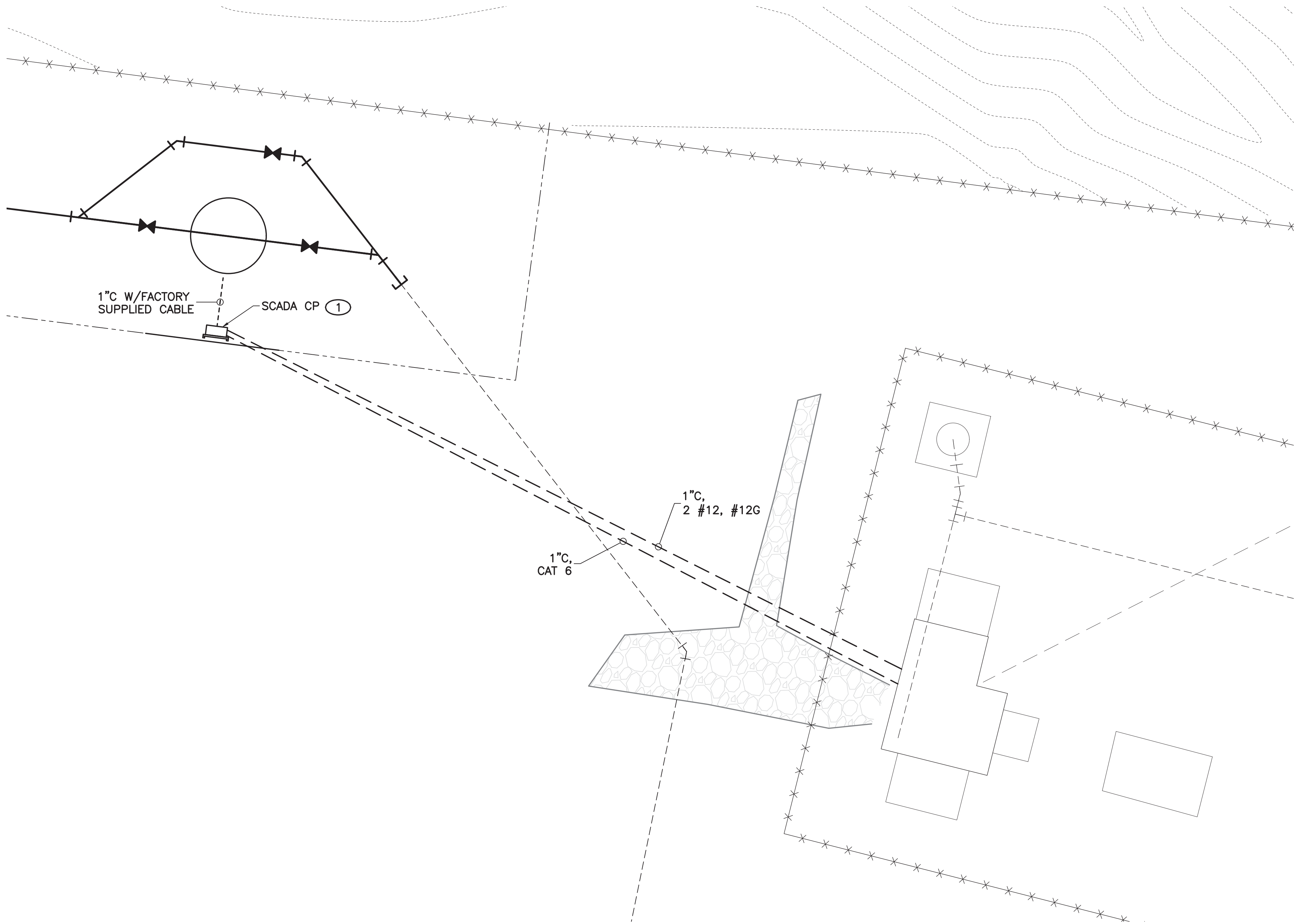
PROJECT NAME:  
CANONCITO-ELDORADO WATERLINE

HONDO 2 PUMP STATION  
LIGHTING PLAN

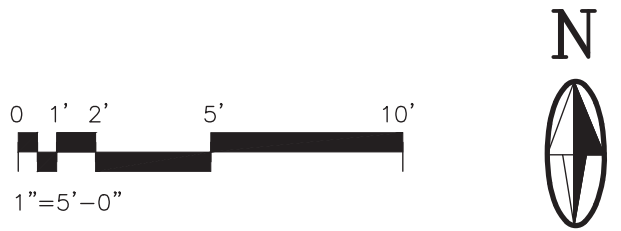
APPROVED BY: R. HANKS  
DATE: FEBRUARY 2020  
DRAWN BY: N. WILHELM

REVIEWED BY:  
SHEET :  
E-102





MASTER METER SITE PLAN  
SCALE: 1"=5'-0"



KEYED NOTES: ①

- 1. REFER TO E-502 FOR SCADA CONTROL PANEL MOUNTING DETAILS AND WIRING DIAGRAM.

