

# CITY OF EAST PALO ALTO

## 16-INCH WATER TRANSMISSION MAIN PROJECT PURDUE AVE

**UNAUTHORIZED CHANGES & USES:** The engineer preparing these plans will not be responsible for, or liable for, unauthorized changes to or uses of these plans. All changes to the plans must be in writing and must be approved by the preparer of these plans.

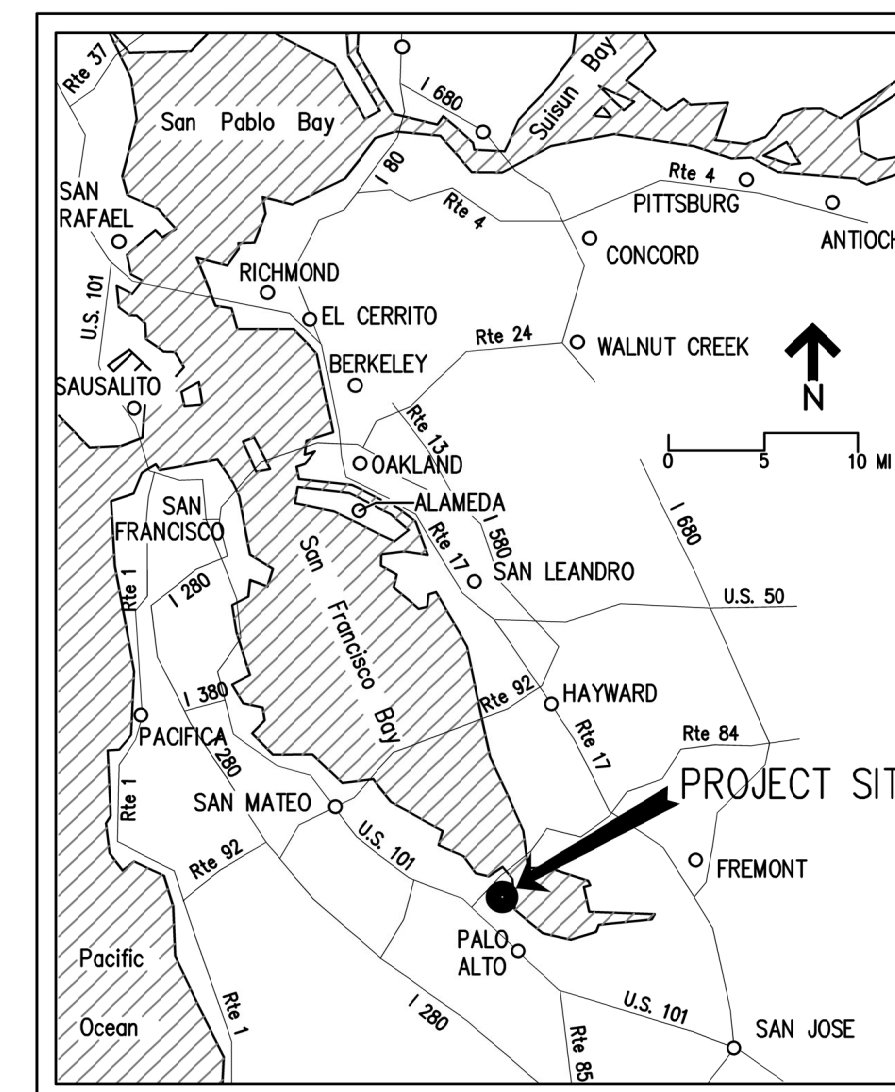
Construction contractor agrees that in accordance with generally accepted construction practices, construction contractor will be required to assume sole and complete responsibility for job site conditions during the course of construction of the project, including safety of all persons and property; 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 design professional harmless from any and all liability, real or alleged, in connection with the performance of work on this project, excepting liability arising from the sole negligence of design professional.

### CONSTRUCTION COMMENTS

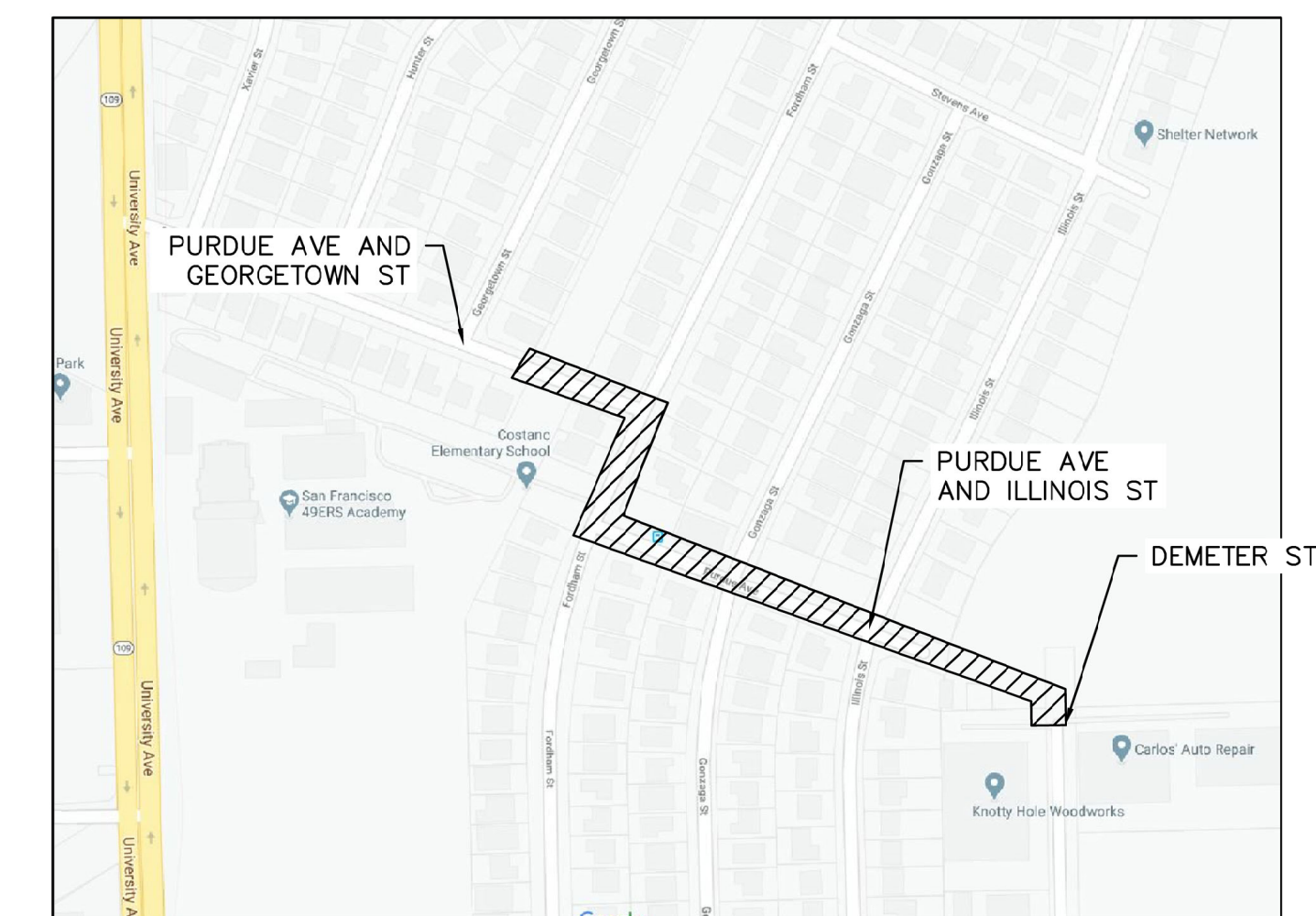
- CONTACT USA AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION.
- EARTHWORK ACTIVITIES AND ASSOCIATED NOISE SHALL BE LIMITED TO WEEK DAYS BETWEEN THE HOURS OF 8:00 AM TO 5:00 PM. NO EARTHWORK ACTIVITIES ARE TO OCCUR ON SATURDAYS AND SUNDAYS WITHOUT SPECIAL PERMISSION FROM THE CITY ENGINEER.
- CONSTRUCTION TRAFFIC FOR DELIVERY OF MATERIALS AND LANE CLOSURES SHALL OCCUR AFTER 9:00 AM AND BEFORE 3:30 PM, EXCEPT CONCRETE AND OTHER LARGE COMPONENTS WHICH HAVE TO BE COORDINATED IN A CONSTRUCTION PHASING PLAN. A TRAFFIC CONTROL PLAN SHALL BE SUBMITTED FOR ALL WORK IN THE CITY RIGHT-OF-WAY WHERE TRAFFIC MAY BE IMPACTED.
- CONTRACTORS AND SUBCONTRACTORS SHALL BE PROPERLY TRAINED AND MADE AWARE OF THE STORM WATER POLLUTION PREVENTION PROGRAM MEASURES. FAILURE TO COMPLY WITH THE APPROVED BMPS COULD RESULT IN A FINE OF \$1,000 FOR FIRST VIOLATION, INCREASING WITH EACH SUBSEQUENT VIOLATION. (SEE CONSTRUCTION BEST MANAGEMENT PRACTICES ON DETAIL SHEET)
- ALL ACAD FILES WITH SURVEY CONTROL POINTS WILL BE PROVIDED TO THE CONTRACTOR.

### SHEET INDEX

SHEET NUMBER	DESCRIPTION
C-1	COVER SHEET
C-2	GENERAL NOTES
C-3	STA 0+00 TO 2+50 PLAN & PROFILE
C-4	STA 2+50 TO 4+50 PLAN & PROFILE
C-5	STA 4+50 TO 7+00 PLAN & PROFILE
C-6	STA 7+00 TO 10+50 PLAN & PROFILE
C-7	STA 10+00 TO 12+16 PLAN & PROFILE
C-8	DETAIL SHEET
C-9	DETAIL SHEET
C-10	DETAIL SHEET
C-11	CONSTRUCTION BEST MANAGEMENT PRACTICES



VICINITY LOCATION  
NTS



LOCATION MAP  
NTS

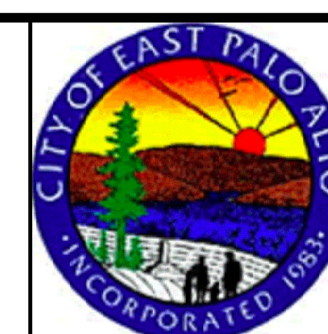
### LEGEND

	NEW 16" WATER MAIN		EXISTING GAS VALVE		UTILITY VAULT
	EXISTING COMMUNICATIONS LINE		EXISTING WATER VALVE		TELECOMMUNICATIONS VAULT
	EXISTING GAS LINE		EXISTING WATER METER		TELECOMMUNICATIONS MANHOLE
	EXISTING UNDERGROUND ELECTRICAL LINE		EXISTING CLEAN OUT		TRAFFIC SIGNAL
	EXISTING WATER LINE		EXISTING FIRE HYDRANT		TRAFFIC SIGNAL BOX
	EXISTING ELECTRIC LINE OVERHEAD		EXISTING SEWER / STORM DRAIN MANHOLE		STREET LIGHT
	ROLLED CURB AND GUTTER		EXISTING CATCH BASIN		IRRIGATION CONTROL BOX
	CURB AND GUTTER		EXISTING ELECTRICAL PULL BOX		PROPOSED WATER VALVE
	EXISTING SANITARY SEWER LINE		TRAFFIC SIGN		
	EXISTING STORM DRAIN LINE		MONUMENT		
	EXISTING SANITARY SEWER FORCEMAIN LINE		JOINT UTILITY POLE		
	EXISTING FENCE LINE		DETECTOR		
			ELECTRIC MANHOLE		
			GUY WIRE		
			ANODE		
			ELECTRIC VAULT		

DATE:	5/28/21	10/2/20	DRAFT SUBMITTAL
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DESIGNED:	JJF	3/12/21	90% SUBMITTAL
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BY	DATE	DESCRIPTION OF REVISIONS	APP'D



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CITY OF EAST PALO ALTO  
16-INCH WATER TRANSMISSION MAIN PROJECT  
COVER SHEET

SHEET  
**C-1**  
OF 11 SHEETS  
JOB NO.  
**221006**

**CONSTRUCTION NOTES**

THE FOLLOWING CONTROL MEASURES FOR CONSTRUCTION ACTIVITIES SHALL BE ADHERED TO, UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.

1. USE CAUTION AND PROTECT EXISTING GAS, ELECTRICAL AND TELECOM LINES.
2. LOCATION OF EXISTING UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE AND MINIMUM DEPTHS OF COVER HAVE BEEN ASSUMED. CONTRACTOR SHALL POTHOLE EXISTING UTILITIES IN ACCORDANCE WITH UTILITY OWNER REQUIREMENTS TO VERIFY CLEARANCE AND BRING ANY CONFLICTS TO THE ATTENTION OF THE ENGINEER.
3. CONTRACTOR SHALL NOTE ELECTRICAL AND GAS LINE CROSSING LOCATIONS AND PROXIMITY OF (E) ELECTRICAL AND GAS LINES TO (N) WATER MAIN LINE CONSTRUCTION. CONTRACTOR SHALL MAKE ALL NECESSARY NOTIFICATIONS TO (E) UTILITY LINES PER UTILITY OWNER REQUIREMENTS.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISPOSAL OF ANY EXCESS MATERIALS FROM THE WORK SITE.
5. EROSION CONTROL MEASURES SHALL BE INSTALLED AS NECESSARY TO PREVENT SEDIMENT RUNOFF TO PUBLIC ROADWAY DRAINAGE FACILITIES, ADJACENT PROPERTIES AND THE SAN FRANCISCO BAY.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES ON OR OFF THE PROJECT SITE AS A RESULT OF LACK OF DUST CONTROL.
7. DURING THE PROGRESS OF THE CONSTRUCTION WORK THE CONTRACTOR SHALL MAINTAIN THE PREMISES IN A NEAT AND CLEAN CONDITION, DISPOSING OF REFUSE IN A SATISFACTORY MANNER AS OFTEN AS DIRECTED OR AS MAY BE NECESSARY SO THAT THERE SHALL BE AT NO TIME ANY UNSIGHTLY ACCUMULATION OF RUBBISH AT THE JOB SITE.
8. CONTRACTOR TO ADHERE TO ALL REQUIREMENTS OF THE SAN MATEO COUNTY HEALTH SERVICES AGENCY.
9. STORAGE OF CONSTRUCTION MATERIALS AND EQUIPMENT WILL NOT BE ALLOWED IN OR UPON THE PUBLIC RIGHT-OF-WAY. ALL MATERIALS INTENDED FOR USE ON ANY PROJECT SHALL BE OFFLOADED DIRECTLY FROM DELIVERY VEHICLES AND PLACED AS REQUIRED DURING THE COURSE OF CONSTRUCTION. SHOULD THE PERMIT HOLDER OR SUB- CONTRACTORS WISH TO STOCKPILE MATERIALS NEAR THE WORK SITE, THEY SHALL MAKE ARRANGEMENTS IN ADVANCE FOR STORAGE WITH APPROVAL FROM THE CITY. ALL STORAGE SITES SHALL BE SECURE, INACCESSIBLE TO THE GENERAL PUBLIC AND KEPT FREE OF CONSTRUCTION SPOILS, DEBRIS AND TRASH AT ALL TIMES STORAGE SITES SHALL BE SUBJECT TO THE REVIEW AND APPROVAL OF THE CITY ENGINEER.
10. CONTRACTOR SHALL COMPLY WITH THE RULES AND REGULATIONS OF THE STATE CONSTRUCTION SAFETY ORDERS.
11. THE CONTRACTOR SHALL PROVIDE ALL LIGHTS, SIGNS, BARRICADES, FLAG MEN OR OTHER DEVICES NECESSARY TO PROVIDE FOR PUBLIC SAFETY & TRAFFIC CONTROL.
12. THE CONTRACTOR SHALL POST EMERGENCY TELEPHONE NUMBERS FOR POLICE, FIRE, AMBULANCE, AND THOSE AGENCIES RESPONSIBLE FOR MAINTENANCE OF UTILITIES IN THE VICINITY OF JOB SITE.
13. THE CONTRACTOR SHALL IMMEDIATELY REPORT ANY SOIL OR WATER CONTAMINATION NOTICED DURING CONSTRUCTION TO THE CITY OF MENLO PARK FIRE DISTRICT HAZARDOUS MATERIALS DIVISION, THE SAN MATEO COUNTY DEPARTMENT OF HEALTH, AND THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE SITE OR SURROUNDING AREA DUE TO DUST OR EROSION, RESULTING FROM WORK DONE BY THE CONTRACTOR. CONTRACTOR SHALL PROVIDE A SEVEN (7) DAY PHONE NUMBER TO RECEIVE AND RESPOND TO DUST COMPLAINTS RESULTING FROM ALL CONSTRUCTION OPERATIONS AND SHALL BE MAINTAINED UNTIL CONSTRUCTION IS COMPLETE. ALL BUSINESSES AND RESIDENTS WITHIN 300' OF THE PROJECT SHALL BE NOTIFIED BY THE CONTRACTOR BY MAIL WITH INFORMATION AND COMPLAINT LINES TO BE CALLED.
15. CONTRACTOR IS TO MAINTAIN ALL JOB SITE FACILITIES UNTIL ACCEPTED BY THE CITY.
16. ALL EXCAVATION SPOILS SHALL BE PLACED DIRECTLY INTO TRUCKS AND DISPOSED OF AT AN APPROVED DUMPSITE.
17. CONSTRUCTION HOURS IN THE CITY PUBLIC RIGHT-OF-WAY ARE LIMITED TO WEEKDAYS AND NON-CITY HOLIDAYS BETWEEN 8:00AM TO 5:00PM.
18. CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY DAMAGED OR DISRUPTED STRIPING IN-KIND.
19. PETROMAT MAY BE FOUND IN THE AC. CONTRACTOR IS RESPONSIBLE FOR REMOVAL AND PROPER DISPOSAL.
20. ALL CURB AND GUTTER REPLACED SHALL HAVE A 2 FOOT SAWCUT CONFORM, UNLESS OTHERWISE NOTED ON PLANS.
21. CONTRACTOR SHALL SUPPLY AND MAINTAIN SANITARY FACILITIES FOR THE WORKERS AT THE CONSTRUCTION SITE.
22. CONTRACTOR SHALL MAINTAIN AND KEEP ALL VEHICULAR AND PEDESTRIAN TRAFFIC ACCESS OPEN TO SURROUNDING RESIDENTS UNLESS APPROVED BY THE ENGINEER.

