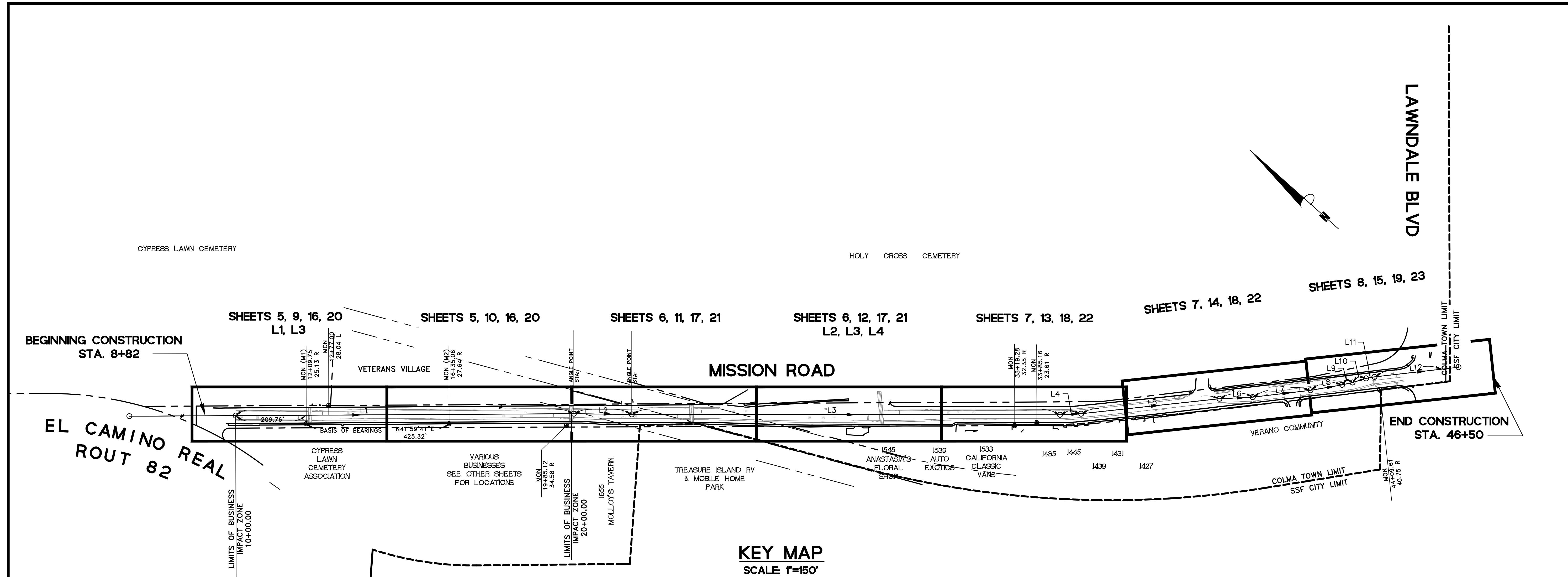




J:\DESIGN\18\_393 - Colma Mission Road Improvements\2020-03-18 BIDSET\02 KEY MAP.dwg © 04:53:17 PM



**KEY MAP**  
SCALE: 1"=150'

**ALIGNMENT LINE TABLE**

#	BEARING	DISTANCE (FT)
L1	S 42°19'47" E	1006.49
L2	S 41°14'93" E	172.53
L3	S 41°56'47" E	1274.82
L4	S 45°04'24" E	63.54
L5	S 43°10'00" E	413.73
L6	S 44°47'16" E	99.14
L7	S 48°41'17" E	173.30
L8	S 51°45'25" E	95.29
L9	S 54°58'00" E	32.12
L10	S 58°45'23" E	42.02
L11	S 52°09'01" E	25.405
L12	S 48°36'11" E	201.62

**BASIS OF BEARINGS**  
THE BEARING N41°59'41"W AS SHOWN BETWEEN 2 FOUND MONUMENTS, M1 & M2, LOCATED SOUTH OF EL CAMINO REAL, IN THE SIDEWALK ON THE WEST SIDE OF MISSION ROAD, WAS USED AS THE BASIS OF BEARINGS FOR THIS PROJECT. ALL MONUMENTS FOUND ARE SHOWN ON THIS SHEET. THE TOPOGRAPHIC SURVEY IS BASED ON THE NORTH AMERICAN DATUM OF 1983 (NAD83) CCS83, CALIFORNIA ZONE 3.

MONUMENT M1 (BART 2" BRASS DISK): N 2073042.09, E 5996471.43  
MONUMENT M2 (BART 2" BRASS DISK): N 2072725.99, E 5996755.97

**PROJECT BENCHMARK**  
THE ELEVATIONS FOR THIS PROJECT ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988.

MONUMENT M1 (BART 2" BRASS DISK): ELEV. 94.94'  
MONUMENT M2 (BART 2" BRASS DISK): ELEV. 92.36'

DESIGNED: SH/LL	DRAWN: SK/CM	APPROVED:	NO.	REVISIONS	DATE	
PREPARED BY: <b>CSG CONSULTANTS</b> 550 Pilgrim Drive Foster City, CA 94404 Phone: (650)622-2500 Fax: (650)522-2599						
PREPARED FOR: <b>TOWN OF COLMA</b> 1198 EL CAMINO REAL COLMA, CA 94014						
TITLE: <b>KEY MAP, MONUMENT LOCATIONS, AND BASIS OF BEARINGS</b> <b>MISSION ROAD</b> <b>BICYCLE &amp; PEDESTRIAN IMPROVEMENTS PROJECT</b>						
<b>SHEET 2</b> OF <b>43</b>						
DATE : 4/17/20 JOB#: 18.393						
4/22/20 <b>BID SET</b>						

J:\DESIGN\18\_393 - Contra Mission Road Improvements\2020-03-18 BIDSET\03 GENERAL CONSTRUCTION & COORDINATION NOTES.dwg @ 04:57:25 PM

**I. GENERAL**

- CONSTRUCTION MATERIALS AND METHODS SHALL COMPLY WITH THESE PROJECT PLANS, THE PROJECT SPECIFICATIONS, AND THE TOWN OF COLMA STANDARD SPECIFICATIONS AND DETAILS, AND CALTRANS STANDARDS PLANS AND SPECIFICATIONS, IN THAT ORDER, UNLESS OTHERWISE INDICATED.
- THE TERM "SPECIFICATIONS", WHERE USED IN THESE DRAWINGS, SHALL REFER TO THE PROJECT SPECIFICATIONS "CONTRACT SPECIFICATIONS AND SPECIAL PROVISIONS FOR THE MISSION ROAD BICYCLE & PEDESTRIAN IMPROVEMENTS PROJECT, DATED DECEMBER 2019.
- WHERE USED IN THESE DRAWINGS, THE TERMS "TOWN" AND "CITY" SHALL REFER TO THE TOWN OF COLMA.
- THIS PROJECT IS LOCATED WITHIN THE JURISDICTION OF THE TOWN OF COLMA AND THE CITY OF SOUTH SAN FRANCISCO. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS AND LICENCES TO PERFORM THE WORK WITHIN THE TOWN AND THE CITY PRIOR TO THE START OF WORK. THE TOWN OF COLMA WILL WAIVE FEES FOR ALL PERMITS REQUIRED FROM THE TOWN.
- CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE REGULATIONS AND REQUIREMENTS OF THE TOWN ORDINANCES.
- SHOULD IT APPEAR THAT THE WORK TO BE DONE OR ANY MATTER RELATIVE THERETO IS NOT SUFFICIENTLY DETAILED OR SPECIFIED IN THE CONSTRUCTION DOCUMENTS, THE CONTRACTOR SHALL NOTIFY THE PUBLIC WORKS DIRECTOR AND OBTAIN CLARIFICATION BEFORE PROCEEDING WITH THE WORK IN QUESTION. SHOULD EXISTING CONDITIONS SHOWN ON THESE PLANS DIFFER FROM ACTUAL CONDITIONS IN THE FIELD, CONTRACTOR SHALL NOTIFY THE PUBLIC WORKS DIRECTOR BEFORE PROCEEDING WITH THE WORK. CONTRACTOR WILL BE RESPONSIBLE FOR ADDITIONAL WORK RESULTING FROM LACK OF COORDINATION REGARDING PLAN/FIELD DISCREPANCIES WITH THE TOWN.
- ALL REVISIONS TO THESE PLANS MUST BE REVIEWED AND APPROVED IN WRITING BY THE ENGINEER OF RECORD AND THE PUBLIC WORKS DIRECTOR PRIOR TO CONSTRUCTION OF AFFECTED ITEMS. THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ARRANGING REQUIRED INSPECTIONS BY THE PUBLIC WORKS DIRECTOR OR HIS/HER AUTHORIZED REPRESENTATIVE(S). NO DELAY OF WORK CLAIM WILL BE ALLOWED DUE TO THE CONTRACTOR'S FAILURE TO ARRANGE FOR TOWN INSPECTION IN ADVANCE. CONTRACTOR SHALL NOTIFY THE PUBLIC WORKS DIRECTOR AT (650) 757-8888 A MINIMUM OF TWO (2) WORKING DAYS IN ADVANCE OF REQUIRED INSPECTIONS.
- CONTRACTOR SHALL POST 24-HOUR EMERGENCY TELEPHONE NUMBERS FOR PUBLIC WORKS, POLICE DEPARTMENT AND FIRE DEPARTMENT AND EMERGENCY MEDICAL SERVICE ON SITE PRIOR TO START OF CONSTRUCTION.
- CONTRACTOR SHALL PROVIDE A 72 HOUR NOTICE TO ADJOINING PROPERTY OWNERS AND TENANTS PRIOR TO COMMENCING CONSTRUCTION WORK. NOTIFICATION SHALL BE BY LETTER AND SHALL BE APPROVED BY THE PUBLIC WORKS DIRECTOR.
- CONTRACTOR SHALL POST "NO-PARKING" SIGNS ON WORK AREA 72 HOURS PRIOR TO COMMENCING WORK. IF THE INTENDED WORK DOES NOT COMMENCE WITHIN 24 HOURS OF THE SCHEDULED DATE, ALL "NO PARKING" SIGNS SHALL BE REMOVED FROM THE SITE UPON CONCURRENCE FROM THE PUBLIC WORKS DIRECTOR.
- CONTRACTOR SHALL HAVE A CONSTRUCTION SUPERINTENDENT ON-SITE AND MUST HAVE READILY AVAILABLE TELEPHONE NUMBERS FOR EMERGENCY ASSISTANCE.
- THE CONTRACTOR SHALL OBTAIN APPROVAL FOR THE HAUL ROUTE FROM THE TOWN'S ENGINEERING DEPARTMENT. APPROVED HAUL ROUTES SHALL BE STRICTLY ADHERED TO BY THE CONTRACTOR AND ALL SUBCONTRACTORS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE CARE AND PROTECTION OF THE FOLLOWING, INCLUDING, BUT NOT LIMITED TO: ADJOINING PREMISES, TREES, LANDSCAPING, FENCES, UTILITIES, SIDEWALKS AND STREETS FROM DAMAGE BY HIS OPERATIONS. CONTRACTOR SHALL REPAIR, REPLACE OR CLEAN ANY PART OF THE ABOVE MENTIONED TO THE SATISFACTION OF THE PUBLIC WORKS DIRECTOR, AT NO ADDITIONAL COST TO THE TOWN OR THE ADJACENT PROPERTY OWNERS. FURTHERMORE, THE CONTRACTOR SHALL REPLACE OR REPAIR, AT HIS/HER OWN EXPENSE, ALL DAMAGED, REMOVED OR OTHERWISE DISTURBED EXISTING UTILITIES, UNDERGROUND OR SURFACE IMPROVEMENTS OR FEATURES OF WHATEVER NATURE, TO THEIR ORIGINAL CONDITION, WHETHER SHOWN ON THE PLANS OR NOT.
- ALL CONSTRUCTION STAKING SHALL BE DONE BY A CIVIL ENGINEER AUTHORIZED TO PRACTICE LAND SURVEYING OR A LAND SURVEYOR REGISTERED IN THE STATE OF CALIFORNIA, HIRED BY THE CONTRACTOR. THE CONTRACTOR SHALL NOTIFY THE TOWN'S CONSTRUCTION INSPECTOR TWENTY-FOUR (24) HOURS IN ADVANCE OF COMMENCEMENT OF STAKING AND WHEN THE WORK WILL BE COMPLETED. THE CONTRACTOR SHALL ALLOW THE TOWN ADEQUATE TIME TO REVIEW AND APPROVE THE PROJECT STAKING PRIOR TO BEGINNING CONSTRUCTION. THIS TIME SHALL BE DETERMINED AND MUTUALLY AGREED UPON WITH THE CONTRACTOR AND TOWN AT THE PRE-CONSTRUCTION MEETING. THE TOWN RESERVES THE RIGHT TO MAKE REASONABLE ADJUSTMENTS TO THE STAKING WORK AS THE TOWN DEEMS NECESSARY AND WITHOUT REGARDS FOR ANY RELATED DELAYS TO CONSTRUCTION. THE CONTRACTOR SHALL WORK WITH THE TOWN IN ENSURING ANY MODIFICATIONS TO THE STAKING REQUIRED BY THE TOWN ARE IN PLACE PRIOR TO CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR MATCHING EXISTING PAVEMENT, ADJACENT LANDSCAPE AND OTHER IMPROVEMENTS WITH A SMOOTH TRANSITION IN PAVING, CURBS, GUTTERS, SIDEWALKS, ETC., TO AVOID ANY ABRUPT OR APPARENT CHANGES IN GRADES OR CROSS SLOPES, LOW SPOTS OR HAZARDOUS CONDITIONS.

**II. WORK HOURS**

- SEE PROJECT SPECIFICATIONS, SECTION 00700-1.05 FOR WORK HOURS AND RESTRICTIONS.

**III. TRAFFIC CONTROL**

- SEE PROJECT SPECIFICATIONS, SECTION 102 OF THE TECHNICAL SPECIFICATIONS FOR TRAFFIC CONTROL REQUIREMENTS.

**IV. CONSTRUCTION STAGING**

- CONTRACTOR SHALL SUBMIT FOR REVIEW AND APPROVAL BY THE PUBLIC WORKS DIRECTOR A COMPLETE CONSTRUCTION STAGING PLAN IMMEDIATELY UPON APPROVAL OF INSURANCE FORMS AND CERTIFICATES. CONSTRUCTION STAGING AREA SHALL BE LOCATED IN AN AREA APPROVED BY THE DIRECTOR OF PUBLIC WORKS.
- NO EQUIPMENT SHALL BE STORED WITHIN TOWN RIGHTS-OF-WAY UNLESS APPROVED IN WRITING BY THE PUBLIC WORK DIRECTOR.
- CONSTRUCTION STAGING AREA SHALL BE ADEQUATELY SECURED BY USE OF TEMPORARY FENCING WITH LOCKING GATE(S) AND SCREENED FROM THE PUBLIC RIGHT-OF-WAY TO THE SATISFACTION OF THE PUBLIC WORKS DIRECTOR. SCREENING SHALL CONSIST OF MATERIALS APPROVED BY THE PUBLIC WORKS DIRECTOR AND SHALL BE INSTALLED PRIOR TO THE START OF CONSTRUCTION.

**V. STORMWATER POLLUTION, EROSION CONTROL, AND CLEANUP**

- CONTRACTOR SHALL COMPLY WITH ALL RULES, REGULATIONS AND PROCEDURES OF THE MUNICIPAL REGIONAL STORMWATER POLLUTION PERMIT (MRP), ALSO KNOWN AS THE NPDES PERMIT, MORE SPECIFICALLY, CONTRACTOR SHALL COMPLY WITH THE SAN MATEO COUNTYWIDE STORMWATER POLLUTION PREVENTION PROGRAM'S BEST MANAGEMENT PRACTICES (BMPs) FOR CONSTRUCTION ACTIVITIES, THE EROSION/STORMWATER POLLUTION CONTROL PLANS ATTACHED HERETO AS SHEETS NO. 20, 21, 22 & 23, AND THE "POLLUTION PREVENTION - IT'S PART OF THE PLAN" CONSTRUCTION BMP PLAN SHEET, ATTACHED HERETO AS SHEET NO. 24.
- CONTRACTOR SHALL SUBMIT FOR TOWN REVIEW A STORMWATER POLLUTION PREVENTION PLAN, PREPARED IN ACCORDANCE WITH CALTRANS STANDARDS INCLUDING ALL MEASURES TO BE IMPLEMENTED THROUGHOUT THE PROJECT LIMITS AND AT CONTRACTOR'S STAGING LOCATION.
- ALL WORK TO BE PERFORMED DURING THE DRY WEATHER MONTHS BETWEEN APRIL 30TH & OCTOBER 1ST. WORK TO CONTINUE AFTER OCTOBER 1ST WITH WRITTEN PERMISSION FROM THE TOWN AND THE CITY WITH ADDITIONAL PROTECTIVE MEASURES ONLY.
- APPLY CONCRETE, ASPHALT, AND SEAL COAT DURING DRY WEATHER TO PREVENT CONTAMINANTS FROM CONTACTING STORM WATER RUNOFF.
- COVER STORM DRAIN INLETS AND MANHOLES WHEN PAVING OR APPLYING SEAL COAT, SLURRY SEAL, FOG SEAL, ETC.
- MAINTAIN ALL VEHICLES AND HEAVY EQUIPMENT. INSPECT FREQUENTLY FOR AND REPAIR LEAKS.
- CLEAN UP LIQUID SPILLS ON PAVED OR IMPERMEABLE SURFACES USING "DRY" CLEANUP METHODS (E.G., ABSORBENT MATERIALS LIKE CAT LITTER, SAND OR RAGS).
- FILTER FABRIC OR OTHER MATERIAL FOR SEDIMENT TRAPPING SHALL BE INSTALLED AND MAINTAINED AT STREET GUTTERS AND DRAINS TO KEEP CONSTRUCTION DEBRIS OUT OF THE STORM DRAIN SYSTEM.
- NO MATERIAL, RESIDUE WASTE OR DEBRIS GENERATED BY CONSTRUCTION ACTIVITIES WILL BE ALLOWED TO BE WASHED INTO ANY DRAINAGE INLETS.
- AT THE END OF EVERY DAY, ALL MATERIALS TRAPPED BY THE INLET PROTECTION BMP (FILTER FABRIC) AND EXCESS MATERIALS SUCH AS PAVEMENT PIECES OR DEBRIS WILL BE COLLECTED USING DRY SWEEP METHODS AND REMOVED FROM THE PROJECT SITE. NO MATERIALS WILL BE ALLOWED TO BE WASHED INTO THE STORM DRAIN SYSTEM.
- DURING CONSTRUCTION, STREETS SHALL BE CLEANED AS OFTEN AS REQUIRED TO REMOVE ANY ACCUMULATION OF MUD AND DEBRIS RESULTING FROM THIS CONSTRUCTION.
- BERM AROUND STORAGE AREAS TO PREVENT CONTACT WITH STORMWATER RUNOFF.
- STORE STOCKPILED MATERIALS AND WASTES OVER PLASTIC SHEETING OR A TARP, AND UNDER A TEMPORARY ROOF OR SECURED PLASTIC SHEETING OR TARP.
- ALWAYS PARK PAVING MACHINES OVER DRIP PANS OR ABSORBENT MATERIALS, AS THEY TEND TO DRIP CONTINUOUSLY.

**VII. EXISTING CONDITIONS, UTILITIES AND MONUMENTS**

- CONTRACTOR SHALL CONTACT USA [UNDERGROUND SERVICES ALERT 1-(800)-227-2600.] AND AFFECTED UTILITY COMPANIES, A MINIMUM OF TWO (2) WORKING DAYS PRIOR TO THE START OF WORK TO NOTIFY THEM OF CONSTRUCTION, AND TO REQUEST THAT UTILITIES BE MARKED. CONTRACTOR SHALL NOT BEGIN EXCAVATION WORK UNTIL ALL UTILITIES HAVE BEEN MARKED OR THE PRESCRIBED "NO RESPONSE FOLLOW-UP" PROCEDURES HAVE BEEN FOLLOWED.
- LOCATION OF UNDERGROUND UTILITIES SHOWN ON THESE PLANS WAS COMPILED FROM SURVEYED SURFACE UTILITIES AND UTILITY COMPANIES' FACILITY SCHEMATICS AND IS APPROXIMATE. THE UTILITY INFORMATION SHOWN HEREON IS NOT MEANT TO BE A FULL CATALOG OF EXISTING CONDITIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING RECORD INFORMATION AND CONDUCTING FIELD INVESTIGATION TO VERIFY THE LOCATION AND ELEVATIONS OF EXISTING UTILITIES - WHETHER SHOWN ON THESE PLANS OR NOT. CONTRACTOR SHALL NOTIFY THE TOWN IMMEDIATELY UPON DISCOVERY OF DISCREPANCIES.
- CONTRACTOR SHALL VERIFY UTILITY LOCATION AND ELEVATION AT PROPOSED UTILITY CROSSINGS AND CONNECTION POINTS BY POTHOLES AT THE LOCATIONS SHOWN ON THESE PLANS. REPORT DISCREPANCIES TO THE PUBLIC WORKS DIRECTOR FOR DESIGN REVISIONS.
- CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING ABOVE OR NEAR AT&T DUCT BANK. LOCATION AS SHOWN ON PLAN WAS APPROXIMATED FROM SCHEMATIC AND VISIBLE TRENCH LINES, AND SHALL IN NO WAY BE ACCEPTED AS TRUE LOCATION. TRUE LOCATION SHALL BE MARKED IN THE FIELD BY REPRESENTATIVES OF AT&T. CONTRACTOR SHALL NOTIFY THE TOWN IMMEDIATELY UPON DISCOVERY OF DISCREPANCIES BETWEEN MARKED LOCATION AND THE LOCATION SHOWN ON THESE PLANS.
- CONTRACTOR SHALL BE RESPONSIBLE TO PROTECT-IN-PLACE EXISTING MONUMENTS. DESTROYED/DAMAGED MONUMENTS SHALL BE RE-ESTABLISHED AT CONTRACTOR'S SOLE EXPENSE. SEE SECTION 103 OF THE PROJECT TECHNICAL SPECIFICATIONS FOR ADDITIONAL INFORMATION REGARDING MONUMENT PRESERVATION.

**X. EARTHWORK AND GRADING**

- TOPSOIL, ROOTS, VEGETABLE MATTER, TRASH, DEBRIS AND ANY OTHER DELETERIOUS MATERIAL SHALL NOT BE CONSIDERED ACCEPTABLE FILL MATERIAL.
- ANY ADDITIONAL FILL MATERIAL REQUIRED TO ATTAIN THE DESIGN GRADES SHOWN ON THESE PLANS SHALL BE PER PROJECT SPECIFICATIONS. ALL FILL MATERIAL SHALL BE FIELD TESTED FOR COMPLIANCE WITH THE PROJECT SPECIFICATIONS INCLUDING TOXICITY TESTING.
- COMPACTION BY FLOODING, PONDING OR JETTING WILL NOT BE PERMITTED.
- PROTECT-IN-PLACE OR RESTORE EXISTING IRRIGATION SYSTEMS. RESET IRRIGATOR HEADS WHERE REQUIRED TO MATCH FINAL GRADES. SPRINKLERS SHOULD NOT BE DISABLED FOR LONGER THAN SUCH PERIOD AS WAS AGREED UPON WITH PROPERTY OWNER, AND NEVER WITHOUT PRIOR APPROVAL FROM DIRECTOR OF PUBLIC WORKS AND PROPERTY OWNER.

**IX. STATEMENT OF RESPONSIBILITY**

- 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. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD BOTH DESIGN PROFESSIONALS AND THE TOWN OF COLMA 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 EITHER THE DESIGN PROFESSIONAL OR THE TOWN OF COLMA.

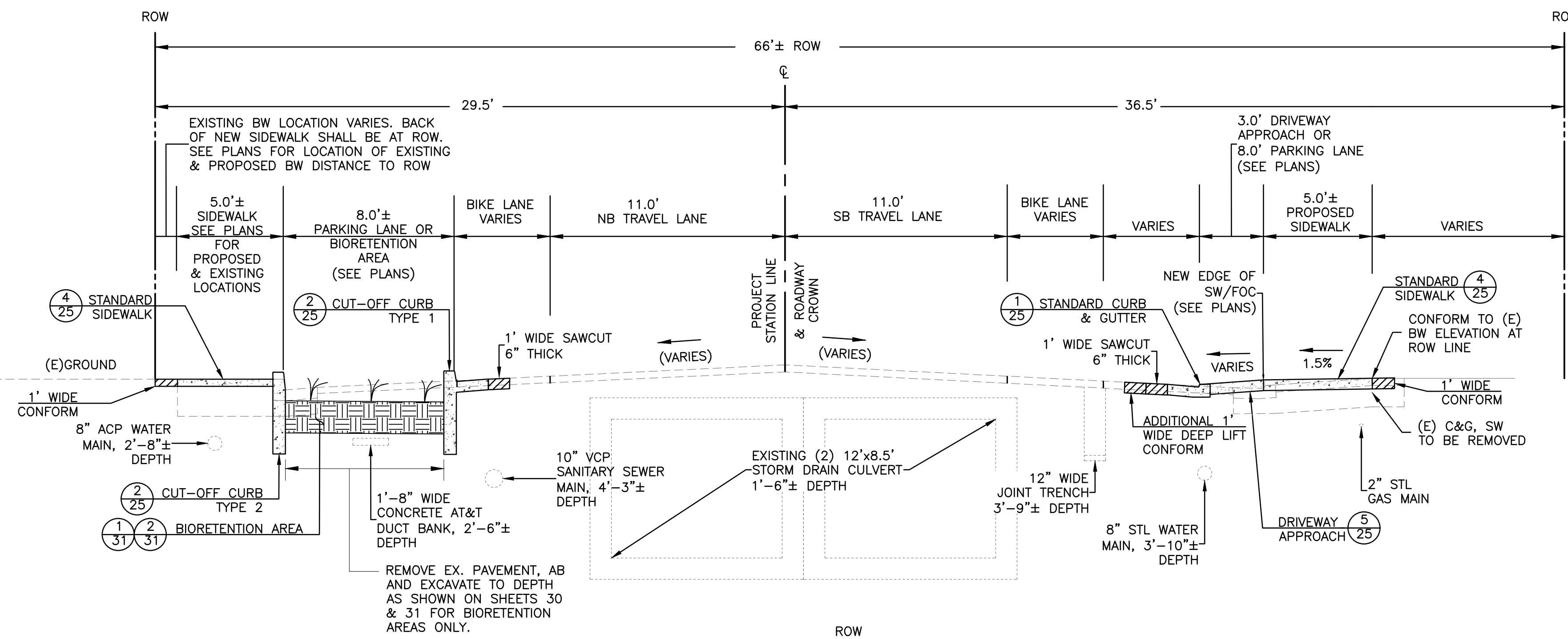
**XI. DEMOLITION NOTES**

- EXISTING SIGNS AS SHOWN ON THE SIGNING/STRIPING PLANS SHALL BE SALVAGED AND MAINTAINED IN AN ACCEPTABLE CONDITION FOR RE-INSTALLATION BY THE CONTRACTOR.
- DEMOLITION INCLUDES REMOVAL OF RAISED PAVEMENT MARKERS AND GRINDING OF THERMOPLASTIC PAVEMENT LEGENDS WHERE AS NOTED ON THE DEMOLITION PLANS.
- PROTECT EXISTING IRRIGATION SYSTEMS WITHIN PROJECT LIMITS.
- PROTECT EXISTING MONUMENTS DURING CONSTRUCTION.
- PROTECT-IN-PLACE ALL MANHOLE COVERS AND LIDS OF UNDERGROUND VAULTS, WATER VALVES, ETC. UNLESS OTHERWISE NOTED ON PLANS.
- TO THE BEST OF THE TOWN'S KNOWLEDGE, THE DEPTH OF EXISTING ASPHALT CONCRETE IS UNKNOWN, THE TOWN CANNOT WARRANT THAT THE DEPTH IS COMPLETELY UNIFORM THROUGHOUT. GRINDING EXISTING SECTION "FULL-DEPTH" SHALL MEAN REMOVE ALL EXISTING ASPHALT CONCRETE DOWN TO BASE MATERIAL, AND MAY BE MORE THAN WHAT IS SHOWN ON THESE PLANS.

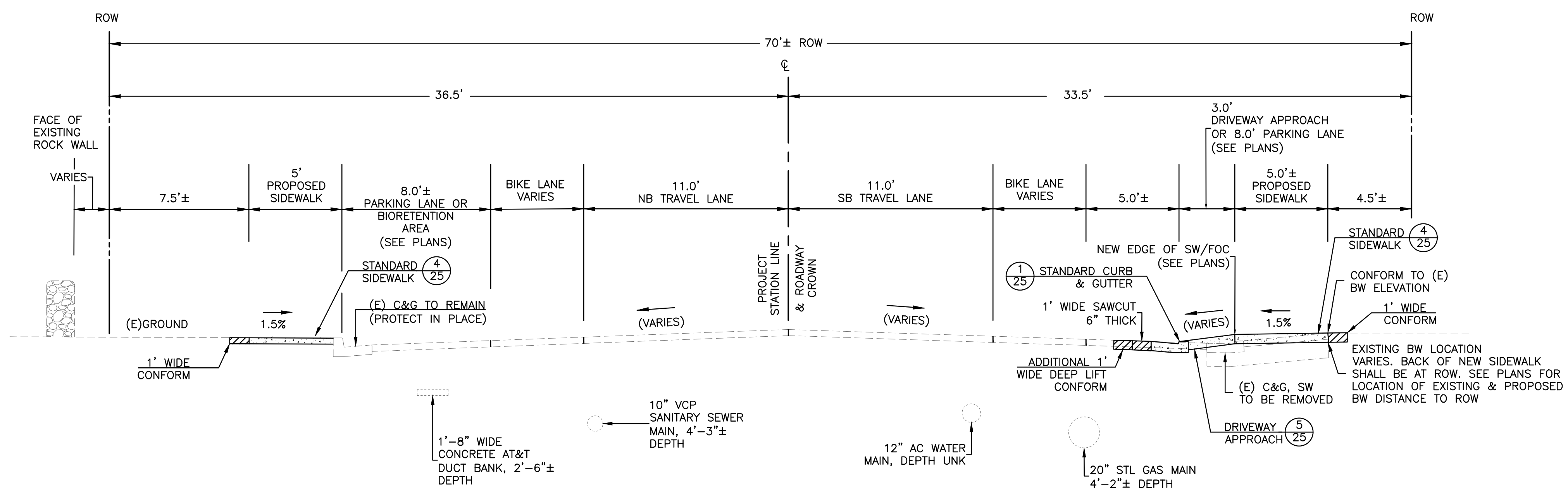
**XII. LIGHTING NOTES**

- LIGHTING SYMBOLS DENOTE APPROXIMATE LOCATION OF POLE AND NO. 3 1/2 PULL BOX.
- LIGHTING STANDARD SHALL BE IN PLACE AND TRULY PLUMBED BEFORE PLACING CONCRETE.
- LUMINAIRES SHALL BE WIRED TO A "MULTIPLE CIRCUIT".
- LIGHTING CONDUIT INSTALLATION SHALL CONFORM TO THE REQUIREMENTS FOR "TRENCHING IN PAVEMENT METHOD" IN SECTION 86-2.05C OF THE STATE STANDARD SPECIFICATIONS.
- CONFIRM EXACT LIGHT LOCATIONS IN THE FIELD WITH THE ENGINEER PRIOR TO EXCAVATION FOR THE FOUNDATION.
- CONFIRM CONDUIT LOCATIONS IN FIELD WITH ENGINEER PRIOR TO TRENCHING.
- PROVIDE NO. 3 1/2 PULL BOX SPACED AS NOTED OR 100 FEET MAX.

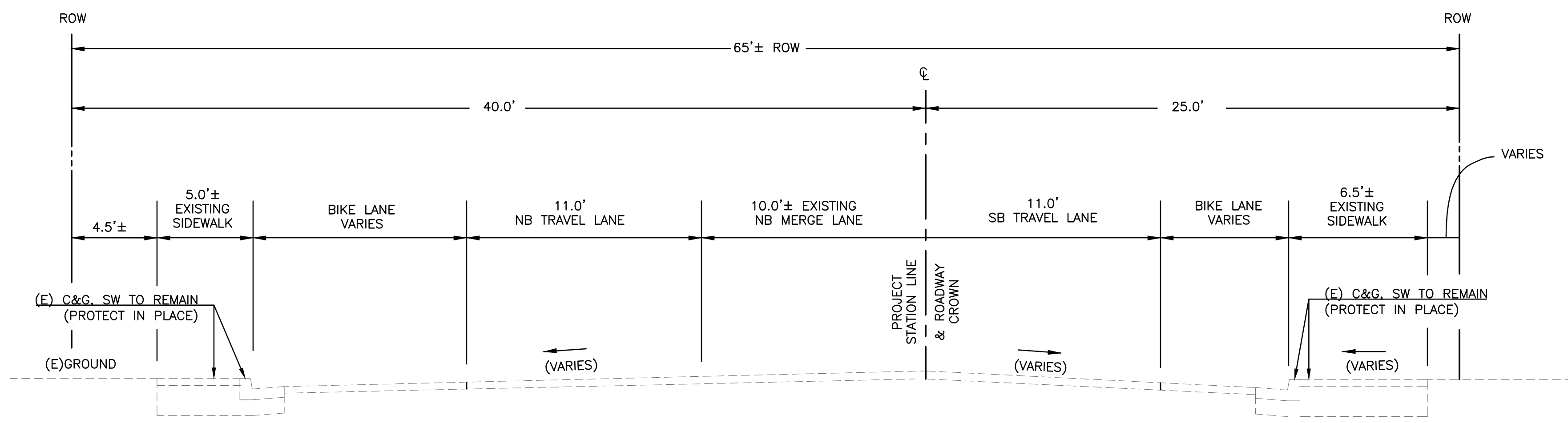
NO.	REVISIONS	DATE
DESIGNED: SH/ALL	DRAWN: SK/CLM	APPROVED: _____
		
PREPARED BY: <b>CSG CONSULTANTS</b> 550 Pilgrim Drive Foster City, CA 94404 Phone: (650)622-2500 Fax: (650)522-2599		
		
PREPARED FOR: <b>TOWN OF COLMA</b> <b>1198 EL CAMINO REAL</b> <b>COLMA, CA 94014</b>		
TITLE: <b>GENERAL, CONSTRUCTION AND COORDINATION NOTES</b> <b>MISSION ROAD BICYCLE &amp; PEDESTRIAN IMPROVEMENTS PROJECT</b>		
<b>SHEET 3</b> <b>OF</b> <b>43</b>		
DATE : 4/17/20 JOB# : 18.393		
4/22/20 <b>BID SET</b>		



**1** TYPICAL STREET CROSS-SECTION  
 - (AT BIORETENTION AREA)  
 STA. 8+82 TO 25+00  
 EL CAMINO REAL TO HOLY CROSS - NORTH ENTRANCE  
 N.T.S.



**2** TYPICAL STREET CROSS-SECTION  
 - (BETWEEN BIORETENTION AREAS)  
 STA. 25+00 TO 39+00  
 HOLY CROSS - NORTH ENTRANCE TO HOLY CROSS - SOUTH ENTRANCE  
 N.T.S.



**3** TYPICAL STREET CROSS-SECTION  
 - STA. 39+00 TO 46+50  
 HOLY CROSS - SOUTH ENTRANCE TO LAWDALE BLVD.  
 N.T.S.

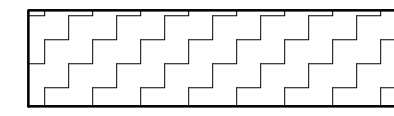
**NOTES:**

1. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
2. TO THE BEST OF THE TOWN'S KNOWLEDGE, THE DEPTH OF EXISTING ASPHALT CONCRETE IS AS SHOWN ON THESE SECTIONS. HOWEVER, THE TOWN CANNOT WARRANT THAT THE DEPTH IS COMPLETELY UNIFORM THROUGHOUT. GRINDING EXISTING SECTION "FULL-DEPTH" SHALL MEAN REMOVE ALL EXISTING ASPHALT CONCRETE DOWN TO BASE MATERIAL, AND MAY BE MORE THAN WHAT IS SHOWN ON THESE SECTIONS.
3. EXISTING UTILITIES ARE NOT SHOWN FOR DETAIL 3. WITH THE EXCEPTION OF SURFACE STRIPING WORK, NO SUBSURFACE WORK IS INCLUDED WITHIN THE LIMITS OF THE CROSS-SECTION SHOWN IN DETAIL 3.
4. LOCATIONS OF UTILITIES IN DETAILS 1 & 2 ARE APPROXIMATE. CONTRACTOR SHALL CONFIRM EXACT LOCATIONS OF EXISTING UTILITIES.

DATE	
REVISIONS	
NO.	
DESIGNED: SH/LL	
DRAWN: SK/CM	
APPROVED:	
PREPARED BY:	CSG CONSULTANTS
	550 Pilgrim Drive Foster City, CA 94404 Phone: (650)622-2500 Fax: (650)522-2599
PREPARED FOR:	TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA 94014
TITLE:	TYPICAL CROSS-SECTIONS MISSION ROAD BICYCLE & PEDESTRIAN IMPROVEMENTS PROJECT
SHEET 4	
OF 43	
DATE:	4/17/20
JOB#:	18.393
	4/22/20 BID SET

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**LEGEND:**



REMOVE MOW STRIP, SIDEWALK, DRIVEWAY, CURB AND GUTTER, AND AC DOWN TO AB. REMOVE AB DOWN TO SUBGRADE IN AREAS TO RECEIVE PLANTING ONLY.



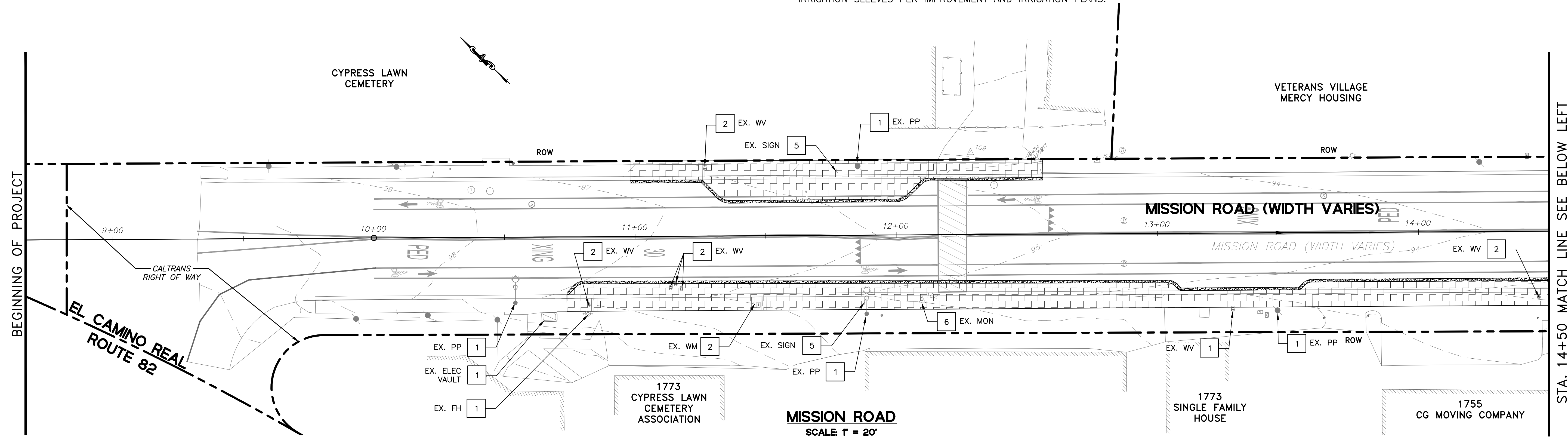
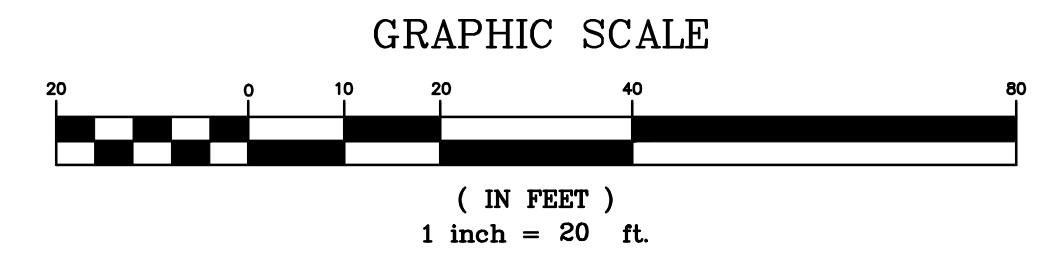
SAWCUT LINE (1' WIDE x 6" THICK)

**CONSTRUCTION NOTES:**

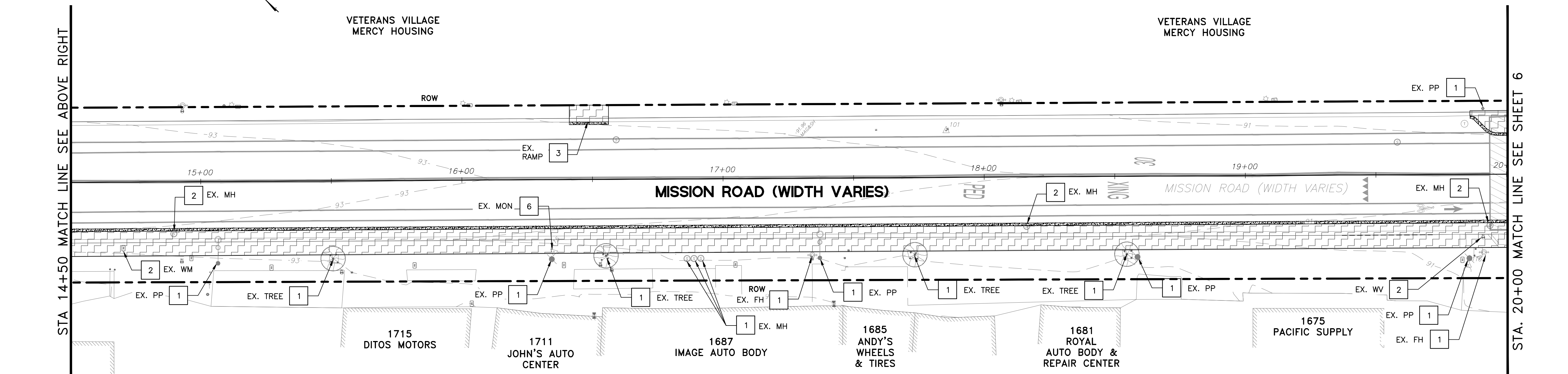
- 1 PROTECT IN PLACE
- 2 ADJUST TO GRADE
- 3 REMOVE
- 4 RELOCATE
- 5 REMOVE & REPLACE
- 6 REMOVE & RESTORE

**GENERAL NOTES:**

- 1. REMOVE ALL EXISTING STRIPING AND MARKINGS WITHIN SLURRY SEAL LIMITS PRIOR TO PAVING OPERATIONS.
- 2. APPLY ADDITIONAL 1' WIDE DEEP LIFT FROM LIP OF GUTTER TO CONFORM TO EXISTING PAVEMENT IF NECESSARY.
- 3. APPLY EXCAVATION OF BIORETENTION AREAS INCLUDING CUT-OFF CURB AND BACKFILL.
- 4. APPLY TRENCHING FOR PROPOSED STORM DRAIN PIPES AND IRRIGATION SLEEVES PER IMPROVEMENT AND IRRIGATION PLANS.



**MISSION ROAD**  
SCALE 1" = 20'



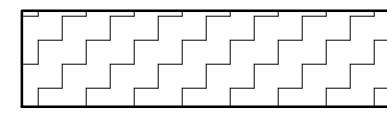
**MISSION ROAD**  
SCALE 1" = 20'

DATE	
REVISIONS	
NO.	
DESIGNED: SH/LL	
DRAWN: SK/CM	
APPROVED:	
PREPARED BY:	CSG CONSULTANTS
	550 Pilgrim Drive Foster City, CA 94404 Phone: (650) 922-2500 Fax: (650) 922-2599
	Employee - Owned
PREPARED FOR:	TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA 94014
TITLE:	EXISTING CONDITIONS AND DEMOLITION PLAN STA. 8+82 TO STA. 20+00 MISSION ROAD BICYCLE & PEDESTRIAN IMPROVEMENTS PROJECT
SHEET 5	
OF 43	
DATE:	4/17/20
JOB#:	18.393
	4/22/20 BID SET

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**LEGEND:**



REMOVE MOW STRIP, SIDEWALK, DRIVEWAY, CURB AND GUTTER, AND AC DOWN TO AB. REMOVE AB DOWN TO SUBGRADE IN AREAS TO RECEIVE PLANTING ONLY.



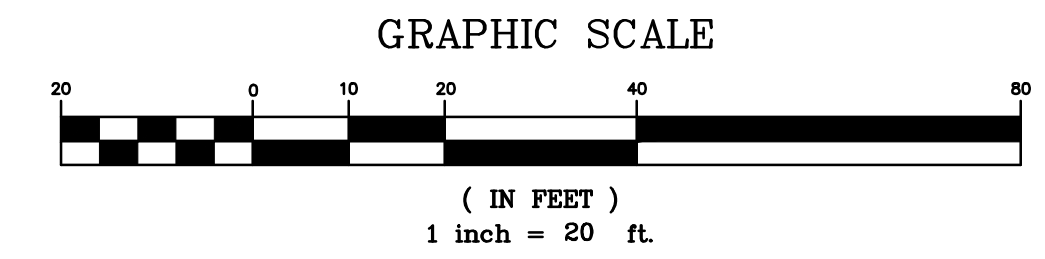
SAWCUT LINE (1' WIDE x 6" THICK)

**CONSTRUCTION NOTES:**

- 1 PROTECT IN PLACE
- 2 ADJUST TO GRADE
- 3 REMOVE
- 4 RELOCATE
- 5 REMOVE & REPLACE
- 6 REMOVE & RESTORE
- 7 PROTECT IN PLACE
- 8 PROTECT IN PLACE

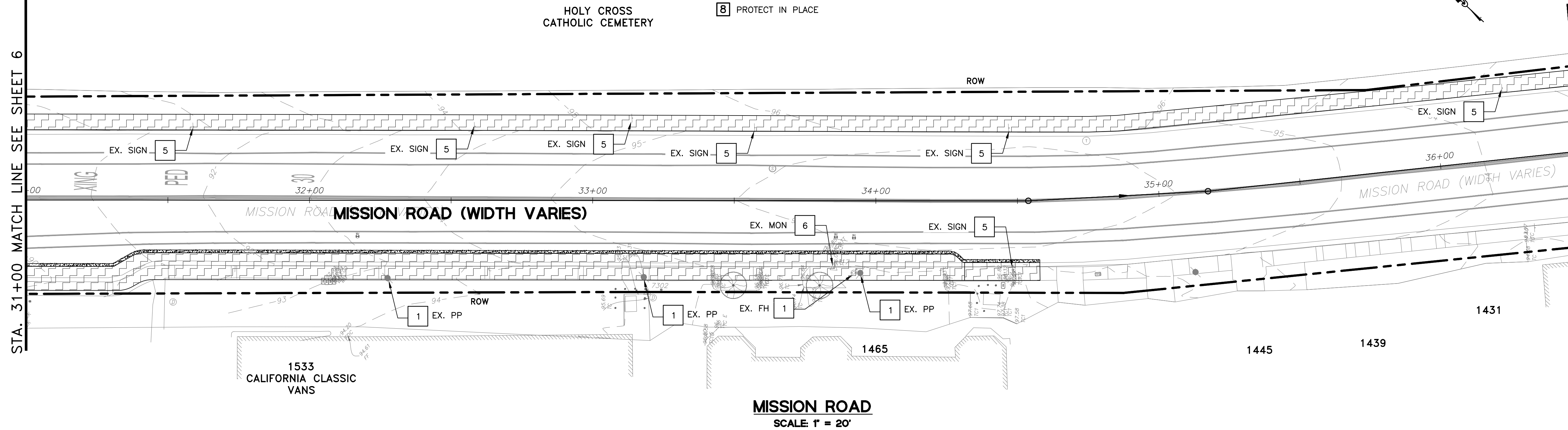
**GENERAL NOTES:**

- 1. REMOVE ALL EXISTING STRIPING AND MARKINGS WITHIN SLURRY SEAL LIMITS PRIOR TO PAVING OPERATIONS.
- 2. APPLY ADDITIONAL 1' WIDE DEEP LIFT FROM LIP OF GUTTER TO CONFORM TO EXISTING PAVEMENT IF NECESSARY.
- 3. APPLY EXCAVATION OF BIORETENTION AREAS INCLUDING CUT-OFF CURB AND BACKFILL.
- 4. APPLY TRENCHING FOR PROPOSED STORM DRAIN PIPES AND IRRIGATION SLEEVES PER IMPROVEMENT AND IRRIGATION PLANS.



STA. 31+00 MATCH LINE SEE SHEET 6

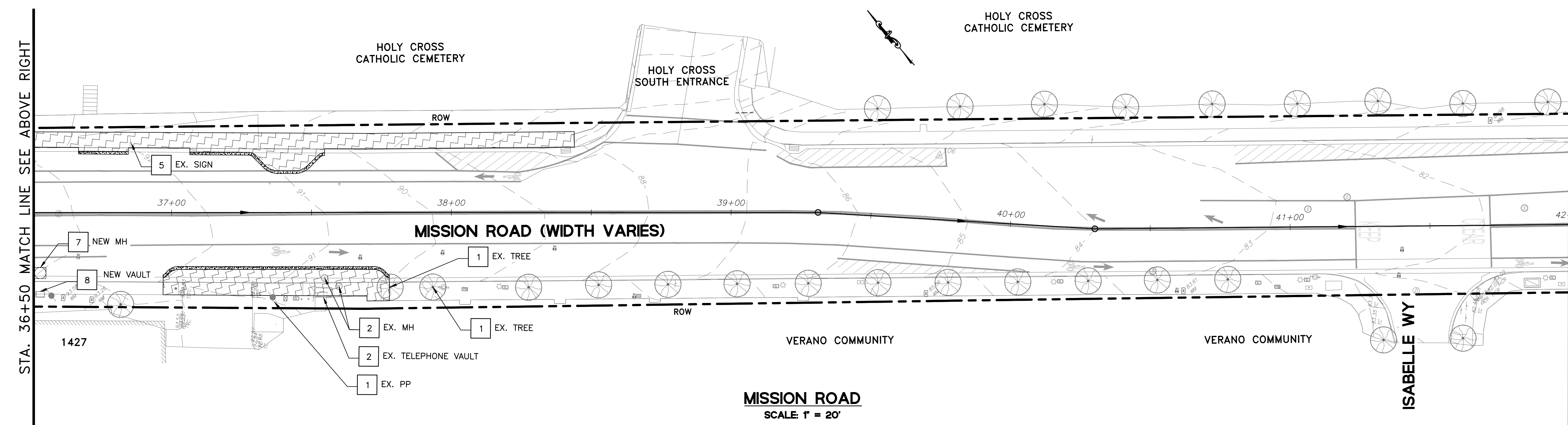
STA. 36+50 MATCH LINE SEE BELOW LEFT



**MISSION ROAD**  
SCALE: 1" = 20'

STA. 36+50 MATCH LINE SEE ABOVE RIGHT

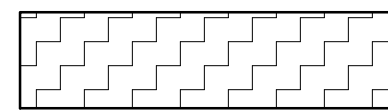
STA. 42+00 MATCH LINE SEE SHEET 8



**MISSION ROAD**  
SCALE: 1" = 20'

DATE	
REVISIONS	
NO.	
DESIGNED: SH/LL	
DRAWN: SK/CM	
APPROVED:	
PREPARED BY:	CSG CONSULTANTS
	550 Pilgrim Drive Foster City, CA 94404 Phone: (650) 922-2500 Fax: (650) 922-2599
PREPARED FOR:	TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA 94014
TITLE:	EXISTING CONDITIONS AND DEMOLITION PLAN STA. 31+00 TO STA. 42+00 MISSION ROAD BICYCLE & PEDESTRIAN IMPROVEMENTS PROJECT
SHEET	7
OF	43
DATE:	4/17/20
JOB#:	18.393
	4/22/20 BID SET

**LEGEND:**



REMOVE MOW STRIP, SIDEWALK, DRIVEWAY, CURB AND GUTTER, AND AC DOWN TO AB. REMOVE AB DOWN TO SUBGRADE IN AREAS TO RECEIVE PLANTING ONLY.



SAWCUT LINE (1' WIDE x 6" THICK)

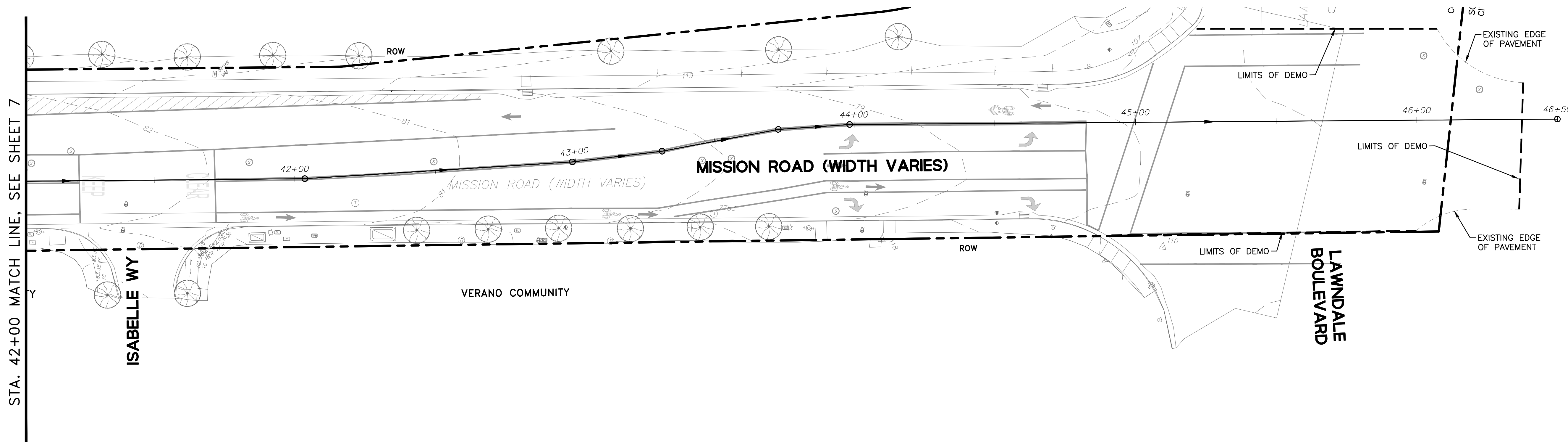
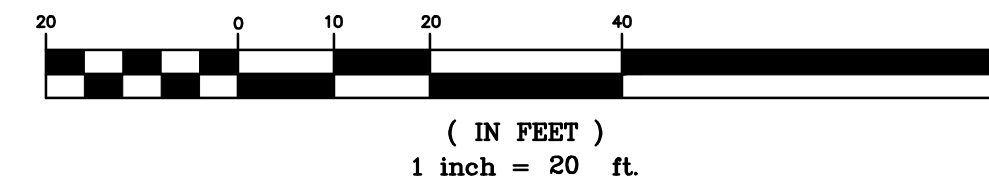
**CONSTRUCTION NOTES:**

- 1 PROTECT IN PLACE
- 2 ADJUST TO GRADE
- 3 REMOVE
- 4 RELOCATE
- 5 REMOVE & REPLACE
- 6 REMOVE & RESTORE

**GENERAL NOTES:**

- 1. REMOVE ALL EXISTING STRIPING AND MARKINGS WITHIN SLURRY SEAL LIMITS PRIOR TO PAVING OPERATIONS.
- 2. APPLY ADDITIONAL 1' WIDE DEEP LIFT FROM LIP OF GUTTER TO CONFORM TO EXISTING PAVEMENT IF NECESSARY.
- 3. APPLY EXCAVATION OF BIORETENTION AREAS INCLUDING CUT-OFF CURB AND BACKFILL.
- 4. APPLY TRENCHING FOR PROPOSED STORM DRAIN PIPES AND IRRIGATION SLEEVES PER IMPROVEMENT AND IRRIGATION PLANS.