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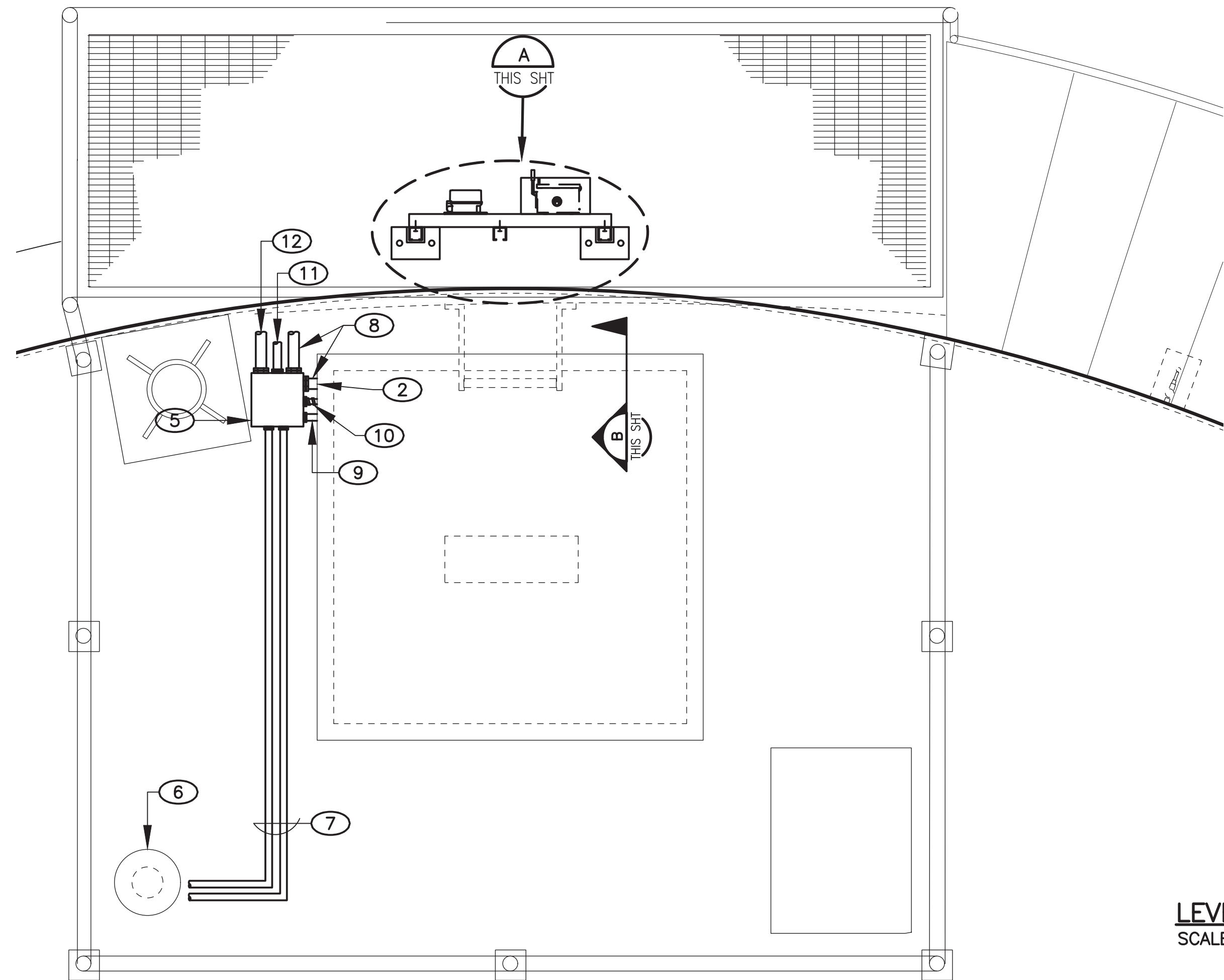
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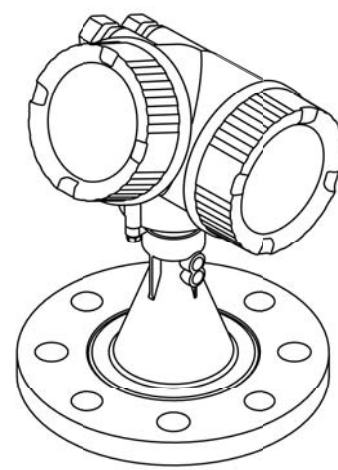
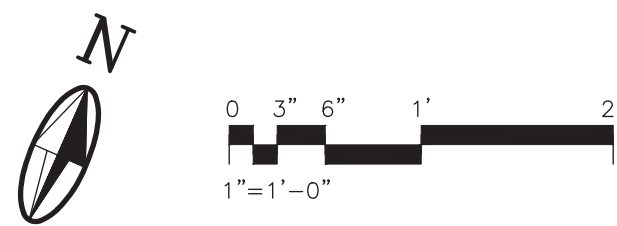
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CANONCITO-ELDORADO WATERLINE

APPROVED BY:	REVIEWED BY:	SHEET :
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DRAWN BY:		