**UTILITY GENERAL NOTES**

1. WATER MAIN SHALL BE POLYVINYL CHLORIDE (PVC) C905 FOR THE PROPOSED IMPROVEMENTS. ALL NEW TRANSMISSION MAIN PIPE IS PROPOSED TO BE 16-INCH DIAMETER PIPE.
2. NEAREST OUTSIDE WALL OF PVC WATER MAIN SHALL BE A MINIMUM HORIZONTAL DISTANCE OF 10' FROM THE NEAREST OUTSIDE WALL OF THE SANITARY SEWER UNLESS OTHERWISE SPECIFIED. (N) WATER MAIN SHALL BE BACKFILLED WITH CDF IF CLOSER THAN 10' TO THE SANITARY SEWER (OUTSIDE WALL TO OUTSIDE WALL).
3. NEAREST OUTSIDE WALL OF PVC WATER MAIN SHALL BE A MINIMUM HORIZONTAL DISTANCE OF 4' FROM THE NEAREST OUTSIDE WALL OF THE STORM DRAIN. (N) WATER MAIN SHALL BE BACKFILLED WITH CDF IF CLOSER THAN 4' TO THE STORM DRAIN (OUTSIDE WALL TO OUTSIDE WALL).
4. WATER MAIN SHALL HAVE A MINIMUM COVER OF 30". WATER LINES WITH LESS THAN 30" COVER SHALL COMPLY WITH DETAIL \_\_\_\_\_ WATER. WHERE PROFILE VIEW SHOWS WATER MAIN DEEPER THAN 3', THE PROFILE SHALL GOVERN.
5. CONTRACTOR SHALL SUPPLY AND INSTALL (N) GATE VALVES FOR ALL (N) WATER MAINS.
6. THRUST BLOCKS SHALL BE CONSTRUCTED AT ALL BENDS, TEES, REDUCERS, BLIND FLANGES, CAPS, AND PLUGS PER SHEET C-43 DETAIL 1.
7. ALL WATER SERVICE LATERALS ARE 1" AND ALL WATER METERS ARE 1" UNLESS OTHERWISE SPECIFIED. INSTALL REPLACEMENT WATER SERVICES, (N) WATER METERS (PROVIDED BY CITY), AND WATER METER BOXES PER \_\_\_\_\_ FOR 1" & 2" WATER SERVICE. REPLACEMENT WATER SERVICE DIAMETERS SHALL MATCH EXISTING AND SHALL BE INSTALLED ALONG THE PROFILE OF THE EXISTING SERVICES TO AVOID CONFLICTS WITH EXISTING UTILITIES.
8. FINAL LOCATION OF (N) WATER METER BOXES SHALL BE APPROVED BY THE CITY. EXTEND CUSTOMER-SIDE WATER SERVICE AS NECESSARY TO CONNECT NEW WATER METER TO EXISTING CUSTOMER-SIDE WATER SERVICE. STATION CALLOUTS ARE TO CONNECTION POINT AT THE MAIN. REMOVE EXISTING WATER SERVICES FROM EXISTING WATER MAINS (TO BE ABANDONED) AND REMOVE AND REPLACE EXISTING WATER METER. DISPOSE OF EXISTING WATER METER BOXES. RESTORE SURFACE TO MATCH EXISTING.
9. CONTRACTOR SHALL CONFIRM ALL (E) WATER SERVICE CONNECTIONS ARE SERVED FROM (N) WATER MAIN.
10. WATER MAIN SHALL BE DISINFECTED IN ACCORDANCE WITH AMERICAN WATER REQUIREMENTS AND PROJECT SPECIFICATIONS.
11. MOST OF THE (E) WATER MAINS ARE ASBESTOS CEMENT PIPE. THE CONTRACTOR SHALL CONFIRM THE PIPE MATERIAL PRIOR TO CUTTING. CONTRACTOR SHALL FOLLOW ALL LOCAL, STATE, AND FEDERAL REGULATIONS INCLUDING BUT NOT LIMITED TO CCR, TITLE 8, SECTION 1529 WHEN PERFORMING ANY WORK WITH, INCLUDING CUTTING, EXISTING ASBESTOS CEMENT PIPE.
12. WATER MAIN, SANITARY SEWER, AND STORM DRAIN CROSSING LOCATIONS SHALL COMPLY WITH TITLES 17 AND 22 OF THE CALIFORNIA CODE OF REGULATIONS RELATED TO DRINKING WATER INCLUDING BUT NOT LIMITED TO TITLE 22, CHAPTER 16, ARTICLE 4 "MATERIALS AND INSTALLATION OF WATER MAINS AND APPURTENANCES" FOR THE SEPARATION OF WATER MAINS AND NON-POTABLE PIPELINES. INCLUDING IF CROSSING A SD OR SS THE (N) WATER MAIN SHALL BE CONSTRUCTED NO LESS THAN 45-DEGREES TO AND AT LEAST ONE FOOT ABOVE THE SD OR SS. NO CONNECTION JOINTS SHALL BE MADE IN THE (N) WATER MAIN WITHIN 8 HORIZONTAL FEET OF THE SD OR SS.
13. ABANDONED WATERLINES SHALL BE COMPLETELY FILLED WITH CDF AND CAPPED WITH A MINIMUM OF 12 INCHES OF CONCRETE.
14. FOR SERVICES 2" AND SMALLER, CONNECTION SHALL BE WET TAP ONLY USING DOUBLE STRAPPED BRONZE SADDLE. FOR SERVICES 3" AND LARGER, CONNECTION SHALL BE MADE USING A TEE.
15. FOR 3/4" AND 1" SERVICES, POLYETHYLENE TUBING (PE3406) WITH MUELLER INSTA-TITE FITTINGS IS ALLOWED. SEE CITY STD. DETAIL NO. WA-17.
16. FOR 3/4" AND 2" SERVICES, TYPE "K" SOFT COPPER TUBING (ASTM B-88-62) IS REQUIRED WITH COMPRESSION FITTINGS (NO SOLDERED JOINTS ARE ALLOWED)
17. FOR 3" AND 4" SERVICES, USE DUCTILE IRON PIPE WITH RESTRAINED MECHANICAL OR FLANGED JOINTS. RESTRAINING ROD MAY BE USED WITH MEGALUGS. SEE CITY STD. DETAIL WA-22
18. FOR FIRE SERVICE AND HYDRANT CONNECTIONS, CONTACT MENLO PARK FIRE PROTECTION DISTRICT FOR UNDERGROUND STANDARDS AND APPROVAL OF ONSITE DESIGN. SEE WA-6.
19. RESURFACING AND BACKFILL IN THE PUBLIC RIGHT-OF-WAY SHALL CONFORM TO AW STANDARD DETAIL MSG-ST-02 (EXCEPT WHERE NOTED) OR AS DIRECTED BY THE ENGINEERING DEPARTMENT

**STANDARDS FOR SYSTEM:**

20. USE FUSION EPOXY COATED (EXTERIOR AND INTERIOR) MUELLER FULL BODIED TAPPING SLEEVE #H-615. USE STAINLESS STEEL BOLTS, TRIM, AND SLEEVES. FOR AC PIPES USE #316 STAINLESS STEEL SLEEVES.
21. ALL BURIED FERROUS (IRON) FITTINGS AND VALVES SHALL BE FUSION EPOXY COATED (EXTERIOR AND INTERIOR) AND WRAPPED WITH SINGLE LAYER OF 8 MIL POLYETHYLENE COVERING, WITH ENDS TAPED.

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PLOT DATE: 05-27-21 PLOTTED BY: feaudale

DATE:	5/28/21	10/2/20	DRAFT SUBMITTAL
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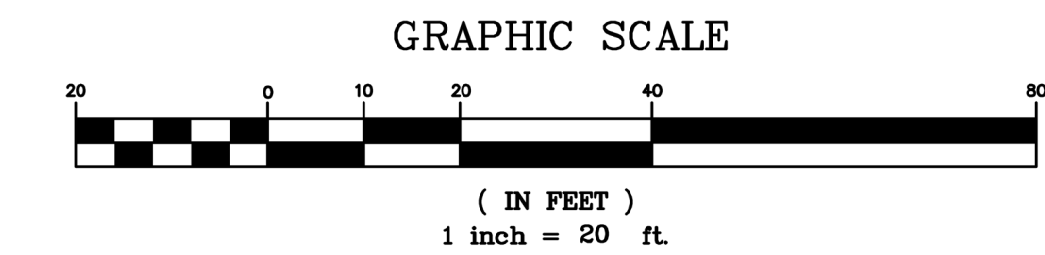
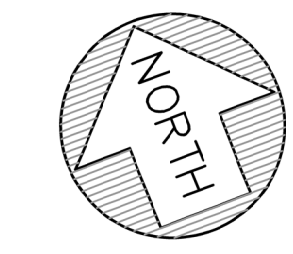
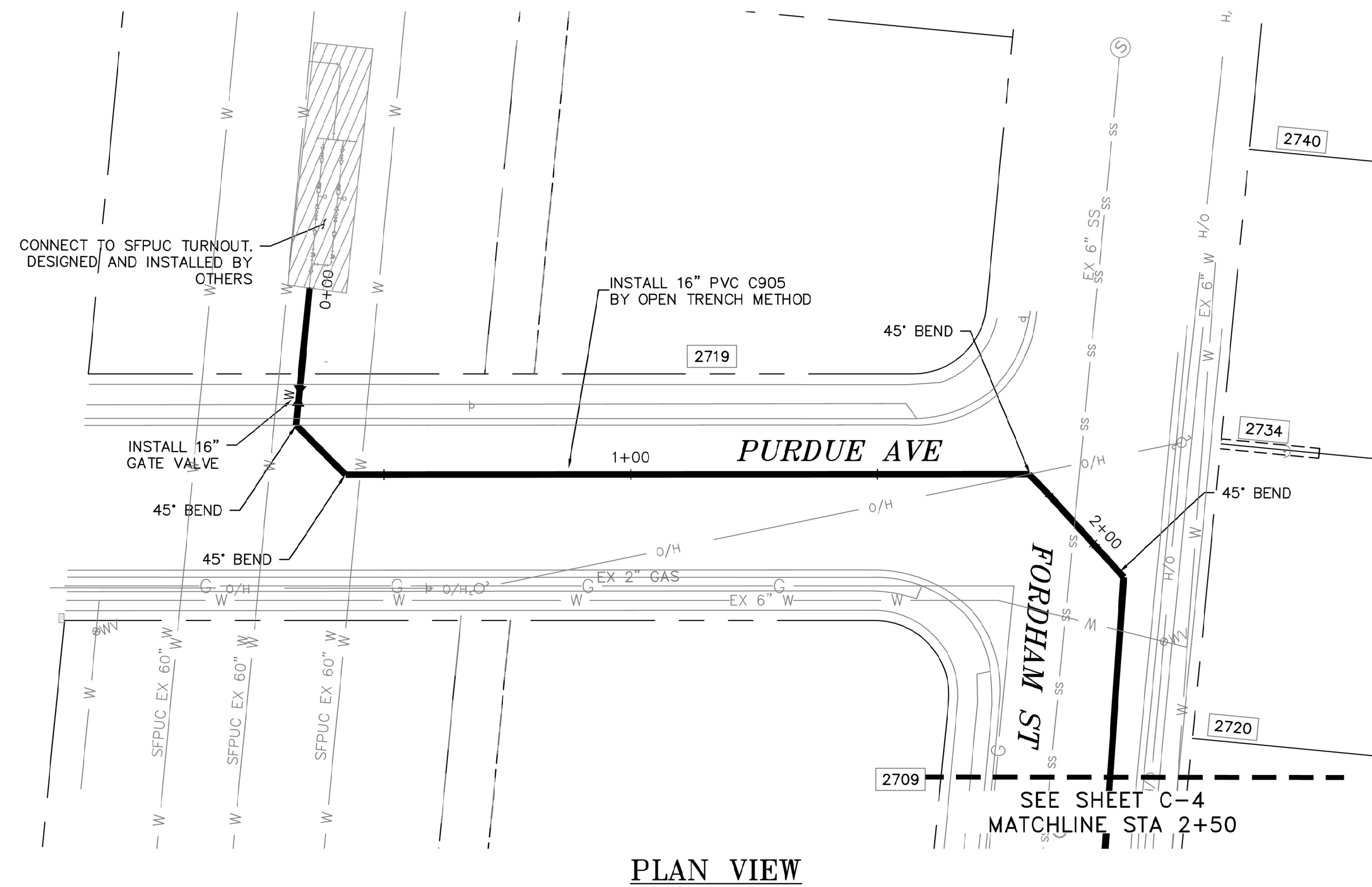
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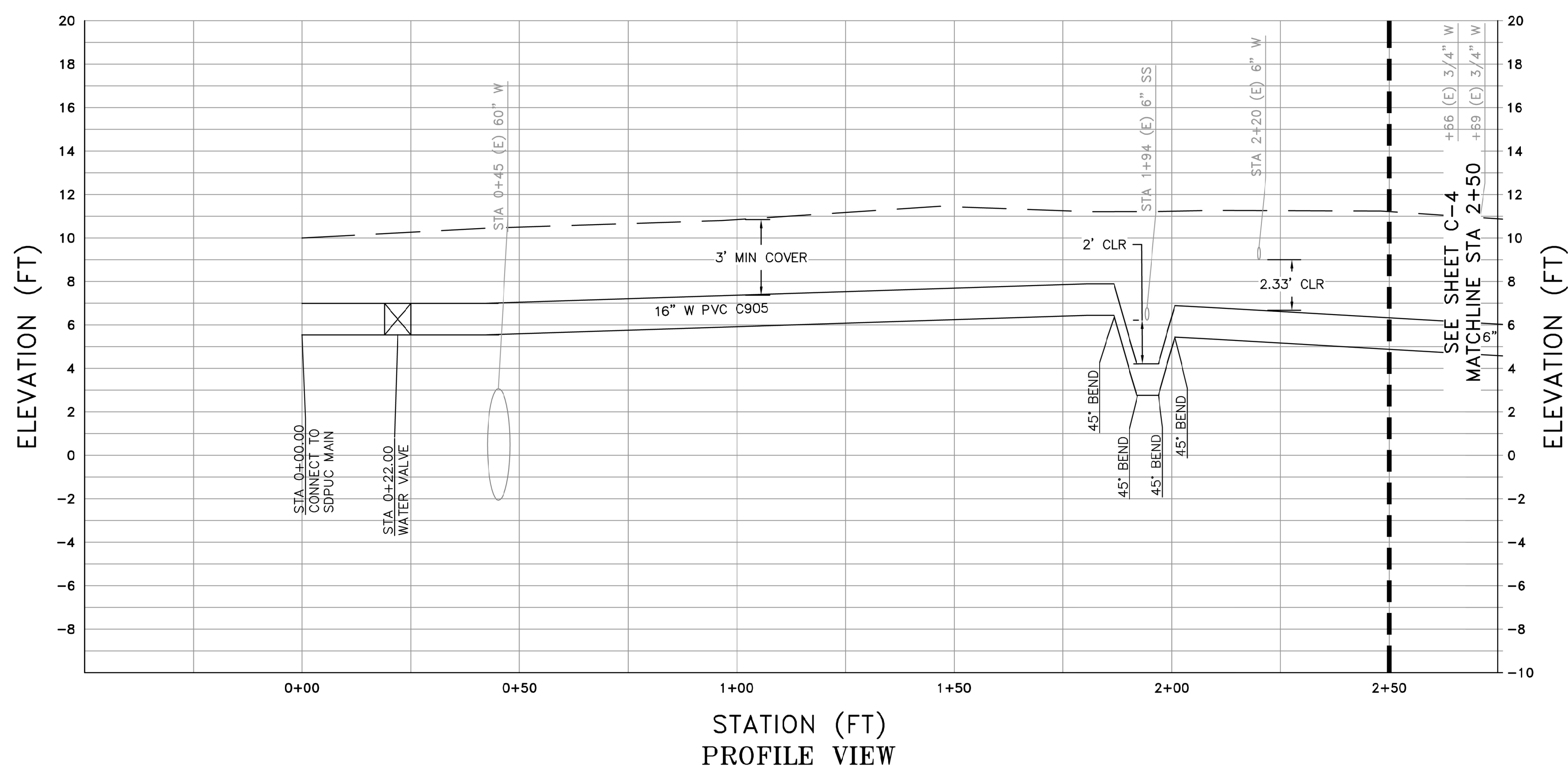
**CITY OF EAST PALO ALTO**  
**16-INCH WATER TRANSMISSION MAIN PROJECT**  
**GENERAL NOTES**