**GRAPHIC SCALE**



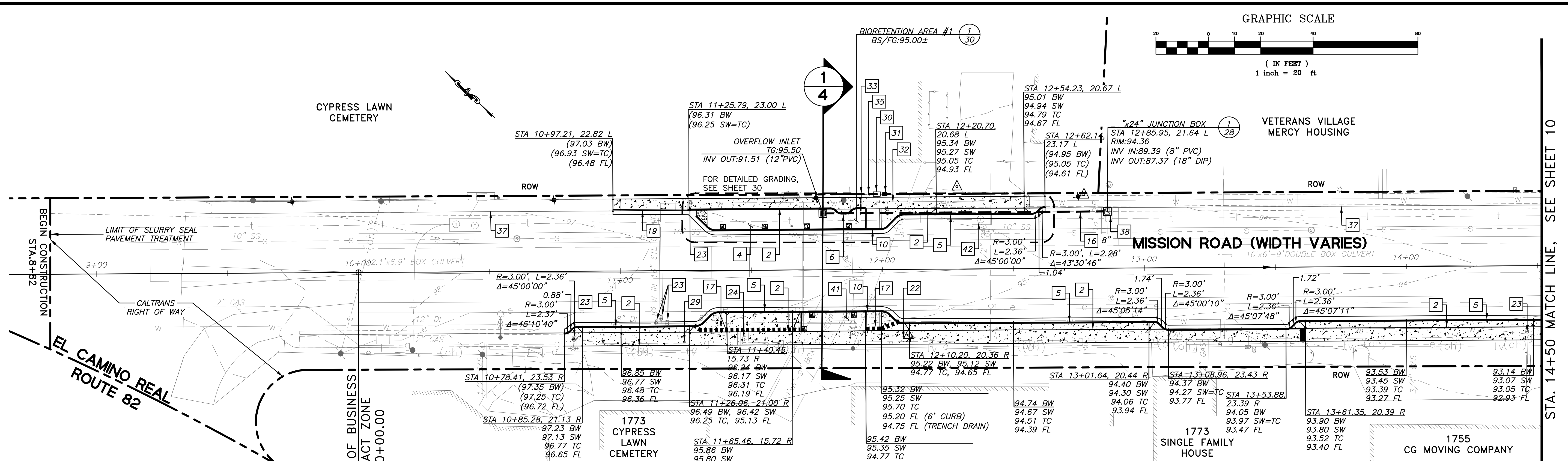
**MISSION ROAD**  
SCALE: 1"=20'

STA. 42+00 MATCH LINE, SEE SHEET 7

DESIGNED: SH/LL	NO.	DATE
DRAWN: SK/AM	REVISIONS	
APPROVED:		
PREPARED BY: <b>CSG CONSULTANTS</b> 550 Pilgrim Drive Foster City, CA 94404 Phone: (650) 622-2500 Fax: (650) 522-2599		
PREPARED FOR: <b>TOWN OF COLMA</b> 1198 EL CAMINO REAL COLMA, CA 94014		
TITLE: EXISTING CONDITIONS AND DEMOLITION PLAN STA. 42+00 TO STA. 46+50 MISSION ROAD BICYCLE & PEDESTRIAN IMPROVEMENTS PROJECT		
<b>SHEET 08</b> OF <b>43</b>		
DATE: 4/17/20 JOB#: 18.393		
4/22/20 BID SET		



\\SERVER2\clients\DESIGN\18-393 - Colma Mission Road Improvement\CONSTRUCTION SUPPORT\Cypress Lawn Drive\Modifications\09-15 IMPROV STA. 10+00 TO 14+50 REV1.dwg 06/30/20 06:24:50 PM



**LEGEND:**

- PVC STORM DRAIN PIPE, SIZE SHOWN ON PLAN
- NEW CATCH BASIN WITH BICYCLE PROOF GRATE (TYPE 24-12X) AND GUTTER DEPRESSION (D78A), PER
- OVERFLOW: 24"x24" PRECAST CONCRETE DROP INLET WITH GRATE PER
- DECORATIVE LIGHTING, PER
- SLURRY SEAL
- HMA DRIVEWAY
- CONCRETE

**GENERAL NOTES:**

- SEE SHEETS L2-L7 FOR IRRIGATION NOTES, PLANS AND DETAILS.
- SEE SHEETS 34-36 FOR LIGHTING PLANS, DETAILS AND PHOTOMETRIC PLANS.

**CONSTRUCTION NOTES:**

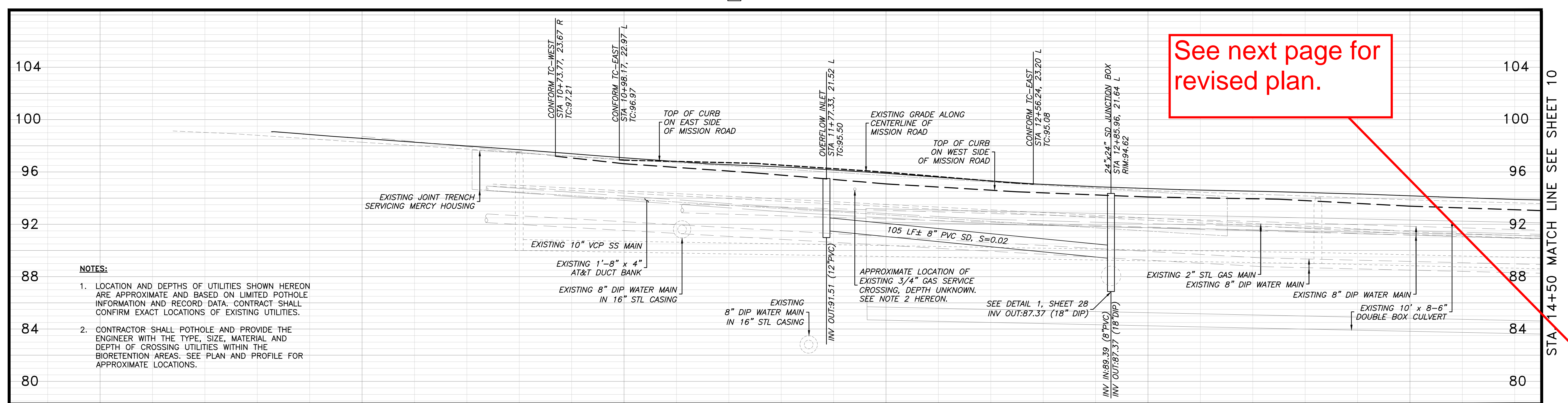
- NEW ADA DRIVEWAY; DETAIL 6, SHEET 25
- NEW CONCRETE SIDEWALK; DETAIL 4, SHEET 25
- BIORETENTION AREA, SEE SHEETS 30 & 31 FOR TYPICAL LAYOUTS, SECTIONS AND DETAILS
- ASPHALT CONCRETE DRIVEWAY APPROACH; DETAIL 5, SHEET 25
- CURB MODIFICATION AROUND EXISTING UTILITY POLE; DETAIL 1, SHEET 30
- CURB MODIFICATION AROUND EXISTING WATER VALVES; DETAIL 4, SHEET 32
- ADA CURB RAMP, SEE SHEETS 32 & 33
- 8" OR 12" PVC SD. SEE PLANS FOR SIZE
- 18" WIDE TRENCH DRAIN; SEE DETAIL 2, SHEET 29

**CONSTRUCTION NOTES (CONTINUED):**

- REPLACE EXISTING DEPRESSED CURB WITH STANDARD CURB & GUTTER
- REMOVE AND RESTORE EXISTING SURVEY MONUMENT
- ADJUST WATER VALVE PER CALWATER STANDARDS
- ADJUST WATER METER PER CALWATER STANDARDS
- ADJUST PG&E GAS VALVE
- NEW BACKFLOW PREVENTOR PER IRRIGATION PLAN
- NEW 5/8" IRRIGATION METER
- CONNECT IRRIGATION SERVICE TO WATER MAIN
- IRRIGATION SLEEVE PER IRRIGATION PLAN

**CONSTRUCTION NOTES (CONTINUED):**

- GATE VALVE BOX PER IRRIGATION PLAN
- EXISTING CURB, GUTTER AND SIDEWALK TO REMAIN
- 24"x24" JUNCTION BOX; DETAIL 1, SHEET 28
- PROTECT IN PLACE NEW 4'x4' COMMUNICATION MANHOLE
- PROTECT IN PLACE NEW 24"x36" COMMUNICATION VAULT
- FLOW-THROUGH PLANTER, DETAIL XX, SHEET XX
- ADJUST AT&T MANHOLE COVER TO GRADE PER AT&T STANDARDS



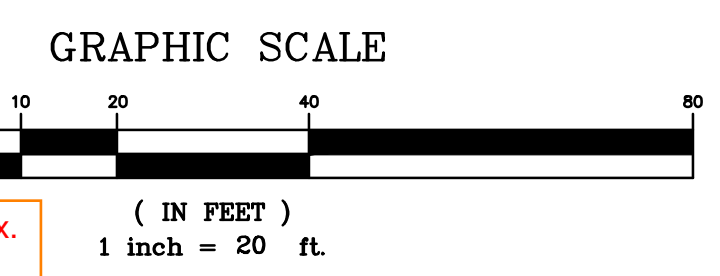
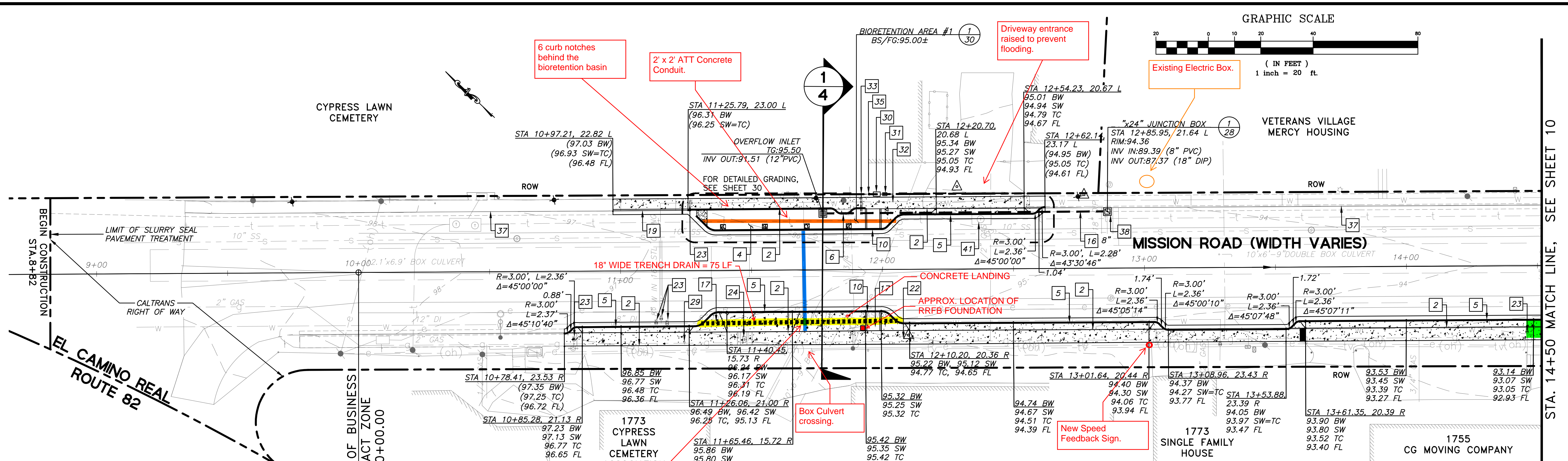
**NOTES:**

- LOCATION AND DEPTHS OF UTILITIES SHOWN HEREON ARE APPROXIMATE AND BASED ON LIMITED POTHOLE INFORMATION AND RECORD DATA. CONTRACTOR SHALL CONFIRM EXACT LOCATIONS OF EXISTING UTILITIES.
- CONTRACTOR SHALL POTHOLE AND PROVIDE THE ENGINEER WITH THE TYPE, SIZE, MATERIAL AND DEPTH OF CROSSING UTILITIES WITHIN THE BIORETENTION AREAS. SEE PLAN AND PROFILE FOR APPROXIMATE LOCATIONS.

SCALE: HORIZONTAL 1"=20' ; VERTICAL 1"=4'

DATE	
REVISIONS	
NO.	
DESIGNED: SH/LL	
DRAWN: SK/CM	
APPROVED:	
PREPARED BY:	CSG CONSULTANTS
	550 Pilgrim Drive Foster City, CA 94404 Phone: (650)622-2500 Fax: (650)622-2589
	Employee - Owned
PREPARED FOR:	TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA 94014
TITLE:	IMPROVEMENTS PLAN AND PROFILE, STA. 8+82 TO STA. 14+50 MISSION ROAD BICYCLE & PEDESTRIAN IMPROVEMENTS PROJECT
SHEET 9	OF 43
DATE:	6/30/20
JOB#:	18-393
	6/30/20 CONFORM SET

\\SERVER2\client\DESIGN\18-333 - Colma Mission Road Improvement\CONSTRUCTION SUPPORT\Cypress Lawn & Holy Cross MCD\09-15 IMPROV STA. 10+00 TO 14+50 REV2 - 2020.12.08.dwg @ 11:00:15 AM



**LEGEND:**

- PVC STORM DRAIN PIPE, SIZE SHOWN ON PLAN
- NEW CATCH BASIN WITH BICYCLE PROOF GRATE (TYPE 24-12X) AND GUTTER DEPRESSION (D78A), PER
- OVERFLOW: 24"x24" PRECAST CONCRETE DROP INLET WITH GRATE PER
- DECORATIVE LIGHTING, PER
- SLURRY SEAL
- HMA DRIVEWAY
- CONCRETE

**GENERAL NOTES:**

1. SEE SHEETS L2-L7 FOR IRRIGATION NOTES, PLANS AND DETAILS.
2. SEE SHEETS 34-36 FOR LIGHTING PLANS, DETAILS AND PHOTOMETRIC PLANS.

**CONSTRUCTION NOTES:**

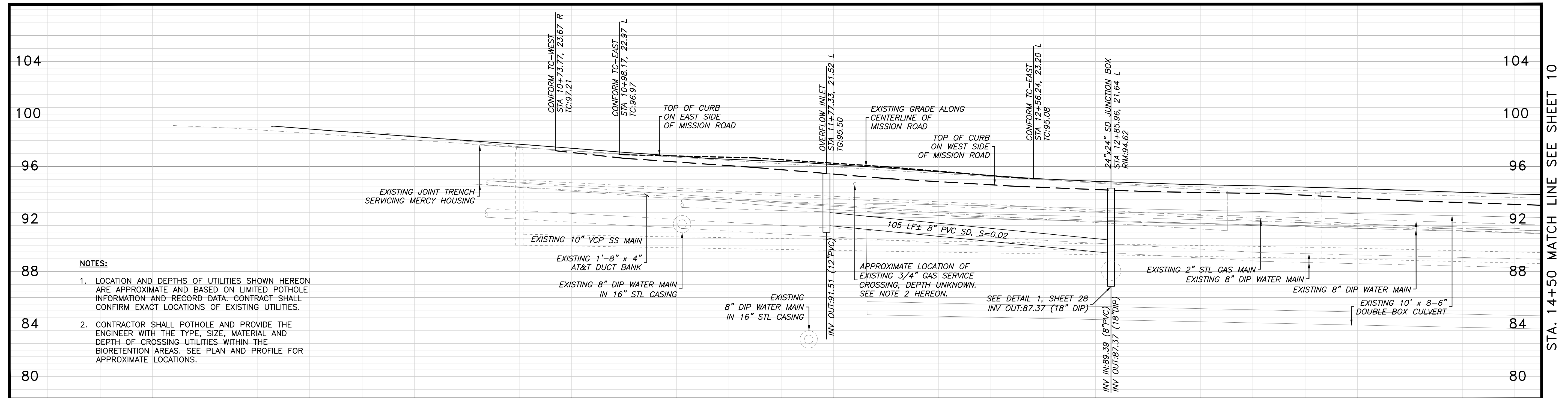
- 1 NEW ADA DRIVEWAY; DETAIL 6, SHEET 25
- 2 NEW CONCRETE SIDEWALK; DETAIL 4, SHEET 25
- 4 BIORETENTION AREA, SEE SHEETS 30 & 31 FOR TYPICAL LAYOUTS, SECTIONS AND DETAILS
- 5 ASPHALT CONCRETE DRIVEWAY APPROACH; DETAIL 5, SHEET 25
- 6 CURB MODIFICATION AROUND EXISTING UTILITY POLE; DETAIL 1, SHEET 30
- 7 CURB MODIFICATION AROUND EXISTING WATER VALVES; DETAIL 4, SHEET 32
- 10 ADA CURB RAMP, SEE SHEETS 32 & 33
- 16 8" OR 12" PVC SD. SEE PLANS FOR SIZE
- 17 18" WIDE TRENCH DRAIN; SEE DETAIL 2, SHEET 29

**CONSTRUCTION NOTES (CONTINUED):**

- 19 REPLACE EXISTING DEPRESSED CURB WITH STANDARD CURB & GUTTER
- 22 REMOVE AND RESTORE EXISTING SURVEY MONUMENT
- 23 ADJUST WATER VALVE PER CALWATER STANDARDS
- 24 ADJUST WATER METER PER CALWATER STANDARDS
- 29 ADJUST PG&E GAS VALVE
- 30 NEW BACKFLOW PREVENTOR PER IRRIGATION PLAN
- 31 NEW 5/8" IRRIGATION METER
- 32 CONNECT IRRIGATION SERVICE TO WATER MAIN
- 33 IRRIGATION SLEEVE PER IRRIGATION PLAN

**CONSTRUCTION NOTES (CONTINUED):**

- 35 GATE VALVE BOX PER IRRIGATION PLAN
- 37 EXISTING CURB, GUTTER AND SIDEWALK TO REMAIN
- 38 24"x24" JUNCTION BOX; DETAIL 1, SHEET 28
- 39 PROTECT IN PLACE NEW 4'x4' COMMUNICATION MANHOLE
- 40 PROTECT IN PLACE NEW 24"x36" COMMUNICATION VAULT
- 41 ADJUST AT&T MANHOLE COVER TO GRADE PER AT&T STANDARDS



**NOTES:**

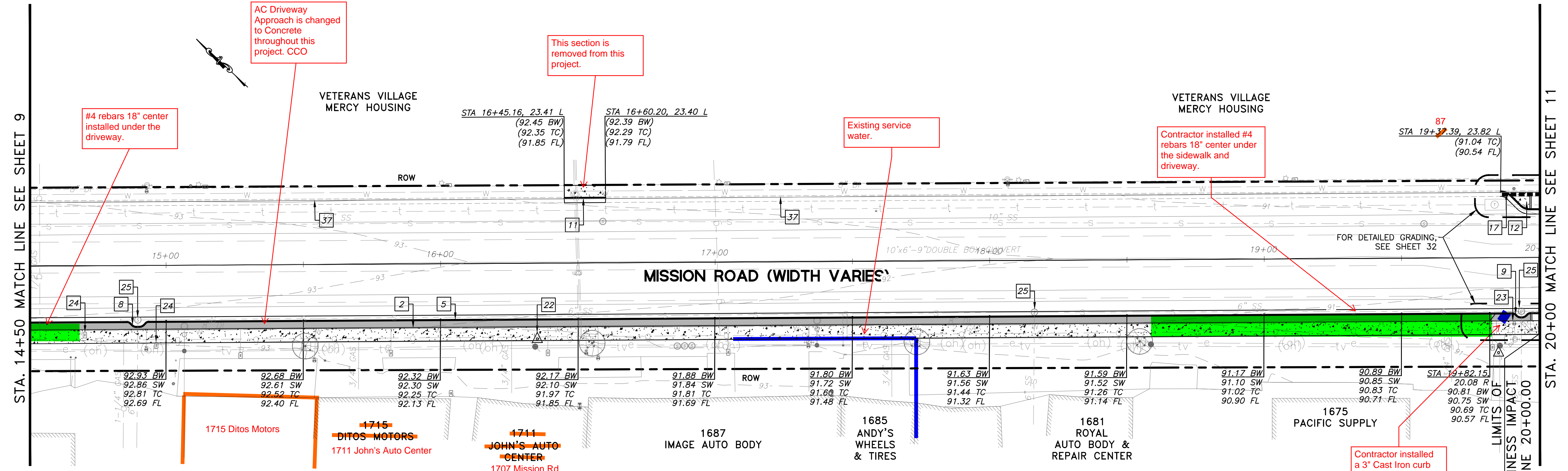
1. LOCATION AND DEPTHS OF UTILITIES SHOWN HEREON ARE APPROXIMATE AND BASED ON LIMITED POTHOLE INFORMATION AND RECORD DATA. CONTRACTOR SHALL CONFIRM EXACT LOCATIONS OF EXISTING UTILITIES.
2. CONTRACTOR SHALL POTHOLE AND PROVIDE THE ENGINEER WITH THE TYPE, SIZE, MATERIAL AND DEPTH OF CROSSING UTILITIES WITHIN THE BIORETENTION AREAS. SEE PLAN AND PROFILE FOR APPROXIMATE LOCATIONS.

SCALE: HORIZONTAL 1"=20' ; VERTICAL 1"=4'

STA. 14+50 MATCH LINE, SEE SHEET 10

STA. 14+50 MATCH LINE SEE SHEET 10

DATE	6/30/20
REVISIONS	
NO.	
DESIGNED: SH/LL	
DRAWN: SK/AM	
APPROVED:	
PREPARED BY:	CSG CONSULTANTS
	550 Pilgrim Drive Foster City, CA 94404 Phone: (650) 922-2500 Fax: (650) 522-2589
PREPARED FOR:	TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA 94014
TITLE:	IMPROVEMENTS PLAN AND PROFILE, STA. 8+82 TO STA. 14+50 MISSION ROAD BICYCLE & PEDESTRIAN IMPROVEMENTS PROJECT
SHEET 9	OF 43
DATE:	6/30/20
JOB#:	18-393
	6/30/20 CONFORM SET



**LEGEND:**

- PVC STORM DRAIN PIPE, SIZE SHOWN ON PLAN
- NEW CATCH BASIN WITH BICYCLE PROOF GRATE (TYPE 24-12X) AND GUTTER DEPRESSION (D78A), PER 4/29
- OVERFLOW: 24"x24" PRECAST CONCRETE DROP INLET WITH GRATE PER 1/31, 2/31, 3/31
- DECORATIVE LIGHTING, PER 1/35, 2/35
- SLURRY SEAL
- HMA DRIVEWAY
- CONCRETE

**GENERAL NOTES:**

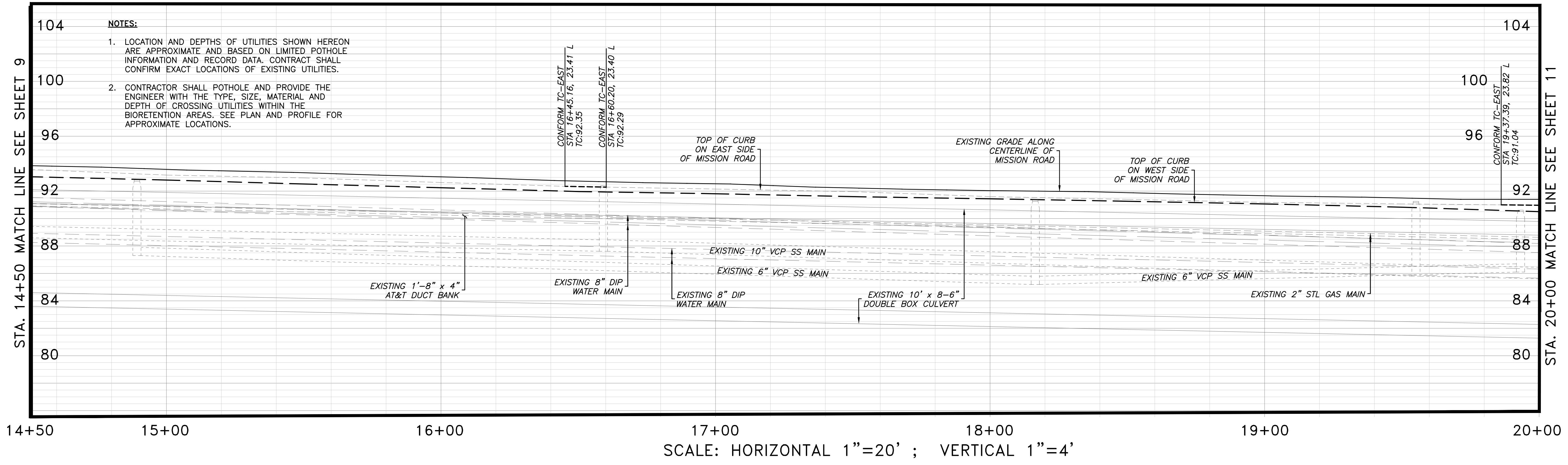
1. SEE SHEETS L2-L7 FOR IRRIGATION NOTES, PLANS AND DETAILS.
2. SEE SHEETS 34-36 FOR LIGHTING PLANS, DETAILS AND PHOTOMETRIC PLANS.

**CONSTRUCTION NOTES:**

- 2 NEW CONCRETE SIDEWALK; DETAIL 4, SHEET 25
- 5 ASPHALT CONCRETE DRIVEWAY APPROACH; DETAIL 5, SHEET 25
- 8 CURB MODIFICATION AROUND EXISTING SS MANHOLE; DETAIL 5, SHEET 32
- 9 CURB MODIFICATION AROUND EXISTING SS MANHOLE; DETAIL 2, SHEET 32
- 11 REPLACE EXISTING CURB RAMP WITH CONCRETE SIDEWALK
- 12 BULB-OUT; DETAIL 6, SHEET 29
- 17 18" WIDE TRENCH DRAIN; DETAIL 2, SHEET 29

**CONSTRUCTION NOTES (CONTINUED):**

- 22 REMOVE AND RESTORE EXISTING SURVEY MONUMENT
- 23 ADJUST WATER VALVE PER CALWATER STANDARDS
- 24 ADJUST WATER METER PER CALWATER STANDARDS
- 25 ADJUST SANITARY SEWER MANHOLE COVER
- 37 EXISTING CURB, GUTTER AND SIDEWALK TO REMAIN



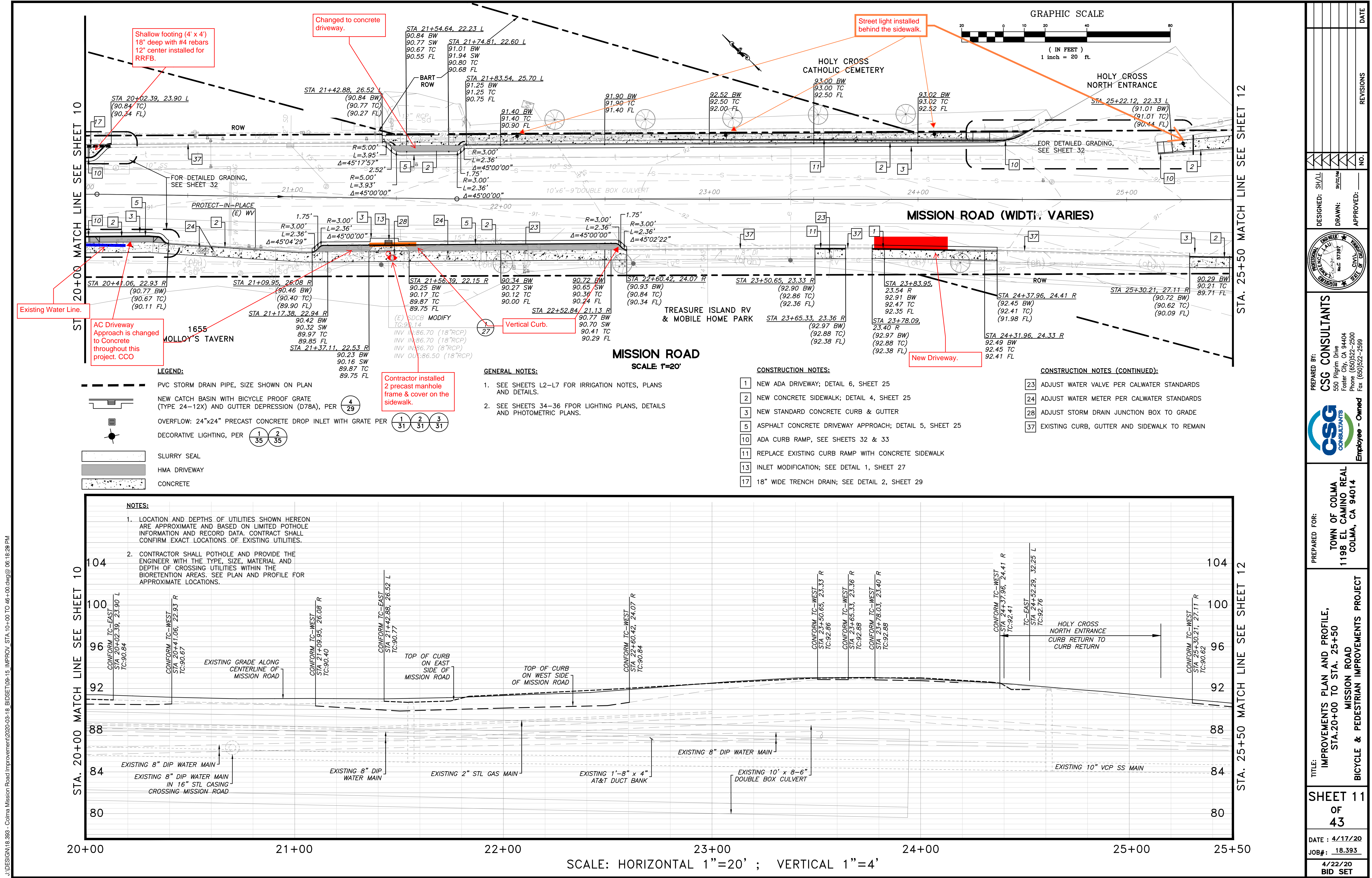
**NOTES:**

1. LOCATION AND DEPTHS OF UTILITIES SHOWN HEREON ARE APPROXIMATE AND BASED ON LIMITED POT HOLE INFORMATION AND RECORD DATA. CONTRACTOR SHALL CONFIRM EXACT LOCATIONS OF EXISTING UTILITIES.
2. CONTRACTOR SHALL FILL AND PROVIDE THE ENGINEER WITH THE TYPE, SIZE, MATERIAL AND DEPTH OF CROSSING UTILITIES WITHIN THE BIOTRETENTION AREAS. SEE PLAN AND PROFILE FOR APPROXIMATE LOCATIONS.

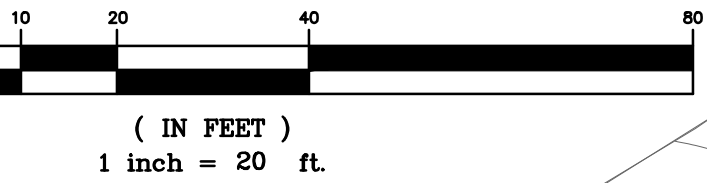
SCALE: HORIZONTAL 1"=20' ; VERTICAL 1"=4'

<p>DESIGNED: SH/LL</p> <p>DRAWN: SK/AM</p> <p>APPROVED: _____</p> <p>NO. _____</p> <p>REVISIONS _____</p> <p>DATE _____</p>	<p>PREPARED BY: <b>CSG CONSULTANTS</b></p> <p>550 Pilgrim Drive Foster City, CA 94404 Phone: (650) 922-2500 Fax: (650) 522-2599</p> <p>EMPLOYEE - OWNED</p> <p>PREPARED FOR: <b>TOWN OF COLMA</b> 1198 EL CAMINO REAL COLMA, CA 94014</p> <p>TITLE: <b>IMPROVEMENTS PLAN AND PROFILE, STA. 14+50 TO STA. 20+00</b> <b>MISSION ROAD</b> <b>BICYCLE &amp; PEDESTRIAN IMPROVEMENTS PROJECT</b></p> <p><b>SHEET 10 OF 43</b></p> <p>DATE: 4/17/20 JOB#: 18-393 4/22/20 BID SET</p>
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J:\DESIGN\18-393 - Colma Mission Road Improvements\2020-03-18\_BIDSET\08-15 IMPROV STA. 10+00 TO 48+00.dwg @ 06:14:08 PM



GRAPHIC SCALE



**MISSION ROAD**  
SCALE 1"=20'

**LEGEND:**

- PVC STORM DRAIN PIPE, SIZE SHOWN ON PLAN
- NEW CATCH BASIN WITH BICYCLE PROOF GRATE (TYPE 24-12X) AND GUTTER DEPRESSION (D78A), PER
- OVERFLOW: 24"x24" PRECAST CONCRETE DROP INLET WITH GRATE PER
- DECORATIVE LIGHTING, PER
- SLURRY SEAL
- HMA DRIVEWAY
- CONCRETE

**GENERAL NOTES:**

1. SEE SHEETS L2-L7 FOR IRRIGATION NOTES, PLANS AND DETAILS.
2. SEE SHEETS 34-36 FOR LIGHTING PLANS, DETAILS AND PHOTOMETRIC PLANS.

**CONSTRUCTION NOTES:**

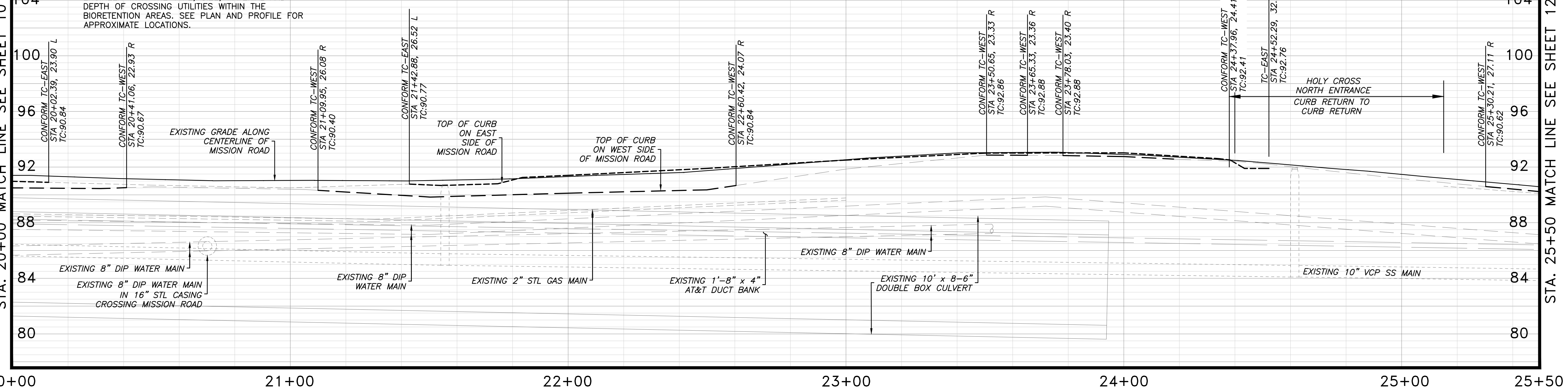
- NEW ADA DRIVEWAY; DETAIL 6, SHEET 25
- NEW CONCRETE SIDEWALK; DETAIL 4, SHEET 25
- NEW STANDARD CONCRETE CURB & GUTTER
- ASPHALT CONCRETE DRIVEWAY APPROACH; DETAIL 5, SHEET 25
- ADA CURB RAMP, SEE SHEETS 32 & 33
- REPLACE EXISTING CURB RAMP WITH CONCRETE SIDEWALK
- INLET MODIFICATION; SEE DETAIL 1, SHEET 27
- 18" WIDE TRENCH DRAIN; SEE DETAIL 2, SHEET 29

**CONSTRUCTION NOTES (CONTINUED):**

- ADJUST WATER VALVE PER CALWATER STANDARDS
- ADJUST WATER METER PER CALWATER STANDARDS
- ADJUST STORM DRAIN JUNCTION BOX TO GRADE
- EXISTING CURB, GUTTER AND SIDEWALK TO REMAIN

**NOTES:**

1. LOCATION AND DEPTHS OF UTILITIES SHOWN HEREON ARE APPROXIMATE AND BASED ON LIMITED POT HOLE INFORMATION AND RECORD DATA. CONTRACTOR SHALL CONFIRM EXACT LOCATIONS OF EXISTING UTILITIES.
2. CONTRACTOR SHALL POT HOLE AND PROVIDE THE ENGINEER WITH THE TYPE, SIZE, MATERIAL AND DEPTH OF CROSSING UTILITIES WITHIN THE BIOTRENTION AREAS. SEE PLAN AND PROFILE FOR APPROXIMATE LOCATIONS.

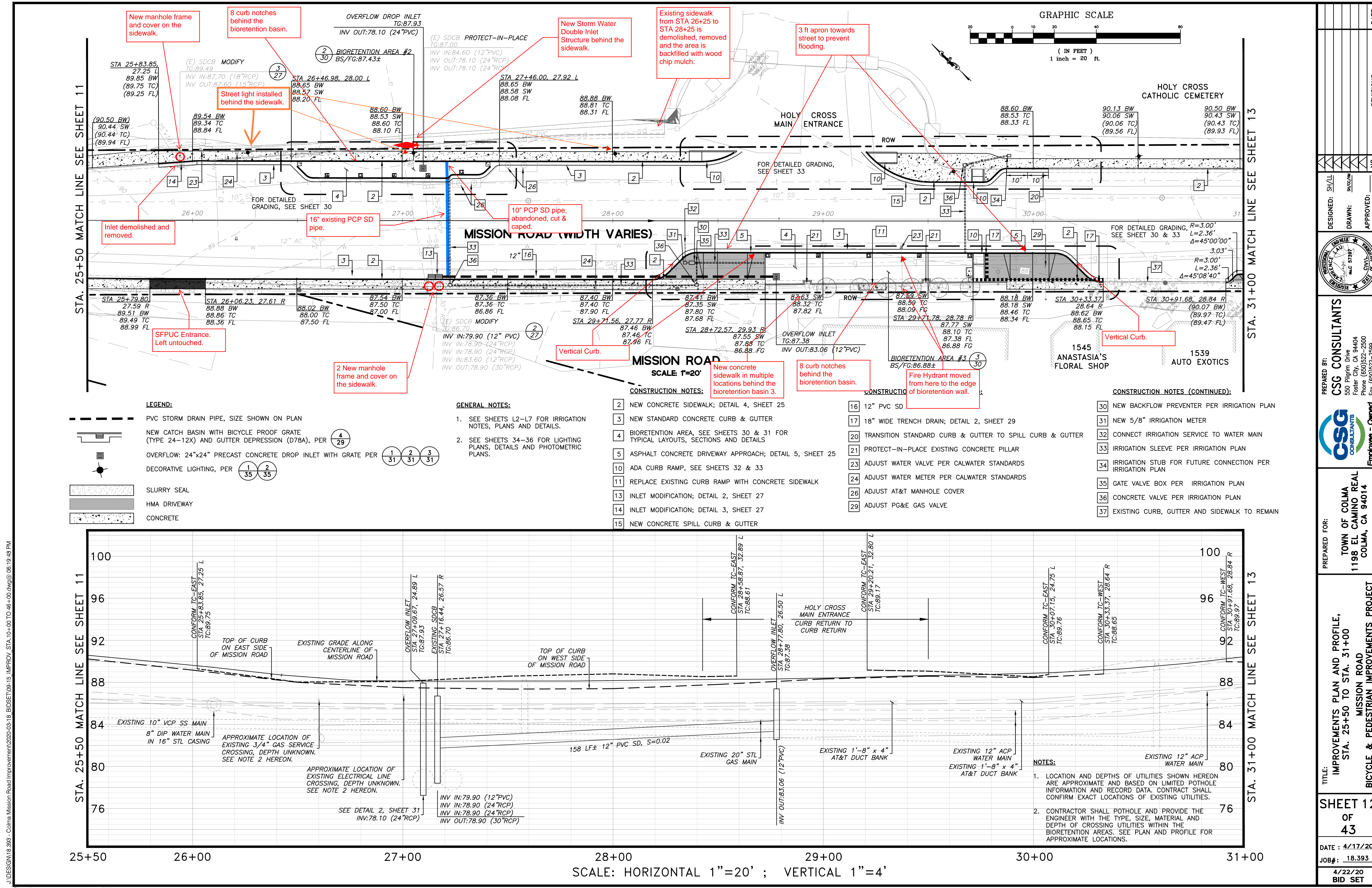


SCALE: HORIZONTAL 1"=20' ; VERTICAL 1"=4'

J:\DESIGN\18\_393 - Colma Mission Road Improvements\2020-03-18\_BIDSET\08-15 IMPROV STA 10+00 TO 48+00.dwg @ 06:18:29 PM

Plotted on: 03/19/20 @ 06:18:29 PM

<p><b>CSG CONSULTANTS</b> 550 Pilgrim Drive Foster City, CA 94404 Phone: (650) 922-2500 Fax: (650) 922-2589</p> <p><b>Employee - Owned</b></p>	<p><b>TOWN OF COLMA</b> 1198 EL CAMINO REAL COLMA, CA 94014</p>
<p>DESIGNED: SH/LL DRAWN: SK/CM APPROVED: _____</p>	<p>NO. _____</p> <p>REVISIONS _____</p> <p>DATE _____</p>
<p>PREPARED BY: <b>CSG CONSULTANTS</b></p> <p>PREPARED FOR: <b>TOWN OF COLMA</b> <b>1198 EL CAMINO REAL</b> <b>COLMA, CA 94014</b></p> <p>TITLE: <b>IMPROVEMENTS PLAN AND PROFILE, STA. 20+00 TO STA. 25+50</b> <b>MISSION ROAD</b> <b>BICYCLE &amp; PEDESTRIAN IMPROVEMENTS PROJECT</b></p>	
<p><b>SHEET 11</b> <b>OF</b> <b>43</b></p> <p>DATE: 4/17/20 JOB#: 18.393</p> <p>4/22/20 BID SET</p>	



STA. 25+50 MATCH LINE SEE SHEET 11

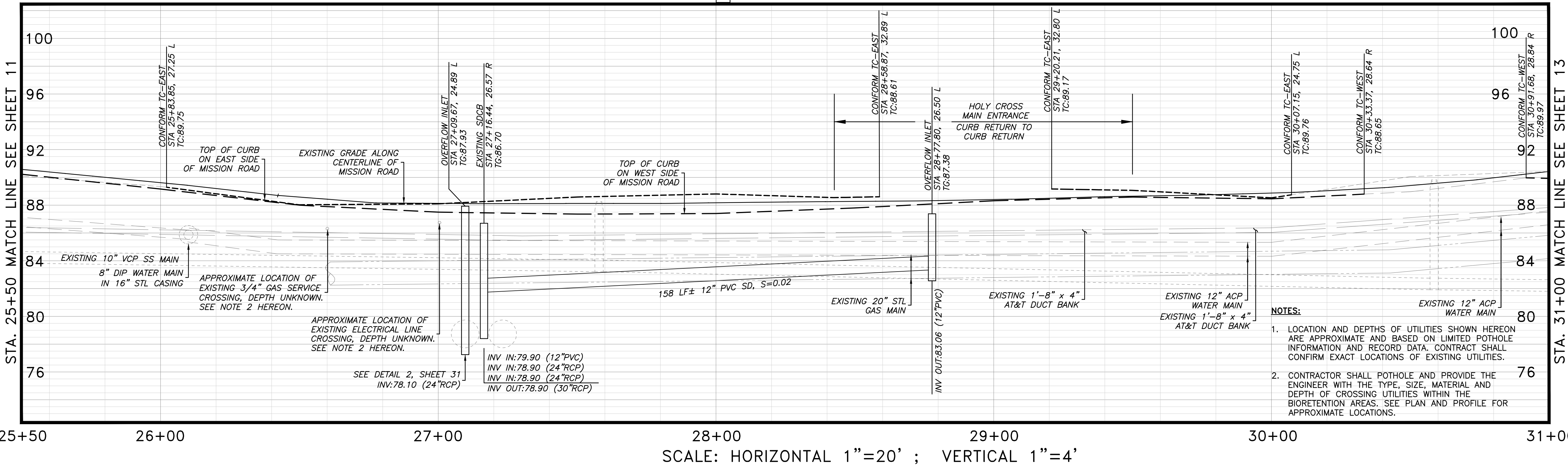
STA. 31+00 MATCH LINE SEE SHEET 13

- LEGEND:**
- PVC STORM DRAIN PIPE, SIZE SHOWN ON PLAN
  - NEW CATCH BASIN WITH BICYCLE PROOF GRATE (TYPE 24-12X) AND GUTTER DEPRESSION (D78A), PER
  - OVERFLOW: 24"x24" PRECAST CONCRETE DROP INLET WITH GRATE PER
  - DECORATIVE LIGHTING, PER
  - SLURRY SEAL
  - HMA DRIVEWAY
  - CONCRETE

- GENERAL NOTES:**
1. SEE SHEETS L2-L7 FOR IRRIGATION NOTES, PLANS AND DETAILS.
  2. SEE SHEETS 34-36 FOR LIGHTING PLANS, DETAILS AND PHOTOMETRIC PLANS.

- CONSTRUCTION NOTES:**
- 2 NEW CONCRETE SIDEWALK; DETAIL 4, SHEET 25
  - 3 NEW STANDARD CONCRETE CURB & GUTTER
  - 4 BIORETENTION AREA, SEE SHEETS 30 & 31 FOR TYPICAL LAYOUTS, SECTIONS AND DETAILS
  - 5 ASPHALT CONCRETE DRIVEWAY APPROACH; DETAIL 5, SHEET 25
  - 10 ADA CURB RAMP, SEE SHEETS 32 & 33
  - 11 REPLACE EXISTING CURB RAMP WITH CONCRETE SIDEWALK
  - 13 INLET MODIFICATION; DETAIL 2, SHEET 27
  - 14 INLET MODIFICATION; DETAIL 3, SHEET 27
  - 15 NEW CONCRETE SPILL CURB & GUTTER
  - 16 12" PVC SD
  - 17 18" WIDE TRENCH DRAIN; DETAIL 2, SHEET 29
  - 20 TRANSITION STANDARD CURB & GUTTER TO SPILL CURB & GUTTER
  - 21 PROTECT-IN-PLACE EXISTING CONCRETE PILLAR
  - 23 ADJUST WATER VALVE PER CALWATER STANDARDS
  - 24 ADJUST WATER METER PER CALWATER STANDARDS
  - 26 ADJUST AT&T MANHOLE COVER
  - 29 ADJUST PG&E GAS VALVE

- CONSTRUCTION NOTES (CONTINUED):**
- 30 NEW BACKFLOW PREVENTER PER IRRIGATION PLAN
  - 31 NEW 5/8" IRRIGATION METER
  - 32 CONNECT IRRIGATION SERVICE TO WATER MAIN
  - 33 IRRIGATION SLEEVE PER IRRIGATION PLAN
  - 34 IRRIGATION STUB FOR FUTURE CONNECTION PER IRRIGATION PLAN
  - 35 GATE VALVE BOX PER IRRIGATION PLAN
  - 36 CONCRETE VALVE PER IRRIGATION PLAN
  - 37 EXISTING CURB, GUTTER AND SIDEWALK TO REMAIN

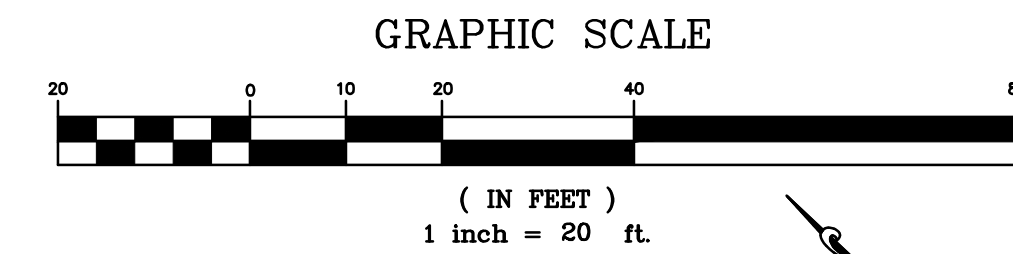


25+50 26+00 27+00 28+00 29+00 30+00 31+00  
 SCALE: HORIZONTAL 1"=20' ; VERTICAL 1"=4'

- NOTES:**
1. LOCATION AND DEPTHS OF UTILITIES SHOWN HEREON ARE APPROXIMATE AND BASED ON LIMITED POTHOLE INFORMATION AND RECORD DATA. CONTRACTOR SHALL CONFIRM EXACT LOCATIONS OF EXISTING UTILITIES.
  2. CONTRACTOR SHALL POTHOLE AND PROVIDE THE ENGINEER WITH THE TYPE, SIZE, MATERIAL AND DEPTH OF CROSSING UTILITIES WITHIN THE BIORETENTION AREAS. SEE PLAN AND PROFILE FOR APPROXIMATE LOCATIONS.

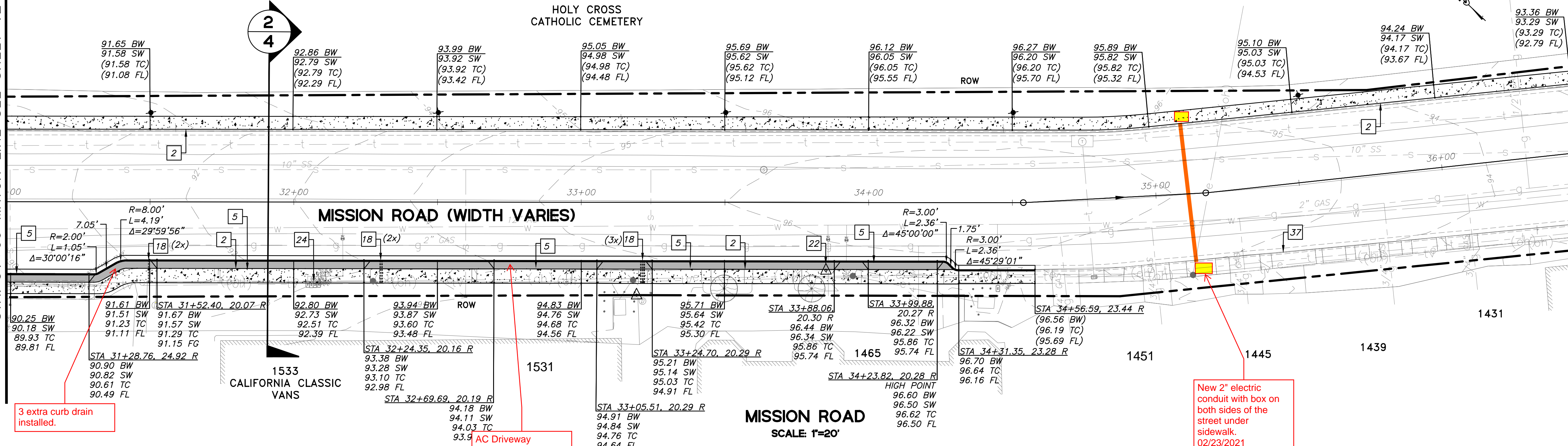
DATE	
REVISIONS	
NO.	
DESIGNED: SH/LL	
DRAWN: SK/AM	
APPROVED:	
PREPARED BY:	CSG CONSULTANTS
	550 Pilgrim Drive Foster City, CA 94404 Phone: (650) 922-2500 Fax: (650) 922-2599
PREPARED FOR:	TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA 94014
TITLE:	IMPROVEMENTS PLAN AND PROFILE, STA. 25+50 TO STA. 31+00 MISSION ROAD BICYCLE & PEDESTRIAN IMPROVEMENTS PROJECT
SHEET 12	
OF 43	
DATE: 4/17/20	
JOB#: 18.393	
4/22/20	
BID SET	

J:\DESIGN\18.393 - Colma Mission Road Improvements\2020-03-18\_BIDSET\08-15 IMPROV STA. 10+00 TO 48+00.dwg @ 06:19:45 PM



STA. 31+00 MATCH LINE SEE SHEET 12

STA. 36+50 MATCH LINE SEE SHEET 14



**LEGEND:**

- PVC STORM DRAIN PIPE, SIZE SHOWN ON PLAN
- NEW CATCH BASIN WITH BICYCLE PROOF GRATE (TYPE 24-12X) AND GUTTER DEPRESSION (D78A), PER  $\frac{4}{29}$
- OVERFLOW: 24"x24" PRECAST CONCRETE DROP INLET WITH GRATE PER  $\frac{1}{31}$   $\frac{2}{31}$   $\frac{3}{31}$
- DECORATIVE LIGHTING, PER  $\frac{1}{35}$   $\frac{2}{35}$
- SLURRY SEAL
- HMA DRIVEWAY
- CONCRETE

**GENERAL NOTES:**

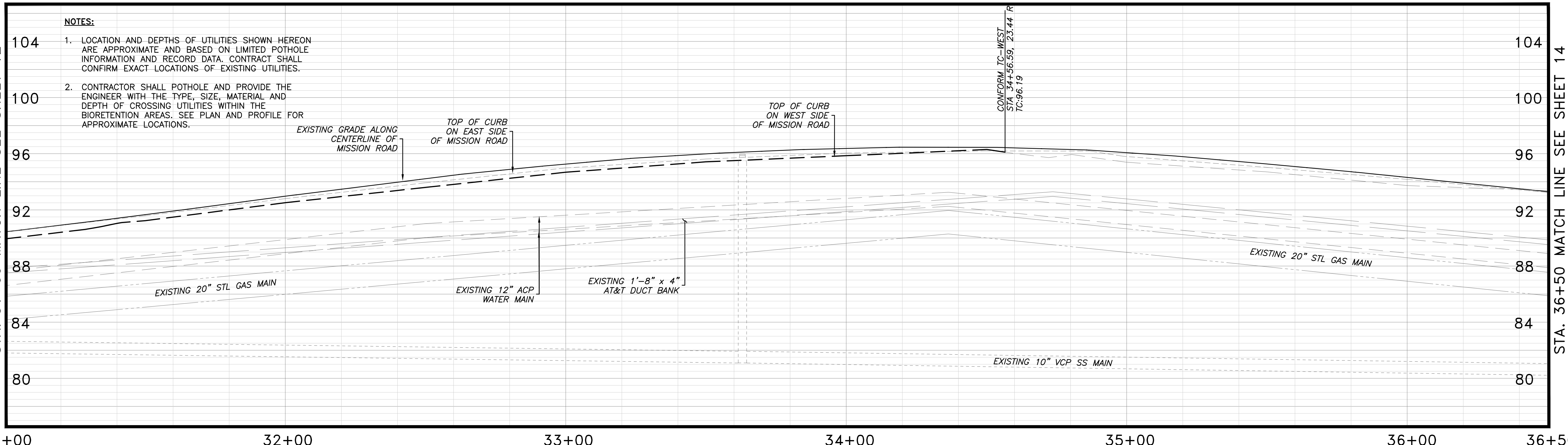
1. SEE SHEETS L2-L7 FOR IRRIGATION NOTES, PLANS AND DETAILS.
2. SEE SHEETS 34-36 FOR LIGHTING PLANS, DETAILS AND PHOTOMETRIC PLANS.