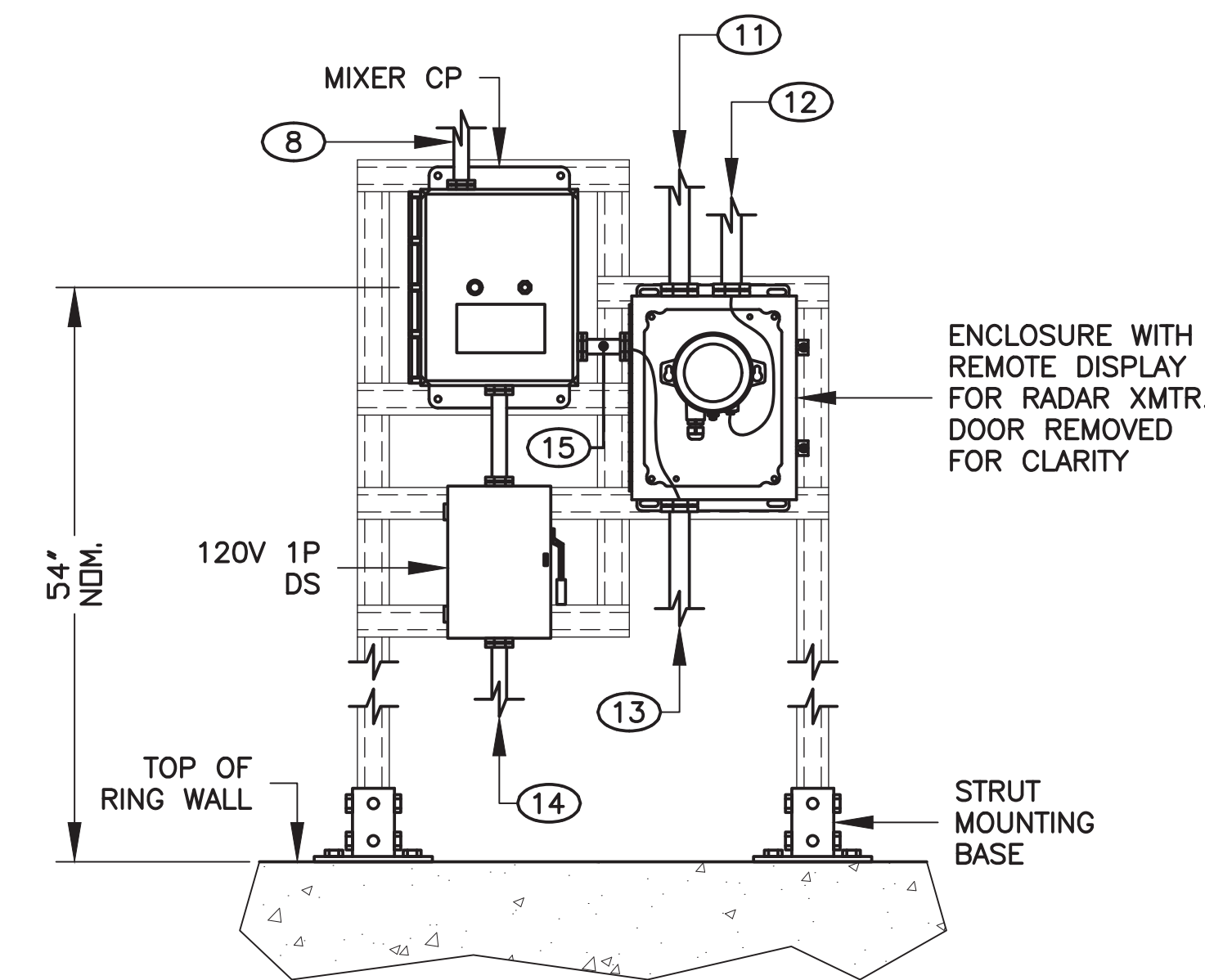




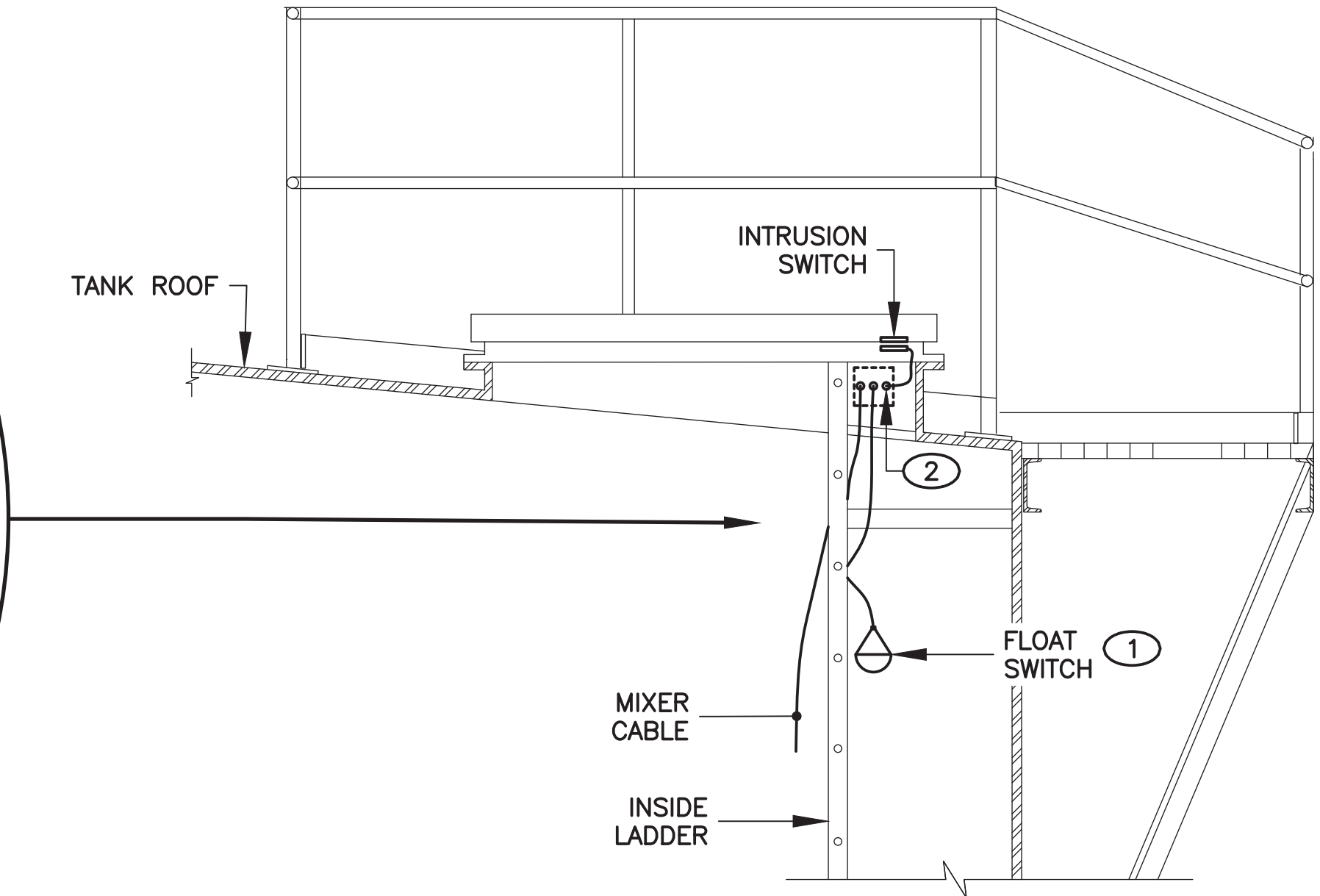
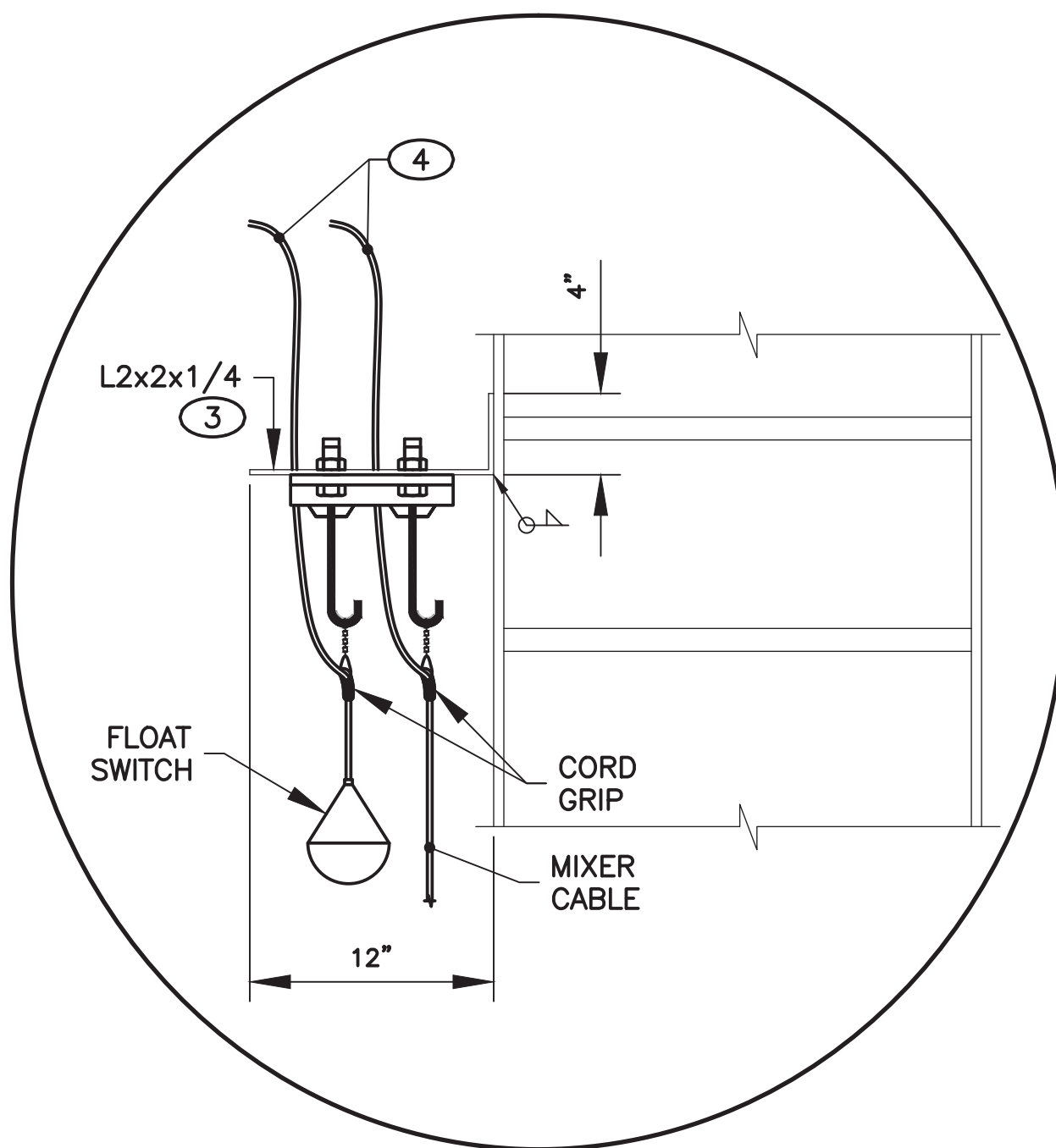
**HONDO 2 TANK PARTIAL PLAN VIEW**  
SCALE: 1"=1'-0"