SHEET  
**C-2**  
OF 11 SHEETS  
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- NOTES:**
- PIPE LENGTHS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
  - ALL NEW 16" WATER PIPE SHALL BE PVC C905.
  - EXISTING UTILITY DEPTH SHALL BE CONFIRMED BY CONTRACTOR ON SITE PRIOR TO BEGINNING WORK.
  - FOR ANY PROJECT THAT REQUIRES LESS THAN FIVE WORKERS AT THE JOBSITE AT ANY ONE TIME, CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RESTRICTIONS AND REQUIREMENTS AS OUTLINED PER THE SAN MATEO COUNTY HEALTH OFFICER ORDER APPENDIX B-1: SMALL CONSTRUCTION PROJECT SAFETY PROTOCOL, DATED 4/29/20. THIS INCLUDES, BUT IS NOT LIMITED TO: POSTING THE REQUIRED NOTICES AND PLANS ON THE JOBSITE, ESTABLISHING A DAILY SCREENING PROTOCOL, SANITIZING THE JOBSITE AND EQUIPMENT DAILY, PROVIDING APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT (PPE) TO EMPLOYEES, IMPLEMENTING SOCIAL DISTANCING REQUIREMENTS, MAINTAINING A DAILY ATTENDANCE LOG, AND DESIGNATING A SITE-SPECIFIC COVID-19 SUPERVISOR OR SUPERVISORS. FOR MORE INFORMATION, SEE THE SAN MATEO COUNTY HEALTH OFFICER ORDER APPENDIX B-1.
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  - TRENCH DEWATERING WILL LIKELY BE NEEDED DUE TO A RELATIVELY SHALLOW GROUNDWATER ELEVATION. WATER GENERATED DURING DEWATERING SHALL BE HANDLED AS OUTLINED IN SPECIFICATIONS.
  - SOIL TYPES WILL VARY ALONG THE PROPOSED PIPELINE ALIGNMENT AND TEMPORARY EXCAVATIONS SHALL EITHER BE SHORED OR SLOPED BACK TO MEET CAL-OSHA TRENCH EXCAVATION REQUIREMENTS.
  - TRACER WIRE SHALL BE REQUIRED FOR ALL NEW WATER PIPE.
  - ALL CROSSINGS SHOWN ARE ONLY AT APPROXIMATION, POTHOLING TO DETERMINE EXACT PIPE LOCATION AND ELEVATION IS REQUIRED FOR ALL CROSSINGS. POT HOLE ACTIVITIES SHALL BE COORDINATED WITH CIVIL DESIGN TEAM.



**PROFILE VIEW**  
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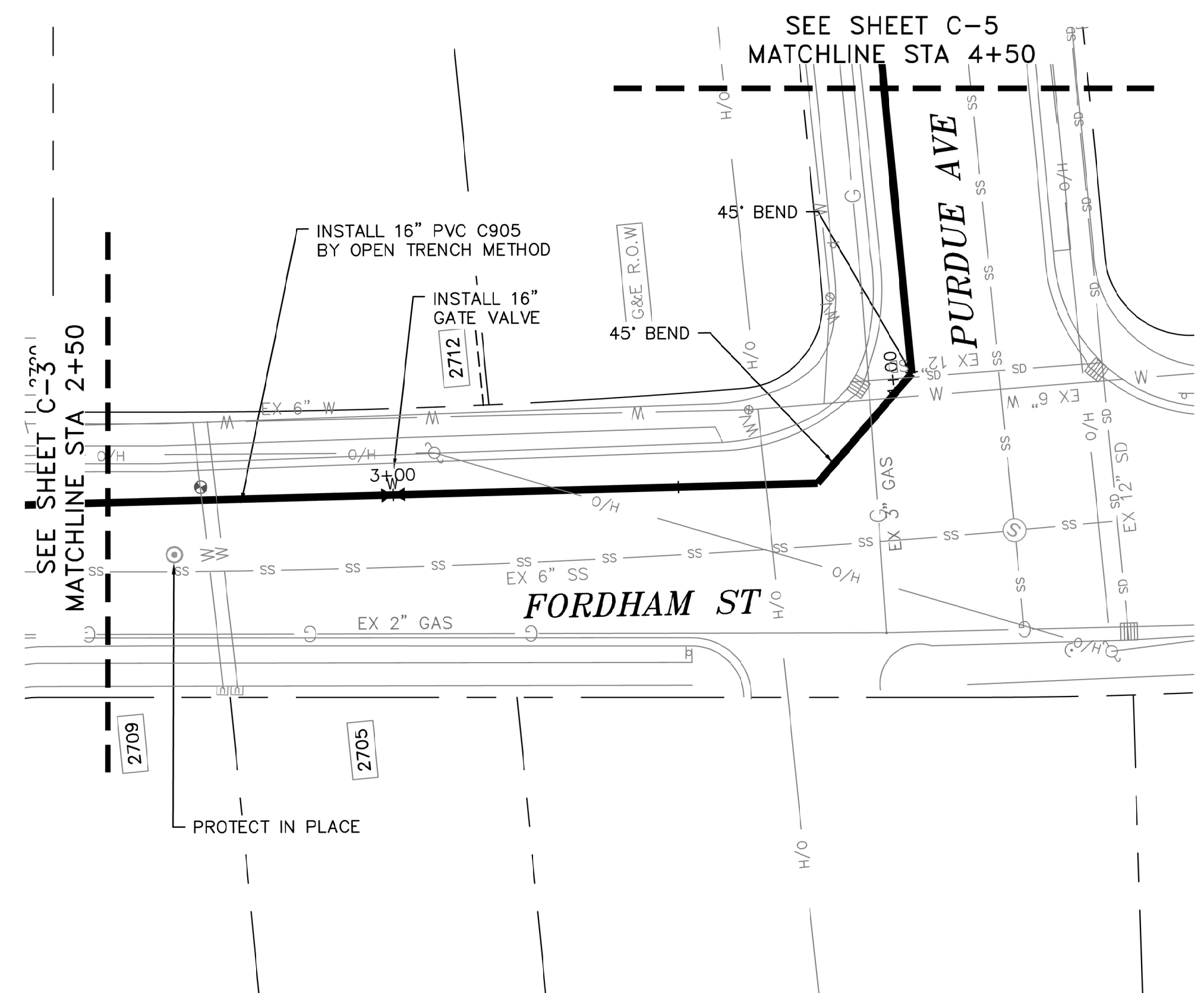
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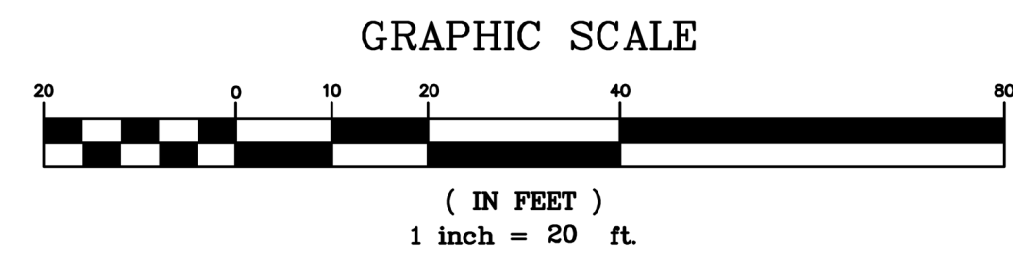
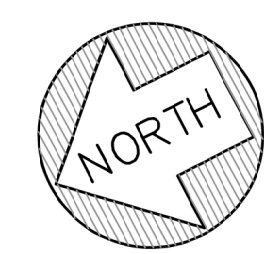
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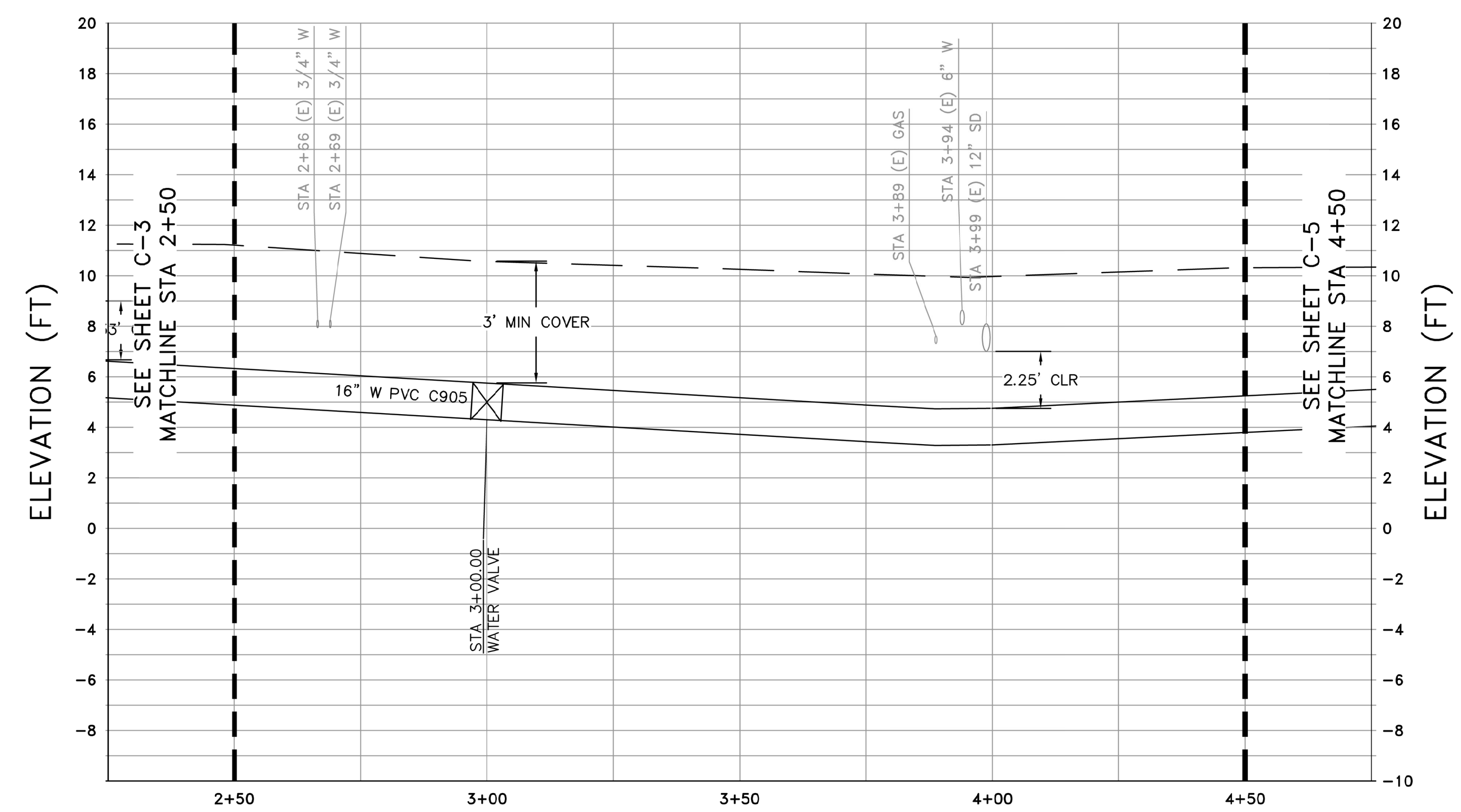
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PLAN VIEW



