

# SCOTTS VALLEY WATER DISTRICT

## MEADOW WAY PRESSURE REDUCING VALVE

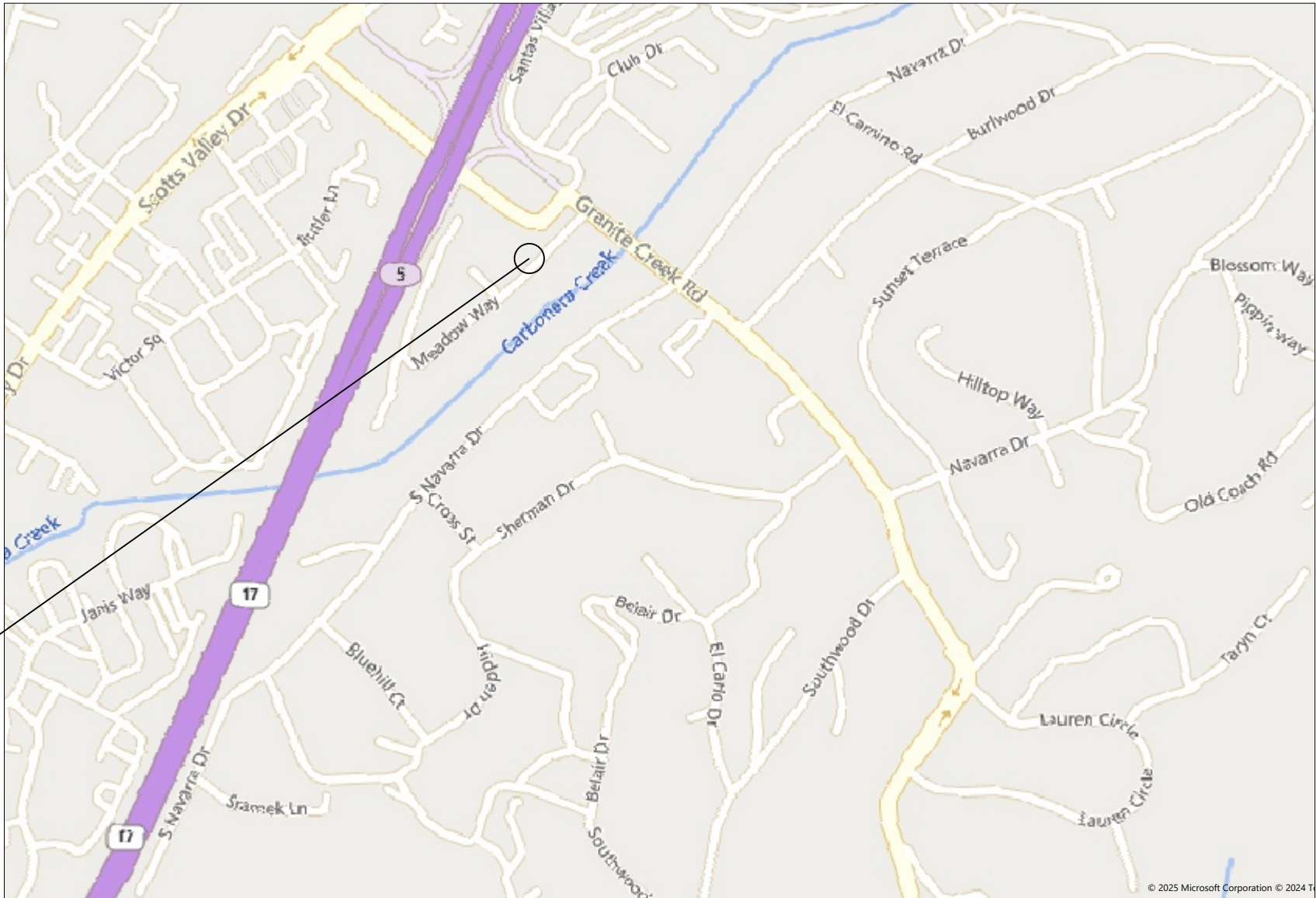
OWNER:  
SCOTTS VALLEY WATER DISTRICT (SVWD)  
2 CIVIC CENTER DRIVE  
SCOTTS VALLEY, CA  
831-438-2363

CIVIL ENGINEER:  
SCHAAF & WHEELER CONSULTING CIVIL ENGINEERS  
3 QUAIL RUN CIRCLE, SUITE 101  
SALINAS, CA 93907  
831-883-4848

### ABBREVIATIONS

AB	AGGREGATE BASE
AC	ASPHALTIC CONCRETE
APPROX	APPROXIMATE
ARV	AIR RELEASE VALVE
AVAR	AIR VACUUM AIR RELEASE
BFP	BACK FLOW PREVENTER
BM	BENCHMARK
CL	CENTERLINE
CONC	CONCRETE
CONT	CONTINUED
CPLG	COUPLING
CY	CUBIC YARDS
CU	COPPER
DI, DIP	DUCTILE IRON PIPE
Ø, DIA	DIAMETER
EB	ELECTRIC BOX
E, ELEC	ELECTRIC
EL, ELEV	ELEVATION
ELL	ELBOW
EV	ELECTRIC VAULT
FG	FINISHED GRADE
FL	FLANGE
FM	FORCE MAIN
FT	FEET
FOC	FACE OF CURB
G	GAS
GALV	GALVANIZED
GRN	GROUND
GV	GATE VALVE
HB	HOSE BIB
HDPE	HIGH DENSITY POLYETHYLENE
HOR	HORIZONTAL
IN	INCHES
INV	INVERT ELEVATION
JT	JOINT TRENCH
LF	LINEAR FOOT
L/S	LANDSCAPE
M	METER
MIN	MINIMUM
MJ	MECHANICAL JOINT
N	NORTH
N.C.	NORMALLY CLOSED
N.T.S	NOT TO SCALE
P	PUMP
P.C.C	PORTLAND CEMENT CONCRETE
PE	PLAIN END
PG&E	PACIFIC GAS AND ELECTRIC
PL	PROPERTY LINE
PRV	PRESSURE REDUCING VALVE
PVC	POLYVINYL CHLORIDE
REF	REFERENCE
RIM	RIM ELEVATION
ROW, R/W	RIGHT OF WAY
S	SLOPE
SD	STORM DRAIN
STL	STEEL
STA	STATION
THD	THREADED
TOC	TOP OF CURB
TYP	TYPICAL
UB	UTILITY BOX
VERT	VERTICAL
W	WATER
WM	WATER METER
W/	WITH
WB	WATER BOX

PROJECT SITE



### VICINITY MAP

#### LEGEND

DESCRIPTION	EXISTING	PROPOSED
BENCHMARK / SOIL BORING		
BOLLARD		
MANHOLE		
VALVE		
CATCH BASIN / DRAIN INLET / AREA DRAIN		
WATER METER		
SIGN		
UTILITY BOX (SIZE VARIES)		
BUILDING LINE		
CONCRETE		
THRUST BLOCK		
FENCE		
CENTERLINE		
EDGE OF PAVEMENT		
SANITARY SEWER		
STORM DRAIN		
WATER		
UNDERGROUND GAS		
JOINT TRENCH		
FORCEMAIN		
TELEPHONE		
ELECTRICAL		
OVER HEAD ELECTRICAL		
ABANDONED PIPE		
DEMOLITION		
TEMPORARY WATER HIGHLINE		



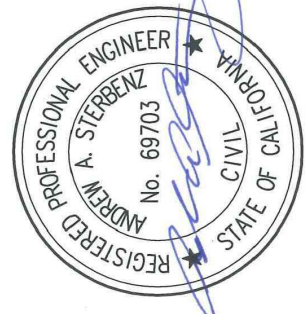
### PROJECT SITE

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4	C2.0	SVWD STANDARD DETAILS, CITY OF SCOTTS VALLEY PAVING DETAIL & THRUST BLOCK DETAIL

SUBMITTED:	ANDREW A. STERBENZ, PE	DATE
	SCHAAF & WHEELER	
APPROVED:	NATE GILLESPIE, OPERATIONS MANAGER	DATE
	SCOTTS VALLEY WATER DISTRICT	

**UNDERGROUND SERVICE ALERT**  
**CALL: TOLL FREE**  
**1-800-227-2600**  
TWO WORKING DAYS BEFORE YOU DIG



NO	REVISIONS	DATE	APPR
1			
2			
3			
4			

**Schaaf & Wheeler**  
CONSULTING CIVIL ENGINEERS  
3 QUAIL RUN CIRCLE, SUITE #101  
SALINAS, CA 93907  
(831) 883-4848

SCOTTS VALLEY WATER DISTRICT  
MEADOW WAY PRESSURE REDUCING VALVE  
COVER SHEET, VICINITY MAP, ABBREVIATIONS & LEGEND

DATE: 3/28/2025	SCALE: AS SHOWN	DESIGN: JCT	DRAWN: JCT	CHECKED: AAS
SHEET 1 OF 4				

C:\USERS\JTABUE\DESKTOP\WORK\SVWD\0324 MEADOW WAY PRIVDRAWINGS\G1.1 NOTES AND SPECIFICATIONS.DWG by JTABUE 3/28/2025 3:40 PM

GENERAL NOTES:

1. SHOULD IT APPEAR THAT THE WORK TO BE PERFORMED OR ANY MATTER RELATIVE THERETO, IS NOT SUFFICIENTLY DETAILED OR EXPLAINED ON THESE PLANS, THE CONTRACTOR SHALL CONTACT THE OWNER AT (831) 438-2363 WITH ANY QUESTIONS OR DISCREPANCIES. ANY REVISIONS REQUIRE OWNER'S APPROVAL BEFORE PROCEEDING WITH REVISED PLANS.

2. CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONSTRUCTION CONTRACTOR SHALL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY OF THE JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD THE CIVIL ENGINEER AND THE OWNER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF THE WORK ON THE PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE CIVIL ENGINEER.

3. CONTRACTOR SHALL POSSESS A VALID CLASS A - GENERAL ENGINEERING CONTRACTOR LICENSE AT THE TIME THE CONTRACT IS AWARDED AND SHALL MAINTAIN THROUGHOUT THE LENGTH OF CONTRACT.

4. CONTRACTOR SHALL POST EMERGENCY TELEPHONE NUMBERS AT THE JOB SITE FOR PUBLIC WORKS, AMBULANCE, POLICE AND FIRE DEPARTMENTS.

5. CONTRACTOR SHALL CONFORM TO THE RULES AND REGULATIONS OF THE STATE CONSTRUCTION SAFETY ORDERS PERTAINING TO EXCAVATION AND TRENCHING. CONTRACTOR SHALL BEAR FULL RESPONSIBILITY FOR TRENCH SHORING DESIGN AND INSTALLATION.

6. EXCAVATIONS SHALL BE ADEQUATELY SHORED, BRACED AND SHEETED SO THAT THE EARTH WILL NOT SLIDE OR SETTLE AND SO THAT ALL EXISTING IMPROVEMENTS OF ANY KIND WILL BE FULLY PROTECTED FROM DAMAGE, ANY DAMAGE RESULTING FROM A LACK OF ADEQUATE SHORING, BRACING AND SHEETING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND HE SHALL EFFECT NECESSARY REPAIRS OR RECONSTRUCTION AT HIS OWN EXPENSE. WHERE THE EXCAVATION FOR A CONDUIT TRENCH, STRUCTURE AND/OR BORING AND JACKING PIT IS REQUIRED, THE CONTRACTOR SHALL CONFORM TO THE APPLICABLE CONSTRUCTION SAFETY ORDERS OF THE DIVISION OF INDUSTRIAL SAFETY OF THE STATE OF CALIFORNIA. THE CONTRACTOR SHALL ALWAYS COMPLY WITH OSHA REQUIREMENTS.