**LEVEL XMTR VIEW**  
SCALE: NONE



**EQUIPMENT ELEVATION VIEW**  
SCALE: 1 1/2"=1'-0"



**FLOAT AND INTRUSION SWITCH DETAIL**  
SCALE: NONE

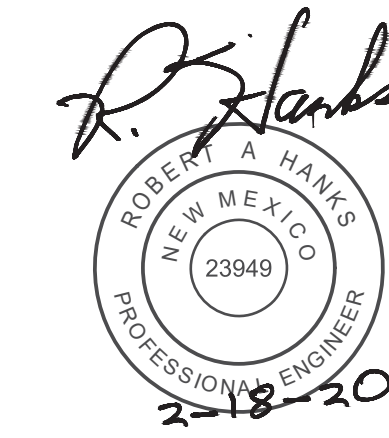
**KEYED NOTES: #**

1. HIGH LEVEL FLOAT SWITCH SET TO TRIP AT 6" BELOW OVERFLOW.
2. CABLE PENETRATIONS. SHOWN HERE FOR DRAFTING PURPOSES (TYP). COORDINATE EXACT LOCATION IN FIELD.
3. SS BRACKET WITH CORD GRIP FOR FLOAT LEVEL SWITCH CABLE SUPPORT.
4. CABLES TO JUNCTION BOX.
5. J-BOX FOR INSTRUMENTATION WIRING. PROVIDE WITH TERMINAL BLOCKS.
6. FLANGE FOR RADAR LEVEL TRANSMITTER INSTALLATION (NOT SHOW ON THIS VIEW). SEE TRANSMITTER VIEW ON THIS SHEET.
7. TWO (2) 1/2" CONDUITS WITH CABLES: TWSH CABLE WITH ANALOG SIGNAL TO PLC IN BCP VIA JUNCTION BOX AND LEVEL TRANSMITTER REMOTE DISPLAY ENCLOSURE; 8-CONDUCTORS FACTORY SUPPLIED CABLE TO REMOTE DISPLAY VIA JUNCTION BOX.
8. 1" CONDUIT WITH FACTORY SUPPLIED CABLE FOR MIXER POWER. PULL CABLE THRU THE JUNCTION BOX TO MIXER CONTROL PANEL.
9. 1/2" CONDUIT WITH FLOAT LEVEL SWITCH FACTORY SUPPLIED CABLE. CONNECT CONDUCTORS TO TERMINALS IN JUNCTION BOX.
10. ARMORED CABLE FACTORY SUPPLIED WITH INTRUSION SWITCH. CONNECT CONDUCTORS TO TERMINALS IN JUNCTION BOX.
11. 3/4" CONDUIT WITH 6 #12, #12G FOR DIGITAL SIGNALS TO PLC IN BCP FROM INTRUSION SWITCH AND HIGH LEVEL FLOAT SWITCH.
12. 1" CONDUIT WITH TWSH CABLE AND FACTORY SUPPLIED 8-CONDUCTORS CABLE FROM RADAR LEVEL TRANSMITTER TO REMOTE DISPLAY ENCLOSURE.
13. 1" CONDUIT WITH TWO (2) TWSH CABLES TO BCP IN BOOSTER PUMP STATION (TANK LEVEL AND MIXER MOTOR LOAD INDICATION) AND 6 #12, #12G FOR DIGITAL SIGNALS (INTRUSION SWITCH AND HIGH LEVEL FLOAT SWITCH).
14. 3/4" CONDUIT WITH 2 #10, #10G FOR 120V POWER TO MIXER CP FROM POWER PANEL LP1 IN BOOSTER PUMP STATION. REFER TO E-601 FOR PANEL SCHEDULE.
15. 3/4" CONDUIT WITH TWSH FOR MIXER MOTOR LOAD INDICATION.

**MOLZENCORBIN**

2701 Miles Road SE  
Albuquerque, New Mexico 87106  
505 242 5700 office  
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NOTICE OF EXTENDED PAYMENT PROVISION:  
THIS CONTRACT ALLOWS THE OWNER TO MAKE  
PAYMENT WITHIN 45 DAYS AFTER SUBMISSION  
OF AN UNDISPUTED REQUEST FOR PAYMENT



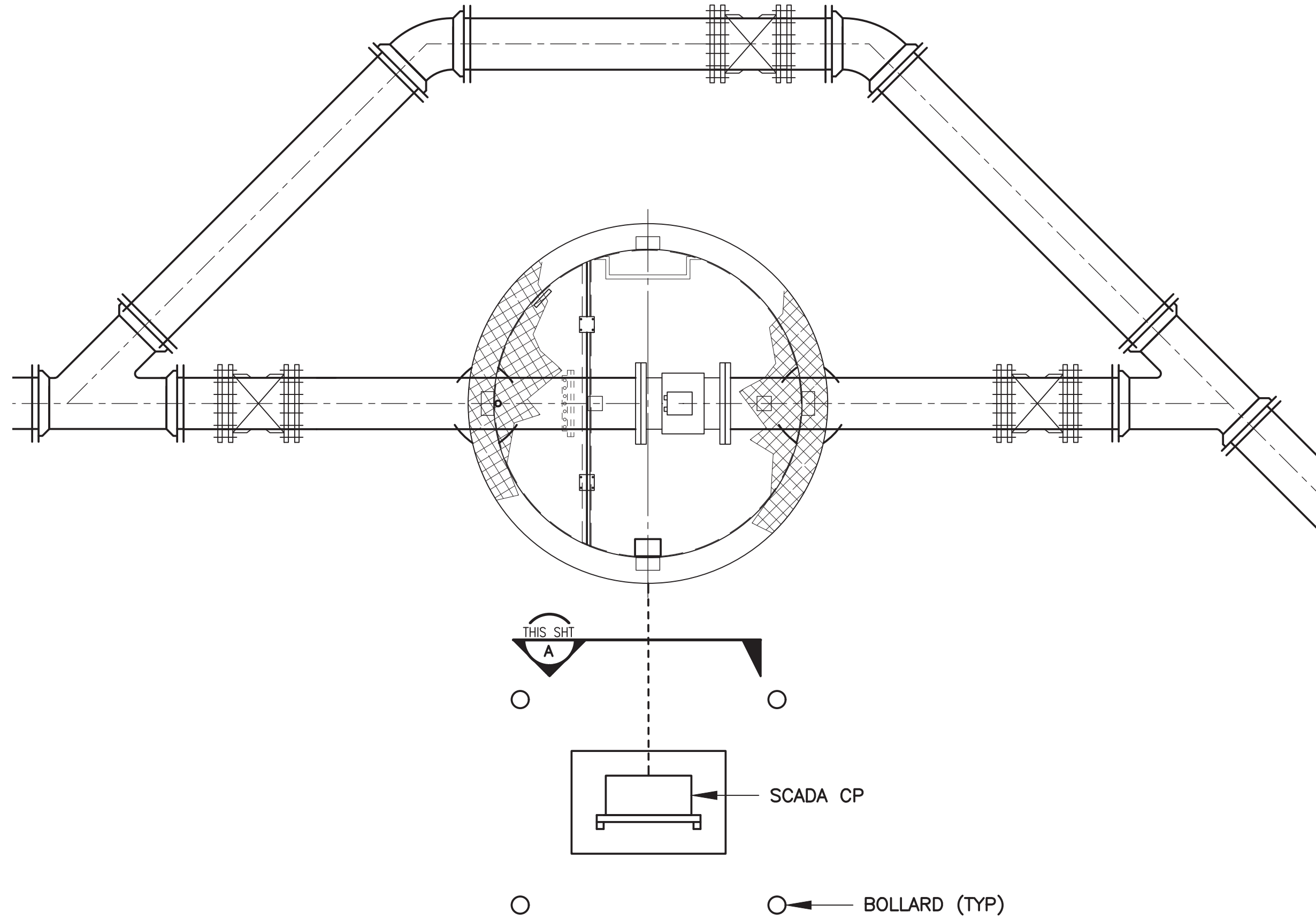
REVISION		
SYMBOL	DATE:	BY:

**SANTA FE COUNTY**  
UTILITIES DIVISION 424 NM 599, SANTA FE, NM 87507

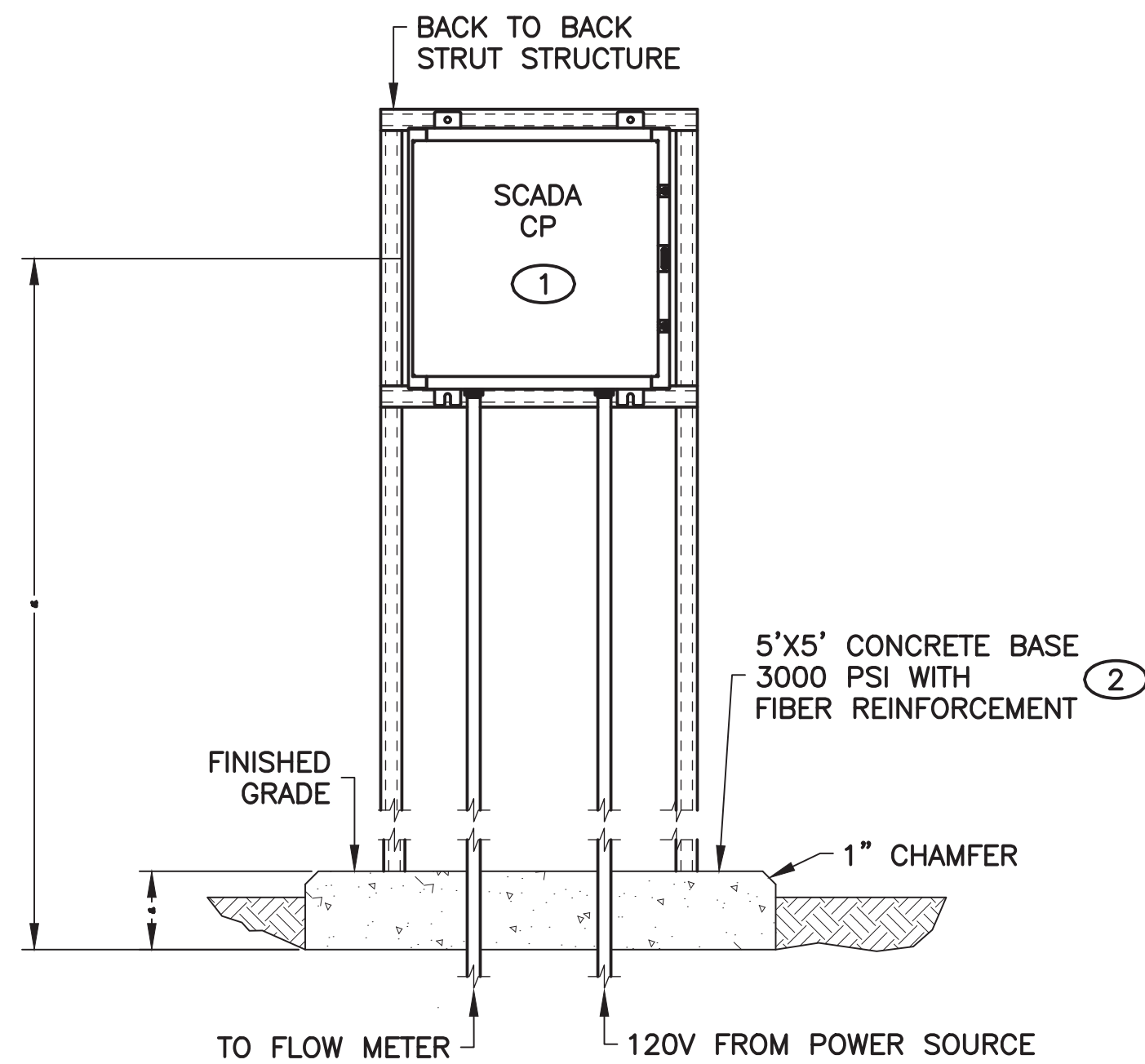
**PROJECT NAME:**  
CANONCITO-ELDORADO WATERLINE

**HONDO 2 TANK  
POWER AND INSTRUMENTATION DETAILS**  
APPROVED BY: REVIEWED BY: R. HANKS  
DATE: FEBRUARY 2020 SHEET: E-501  
DRAWN BY: N. WILHELM