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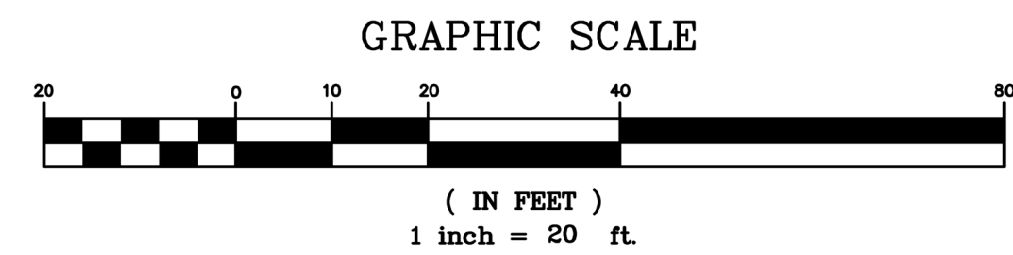
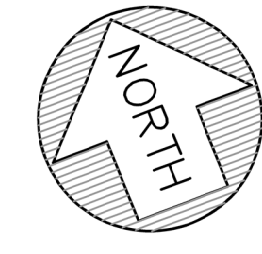
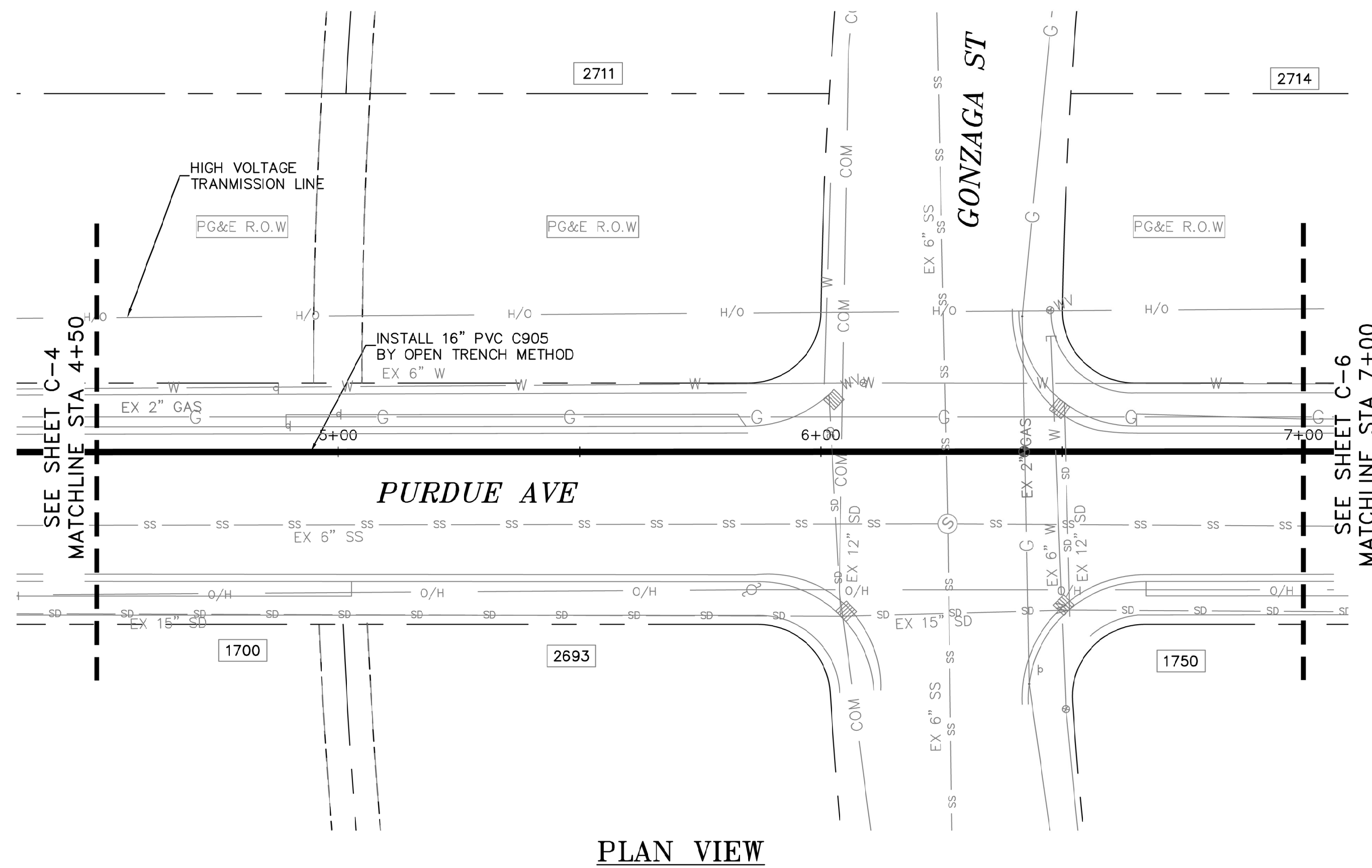
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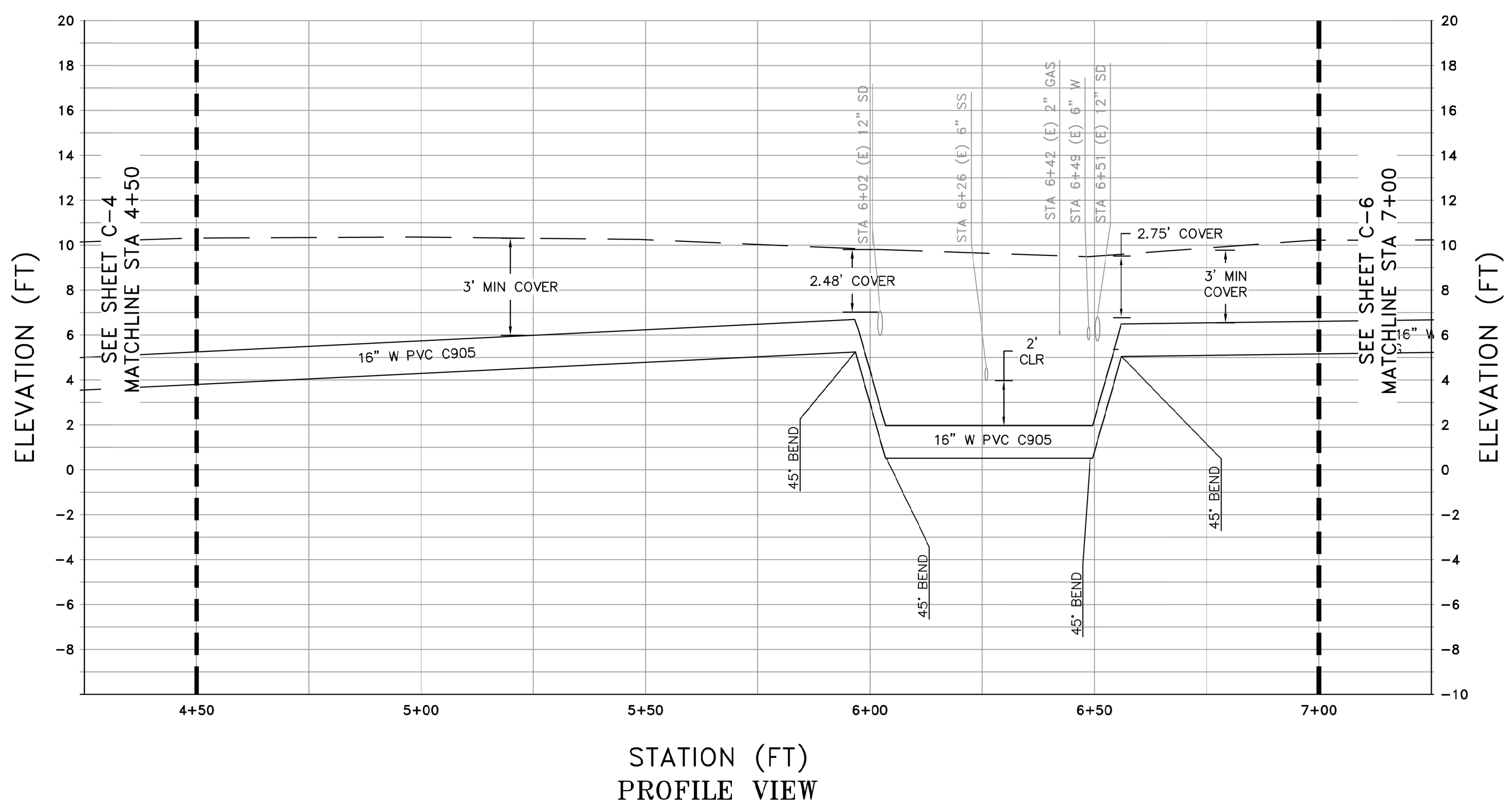
**CITY OF EAST PALO ALTO**  
**16-INCH WATER TRANSMISSION MAIN PROJECT**  
**STA: 2+50 TO 4+50**  
**PLAN AND PROFILE**

SHEET  
**C-4**  
 OF 11 SHEETS  
 JOB NO.  
**221006**

DRAWING NAME: Y:\Projects\221 City of East Palo Alto\006\_Purdue Water Line\AAA Latest\Plan and Profiles.dwg  
 PLOT DATE: 05-27-21 PLOTTED BY: feaudale



- NOTES:**
- PIPE LENGTHS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
  - ALL NEW 16" WATER PIPE SHALL BE PVC C905.
  - EXISTING UTILITY DEPTH SHALL BE CONFIRMED BY CONTRACTOR ON SITE PRIOR TO BEGINNING WORK.
  - FOR ANY PROJECT THAT REQUIRES LESS THAN FIVE WORKERS AT THE JOBSITE AT ANY ONE TIME, CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RESTRICTIONS AND REQUIREMENTS AS OUTLINED PER THE SAN MATEO COUNTY HEALTH OFFICER ORDER APPENDIX B-1: SMALL CONSTRUCTION PROJECT SAFETY PROTOCOL, DATED 4/29/20. THIS INCLUDES, BUT IS NOT LIMITED TO: POSTING THE REQUIRED NOTICES AND PLANS ON THE JOBSITE, ESTABLISHING A DAILY SCREENING PROTOCOL, SANITIZING THE JOBSITE AND EQUIPMENT DAILY, PROVIDING APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT (PPE) TO EMPLOYEES, IMPLEMENTING SOCIAL DISTANCING REQUIREMENTS, MAINTAINING A DAILY ATTENDANCE LOG, AND DESIGNATING A SITE-SPECIFIC COVID-19 SUPERVISOR OR SUPERVISORS. FOR MORE INFORMATION, SEE THE SAN MATEO COUNTY HEALTH OFFICER ORDER APPENDIX B-1.
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**PROFILE VIEW**  
 HORIZ: 1" = 20'  
 VERT: 1" = 4'

DATE:	5/28/21	10/2/20	DRAFT SUBMITTAL
SCALE:	AS NOTED	10/13/20	DRAFT SUBMITTAL
DESIGNED:	JJF	3/12/21	90% SUBMITTAL
DRAWN:	DZ	5/28/21	100% SUBMITTAL
CHECKED:	JJT		
PROJ. ENGR:	JJF		
BY	DATE	DESCRIPTION OF REVISIONS	APP'D

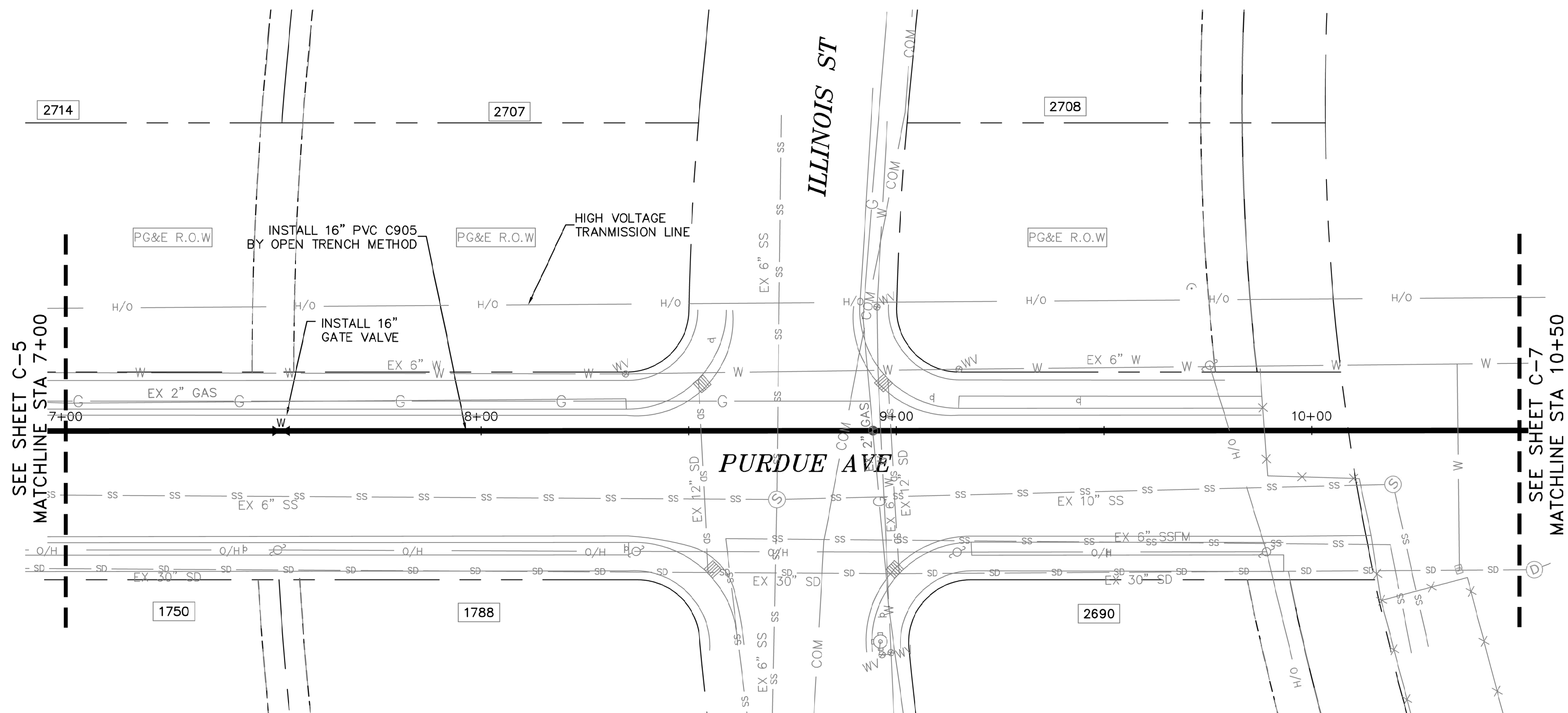


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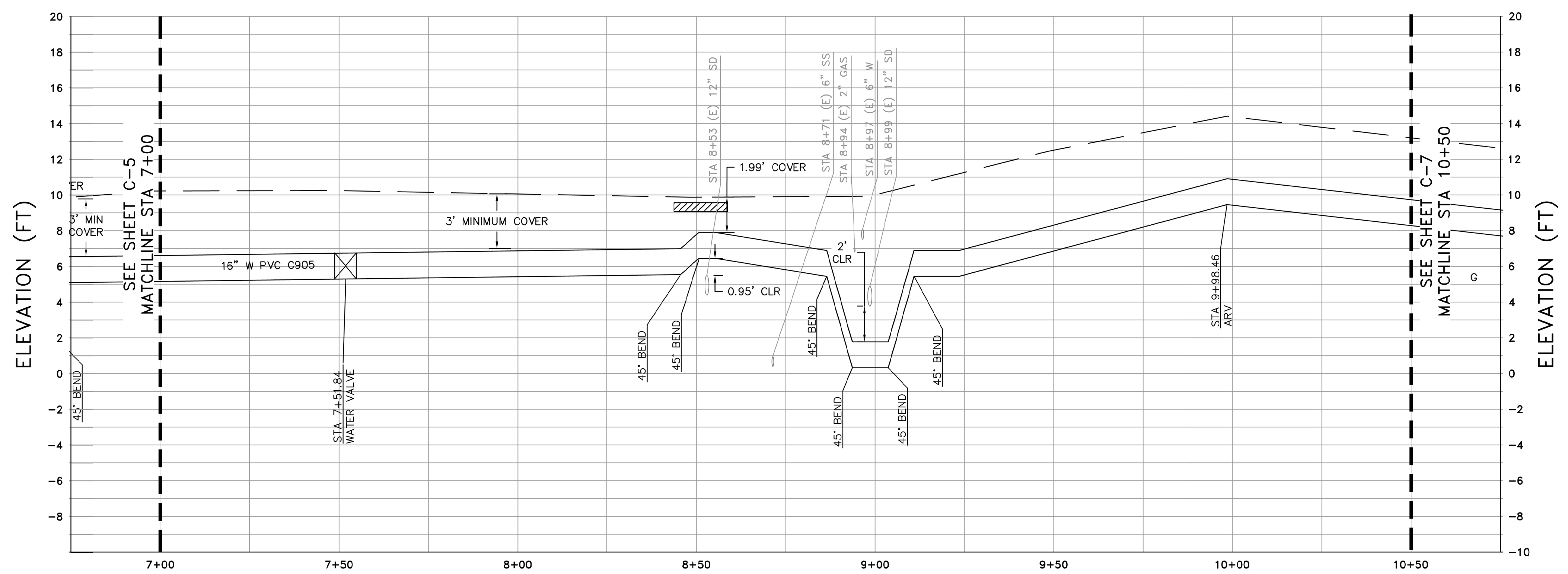


**CITY OF EAST PALO ALTO**  
**16-INCH WATER TRANSMISSION MAIN PROJECT**  
**STA: 4+50 TO 7+00**  
**PLAN AND PROFILE**

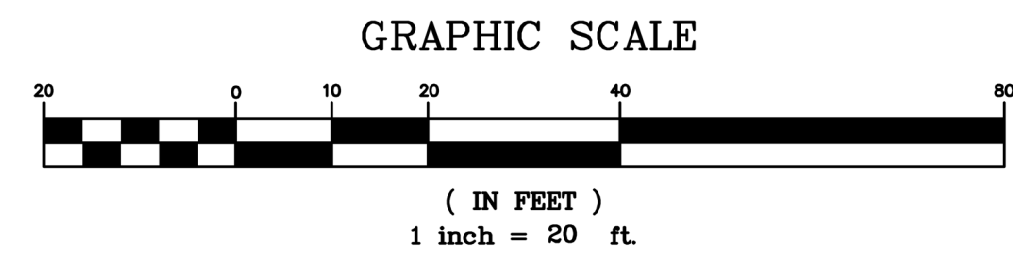
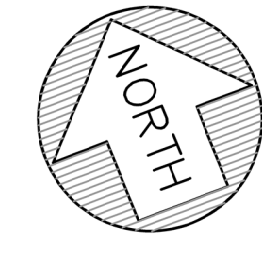
**SHEET**  
**C-5**  
**OF 11 SHEETS**  
**JOB NO.**  
**221006**