7. INFORMATION CONCERNING EXISTING UTILITIES IS NOT GUARANTEED; LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE ONLY. DISTRICT DOES NOT GUARANTEE THE ACCURACY, COMPLETENESS, LOCATION, OR THE EXISTENCE OR NONEXISTENCE OF ANY UTILITY PIPE OR STRUCTURE WITHIN THE LIMITS OF THIS PROJECT. THE CONTRACTOR IS REQUIRED TO TAKE ALL DUE PRECAUTIONARY MEANS NECESSARY TO PROTECT UTILITY LINES, PIPES, OR STRUCTURES.

8. CONTRACTOR SHALL REQUEST THAT UNDERGROUND FACILITIES BE LOCATED AND MARKED IN THE FIELD A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION BY CALLING UNDERGROUND SERVICE ALERT (USA) AT 1-800-227-2600.

9. CONTRACTOR SHALL POTHOLE, EXCAVATE, AND EXPOSE ALL UTILITY CROSSINGS OR CONNECTIONS AFFECTED BY THE WORK. ALL EXISTING UTILITIES SHALL BE ADEQUATELY SUPPORTED AND PROTECTED TO THE SATISFACTION OF THE DISTRICT. IN THE EVENT OF DAMAGE TO ANY UTILITY OCCASIONED BY THE CONTRACTOR OPERATIONS, THE CONTRACTOR, AT HIS SOLE COST AND EXPENSE, WILL IMMEDIATELY CAUSE REPAIRS TO BE MADE TO THE SATISFACTION OF THE AFFECTED UTILITY. NOTIFY THE PROJECT ENGINEER OF ANY ADJUSTMENTS NECESSITATED BY WAY OF CONFLICT WITH EXISTING UTILITIES.

10. CONTRACTOR SHALL PROVIDE ALL LIGHTS, SIGNS, BARRICADES, FLAG MEN, CONES OR OTHER DEVICES NECESSARY TO PROVIDE FOR PUBLIC SAFETY IN ACCORDANCE WITH THE SPECIFICATIONS.

11. MAINTAIN ONE-WAY TRAFFIC ON PUBLIC AND PRIVATE ROADS WITH FLAG CONTROL, PAVED OR UNPAVED, ON WHICH WORK IS BEING PERFORMED DURING WORKING HOURS, OR COORDINATE WITH OWNER TO PROVIDE AN ACCEPTABLE DETOUR ROUTE AROUND THE WORKING AREA. MAINTAIN NORMAL TRAFFIC TRAVEL WIDTH DURING NON-WORKING HOURS. REFER TO ENCROACHMENT PERMITS, LICENSES, EASEMENT CONDITIONS AND TRAFFIC PLANS, WHERE APPLICABLE, AS INCLUDED IN THE SPECIFICATIONS.

12. THE CONTRACTOR SHALL PROVIDE FOR INGRESS AND EGRESS FOR ANY PRIVATE PROPERTY ADJACENT TO THE WORK AREA THROUGHOUT THE PERIOD OF CONSTRUCTION.

13. CONTRACTOR SHALL REPLACE, AT HIS EXPENSE, ALL TREES, SHRUBS, LAWNS, FENCES, IRRIGATION SYSTEMS AND IMPROVEMENTS WHICH ARE TO REMAIN INTACT BUT HAVE BEEN REMOVED OR DAMAGED DURING CONSTRUCTION.

14. ALL PERMANENT IMPROVEMENTS REMOVED OR DAMAGED BY THE CONTRACTOR SHALL BE RESTORED TO THEIR ORIGINAL LOCATION AND CONDITION BY THE CONTRACTOR USING NEW MATERIALS AS DIRECTED BY THE ENGINEER.

15. ALL SURPLUS AND UNSUITABLE MATERIAL SHALL BE REMOVED FROM THE SITE AND PUBLIC RIGHT-OF-WAY.

16. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO KEEP PUBLIC STREETS FREE FROM DIRT AND DEBRIS. SHOULD ANY DIRT OR DEBRIS BE DEPOSITED IN PUBLIC RIGHT-OF-WAY, THE CONTRACTOR SHALL REMOVE IT IMMEDIATELY.

17. OVERNIGHT PARKING OF CONSTRUCTION EQUIPMENT ON SITE OR IN THE STREET RIGHT-OF-WAY SHALL NOT BE PERMITTED, EXCEPT AT LOCATION(S) APPROVED BY THE CITY.

18. CONTRACTOR SHALL OBTAIN CITY OF SCOTTS VALLEY ENCROACHMENT PERMITS FOR WORK WITHIN PUBLIC RIGHT-OF-WAY AND EASEMENTS. CONTRACTOR IS RESPONSIBLE FOR ANY/ALL PERMITS AND ASSOCIATED FEES FOR ENTRY OR USE OF PRIVATE PROPERTY.

19. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE REQUIREMENTS OF THE DIVISION OF INDUSTRIAL SAFETY PERTAINING TO "CONFINED SPACES". ANY MANHOLE, CULVERT, DROP INLET OR TRENCH (WHICH COULD CONTAIN AIR) THAT IS NOT READILY VENTILATED MAY BE CONSIDERED A "CONFINED SPACE".

20. THE CONTRACTOR SHALL NOT DESTROY ANY PERMANENT SURVEY POINTS. ANY PERMANENT MONUMENTS OR POINTS DESTROYED SHALL BE REPLACED BY A LICENSED ENGINEER OR LICENSED SURVEYOR AT THE CONTRACTOR'S EXPENSE.

21. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING AN AIRBORNE DUST NUISANCE FROM THE CONSTRUCTION SITE BY WATERING AND/OR TREATING THE SITE IN SUCH A MANNER TO LIMIT THE EXTENT OF AIRBORNE DUST PARTICLES.

22. SITE WORK HOURS ARE 8:00 A.M. TO 5:00 P.M. MONDAY THRU FRIDAY. NO GRADING WORK SHALL BE PERFORMED ON SATURDAYS, SUNDAYS OR OBSERVED NATIONAL HOLIDAYS.

23. CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION SITE STORM WATER POLLUTION PREVENTION AND IMPLEMENTING NECESSARY BEST MANAGEMENT PRACTICES AND AT THE REQUEST OF THE CITY OF SCOTTS VALLEY. EROSION CONTROL MEASURES SHALL BE IN PLACE AT THE END OF EACH WORKING DAY. WET SEASON CONTROLS ARE REQUIRED (MINIMUM) BETWEEN OCTOBER 15 AND APRIL 15.

24. IF DEWATERING IS NEEDED, CONTRACTOR SHALL HAVE ALL EQUIPMENT AND MATERIALS ON SITE NEEDED TO ENSURE THE PROTECTION OF SURFACE WATER BODIES AND SEWER AND STORM DRAIN SYSTEMS FROM RUNOFF WHICH MAY BE CONTAMINATED BY SEDIMENT, SAWCUT SLURRY OR OTHER POLLUTION. NO DEWATERING ACTIVITY SHALL CONNECT TO EXISTING SEWER OR STORM DRAIN SYSTEMS.

25. THE CONTRACTOR SHALL COMPLY WITH ALL RULES, REGULATIONS AND PROCEDURES OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) FOR MUNICIPAL, CONSTRUCTION AND INDUSTRIAL ACTIVITIES AS PROMULGATED BY THE CALIFORNIA STATE WATER RESOURCES CONTROL BOARD OR ANY OF ITS' REGIONAL WATER QUALITY CONTROL BOARDS. REFER TO THE FOLLOWING GENERAL PERMITS  
a. WQO 2022-0057-DWQ, GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION AND LAND DISTURBANCE ACTIVITIES  
b. WQO 2013-0001-DWQ, GENERAL PERMIT FOR STORM WATER DISCHARGES FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4)

25. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS. THE FOLLOWING LIST OF STANDARDS ARE/OR SPECIFICATIONS ARE INCORPORATED INTO THESE PLANS BY REFERENCE. DESIGN AND CONSTRUCTION OF ALL IMPROVEMENTS SHALL COMPLY WITH ALL APPLICABLE STANDARDS INCLUDING:  
a. SCOTTS VALLEY WATER DISTRICT STANDARD DETAILS AND SPECIFICATIONS  
b. CITY OF SCOTTS VALLEY MUNICIPAL CODE  
c. CITY OF SCOTTS VALLEY STANDARD DETAILS AND SPECIFICATIONS  
d. STANDARD SPECIFICATIONS, STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION, 2023 EDITION  
e. STANDARD PLANS, STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS), 2023 EDITION

26. IF ARCHAEOLOGICAL RESOURCES OR HUMAN REMAINS ARE DISCOVERED DURING CONSTRUCTION, THE COUNTY CORONER SHALL BE NOTIFIED AND WORK SHALL BE HALTED TO WITHIN 150-FEET OF THE FIND UNTIL IT CAN BE EVALUATED BY A QUALIFIED PROFESSIONAL ARCHAEOLOGIST. IF THE FIND IS SIGNIFICANT, APPROPRIATE MITIGATION MEASURES SHALL BE FORMULATED AND IMPLEMENTED.

27. THE CONTRACTOR SHALL SUBMIT TWO SETS OF "RED-LINE" AS-BUILT PLANS TO THE OWNER PRIOR TO FINAL ACCEPTANCE OF THE IMPROVEMENTS.

28. THE EXISTING PIPE TO BE REMOVED IS ASBESTOS CEMENT PIPE (ACP). THE PIPE SHALL BE CUT, REMOVED AND DISPOSED IN A PROPER MANOR. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER MANIFESTING OF ANY AND ALL ACP AT AN AUTHORIZED DISPOSAL SITE.

29. CONTRACTOR IS REQUIRED TO NOTIFY ALL POLICE DEPARTMENTS, UNITED STATES POSTAL OFFICE, TRASH (GREEN WASTE TRASH MANAGEMENT, FIRE DEPARTMENT), AND AFFECTED PROPERTY OWNERS AT LEAST 72 HOURS AHEAD BEFORE WORK COMMENCING.
  - POLICE DEPARTMENT: SCOTTS VALLEY POLICE DEPARTMENT -- TIPLINE@SCOTTSVALLEY.GOV
  - FIRE DEPARTMENT: SCOTTS VALLEY FIRE DEPARTMENT -- (831) 438-0211 INFO@SCOTTSVALLEYFIRE.COM
  - U.S POSTAL OFFICE: 831-438-5801 241 KINGS VILLAGE RD SCOTTS VALLEY, CA 95066-9998
  - TRASH: (GREEN WASTE MANAGEMENT) - MONA GALLO --- MONA.GALLO@GREENWASTE.COM

SPECIFICATIONS:

1. WATER SYSTEM REQUIREMENTS

1.1. WATER FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THESE PLANS AND THE STANDARD PLANS AND SPECIFICATION OF THE SCOTTS VALLEY WATER DISTRICT. CONTRACTOR SHALL KEEP A COPY OF THE STANDARD SPECIFICATIONS AND DRAWINGS ON THE JOBSITE AT ALL TIMES.

1.2. SVWD SHALL BE NOTIFIED AT LEAST 24-HOURS PRIOR TO COMMENCING THE WORK. A PRE-CONSTRUCTION MEETING SHALL BE HELD AT LEAST ONE WEEK PRIOR TO SITE MOBILIZATION.