**CONSTRUCTION NOTES:**

- $\frac{2}{}$  NEW CONCRETE SIDEWALK; DETAIL 4, SHEET 25
- $\frac{5}{}$  ASPHALT CONCRETE DRIVEWAY APPROACH; DETAIL 5, SHEET 25
- $\frac{18}{}$  CURB DRAIN EXTENSION; DETAIL 1, SHEET 29
- $\frac{22}{}$  REMOVE AND RESTORE EXISTING SURVEY MONUMENT
- $\frac{24}{}$  ADJUST WATER METER PER CALWATER STANDARDS
- $\frac{37}{}$  EXISTING CURB, GUTTER AND SIDEWALK TO REMAIN

**NOTES:**

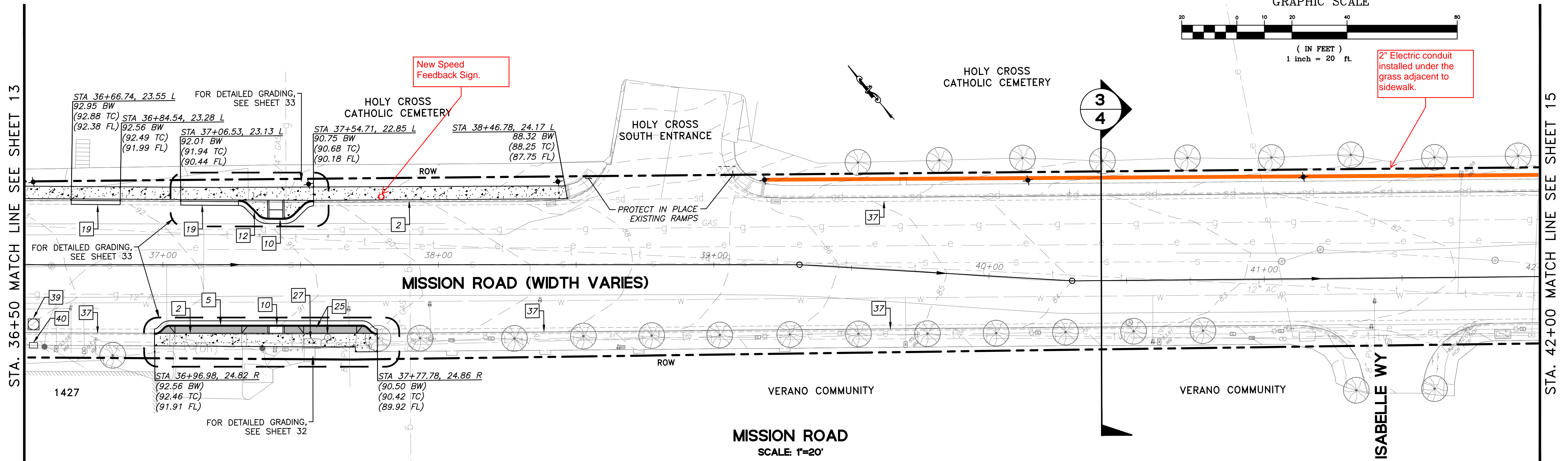
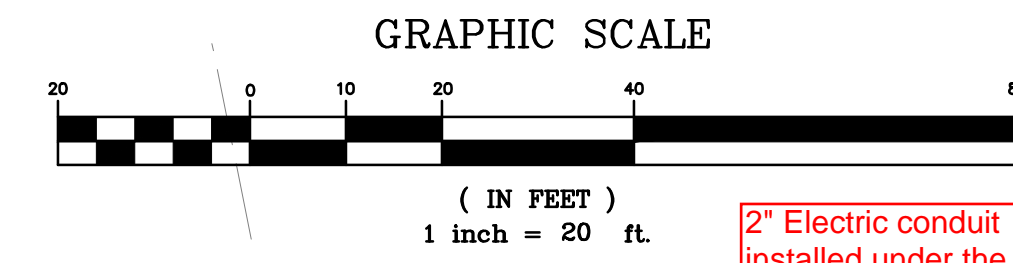
1. LOCATION AND DEPTHS OF UTILITIES SHOWN HEREON ARE APPROXIMATE AND BASED ON LIMITED POTHOLE INFORMATION AND RECORD DATA. CONTRACTOR SHALL CONFIRM EXACT LOCATIONS OF EXISTING UTILITIES.
2. CONTRACTOR SHALL POTHOLE AND PROVIDE THE ENGINEER WITH THE TYPE, SIZE, MATERIAL AND DEPTH OF CROSSING UTILITIES WITHIN THE BIOTENTION AREAS. SEE PLAN AND PROFILE FOR APPROXIMATE LOCATIONS.



SCALE: HORIZONTAL 1"=20' ; VERTICAL 1"=4'

<p>DESIGNED: SH/LL</p> <p>DRAWN: SK/SM</p> <p>APPROVED:</p>	<p>NO.</p> <p>REVISIONS</p> <p>DATE</p>
<p>PREPARED BY: <b>CSG CONSULTANTS</b></p> <p>550 Pilgrim Drive Foster City, CA 94404 Phone: (650)522-2500 Fax: (650)522-2589</p>	
<p>Employee - Owned</p>	
<p>PREPARED FOR:</p> <p><b>TOWN OF COLMA</b> 1198 EL CAMINO REAL COLMA, CA 94014</p>	
<p>TITLE:</p> <p><b>IMPROVEMENTS PLAN AND PROFILE, STA. 31+00 TO STA. 36+50 MISSION ROAD BICYCLE &amp; PEDESTRIAN IMPROVEMENTS PROJECT</b></p>	
<p><b>SHEET 13 OF 43</b></p>	
<p>DATE: 4/17/20</p> <p>JOB#: 18.393</p> <p>4/22/20 BID SET</p>	

J:\DESIGN\18\_393 - Colma Mission Road Improvements\2020-03-18\_BIDSET\08-15 IMPROV STA. 10+00 TO 46+00.dwg @ 03:59:31 PM  
 Plotted on: 03/23/20 @ 03:59:40 PM



**LEGEND:**

- PVC STORM DRAIN PIPE, SIZE SHOWN ON PLAN
- NEW CATCH BASIN WITH BICYCLE PROOF GRATE (TYPE 24-12X) AND GUTTER DEPRESSION (D78A), PER  $\frac{4}{29}$
- OVERFLOW: 24"x24" PRECAST CONCRETE DROP INLET WITH GRATE PER  $\frac{1}{31}$   $\frac{2}{31}$   $\frac{3}{31}$
- DECORATIVE LIGHTING, PER  $\frac{1}{35}$   $\frac{2}{35}$
- SLURRY SEAL
- HMA DRIVEWAY
- CONCRETE

**GENERAL NOTES:**

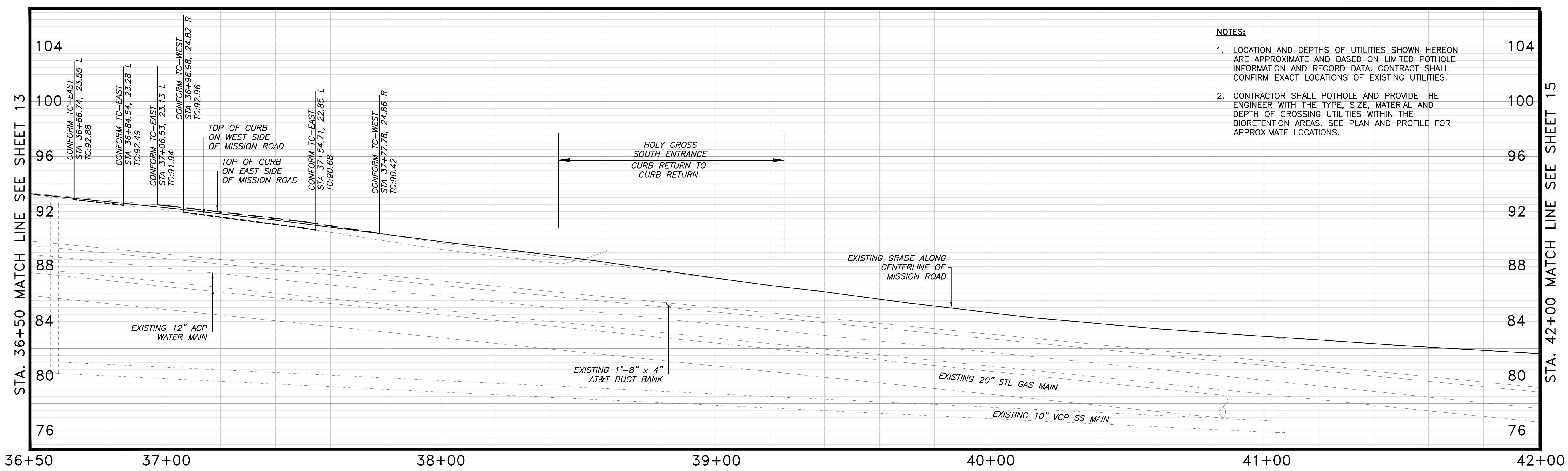
1. SEE SHEETS L2-L7 FOR IRRIGATION NOTES, PLANS AND DETAILS.
2. SEE SHEETS 34-36 FOR LIGHTING PLANS, DETAILS AND PHOTOMETRIC PLANS.

**CONSTRUCTION NOTES:**

- $\frac{2}{}$  NEW CONCRETE SIDEWALK; DETAIL 4, SHEET 25
- $\frac{5}{}$  ASPHALT CONCRETE DRIVEWAY APPROACH; DETAIL 5, SHEET 25
- $\frac{10}{}$  ADA CURB RAMP, SEE SHEETS 32 & 33
- $\frac{12}{}$  BULB-OUT; DETAIL 6, SHEET 29
- $\frac{19}{}$  REPLACE EXISTING DEPRESSED CURB WITH STANDARD CURB & GUTTER
- $\frac{25}{}$  ADJUST SANITARY SEWER MANHOLE COVER
- $\frac{27}{}$  ADJUST AT&T VAULT
- $\frac{37}{}$  EXISTING CURB, GUTTER AND SIDEWALK TO REMAIN
- $\frac{39}{}$  PROTECT IN PLACE NEW 4'x4' COMMUNICATION MANHOLE
- $\frac{40}{}$  PROTECT IN PLACE NEW 24"x36" COMMUNICATION VAULT

**NOTES:**

1. LOCATION AND DEPTHS OF UTILITIES SHOWN HEREON ARE APPROXIMATE AND BASED ON LIMITED POTHOLE INFORMATION AND RECORD DATA. CONTRACTOR SHALL CONFIRM EXACT LOCATIONS OF EXISTING UTILITIES.
2. CONTRACTOR SHALL POTHOLE AND PROVIDE THE ENGINEER WITH THE TYPE, SIZE, MATERIAL AND DEPTH OF CROSSING UTILITIES WITHIN THE BIoretention AREAS. SEE PLAN AND PROFILE FOR APPROXIMATE LOCATIONS.

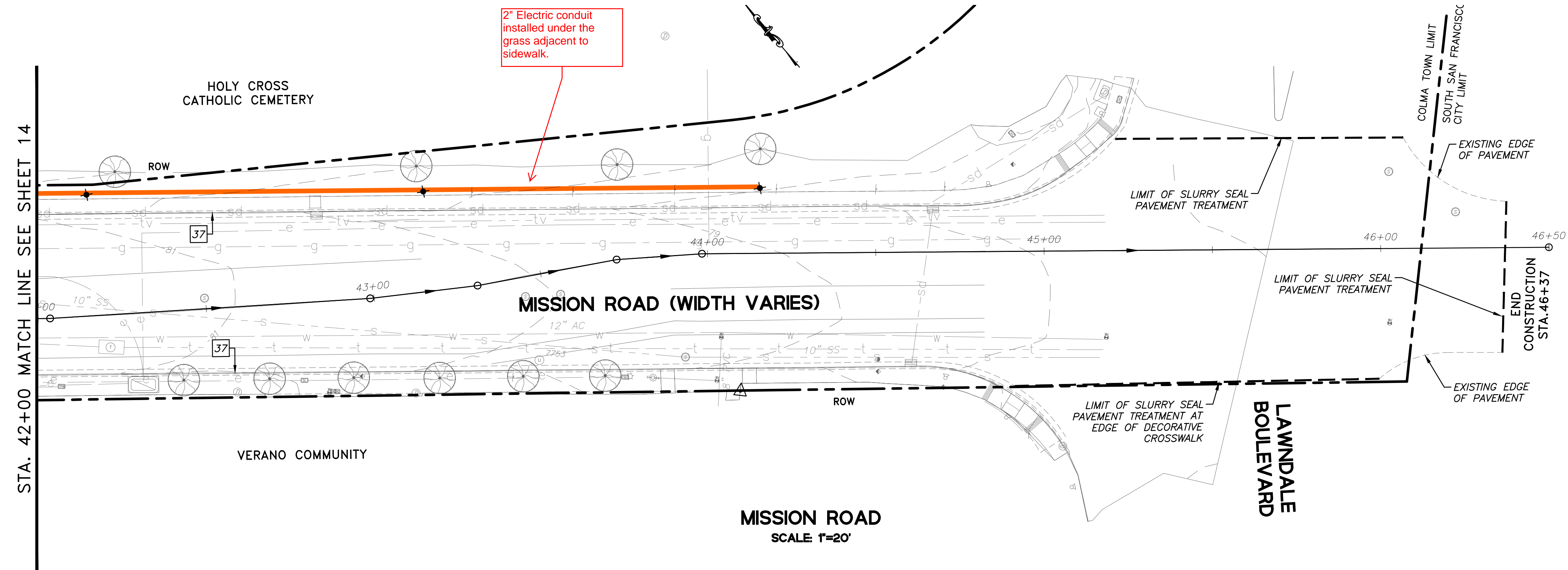
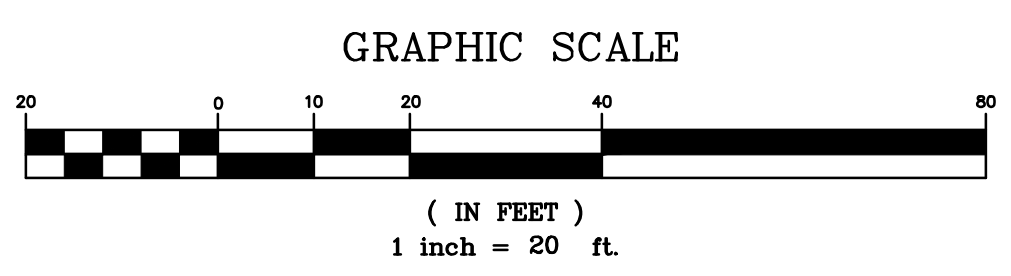


SCALE: HORIZONTAL 1"=20' ; VERTICAL 1"=4'

DATE	
REVISIONS	
NO.	
DESIGNED: SH/LL	
DRAWN: SK/AM	
APPROVED:	
PREPARED BY:	CSG CONSULTANTS
	550 Pilgrim Drive Foster City, CA 94404 Phone: (650)522-2500 Fax: (650)522-2599
PREPARED FOR:	TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA 94014
TITLE:	IMPROVEMENTS PLAN AND PROFILE, STA. 36+50 TO STA. 42+00 MISSION ROAD BICYCLE & PEDESTRIAN IMPROVEMENTS PROJECT
SHEET 14	
OF 43	
DATE: 4/17/20	
JOB#: 18.393	
4/22/20	
BID SET	

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2" Electric conduit installed under the grass adjacent to sidewalk.



**MISSION ROAD**  
SCALE: 1"=20'

- LEGEND:**
- PVC STORM DRAIN PIPE, SIZE SHOWN ON PLAN
  - NEW CATCH BASIN WITH BICYCLE PROOF GRATE (TYPE 24-12X) AND GUTTER DEPRESSION (D78A), PER  $\frac{4}{29}$
  - OVERFLOW: 24"x24" PRECAST CONCRETE DROP INLET WITH GRATE PER  $\frac{1}{31}$   $\frac{2}{31}$   $\frac{3}{31}$
  - DECORATIVE LIGHTING, PER  $\frac{1}{35}$   $\frac{2}{35}$
  - SLURRY SEAL
  - HMA DRIVEWAY
  - CONCRETE

**GENERAL NOTES:**

1. SEE SHEETS L2-L7 FOR IRRIGATION NOTES, PLANS AND DETAILS.
2. SEE SHEETS 34-36 FOR LIGHTING PLANS, DETAILS AND PHOTOMETRIC PLANS.

**CONSTRUCTION NOTES:**

- $\frac{37}{}$  EXISTING CURB, GUTTER AND SIDEWALK TO REMAIN



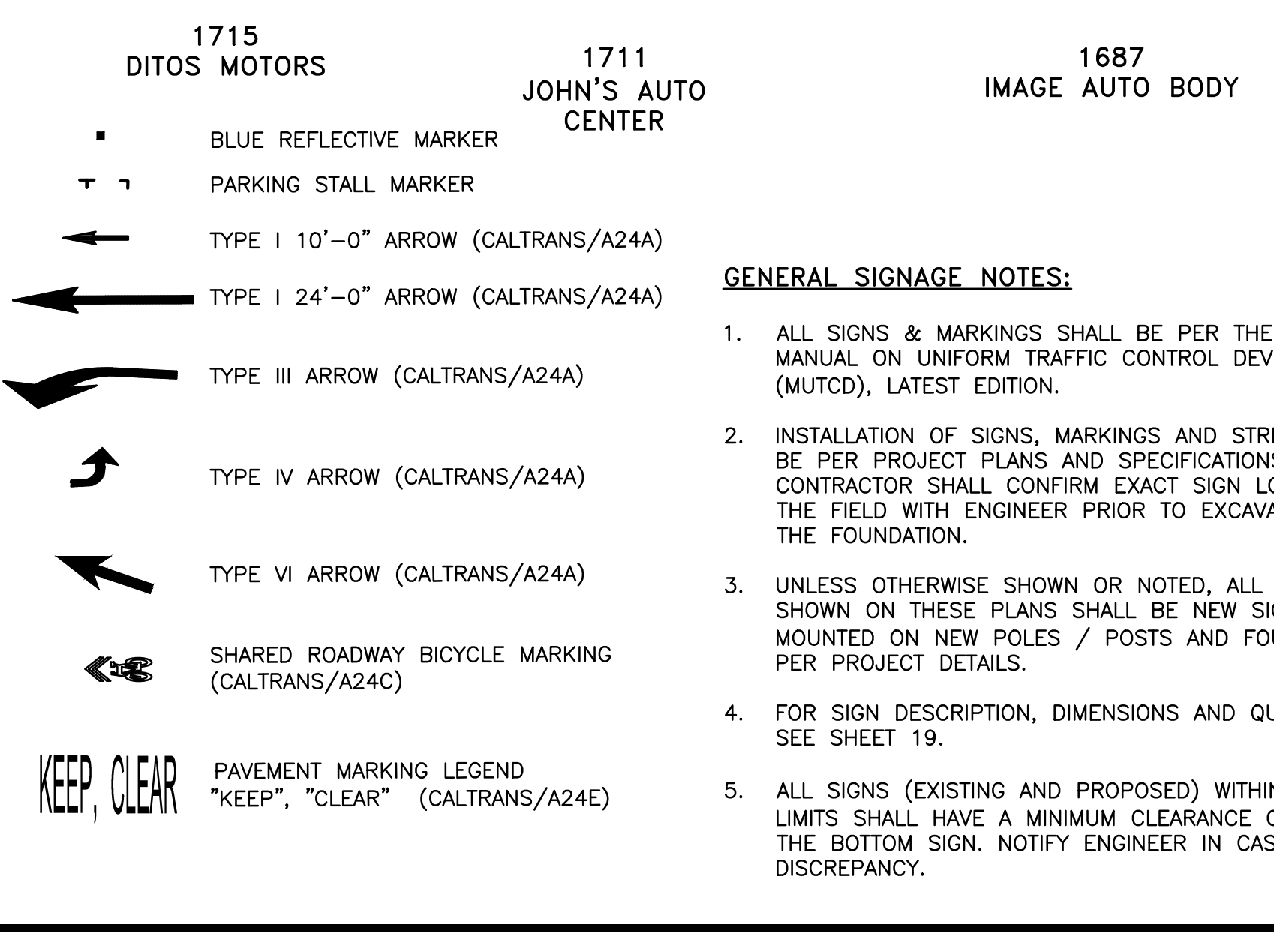
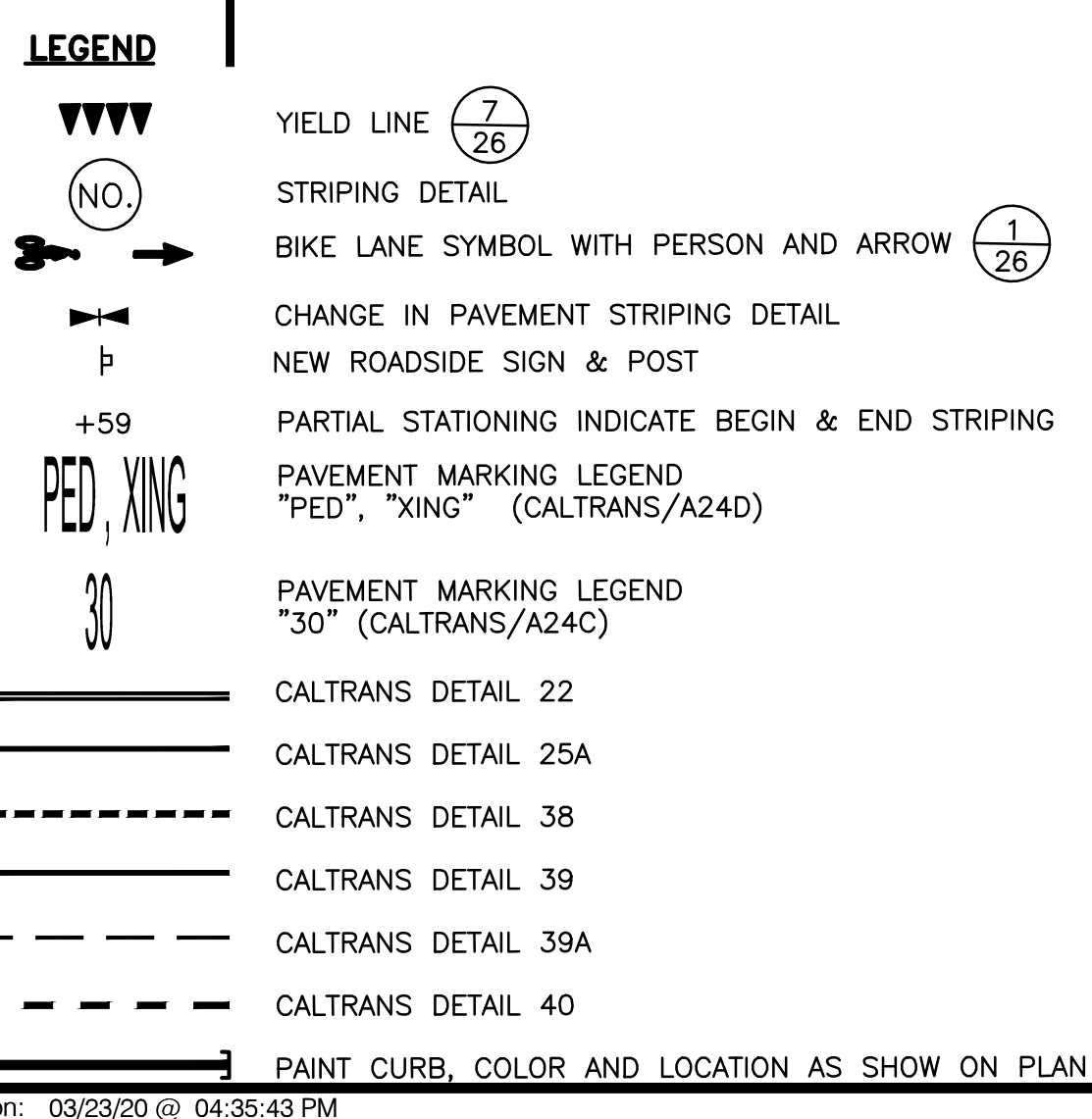
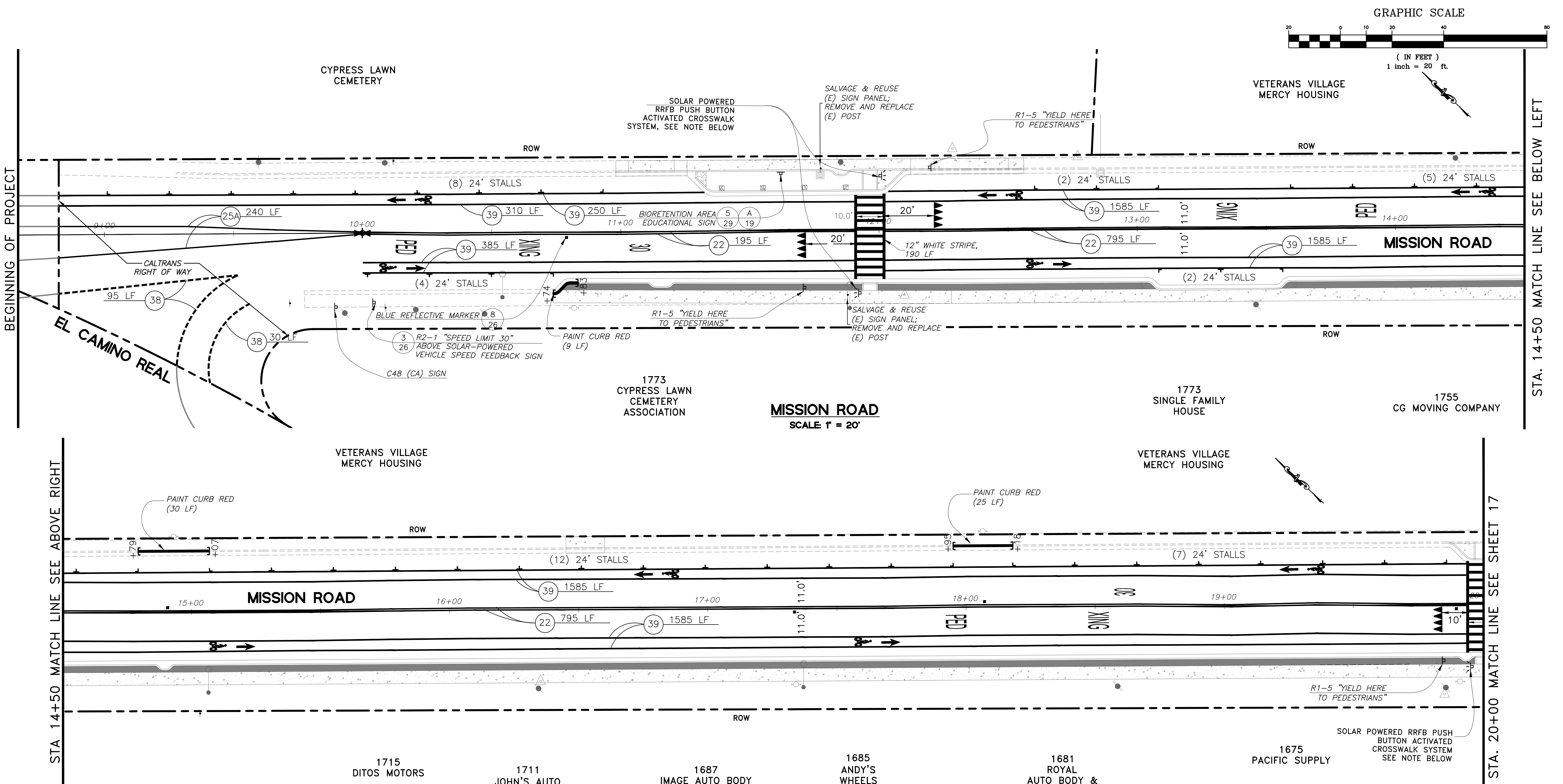
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							DATE
							REVISIONS
							NO.
DESIGNED:	SH/LL						
DRAWN:	SK/AM						
APPROVED:							
<b>PREPARED BY:</b> <b>CSG CONSULTANTS</b> 550 Pilgrim Drive Foster City, CA 94044 Phone: (650) 622-2500 Fax: (650) 522-2599							
<b>PREPARED FOR:</b> <b>TOWN OF COLMA</b> 1198 EL CAMINO REAL COLMA, CA 94014							
<b>TITLE:</b> IMPROVEMENTS PLAN AND PROFILE, STA. 42+00 TO STA. 46+50 MISSION ROAD BICYCLE & PEDESTRIAN IMPROVEMENTS PROJECT							
<b>SHEET 15</b> OF <b>43</b>							
DATE : 4/17/20 JOB# : 18.393							
4/22/20 BID SET							



J:\DESIGN\18\_393 - Contra Mission Road Improvement\2020-03-18\_BIDSET\18-19\_SIGNING & STRIPING STA. 10+00 TO 46+00.dwg @ 04:35:40 PM  
 Plotted on: 03/23/20 @ 04:35:43 PM



**MISSION ROAD**  
SCALE 1" = 20'

**GENERAL SIGNAGE NOTES:**

- ALL SIGNS & MARKINGS SHALL BE PER THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION.
- INSTALLATION OF SIGNS, MARKINGS AND STRIPING SHALL BE PER PROJECT PLANS AND SPECIFICATIONS, HOWEVER, CONTRACTOR SHALL CONFIRM EXACT SIGN LOCATIONS IN THE FIELD WITH ENGINEER PRIOR TO EXCAVATION OF THE FOUNDATION.
- UNLESS OTHERWISE SHOWN OR NOTED, ALL SIGNING SHOWN ON THESE PLANS SHALL BE NEW SIGNS MOUNTED ON NEW POLES / POSTS AND FOUNDATIONS PER PROJECT DETAILS.
- FOR SIGN DESCRIPTION, DIMENSIONS AND QUANTITIES SEE SHEET 19.
- ALL SIGNS (EXISTING AND PROPOSED) WITHIN PROJECT LIMITS SHALL HAVE A MINIMUM CLEARANCE OF 7' TO THE BOTTOM SIGN. NOTIFY ENGINEER IN CASE OF DISCREPANCY.

**GENERAL MARKINGS AND STRIPING NOTES:**

- ALL STRIPING SHALL BE PER CALTRANS STANDARD PLANS, LATEST EDITION.
- ALL STRIPING AND LEGENDS SHALL BE THERMOPLASTIC, EXCEPT STRIPING DETAILS 39, 39A, BIKE LANE MARKINGS AND BIKE LANE ARROWS.
- TOWN TO APPROVE CAT-TRACKING PRIOR TO PLACEMENT OF PERMANENT STRIPING AND LEGENDS. CONTRACTOR TO ALLOW MINIMUM 1 WEEK REVIEW BY TOWN AFTER PLACEMENT OF CAT-TRACKING.
- ADD "NO DUMPING--DRAINS TO BAY" STENCIL AT EVERY STORM DRAIN INLETS. SEE SPECIFICATIONS.
- CROSSWALK STRIPING SHALL BE 10' LONG WHITE THERMOPLASTIC STRIPES, 12" WIDE SEPARATED BY 24" GAPS.
- FOR SIGNS, STRIPING & PAVEMENT MARKING QUANTITIES SEE SHEET 19.
- FOR STANDARD "T" PARKING STALL MARKING AND STALL DIMENSIONS, SEE DETAIL 5, SHEET 26.

**RRFB PUSH BUTTON ACTIVATED CROSSWALK SYSTEM NOTE:**

SYSTEM SHALL CONSIST OF THE FOLLOWING:

- (2) 13" TALL, 4.5" OUTER DIAMETER ALUMINUM POLE WITH FOUNDATION SYSTEM PER 6/26
- (4) W11-2 SIGNS (FYG)
- (2) W16-7P (LEFT) (FYG)
- (2) W16-7P (RIGHT) (FYG)
- (4) LED LIGHT BARS
- SOLAR POWER WITH WIRELESS TRANSMISSION
- ALL SOFTWARE AND HARDWARE REQUIRED FOR INSTALLATION
- PUSH BUTTON (2)

**VEHICLE SPEED FEEDBACK SIGN NOTE:**

- SYSTEM SHALL CONSIST OF THE FOLLOWING:
- 18" CHARACTER DISPLAY
  - SOLAR POWER 85 WATT PANEL
  - RADAR RANGE: 1000' AVERAGE
  - FULL MATRIX CAPABLE
  - WHITE SIGN

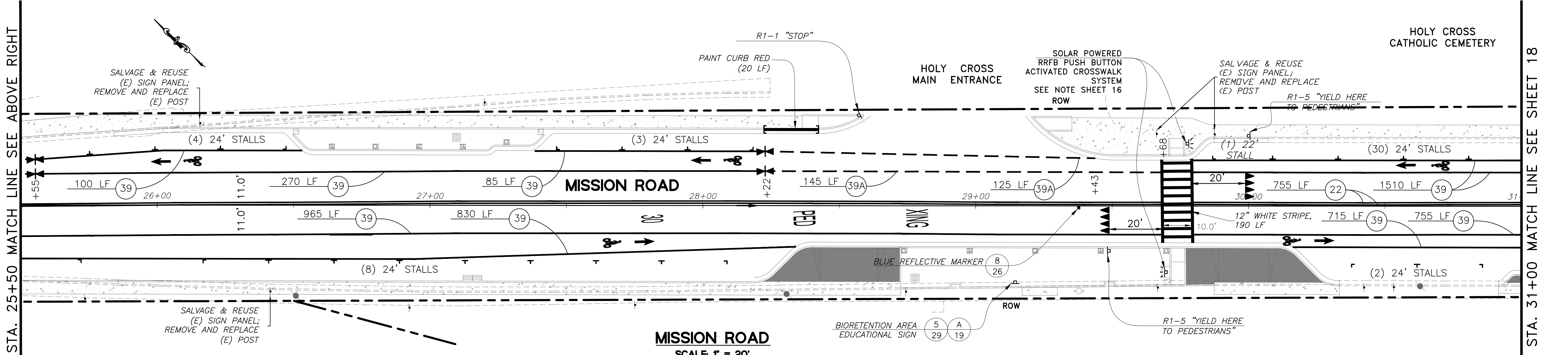
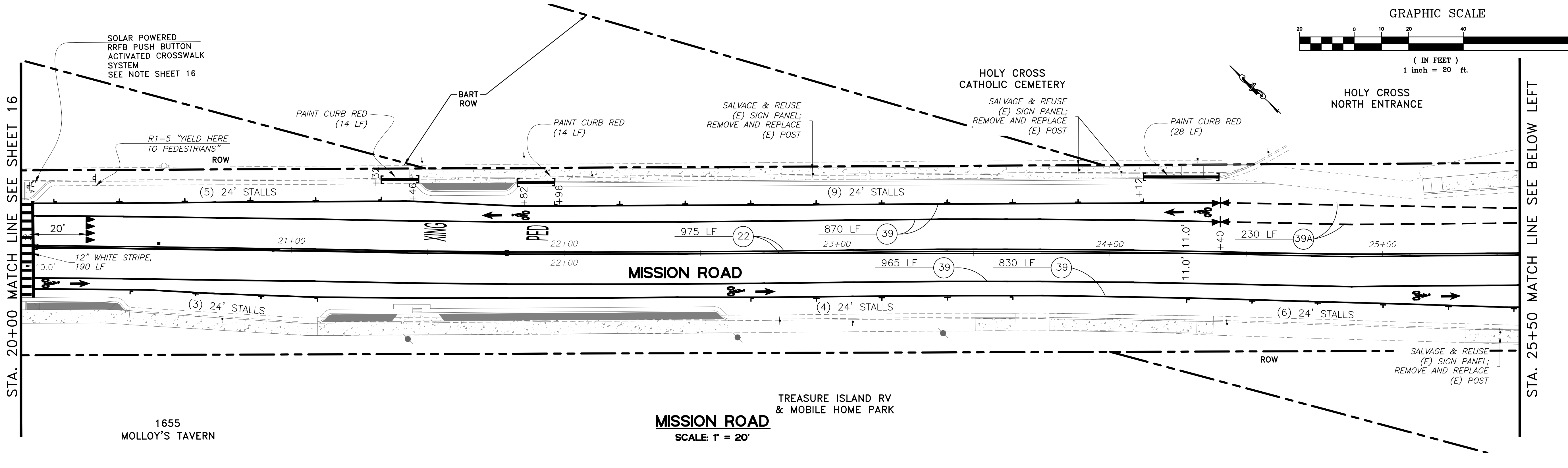
STA. 14+50 MATCH LINE SEE BELOW LEFT

STA. 14+50 MATCH LINE SEE ABOVE RIGHT

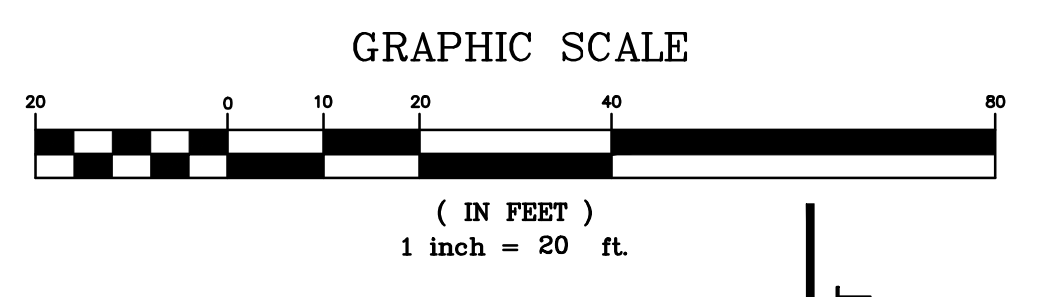
STA. 20+00 MATCH LINE SEE SHEET 17

DATE	
REVISIONS	
NO.	
DESIGNED: SH/LL	
DRAWN: SK/AM	
APPROVED:	
PREPARED BY:	CSG CONSULTANTS
	550 Pilgrim Drive Foster City, CA 94404 Phone: (650)622-2500 Fax: (650)522-2589
PREPARED FOR:	TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA 94014
TITLE:	SIGNING AND STRIPING PLAN, STA. 8+82 TO STA. 20+00 MISSION ROAD BICYCLE & PEDESTRIAN IMPROVEMENTS PROJECT
	<b>SHEET 16</b> OF <b>43</b>
	DATE : 4/17/20
	JOB#: 18-393
	4/22/20 BID SET

J:\DESIGN\18\_393 - Colma Mission Road Improvement\2020-03-18\_BIDSET\18-19\_SIGNING & STRIPING STA. 10+00 TO 46+00.dwg @ 04:38:48 PM



- LEGEND**
- ▼▼▼ YIELD LINE (7/26)
  - (NO.) STRIPING DETAIL
  - 🚲 BIKE LANE SYMBOL WITH PERSON AND ARROW (1/26)
  - ⊥ CHANGE IN PAVEMENT STRIPING DETAIL
  - ⊥ NEW ROADSIDE SIGN & POST
  - +59 PARTIAL STATIONING INDICATE BEGIN & END STRIPING
  - PEDESTRIAN, XING PAVEMENT MARKING LEGEND "PED", "XING" (CALTRANS/A24D)
  - 30 PAVEMENT MARKING LEGEND "30" (CALTRANS/A24C)
  - CALTRANS DETAIL 22
  - CALTRANS DETAIL 25A
  - CALTRANS DETAIL 38
  - CALTRANS DETAIL 39
  - CALTRANS DETAIL 39A
  - CALTRANS DETAIL 40
  - PAINT CURB, COLOR AND LOCATION AS SHOW ON PLAN
  - BLUE REFLECTIVE MARKER
  - ⊥ PARKING STALL MARKER
  - ➡ TYPE I 10'-0" ARROW (CALTRANS/A24A)
  - ➡ TYPE I 24'-0" ARROW (CALTRANS/A24A)
  - ➡ TYPE III ARROW (CALTRANS/A24A)
  - ➡ TYPE IV ARROW (CALTRANS/A24A)
  - ➡ TYPE VI ARROW (CALTRANS/A24A)
  - 🚲 SHARED ROADWAY BICYCLE MARKING (CALTRANS/A24C)
  - KEEP, CLEAR PAVEMENT MARKING LEGEND "KEEP", "CLEAR" (CALTRANS/A24E)

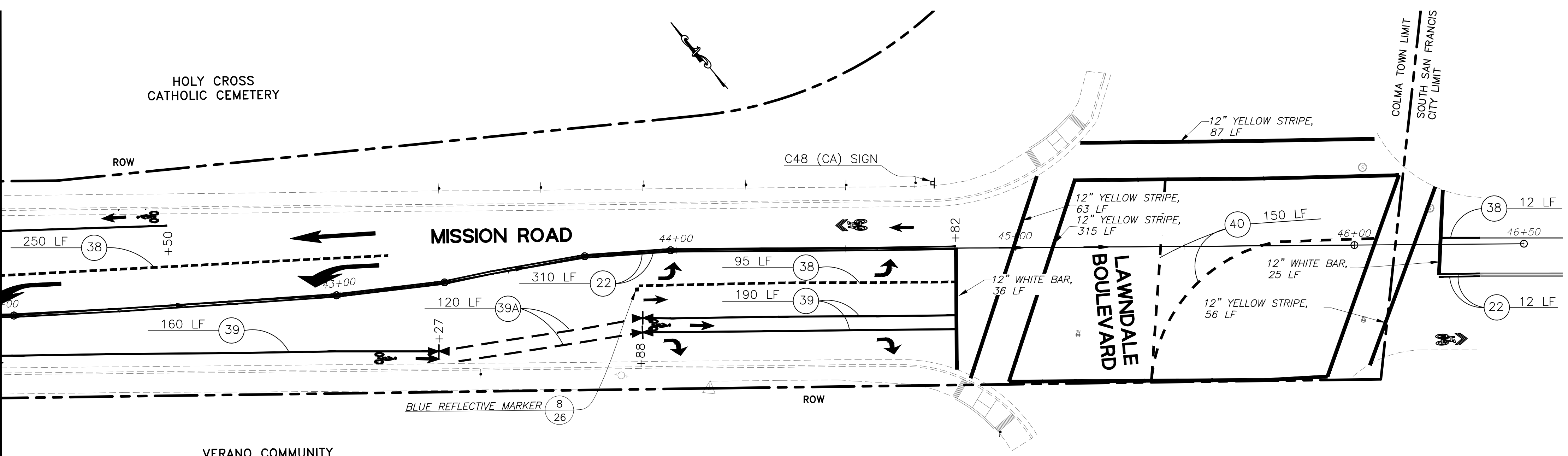


DATE	
REVISIONS	
NO.	
DESIGNED: SH/LL	
DRAWN: SK/AM	
APPROVED:	
PREPARED BY: <b>CSG CONSULTANTS</b> 550 Pilgrim Drive Foster City, CA 94404 Phone: (650) 622-2500 Fax: (650) 522-2599	
PREPARED FOR: <b>TOWN OF COLMA</b> 1198 EL CAMINO REAL COLMA, CA 94014	
TITLE: <b>SIGNING AND STRIPING PLAN,          STA. 20+00 TO STA. 31+00          MISSION ROAD          BICYCLE &amp; PEDESTRIAN IMPROVEMENTS PROJECT</b>	
<b>SHEET 17          OF          43</b>	
DATE: 4/17/20 JOB#: 18.393	
4/22/20 BID SET	

SEE NOTES SHEET 16



STA. 42+00 MATCH LINE SEE SHEET 18



MISSION ROAD  
SCALE 1" = 20'



**LEGEND**

YIELD LINE	(IN FEET) 7/26
STRIPING DETAIL	
BIKE LANE SYMBOL WITH PERSON AND ARROW	1/26
CHANGE IN PAVEMENT STRIPING DETAIL	
NEW ROADSIDE SIGN & POST	
+59	PARTIAL STATIONING INDICATE BEGIN & END STRIPING
PAVEMENT MARKING LEGEND "PED", "XING" (CALTRANS/A24D)	
PAVEMENT MARKING LEGEND "30" (CALTRANS/A24C)	
CALTRANS DETAIL 22	
CALTRANS DETAIL 25A	
CALTRANS DETAIL 38	
CALTRANS DETAIL 39	
CALTRANS DETAIL 39A	
CALTRANS DETAIL 40	
PAINT CURB, COLOR AND LOCATION AS SHOW ON PLAN	
BLUE REFLECTIVE MARKER	
PARKING STALL MARKER	
TYPE I 10'-0" ARROW (CALTRANS/A24A)	
TYPE I 24'-0" ARROW (CALTRANS/A24A)	
TYPE III ARROW (CALTRANS/A24A)	
TYPE IV ARROW (CALTRANS/A24A)	
TYPE VI ARROW (CALTRANS/A24A)	
SHARED ROADWAY BICYCLE MARKING (CALTRANS/A24C)	

**STRIPING QUANTITIES:**

DETAIL 22	3,422	LF
DETAIL 25A	240	LF
DETAIL 38	482	LF
DETAIL 39	11,845	LF
DETAIL 39A	910	LF
DETAIL 40	150	LF
12" WHITE CROSSWALK STRIPE AND STOP BAR	931	LF
12" YELLOW CROSSWALK	521	LF
4" WHITE STRIPE	80	LF
4" PARKING STRIPE ("T" & "L")	396	LF
BLUE REFLECTIVE MARKER	11	EA
PAINTED CURB QUANTITIES:		
RED PAINTED CURB	273	LF

**KEEP, CLEAR**

**SIGN QUANTITIES:**

SIGN	DESCRIPTION	DIM.	QUAN.
R1-1	"STOP"	24x30	1
R1-5	"YIELD HERE TO PEDESTRIANS"	30x30	8
R2-1	"SPEED LIMIT 30"	24x30	2
C48 (CA)	"YOUR TAX DOLLARS AT WORK"	48X30	2

SALVAGE AND REUSE EXISTING SIGN PANEL: 17 TOTAL

**PAVEMENT MARKINGS:**

MARKING	EA	SF	TOTAL SF
YIELD LINE (CALTRANS DETAILS/A24E)	32	3	96
BIKE LANE ARROW (CALTRANS DETAILS/A24A) SYMBOL WITH PERSON (CALTRANS DETAILS/A24C)	31	10.5	326
PAVEMENT MARKING LEGEND "PED" (CALTRANS/A24D)	8	18	144
PAVEMENT MARKING LEGEND "XING" (CALTRANS/A24D)	8	21	168
PAVEMENT MARKING LEGEND "KEEP" (CALTRANS/A24E)	1	24	24
PAVEMENT MARKING LEGEND "CLEAR" (CALTRANS/A24E)	1	27	27
PAVEMENT MARKING LEGEND "30" (CALTRANS/A24C)	6	16.5	99
TYPE I 10'-0" ARROW (CALTRANS DETAILS/A24A)	2	14	28
TYPE I 24'-0" ARROW (CALTRANS DETAILS/A24A)	1	31	31
TYPE III ARROW (CALTRANS DETAILS/A24B)	2	42	84
TYPE IV ARROW (CALTRANS DETAILS/A24A)	4	15	60
TYPE VI ARROW (CALTRANS DETAILS/A24A)	2	42	84
SHARED ROADWAY BICYCLE MARKING (CALTRANS DETAILS/A24C)	1	11.5	11.5

# GREEN STREETS BLUE BAY

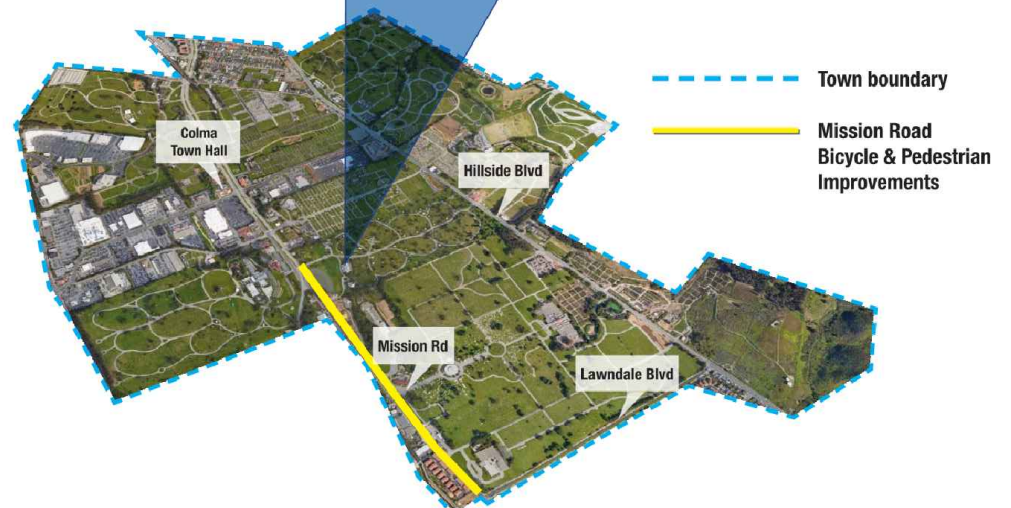
GREEN STREETS CLEAN POLLUTED WATER BEFORE IT DRAINS TO THE BAY

**WHAT ARE GREEN STREETS?**

When it rains, stormwater flows off roof tops, sidewalks, and streets picking up motor oils, heavy metals, pesticides, trash and other pollution. This dirty water flows untreated into storm drains, creeks, and ultimately into the San Francisco Bay.

Green Streets collect stormwater in shallow basins filled with carefully selected soils and plants. These features clean the water by breaking down and filtering pollutants, before the water returns to the storm drain system or soaks into the native soils to replenish groundwater.

Beyond cleaning water, Green Streets can also beautify neighborhoods, provide bird and butterfly habitat, reduce localized flooding and create streets that are safe for everyone.



**NOTE:**  
1. SEE DETAIL 5, SHEET 29 FOR POST AND FOUNDATION DESIGN.

**YOUR TAX DOLLARS AT WORK REBUILDING CALIFORNIA**

BE WORK ZONE ALERT

**C48 (CA) SIGN**



This project has been funded in part by the City/County Association of Governments of San Mateo County in partnership with the Town of Colma. To learn more about Sustainable Stormwater and Safe Routes to School, visit [www.ccap.ca.gov](http://www.ccap.ca.gov).