PLAN VIEW



STATION (FT)  
PROFILE VIEW



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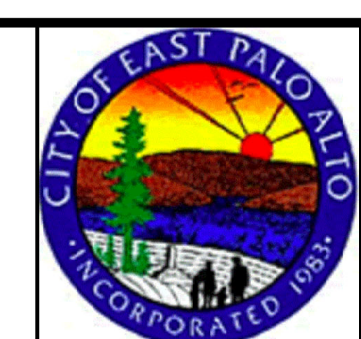
PROFILE VIEW  
HORIZ: 1" = 20'  
VERT: 1" = 4'

DRAWING NAME: Y:\Projects\221 City of East Palo Alto\006\_Purdue Water Line\AAA Latest\Plan and Profiles.dwg  
PLOT DATE: 05-27-21 PLOTTED BY: feaudale

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PROJ. ENGR:	JJF		
BY	DATE	DESCRIPTION OF REVISIONS	APP'D

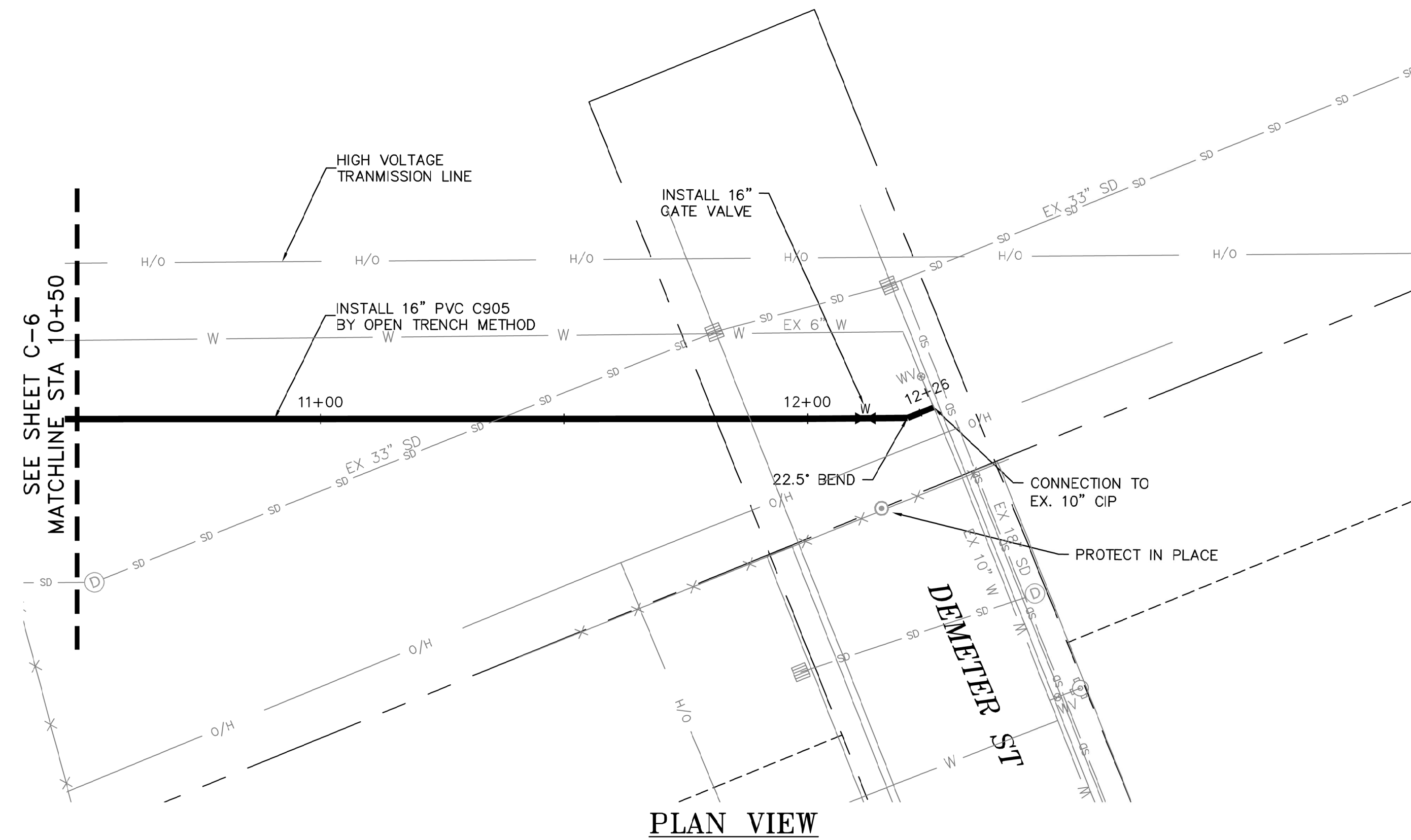
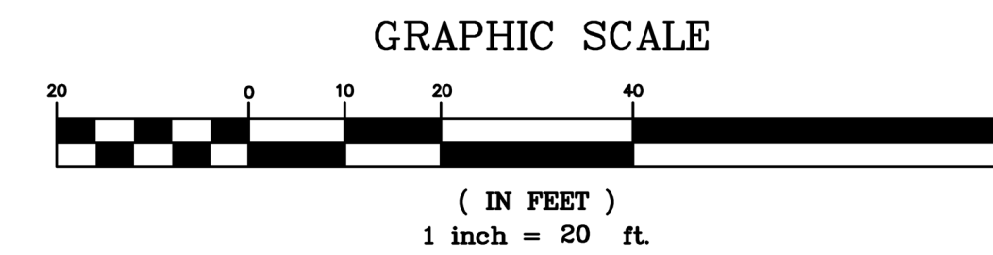
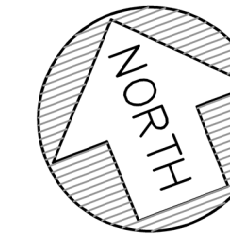


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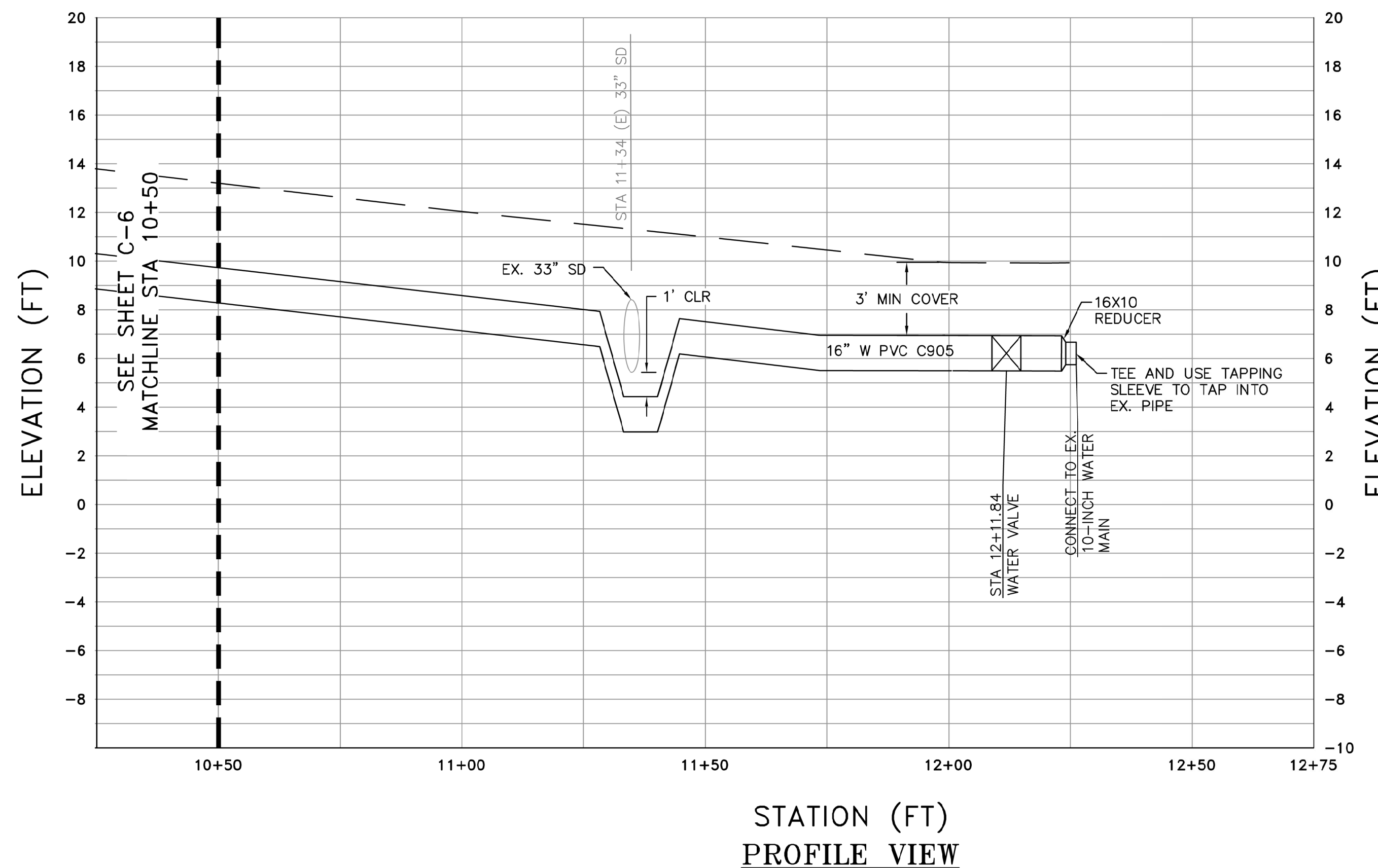
**CITY OF EAST PALO ALTO**  
**16-INCH WATER TRANSMISSION MAIN PROJECT**  
**STA: 7+00 TO 10+50**  
**PLAN AND PROFILE**

SHEET  
**C-6**  
OF 11 SHEETS  
JOB NO.  
**221006**



**NOTES:**

1. PIPE LENGTHS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
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**PROFILE VIEW**  
 HORIZ: 1" = 20'  
 VERT: 1" = 4'

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 PLOT DATE: 05-27-21 PLOTTED BY: feaudale

DATE:	5/28/21	10/2/20	DRAFT SUBMITTAL
SCALE:	AS NOTED	10/13/20	DRAFT SUBMITTAL
DESIGNED:	JJF	3/12/21	90% SUBMITTAL
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PROJ. ENGR:	JJF		
BY	DATE	DESCRIPTION OF REVISIONS	APP'D

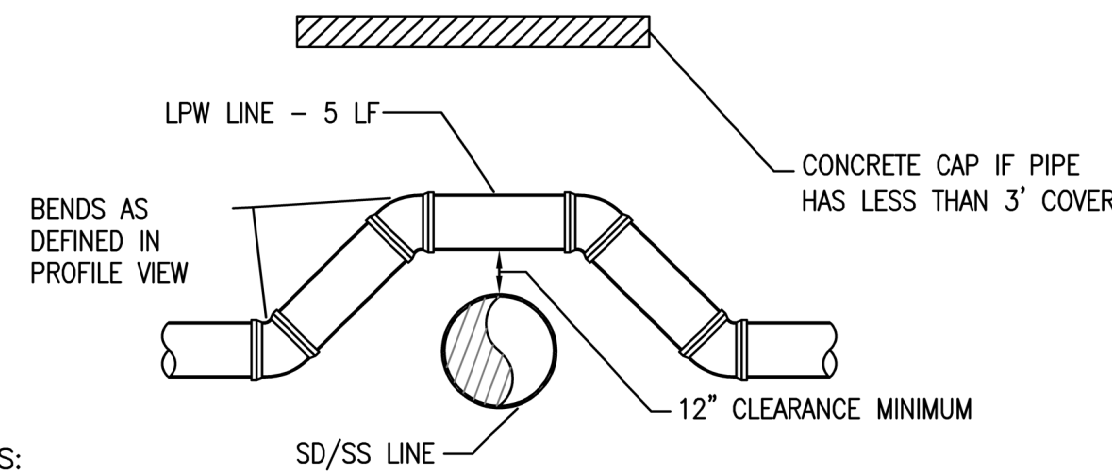


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**CITY OF EAST PALO ALTO**  
**16-INCH WATER TRANSMISSION MAIN PROJECT**  
**STA: 10+00 TO 12+15.73**  
**PLAN AND PROFILE**

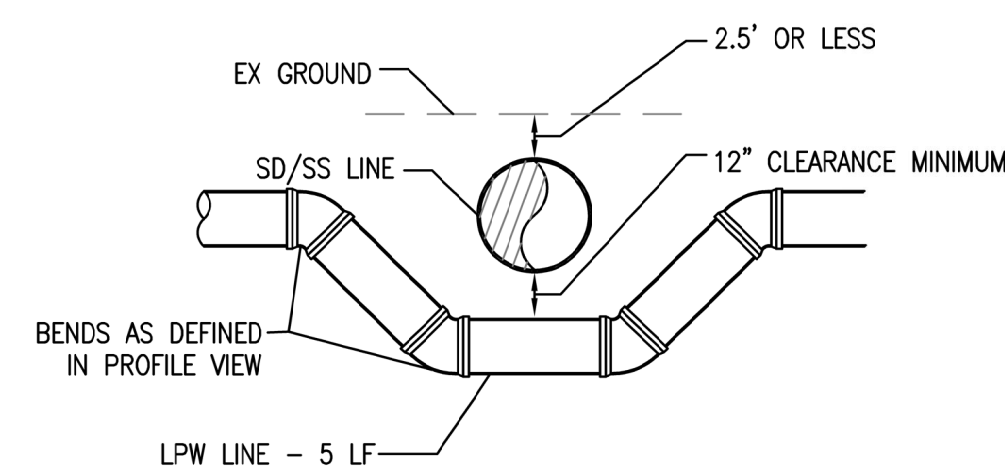
**SHEET**  
**C-7**  
 OF 11 SHEETS  
 JOB NO.  
**221006**



NOTES:

1. CONTRACTOR SHALL AVOID CONFLICTS WITH OTHER UTILITIES.
2. PIPES SHALL HAVE A MINIMUM 12" CLEARANCE AT CROSSINGS.
3. POTHOLING REQUIRED AT ALL CROSSINGS. ALL PIPE LOCATION SHOWN ARE APPROXIMATE.