1.3. THE TOP OF THE PIPE SHALL BE A MINIMUM OF 36 INCHES BELOW FINISHED GRADE IN PAVED AREAS, UNLESS INDICATED OTHERWISE ON THE PLANS OR DIRECTED BY THE OWNER DUE TO UNUSUAL SITE CONDITIONS. PIPE SHALL BE BEDDED AND BACKFILLED PER SVWD STANDARD DETAIL 15. TRENCH SHALL BE REPAIRED PER CITY OF SCOTTS VALLEY STANDARD DETAIL SS-03.

1.4. PIPE BEDDING AND PIPE ZONE BACKFILL SHALL BE CLEAN NATIVE SAND OR IMPORTED SAND.

1.5. NO FACILITY IS TO BE BACKFILLED UNTIL INSPECTED BY THE OWNER.

1.6. SHUT DOWN OR TAPPING OF EXISTING WATERLINES SHALL BE COORDINATED WITH THE CITY AND/OR SVWD AT LEAST 24-HOURS IN ADVANCE.

1.7. NO CONNECTION SHALL BE MADE TO THE EXISTING WATER MAINS UNTIL THE NEW WORK HAS PASSED THE REQUIRED PRESSURE AND BACTERIOLOGICAL TESTS. TAPPING SLEEVES SHALL BE PRESSURE TESTED IN AN APPROVED MANNER IN THE PRESENCE OF THE INSPECTOR PRIOR TO TAPPING THE MAIN. TAPPING OF THE MAIN LINE SHALL NOT PROCEED UNLESS THE INSPECTOR IS PRESENT.

1.8. WATER USED FOR CONSTRUCTION SHALL BE METERED. OBTAIN A CONSTRUCTION METER FROM THE SYSTEM SERVING THE HYDRANT.

1.9. INSTALL PIPELINES AT UNIFORM LINE AND GRADE BETWEEN CONTROL ELEVATIONS NOTED ON DRAWINGS. DEFLECT VERTICALLY AS NEEDED TO JOIN EXISTING PIPES.

1.10. ALL NEW PIPE SHALL BE PVC C900 DR 14 AND SHALL BE FULLY RESTRAINED USING MECHANICAL RESTRAINTS.

1.11. DISTURBED (E) THRUST BLOCKS TO BE REPLACED IN KIND.

1.12. PRESSURE TEST PIPE TO 200 PSI PER SVWD STANDARD SPECIFICATION 15042.

1.13. CONTRACTOR SHALL NOT OPERATE EXISTING VALVES. ALL SYSTEM OPERATIONS TO BE PERFORMED BY SVWD. COORDINATE WITH CITY FOR TEMPORARY SHUTDOWNS.

2. DEMOLITION REQUIREMENTS

2.1. SAWCUT PAVEMENTS AND CURBS TO BE REMOVED, PROVIDING A STRAIGHT, NEAT EDGE FOR CONNECTION TO NEW WORK.

2.2. REMOVE THE MINIMAL AMOUNT OF EXISTING PAVEMENT REQUIRED TO INSTALL THE NEW WORK. BACKFILL AND THEN THEN REMOVE THE REMAINING PAVEMENT TO THE LIMITS SHOWN ON THE PLANS.

3. PAVING REQUIREMENTS

3.1. CURB, GUTTER AND SIDEWALK SHALL MATCH EXISTING OR SHALL BE PER CITY OF SCOTTS VALLEY STANDARD DETAILS

3.2. REPLACE STREET PAVEMENTS PER CITY OF SCOTTS VALLEY STANDARD PLANS AND STREET STRUCTURAL SECTIONS AND CALTRANS SPECIFICATION SECTION 39. MATCH EXISTING THICKNESS OF ASPHALT CONCRETE AND AGGREGATE BASE. WHEN REPLACING THE PAVEMENT ON AN EXISTING ROAD, THE EXISTING PAVEMENT SHALL BE CUT TO A NEAT LINE AND REMOVED BACK TO AN EXISTING ADEQUATE STRUCTURAL SECTION. AN EXPLORATORY TRENCH OR POTHOLING MAY BE REQUIRED TO DETERMINE THE LIMITS OF PAVEMENT REMOVAL.

3.3. THE CONTRACTOR IS RESPONSIBLE FOR MATCHING EXISTING STREETS AND OTHER IMPROVEMENTS WITH A SMOOTH TRANSITION IN PAVING, CURBS, GUTTERS, SIDEWALKS, GRADING, ETC., AND TO AVOID THE CREATION OF ANY LOW SPOTS OR HAZARDOUS CONDITIONS OR ANY ABRUPT OR APPARENT CHANGES IN APPEARANCE, GRADES, OR CROSS SLOPES.

4. COMPACTION TESTING

4.1. CONTRACTOR TO SECURE SERVICE FOR COMPACTION TESTING AND SHALL BE RESPONSIBLE FOR ALL RETESTS IN FAILED AREAS.

4.2. TESTING INTERVAL SHALL BE DETERMINED BY THE LENGTH OF THE TRENCH DIVIDED BY 50 FEET.

4.3. THE COMPACTION REQUIREMENTS OF THE COUNTY OF SANTA CRUZ OR CALTRANS SHALL PREVAIL IN ALL PUBLIC ROADS

4.4. THE RELATIVE COMPACTION IN PIPE TRENCHES SHALL BE AS DESCRIBED BELOW:

4.4.1. PIPE ZONE AND PIPE BASE - 95% RELATIVE COMPACTION

4.4.2. TRENCH ZONE TO STREET ZONE IN PAVED AREAS - 95% RELATIVE COMPACTION

4.4.3. BACKFILL ZONE - 95% RELATIVE COMPACTION

4.4.4. STREET ZONE IN PAVED AREAS - 95% RELATIVE COMPACTION

PIPELINE NOTES

1. NEW WATER MAINS SHALL BE C900 PVC DR 14

2. FULLY RESTRAIN ALL PIPE JOINTS, VALVES AND FITTINGS USING MECHANICAL JOINT RESTRAINTS

3. DISINFECTION AND FLUSHING PLAN TO BE SUBMITTED BY CONTRACTOR FOR REVIEW

4. CONTRACTOR SHALL POTHOLE AND PHYSICALLY DAYLIGHT ALL EXISTING UTILITIES AFFECTED BY WORK INCLUDED IN THE PROJECT (I.E. EXISTING MAINS, VALVES, FITTINGS ETC.) THE LOCATION, SIZE AND CONDITION OF THE EXISTING UTILITIES SHALL BE PROVIDED TO THE SVWD AND ENGINEER

QUANTITIES

6" PVC C900 DR 14	80 LF
6" GATE VALVE, FL	2 EA
6" GATE VALVE, FL X MJ	1 EA
6" PIPE COUPLING	2 EA
6" 45° ELL, MJ	2 EA
6" 90° ELL, MJ	2 EA
6" MEGALUG MJ RESTRAINT	3 EA
6" MEGALUG RFA	3 EA
6" TEE, FL	4 EA
6" X 3" TEE, FL	2 EA
6" GATE VALVE W/ HAND WHEEL	2 EA
6" DISMANTLING JOINT	1 EA
3" COMPANION FLG X 2" THR	2 EA
2" BRASS NIPPLE	4 EA
3" 90° ELL, FL	2 EA
PIPE SUPPORTS	6 EA
TRAFFIC BOLLARDS	3 EA
METAL PRV ENCLOSURE	1 EA
2" X 1" BRASS TEE, FPT	1 EA
2" ARV, THR (CLA-VAL 90-01 OR EQUAL)	1 EA
6" ARV, FL (CLA-VAL 90-01 OR EQUAL)	1 EA
BADGER E-SERIES G2 METER 3"Ø	1 EA

MATERIALS:

1. GENERAL MATERIAL REQUIREMENTS

1.1. ALL PRODUCTS AND MATERIALS FURNISHED AS PART OF THE WORK INCLUDED IN THIS PLAN SET SHALL BE SUBMITTED TO OWNER REPRESENTATIVE FOR APPROVAL. SUBMITTALS SHALL INCLUDE BUT BE LIMITED TO: SHOP DRAWINGS, MATERIAL PROPERTIES, PRODUCT CUT SHEETS, INSTALLATION REQUIREMENTS AND OPERATION AND MAINTENANCE MANUALS. CONTRACTOR SHALL NOT PURCHASE NOR INSTALL ANY PRODUCTS OR MATERIALS WITHOUT PRIOR SATISFACTORY REVIEW DETERMINATION BY OWNER REPRESENTATIVE.

1.2. ALL MATERIALS SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE OWNER REPRESENTATIVE, AND SHALL NOT BE USED BEFORE BEING INSPECTED AND APPROVED BY THE INSPECTOR. OWNER HAS THE RIGHT TO PERFORM ANY TESTING NECESSARY TO ENSURE COMPLIANCE OF THE MATERIALS WITH THE MATERIALS SPECIFICATIONS. FAILURE OR NEGLECT ON THE PART OF THE OWNERS REPRESENTATIVE TO CONDEMN OR REJECT WORK MATERIALS NOT IN ACCORDANCE WITH THE MATERIALS SPECIFICATIONS SHALL NOT BE CONSTRUED TO IMPLY ACCEPTANCE SHOULD THEIR INFERIORITY BECOME EVIDENT AT ANY TIME. MATERIALS REJECTED BY THE OWNER REPRESENTATIVE SHALL BE IMMEDIATELY REMOVED FROM THE JOBSITE.

2. REFERENCE STANDARDS

2.1. ANSI – AMERICAN NATIONAL STANDARDS INSTITUTE

2.2. ASME - AMERICAN SOCIETY OF MECHANICAL ENGINEERS

2.3. ASTM – AMERICAN SOCIETY FOR TESTING AND MATERIALS

2.4. AWWA - AMERICAN WATER WORKS ASSOCIATION

2.5. FM - FM GLOBAL (FACTORY MUTUAL)

2.6. HI - HYDRAULIC INSTITUTE

2.7. IEEE – INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS

2.8. ISO – INTERNATIONAL STANDARDS ORGANIZATION

2.9. NEMA – NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION

2.10. NEC – NATIONAL ELECTRICAL CODE

2.11. NFPA - NATIONAL FIRE PROTECTION ASSOCIATION

2.12. NSF - NSF INTERNATIONAL (NATIONAL SANITATION FOUNDATION)

2.13. UL – UNDERWRITERS LABORATORIES, INC.

3. CAST-IN-PLACE CONCRETE

3.1. CONCRETE SHALL BE MINOR CONCRETE PER CALTRANS STANDARD 90-2, PORTLAND CEMENT CONCRETE, 3000 PSI AT 28 DAYS, MAX 3-INCH SLUMP.

3.2. MAXIMUM AGGREGATE SIZE SHALL BE 1-INCH.

3.3. REBAR SHALL BE DEFORMED STEEL PER CALTRANS SECTION 52.

3.4. PLACE CONCRETE PER THE REQUIREMENTS OF CALTRANS SECTIONS 51 AND 73.

3.5. SUBMIT MIX DESIGN FOR APPROVAL PRIOR TO CONSTRUCTION.

4. BASE AND SUBBASE

4.1. CLASS 2 AGGREGATE BASE, PRIME COATED, ¾-INCH MAXIMUM, PER CALTRANS SECTION 26.

5. PEA GRAVEL FOR STRUCTURAL BEDDING

5.1. ¾4-INCH CRUSHED AND WASHED STONE, 100% PASSING THE 1-INCH SIEVE AND LESS THAN 6% PASSING THE #4 SIEVE.