**BIORETENTION AREA EDUCATIONAL SIGN PANEL INFORMATION**

DATE

REVISIONS

DESIGNED: SH/LL

DRAWN: SK/SLM

APPROVED:

PREPARED BY: **CSG CONSULTANTS**  
550 Pilgrim Drive  
Foster City, CA 94044  
Phone: (650)922-2500  
Fax: (650)922-2599

EMPLOYEE OWNED

PREPARED FOR: **TOWN OF COLMA**  
1198 EL CAMINO REAL  
COLMA, CA 94014

TITLE: **SIGNING AND STRIPING PLAN, STA. 42+00 TO STA. 46+50 MISSION ROAD BICYCLE & PEDESTRIAN IMPROVEMENTS PROJECT**

**SHEET 19 OF 43**

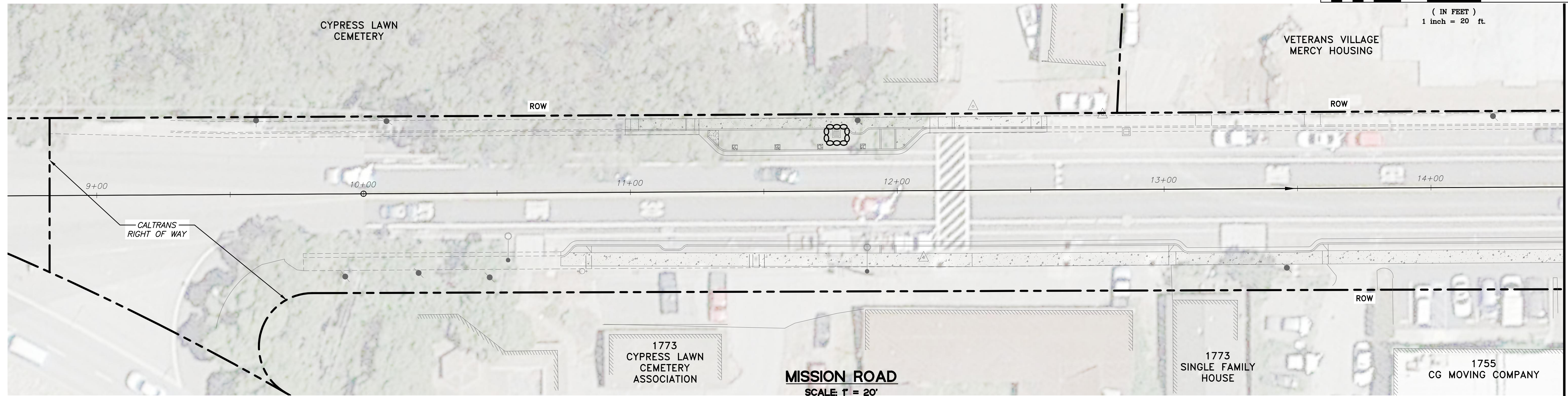
DATE: 4/17/20  
JOB#: 18-393

4/22/20  
BID SET

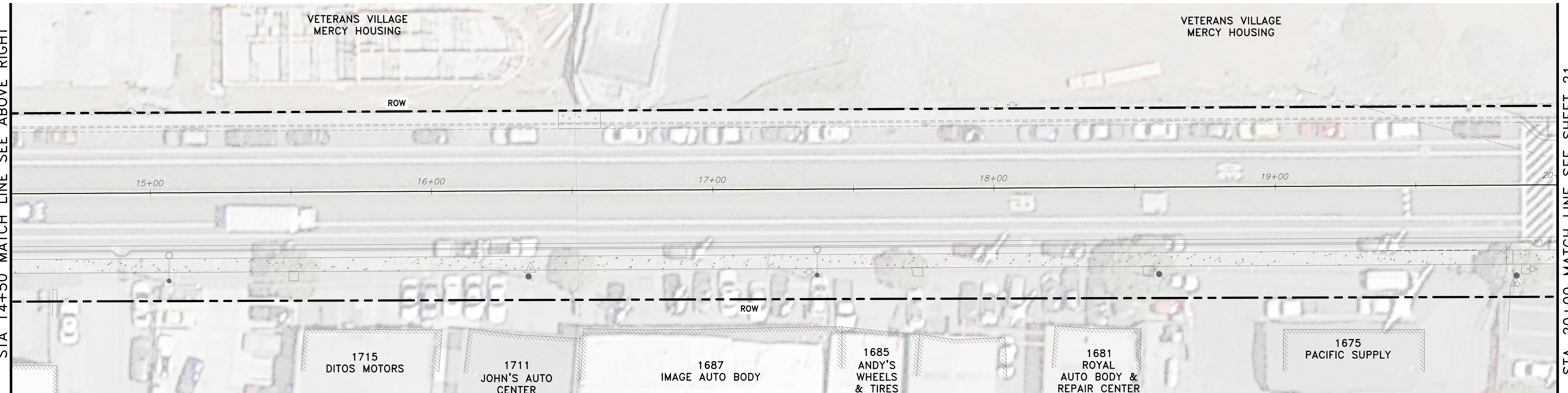
J:\DESIGN\18-393 - Colma Mission Road Improvement\2020-03-18\_BIDSET\18-19\_SIGNING & STRIPING STA. 10+00 TO 46+00.dwg @ 04:46:42 PM

J:\DESIGN\18\_393 - Colma Mission Road Improvements\2020-03-18\_BIDSET\20-23\_EROSION & STORMWATER STA. 10+00 TO 46+00.dwg @ 04:54:46 PM

Plotted on: 03/23/20 @ 04:54:46 PM


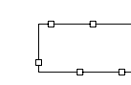


STA. 14+50 MATCH LINE SEE BELOW LEFT

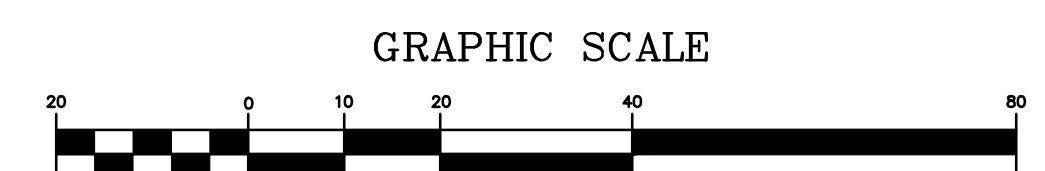


STA. 20+00 MATCH LINE SEE SHEET 21

**STORM WATER POLLUTION PREVENTION LEGEND**

-  INLET PROTECTION PER DETAILS 2 & 3 - SHEET 23
-  CONCRETE WASTE MANAGEMENT/WASHOUT, CASQA WM-8, SEE DETAIL 1- SHEET 23

**MISSION ROAD**  
SCALE: 1" = 20'

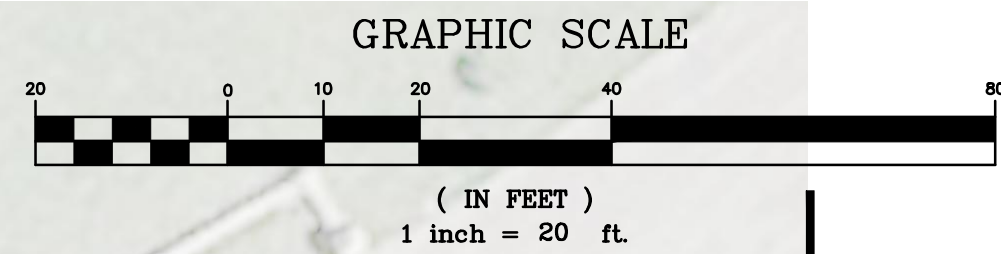
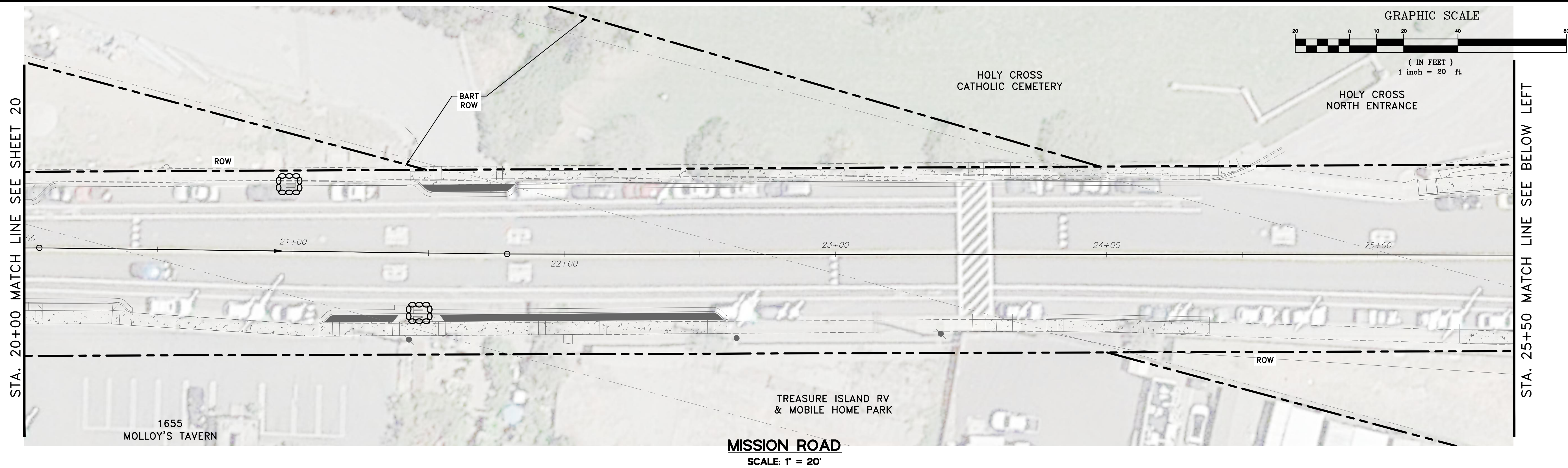


DATE	
REVISIONS	
NO.	
DESIGNED: SH/LL	
DRAWN: SK/CM	
APPROVED:	
	
PREPARED BY:	CSG CONSULTANTS
	550 Pilgrim Drive Foster City, CA 94404 Phone: (650) 922-2500 Fax: (650) 522-2599
PREPARED FOR:	TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA 94014
TITLE:	EROSION/STORMWATER POLLUTION CONTROL PLAN, STA. 8+82 TO STA. 20+00 MISSION ROAD BICYCLE & PEDESTRIAN IMPROVEMENTS PROJECT
SHEET 20	
OF 43	
DATE: 4/17/20	
JOB#: 18.393	
4/22/20	
BID SET	

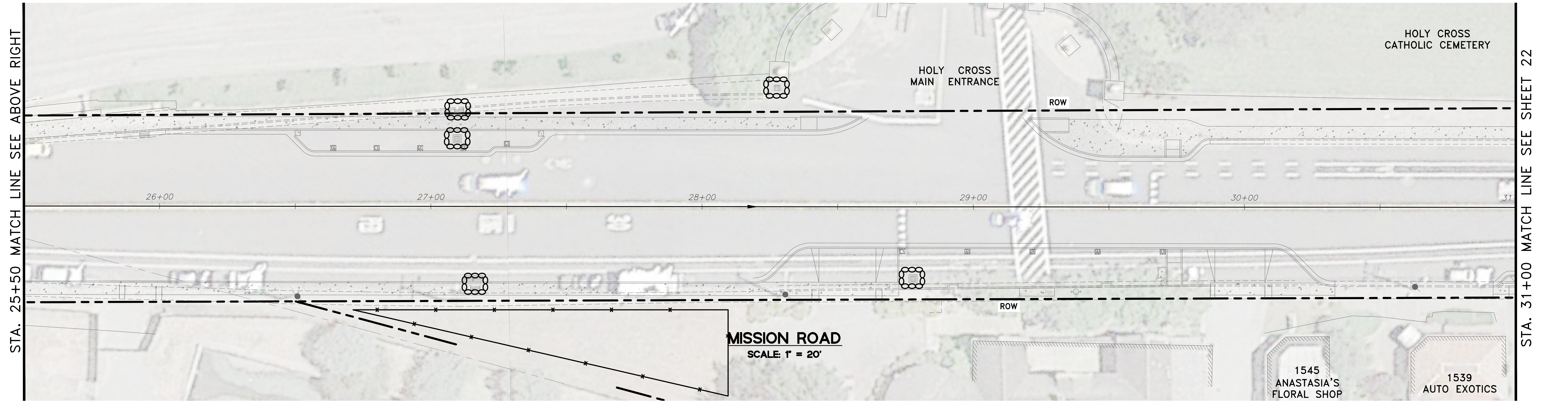
SEE NOTES SHEET 23

J:\DESIGN\18\_393 - Colma Mission Road Improvements\2020-03-18\_BIDSET\20-23 EROSION & STORMWATER STA.10+00 TO 46+00.dwg @ 04:57:12 PM

Plotted on: 03/23/20 @ 04:57:13 PM

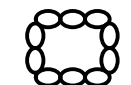
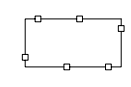


**MISSION ROAD**  
SCALE: 1" = 20'



**MISSION ROAD**  
SCALE: 1" = 20'

**STORM WATER POLLUTION PREVENTION LEGEND**

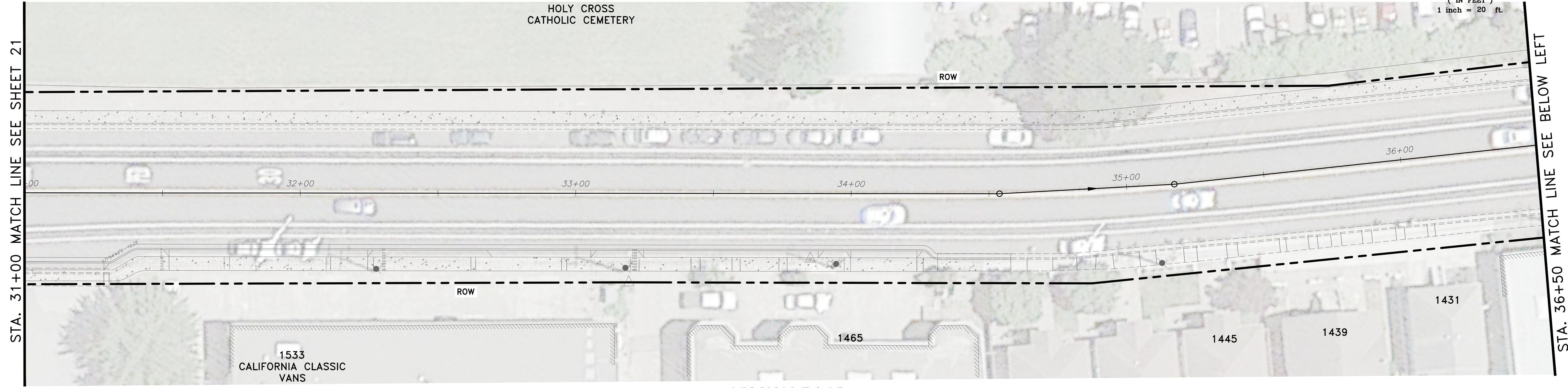
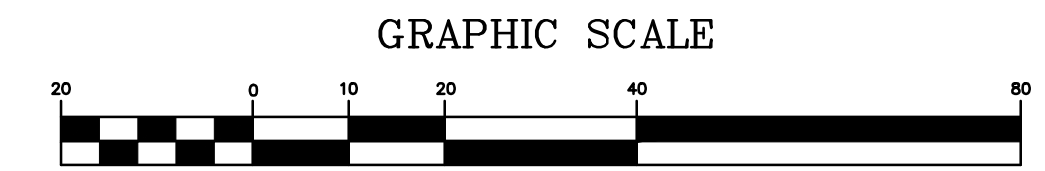
-  INLET PROTECTION PER DETAILS 2 & 3 - SHEET 23
-  CONCRETE WASTE MANAGEMENT/WASHOUT, CASQA WM-8, SEE DETAIL 1- SHEET 23

SEE NOTES SHEET 23

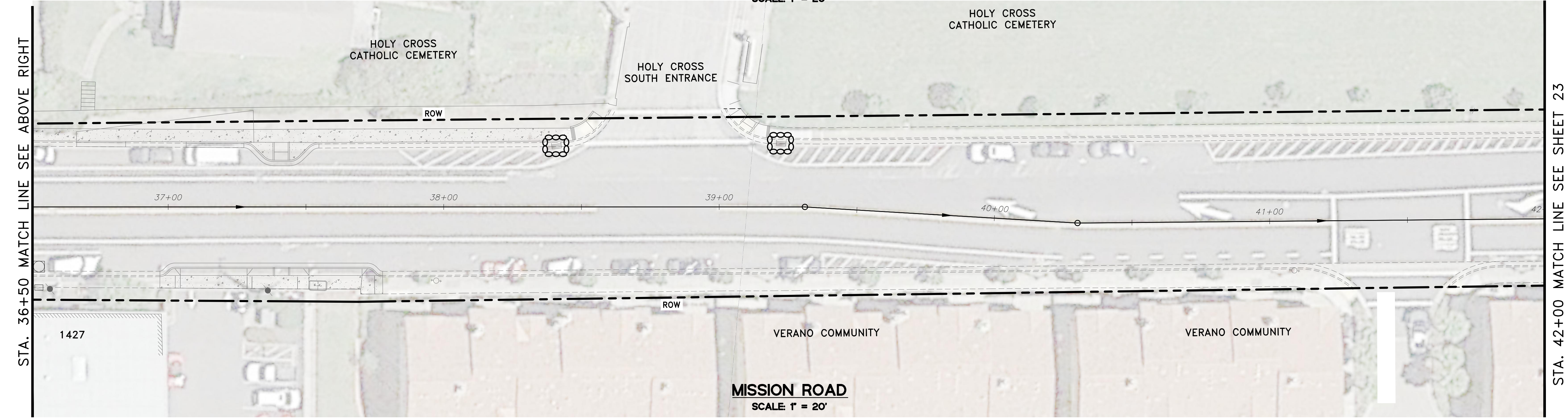
<p><b>TITLE:</b> EROSION/STORMWATER POLLUTION CONTROL PLAN, STA.20+00 TO STA. 31+00 MISSION ROAD BICYCLE &amp; PEDESTRIAN IMPROVEMENTS PROJECT</p>	<p><b>PREPARED FOR:</b> TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA 94014</p>
<p><b>PREPARED BY:</b>  <b>CSG CONSULTANTS</b> Employee - Owned</p>	
<p><b>DESIGNED:</b> SH/LL <b>DRAWN:</b> SK/AM <b>APPROVED:</b> _____</p>	
<p><b>NO.</b></p>	<p><b>REVISIONS</b></p>
<p><b>DATE</b></p>	

**SHEET 21**  
OF  
**43**  
DATE : 4/17/20  
JOB#: 18.393  
4/22/20  
BID SET

J:\DESIGN\18\_393 - Colma Mission Road Improvements\2020-03-18\_BIDSET\20-23\_EROSION & STORMWATER\STA.10+00 TO 46+00.dwg @ 04:59:50 PM


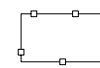


**MISSION ROAD**  
SCALE 1" = 20'



**MISSION ROAD**  
SCALE 1" = 20'

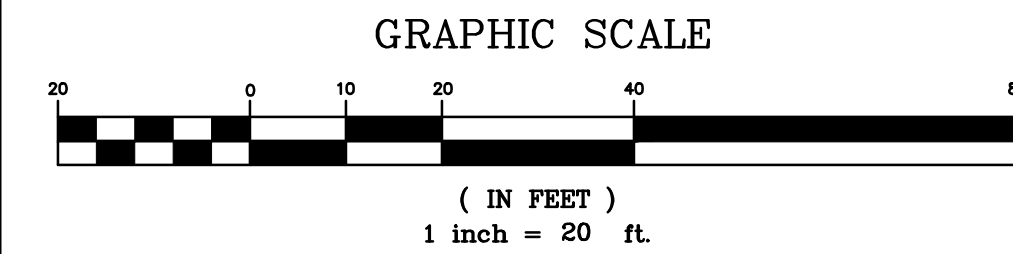
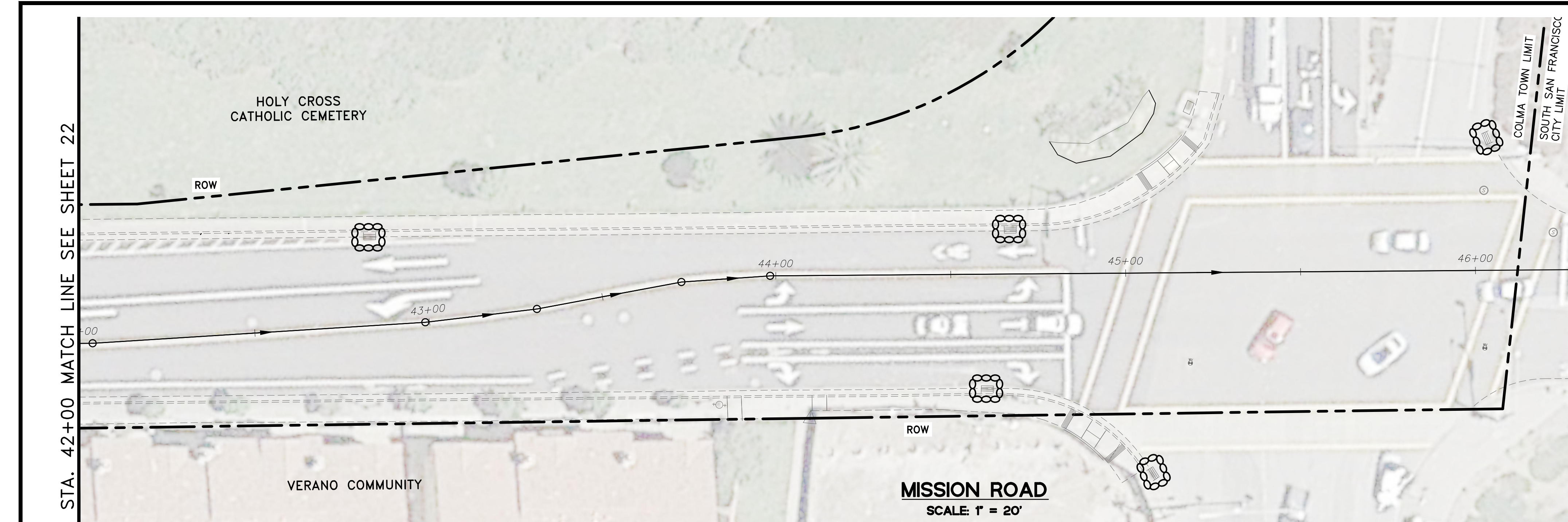
**STORM WATER POLLUTION PREVENTION LEGEND**

-  INLET PROTECTION PER DETAILS 2 & 3 - SHEET 23
-  CONCRETE WASTE MANAGEMENT/WASHOUT, CASQA WM-8, SEE DETAIL 1- SHEET 23

SEE NOTES SHEET 23

DATE	
REVISIONS	
NO.	
DESIGNED: SH/LL	
DRAWN: SK/CSM	
APPROVED:	
	
<b>PREPARED BY:</b> <b>CSG CONSULTANTS</b> 550 Pilgrim Drive Foster City, CA 94404 Phone: (650) 622-2500 Fax: (650) 522-2599	
	
<b>PREPARED FOR:</b> <b>TOWN OF COLMA</b> 1198 EL CAMINO REAL COLMA, CA 94014	
<b>TITLE:</b> EROSION/STORMWATER POLLUTION CONTROL PLAN, STA. 31+00 TO STA. 42+00 MISSION ROAD BICYCLE & PEDESTRIAN IMPROVEMENTS PROJECT	
<b>SHEET 22</b> <b>OF</b> <b>43</b>	
DATE : 4/17/20 JOB# : 18.393	
4/22/20 BID SET	

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**GENERAL WATER POLLUTION CONTROL NOTES:**

- SWPPP OBJECTIVES:** THE INFORMATION ON THIS PLAN IS INTENDED TO BE USED AS A GUIDELINE FOR THE CONTRACTOR AND SUBCONTRACTORS TO INSTALL WATER POLLUTION CONTROL DEVICES AT GENERAL LOCATIONS THROUGHOUT THE SITE. ADDITIONAL MEASURES SHALL BE IMPLEMENTED BY THE CONTRACTOR ON AN AS NEEDED BASIS TO PREVENT SEDIMENT LADEN WATER FROM LEAVING THE SITE AND ENTERING THE STORM DRAIN SYSTEM. THESE FACILITIES SHALL CONTROL AND CONTAIN EROSION-CAUSED SILT DEPOSITS AND PROVIDE FOR THE SAFE DISCHARGE OF SILT-FREE STORM WATER INTO EXISTING STORM DRAIN FACILITIES. DESIGN OF THESE FACILITIES MUST BE APPROVED BY THE TOWN ENGINEER. ADDITIONAL MEASURES SHALL BE AS PRESCRIBED IN THE CONSTRUCTION SITE BEST MANAGEMENT PRACTICES MANUAL, PREPARED BY CALTRANS.
- CONTACT INFORMATION:** THE CONTRACTOR SHALL FILE THE NAME OF THE PERSON RESPONSIBLE FOR THE MAINTENANCE OF THESE FACILITIES WITH THE TOWN OF COLMA DEPARTMENT OF PUBLIC WORKS ALONG WITH A PHONE NUMBER WHERE THEY CAN BE REACHED 24 HOURS A DAY.
- SUB-CONTRACTOR OVERSIGHT:** THE CONTRACTOR IS RESPONSIBLE FOR THE ENSURING THAT ALL SUB-CONTRACTORS AND SUPPLIERS ARE AWARE OF ALL STORM WATER QUALITY MEASURES AND WILL IMPLEMENT SUCH MEASURES. FAILURE TO COMPLY WITH THE APPROVED REPORT WILL RESULT IN THE ISSUANCE OF CORRECTION NOTICES, CITATIONS AND/OR A PROJECT STOP ORDER.
- CONSTRUCTION CONSIDERATIONS:** CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION WILL BE MINIMIZED. STATE AND LOCAL LAWS CONCERNING POLLUTION ABATEMENT SHALL BE COMPLIED WITH. ALL TRUCK TIRES SHALL BE CLEANED PRIOR TO EXITING THE SITE.
- SWPPP PLAN APPROVAL:** PRIOR TO START OF CONSTRUCTION, THE PROPOSED SWPPP MEASURES SHALL BE REVIEWED BY THE DIRECTOR OF PUBLIC WORKS. THE CONTRACTOR SHALL REVISE THE DOCUMENTS AS REQUIRED TO RECEIVE THE DIRECTOR OF PUBLIC WORKS' APPROVAL. PLANS ARE TO BE RESUBMITTED FOR TOWN APPROVAL UNTIL ACCEPTED BY THE TOWN OF COLMA.
- SWPPP IMPLEMENTATION:** CONTRACTOR SHALL MAINTAIN THE EROSION CONTROL AND STORM WATER POLLUTION PREVENTION MEASURES THROUGHOUT THE CONSTRUCTION PERIOD. WHENEVER RAIN IS FORECAST, AT THE END OF THE LAST DAY OF A WORK WEEK OR BEFORE ANY EXTENDED SUSPENSION OF THE WORK, THE CONTRACTOR SHALL ENSURE THAT THE MEASURES SHOWN ON THESE PLANS ARE IN PLACE AND SATISFACTORILY INSTALLED TO PROVIDE THE INTENDED PROTECTION. IF IT IS DETERMINED THAT A PARTICULAR MEASURE IS NOT PROVIDING THE INTENDED PROTECTION, THE CONTRACTOR SHALL NOTIFY THE TOWN ENGINEER TO DETERMINE ALTERNATIVE MEASURES. ALTERNATIVE DESIGNS WILL BE SUBMITTED TO THE TOWN FOR REVIEW PRIOR TO IMPLEMENTATION. THE CONTRACTOR SHALL KEEP ADEQUATE SUPPLIES ON SITE TO PROVIDE EMERGENCY REPAIRS AS REQUIRED. THESE SUPPLIES MAY INCLUDE ADDITIONAL FILTER FABRIC, HAY BALES, BAGS AND TARPS.
- STOCKPILES:** TEMPORARY STOCKPILES SHALL BE PROTECTED AT ALL TIMES WITH APPROPRIATE EROSION CONTROL MEASURES (TARPS, FIBER ROLLS, SILT FENCES, ETC.) TO ENSURE SILT DOES NOT LEAVE THE SITE OR ENTER THE STORM DRAIN SYSTEM.
- STAGING AREA:** CONSTRUCTION STAGING AREA SHALL BE ADEQUATELY SECURED BY USE OF TEMPORARY FENCING AND SCREENED FROM THE PUBLIC RIGHT-OF-WAY TO THE SATISFACTION OF THE TOWN ENGINEER. SCREENING SHALL CONSIST OF MATERIALS APPROVED BY THE TOWN ENGINEER AND SHALL BE INSTALLED PRIOR TO THE START OF CONSTRUCTION.
- STREET SWEEPING AND GENERAL CLEANUP:** CONTRACTOR SHALL SWEEP AND PICK UP DEBRIS AND SEDIMENT AT THE END OF EACH WORK DAY (AND THROUGHOUT THE WORKING DAY WHEN RAIN IS IN THE FORECAST). TRACKING OF SEDIMENT ON PUBLIC STREETS IS STRICTLY PROHIBITED.

NO.	REVISIONS	DATE

PREPARED BY:  
**CSG CONSULTANTS**  
 550 Pilgrim Drive  
 Foster City, CA 94404  
 Phone: (650)622-2500  
 Fax: (650)522-2599

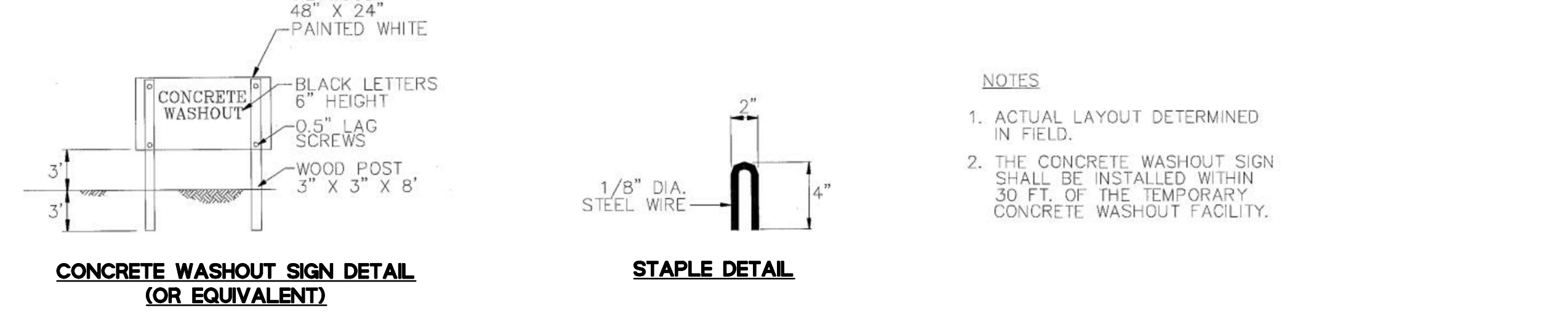
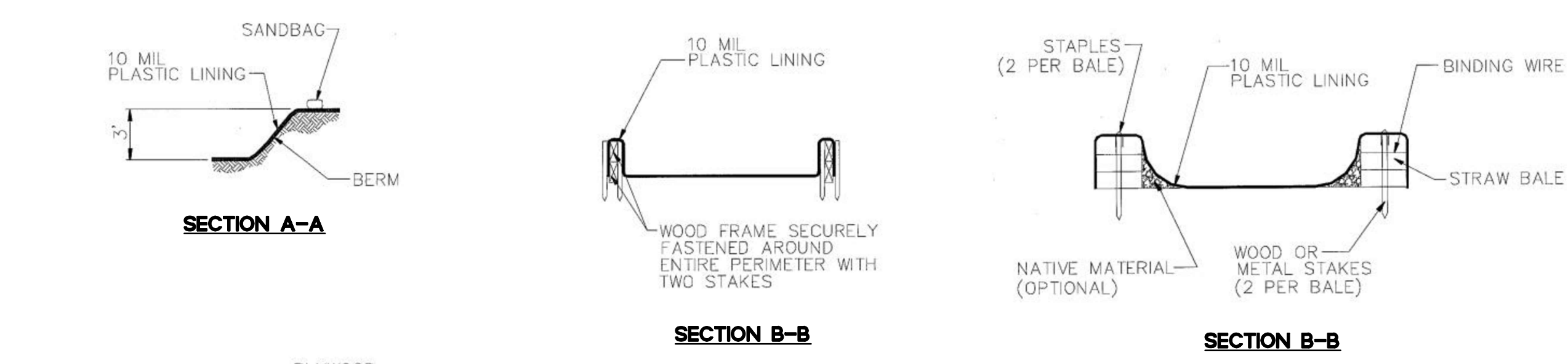
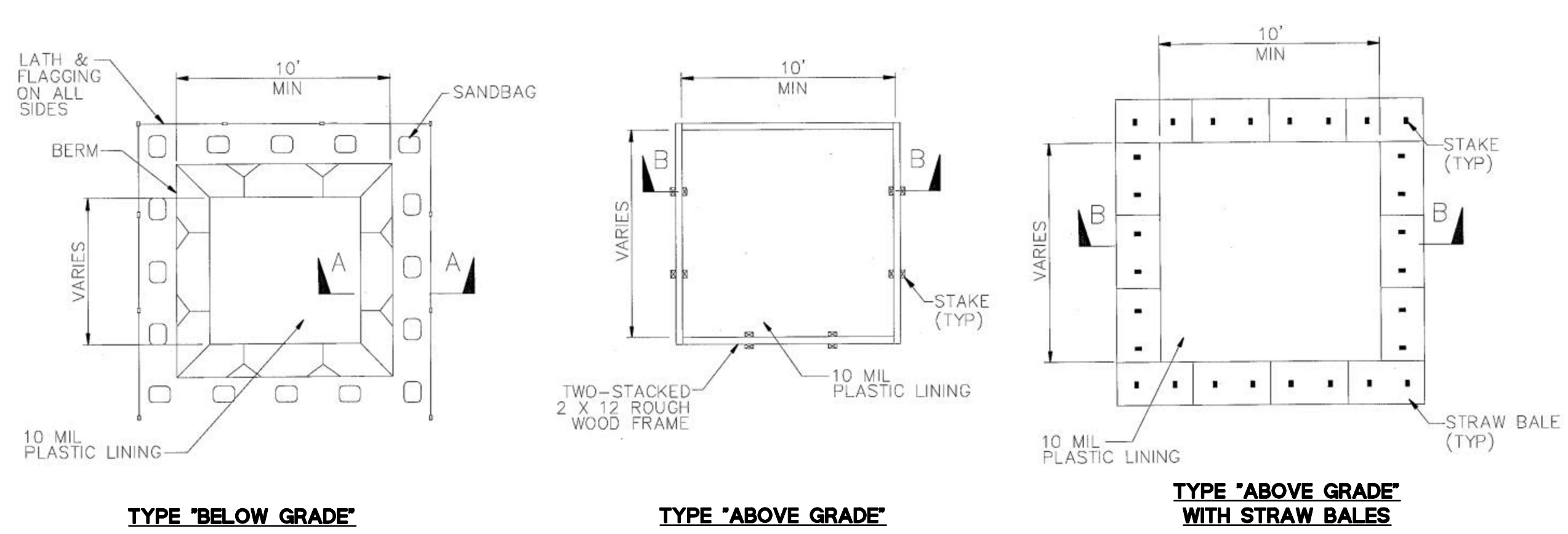
Employee - Owned

PREPARED FOR:  
**TOWN OF COLMA**  
 1198 EL CAMINO REAL  
 COLMA, CA 94014

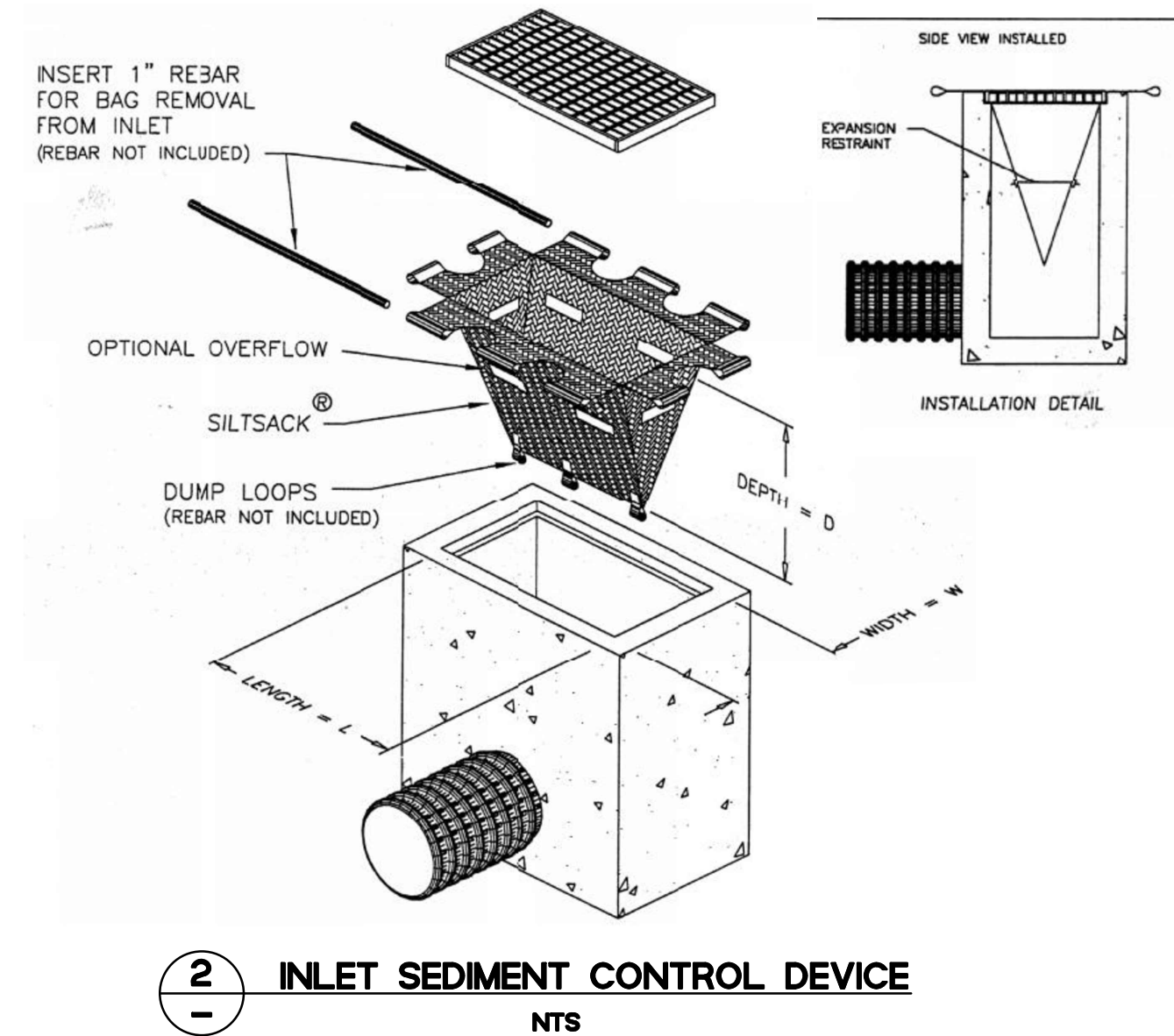
TITLE:  
 EROSION/STORMWATER POLLUTION CONTROL PLAN  
 STA. 42+00 TO STA. 46+50  
 MISSION ROAD  
 BICYCLE & PEDESTRIAN IMPROVEMENTS PROJECT

**SHEET 23**  
 OF  
**43**

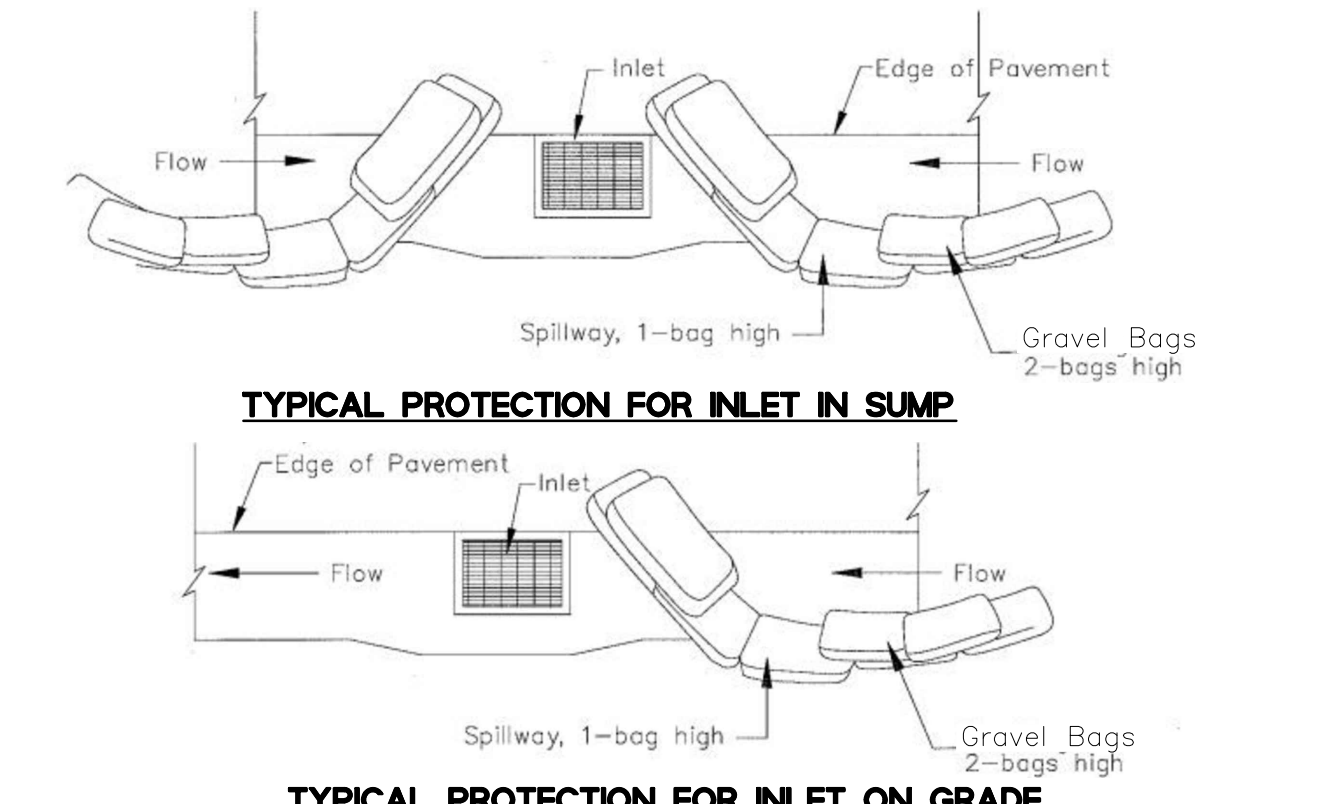
DATE: 4/17/20  
 JOB#: 18.393  
 4/22/20  
 BID SET



**1** WM-8 CONCRETE WASTE MANAGEMENT/WASHOUT AREA  
 NTS



**2** INLET SEDIMENT CONTROL DEVICE  
 NTS

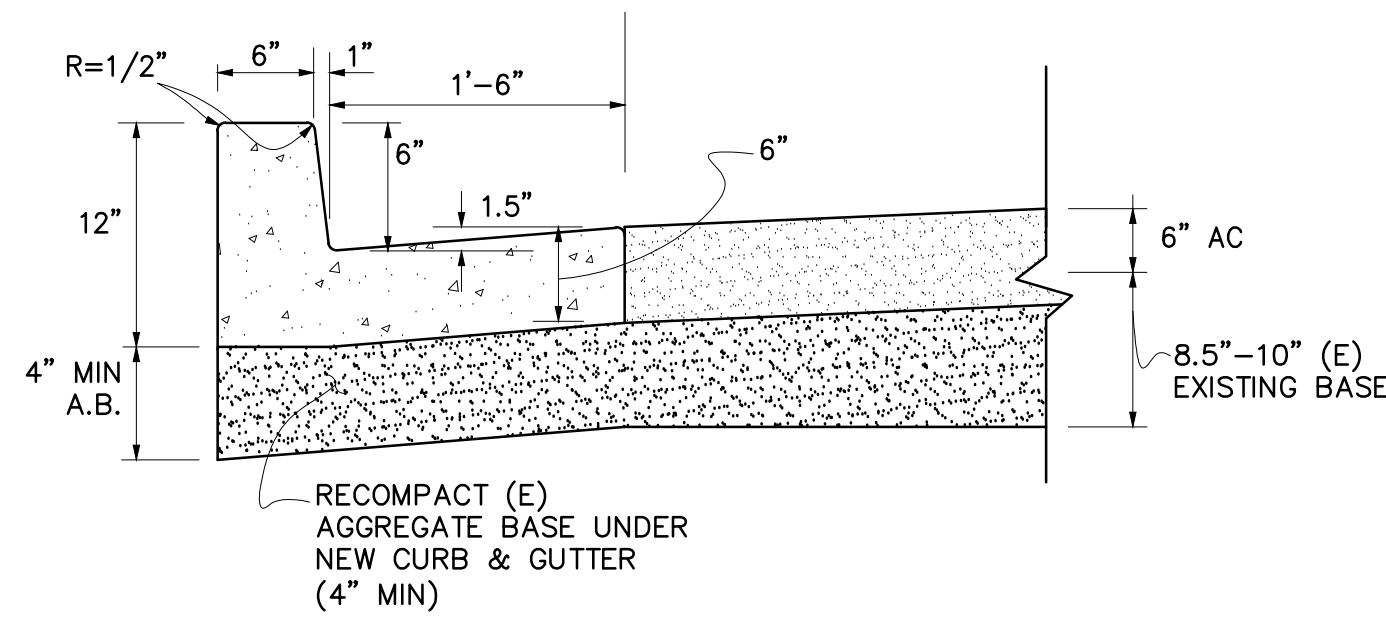


- NOTES:
- Intended for short-term use.
  - Use to inhibit non-storm water flow.
  - Allow for proper maintenance and cleanup.
  - Bags must be removed after adjacent operation is completed.
  - Not applicable in areas with high silts and clays without filter fabric.
  - INSTALL GRAVEL BAGS ON ALL SIDES OF DRAIN INLET DURING GRADING OR ROADWAY CONSTRUCTION PHASES ADJACENT TO INLET.

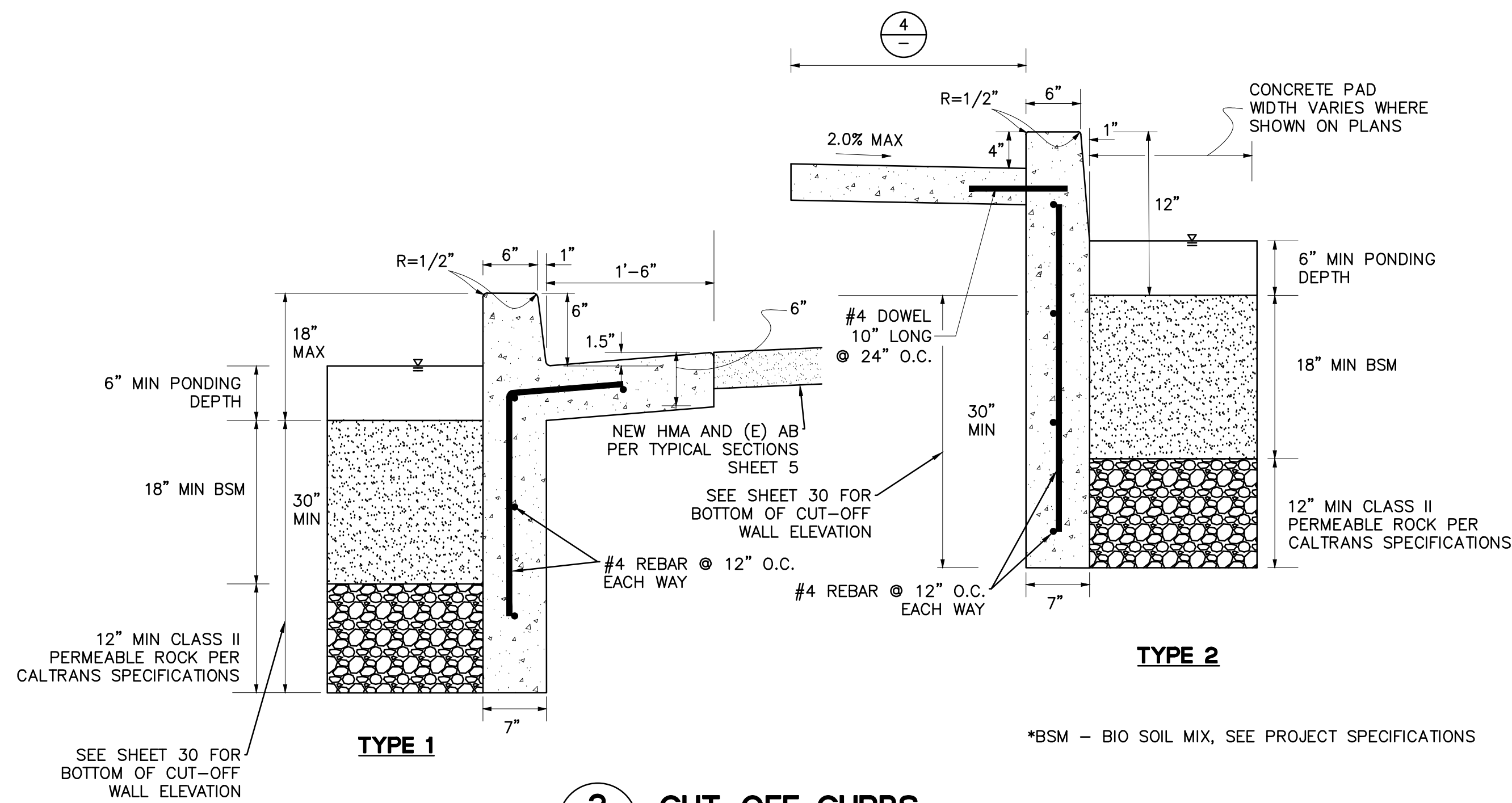
**3** SE-10 STORM DRAIN INLET PROTECTION  
 NTS



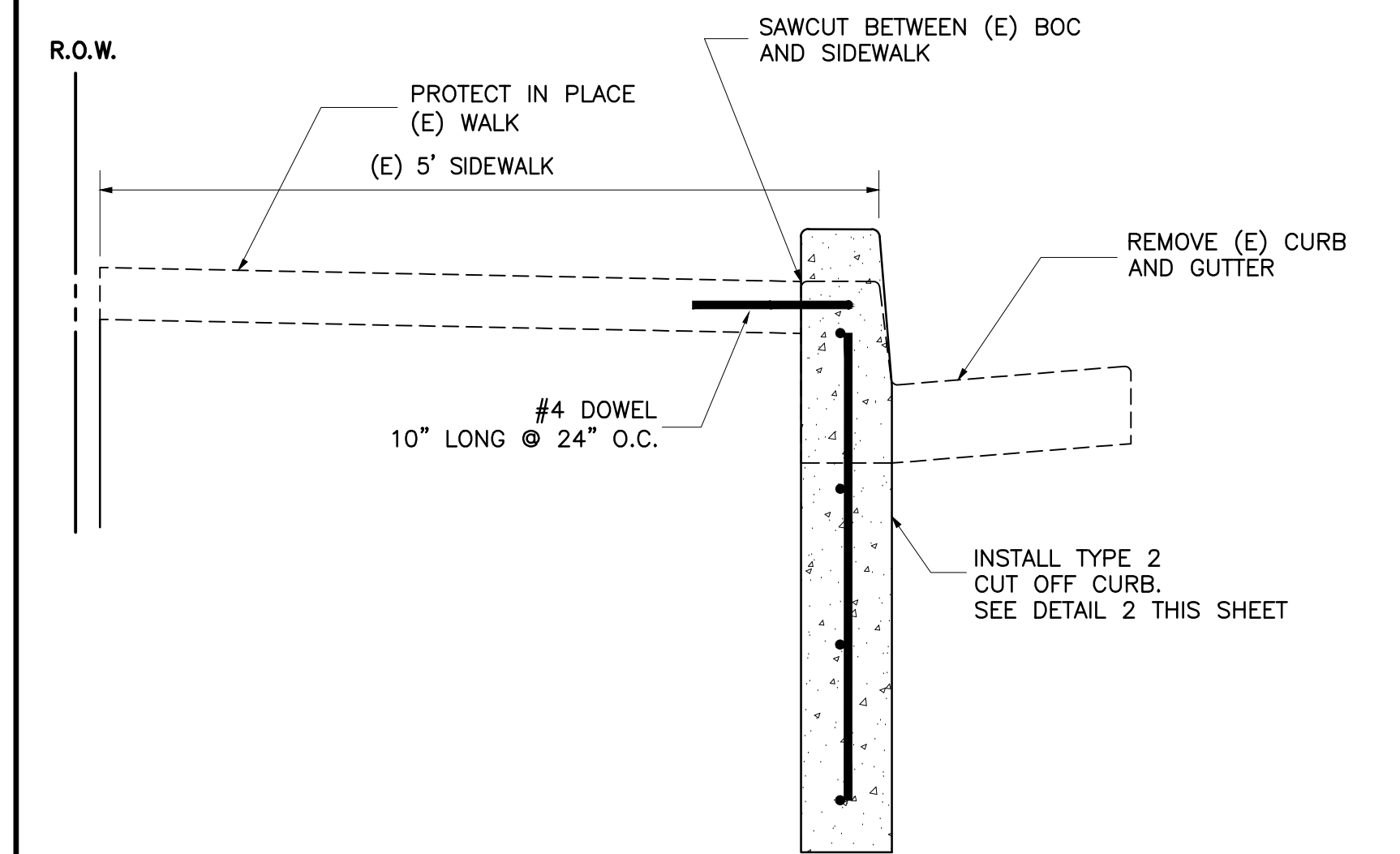




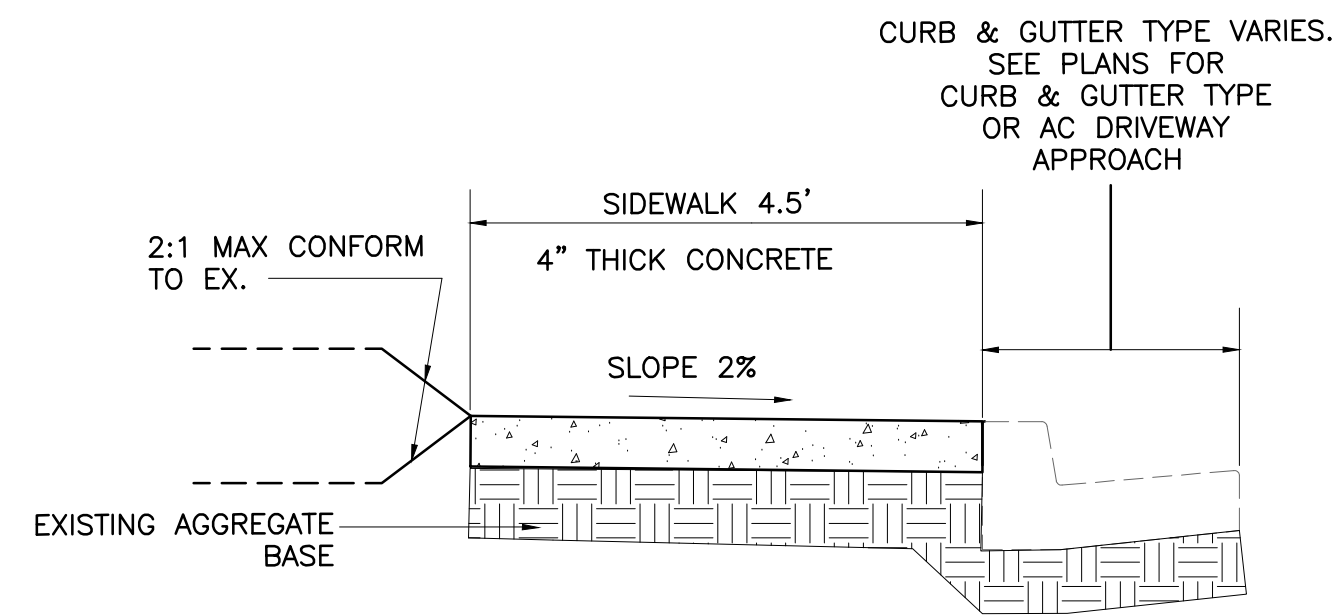
**1** STANDARD CURB AND GUTTER  
N.T.S.