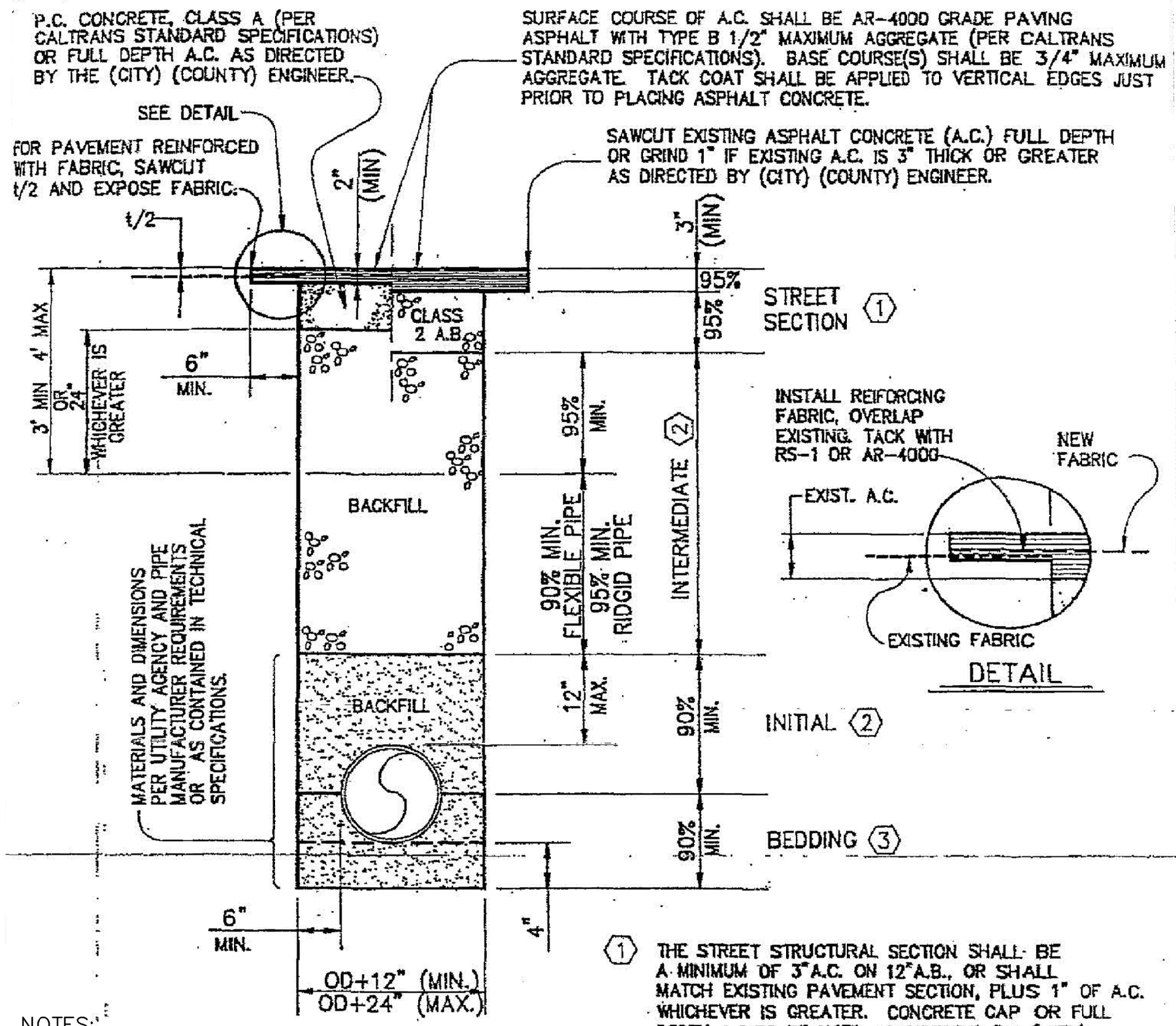
1 UTILITY CROSSING DETAIL  
SCALE: NO SCALE



NOTES:

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2. PIPES SHALL HAVE A MINIMUM 12" CLEARANCE AT CROSSINGS.
3. POTHOLING REQUIRED AT ALL CROSSINGS. ALL PIPE LOCATION SHOWN ARE APPROXIMATE.

2 UTILITY CROSSING DETAIL 2  
SCALE: NO SCALE



NOTES:

1. STREET ENCROACHMENT PERMIT WILL BE REQUIRED FOR ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY.
2. ALL WORK TO BE DONE IN ACCORDANCE WITH (CITY) (COUNTY) STANDARDS AND SPECIFICATIONS.
3. UNDERGROUND SERVICE ALERT (USA) SHALL BE NOTIFIED PRIOR TO BEGINNING WORK.
4. ALL EXCAVATIONS SHALL CONFORM TO THE REQUIREMENTS OF THE STATE OF CALIFORNIA DIVISION OF OCCUPATIONAL SAFETY AND HEALTH (OSHA)
5. INCLUDE SLURRY SEAL FROM CURB TO CURB.
6. INCLUDE 2" A.C. GRIND AND OVERLAY ALONG THE FULL WIDTH OF THE PROJECT LIMITS.

- 1 THE STREET STRUCTURAL SECTION SHALL BE A MINIMUM OF 3" A.C. ON 12" A.B., OR SHALL MATCH EXISTING PAVEMENT SECTION, PLUS 1" OF A.C. WHICHEVER IS GREATER. CONCRETE CAP OR FULL DEPTH A.C. TO BE USED AS DIRECTED BY (CITY) (COUNTY) ENGINEER.
- 2 IMPORTED MATERIAL, OR FLOWABLE BACKFILL AND NATIVE MATERIAL OPTIONAL, AS CONTAINED IN THE TECHNICAL SPECIFICATIONS, AND AS APPROVED BY THE (CITY) (COUNTY) ENGINEER.
- 3 CALTRANS CLASS 1, TYPE A PERMEABLE MATERIAL OR GRADATION AS APPROVED BY THE (CITY) (COUNTY) ENGINEER.

3 TRENCH DETAIL  
SCALE: NO SCALE

### GENERAL WATER AND SEWER CONSTRUCTION NOTES

1. APPROVAL OF THIS PLAN SHALL NOT CONSTITUTE A COMMITMENT FOR SERVICE OR AN AUTHORIZATION TO BEGIN THE SITE UTILITY SYSTEM CONSTRUCTION. THE APPLICANT SHALL BE REQUIRED TO OBTAIN A DIG PERMIT FROM THE INSTALLATION PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.
2. THE APPLICANT SHALL OBTAIN ALL NECESSARY PERMITS FROM ANY FEDERAL, STATE, AND/OR LOCAL PERMIT AUTHORITY HAVING JURISDICTION OVER ANY PHASE OF CONSTRUCTION ASSOCIATED WITH THE INSTALLATION OF THIS SITE UTILITY SYSTEM.
3. THE CONTRACTOR SHALL NOTIFY THE AMERICAN WATER UTILITY MANAGER AT LEAST 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.
4. BACKFLOW PREVENTION DEVICES ARE REQUIRED ON ALL CONNECTIONS TO THE EXISTING WATER SYSTEM. BACKFLOW PREVENTERS INSTALLED INSIDE ANY BUILDING SHALL REMAIN UNDER THE OWNERSHIP AND MAINTENANCE RESPONSIBILITY OF THE GOVERNMENT UNLESS OTHERWISE NOTED.
5. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL AMERICAN WATER FACILITIES AND OTHER UTILITIES PRIOR TO BEGINNING CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER AND AMERICAN WATER OF ANY DISCREPANCIES FOUND IN THE FIELD OR ON THE DRAWINGS PRIOR TO CONSTRUCTION. ANY DEVIATIONS FROM THE CONSTRUCTION PLANS SHALL NEED TO BE APPROVED IN WRITING BY AMERICAN WATER.
6. ALL WATER AND SANITARY SEWER CONSTRUCTION MATERIALS AND APPURTENANCES MUST ADHERE TO THE FULL REQUIREMENTS AS PUT FORTH IN AMERICAN WATER MILITARY SERVICES GROUP'S STANDARD SPECIFICATIONS FOR CONSTRUCTION OF WATER AND WASTEWATER FACILITIES, DESIGN GUIDE FOR WATER AND WASTEWATER FACILITIES, AND STANDARD CONSTRUCTION DETAILS.
7. A PROFESSIONAL ENGINEER, REGISTERED IN THE STATE WHERE CONSTRUCTION IS TAKING PLACE, SHALL BE RESPONSIBLE FOR GENERAL OVERSIGHT AND OBSERVATION OF THE SITE UTILITY SYSTEM INSTALLATION FOR COMPLIANCE WITH AMERICAN WATER STANDARDS AND TESTING REQUIREMENTS.
8. THE FOLLOWING TESTS SHALL BE ADMINISTERED BY THE CONTRACTOR AND WITNESSED AND REPORTED BY THE APPLICANT'S ENGINEER OR AGENT:
  - > WATER - CHLORINE RESIDUAL
  - > WATER - HYDROSTATIC
  - > SEWER - MANDREL
  - > SEWER (GRAVITY) - AIR TEST
  - > SEWER (P/M/ PRESSURE) - HYDROSTATIC
  - > SEWER (MANHOLE) - VACUUM TEST
9. ALL TESTING EQUIPMENT SHALL BE FURNISHED BY THE SITE UTILITY CONTRACTOR.
10. WATER CONNECTION - CONNECTION OF THE SITE UTILITY WATER SYSTEM TO THE EXISTING AMERICAN WATER DISTRIBUTION SYSTEM IS PROHIBITED UNTIL THE CHLORINE RESIDUAL AND BACTERIOLOGICAL TESTS AS WELL AS THE REQUIRED HYDROSTATIC TESTS HAVE BEEN PERFORMED AND THE RESULTS REPORTED. THE APPLICANT SHALL SUBMIT THE TEST RESULTS TO THE AMERICAN WATER UTILITY MANAGER OR PROJECT ENGINEER FOR APPROVAL.
11. CONNECTION OF THE SITE UTILITY SEWER SYSTEM TO THE EXISTING AMERICAN WATER SANITARY SEWER SYSTEM IS PROHIBITED UNTIL ALL APPLICABLE TESTS HAVE BEEN PERFORMED AND SATISFACTORY RESULTS VERIFIED, AND THE RESULTS FOUND TO COMPLY WITH ALL AW REQUIREMENTS. THE APPLICANT SHALL SUBMIT REPORTS TO THE AMERICAN WATER UTILITY MANAGER OR PROJECT ENGINEER.
12. SHOP DRAWINGS SHALL BE SUBMITTED TO AW FOR REVIEW AND APPROVAL PRIOR TO ANY CONSTRUCTION.
13. ELECTRONIC FINAL AS-BUILT DRAWINGS PREPARED BY A REGISTERED PROFESSIONAL ENGINEER, COMPATIBLE WITH AMERICAN WATER'S GIS SYSTEM, SHALL BE SUBMITTED TO AMERICAN WATER. THE AS-BUILT DRAWING SHALL REFLECT ANY FIELD CHANGES AND INDICATE 'TIES' FOR THE LOCATION OF VALVES, BENDS, MANHOLES, FIRE HYDRANTS, APPURTENANCES, ETC.
14. THE CONTRACTOR SHALL NOT OPERATE ANY VALVES LOCATED ON THE EXISTING DISTRIBUTION SYSTEM. REQUESTS TO OPERATE VALVES MUST BE SUBMITTED TO THE AMERICAN WATER UTILITY MANAGER 48 HOURS IN ADVANCE.
15. ALL MATERIALS SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR UNLESS OTHERWISE NOTED.
16. WHEN A WATER MAIN AND A SEWER LINE ARE IN A PARALLEL ALIGNMENT, THE WATER MAIN SHALL NOT BE INSTALLED WITHIN TEN FEET (10') OF THE SEWER LINE. WHEN A WATER MAIN AND SEWER LINE ARE IN A PERPENDICULAR CROSSING ALIGNMENT, THE WATER MAIN SHALL NOT BE INSTALLED WITHIN TWO FEET (2') OF THE SEWER LINE AND NO WATER MAIN JOINTS SHALL BE ALLOWED WITHIN TEN FEET (10') OF THE SEWER LINE. SEPARATION DISTANCES MEASURED EDGE-TO-EDGE. IF REQUIRED CLEARANCES CAN NOT BE MAINTAINED, CONCRETE ENCASMENT SHALL BE REQUIRED.
17. SCHEDULE 40 AND SCHEDULE 80 PVC PIPE ARE NOT PERMITTED UNDER ANY CIRCUMSTANCES.

FINAL MS-01-01

### GUIDELINES FOR VARIANCES

1. THE AMERICAN WATER CAPITAL PROJECT MANAGER AND HIS DESIGNATED REPRESENTATIVES MAY ALLOW VARIANCES TO THE DESIGN STANDARDS AND STANDARD DETAILS WHEN STRICT ADHERENCE WOULD LESS ADEQUATELY PROVIDE FOR THE DEVELOPMENT, MAINTENANCE, EFFICIENCY, AND EFFECTIVENESS OF THE WATER AND SEWER UTILITIES. ANY VARIANCE GRANTED SHALL ENSURE THAT THE OBJECTIVES AND INTENT OF THE ORIGINAL DESIGN STANDARD OR STANDARD DETAIL TO WHICH THE VARIANCES IS GRANTED ARE SUBSTANTIALLY MET.
2. VARIANCES MAY BE ALLOWED WHEN:
  - 2.1. A SUBSTITUTION FOR A CHANGE IN STANDARD MATERIAL RESULTS IN THE USE OF A MATERIAL WHICH CAN BE CLEARLY DEMONSTRATED TO BE EQUAL TO OR OF SUPERIOR QUALITY;
  - 2.2. A STRICT ADHERENCE TO A DESIGN STANDARD OR STANDARD DETAIL WOULD BE IMPRACTICAL OR IMPOSSIBLE BECAUSE OF FIELD CONDITIONS SUCH AS EXISTING UTILITY FACILITIES;
  - 2.3. AN EMERGENCY SITUATION PROHIBITS STRICT ADHERENCE TO A DESIGN STANDARD OR STANDARD DETAIL;
  - 2.4. AT THE DISCRETION OF THE AW CAPITAL PROJECT MANAGER.

FINAL MS-01-01A

4 WATER AND SEWER NOTES  
SCALE: NO SCALE

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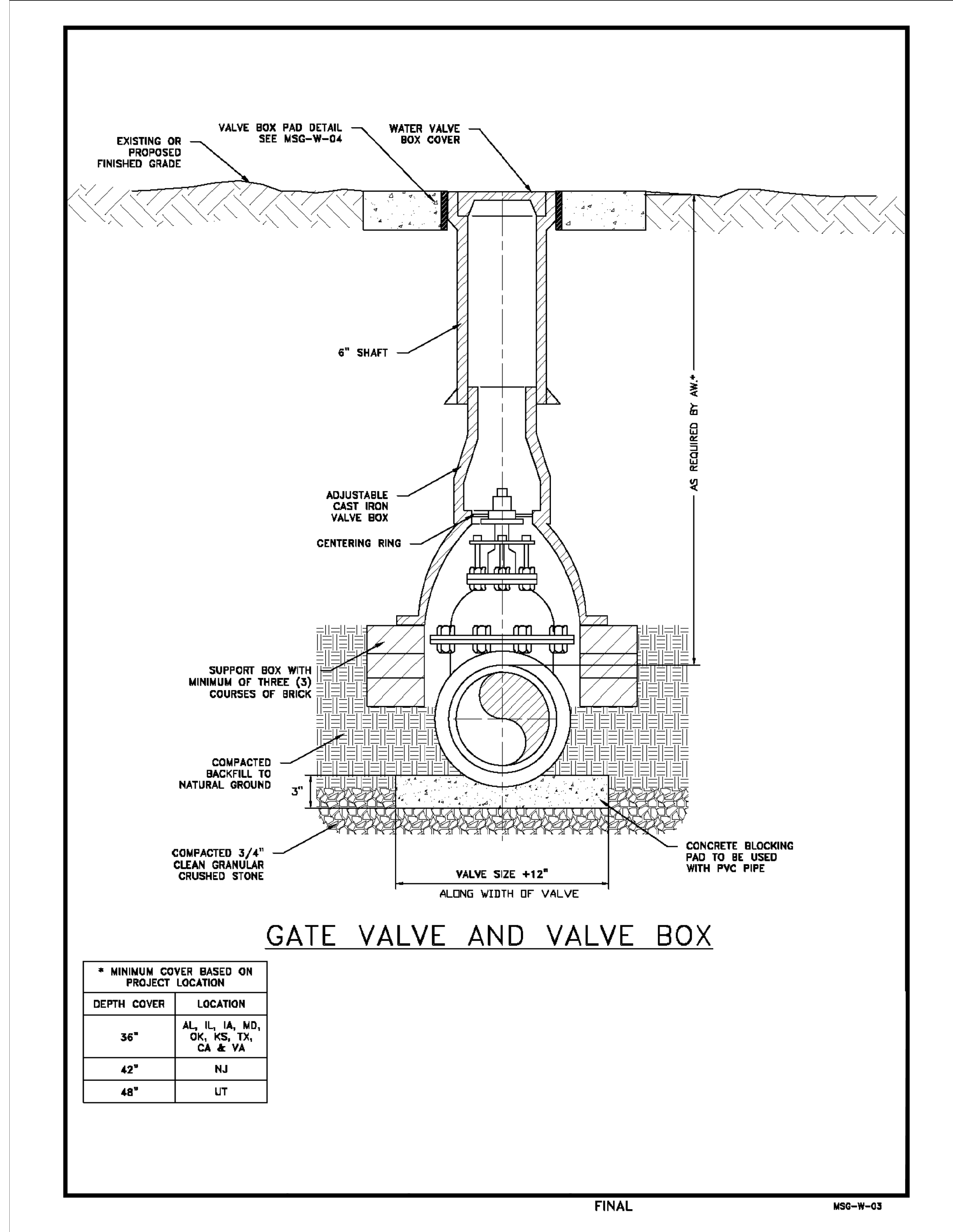