6. ASPHALT PAVING AND SEALS

6.1. ASPHALT CONCRETE SHALL BE TYPE B HOT MIX ASPHALT, ¾" AGGREGATE GRADATION, PER SECTION 39.2.02 OF THE CALTRANS STANDARD SPECIFICATIONS.

6.2. TACK COAT SHALL BE TYPE RS1 ASPHALTIC EMULSION PER SECTION 94 OF THE CALTRANS STANDARD SPECIFICATIONS.

6.3. ASPHALT BINDER SHALL BE TYPE PG64-10 PER SECTION 92 OF THE CALTRANS STANDARD SPECIFICATIONS.

7. SLURRY

7.1. 2-SACK SAND CEMENT SLURRY SHALL CONSIST OF TWO SACKS (188 LBS.) OF PORTLAND CEMENT PER CUBIC YARD OF SAND AND SUFFICIENT MOISTURE FOR WORKABILITY.

8. PVC PIPE

8.1. PVC PIPE SHALL BE PER AWWA STANDARD C900, DR 14 PRESSURE CLASS 305.

8.2. PVC WATER MAINS SHALL BE RESTRAINED USING MJ RESTRAINTS, EBAA IRON 1900 OR EQUAL.

8.3. INSTALL PER AWWA STANDARD C600. PRESSURE TEST INSTALLED PIPE TO 200 PSI.

8.4. DISINFECT INSTALLED PIPE USING SODIUM HYPOCHLORITE SOLUTION PER AWWA STANDARD C651.

9. DUCTILE IRON PIPE (DIP)

9.1. DIP SHALL BE C151, PRESSURE CLASS 350 FOR BELL AND SPIGOT PIPE FOR UNDERGROUND INSTALLATION.

9.2. DIP SHALL BE THICKNESS CLASS 53 FOR FLANGED PIPE AND EPOXY LINED AND COATED FOR ABOVE GROUND INSTALLATION.

9.3. INSTALL PER AWWA STANDARD C600. PRESSURE TEST INSTALLED PIPE TO 200 PSI.

9.4. DISINFECT INSTALLED PIPE USING SODIUM HYPOCHLORITE SOLUTION PER AWWA STANDARD C651.

9.5. DIP THROUGH SLAB SHALL BE WRAPPED WITH PROTECTIVE TAPE, CALPICO VI-10 OR EQUAL.

10. DUCTILE IRON FITTINGS

10.1. DUCTILE IRON FITTINGS SHALL BE PER AWWA STANDARD C110.

10.2. BURIED DUCTILE IRON FITTINGS SHALL BE CEMENT MORTAR LINED AND BITUMINOUS COATED. BURIED FITTINGS SHALL BE WRAPPED IN 10-MIL POLYETHYLENE SHEET.

10.3. ABOVE GROUND FITTINGS SHALL BE EPOXY LINED AND COATED.

10.4. GASKETS SHALL BE VULCANIZED BUTADIENE RUBBER (SBR).

10.5. BOLTS AND NUTS SHALL BE TYPE 316 STAINLESS STEEL CONFORMING TO ASTM F593.

10.6. RESTRAIN ALL FITTINGS USING MEGALUG MECHANICAL RESTRAINTS BY EBAA IRON, INC.

11. GATE VALVES

11.1. RESILIENT WEDGE GATE VALVES PER AWWA C509, U.L.LISTED, CLOW MODEL 2639, MULLER MODEL A-2360 OR EQUAL.

11.2. BURIED VALVES SHALL HAVE 2-INCH SQUARE OPERATING NUT. ABOVE GRADE VALVES SHALL HAVE OPEN STEM AND YOKE (OS&Y) UNLESS NOTED OTHERWISE.

11.3. INTERIOR AND EXTERIOR METAL SURFACES SHALL BE FACTORY-COATED WITH EPOXY MEETING NSF 61.

11.4. END CONNECTIONS AS INDICATED ON THE DRAWINGS.

11.5. BOLTS AND NUTS SHALL BE TYPE 316 STAINLESS STEEL.

11.6. VALVE BOXES SHALL BE TRAFFIC-RATED PRE-CAST CONCRETE WITH IRON LID, CHRISTY MODEL G05T OR EQUAL.

11.7. VALVE BOX RISER SHALL BE PVC PIPE, ASTM D3404, SDR 35.

12. BALL VALVES

12.1. THREADED END BALL VALVES, 1-IN AND SMALLER, FULL PORT BALL TYPE WITH LEVER OPERATOR, RATED FOR 200 PSI SERVICE

12.2. VALVES SHALL HAVE SS BALL AND BODY. SEALS AND STEM SHALL BE NSF 61 COMPLIANT.

13. LOCATOR WIRE

13.1. LOCATOR WIRE SHALL BE 10-GAUGE STRANDED COPPER WIRE WITH BLUE INSULATION.

13.2. WIRE SHALL BE PLACED CONTINUOUSLY ON TOP OF INSTALLED PIPE AND BROUGHT TO THE SURFACE AT EACH VALVE. ATTACHED WIRE TO PIPE USING PLASTIC ADHESIVE TAPE AT 10-FT INTERVALS.

13.3. WIRE SHALL BE BROUGHT UP THE OUTSIDE OF THE VALVE RISER AND FOLDED OVER BETWEEN THE INSIDE OF THE VALVE BOX AND THE VALVE RISER. WIRE SHALL BE BROUGHT TO WITHIN 6-INCHES OF FINISHED GRADE.

14. PRESSURE REDUCING VALVE (PRV)

14.1. GLOBE-STYLE PRESSURE REDUCING VALVE, CLA-VAL MODEL 90-01, SIZES AS NOTED ON PLANS

14.2. ENDS SHALL BE ANSI CLASS 150 FLANGES FOR 6-INCH PRV AND THREADED FOR 2-INCH PRV

14.3. VALVE OR COMPONENT WETTED PARTS SHALL BE NSF 61 COMPLIANT

14.4. PILOT SYSTEM ADJUSTMENT RANGE: 30 PSI TO 300 PSI

14.5. OPERATING PRESSURE SETTINGS

14.5.1. 6-INCH: 60 PSI

14.5.2. 3-INCH: 65 PSI

15. METAL PRV ENCLOSURE

15.1. PLACER WATERWORKS MODEL PW/BE4D, OR EQUAL, SIZE INDICATED ON DRAWING

16. PRESSURE GAUGES

16.1. BOURDON TUBE PRESSURE GAUGE, 2.5 INCH DIAMETER FACE, RANGE AND INSTALLATION LOCATION AS SHOWN ON DRAWINGS.

16.2. GAUGE SHALL BE LIQUID-FILLED, WITH COPPER-ALLOY INTERNAL PARTS IN A STAINLESS STEEL CASE.

16.3. GAUGE ACCURACY SHALL BE ± 2.5 %.

16.4. GAUGE SHALL BE CAPABLE OF EXPERIENCING A PRESSURE 30% ABOVE ITS MAXIMUM SPAN WITHOUT REQUIRING RECALIBRATION.

17. PIPE SUPPORTS

17.1. PROVIDE PREFORMED CHANNEL PIPE SUPPORTS (PIPE STANDS) AS SHOWN ON THE DRAWINGS.

17.2. PIPE SUPPORTS SHALL BE OF MANUFACTURER'S STANDARD DESIGN. MATERIAL SHALL BE GALVANIZED STEEL. ANCHOR THE SUPPORT INTO THE FOUNDATION SLAB PER THE MANUFACTURER'S RECOMMENDATION.

18. BRASS PIPE

18.1. BRASS PIPE AND NIPPLES SHALL CONFORM TO AWWA C800 AND SHALL BE CERTIFIED BY AN ANSI ACCREDITED ORGANIZATION AND BE NSF 61 COMPLIANT.

19. ULTRASONIC METER

19.1. METER SHALL BE BADGER METER E-SERIES G2. SIZE AS INDICATED ON PLANS.

20. GEOTEXTILE FOR SOIL RETENTION

20.1. WOVEN, NONBIODEGRADABLE FABRIC CONSISTING ONLY OFCONTINUOUS CHAIN POLYMER FILAMENTS OR YARD, AT LEAST 85% BY WEIGHT POLYOLEFINS, POLYESTERS OR POLYAMIDE, FORMED INTO A DIMENSIONALLY STABLE NETWORK.

20.2. PROPERTIES:

20.2.1. MINIMUM GRAB TENSILE STRENGTH 315 LBS

20.2.2. MINIMUM GRAB TENSILE ELONGATION 15%

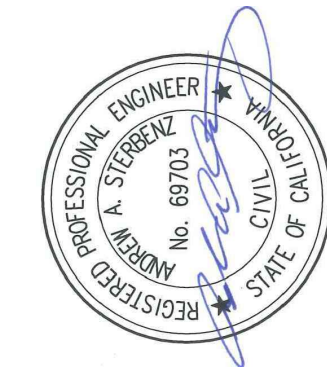
20.2.3. MINIMUM TRAPEZOIDAL TEAR STRENGTH 113 LBS