**2** CUT-OFF CURBS  
N.T.S.



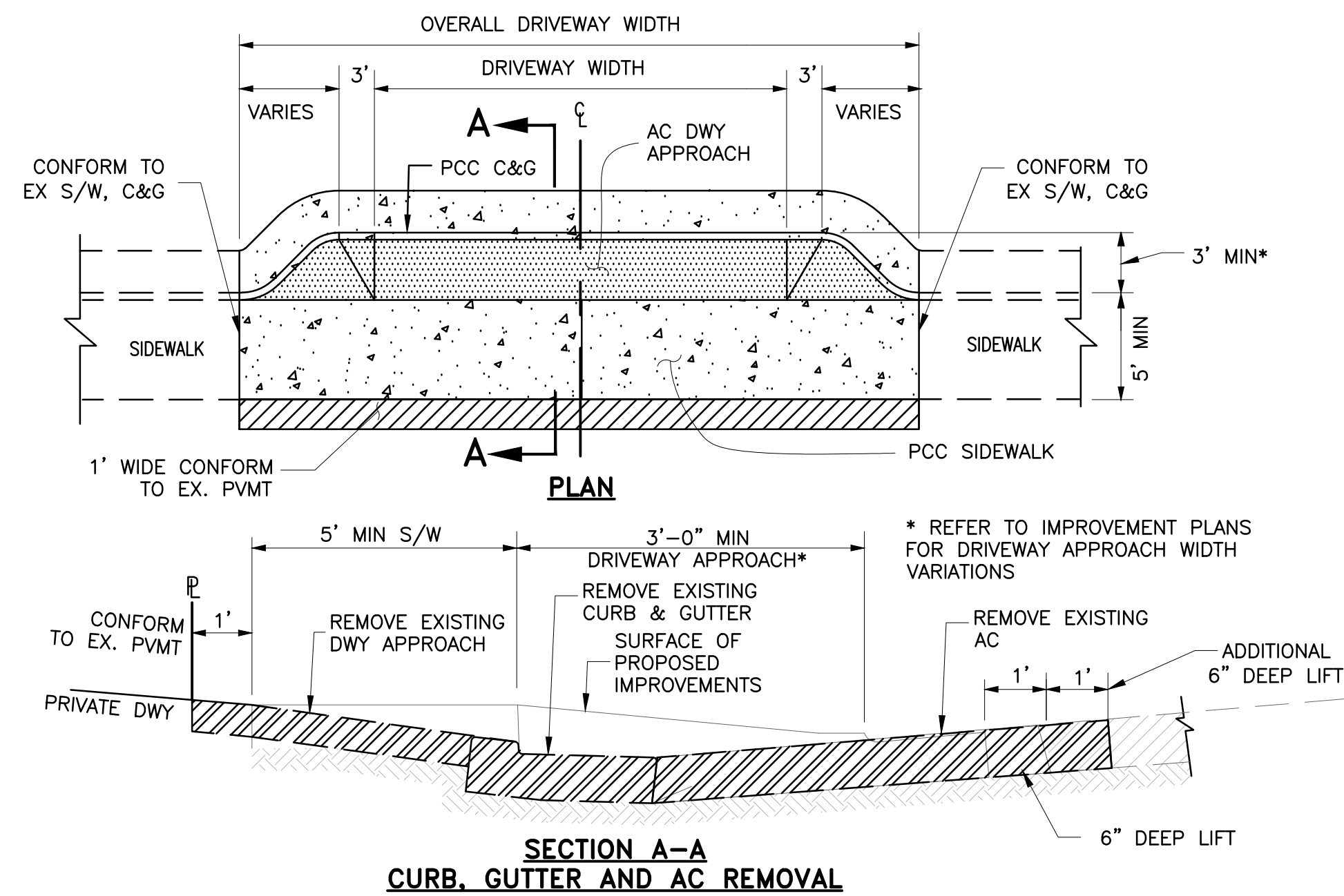
**3** NEW CONCRETE CUT-OFF CURB ADJACENT TO EXISTING SIDEWALK  
N.T.S.



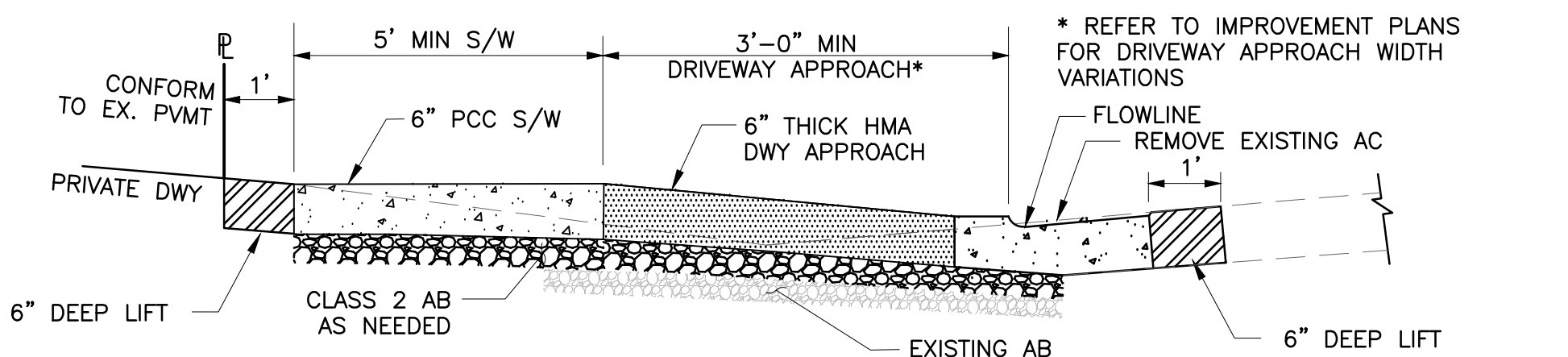
**NOTE:**  
ALL TRANSITIONS TO EXISTING 6" CURBS SHALL OCCUR OVER A LENGTH OF TEN (10) FEET.

**4** STANDARD SIDEWALK  
N.T.S.

\*SEE ADDITIONAL REQUIREMENTS PER SECTION 1.17 OF SECTION 00 73 13 "SPECIAL CONDITIONS" OF THE PROJECT SPECIFICATIONS



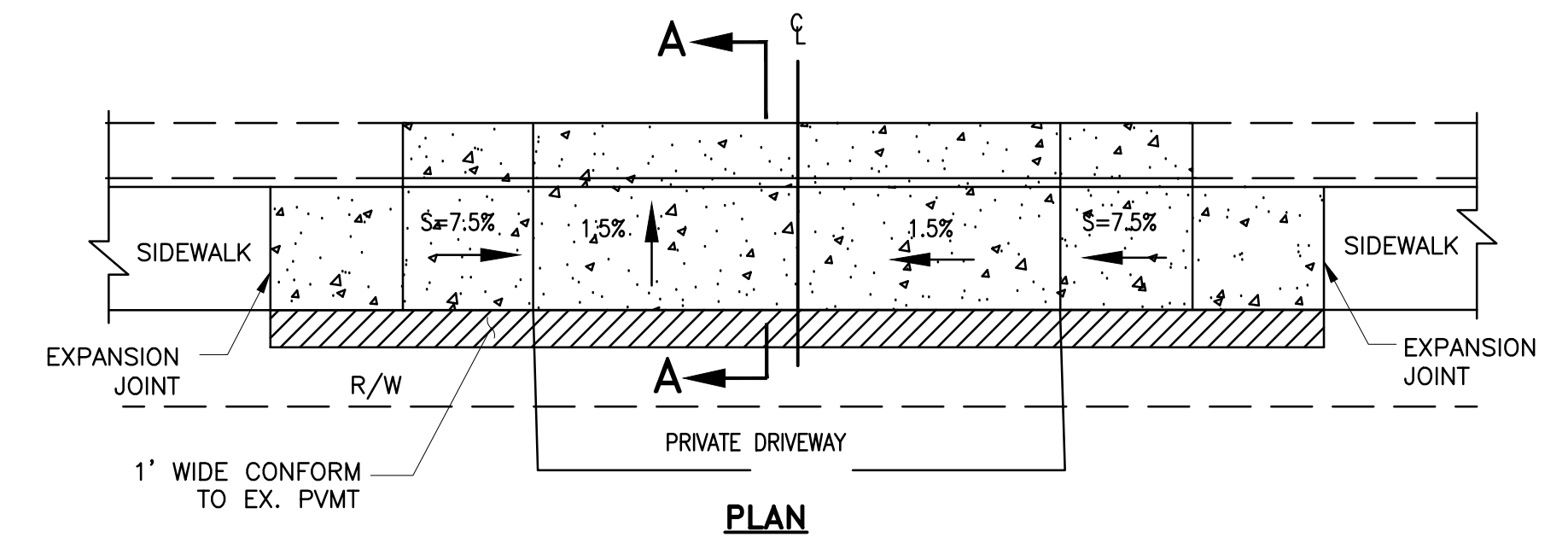
**SECTION A-A**  
CURB, GUTTER AND AC REMOVAL



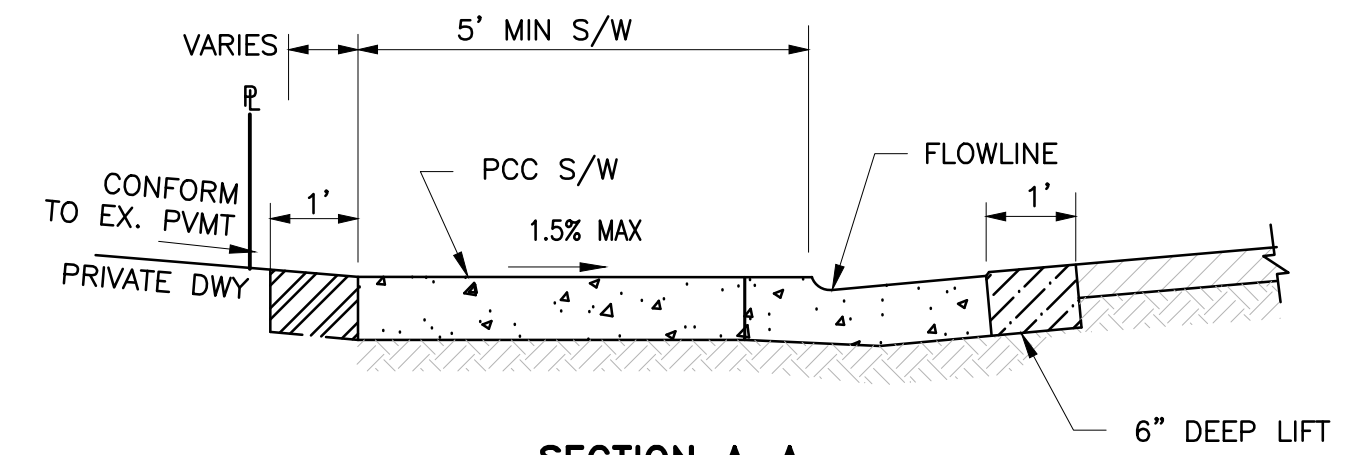
**SECTION A-A**  
PROPOSED IMPROVEMENTS

**NOTES:**  
1. SEE STANDARD CURB & GUTTER DETAIL, THIS SHEET.  
2. DRIVEWAY FLARE WIDTH:  
1.5' FOR RESIDENTIAL  
3.0' FOR COMMERCIAL & INDUSTRIAL  
3. 6" THICK PCC SIDEWALK SHALL BE CONSTRUCTED AT DRIVEWAY APPROACHES ONLY. PCC SIDEWALK AT ALL OTHER LOCATIONS SHALL BE 4" THICK.

**5** DRIVEWAY APPROACH TYPICAL DETAIL  
N.T.S.



**PLAN**

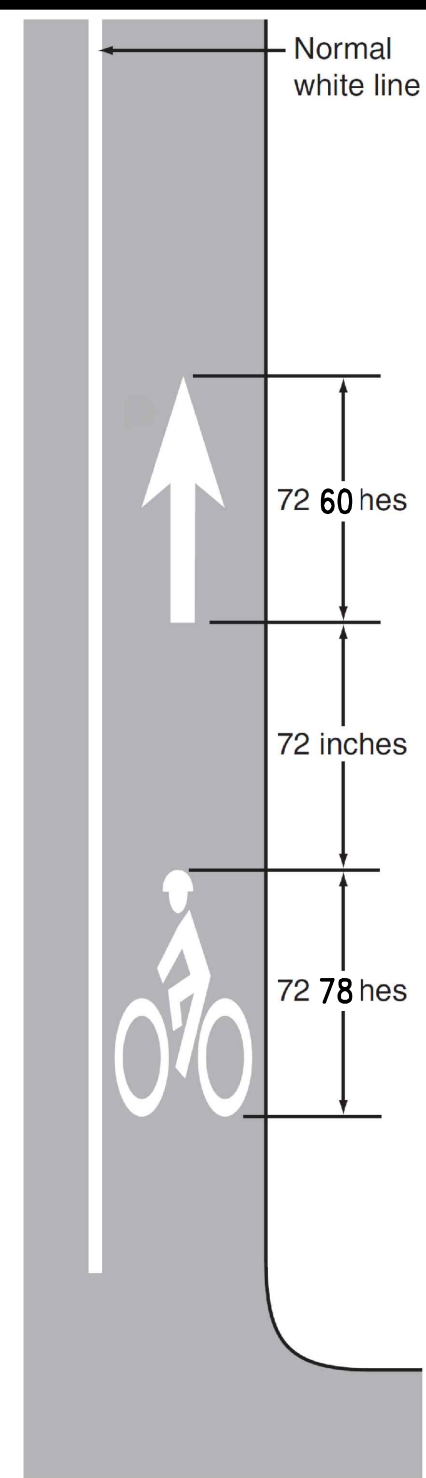


**SECTION A-A**

**NOTES:**  
1. SEE STANDARD CURB & GUTTER DETAIL, THIS SHEET.  
2. DRIVEWAY FLARE WIDTH:  
1.5' FOR RESIDENTIAL  
3.0' FOR COMMERCIAL & INDUSTRIAL

**6** ADA DRIVEWAY DETAIL  
N.T.S.

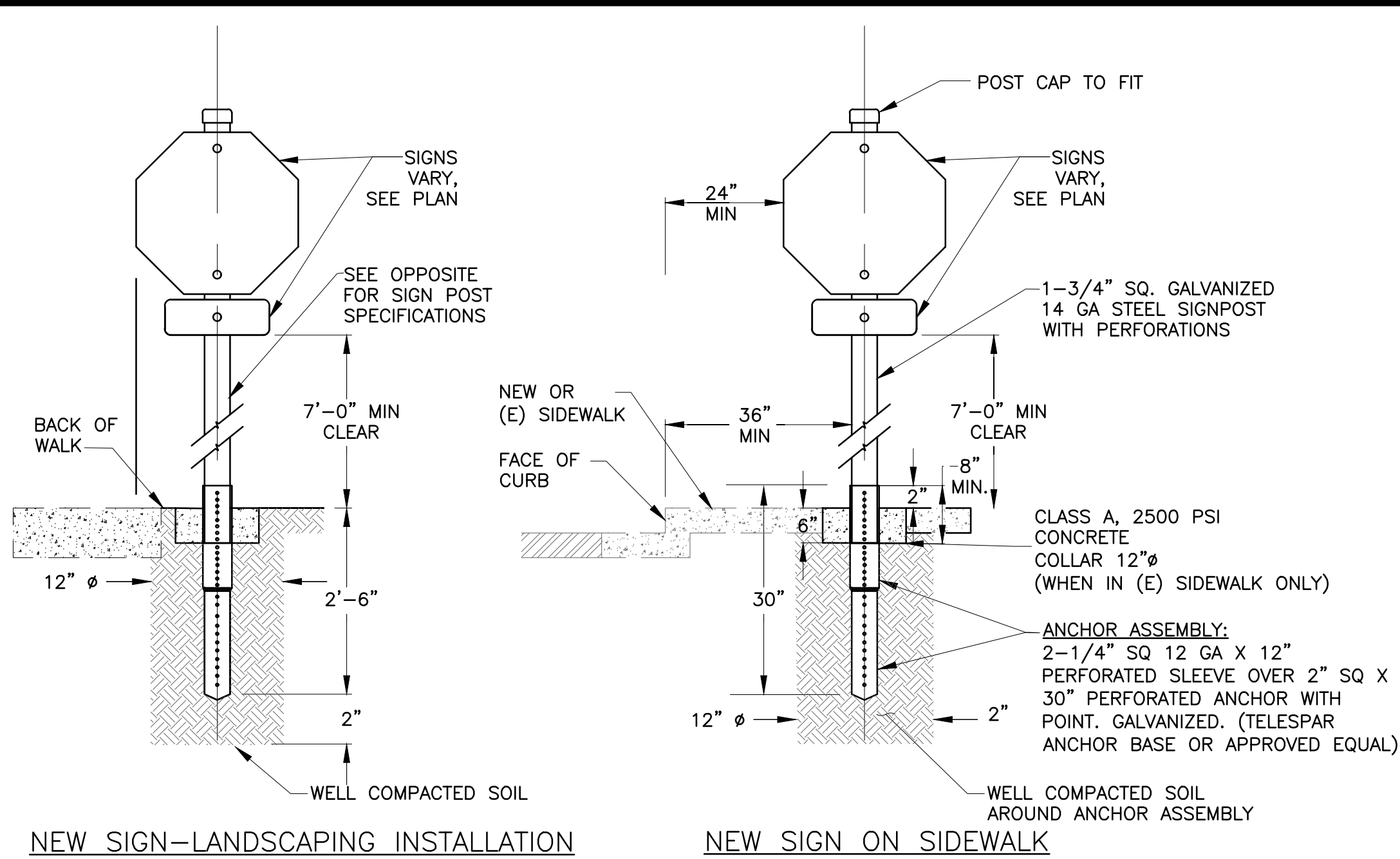
DATE	
REVISIONS	
NO.	
DESIGNED: SH/LL	
DRAWN: SK/SLM	
APPROVED:	
PREPARED BY:	CSG CONSULTANTS
550 Pilgrim Drive	
Foster City, CA 94404	
Phone: (650) 922-2500	
Fax: (650) 522-2599	
PREPARED FOR:	TOWN OF COLMA
	1198 EL CAMINO REAL
	COLMA, CA 94014
TITLE:	DETAILS
	MISSION ROAD
	BICYCLE & PEDESTRIAN IMPROVEMENTS PROJECT
SHEET 25	
OF 43	
DATE: 4/17/20	
JOB#: 18.393	
4/22/20	
BID SET	



**NOTES:**

- HELMETED BICYCLE LEGEND PER CALTRANS STANDARD PLAN RSP A24C. - 7 S.F. WHITE PAINT
- BIKE LANE ARROW LEGEND PER CALTRANS STANDARD PLAN RSP A24A. - 7 S.F. WHITE PAINT
- ALL STRIPING AND MARKINGS FOR THE BIKE LANE SHALL BE PAINT, NOT THERMOPLASTIC.

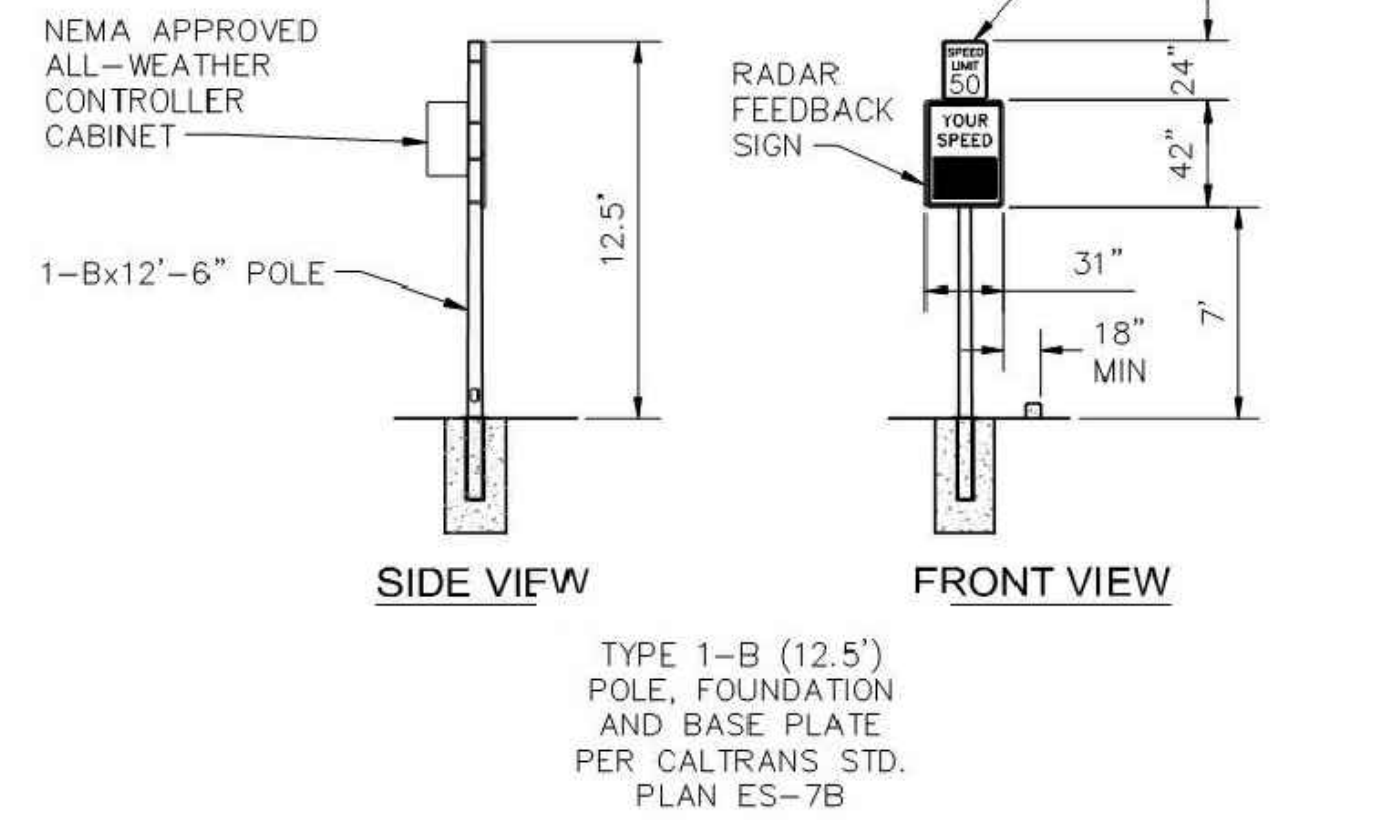
**1 TYPICAL HELMETED BICYCLIST MARKING**  
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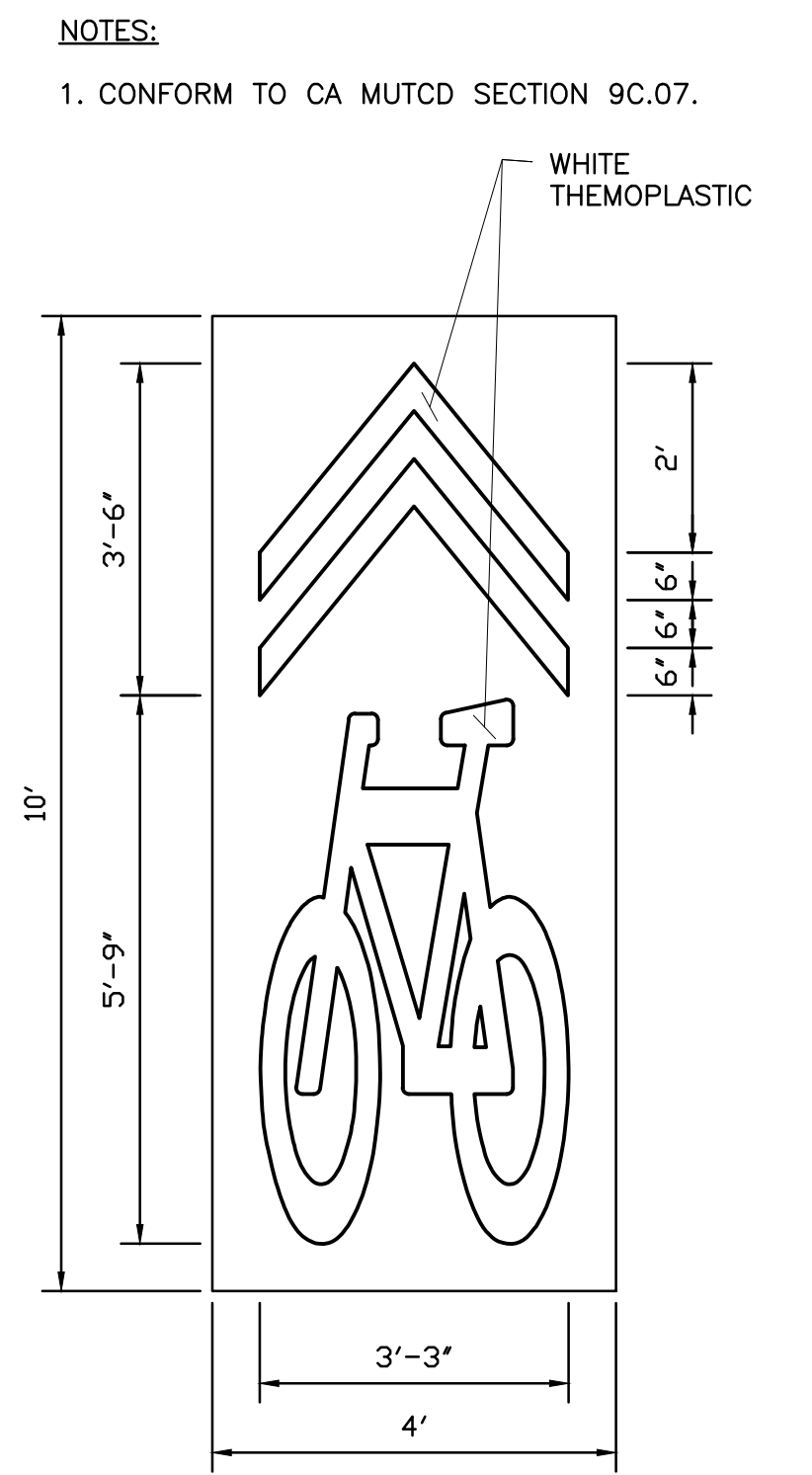
**NOTES:**

- SIGNS SHALL COMPLY WITH LATEST CALIFORNIA MUTCD.
- POST AND BASE FOR THE SIGN SHALL CONFORM TO THE SPECIFICATIONS.
- SIGNS SHALL BE INSTALLED WITH STRAIGHT BOLTS FOR CONVENTIONAL SIGN INSTALLATION AND SQUARE POST SYSTEM CORNER-BOLTS FOR BACK TO BACK INSTALLATION, IF REQUIRED.

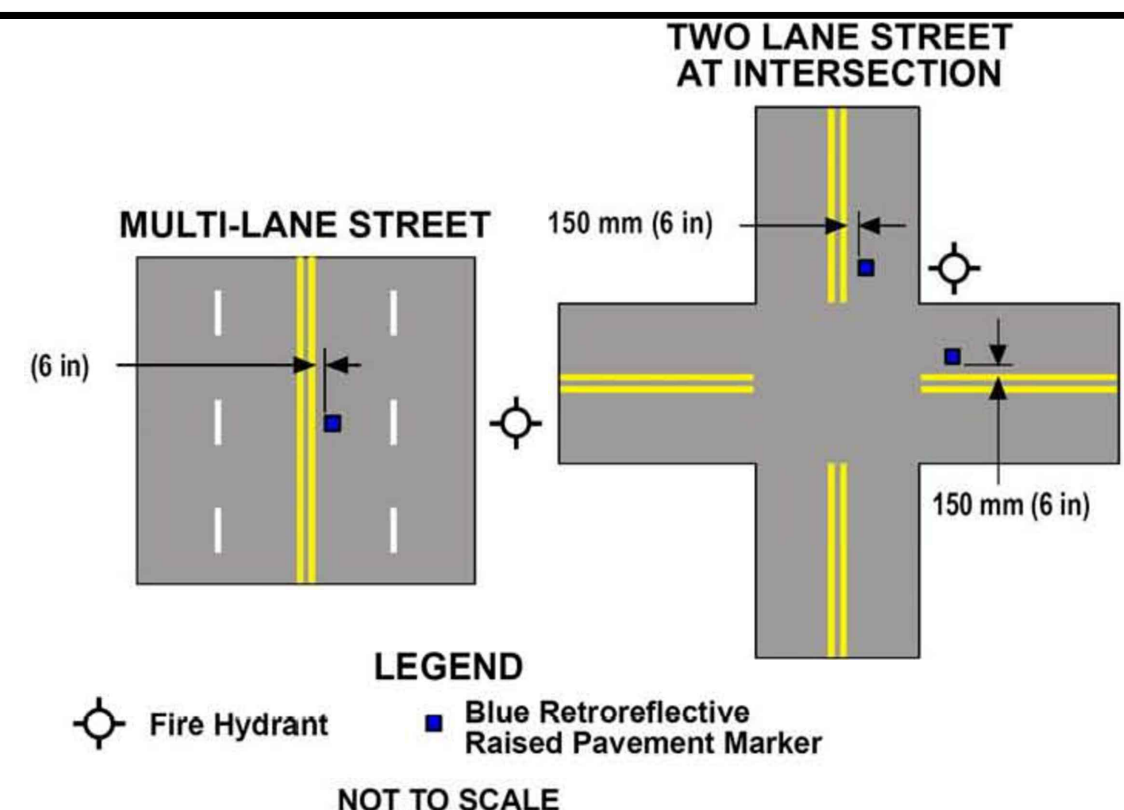
**2 SIGN POST DETAIL**  
N.T.S.



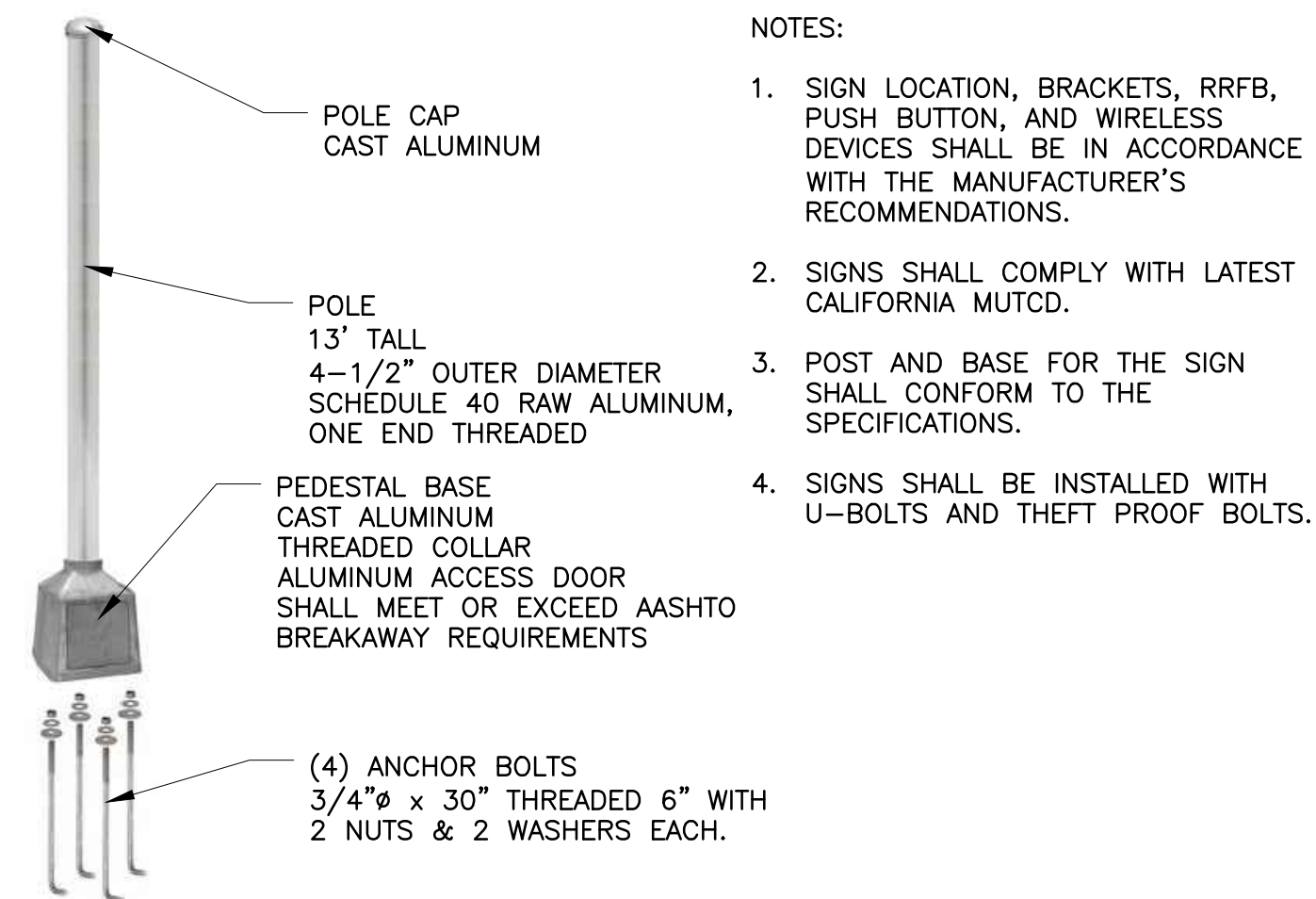
**3 RADAR FEEDBACK SIGN DETAIL**  
N.T.S.



**4 SHARED ROADWAY BICYCLE MARKING**  
N.T.S.



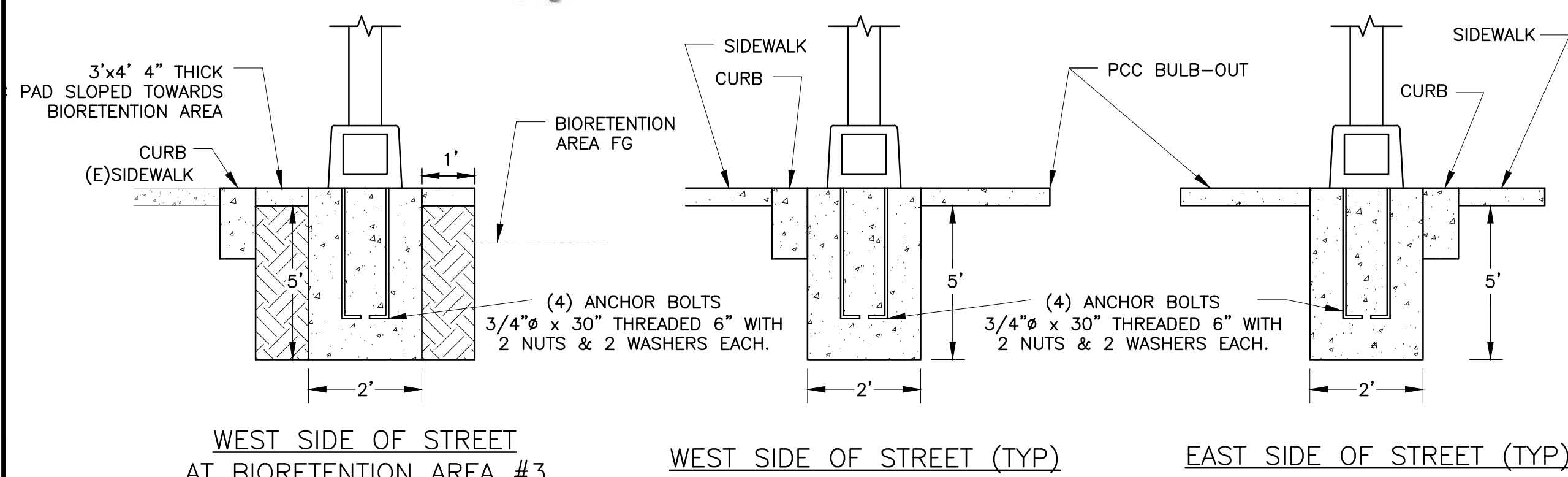
**8 BLUE MARKER LOCATIONS**  
N.T.S.



**NOTES:**

- SIGN LOCATION, BRACKETS, RRFB, PUSH BUTTON, AND WIRELESS DEVICES SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- SIGNS SHALL COMPLY WITH LATEST CALIFORNIA MUTCD.
- POST AND BASE FOR THE SIGN SHALL CONFORM TO THE SPECIFICATIONS.
- SIGNS SHALL BE INSTALLED WITH U-BOLTS AND THEFT PROOF BOLTS.

**6 RRFB POST & FOUNDATION**  
N.T.S.

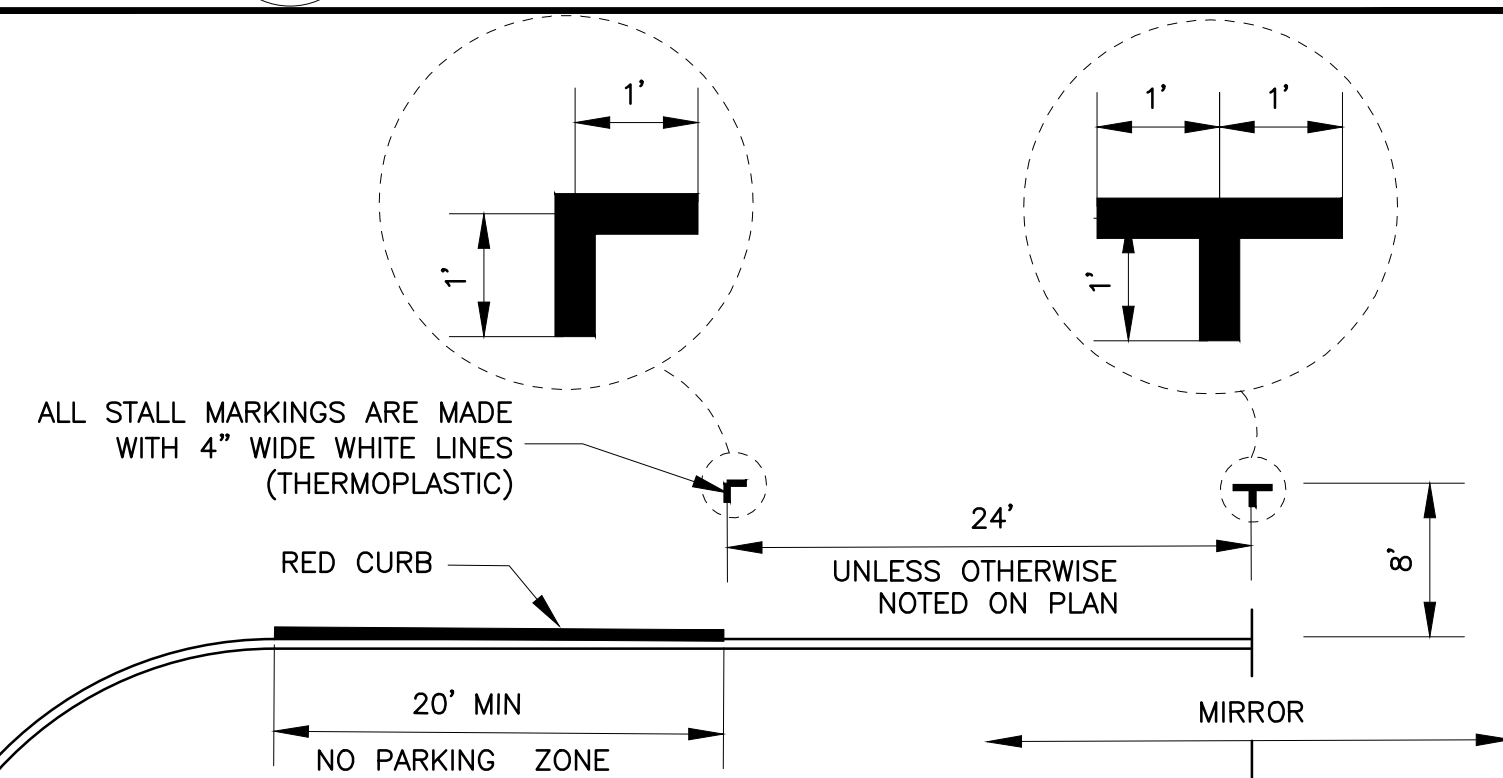


**WEST SIDE OF STREET AT BIORETENTION AREA #3**

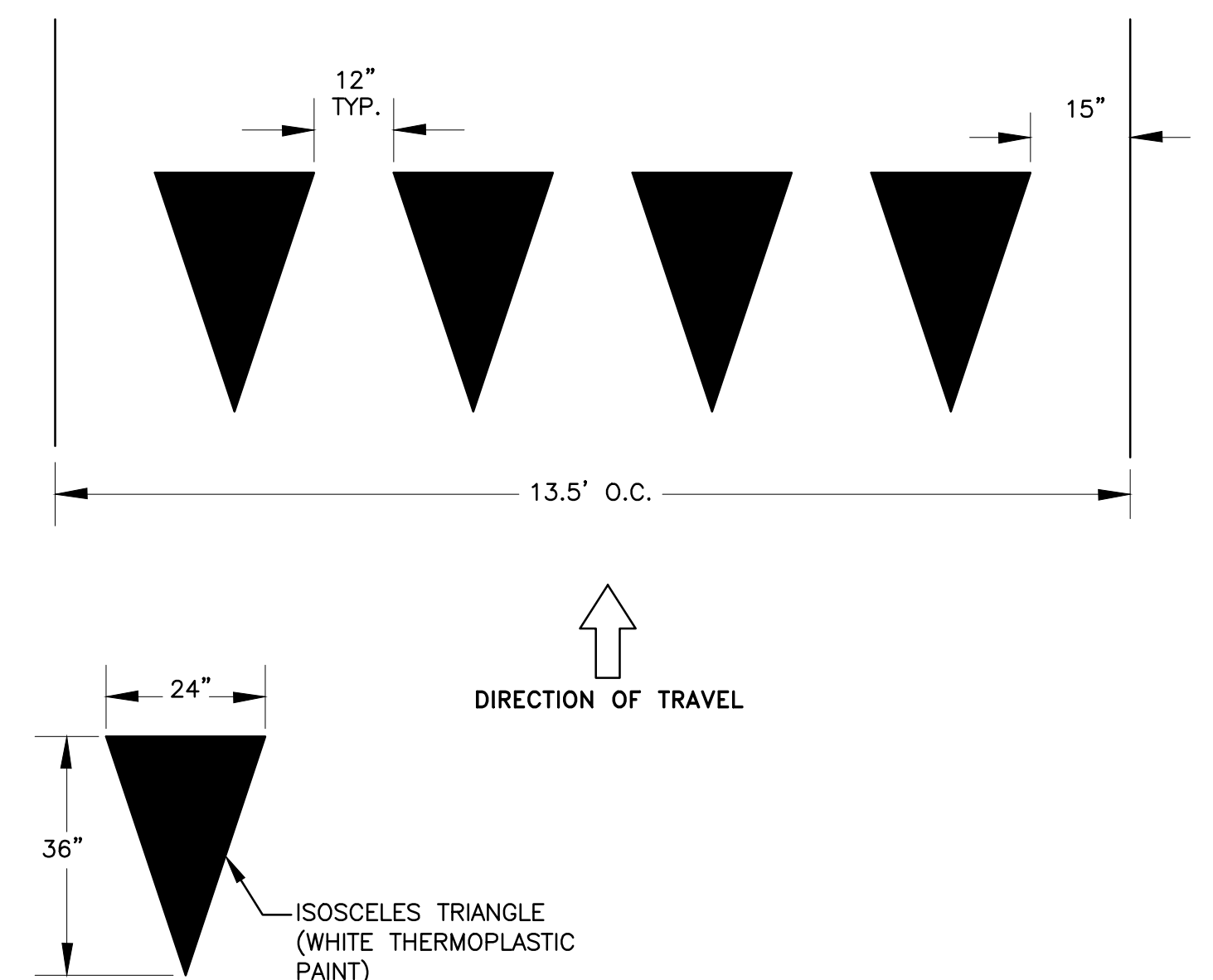
**WEST SIDE OF STREET (TYP)**

**EAST SIDE OF STREET (TYP)**

**6 RRFB POST & FOUNDATION**  
N.T.S.



**5 TYPICAL PARKING SPACE MARKINGS & DIMENSIONS**  
N.T.S.

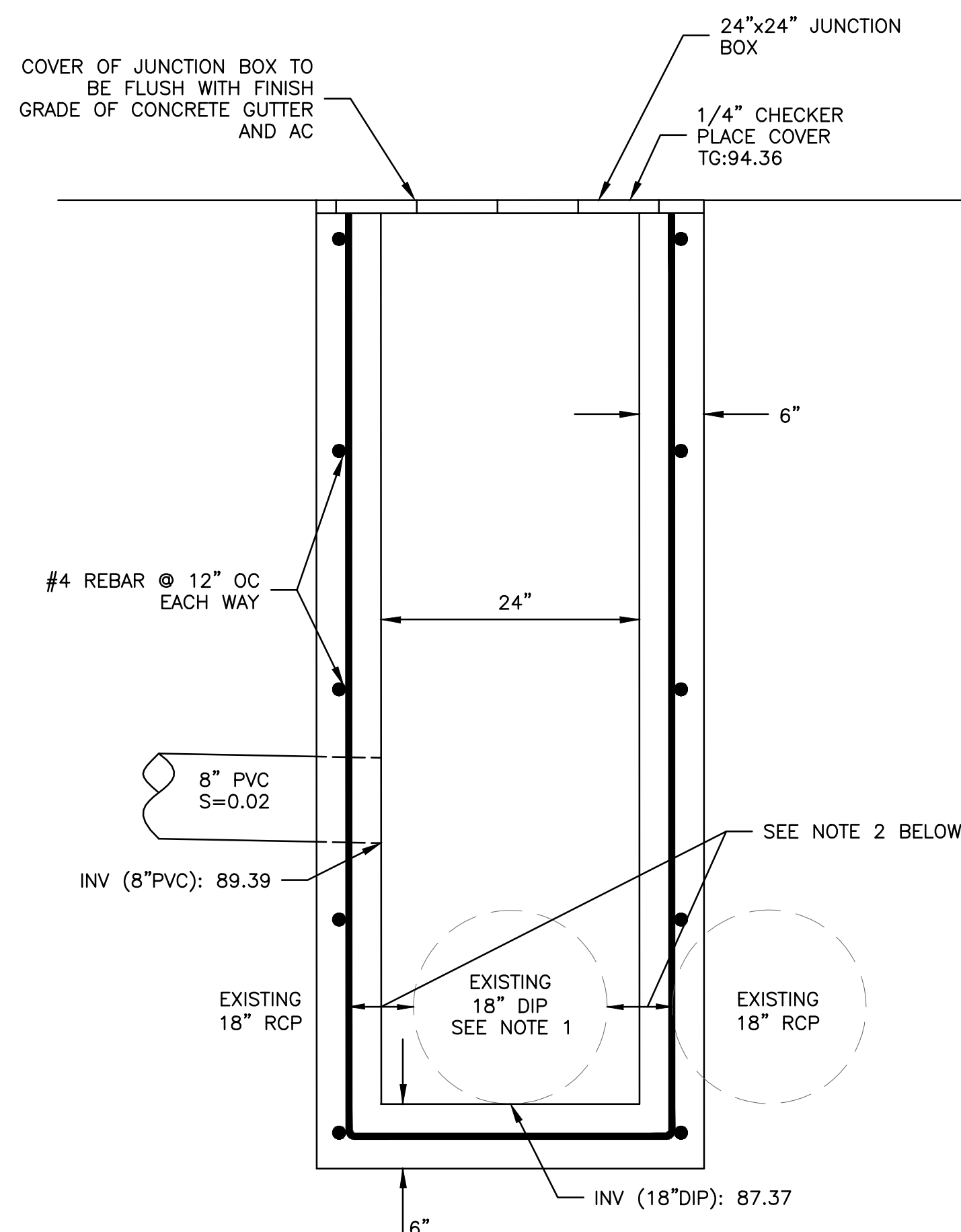
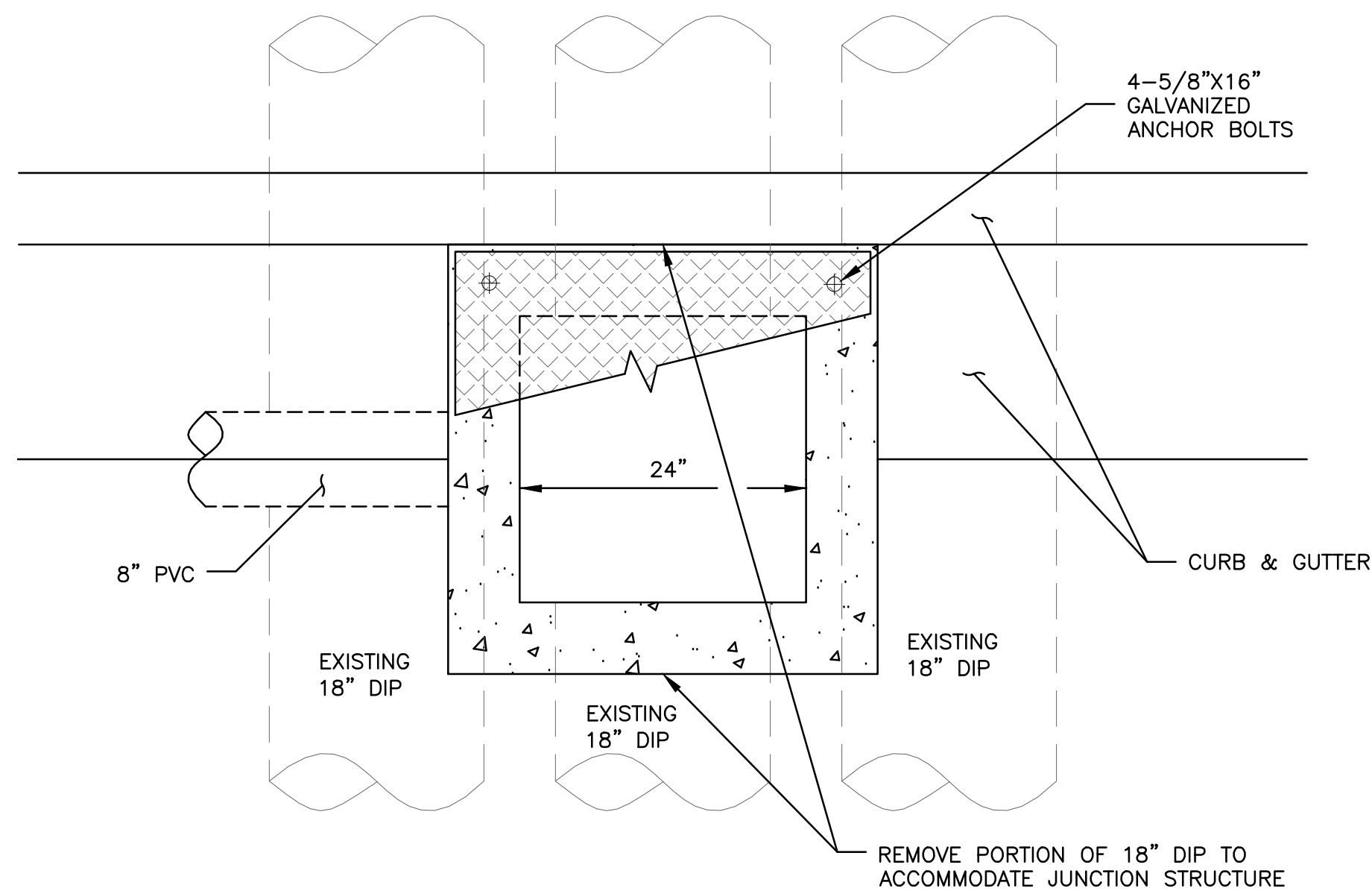


**7 YIELD LINE LAYOUT**  
N.T.S.

DATE	
REVISIONS	
NO.	
DESIGNED: SH/LL	
DRAWN: SK/SLM	
APPROVED:	
<b>PREPARED BY: CSG CONSULTANTS</b> 550 Pilgrim Drive Foster City, CA 94404 Phone: (650)522-2500 Fax: (650)522-2599	
<b>PREPARED FOR:</b> TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA 94014	
<b>TITLE:</b> DETAILS MISSION ROAD BICYCLE & PEDESTRIAN IMPROVEMENTS PROJECT	
<b>SHEET 26 OF 43</b>	
DATE: 4/17/20 JOB#: 18.393	
4/22/20 BID SET	

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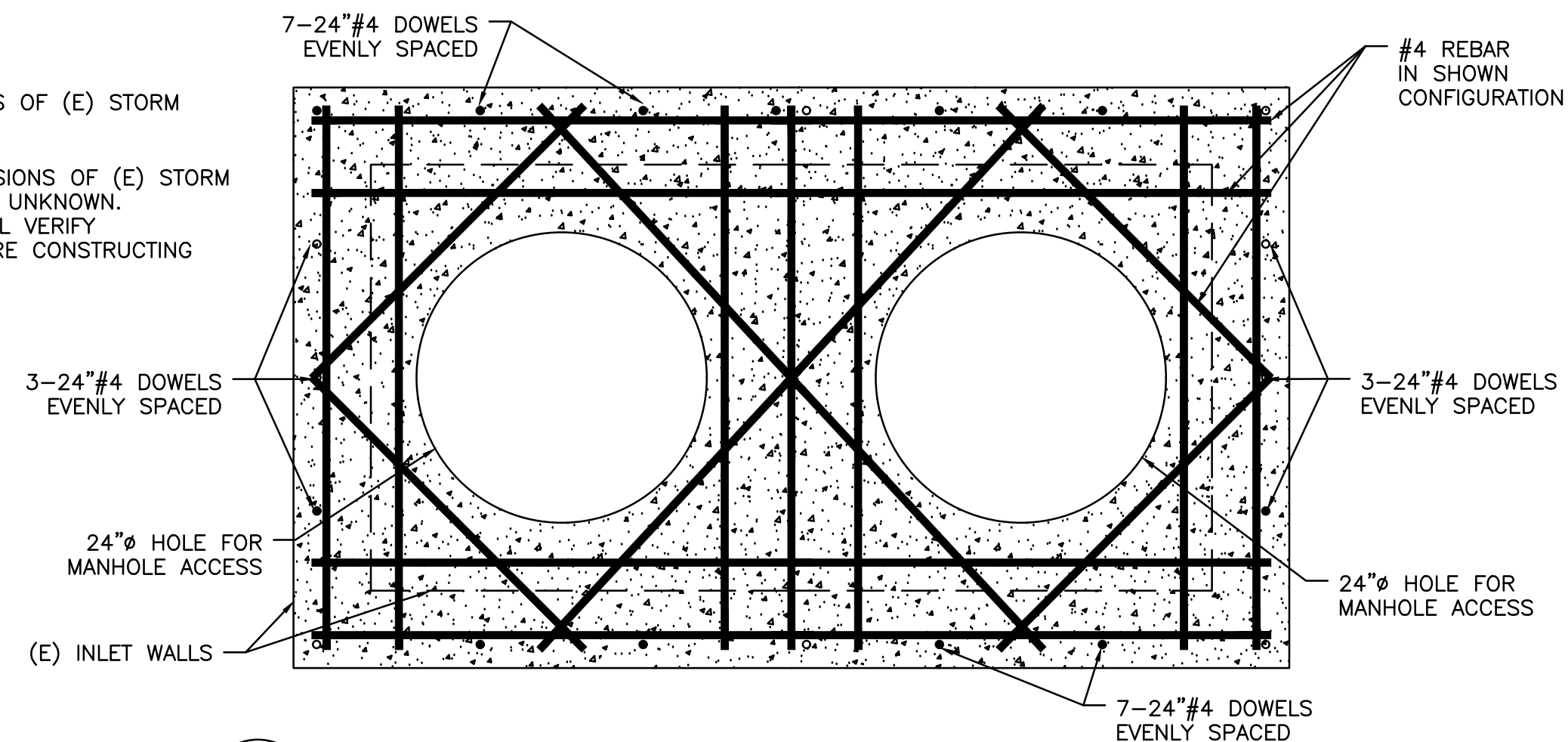


- NOTES:**
- OVERFLOW STRUCTURE SHALL BE A CAST-IN-PLACE STRUCTURE IN-LINE WITH EXISTING 18" DIP. REMOVE PORTION OF EXISTING 18" DIP SD TO ACCOMMODATE PROPOSED STRUCTURE. GROUT ANNULAR SPACE AT CONNECTION OF EXISTING PIPE TO NEW STRUCTURE.
  - CONTRACTOR SHALL VERIFY THE CLEARANCE BETWEEN THE EXISTING 18" DIP SD LINES. OVERFLOW STRUCTURE SHALL BE CAST-IN-PLACE ADJACENT THE EXISTING 18" DIP SD PIPES TO REMAIN.