**CITY OF EAST PALO ALTO**  
**16-INCH WATER TRANSMISSION MAIN PROJECT**  
**DETAIL SHEET**

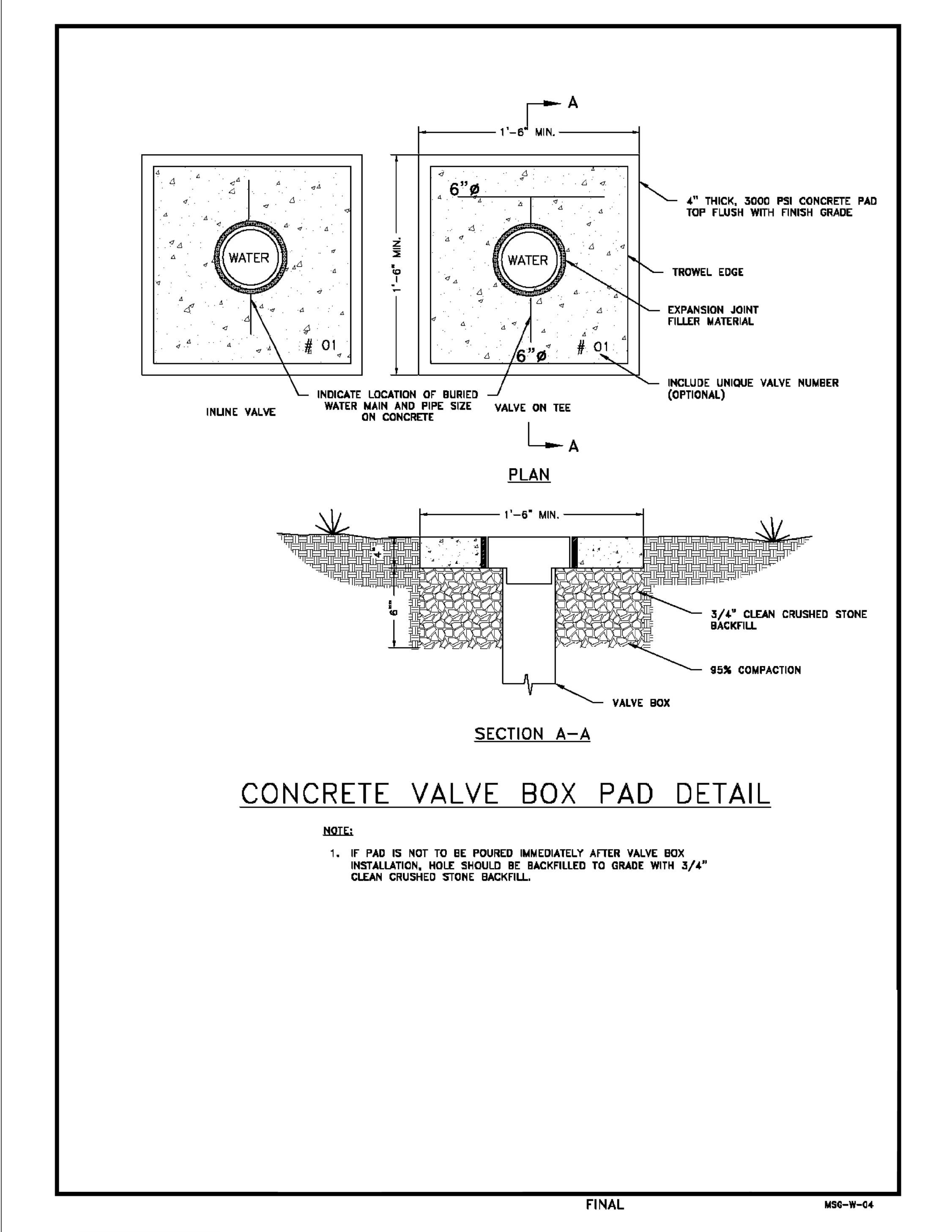
SHEET  
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 PLOT DATE: 05-27-21 PLOTTED BY: feudale



1 GATE VALVE AND VALVE BOX  
SCALE: NO SCALE



2 CONCRETE VALVE BOX PAD  
SCALE: NO SCALE

DATE:	5/28/21	10/2/20	DRAFT SUBMITTAL
SCALE:	AS NOTED	10/13/20	DRAFT SUBMITTAL
DESIGNED:	JJF	3/12/21	90% SUBMITTAL
DRAWN:	DZ	5/28/21	100% SUBMITTAL
CHECKED:	JJT		
PROJ. ENGR:	JJF		
BY	DATE	DESCRIPTION OF REVISIONS	APP'D



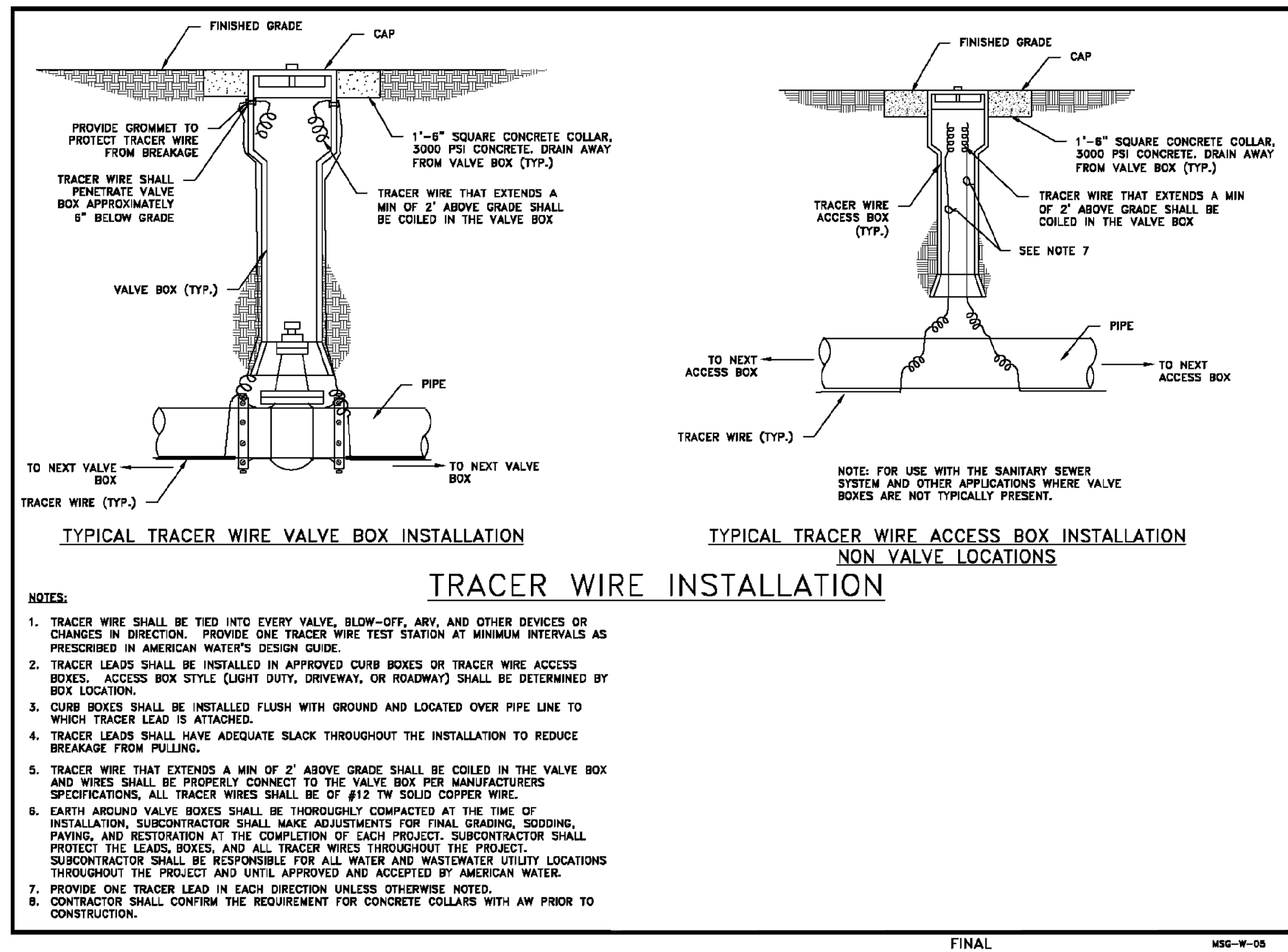
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**CITY OF EAST PALO ALTO  
 16-INCH WATER TRANSMISSION MAIN PROJECT  
 DETAIL SHEET**

SHEET  
**C-9**  
 OF 11 SHEETS  
 JOB NO.  
**221006**

DRAWING NAME: Y:\Projects\221 City of East Palo Alto\006\_Purdue Water Line\AAA Latest\Detail Sheets.dwg  
 PLOT DATE: 05-27-21  
 PLOTTED BY: feaudale

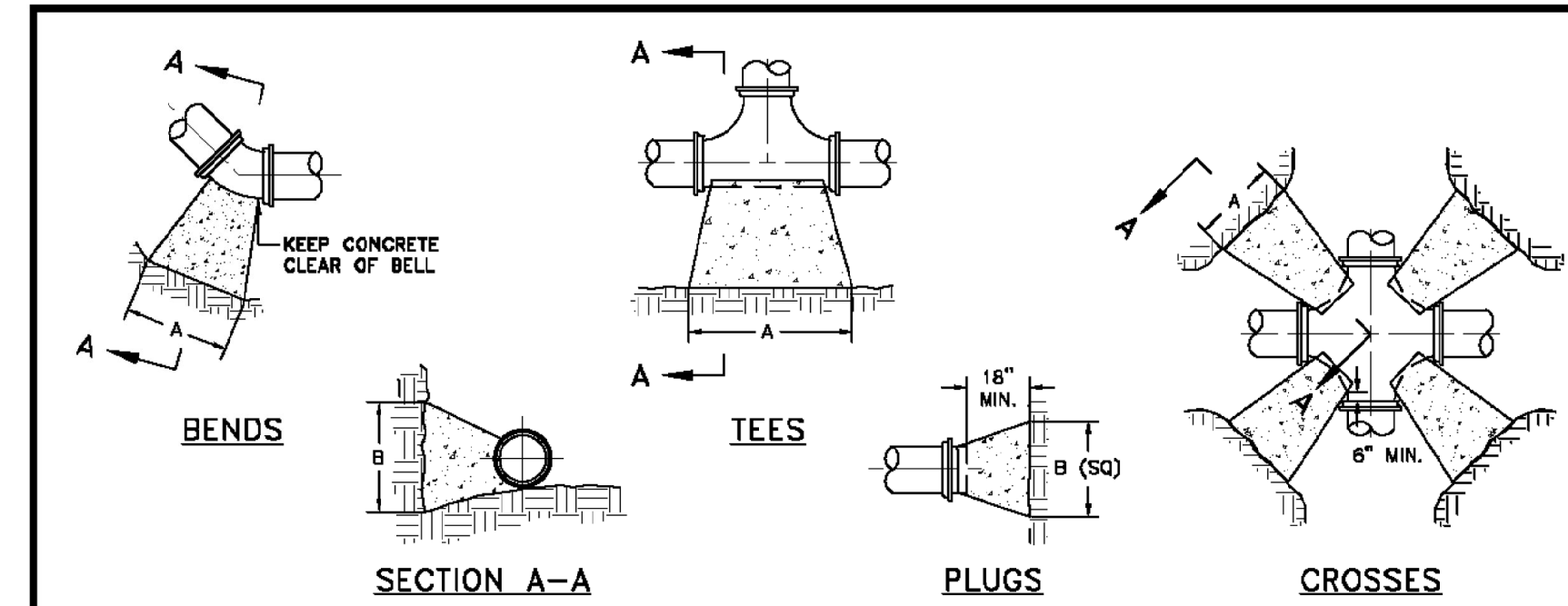


**TRACER WIRE INSTALLATION**

**NOTES:**

1. TRACER WIRE SHALL BE TIED INTO EVERY VALVE, BLOW-OFF, ARY, AND OTHER DEVICES OR CHANGES IN DIRECTION. PROVIDE ONE TRACER WIRE TEST STATION AT MINIMUM INTERVALS AS PRESCRIBED IN AMERICAN WATER'S DESIGN GUIDE.
2. TRACER LEADS SHALL BE INSTALLED IN APPROVED CURB BOXES OR TRACER WIRE ACCESS BOXES. ACCESS BOX STYLE (LIGHT DUTY, DRIVEWAY, OR ROADWAY) SHALL BE DETERMINED BY BOX LOCATION.
3. CURB BOXES SHALL BE INSTALLED FLUSH WITH GROUND AND LOCATED OVER PIPE LINE TO WHICH TRACER LEAD IS ATTACHED.
4. TRACER LEADS SHALL HAVE ADEQUATE SLACK THROUGHOUT THE INSTALLATION TO REDUCE BREAKAGE FROM PULLING.
5. TRACER WIRE THAT EXTENDS A MIN OF 2' ABOVE GRADE SHALL BE COILED IN THE VALVE BOX AND WIRES SHALL BE PROPERLY CONNECT TO THE VALVE BOX PER MANUFACTURERS SPECIFICATIONS. ALL TRACER WIRES SHALL BE OF #12 TW SOLID COPPER WIRE.
6. EARTH AROUND VALVE BOXES SHALL BE THOROUGHLY COMPACTED AT THE TIME OF INSTALLATION. SUBCONTRACTOR SHALL MAKE ADJUSTMENTS FOR FINAL GRADING, SODDING, PAVING, AND RESTORATION AT THE COMPLETION OF EACH PROJECT. SUBCONTRACTOR SHALL PROTECT THE LEADS, BOXES, AND ALL TRACER WIRES THROUGHOUT THE PROJECT. SUBCONTRACTOR SHALL BE RESPONSIBLE FOR ALL WATER AND WASTEWATER UTILITY LOCATIONS THROUGHOUT THE PROJECT AND UNTIL APPROVED AND ACCEPTED BY AMERICAN WATER.
7. PROVIDE ONE TRACER LEAD IN EACH DIRECTION UNLESS OTHERWISE NOTED.
8. CONTRACTOR SHALL CONFIRM THE REQUIREMENT FOR CONCRETE COLLARS WITH AW PRIOR TO CONSTRUCTION.

FINAL MSG-W-05



SIZE	REQUIRED BEARING AREA ON UNDISTURBED SOIL AND TYPICAL DIMENSIONS									
	CROSSES/90° BENDS		45° BENDS		11-1/4° BENDS		22-1/2° BENDS		TEES & PLUGS	
	AREA SQ. FT.	"A" "B"	AREA SQ. FT.	"A" "B"	AREA SQ. FT.	"A" "B"	AREA SQ. FT.	"A" "B"	AREA SQ. FT.	"A" "B"
6"	4.0	32" 18"	2.2	18" 16"	0.6	5" 18"	1.1	9" 18"	2.8	23" 18"
8"	7.0	42" 24"	3.8	23" 24"	1.0	6" 24"	2.0	12" 24"	5.0	30" 24"
10"	11.0	53" 30"	6.3	30" 30"	1.6	8" 30"	3.1	15" 30"	8.0	38" 30"
12"	16.1	64" 36"	10.0	40" 36"	2.2	9" 36"	4.4	18" 36"	11.3	45" 36"
14"	21.6	74" 42"	12.5	43" 42"	3.0	10" 42"	6.0	21" 42"	15.5	53" 42"
16"	28.3	85" 48"	17.7	53" 48"	4.0	12" 48"	7.7	23" 48"	20.1	60" 48"

\* SURFACE AREA OF BEARING SOIL IS PROVIDED FOR 200 PSI MAXIMUM PRESSURE (INCLUDING SURGE) AND 2000 PSF SOIL BEARING. IF PRESSURE IS HIGHER OR SOIL BEARING IS POTENTIALLY LOWER, CONSULT THE ENGINEER FOR ADJUSTMENTS.