20.2.4. APPARANT OPENING SIZE 40 SIEVE

20.2.5. PERMITTIVITY 0.05/SEC

20.2.6. FLOW RATE 4.0 GPM/SQ-FT

20.3. TEMCATE MIRAFI 600X, LAYFIELD LP 315 OR EQUAL.



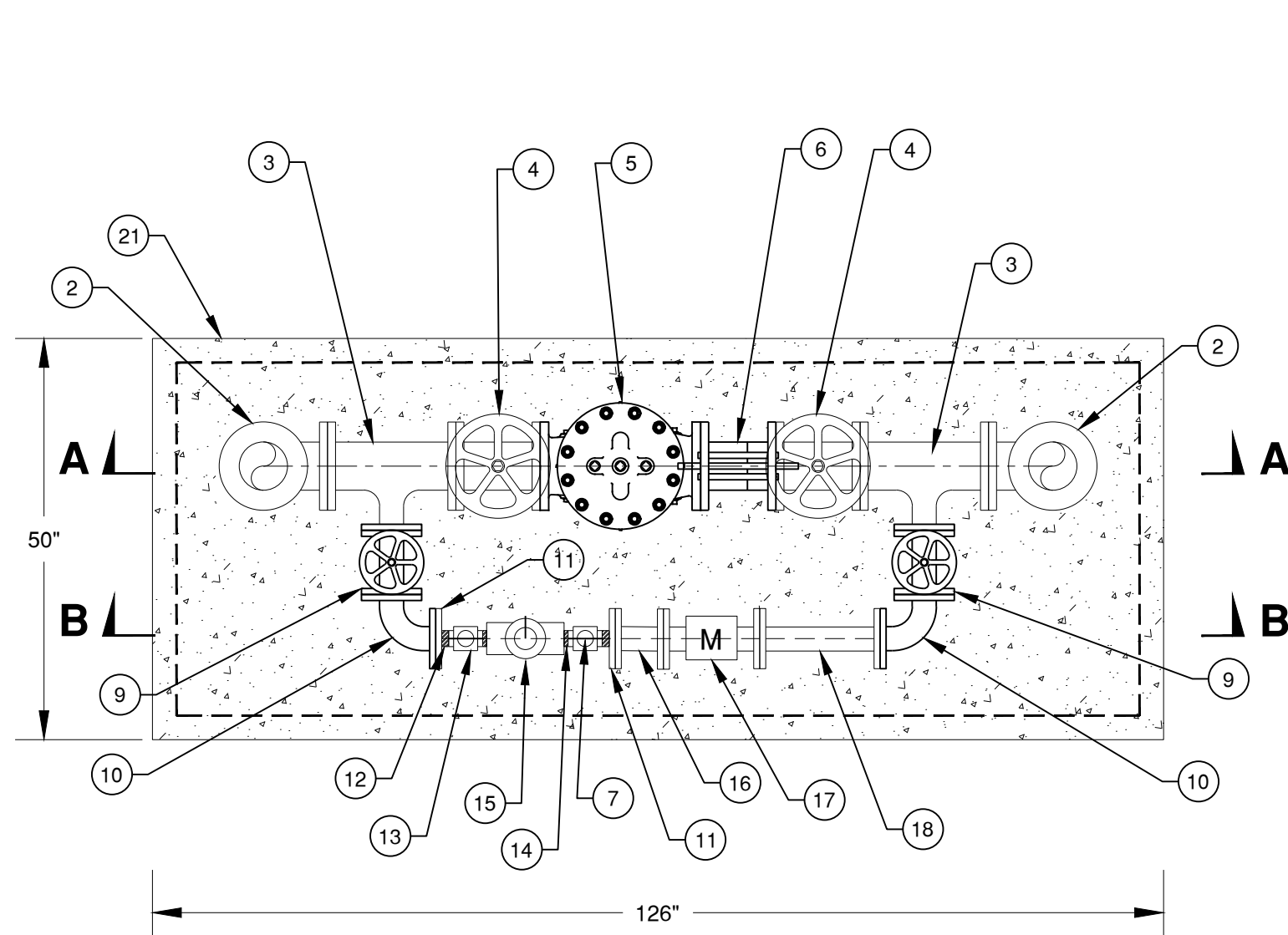
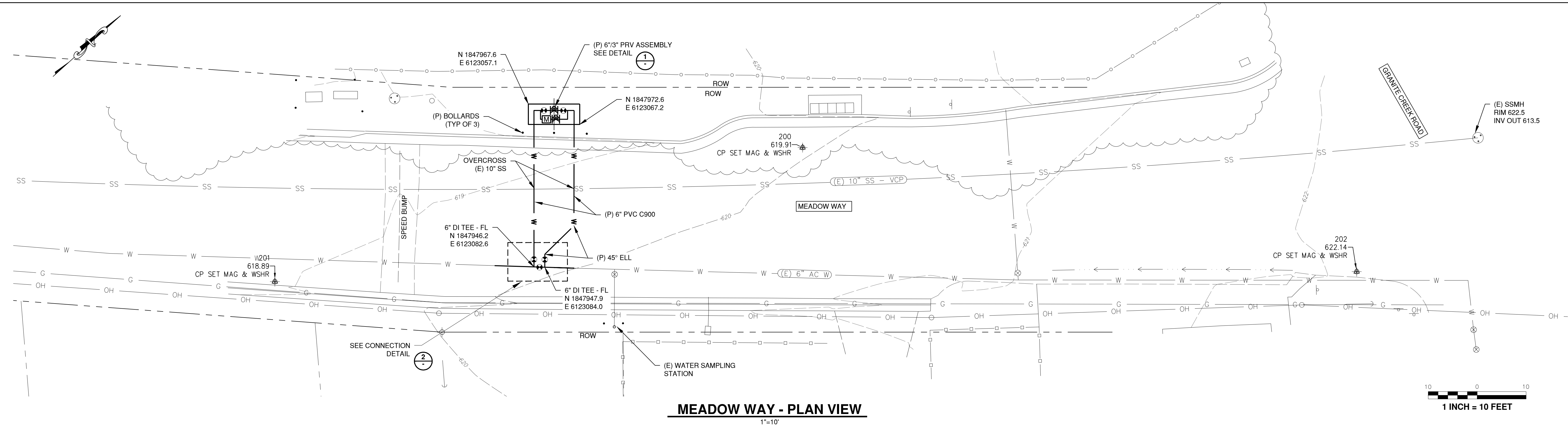
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**Schaaf & Wheeler**  
CONSULTING CIVIL ENGINEERS  
3 QUAIL RUN CIRCLE, SUITE #101  
SALINAS, CA 95007  
(831) 883-4848

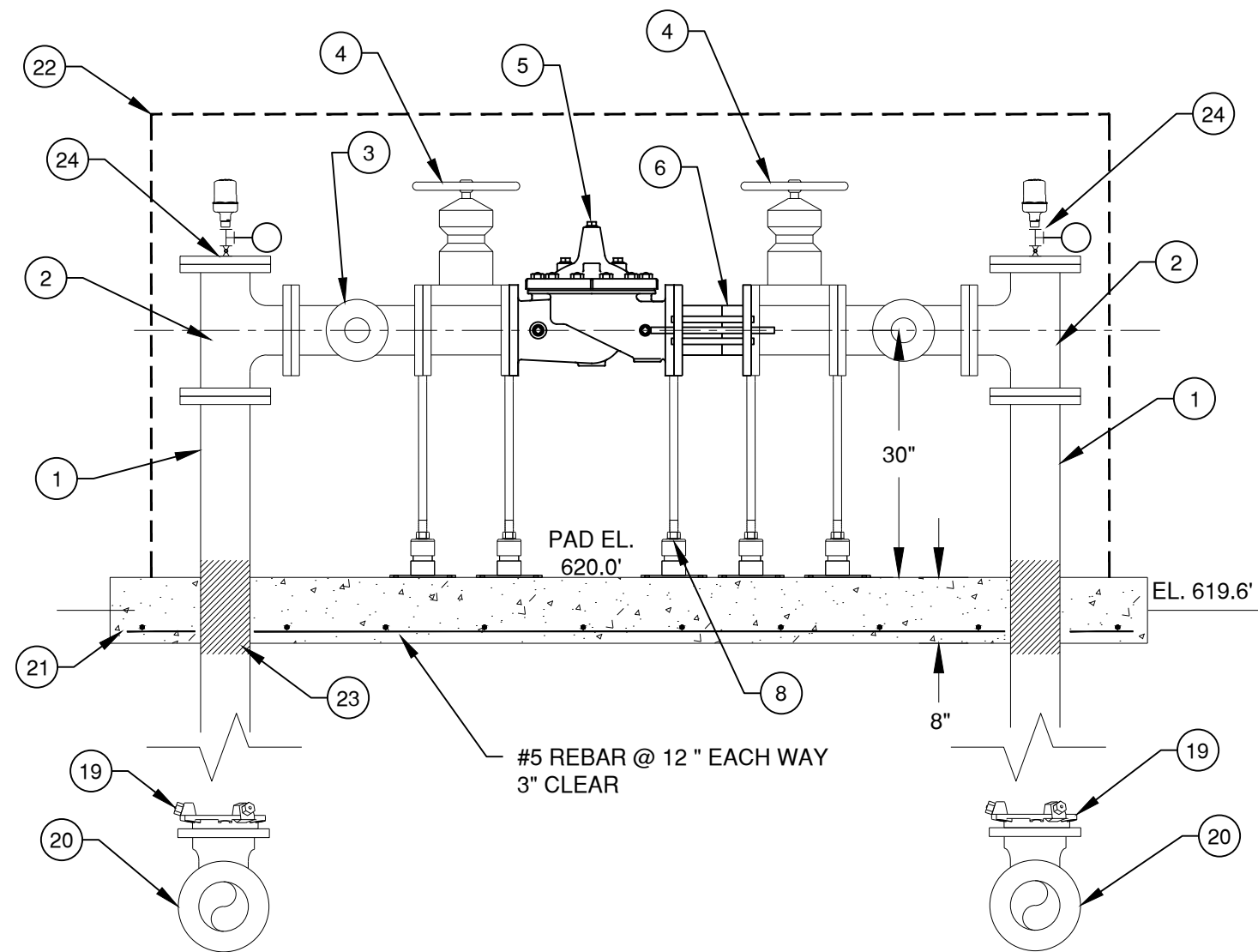
SCOTTS VALLEY WATER DISTRICT  
MEADOW WAY PRESSURE REDUCING VALVE  
GENERAL NOTES & SPECIFICATIONS

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SHEET G1.1				
2 OF 4				

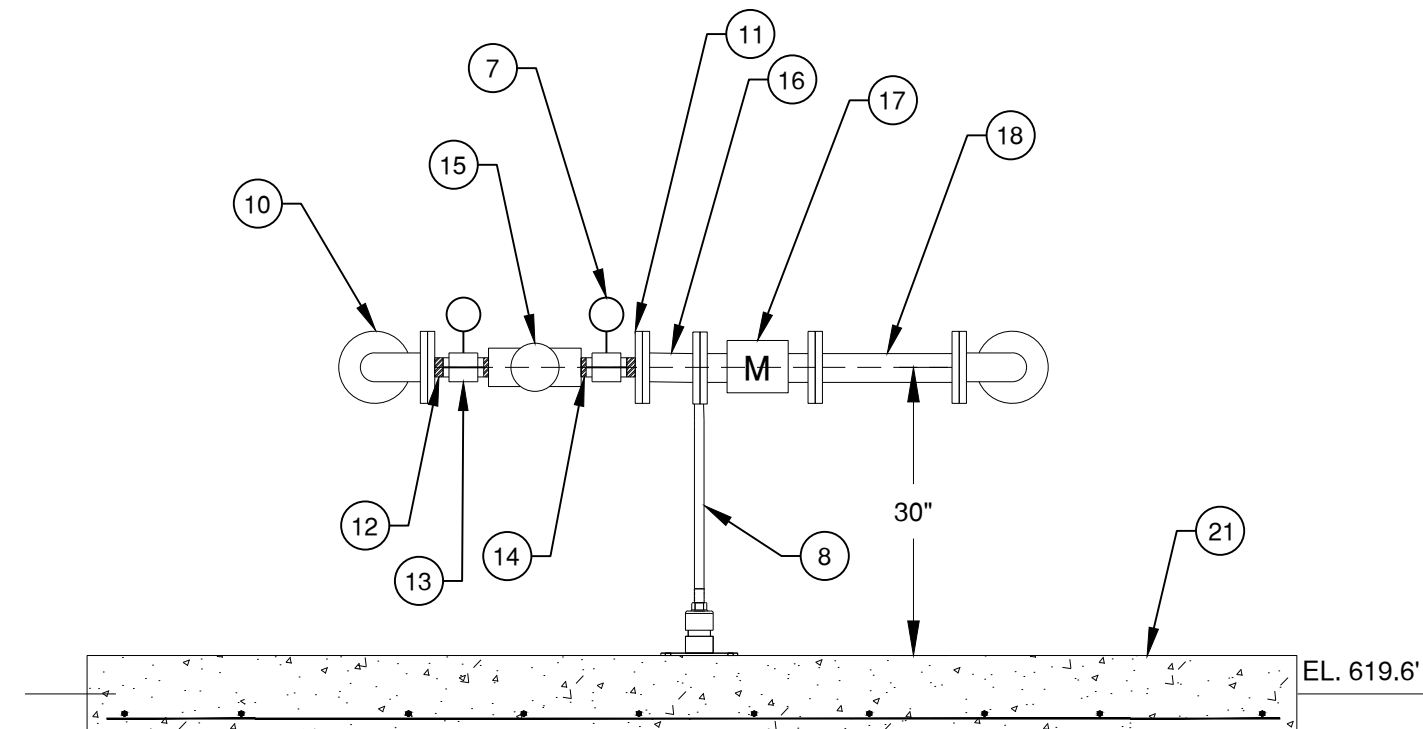
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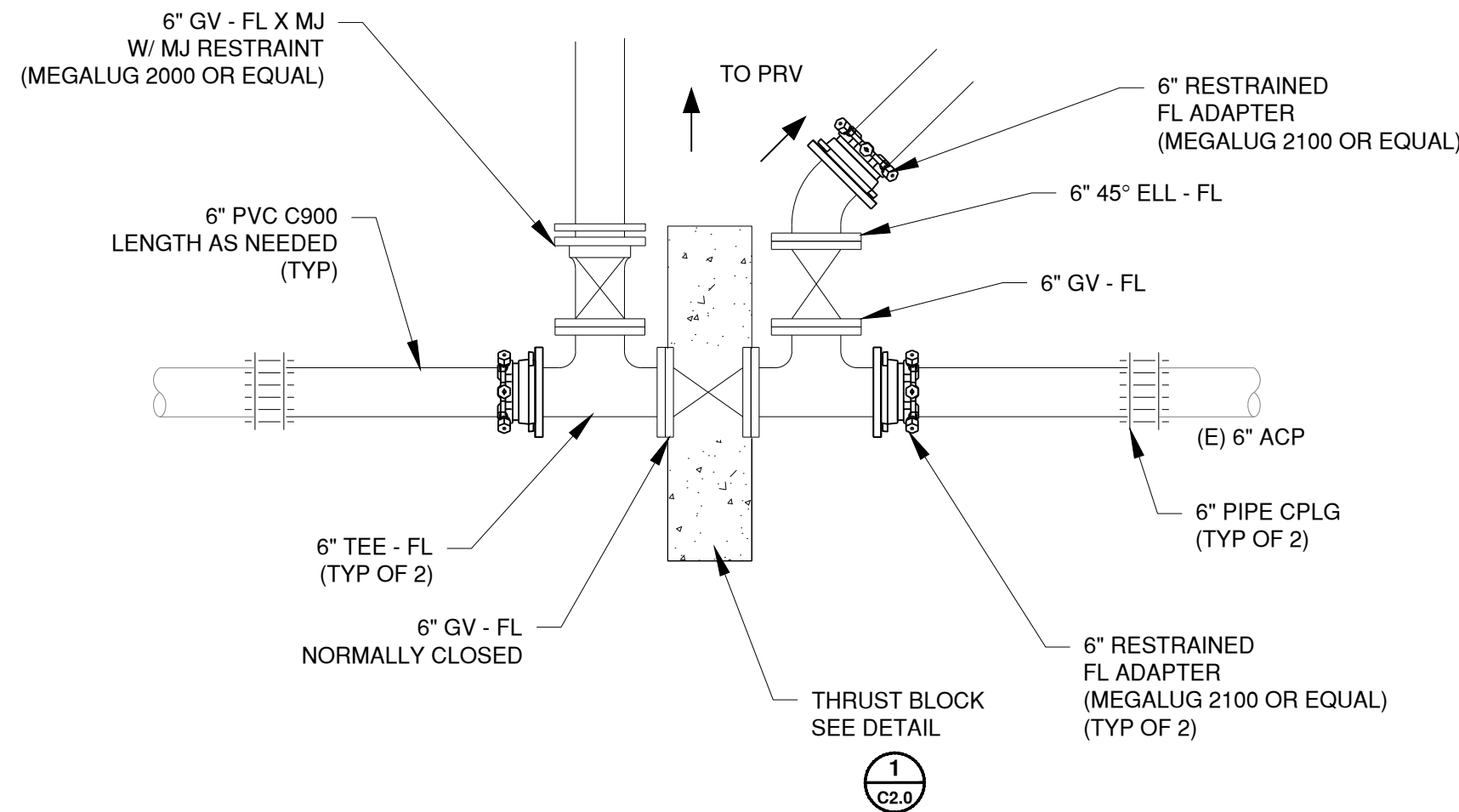
**PLAN**  
1"=20"