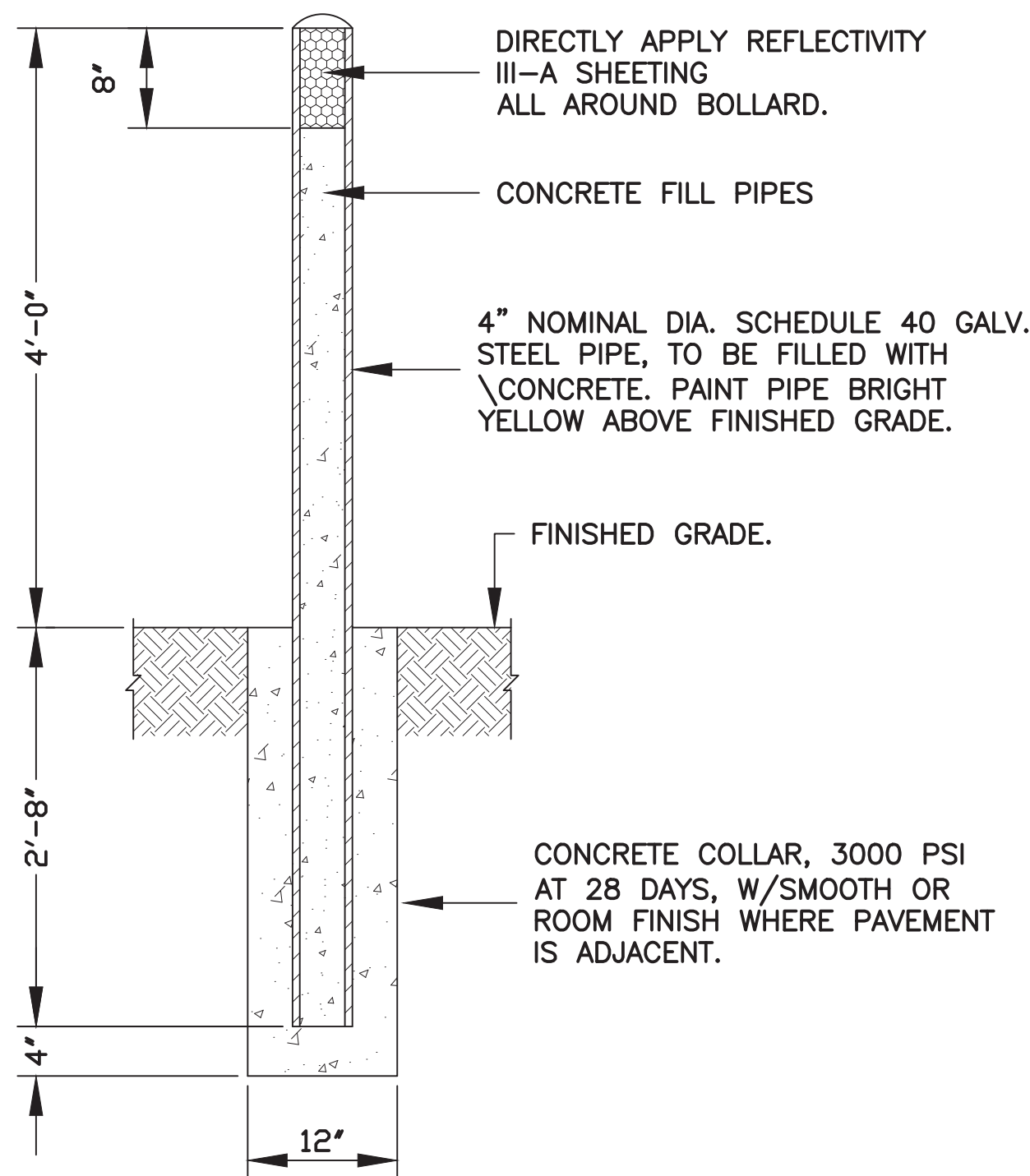




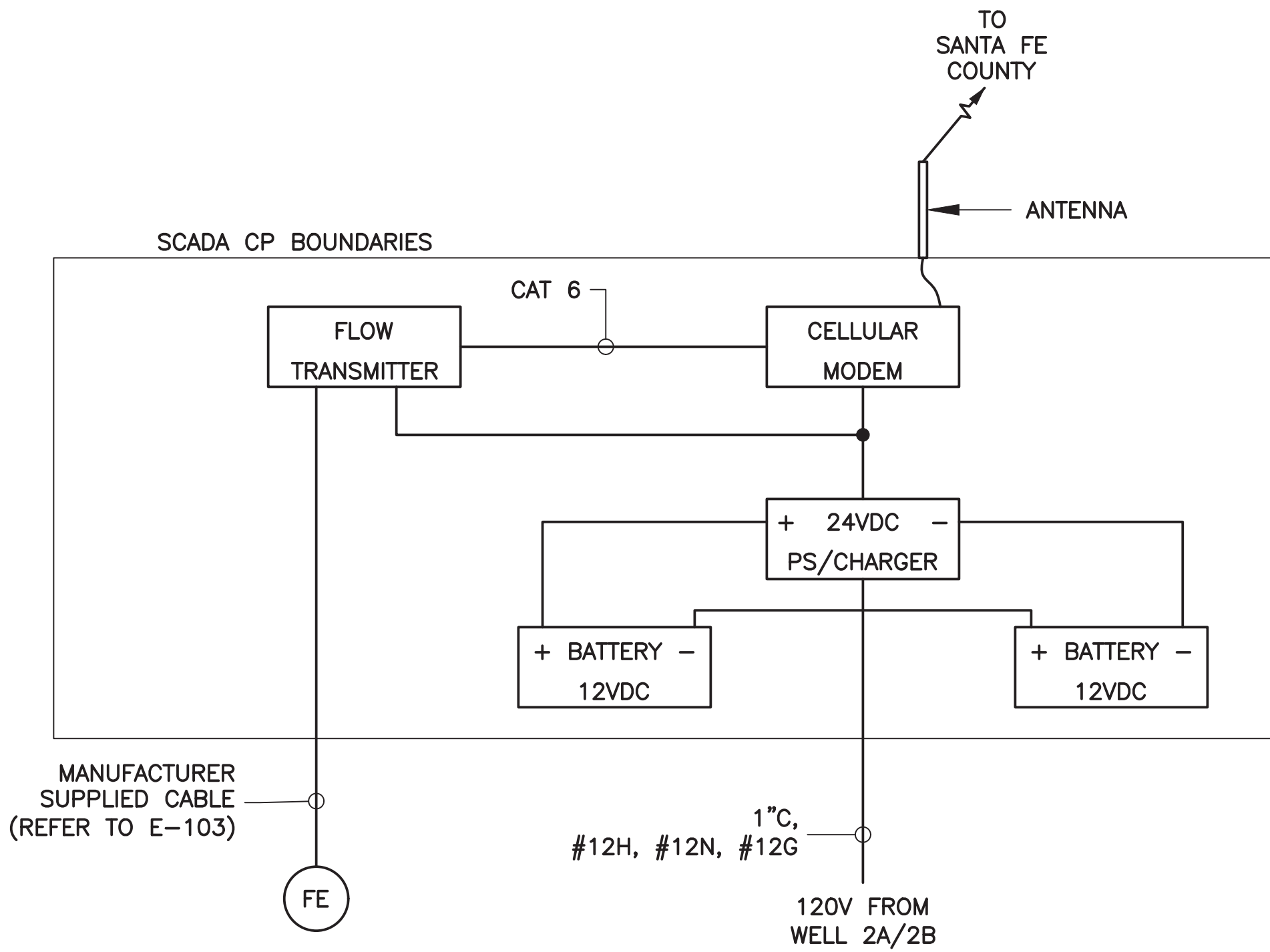
METER VAULT PLAN VIEW  
SCALE: 1/2"=1'-0"



SCADA CP MOUNTING DETAILS  
SCALE: 1"=1'-0"



BOLLARD DETAIL  
SCALE: NONE



SCADA CP WIRING DIAGRAM  
SCALE: NONE

KEYED NOTES: #

- 20"x20" ENCLOSURE IS SHOWN FOR DRAFTING PURPOSES. SIZE THE ENCLOSURE AS REQUIRED TO LOCATE ALL EQUIPMENT INSIDE.
- INSTALL BOLLARDS AT THE CORNERS OF THE CONCRETE BASE. SEE BOLLARD DETAIL ON THIS PAGE.