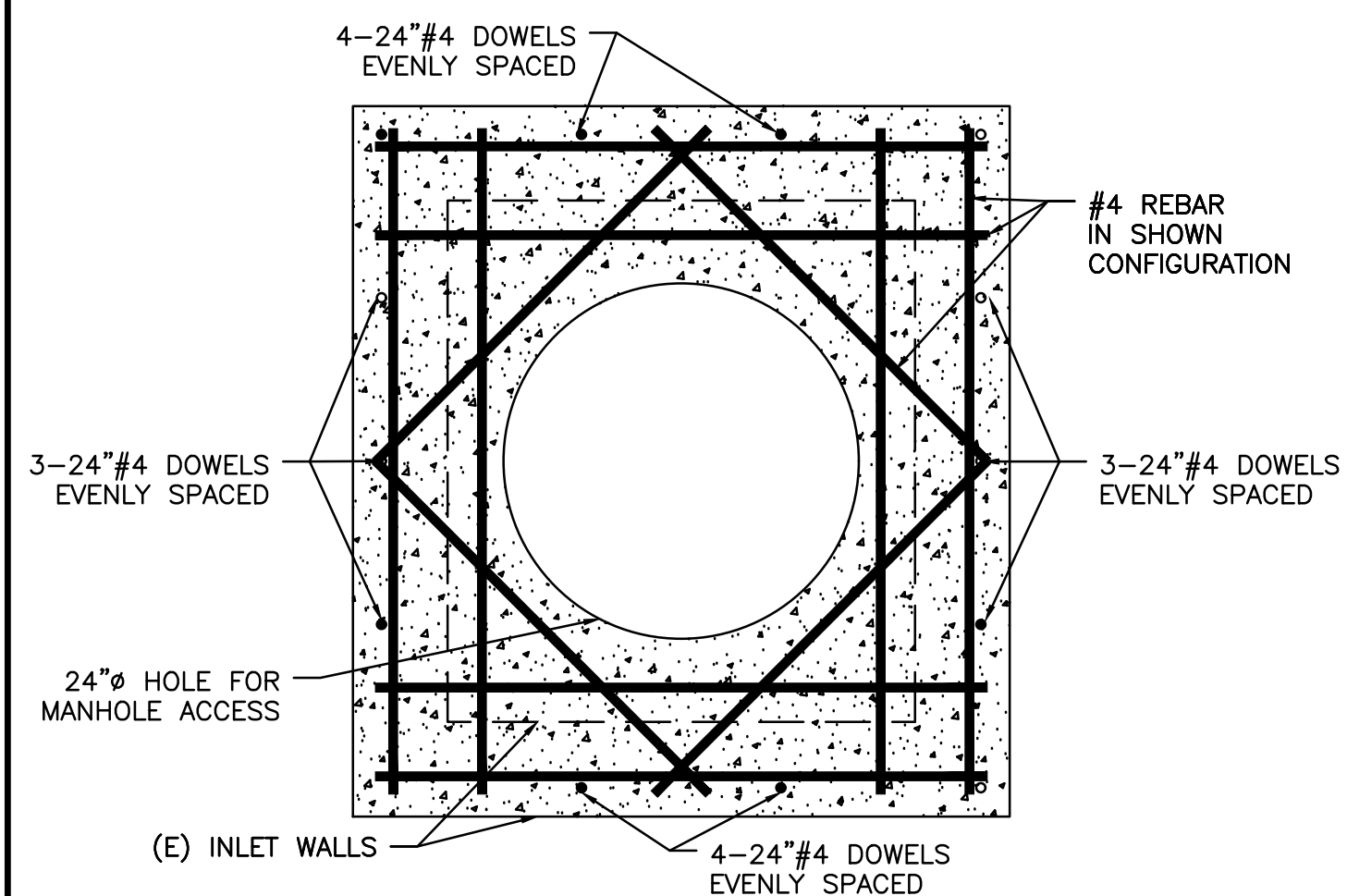
**1**  
- **JUNCTION BOX  
OVER EXISTING PIPE  
STA 12+85.95  
N.T.S.**

**NOTES:**

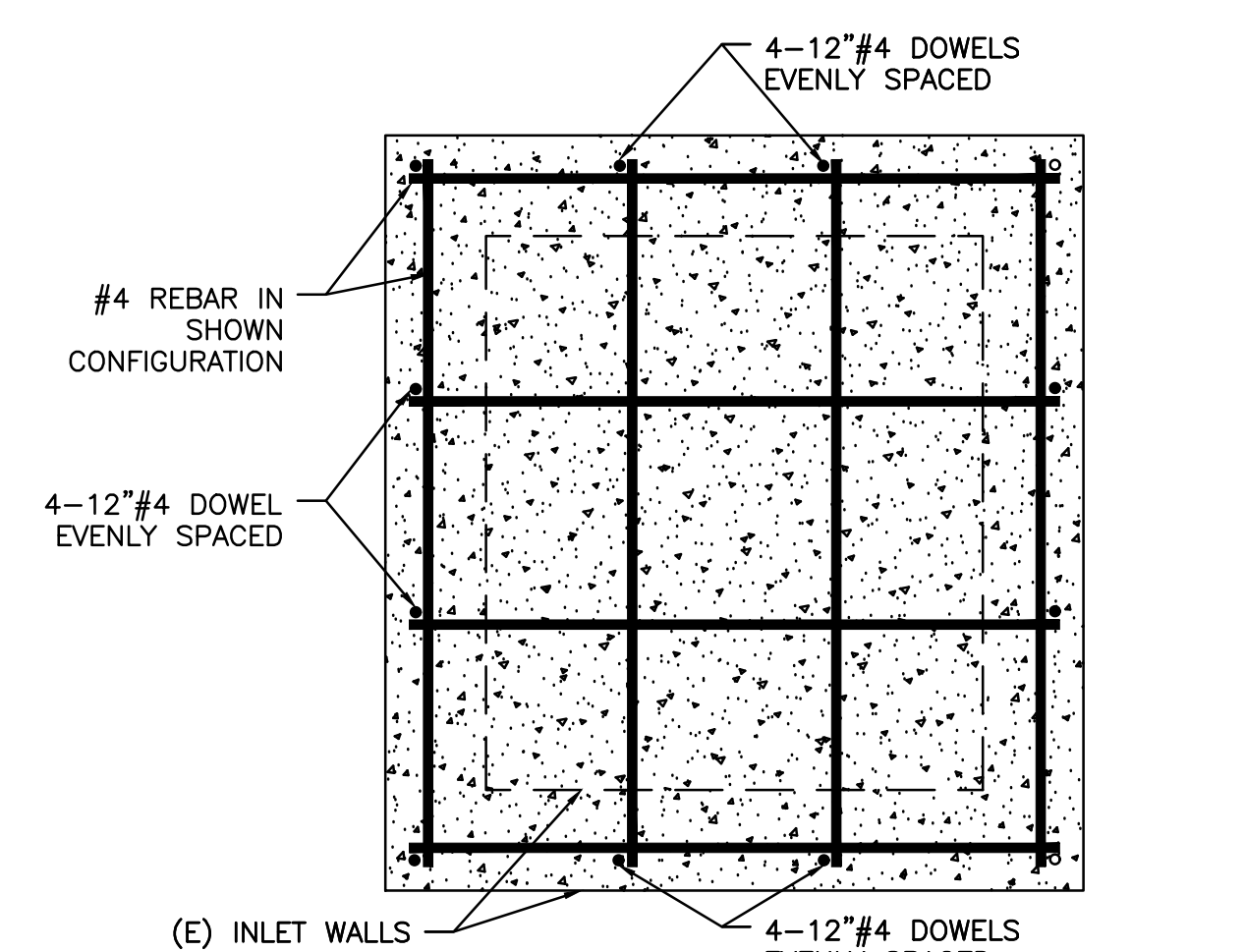
- DOWEL INTO WALLS OF (E) STORM DRAIN INLET.
- THE EXACT DIMENSIONS OF (E) STORM DRAIN INLETS ARE UNKNOWN. CONTRACTOR SHALL VERIFY DIMENSIONS BEFORE CONSTRUCTING SLAB COVER.



**2**  
- **SLAB COVER FOR INLET MODIFICATION  
WITH MANHOLE OPENING - DOUBLE  
N.T.S.**



**3**  
- **SLAB COVER FOR INLET MODIFICATION  
WITH MANHOLE OPENING - SINGLE  
N.T.S.**

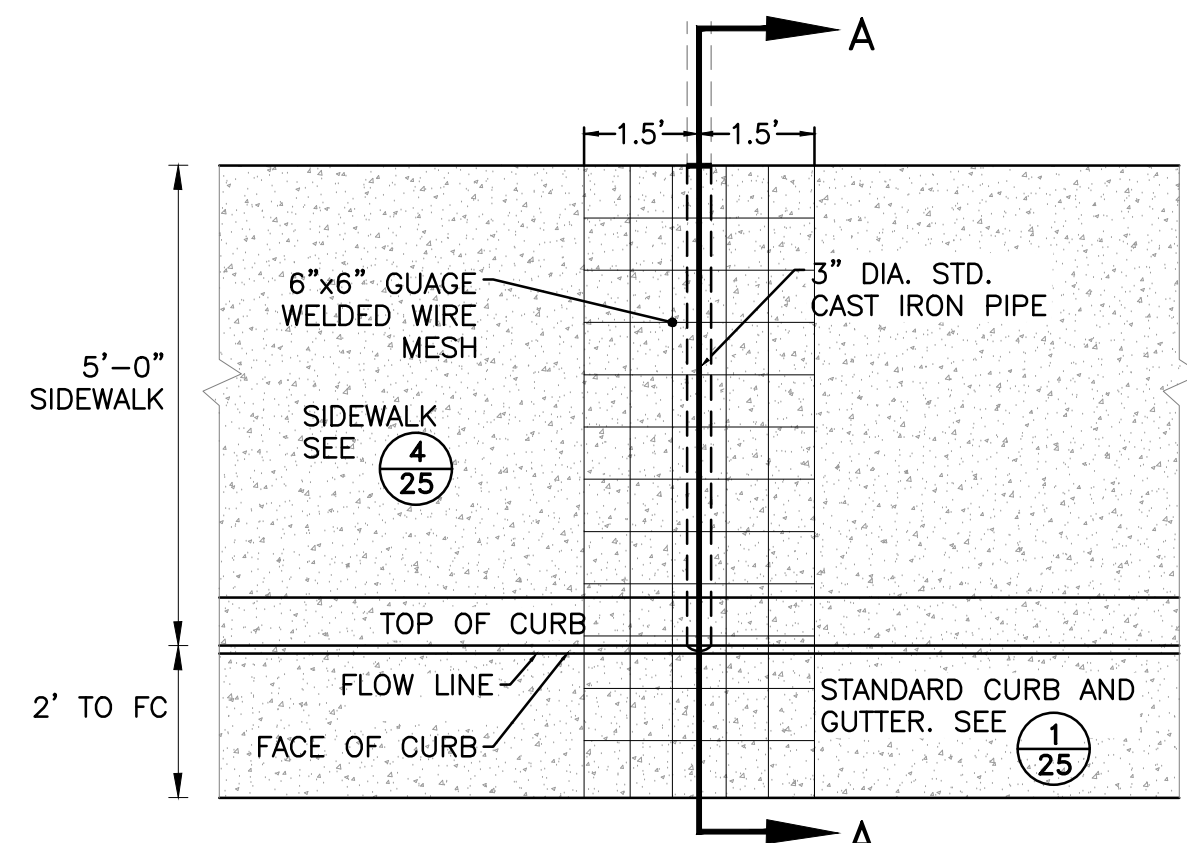


**4**  
- **SLAB COVER FOR INLET MODIFICATION  
WITHOUT MANHOLE OPENING  
N.T.S.**

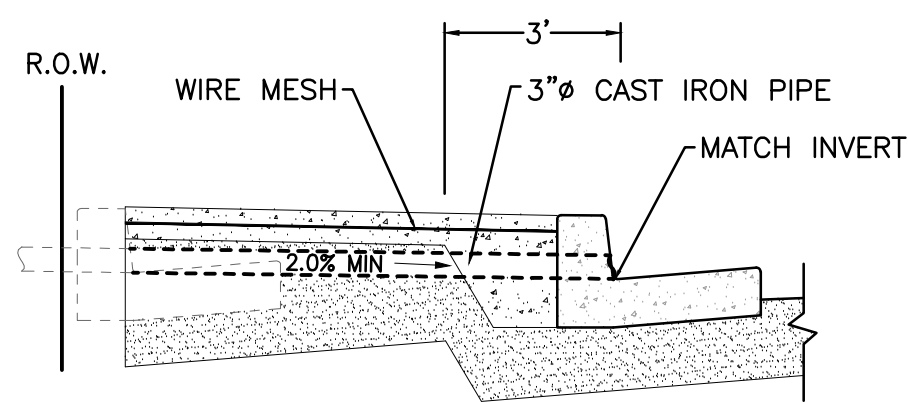
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Plotted on: 03/19/20 @ 07:01:13 PM

DATE	
REVISIONS	
NO.	
DESIGNED: SH/LL	
DRAWN: SK/CM	
APPROVED:	
PREPARED BY:	CSG CONSULTANTS
	550 Pilgrim Drive Foster City, CA 94404 Phone: (650) 622-2500 Fax: (650) 522-2599
PREPARED FOR:	TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA 94014
TITLE:	DETAILS MISSION ROAD BICYCLE & PEDESTRIAN IMPROVEMENTS PROJECT
SHEET 28	
OF 43	
DATE: 4/17/20	
JOB#: 18-393	
4/22/20	
BID SET	



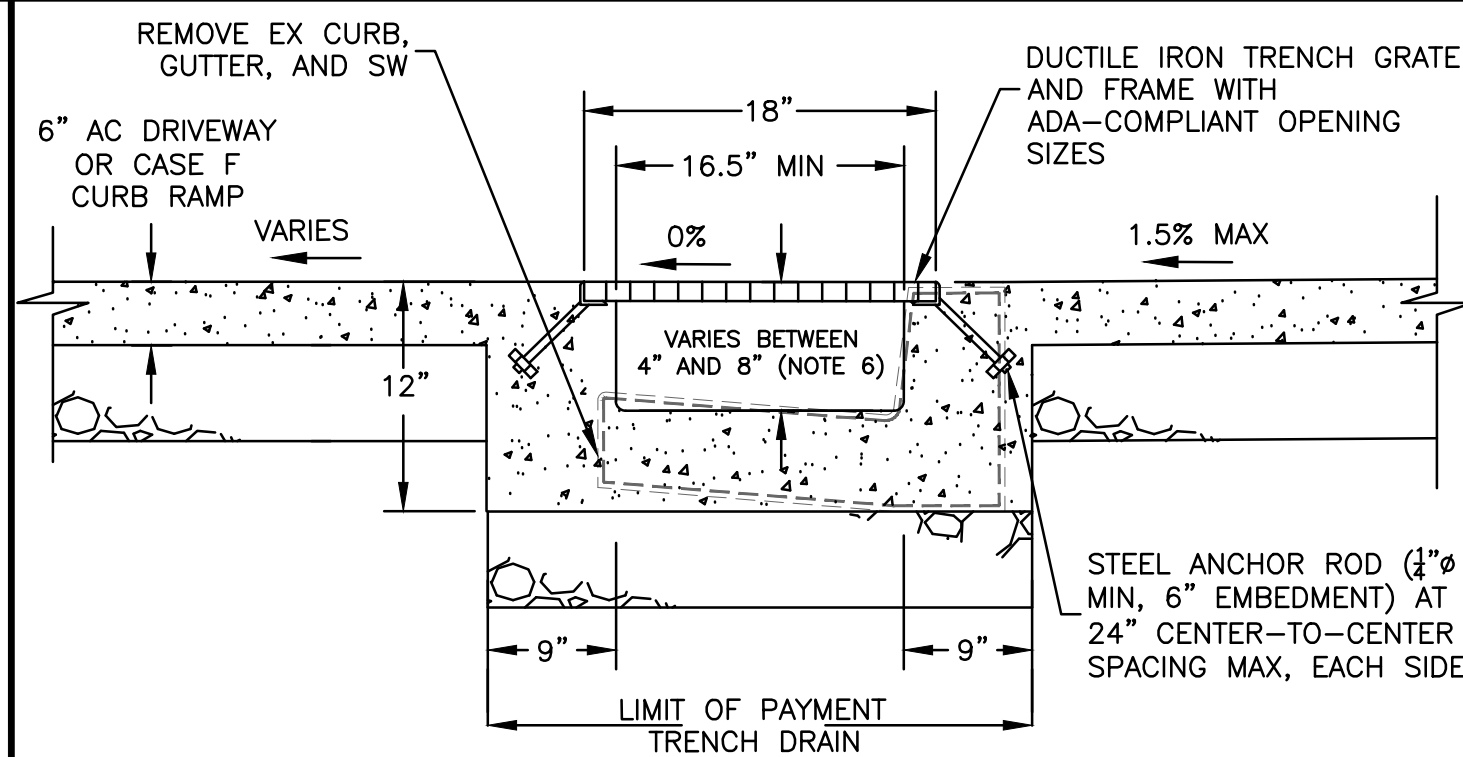
PLAN



SECTION A-A

\*PLACE PIPE OUTLET WITH I.E. ABOVE FLOW LINE BUT MAINTAIN MIN. 2% SLOPE FOR PIPE

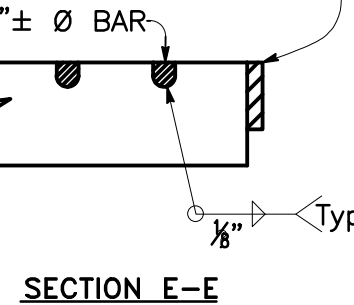
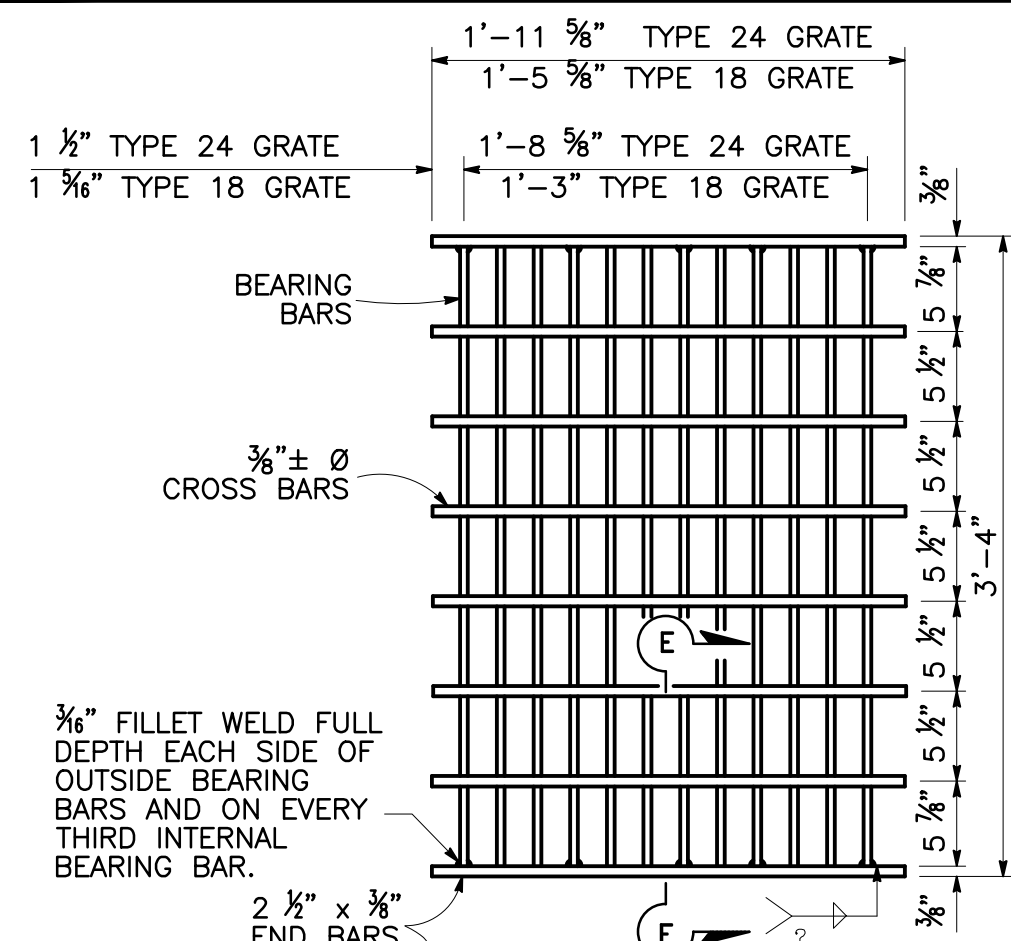
1 CURB DRAIN EXTENSION  
N.T.S.



TRENCH DRAIN NOTES:

1. NOMINAL DIMENSIONS SHOWN. ALLOWABLE TOLERANCE  $\pm 2\%$ .
2. WITHIN PEDESTRIAN PATHS OF TRAVEL, THE MAXIMUM GRATE OPENING IN THE DIRECTION OF PEDESTRIAN TRAFFIC SHALL BE  $1/4"$ . GRATE SHALL BE ADA COMPLIANT AND HEEL PROOF.
3. GRATE PATTERNS MAY VARY FROM DETAIL SHOWN. SEE PROJECT SPECIFICATIONS FOR REQUIREMENTS. CONTRACTOR SHALL OBTAIN APPROVAL FOR GRATE DESIGN WITH TOWN PRIOR TO ORDERING.
4. CONTRACTOR TO FURNISH SHOP DRAWINGS FOR TRENCH DRAIN FOR REVIEW AND APPROVAL BY ENGINEER.
5.  $1/4"$  MAXIMUM GAP BETWEEN ADJACENT GRATINGS.
6. MAINTAIN CONSISTENT SLOPE ALONG TRENCH DRAIN FLOWLINE ACROSS LENGTH. VARY TRENCH DRAIN HEIGHT AS NECESSARY TO MATCH SIDEWALK/TOP OF GRATE ELEVATIONS PER PLAN. HEIGHT MAY VARY BY UP TO 2" OVER THE LENGTH OF THE TRENCH DRAIN.

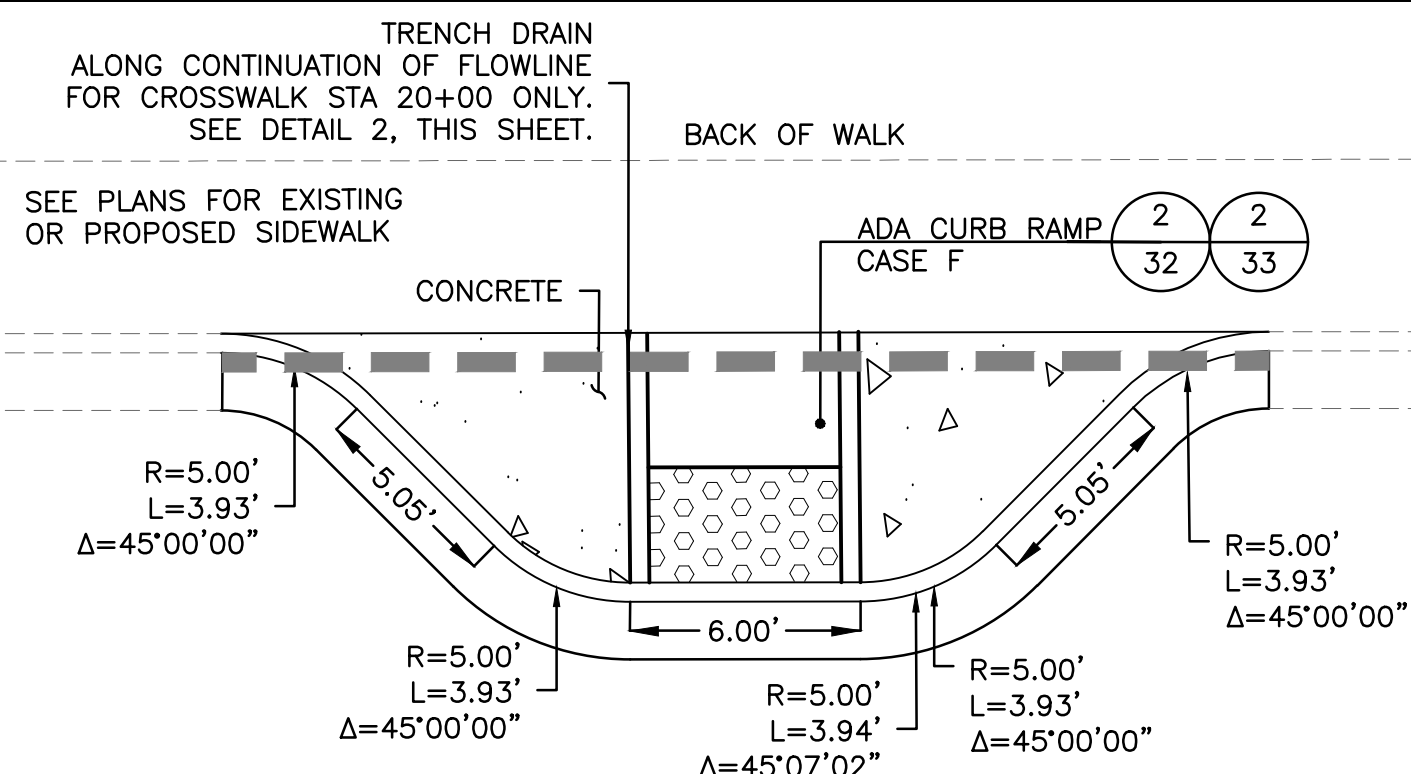
2 TRENCH DRAIN DETAIL  
N.T.S.



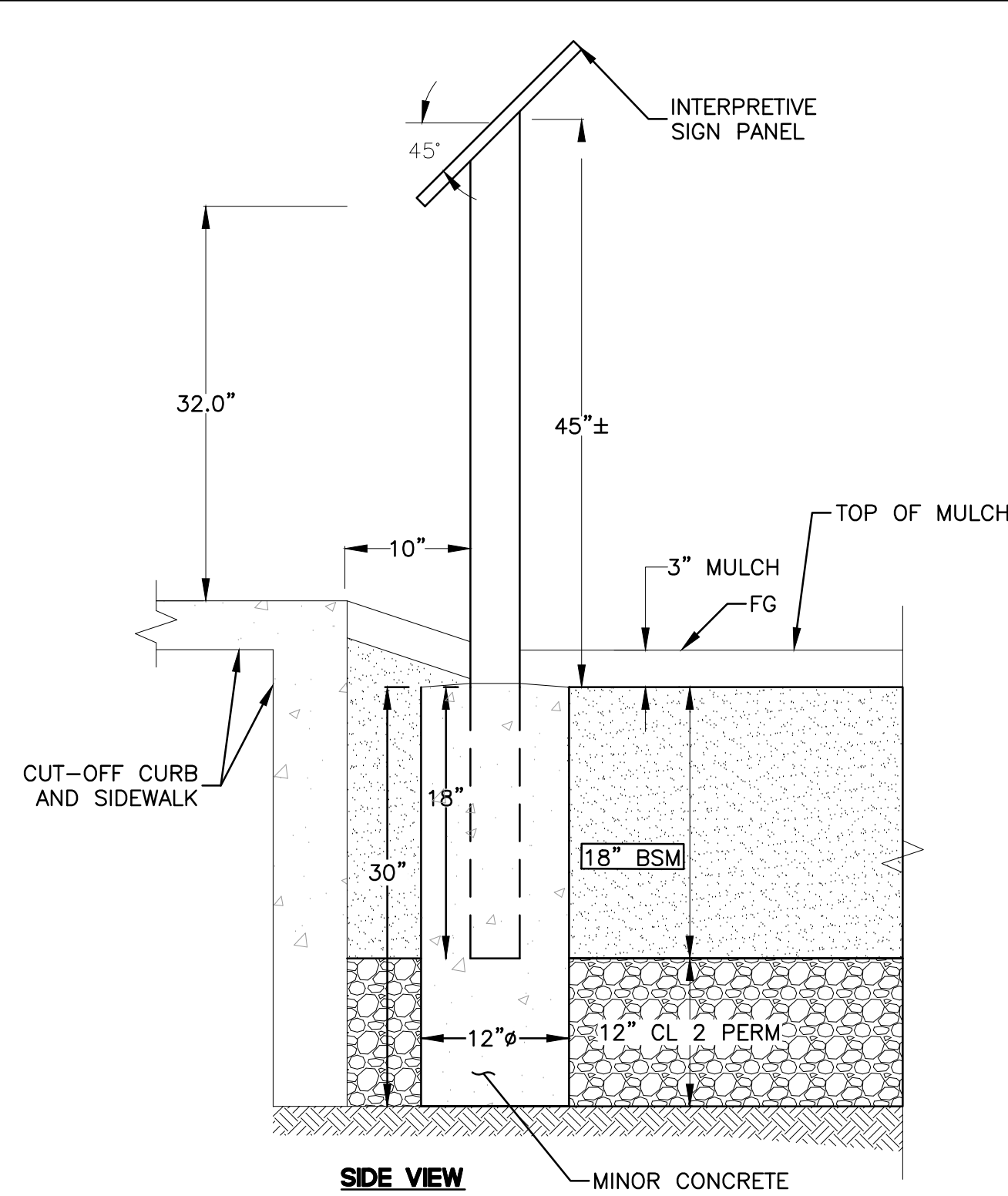
NOTES:

1. BEARING BARS TO BE  $3/2" \times 3/8"$  BARS ON  $1 1/8"$  CENTERS.
2. 12 BARS FOR TYPE 24 GRATE - 9 BARS FOR TYPE 18 GRATE (TYPE 24 GRATE SHOWN).
3. WEIGHT OF TYPE 24 GRATE = 192 LBS.
4. WEIGHT OF TYPE 18 GRATE = 145 LBS.
5.  $3/8" \pm \text{Ø}$  CROSS BARS MAY BE FILLET WELDED, RESISTANCE WELDED OR ELECTROFORGED TO BEARING BARS.

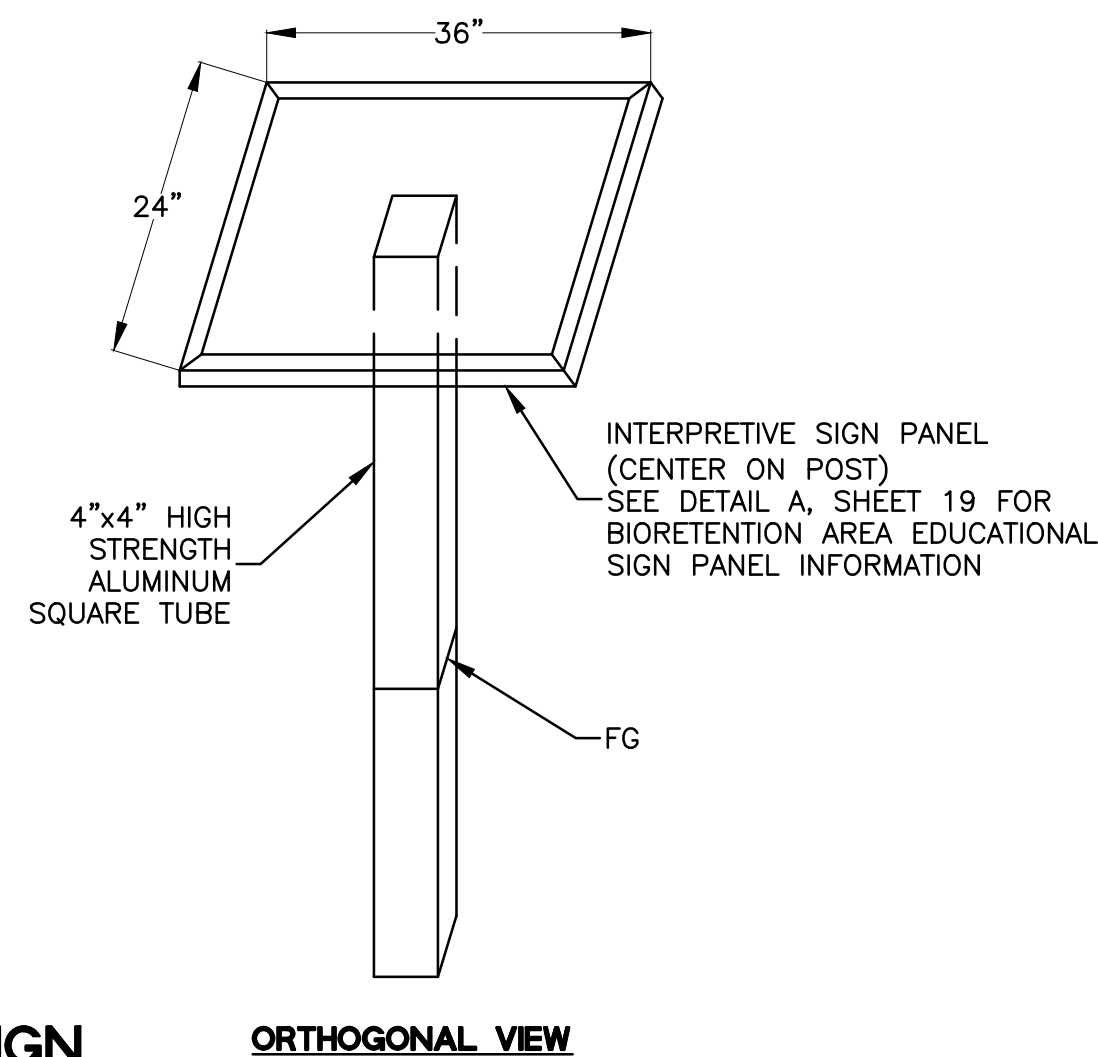
4 TYPE 24-12X GRATE  
N.T.S.



6 BULB-OUT  
CROSSWALK STA 20+00 & 37+40  
N.T.S.



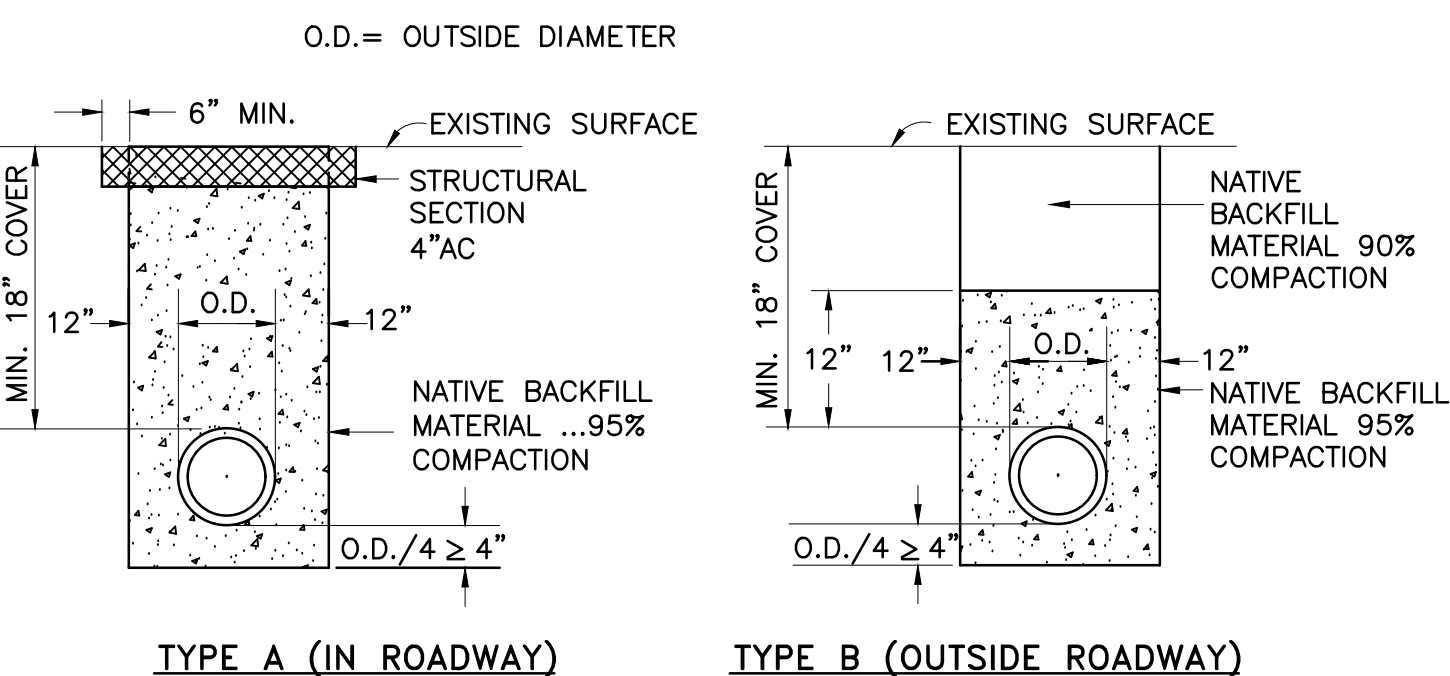
5 EDUCATIONAL SIGN  
N.T.S.



ORTHOGONAL VIEW

NOTE:

1. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO ORDERING MATERIALS.
2. SIGN PANEL SHALL BE MANUFACTURED OF HIGH PRESSURE LAMINATE.
3. FASTENERS SHALL BE STAINLESS STEEL.
4. ALL HIGH STRENGTH ALUMINUM AND STEEL COMPONENTS SHALL BE POWDER COATED.
5. HIGH STRENGTH ALUMINUM SHALL BE  $1/8"$  THICK MINIMUM.
6. INTERPRETIVE SIGN PANEL SHALL BE A FRAMELESS PEDESTAL MOUNT STYLE SIGN AS MANUFACTURED BY ENVROSIGNS, VACKERSIGN, OR ENGINEER-APPROVED EQUIVALENT.
7. THE SIGN POST AND MOUNTING HARDWARE SHALL CONSIST OF HIGH STRENGTH ALUMINUM THAT IS POWDER COATED NPS FOREST GREEN, AND FABRICATED FROM STRUCTURAL SHAPES, FORMED SECTIONS, TUBING, AND SHEETING COMPLYING WITH ASTM B209. ALUMINUM MUST BE FREE OF DEFECTS AND BE UNIFORM IN APPEARANCE. CLOSED SECTIONS MUST BE MADE OF 1-PIECE TUBING.
8. SIGN POSTS SHALL BE SET IN MINOR CONCRETE CONFORMING TO SECTION 90-2, 'MINOR CONCRETE', OF THE STATE STANDARD SPECIFICATIONS.



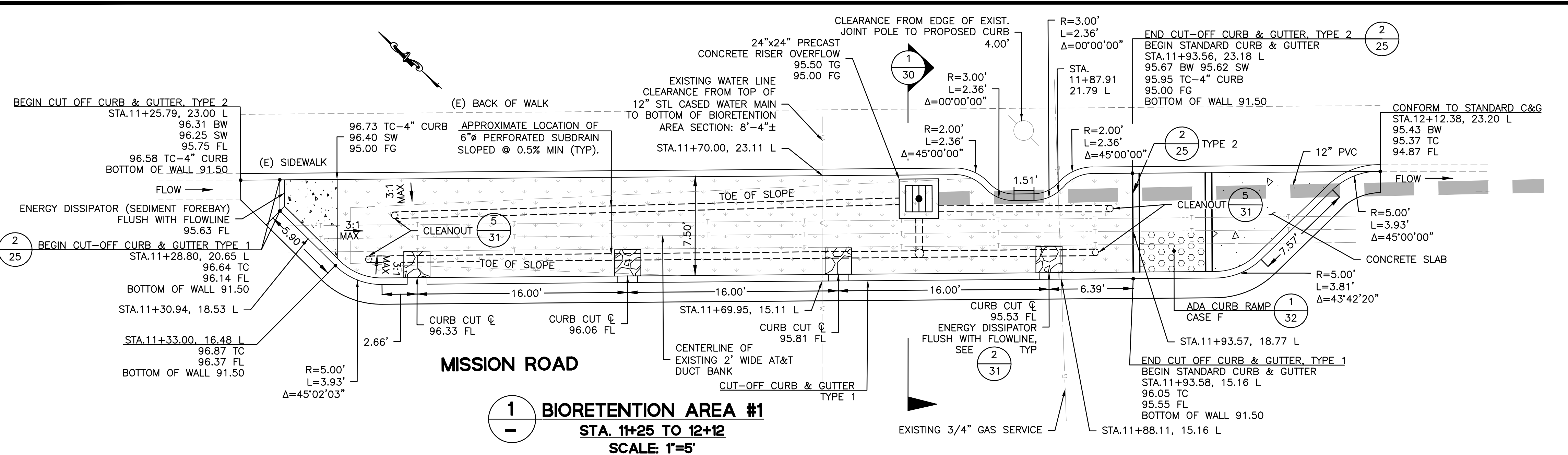
3 STANDARD TRENCH BACKFILL  
AND BEDDING DETAIL  
STORM DRAIN PIPES  
AND ELECTRICAL CONDUIT  
N.T.S.

THERE SHALL BE A MINIMUM OF ONE AND ONE-HALF FEET (18 INCHES) OF COVER OVER ELECTRICAL CONDUIT AND TWO AND ONE-HALF FEET (30 INCHES) OF COVER OVER ALL STORM DRAIN PIPES UNLESS OTHERWISE DIRECTED BY THE TOWN.

NATIVE BACKFILL SHALL BE APPROVED BY THE TOWN PRIOR TO RE-USE AND SHALL BE FREE FROM STONES AND LUMPS EXCEEDING 4 INCHES IN GREATEST DIMENSION, VEGETABLE MATTER, OR OTHER UNSATISFACTORY MATERIAL.

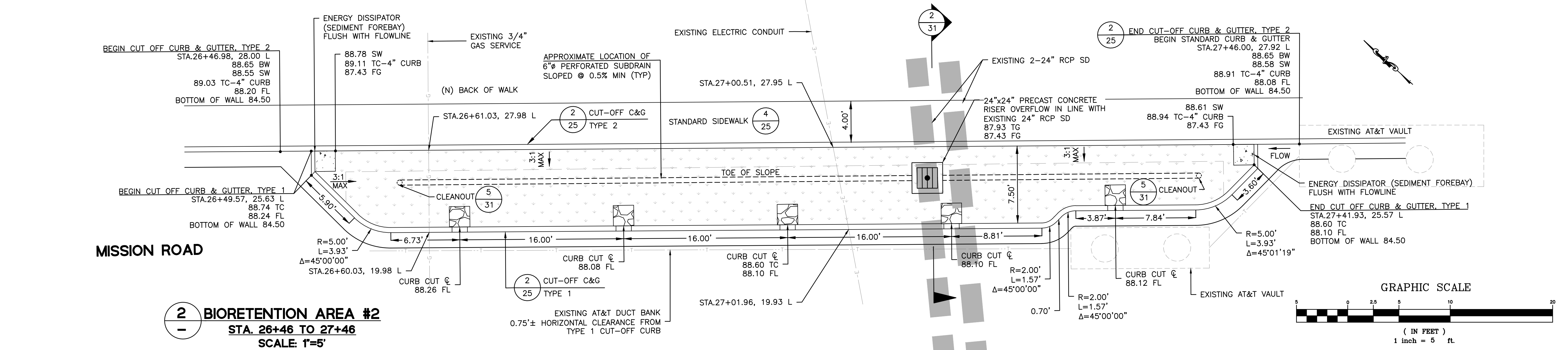
CONTRACTOR TO SHORE ALL TRENCHES IN ACCORDANCE WITH OSHA AND STATE OF CALIFORNIA SAFETY STANDARDS.

DATE	
REVISIONS	
NO.	
DESIGNED: SH/LL	
DRAWN: SK/CM	
APPROVED:	
PREPARED BY:	CSG CONSULTANTS
	550 Pilgrim Drive Foster City, CA 94404 Phone: (650)622-2500 Fax: (650)522-2599
PREPARED FOR:	TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA 94014
TITLE:	DETAILS MISSION ROAD BICYCLE & PEDESTRIAN IMPROVEMENTS PROJECT
SHEET 29	
OF 43	
DATE: 4/17/20	
JOB#: 18.393	
4/22/20	
BID SET	

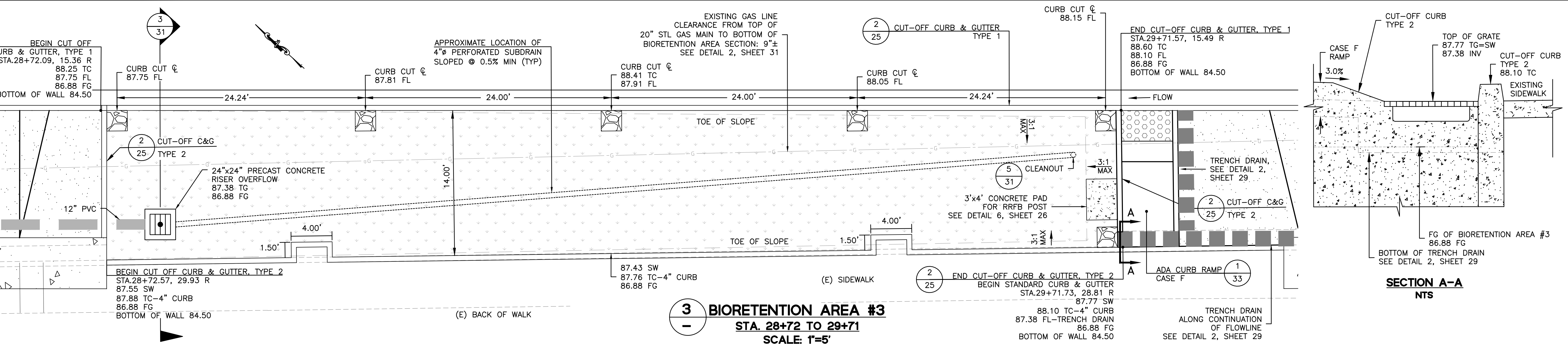
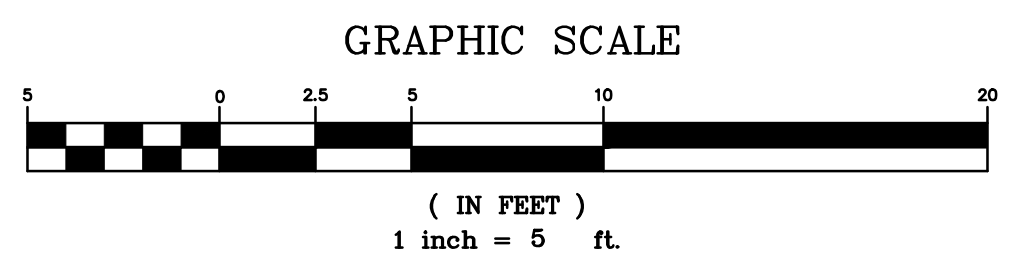


**1 BIORETENTION AREA #1**  
**STA. 11+25 TO 12+12**  
**SCALE: 1"=5'**

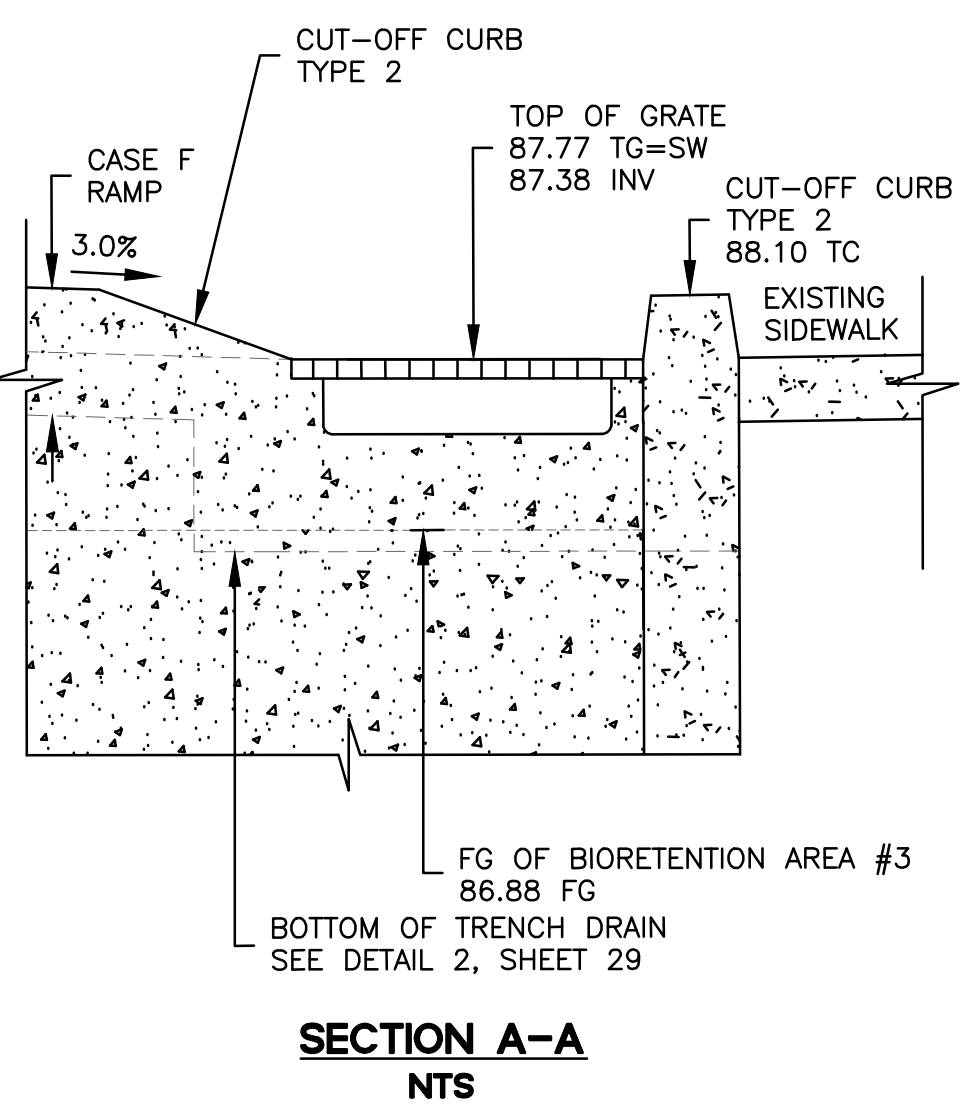
- BIORETENTION AREA LAYOUT NOTES**
- CAD FILES SHALL BE OBTAINED FROM CSG CONSULTANTS FOR ADDITIONAL HORIZONTAL CONTROL DATA NOT PRESENTED HEREON (SUCH AS ANGULAR DIMENSIONS OR BEARINGS).
  - FINISH GRADE OF BOTTOM OF BIORETENTION AREAS SHALL BE FLAT UNLESS OTHERWISE NOTED.
  - ALL ENERGY DISSIPATORS SHALL BE INSTALLED TO SLOPE TOWARDS CENTER OF BIORETENTION AREA WITH A SLOPE OF 2% MIN. AND 5% MAX. PER DETAILS 1, 2 & 3, SHEET 31.
  - 6"Ø HDPE TUBING SUBDRAIN SHALL BE PLACED IN A STRAIGHT OR MEANDER FASHION, WITH PERFORATIONS POINTED DOWN, AROUND AND A MIN. OF 6" AWAY FROM ROOTBALL OF NEW TREES.
  - FINAL LOCATION OF TREE SHALL BE ESTABLISHED AND REFERENCED PRIOR TO INSTALLATION OF OVERFLOWS TO AVOID CONFLICTS, IF APPLICABLE.
  - 12" PVC FROM OVERFLOW DROP INLET TO BE CONNECTED TO EXISTING STORM DRAIN SYSTEM USING AN IN-LINE TEE, OR APPROVED EQUAL.