**SECTION A**  
1"=20"



**SECTION B**  
1"=20"



**CONNECTION TO EXISTING 6" ACP**

**DETAIL NOTES:**

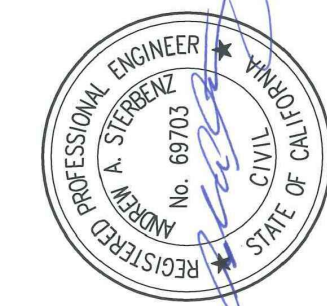
- 6" DIP PIPE, FL X PE, CL 53
- 6" TEE, FL
- 6" X 3" DI TEE, FL
- 6" GATE VALVE, FL W/ HAND WHEEL
- 6" PRESSURE REDUCING VALVE, CLA-VAL MODEL 90-01
- 6" DISMANTLING JOINT
- PRESSURE GAUGE ASSEMBLY ( $\frac{1}{2}$ " X  $\frac{3}{4}$ " REDUCER,  $\frac{1}{2}$ " BALL VALVE,  $\frac{1}{4}$ " NIPPLES) W/ 4"  $\varnothing$  GAUGE FACE,  $\frac{1}{4}$ " FEMALE THR (TYP OF 2)
- STEEL PIPE SUPPORT

- 3" GATE VALVE, FL W/ HAND WHEEL (TYP OF 2)
- 3" 90° EL, FL (TYP OF 2)
- 3" COMPANION FLANGE X 2" THREAD
- 2" BRASS NIPPLE (TYP OF 2)
- 2" X  $\frac{1}{2}$ " TEE, BRASS, FPT (TYP OF 2)
- 2" BRASS NIPPLE (TYP OF 2)
- 2" PRESSURE REDUCING VALVE, CLA-VAL MODEL 90-01, THREADED
- 3" DIP SPOOL (L = 6')
- 3" ULTRASONIC BADGER METER - E SERIES G2
- 3" DIP SPOOL (L = 15')
- 6" MF RESTRAINT - EBAA MEGALUG 2000 OR EQUAL

- 6" 90° ELL, MJ
- CONCRETE SLAB 126" L X 50" W X 8" T W/ #5 REBAR
- METAL PRV ENCLOSURE - PLACER WATER WORKS BE4D-M OR EQUAL
- PROTECTIVE TAPE CALPICO VI-10 OR EQUAL (TYP. BOTH SIDES)
- ARV & PRESSURE GAUGE ASSEMBLY
- 6" COMPANION FL W/ 1" THR OR 6" BLIND FL W/ 1" TAP THR 1" THREADED BRASS BALL VALVE W/ FLARE - MALE ENDS 1" X  $\frac{1}{2}$ " BRASS TEE - FEMALE ENDS, THR 1" ARI S-050 - THR  $\frac{1}{2}$ " X  $\frac{1}{2}$ " REDUCER,  $\frac{1}{2}$ " BALL VALVE,  $\frac{1}{4}$ " NIPPLES PRESSURE GAUGE, 4"  $\varnothing$  FACE,  $\frac{1}{4}$ " FEMALE THR