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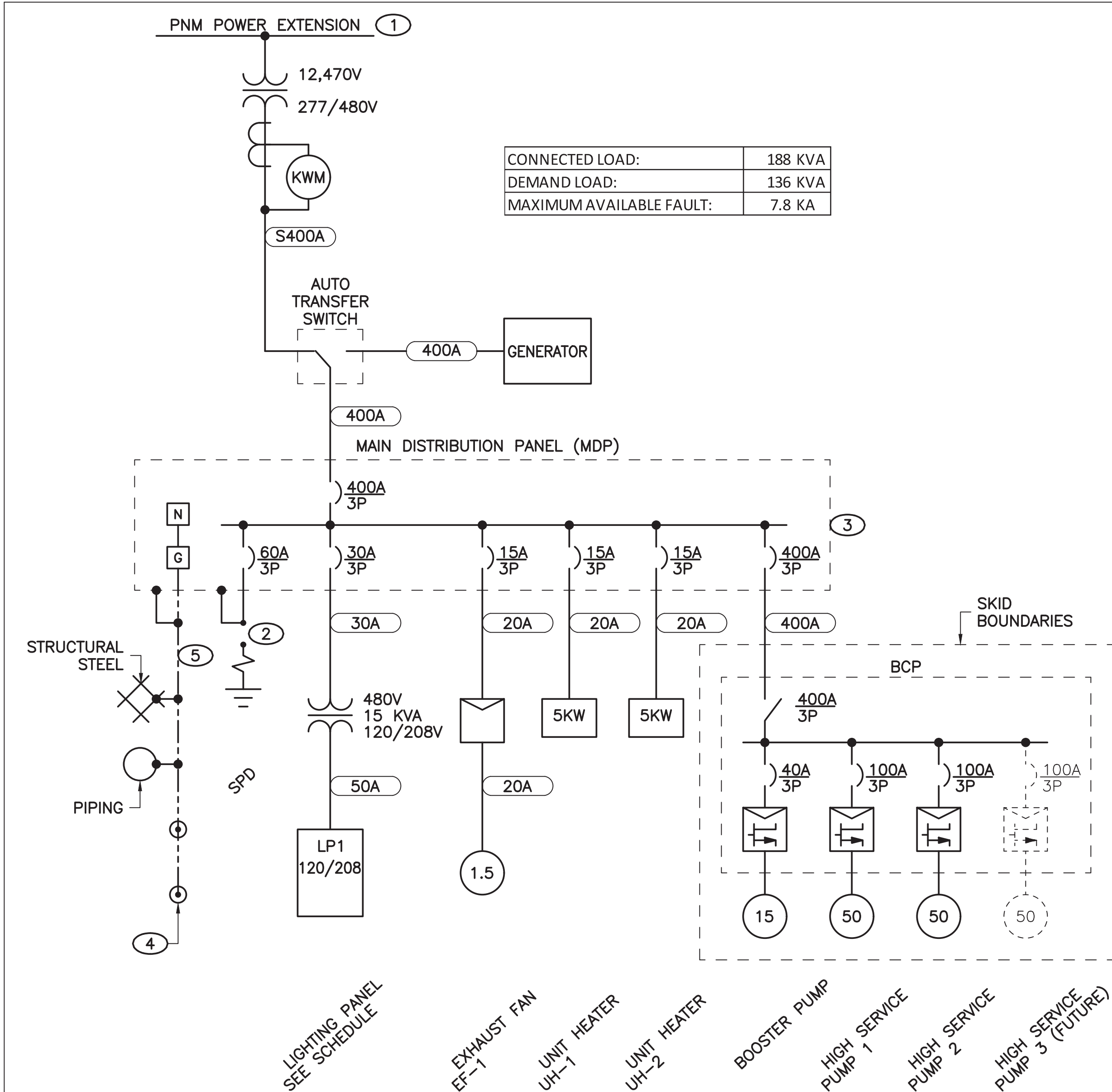
SANTA FE COUNTY  
UTILITIES DIVISION 424 NM 599, SANTA FE, NM 87507

PROJECT NAME:  
CANONCITO-ELDORADO WATERLINE

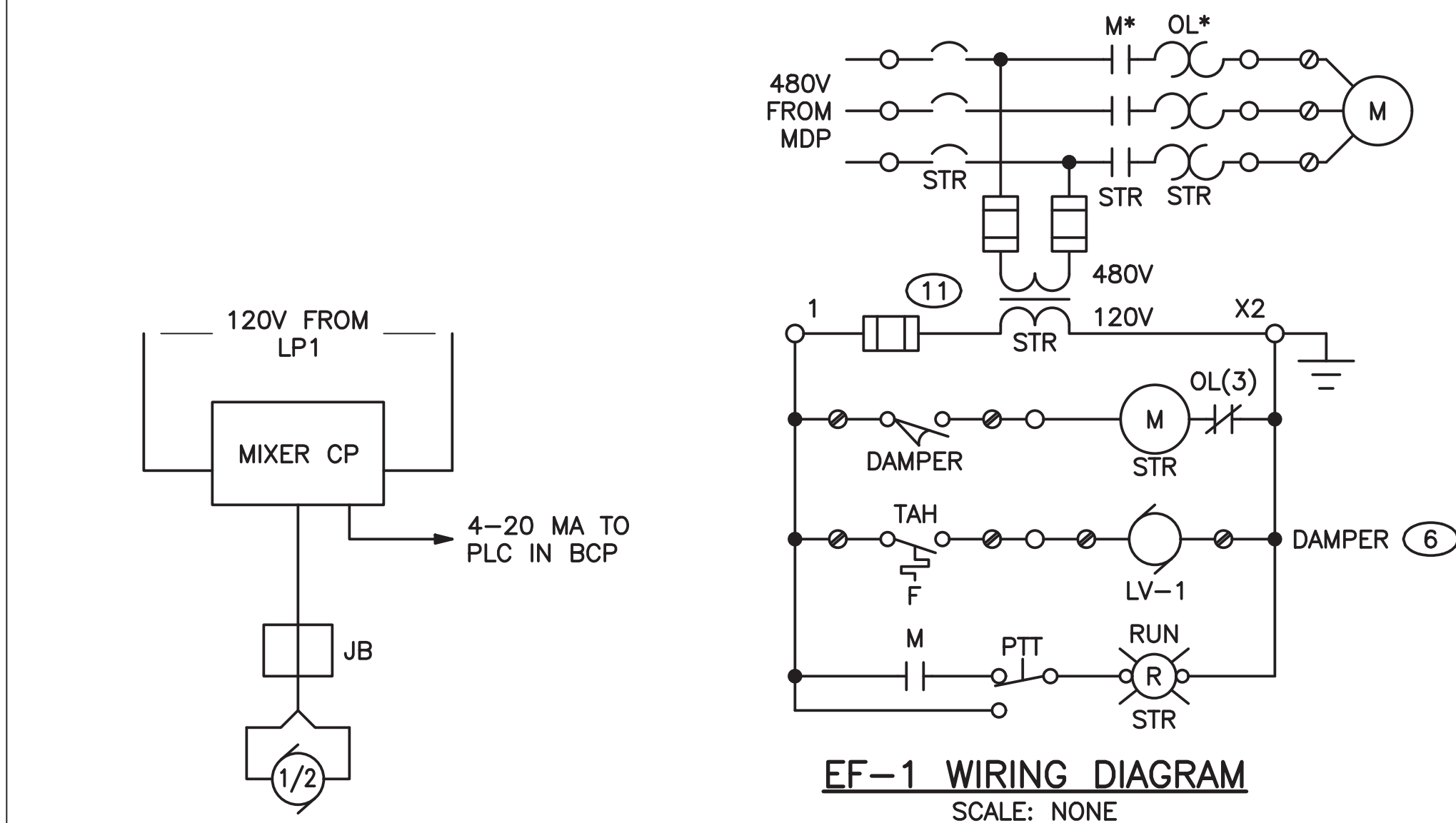
MASTER METER VAULT DETAIL

APPROVED BY: REVIEWED BY: R. HANKS  
DATE: FEBRUARY 2020 SHEET :  
DRAWN BY: N. WILHELM E-502





ONE-LINE DIAGRAM  
SCALE: NONE



TANK MIXER WIRING DIAGRAM  
SCALE: NONE

POWER CONDUIT SCHEDULE	
NAME	COPPER
20AS	3/4"C, #12H, #12N, #12G
20A2	3/4"C, 2 - #12H, #12G
20A	3/4"C, 3 - #12, #12G
30AS	3/4"C, #10H, #10N, #10G
30A2	3/4"C, 2 - #10H, #10G
30A	3/4"C, 3 - #10, #10G
50A	1"C, 3 - #8, #8G
60A	1"C, 3 - #6, #8G
80A	1 1/2"C, 3 - #4, #8G
80AS	1 1/2"C, 2 - #4, #8G
100A	1 1/2"C, 3 - #2, #6G
125A	2"C, 3 - #1, #6G
150A	2"C, 3 - #1/0, #6G
175A	2"C, 3 - #2/0, #4G
200A	2 1/2"C, 3 - #3/0, #4G
225A	2 1/2"C, 3 - #4/0, #2G
250A	3"C, 3 - 250KCM, #2G
275A	3"C, 3 - 300KCM, #2G
300A	3"C, 3 - 350KCM, #2G
400A	4"C, 3 - 500KCM, #1G
450A	2 X (2 1/2"C, 3 - #4/0, #2G)
500A	2 X (3"C, 3 - 250KCM, #2G)
600A	2 X (3"C, 3 - 350KCM, #1/0G)