**2 BIORETENTION AREA #2**  
**STA. 26+46 TO 27+46**  
**SCALE: 1"=5'**



**3 BIORETENTION AREA #3**  
**STA. 28+72 TO 29+71**  
**SCALE: 1"=5'**



**SECTION A-A**  
**NTS**

DATE	
REVISIONS	
NO.	
DESIGNED: SH/LL	
DRAWN: SK/CM	
APPROVED:	

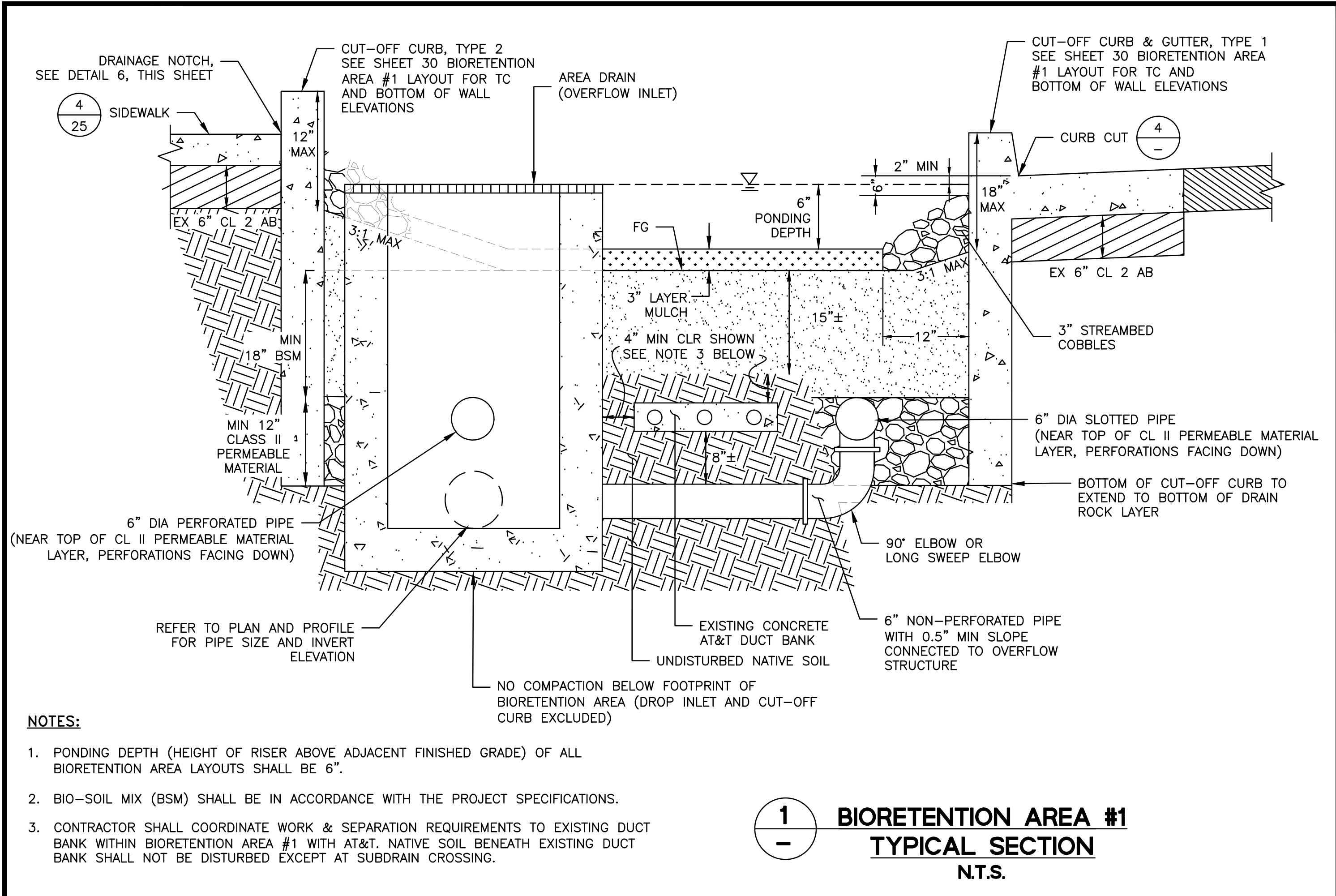
**PREPARED BY:** CSG CONSULTANTS  
 550 Pilgrim Drive  
 Foster City, CA 94404  
 Phone: (650) 922-2500  
 Fax: (650) 522-2599

**PREPARED FOR:** TOWN OF COLMA  
 1198 EL CAMINO REAL  
 COLMA, CA 94014

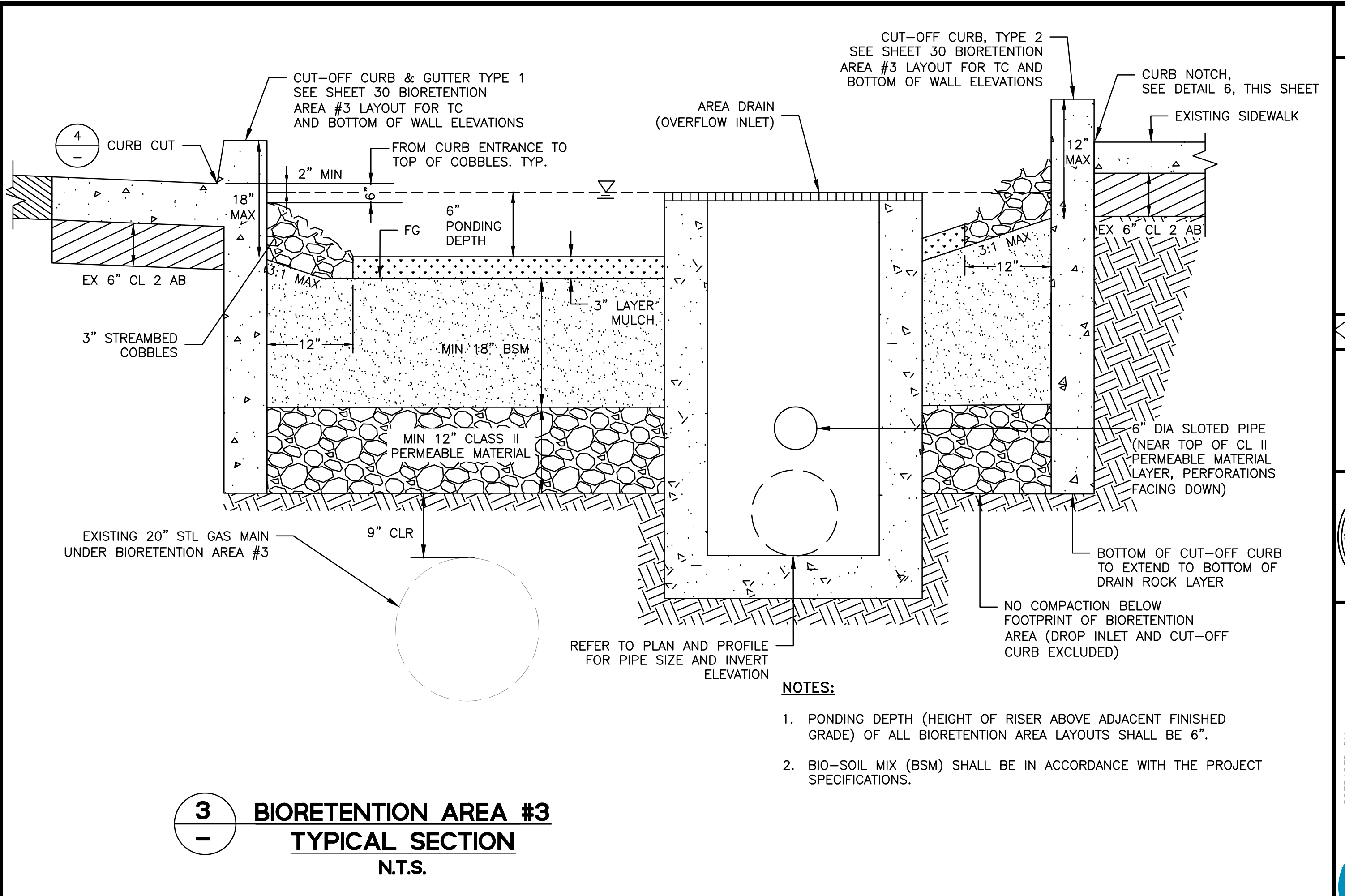
**TITLE:** BIORETENTION AREA TYPICAL LAYOUT AND DETAILS  
 MISSION ROAD  
 BICYCLE & PEDESTRIAN IMPROVEMENTS PROJECT

**SHEET 30 OF 43**  
 DATE: 4/17/20  
 JOB#: 18.393  
 4/22/20  
 BID SET

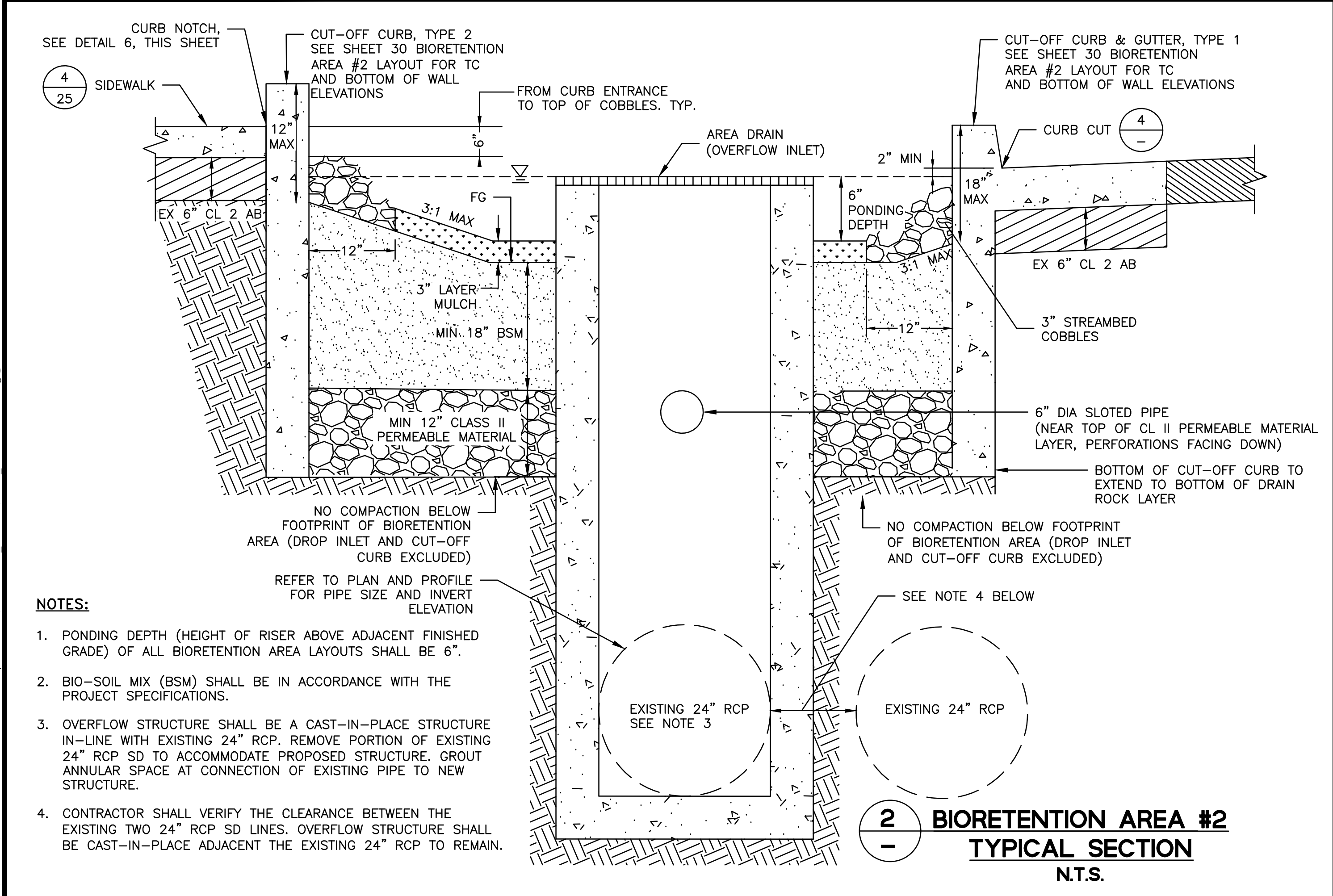
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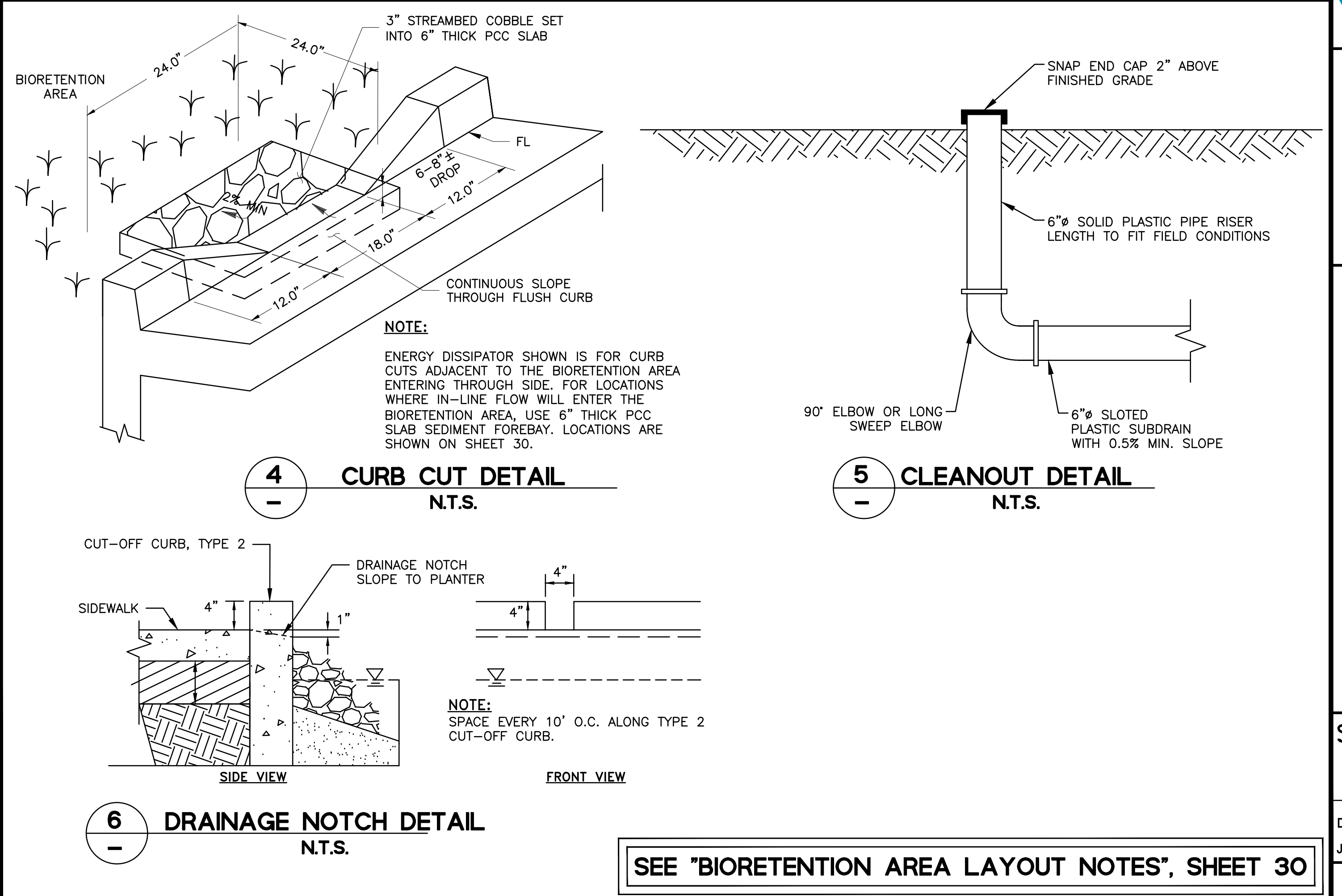
- NOTES:**
- PONDING DEPTH (HEIGHT OF RISER ABOVE ADJACENT FINISHED GRADE) OF ALL BIORETENTION AREA LAYOUTS SHALL BE 6".
  - BIO-SOIL MIX (BSM) SHALL BE IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
  - CONTRACTOR SHALL COORDINATE WORK & SEPARATION REQUIREMENTS TO EXISTING DUCT BANK WITHIN BIORETENTION AREA #1 WITH AT&T. NATIVE SOIL BENEATH EXISTING DUCT BANK SHALL NOT BE DISTURBED EXCEPT AT SUBDRAIN CROSSING.



- NOTES:**
- PONDING DEPTH (HEIGHT OF RISER ABOVE ADJACENT FINISHED GRADE) OF ALL BIORETENTION AREA LAYOUTS SHALL BE 6".
  - BIO-SOIL MIX (BSM) SHALL BE IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.



- NOTES:**
- PONDING DEPTH (HEIGHT OF RISER ABOVE ADJACENT FINISHED GRADE) OF ALL BIORETENTION AREA LAYOUTS SHALL BE 6".
  - BIO-SOIL MIX (BSM) SHALL BE IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
  - OVERFLOW STRUCTURE SHALL BE A CAST-IN-PLACE STRUCTURE IN-LINE WITH EXISTING 24" RCP. REMOVE PORTION OF EXISTING 24" RCP SD TO ACCOMMODATE PROPOSED STRUCTURE. GROUT ANNULAR SPACE AT CONNECTION OF EXISTING PIPE TO NEW STRUCTURE.
  - CONTRACTOR SHALL VERIFY THE CLEARANCE BETWEEN THE EXISTING TWO 24" RCP SD LINES. OVERFLOW STRUCTURE SHALL BE CAST-IN-PLACE ADJACENT THE EXISTING 24" RCP TO REMAIN.



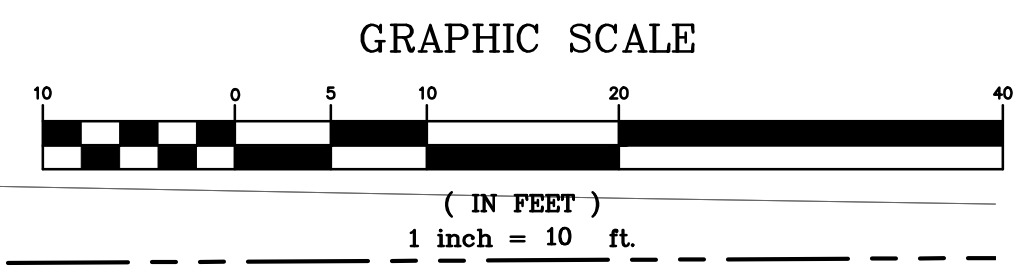
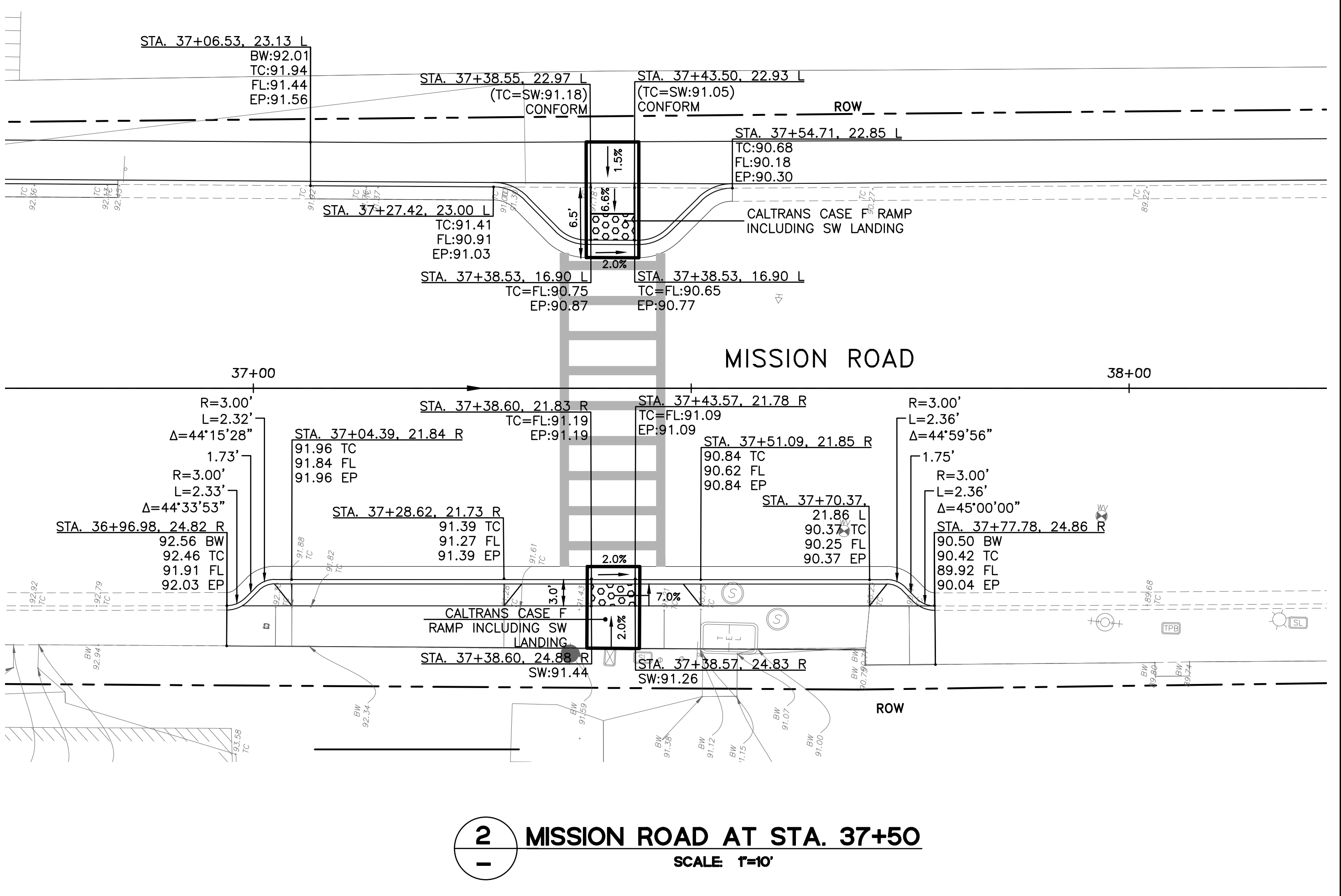
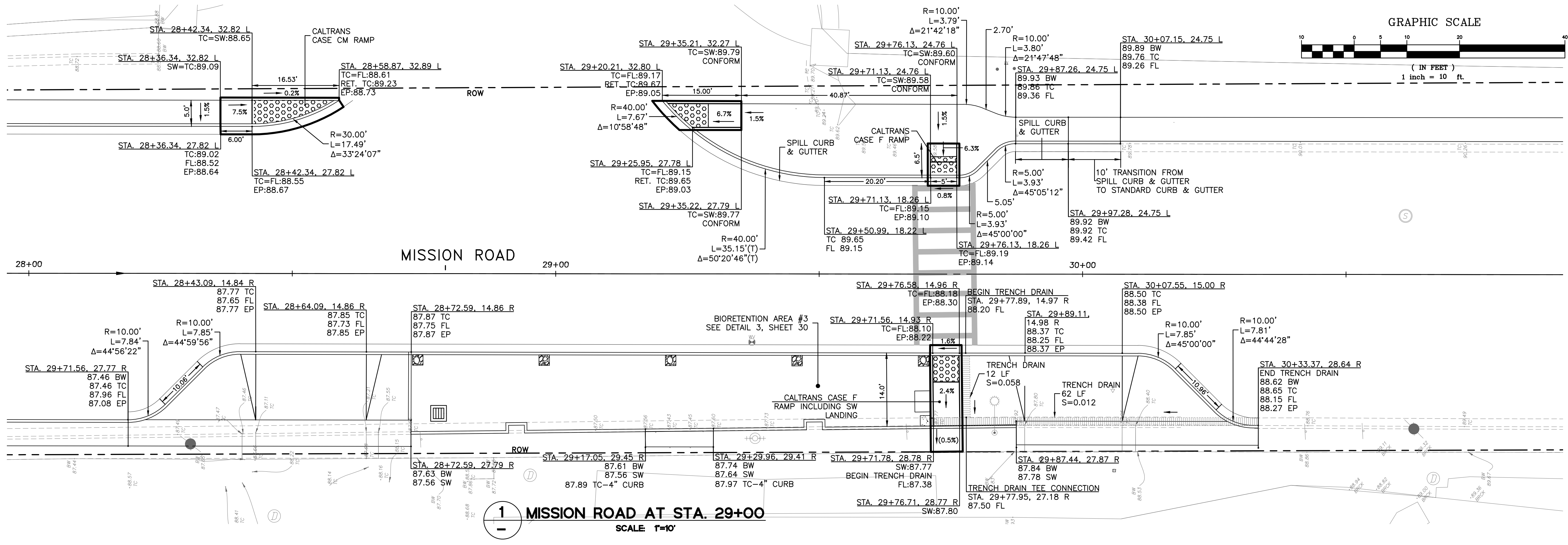
SEE "BIORETENTION AREA LAYOUT NOTES", SHEET 30

DATE	
REVISIONS	
NO.	
DESIGNED: SH/LL	
DRAWN: SK/SLM	
APPROVED:	
PREPARED BY:	CSG CONSULTANTS
	550 Pilgrim Drive Foster City, CA 94404 Phone: (650)622-2500 Fax: (650)522-2599
	Employee - Owned
PREPARED FOR:	TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA 94014
TITLE:	BIORETENTION AREA TYPICAL LAYOUT AND DETAILS MISSION ROAD BICYCLE & PEDESTRIAN IMPROVEMENTS PROJECT
SHEET 31	
OF 43	
DATE: 4/17/20	
JOB#: 18.393	
4/22/20	
BID SET	

J:\DESIGN\18\_393 - Colma Mission Road Improvements\2020-03-18\_BIDSET\30-31\_C.3\_DETAILS.dwg@ 04:00:44 PM

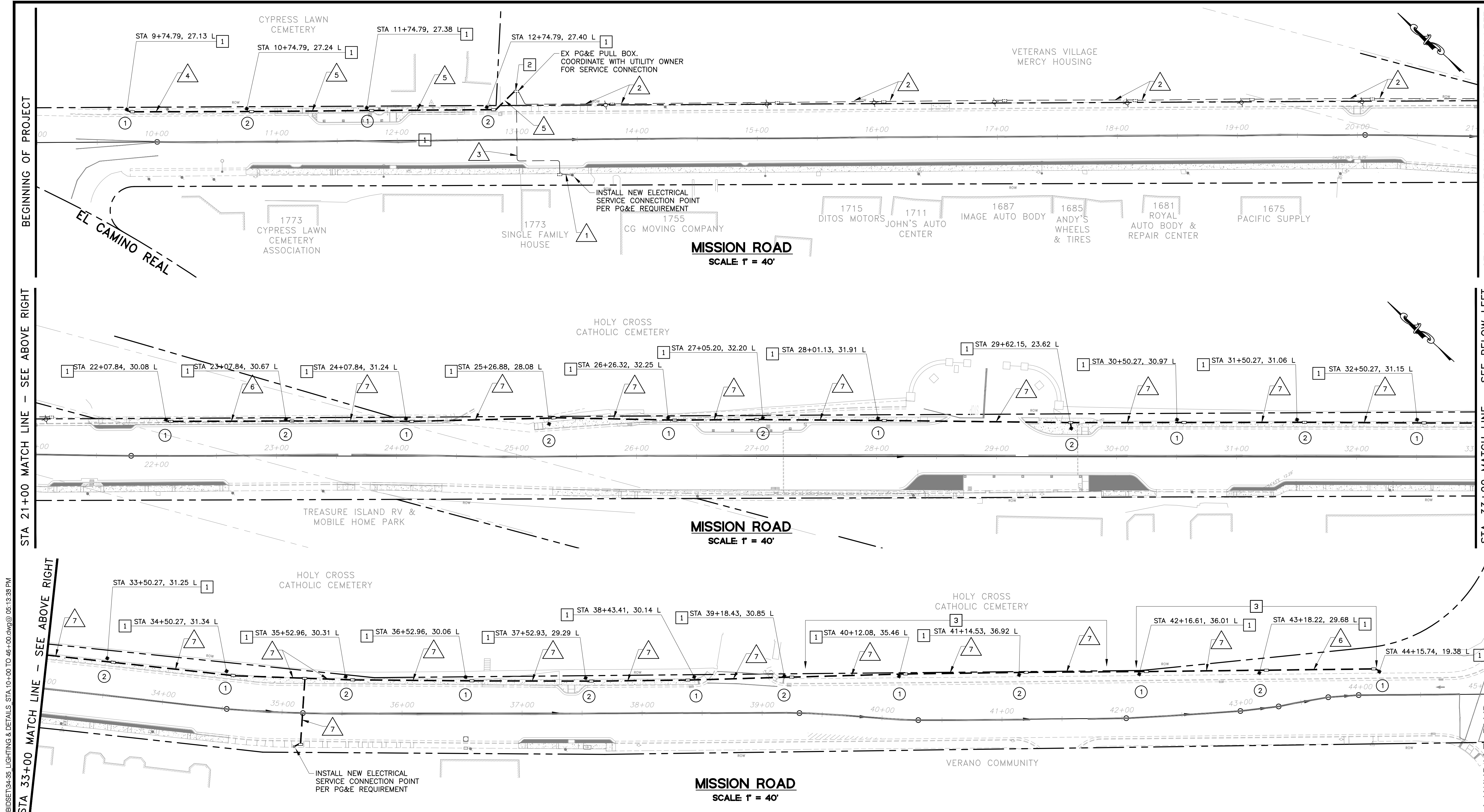






DESIGNED: SH/LL	DRAWN: SK/SM	APPROVED:	NO.	REVISIONS	DATE
<b>PREPARED BY:</b> <b>CSG CONSULTANTS</b> 550 Pilgrim Drive Foster City, CA 94404 Phone: (650) 522-2500 Fax: (650) 522-2599					
<b>PREPARED FOR:</b> <b>TOWN OF COLMA</b> <b>1198 EL CAMINO REAL</b> <b>COLMA, CA 94014</b>					
<b>TITLE:</b> <b>CURB RAMPS &amp; DETAILS</b> <b>MISSION ROAD</b> <b>BICYCLE &amp; PEDESTRIAN IMPROVEMENTS PROJECT</b>					
<b>SHEET 33</b> <b>OF</b> <b>43</b>					
<b>DATE:</b> 4/17/20 <b>JOB#:</b> 18.393					
<b>4/22/20</b> <b>BID SET</b>					

J:\DESIGN\18.393 - Colma Mission Road Improvement\2020-03-18\_BIDSET\32-33\_CURB RAMPS.dwg @ 04:28:15 PM



STA 21+00 MATCH LINE - SEE ABOVE RIGHT  
 STA 33+00 MATCH LINE - SEE ABOVE RIGHT  
 BEGINNING OF PROJECT  
 J:\DESIGN\18\_393 - Colma Mission Road Improvement\2020-03-18\_BIDSET\04-35\_LIGHTING & DETAILS\STA 10+00 TO 46+00.dwg @ 05:13:35 PM  
 Plotted on: 03/23/20 @ 05:13:35 PM

STA. 21+00 MATCH LINE - SEE BELOW LEFT  
 STA. 33+00 MATCH LINE - SEE BELOW LEFT  
 PREPARED BY: **CSG CONSULTANTS**  
 550 Pilgrim Drive  
 Foster City, CA 94404  
 Phone: (650) 922-2500  
 Fax: (650) 922-2599  
 Employee - Owned  
 PREPARED FOR:  
**TOWN OF COLMA**  
 1198 EL CAMINO REAL  
 COLMA, CA 94014  
 LIGHTING PLAN  
**MISSION ROAD**  
**BICYCLE & PEDESTRIAN IMPROVEMENTS PROJECT**  
 TITLE:  
**SHEET 34**  
 OF  
**43**  
 DATE: 4/17/20  
 JOB#: 18.393  
 4/22/20  
 BID SET

**ELECTRICAL NOTES**

- THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.
- CONFORM TO LATEST EDITION OF THE CALTRANS STANDARD PLANS, AND SPECIFICATIONS.
- CONDUIT AND PULL BOXES ARE SCHEMATICALLY SHOWN ON THE PLANS AND SHALL BE INSTALLED WITHIN THE CITY RIGHT OF WAY. EXACT LOCATIONS SHALL BE APPROVED BY THE TOWN.
- LIGHTING LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL POTHOLE PRIOR TO EXCAVATION FOR THE FOUNDATION.
- ELECTRICAL SERVICE POINT OF CONNECTION FOR STREET LIGHTING SHALL BE COORDINATED WITH PG&E.
- ALL PULL BOX SHALL BE INSTALLED AWAY FROM THE PATH OF TRAVEL WAY.
- ELECTRICAL EQUIPMENT SHOWN ARE SCHEMATIC. ALL EQUIPMENT SHALL BE INSTALLED WITHIN THE TOWN'S RIGHT OF WAY.

**LEGEND**

NEW	EXISTING	DESCRIPTION
---	---	RIGHT OF WAY
---	---	CONDUIT SCHEDULE 40
○	○	TYPE 3 1/2 PULL BOX
☆	☆	DECORATIVE LIGHT
①	①	CIRCUIT NUMBER

**CONSTRUCTION NOTES**

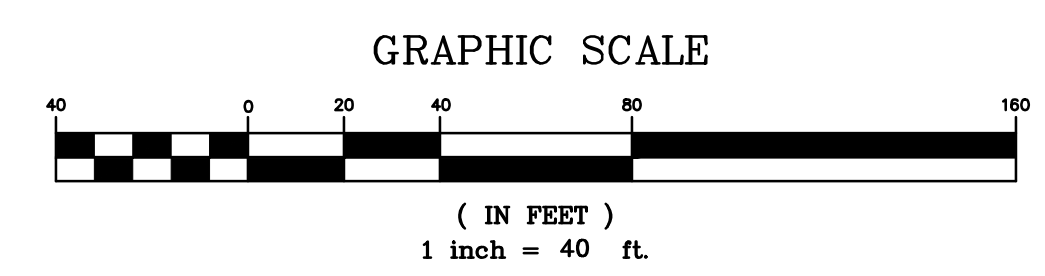
- DECORATIVE STREET LIGHT SINGLE FIXTURE WITH 100W LED LUMINAIRE AND PHOTOCELL ON NEW FOUNDATION PER DETAIL 1 AND 2 ON SHEET 35.
- INSTALL CONDUIT INTO EXISTING PULL BOX.
- RELOCATE EXISTING IRRIGATION SYSTEM AND RESTORE EXISTING LANDSCAPING AS NEEDED.

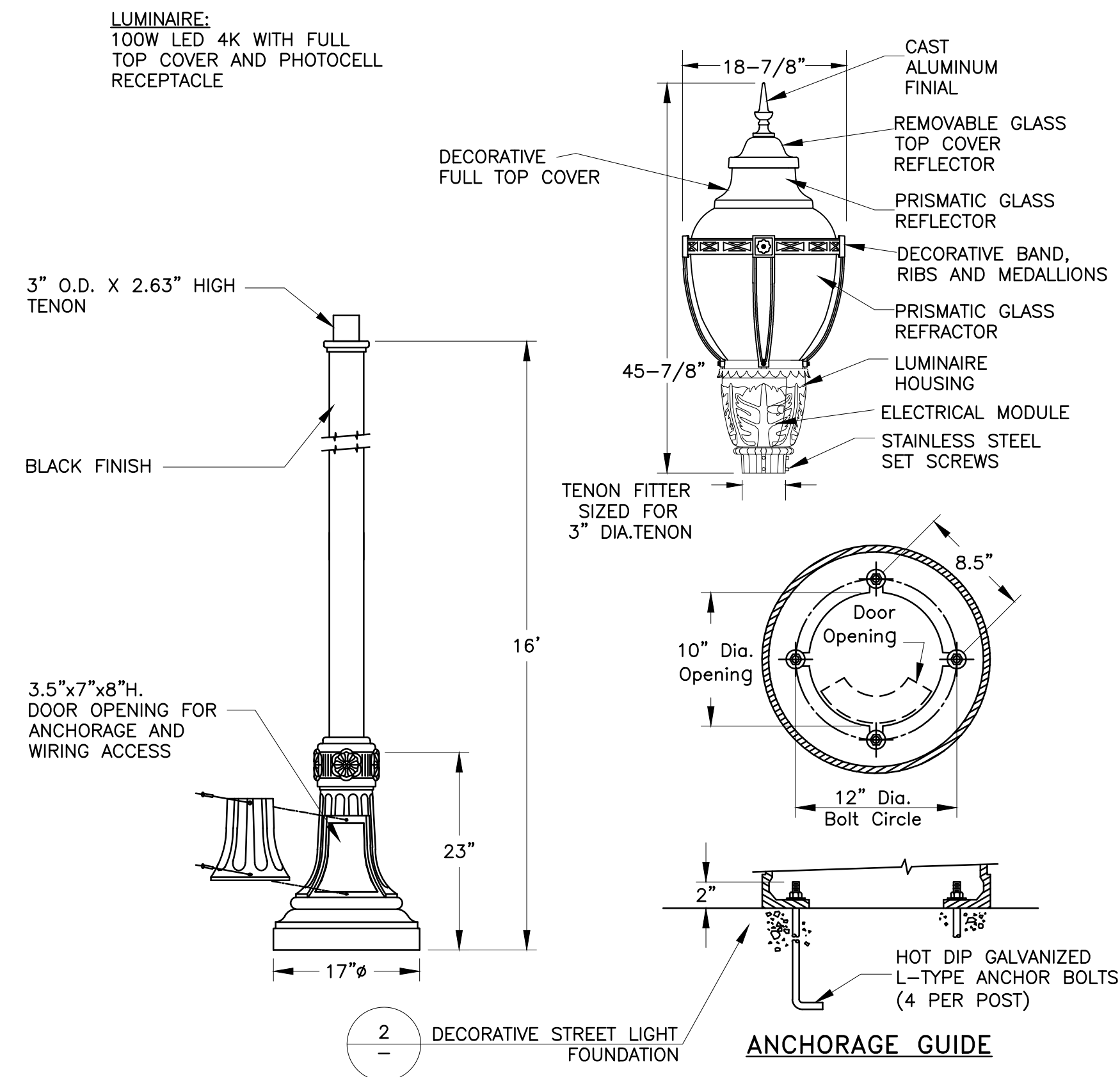
**CONDUCTOR SCHEDULE**

AWG SIZE	NUMBER OF CONDUCTORS						
	①	②	③	④	⑤	⑥	⑦
RUN NUMBER	2(E)	2(E)	2(E)	2	4	2	4
#6 (240V)							
#8 (240V)		2(E)	4	2	4		
#10 GND		1(E)	1(E)/1	1	1	1	1
CONDUIT SIZE (INCH)	1.5(E)	1.5(E)	1.5(E)	2	2	2	2
CONDUIT FILL CALC.	5%	15%	17%	5%	9%	6%	11%

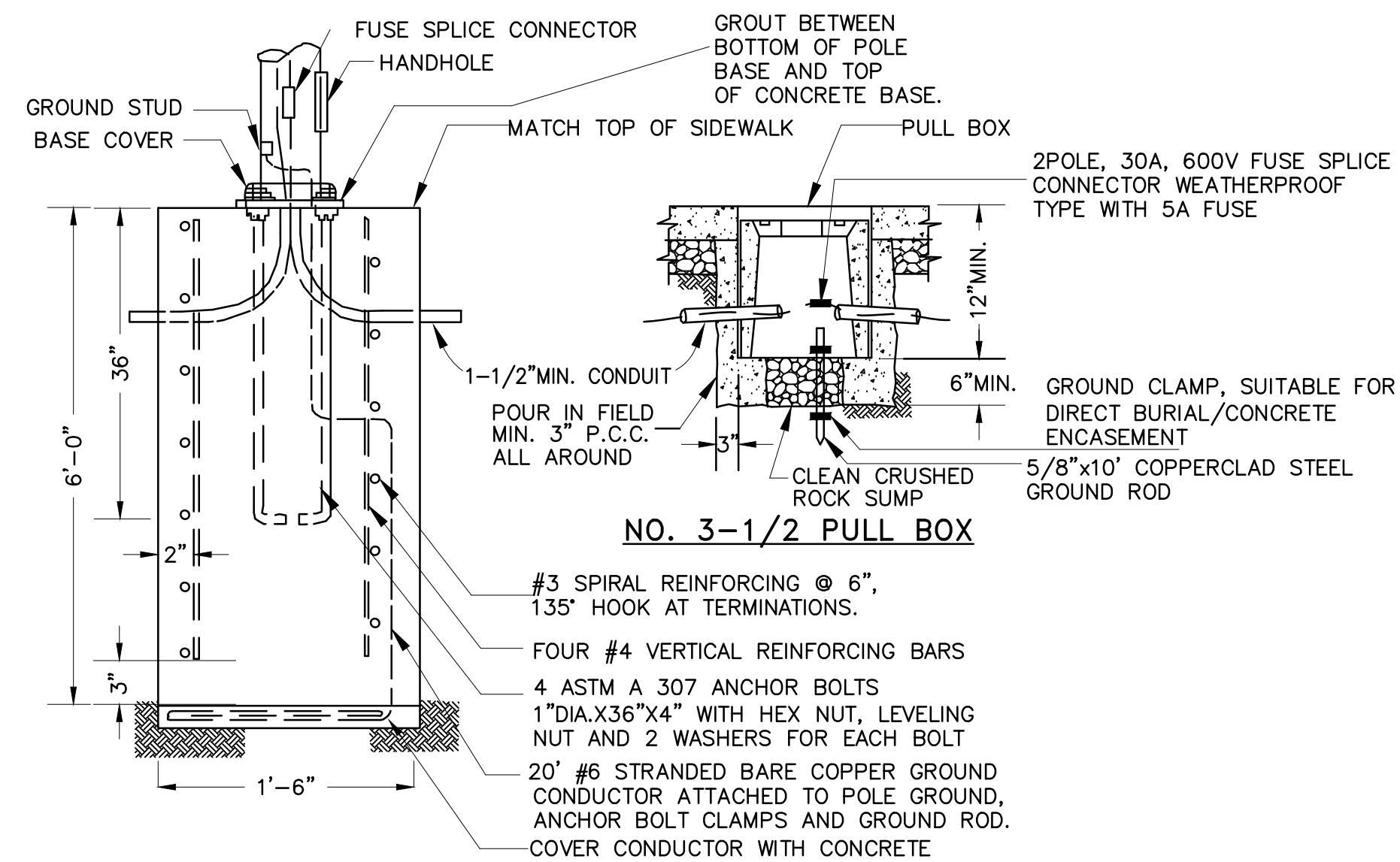
(E) = EXISTING  
 ALL CONDUITS AND CONDUCTORS ARE NEW UNLESS OTHERWISE NOTED

CALL TWO WORKING DAYS  
**BEFORE YOU DIG**  
 IN CALIFORNIA,  
 NEVADA AND HAWAII  
**1-800-227-2600**  
 UNDERGROUND SERVICE ALERT



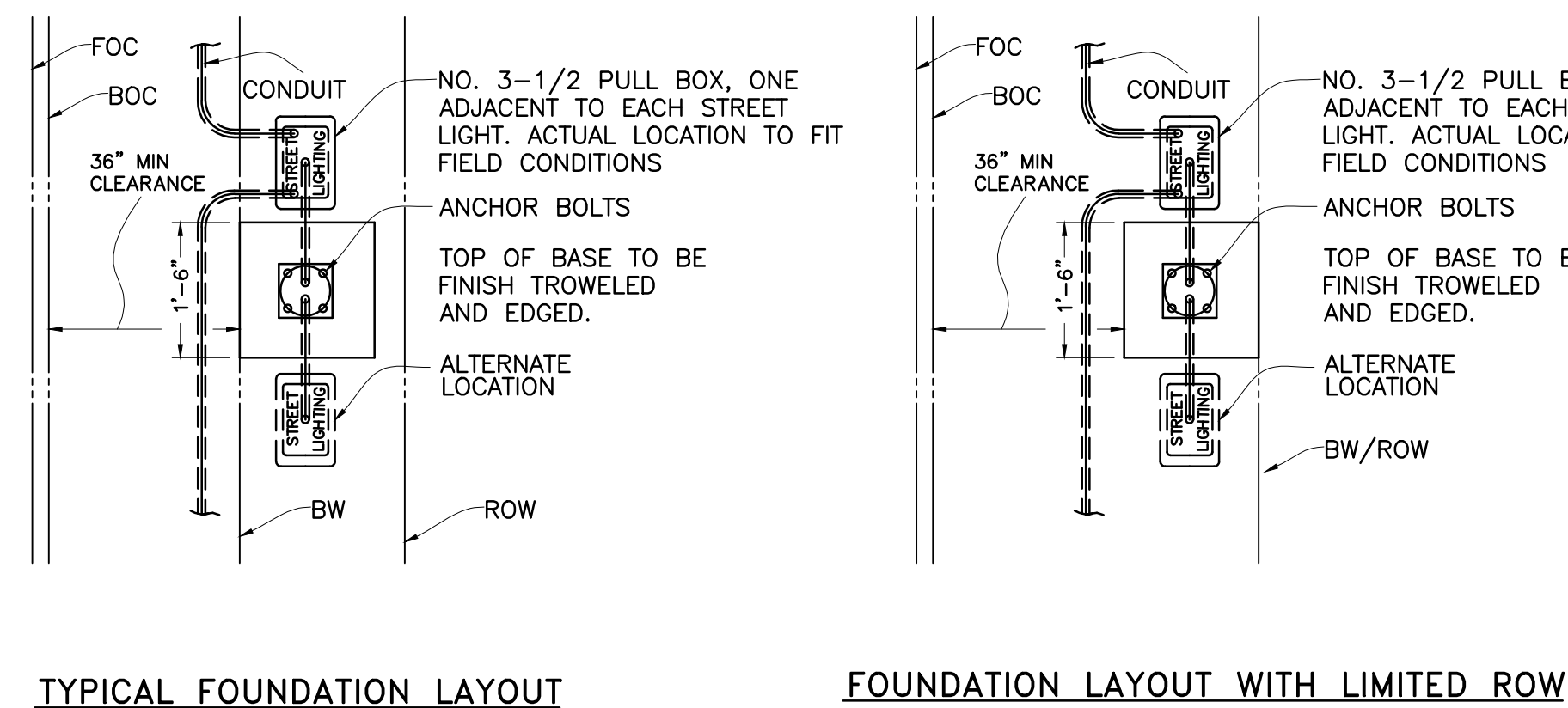


**1** DECORATIVE STREET LIGHT – SINGLE FIXTURE  
(N.T.S.)



**GENERAL NOTES:**

- LIGHTING STANDARD SHALL BE AS SPECIFIED IN THE SPECIFICATIONS.
- LIGHTING STANDARD SHALL BE IN PLACE AND TRULY PLUMBED BEFORE PLACING DRY PACK.
- LUMINAIRES SHALL BE WIRED TO A "MULTIPLE CIRCUIT".
- EACH STREET LIGHT STANDARD SHALL BE INSTALLED WITH A NO. 3-1/2 STREET LIGHT PULL BOX, AND A SPLICED-FUSED CONNECTOR.
- BONDING OF STREET LIGHT STANDARDS SHALL BE BY MEANS OF A BONDING WIRE OR BRAID ATTACHED TO ALL ANCHOR BOLTS.
- STREET LIGHT FOUNDATION CONCRETE SHALL BE PER THE SPECIFICATIONS.
- LUMINAIRE WIRING SHALL BE TWO #10 SOLID WIRES (THHN) FROM LUMINAIRE THRU THE SPLICED-FUSED CONNECTOR TO THE STREET LIGHT PULL BOX.
- SEE PROJECT SPECIFICATIONS FOR COLOR OF DECORATIVE STREET LIGHT FIXTURES.

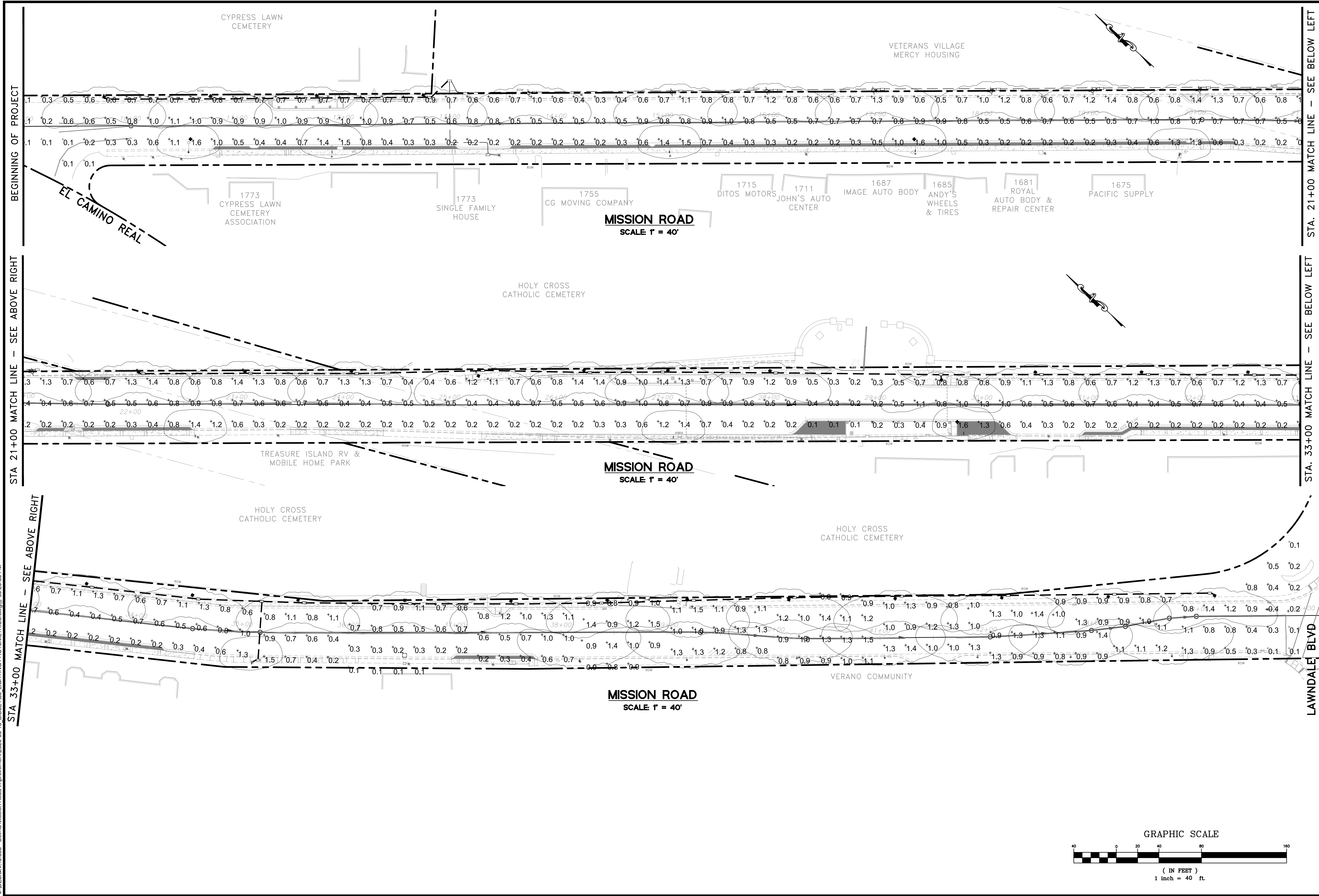


**2** DECORATIVE STREET LIGHT FOUNDATION  
REGULAR INSTALLATION  
(N.T.S.)

DATE	
REVISIONS	
NO.	
DESIGNED BY: SH/LL	
DRAWN BY: SK/CM	
APPROVED BY:	
PREPARED BY:	CSG CONSULTANTS
	550 Pilgrim Drive Foster City, CA 94404 Phone: (650) 622-2500 Fax: (650) 522-2599
PREPARED FOR:	TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA 94014
TITLE:	LIGHTING DETAILS MISSION ROAD BICYCLE & PEDESTRIAN IMPROVEMENTS PROJECT
SHEET 35	
OF 43	
DATE: 4/17/20	
JOB#: 18.393	
4/22/20	
BID SET	

J:\DESIGN\18.393 - Colma Mission Road Improvement\2020-03-18\_BIDSET\04-35\_LIGHTING & DETAILS\_STA.10+00 TO 46+00.dwg@ 04:37:20 PM

J:\DESIGN\18\_393 - Colma Mission Road Improvement\2020-03-18\_BIDSET\08\_LIGHTING\_PHOTOMETRICS.dwg @ 05:20:08 PM



PHOTOMETRICS PLAN  
MISSION ROAD  
BICYCLE & PEDESTRIAN IMPROVEMENTS PROJECT

TITLE: SHEET 36 OF 43

DATE: 4/17/20  
JOB#: 18.393

4/22/20  
BID SET

DESIGNED: SH/LL  
DRAWN: SK/AM  
APPROVED: \_\_\_\_\_

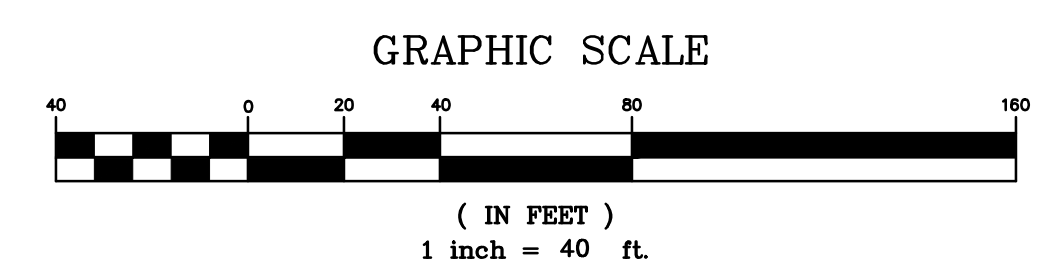
NO. REVISIONS DATE

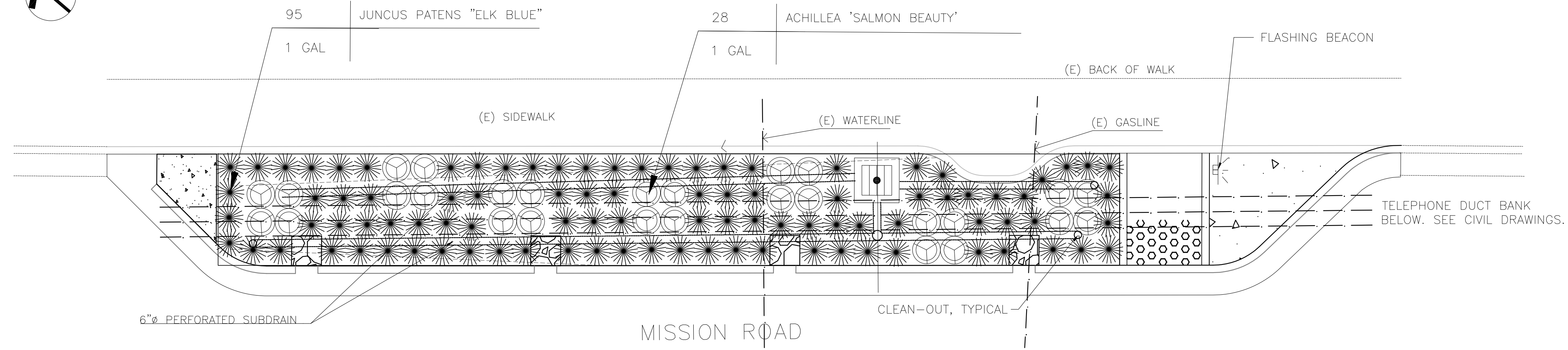
PREPARED BY: CSG CONSULTANTS  
550 Pilgrim Drive  
Foster City, CA 94404  
Phone: (650) 622-2500  
Fax: (650) 522-2599

Employee - Owned

PREPARED FOR: TOWN OF COLMA  
1198 EL CAMINO REAL  
COLMA, CA 94014

STA. 21+00 MATCH LINE - SEE BELOW LEFT  
STA. 33+00 MATCH LINE - SEE BELOW LEFT  
LAWDALE BLVD

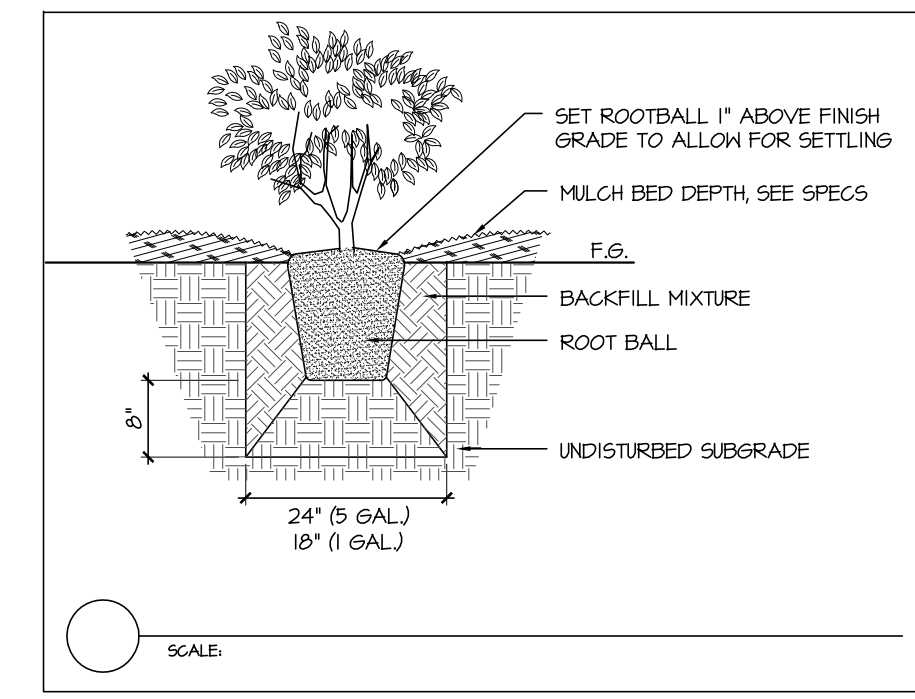




1 BIORETENTION AREA #1  
 STA. 11+25 TO 12+12  
 SCALE: 1"=5'

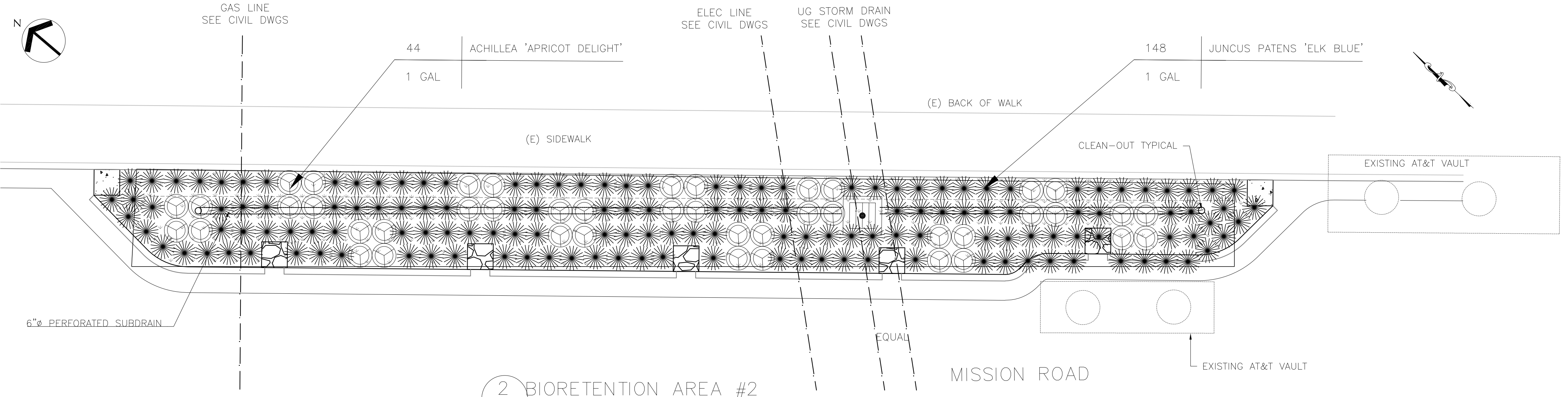
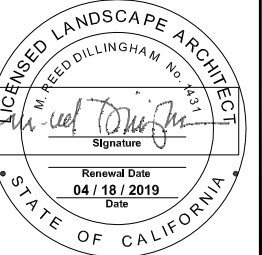
PLANTING LEGEND

BOTANICAL NAME	COMMON NAME	SIZE	QTY	SPACING (O.C.)
ACHILLEA SPECIES	YARROW	1 GAL	90	@2-FT
JUNCUS PATENS 'ELK BLUE'	ELK BLUE CALIFORNIA GRAY RUSH	1 GAL	566	@2-FT



NOTE:  
 SPREAD ESCHSCHOLZIA CALIFORNICA WITH SEEDS RATE @ 3 LBS PER ACRE THROUGH ALL BIORETENTION AREAS: AREA #1 = 450 SF; AREA #2 = 600 SF; AREA #3 = 1300 SF.