**PRV DETAIL**

1



NO	REVISIONS	DATE	APPR
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3			
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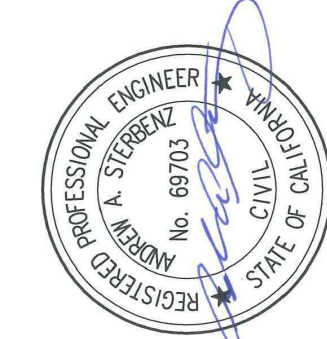
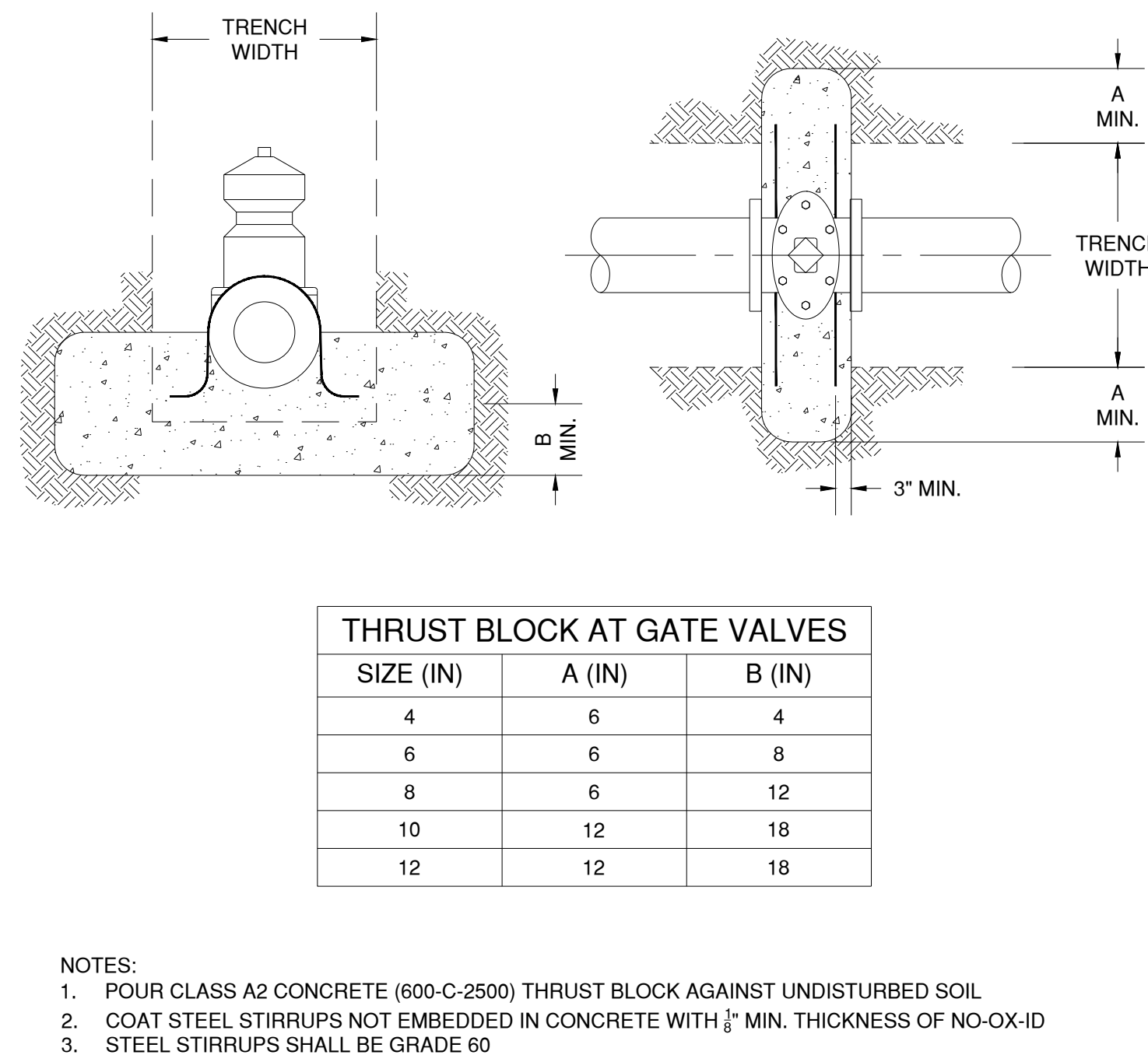
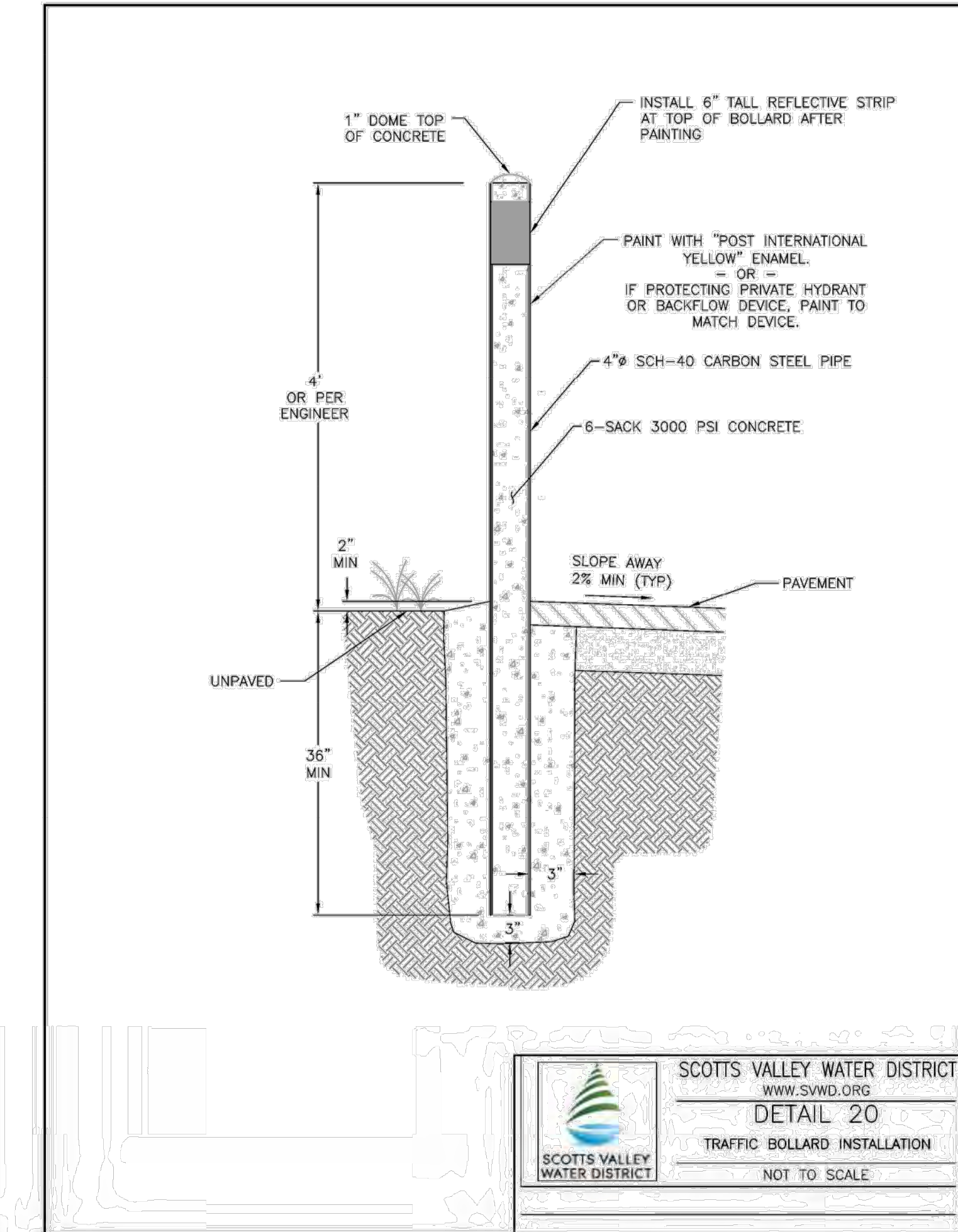
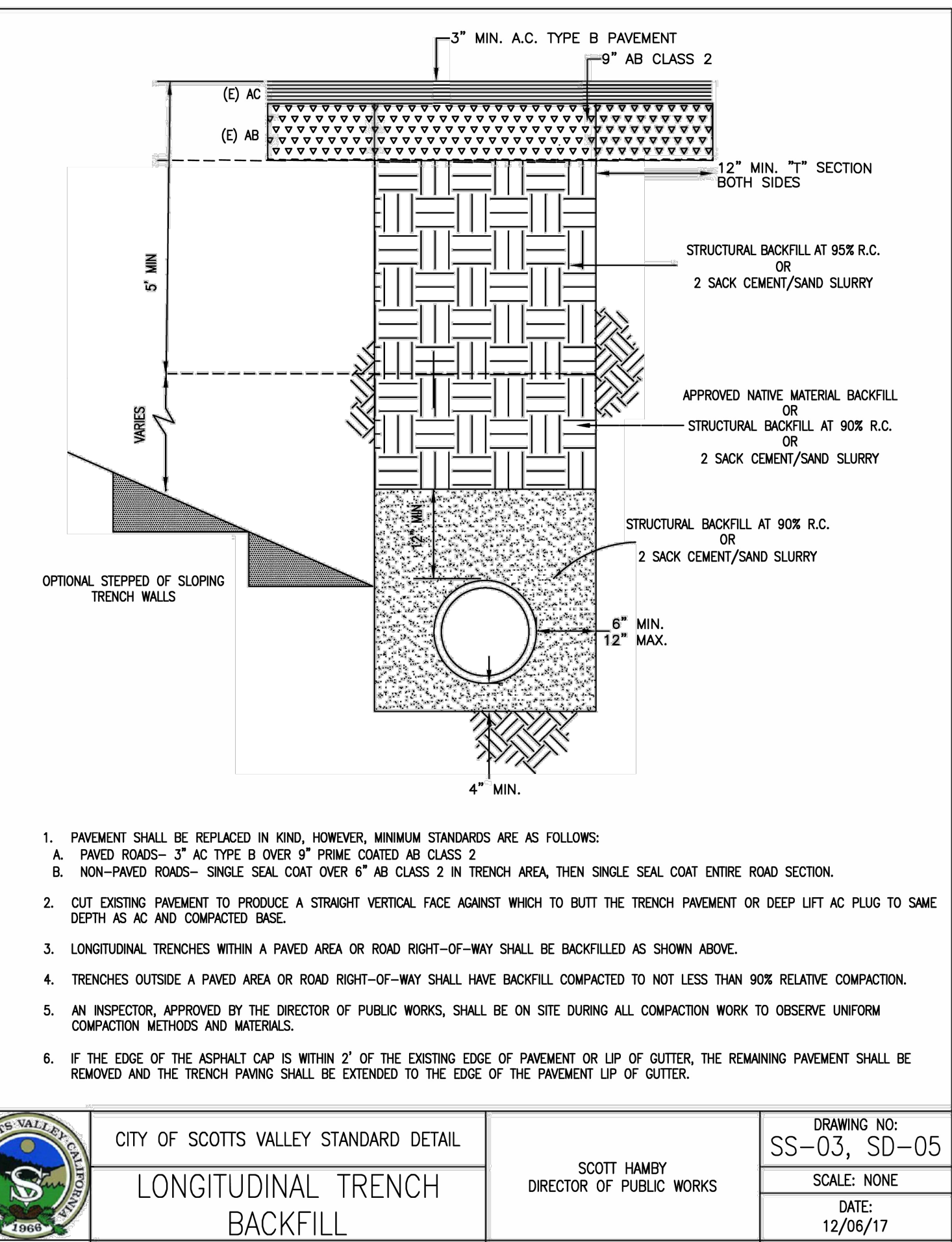
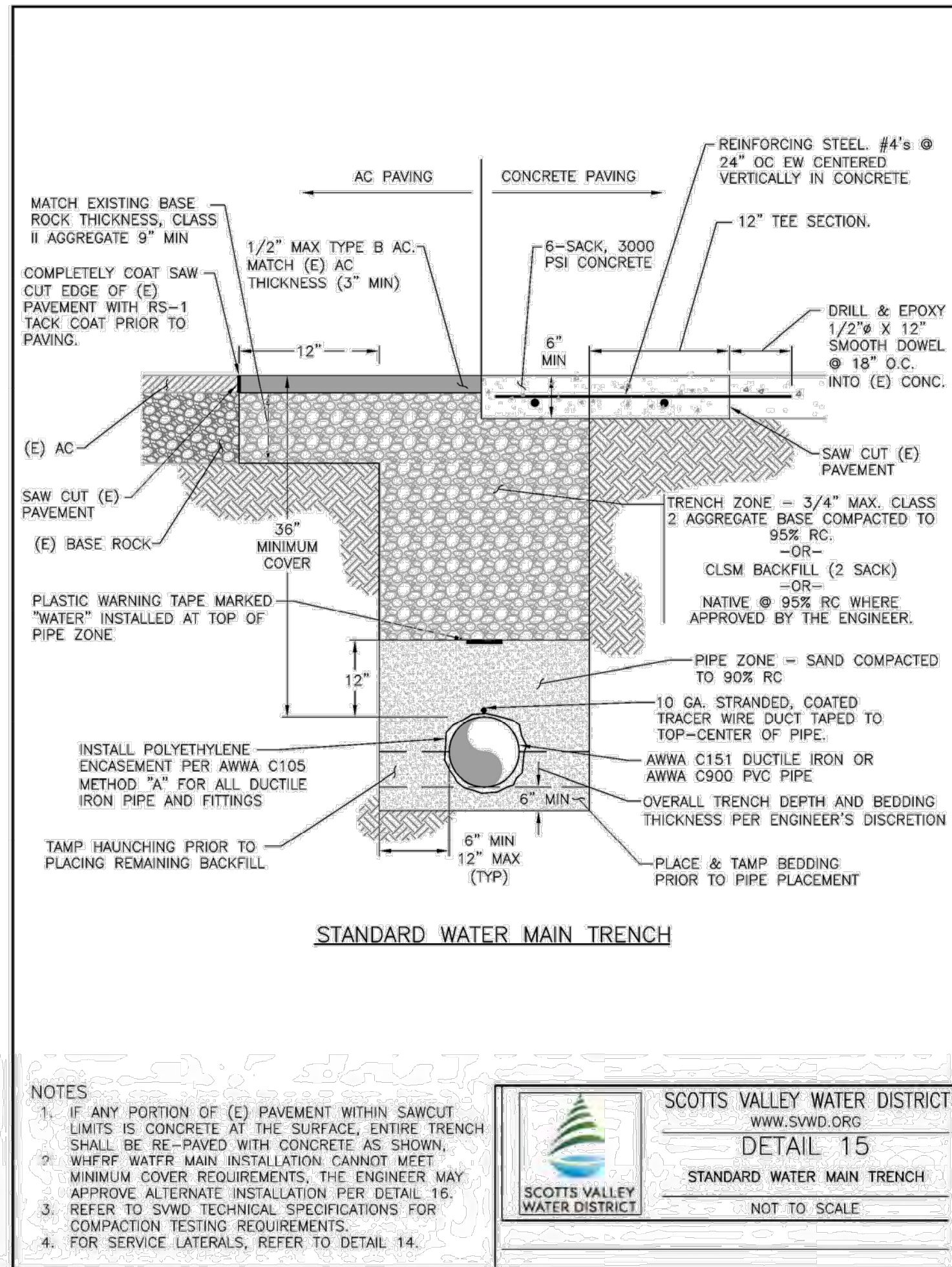
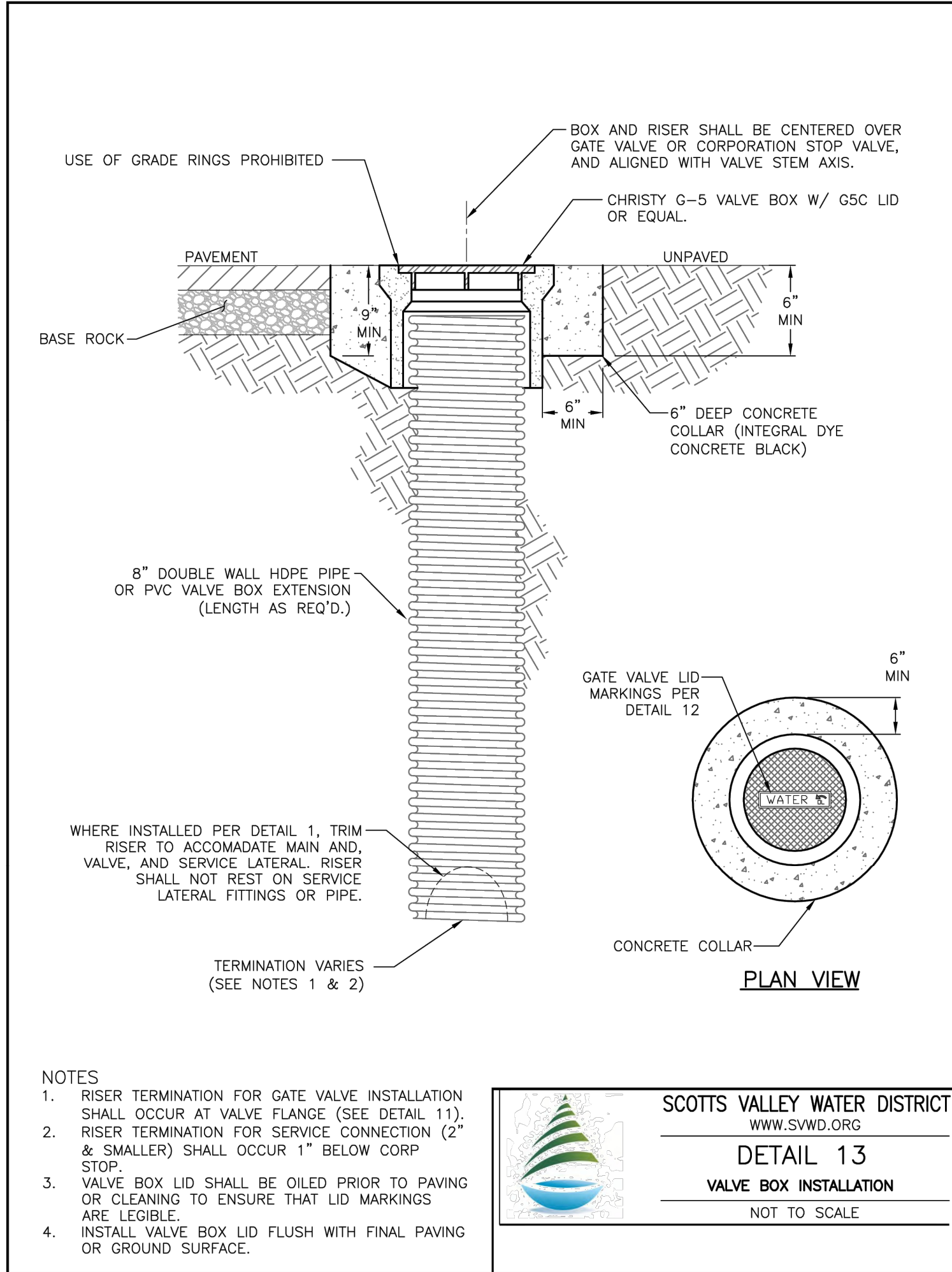
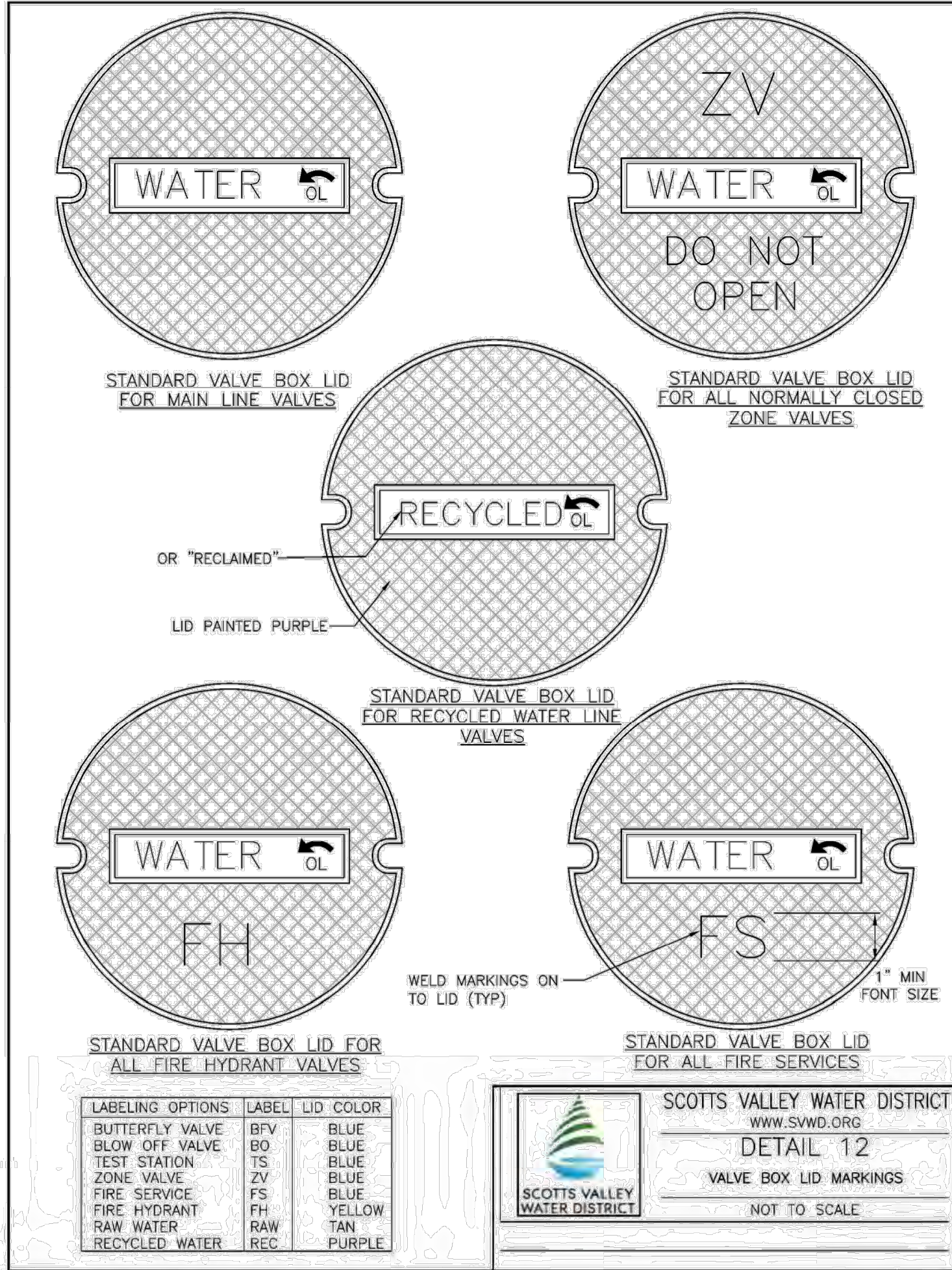
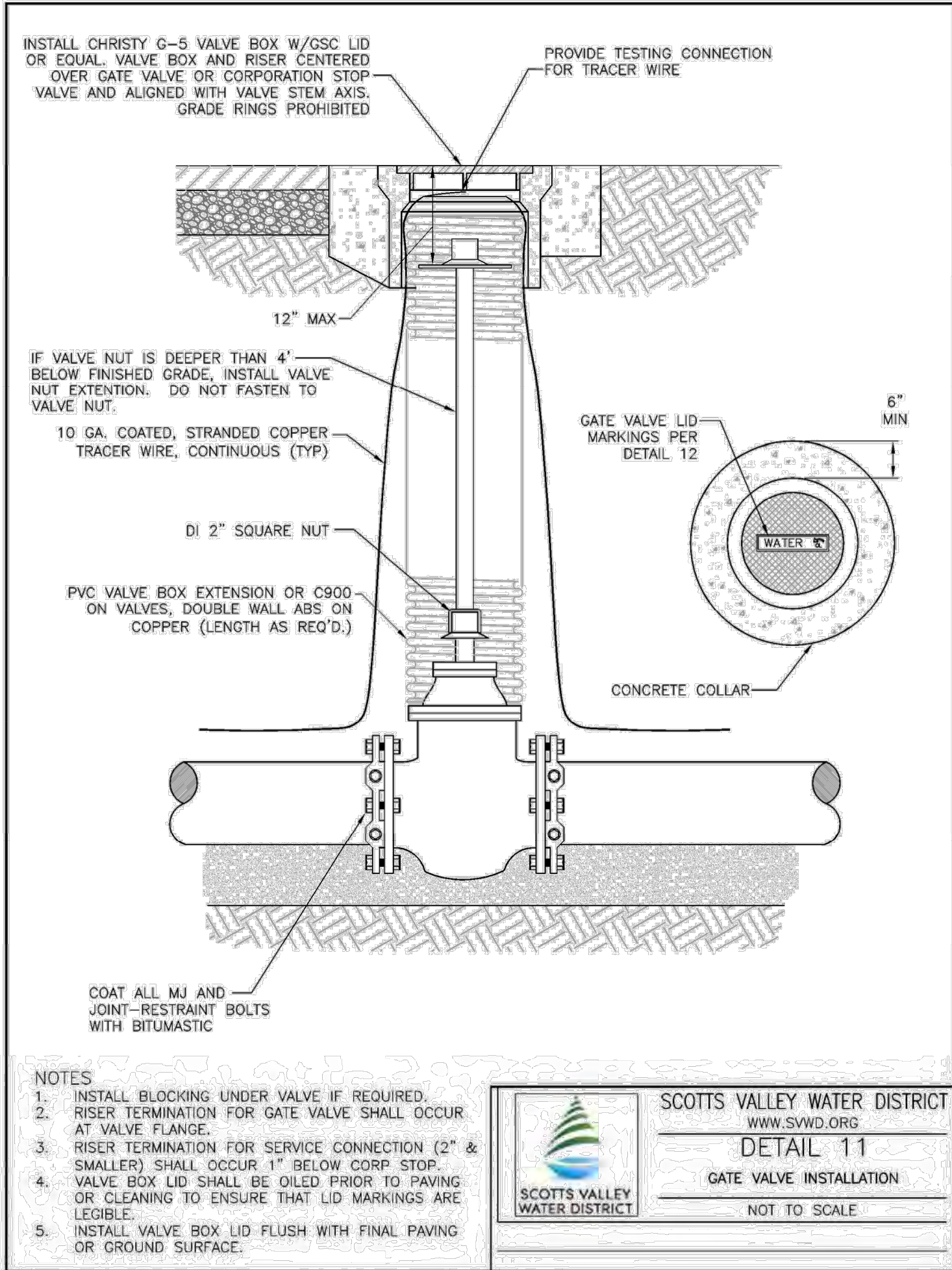
**Schaaf & Wheeler**  
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SALINAS, CA 93907  
(831) 883-4848

**SCOTTS VALLEY WATER DISTRICT  
MEADOW WAY PRESSURE REDUCING VALVE  
PLAN VIEW & DETAILS**

DATE: 3/28/2025	SCALE: AS SHOWN	DESIGN: JCT	DRAWN: JCT	CHECKED: AAS
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SHEET  
C1.0  
2 OF 4

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SCOTT'S VALLEY WATER DISTRICT  
MEADOW WAY PRESSURE REDUCING VALVE  
DETAILS I

DATE: 3/28/2025	SCALE: AS SHOWN	DESIGN: JCT	DRAWN: JCT	CHECKED: AAS
SHEET C2.0				
4 OF 4				