SERVICE CONDUIT SCHEDULE	
NAME	COPPER
S100A	1 1/2"C, 3 - #2, #2N
S200A	2 1/2"C, 3 - #3/0, #3/0N
S400A	4"C, 3 - 500KCM, 500KCM(N)

CONDUIT USAGE MATRIX						
	RMC	RNC	FRE RNC	EMT	FMC	LFMC
EMBEDDED IN STRUCTURE, FLOOR SLAB		Y				
TRANSITION TO/FROM CONCRETE			Y			
DIRECT BURIED		Y	Y			
EXTERIOR EXPOSED OR > 1FT AFG	Y					Y
EXTERIOR < 1FT AFG		*				
BUILDING INTERIOR	Y	Y		Y	L	Y
ALL OTHER WORK	Y					Y

\* - SCHEDULE 80  
L - CONNECTION TO LIGHTS

SIGNAL/POWER SEPARATION IN INCHES							
VOLTAGE LEVEL	NETWORK*	24V DC			120VAC		480VAC
		4 - 20 MA	DI	DO	CONTROL	POWER	
NETWORK*	0	0	1	6	6	6	26
4 - 20 MA	0	0	1	6	6	6	26
24V DC DI	1	1	0	0	6	6	26
24V DC DO	6	6	0	0	0	0	8
120VAC CONTROL	6	6	6	0	0	0	8
120VAC POWER	6	6	6	0	0	0	8
480VAC**	26	26	8	8	8	8	0

\* INCLUDES ALL NETWORKED PROTOCOLS (EX: ETHERNET, DEVICENET, PROFIBUS... ETC)  
\*\* INSTALLING CONTROL CIRCUITS IN SAME CONDUIT AS MOTOR LEADS IS ACCEPTABLE WHEN MOTOR LEADS ARE DIRECTLY CONTROLLING THE RESPECTIVE EQUIPMENT OF THE POWER LEADS.

KEYED NOTES: #

- COORDINATE WITH PNM FOR CONSTRUCTION OF UTILITY PORTION OF SERVICE EXTENSION.
- LOCATE AND ORIENT SURGE PROTECTIVE DEVICE TO COMPLY WITH MANUFACTURER INSTALLATION INSTRUCTIONS.
- MAIN DISTRIBUTION PANEL (MDP) WITH MAIN CIRCUIT BREAKER UL LISTED FOR SERVICE ENTRANCE.
- INSTALL GROUND ROD IN INSPECTION WELL; 2 RODS MINIMUM AT 20' APART.
- INSTALL #2 BC IN BUILDING FOOTING. CONNECT #2 BC TO BUILDING GROUNDING ELECTRODE SYSTEM WITH HEAVY DUTY EXOTHERMIC WELD PROCESS (HDEW).
- REFER TO M-101 FOR SEQUENCE OF OPERATIONS.

MOLZENCORBIN

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KN 2		MAIN DISTRIBUTION PANEL (MDP)					ELECTRICAL ROOM				KN 2
EQUIP FEEDR	CKT. NO.	TRIP/ POLES	LOAD SERVED	PHASE			LOAD SERVED	TRIP/ POLES	CKT. NO.	EQUIP FEEDR	
20A	1	15/3	HEATER UH-1	7	A	21	LP1 VIA XFMR	30/3	2	30A	
	3			7	B	24			4		
	5			7	C	19			6		
20A	7	15/3	HEATER UH-2	7	A	3	EXHAUST FAN EF-1	15/3	8	20A	
	9			7	B	3			10		
	11			7	C	3			12		
400A	13	400/3	BOOSTER PUMP CONTROL PANEL BCP	186	A				14		
	15			186	B			16			
	17			186	C			18			
	19				A				20		
	21				B			22			
	23				C			24			
	25	60/3	SPD		A				26		
	27				B			28			
	29				C			30			
L-N VOLTS		277									
L-L VOLTS		480		Ph A	=	223	AMPS				
3 Ph 4 W				Ph B	=	225	AMPS				
POLES		30		Ph C	=	221	AMPS				
BUS AMPS		400		125%	=	282	AMPS				
MCB AMPS		400		100%	=	188	KVA				
CB AIC		10 KA									
AVAIL FLT		7.8 KA					ENCLOSURE NEMA 1				

KN 2		LIGHTING PANEL LP1					ELECTRICAL ROOM					KN 2	
EQUIP FEEDR	CKT. NO.	TRIP/ POLES	LOAD SERVED	PHASE			LOAD SERVED	TRIP/ POLES	CKT. NO.	EQUIP FEEDR			
30AS	1	15/1	LOUVER DAMPER	0.35	A	2.74	LGHT INTERIOR	20/1	2	30AS			
30AS	3	20/1	FLOW XMTR	1.00	B	0.98	LIGHT EXTERIOR	20/1	4	30AS			
	5				C	6.00	RECEPTACLE	20/1	6	30AS			
	7				A	12.00	HEAT CP (PNL 1&2)		8	30AS			
	9				B	12.00	HEAT CP (PNL 3&4)	30/1	10	30AS			
	11	30/3	SPD		C	13.05	HEAT CP (TRACE)		12	30AS			
	13				A	5.00	LEVEL CP	20/1	14	30AS			
	15				B	9.80	TANK MIXER	20/1	16	30AS			
L-N VOLTS		120											
L-L VOLTS		208		Ph A	=	21					AMPS		
3 Ph 4 W				Ph B	=	24					AMPS		
POLES		16		Ph C	=	19					AMPS		
BUS AMPS		100		125%	=	30					AMPS		
MCB AMPS		50		100%	=	9					KVA		
CB AIC		10 KA											
AVAIL FLT		3.8 KA					ENCLOSURE NEMA 1						

R. Hanks  
ROBERT A. HANKS  
NEW MEXICO  
23949  
PROFESSIONAL ENGINEER  
2-18-20

REVISION

SYMBOL	DATE:	BY:

SANTA FE COUNTY  
UTILITIES DIVISION 424 NM 599, SANTA FE, NM 87507

PROJECT NAME:  
CANONCITO-ELDORADO WATERLINE

HONDO 2 BOOSTER PUMP STATION / TANK  
ONE-LINE DIAGRAM AND SCHEDULES

APPROVED BY: REVIEWED BY: R. HANKS  
DATE: FEBRUARY 2020 SHEET :  
DRAWN BY: N. WILHELM E-601