**NOTES:**

1. COVER OVER TOP OF PIPE SHALL BE BELOW THE FROST LINE OR 30" MINIMUM, 72" MAXIMUM ACCORDING TO REGULATORY REQUIREMENTS. IF GRADING PLANS RECEIVED BY THE ENGINEER/OWNER WITH THE REQUEST FOR WATER MAIN LAYOUT INDICATE ADJUSTMENTS TO EXISTING GRADE, THEN PIPE SHALL BE INSTALLED TO MEET MINIMUM AND MAXIMUM COVER FROM PROPOSED GRADES SHOWN ON THE SAID PLANS.
2. THRUST BLOCKS SHALL BE BUILT AGAINST UNDISTURBED SOIL WITH ADEQUATE BACKING TO PREVENT MOVEMENT OF FITTING.
3. NO THRUST BLOCKS TO BE PLACED IN SEWER LATERAL DITCHES.
4. THRUST BLOCKING MUST FIT WITHIN THE EASEMENT.
5. IN SOME CASES, ADDITIONAL RESTRAINT MAY BE REQUIRED BASED ON 150 PSI STATIC PRESSURE, PLUS 50 PSI WATER HAMMER AND 2000 PSF SOIL BEARING.
6. POLYETHYLENE ENCASEMENT IS REQUIRED ON ALL D.I. PIPE AND FITTINGS.
7. THRUST BLOCKING SHALL BE PERFORMED SUCH THAT PIPE JOINTS AND BOLTS ARE ACCESSIBLE.
8. SUFFICIENT CLEARANCE SHALL BE ALLOWED BETWEEN CONCRETE AND BOLTS FOR FUTURE MAINTENANCE.
9. ALL ANCHOR BOLTS SHALL BE STAINLESS STEEL, MINIMUM 3/4" DIAMETER.
10. ALL M.J. AND FLG. FITTINGS TO RECEIVE THRUST BLOCKS SHALL BE WRAPPED IN POLYWRAP. CONTRACTOR SHALL ENSURE THAT POLYWRAP EXTENDS FAR ENOUGH BEYOND THE FITTING TO ENCLOSE ALL BOLTS WITHIN THE POLYWRAP.
11. THRUST BLOCKING DETAILS ARE SHOWN HERE FOR TYPICAL INSTALLATIONS. IN SOME CASES, ADDITIONAL RESTRAINT MAY BE REQUIRED.
12. PORTLAND CEMENT CONCRETE USED FOR THRUST BLOCKS SHALL BE MIN 3000 PSI CONCRETE.
13. FOR UNSTABLE SOIL CONDITIONS, CHECK WITH ENGINEER FOR THRUST BLOCK DIMENSIONS.
14. FOR MAIN SIZES GREATER THAN 16", SEE ENGINEER FOR THRUST BLOCK DIMENSIONS.

**THRUST BLOCK DETAIL**

FINAL MSG-W-08

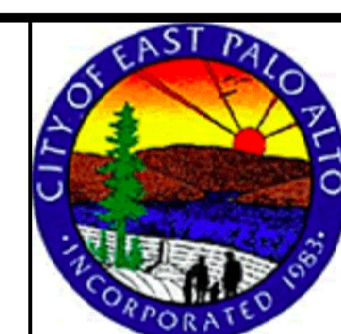
1 TRACER WIRE INSTALLATION  
SCALE: NO SCALE

2 THRUST BLOCK  
SCALE: NO SCALE

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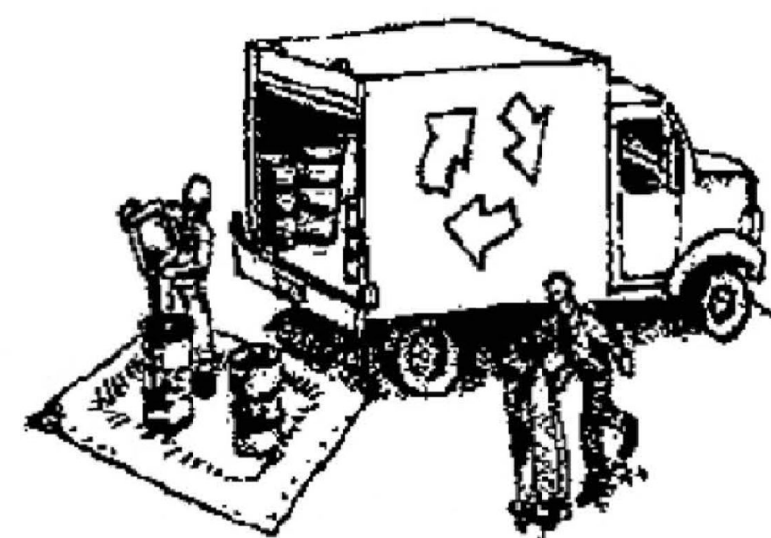


SAN MATEO COUNTYWIDE  
**Water Pollution Prevention Program**  
 Clean Water. Healthy Community.

# Construction Best Management Practices (BMPs)

Construction projects are required to implement the stormwater best management practices (BMP) on this page, as they apply to your project, all year long.

## Materials & Waste Management



### Non-Hazardous Materials

- ❑ Berm and cover stockpiles of sand, dirt or other construction material with tarps when rain is forecast or if not actively being used within 14 days.
- ❑ Use (but don't overuse) reclaimed water for dust control.

### Hazardous Materials

- ❑ Label all hazardous materials and hazardous wastes (such as pesticides, paints, thinners, solvents, fuel, oil, and antifreeze) in accordance with city, county, state and federal regulations.
- ❑ Store hazardous materials and wastes in water tight containers, store in appropriate secondary containment, and cover them at the end of every work day or during wet weather or when rain is forecast.
- ❑ Follow manufacturer's application instructions for hazardous materials and be careful not to use more than necessary. Do not apply chemicals outdoors when rain is forecast within 24 hours.
- ❑ Arrange for appropriate disposal of all hazardous wastes.

### Waste Management

- ❑ Cover waste disposal containers securely with tarps at the end of every work day and during wet weather.
- ❑ Check waste disposal containers frequently for leaks and to make sure they are not overfilled. Never hose down a dumpster on the construction site.
- ❑ Clean or replace portable toilets, and inspect them frequently for leaks and spills.
- ❑ Dispose of all wastes and debris properly. Recycle materials and wastes that can be recycled (such as asphalt, concrete, aggregate base materials, wood, gyp board, pipe, etc.)
- ❑ Dispose of liquid residues from paints, thinners, solvents, glues, and cleaning fluids as hazardous waste.

### Construction Entrances and Perimeter

- ❑ Establish and maintain effective perimeter controls and stabilize all construction entrances and exits to sufficiently control erosion and sediment discharges from site and tracking off site.
- ❑ Sweep or vacuum any street tracking immediately and secure sediment source to prevent further tracking. Never hose down streets to clean up tracking.

## Equipment Management & Spill Control



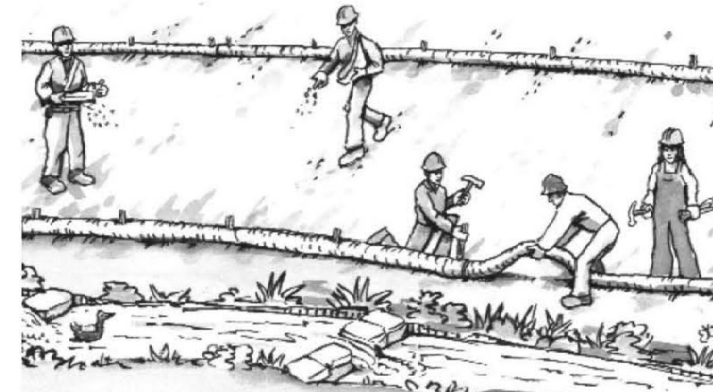
### Maintenance and Parking

- ❑ Designate an area, fitted with appropriate BMPs, for vehicle and equipment parking and storage.
- ❑ Perform major maintenance, repair jobs, and vehicle and equipment washing off site.
- ❑ If refueling or vehicle maintenance must be done onsite, work in a bermed area away from storm drains and over a drip pan big enough to collect fluids. Recycle or dispose of fluids as hazardous waste.
- ❑ If vehicle or equipment cleaning must be done onsite, clean with water only in a bermed area that will not allow rinse water to run into gutters, streets, storm drains, or surface waters.
- ❑ Do not clean vehicle or equipment onsite using soaps, solvents, degreasers, steam cleaning equipment, etc.

### Spill Prevention and Control

- ❑ Keep spill cleanup materials (rags, absorbents, etc.) available at the construction site at all times.
- ❑ Inspect vehicles and equipment frequently for and repair leaks promptly. Use drip pans to catch leaks until repairs are made.
- ❑ Clean up spills or leaks immediately and dispose of cleanup materials properly.
- ❑ Do not hose down surfaces where fluids have spilled. Use dry cleanup methods (absorbent materials, cat litter, and/or rags).
- ❑ Sweep up spilled dry materials immediately. Do not try to wash them away with water, or bury them.
- ❑ Clean up spills on dirt areas by digging up and properly disposing of contaminated soil.
- ❑ Report significant spills immediately. You are required by law to report all significant releases of hazardous materials, including oil. To report a spill: 1) Dial 911 or your local emergency response number, 2) Call the Governor's Office of Emergency Services Warning Center, (800) 852-7550 (24 hours).

## Earthwork & Contaminated Soils



### Erosion Control

- ❑ Schedule grading and excavation work for dry weather only.
- ❑ Stabilize all denuded areas, install and maintain temporary erosion controls (such as erosion control fabric or bonded fiber matrix) until vegetation is established.
- ❑ Seed or plant vegetation for erosion control on slopes or where construction is not immediately planned.

### Sediment Control

- ❑ Protect storm drain inlets, gutters, ditches, and drainage courses with appropriate BMPs, such as gravel bags, fiber rolls, berms, etc.
- ❑ Prevent sediment from migrating offsite by installing and maintaining sediment controls, such as fiber rolls, silt fences, or sediment basins.
- ❑ Keep excavated soil on the site where it will not collect into the street.
- ❑ Transfer excavated materials to dump trucks on the site, not in the street.
- ❑ Contaminated Soils
  - If any of the following conditions are observed, test for contamination and contact the Regional Water Quality Control Board:
    - Unusual soil conditions, discoloration, or odor.
    - Abandoned underground tanks.
    - Abandoned wells
    - Buried barrels, debris, or trash.

## Paving/Asphalt Work

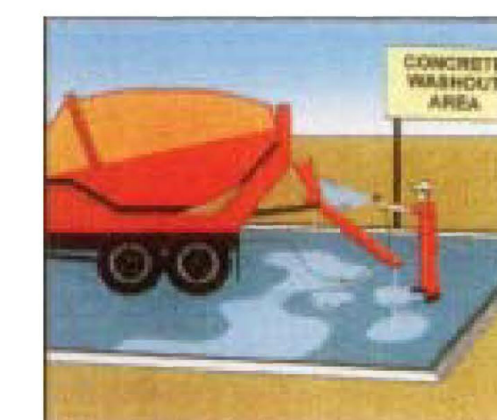


- ❑ Avoid paving and seal coating in wet weather, or when rain is forecast before fresh pavement will have time to cure.
- ❑ Cover storm drain inlets and manholes when applying seal coat, tack coat, slurry seal, fog seal, etc.
- ❑ Collect and recycle or appropriately dispose of excess abrasive gravel or sand. Do NOT sweep or wash it into gutters.
- ❑ Do not use water to wash down fresh asphalt concrete pavement.

### Sawcutting & Asphalt/Concrete Removal

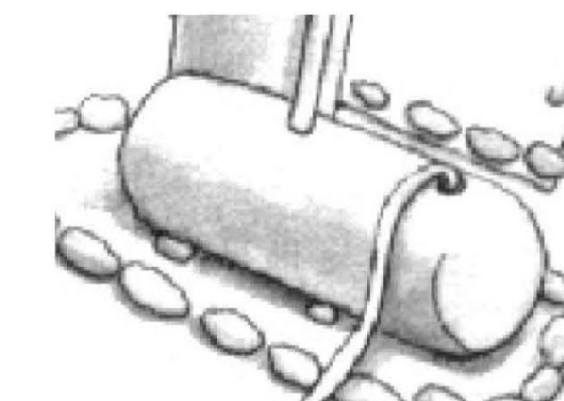
- ❑ Completely cover or barricade storm drain inlets when saw cutting. Use filter fabric, catch basin inlet filters, or gravel bags to keep slurry out of the storm drain system.
- ❑ Shovel, absorb, or vacuum saw-cut slurry and dispose of all waste as soon as you are finished in one location or at the end of each work day (whichever is sooner!).
- ❑ If sawcut slurry enters a catch basin, clean it up immediately.

## Concrete, Grout & Mortar Application



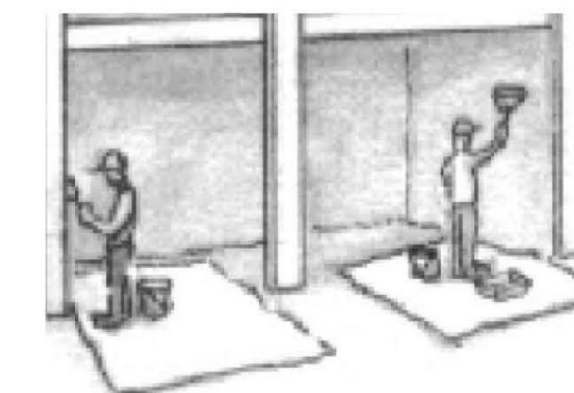
- ❑ Store concrete, grout and mortar under cover, on pallets and away from drainage areas. These materials must never reach a storm drain.
- ❑ Wash out concrete equipment/trucks offsite or in a contained area, so there is no discharge into the underlying soil or onto surrounding areas. Let concrete harden and dispose of as garbage.
- ❑ Collect the wash water from washing exposed aggregate concrete and remove it for appropriate disposal offsite.

### Dewatering



- ❑ Effectively manage all run-on, all runoff within the site, and all runoff that discharges from the site. Divert run-on water from offsite away from all disturbed areas or otherwise ensure compliance.
- ❑ When dewatering, notify and obtain approval from the local municipality before discharging water to a street gutter or storm drain. Filtration or diversion through a basin, tank, or sediment trap may be required.
- ❑ In areas of known contamination, testing is required prior to reuse or discharge of groundwater. Consult with the Engineer to determine whether testing is required and how to interpret results. Contaminated groundwater must be treated or hauled off-site for proper disposal.

## Painting & Paint Removal



### Painting cleanup

- ❑ Never clean brushes or rinse paint containers into a street, gutter, storm drain, or surface waters.
- ❑ For water-based paints, paint out brushes to the extent possible. Rinse to the sanitary sewer once you have gained permission from the local wastewater treatment authority. Never pour paint down a drain.
- ❑ For oil-based paints, paint out brushes to the extent possible and clean with thinner or solvent in a proper container. Filter and reuse thinners and solvents. Dispose of residue and unusable thinner/solvents as hazardous waste.

### Paint removal

- ❑ Chemical paint stripping residue and chips and dust from marine paints or paints containing lead or tributyltin must be disposed of as hazardous waste.
- ❑ Paint chips and dust from non-hazardous dry stripping and sand blasting may be swept up or collected in plastic drop cloths and disposed of as trash.

## Landscape Materials



- ❑ Contain stockpiled landscaping materials by storing them under tarps when they are not actively being used.
- ❑ Stack erodible landscape material on pallets. Cover or store these materials when they are not actively being used or applied.
- ❑ Discontinue application of any erodible landscape material within 2 days before a forecast rain event or during wet weather.

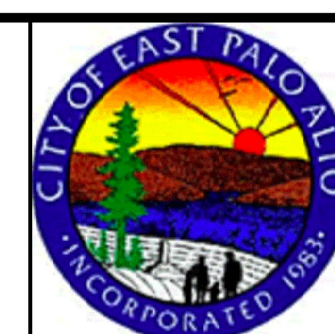
**Storm drain polluters may be liable for fines of up to \$10,000 per day!**

DRAWING NAME: Y:\Projects\221 City of East Palo Alto\006\_Purdue Water Line\AAA Latest\Detail Sheets.dwg  
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