NO.	REVISIONS	DATE



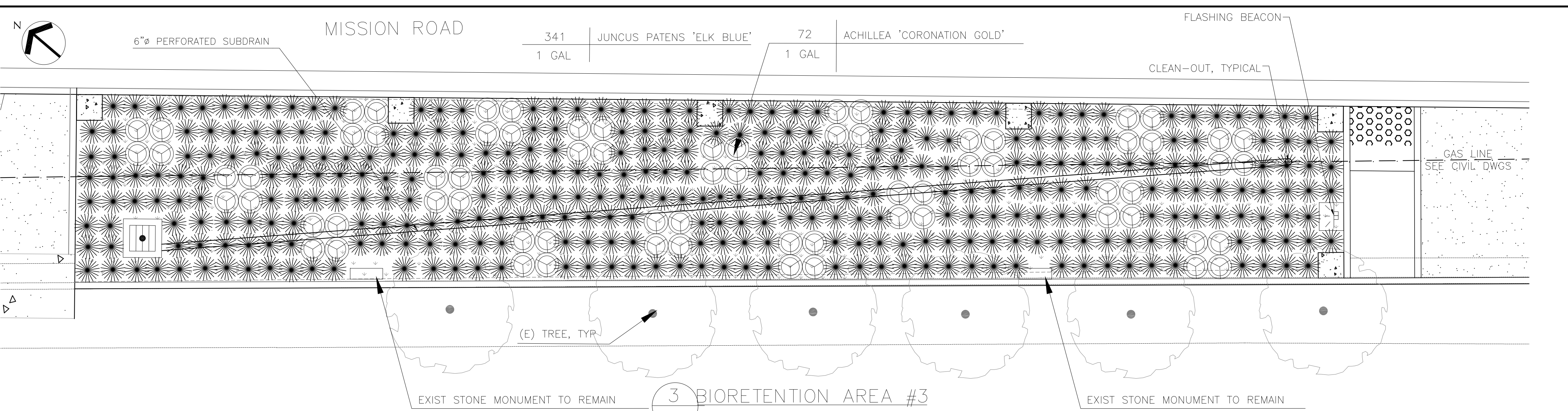
2 BIORETENTION AREA #2  
 STA. 26+46 TO 27+46  
 SCALE: 1"=5'

PLANTING NOTES

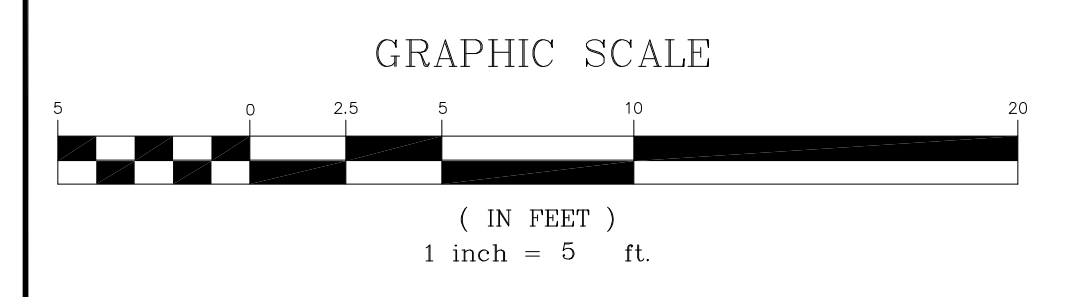
- LANDSCAPE CONTRACTOR SHALL COORDINATE ALL WORK W/ RELATED CONTRACTORS AND W/ THE GENERAL CONTRACTOR OF THE PROJECT. VERIFY ALL SITE CONDITIONS AND UTILITY LOCATIONS PRIOR TO COMMENCING WORK.
- DIMENSIONS FOR PLACEMENT AND LAYOUT OF PLANT MATERIALS SHOWN ON DRAWINGS ARE APPROXIMATE. IF, HOWEVER, IN-THE-FIELD CONFLICTS ARISE BETWEEN PLANT AND UTILITY LOCATIONS, CONTRACTOR SHALL, WITH THE APPROVAL OF LANDSCAPE ARCHITECT, MAKE THE NECESSARY ADJUSTMENTS TO PLANT PLACEMENT IN ORDER TO ACHIEVE OPTIMUM DESIGN.
- CONTRACTOR SHALL ORDER PLANT MATERIAL TO ENSURE ADEQUATE QUANTITIES AND SIZES OF PLANT MATERIAL WILL BE AVAILABLE, IN CONFORMANCE WITH DRAWINGS AND SPECIFICATIONS. CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES IN INSUFFICIENT PLANT QUANTITIES DUE TO DIFFERENCES IN PLAN AND ACTUAL FIELD CONDITIONS. CONTRACTOR SHALL CONFIRM SOURCE OF ALL PLANT MATERIAL. ALL PLANT MATERIAL OF SAME SPECIES SHALL BE FROM A SINGLE SOURCE.
- ALL PLANTS TO BE OF THE FINEST QUALITY AND FREE OF DISEASE OR DAMAGE. PLANT MATERIALS TO BE APPROVED BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. IF NOT REVIEWED, LANDSCAPE ARCHITECT MAY MAKE CHANGES OR REJECT MATERIALS AT NO ADDITIONAL COSTS TO OWNER.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE PLANT ESTABLISHMENT OF THE ENTIRE SITE FOR THE DURATION OF THE CONTRACT AND PLANT ESTABLISHMENT PERIOD, AS INDICATED IN SPECIFICATIONS.
- THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL FROM THE OWNER'S PROPERTY OF ALL WASTE MATERIAL GENERATED FROM THE PLANTING OPERATIONS.
- SEE SPECIFICATIONS AND DETAILS FOR SOIL AMENDMENTS, PLANTING AND MAINTENANCE INSTRUCTIONS. AFTER PLANTING, DRESS OFF ALL PLANTING BEDS WITH 3" DEPTH MULCH, SEE SPECS.

PREPARED FOR:  
 TOWN OF COLMA  
 1198 EL CAMINO REAL  
 COLMA, CA 94014

TITLE:  
 PLANTING PLAN  
 MISSION ROAD  
 BICYCLE & PEDESTRIAN IMPROVEMENTS PROJECT

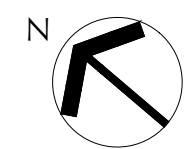


3 BIORETENTION AREA #3  
 STA. 28+72 TO 29+71  
 SCALE: 1"=5'



SHEET L1  
 OF  
 43  
 DATE: 4/17/20  
 JOB#: 18.393  
 4/22/20  
 BID SET



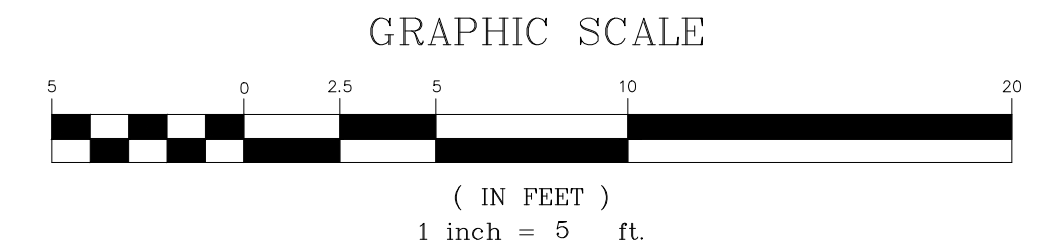


1.44  
30 1" 3.2

IRRIGATION CONTROLLER 'A' (7 7/8" W x 4 1/4" D)

3/4" REDUCED PRESSURE  
BACKFLOW PREVENTER ON  
CONCRETE PAD -  
PAD DIMENSIONS = 20"W x 32"L

5/8" WATER METER  
BOX DIMENSIONS = 19 3/4" x 14 1/2"



(E) WATERLINE

(E) SIDEWALK

(E) BACK OF WALK

PROPOSED INLET

1"

6" SL.

PROPOSED STORM DRAIN

CONNECT NEW MAINLINE TO EXISTING  
WATER MAIN. FIELD VERIFY THE LOCATION  
OF THE WATER MAIN PRIOR TO START OF  
WORK.

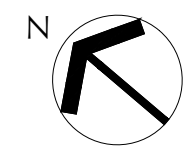
MISSION ROAD

(E) WATERLINE

(E) GAS LINE

(E) AT&T DUCT BANK

1 BIRETENTION AREA #1  
L3 STA. 11+25 TO 12+12  
SCALE: 1"=5'



1.44  
30 1" 4.9

(E) GAS LINE

(E) BACK OF WALK

(E) SIDEWALK

(E) ELECTRICAL LINE

(E) STORM DRAIN

PROPOSED INLET



1"

6" SL.

REFER TO SHEET 1/L4 FOR  
CONTINUATION OF MAINLINE TO  
BIRETENTION AREA #3

MISSION ROAD

2 BIRETENTION AREA #2  
L3 STA. 26+46 TO 27+46  
SCALE: 1"=5'

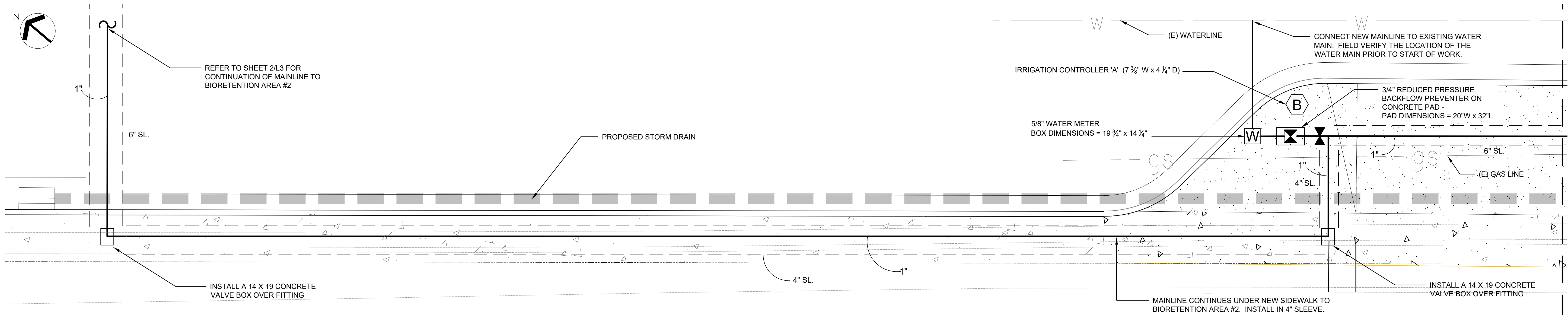
DATE
REVISIONS
NO.
DESIGNED:
DRAWN:
APPROVED:
 JANET S. LUEHRIS Certified Irrigation Designer CID Irrigation Association 43274
 <b>BROOKWATER</b> IRRIGATION CONSULTANTS 480 ST. JOHN STREET, SUITE 220 PLEASANTON, CALIFORNIA 94566 WWW.BROOKWATER.COM E-MAIL: JANET@BROOKWATER.COM
PREPARED FOR: TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA 94014
TITLE: IRRIGATION PLAN MISSION ROAD BICYCLE & PEDESTRIAN IMPROVEMENTS PROJECT
SHEET L3 OF 43
DATE : 4/17/20 JOB# : 18.393
4/22/20 BID SET



GRAPHIC SCALE



( IN FEET )  
1 inch = 5 ft.



REFER TO SHEET 2/L3 FOR CONTINUATION OF MAINLINE TO BIORETENTION AREA #2

PROPOSED STORM DRAIN

IRRIGATION CONTROLLER 'A' (7 3/8" W x 4 1/2" D)

CONNECT NEW MAINLINE TO EXISTING WATER MAIN. FIELD VERIFY THE LOCATION OF THE WATER MAIN PRIOR TO START OF WORK.

5/8" WATER METER BOX DIMENSIONS = 19 3/4" x 14 1/4"

3/4" REDUCED PRESSURE BACKFLOW PREVENTER ON CONCRETE PAD - PAD DIMENSIONS = 20"W x 32"L

INSTALL A 14 X 19 CONCRETE VALVE BOX OVER FITTING

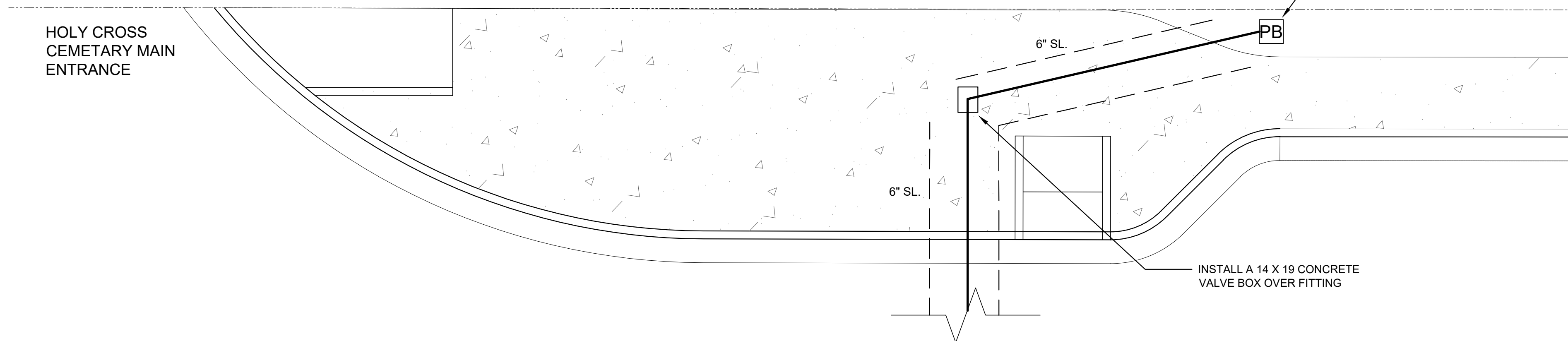
MAINLINE CONTINUES UNDER NEW SIDEWALK TO BIORETENTION AREA #2. INSTALL IN 4" SLEEVE.

INSTALL A 14 X 19 CONCRETE VALVE BOX OVER FITTING

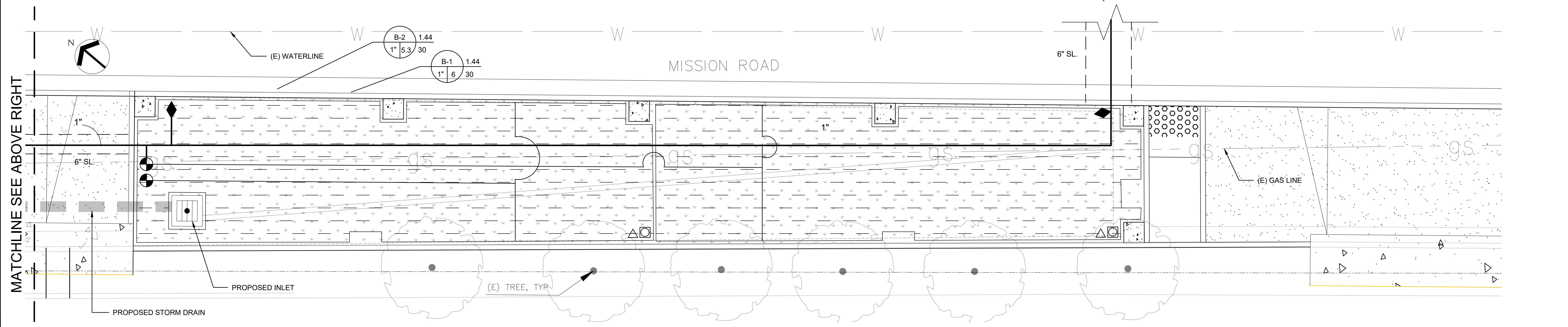
1 BIORETENTION AREA #3  
L4 STA. 27+11 TO 28+61  
SCALE: 1"=5'

HOLY CROSS CEMETARY MAIN ENTRANCE

STUB-OUT MAINLINE AND 3 WIRES IN A PULL BOX AT THIS LOCATION.



INSTALL A 14 X 19 CONCRETE VALVE BOX OVER FITTING



(E) WATERLINE

B-2 1.44  
1" 5.3/30

B-1 1.44  
1" 6/30

MISSION ROAD

(E) GAS LINE

PROPOSED INLET

(E) TREE, TYR

2 BIORETENTION AREA #3  
L4 STA. 28+61 TO 29+71  
SCALE: 1"=5'

MATCHLINE SEE BELOW LEFT

MATCHLINE SEE ABOVE RIGHT

NO.	REVISIONS	DATE

DESIGNED: \_\_\_\_\_  
 DRAWN: \_\_\_\_\_  
 APPROVED: \_\_\_\_\_



**BROOKWATER**  
 IRRIGATION CONSULTANTS  
 480 ST. JOHN STREET, SUITE 220  
 PLEASANTON, CALIFORNIA 94566  
 E-MAIL: JANET@BROOKWATER.COM

PREPARED FOR:  
**TOWN OF COLMA**  
 1198 EL CAMINO REAL  
 COLMA, CA 94014

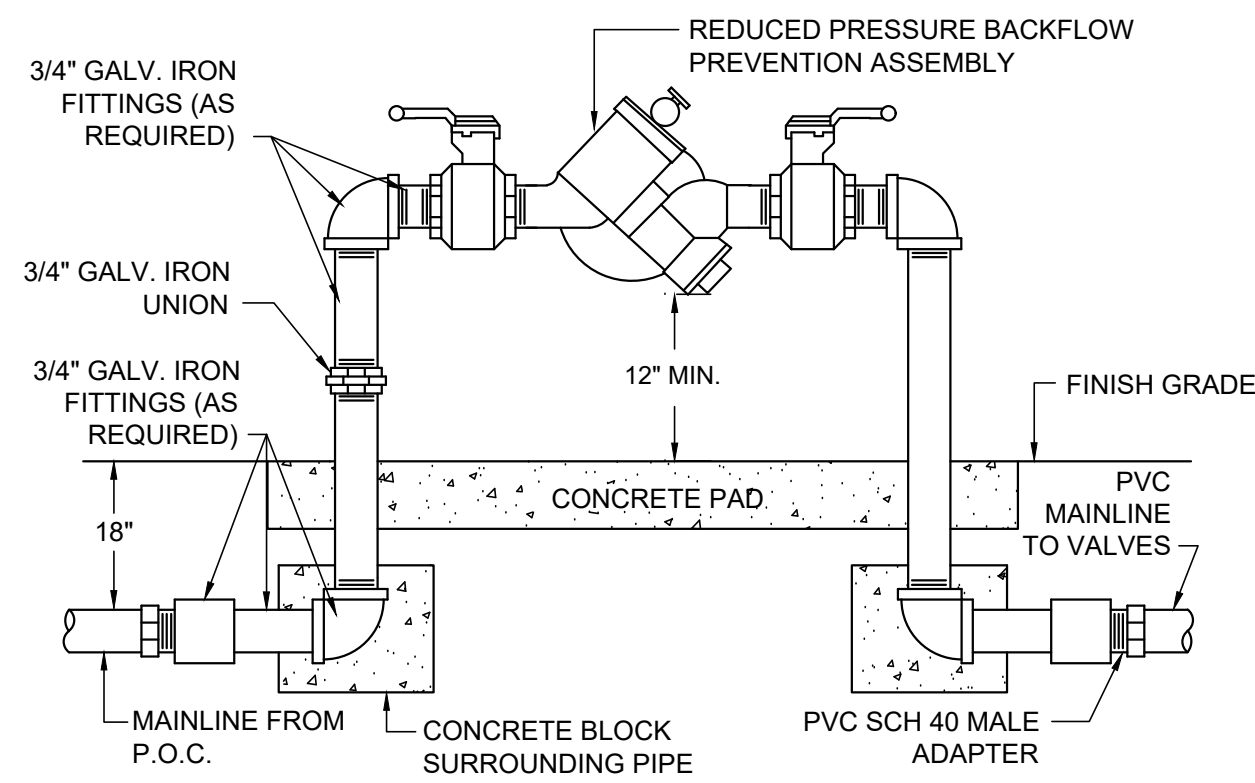
TITLE:  
 IRRIGATION PLAN  
 MISSION ROAD  
 BICYCLE & PEDESTRIAN IMPROVEMENTS PROJECT

SHEET L4  
 OF  
 43

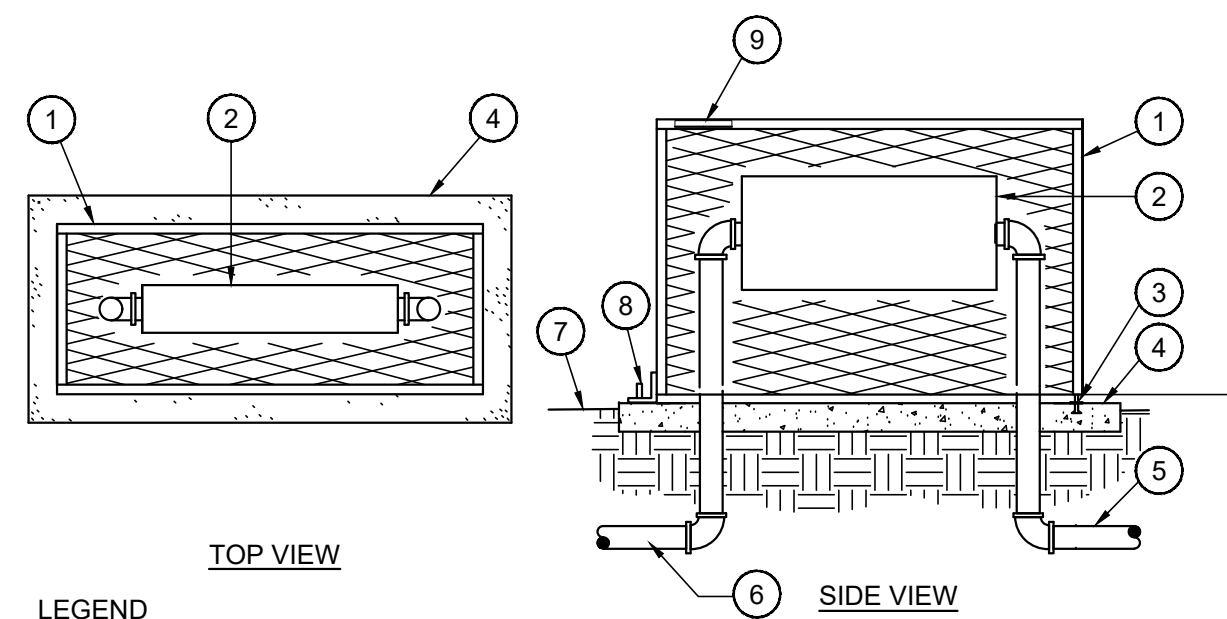
DATE: 4/17/20  
 JOB#: 18.393

4/22/20  
 BID SET

NOTE: EVENLY COAT METAL FITTINGS EXPOSED TO SOIL AND CONCRETE WITH 3M SCOTCHRAP PIPE PRIMER AND THEN WRAP WITH 3M SCOTCHRAP NO. 51 BLACK TAPE (3/4" OVERLAP). USE DIELECTRIC FITTINGS WHERE DISSIMILAR METALS COME INTO CONTACT.

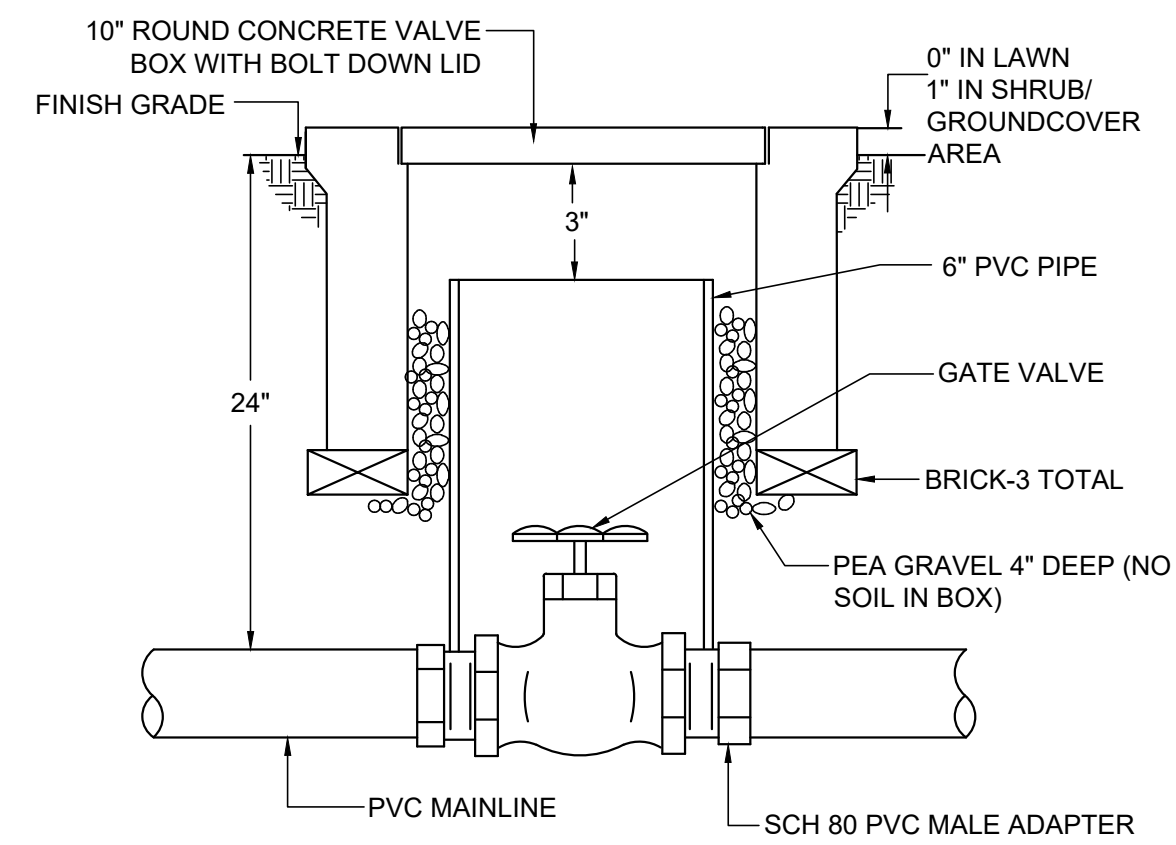


**1** REDUCED PRESSURE BACKFLOW ASSEMBLY  
NOT TO SCALE

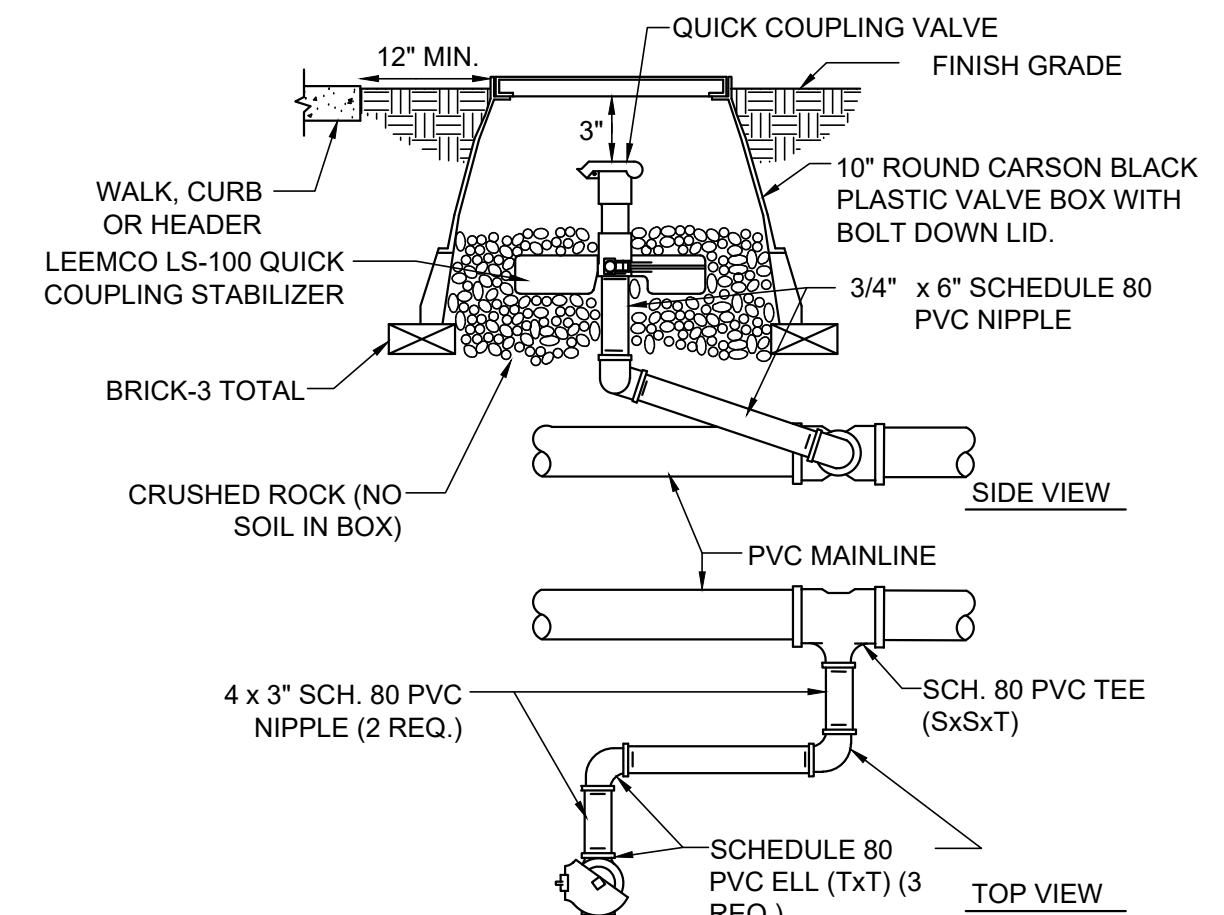


- LEGEND**
- 1. EXPANDED METAL BACKFLOW ENCLOSURE.
  - 2. BACKFLOW PREVENTER.
  - 3. HOLD DOWN ASSEMBLY (TYPICAL).
  - 4. POURED CONCRETE BASE, -6" MIN. THICKNESS - EXTEND 4" BEYOND OUTSIDE DIMENSIONS OF ENCLOSURE.
  - 5. MAINLINE TO VALVES.
  - 6. MAINLINE FROM POINT OF CONNECTION OR WATER METER.
  - 7. FINISH GRADE.
  - 8. SUPPORT ROD (TYPICAL).
  - 9. LIFTING HANDLE.

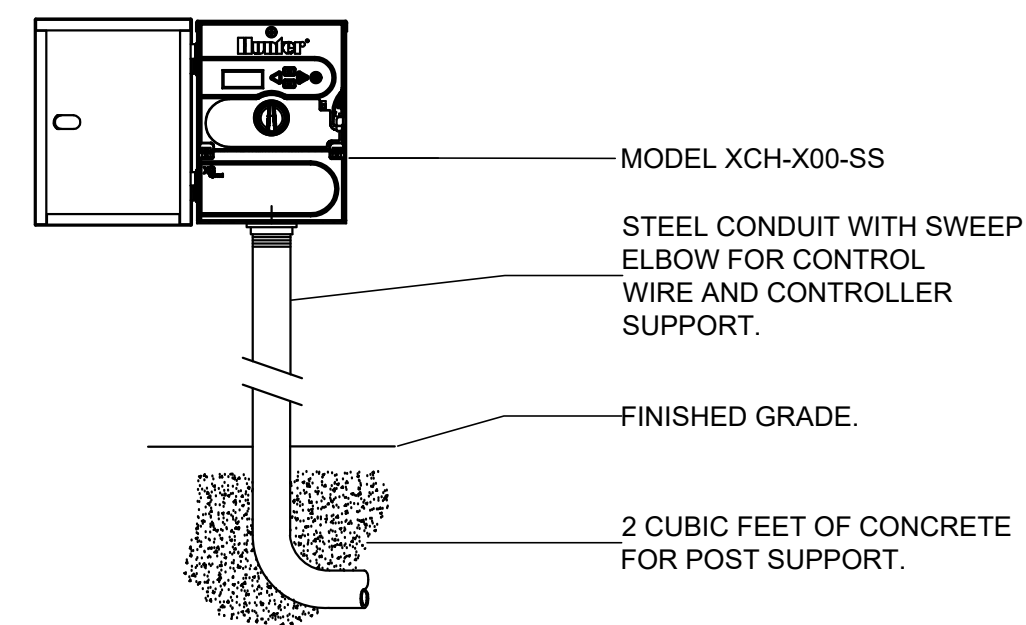
**2** EXPANDED METAL BACKFLOW ENCLOSURE  
NOT TO SCALE



**3** GATE VALVE DETAIL  
NOT TO SCALE

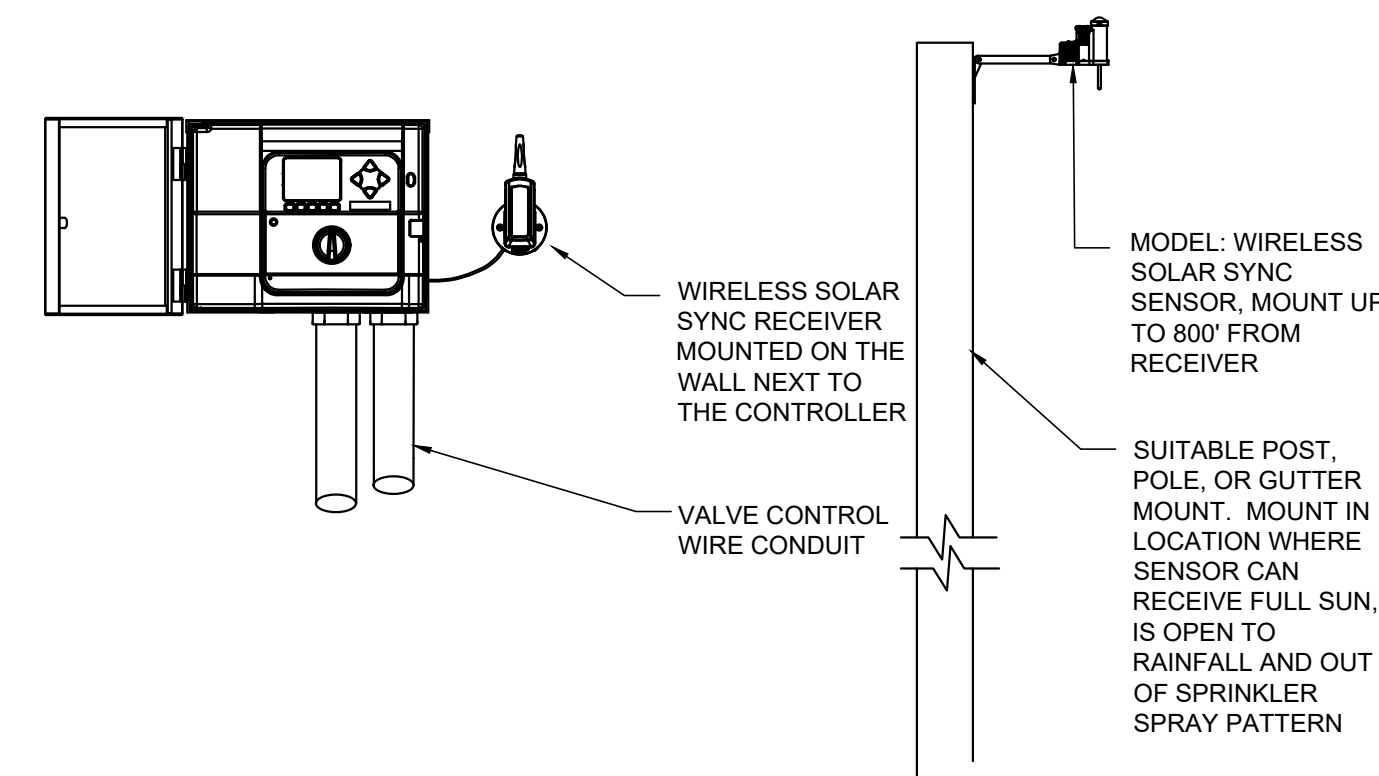


**5** QUICK COUPLER IN BOX DETAIL  
NOT TO SCALE

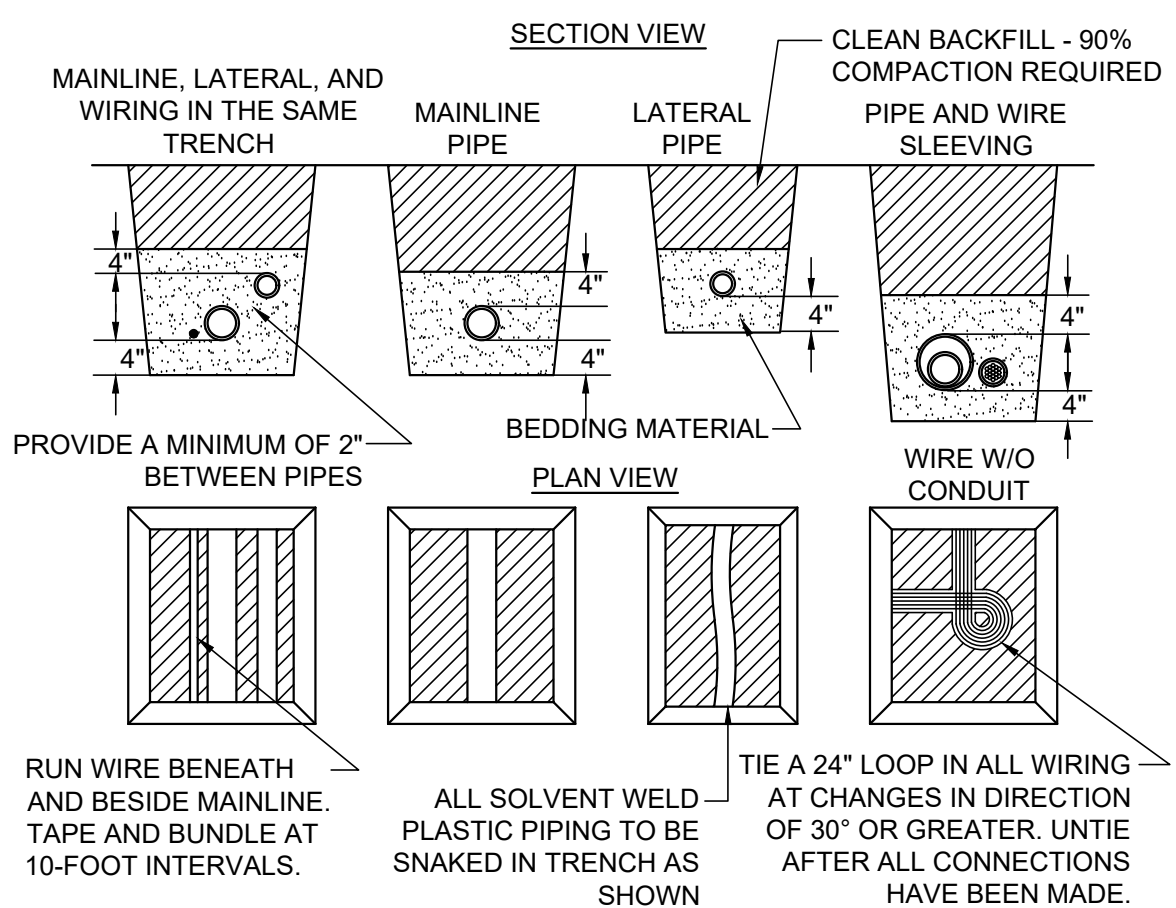


**5** HUNTER XCH STAINLESS CONTROLLER  
NOT TO SCALE

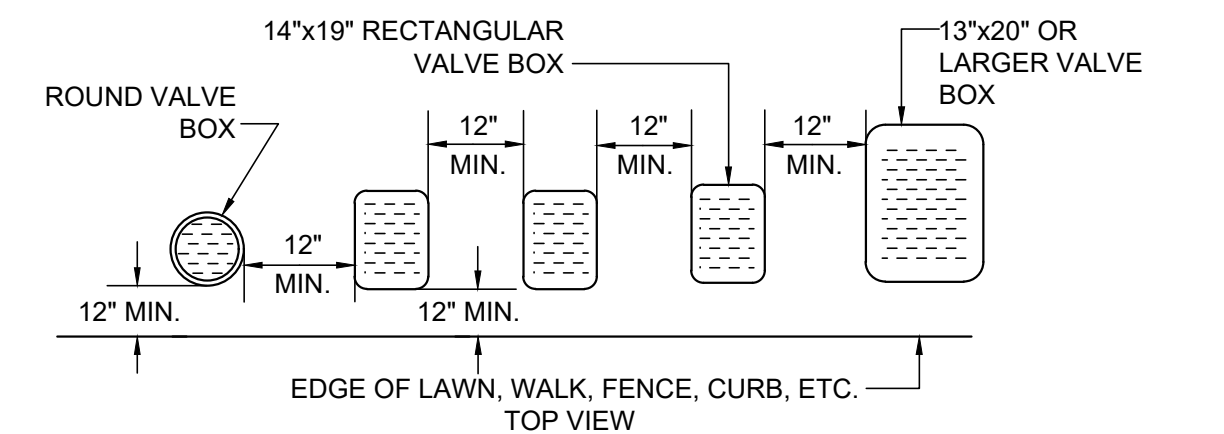
\*NOTE\* SPECIFY 6 OR 12 STATION MODEL CONTROLLER. MOUNT CONTROLLER WITH LCD SCREEN AT EYE LEVEL.



**6** HUNTER WIRELESS SOLAR SYNC SYSTEM  
NOT TO SCALE

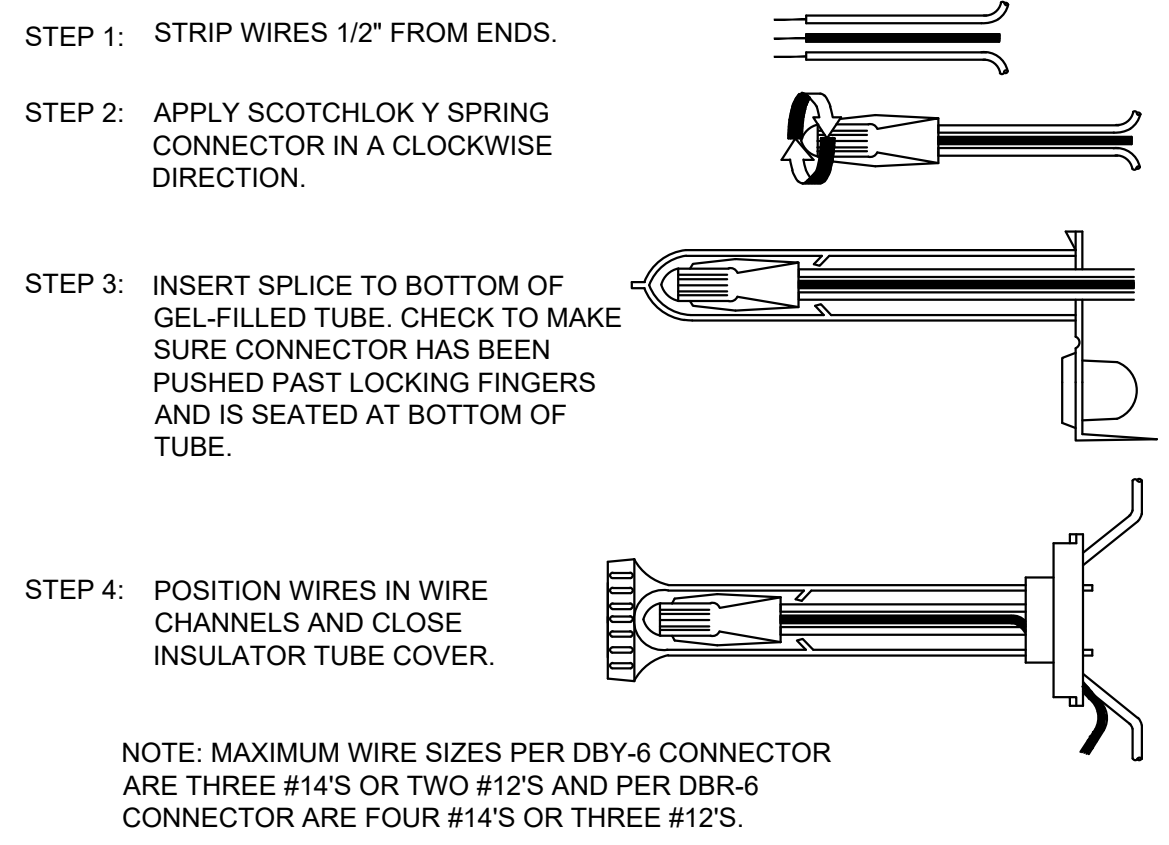


**7** PIPE AND WIRE TRENCHING  
NOT TO SCALE



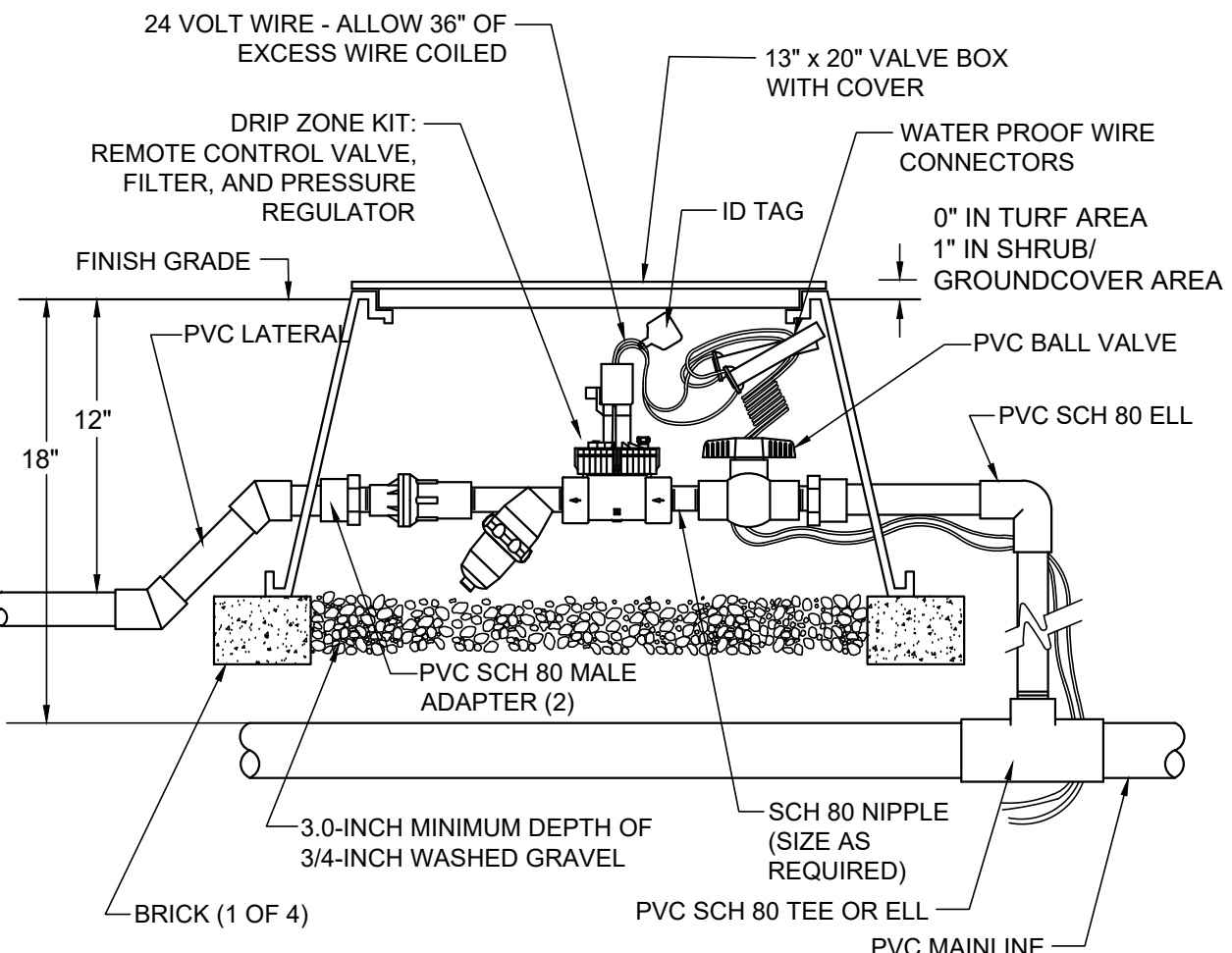
**8** VALVE BOX INSTALLATION DETAIL  
NOT TO SCALE

NOTES:  
 1. ALL IRRIGATION VALVE BOXES TO BE CARSON BLACK VALVE BOXES  
 2. CENTER BOX OVER VALVE TO FACILITATE SERVICING VALVE.  
 3. SET BOXES 1" ABOVE FINISH GRADE OR MULCH COVER IN GROUND COVER/SHRUB AREA AND FLUSH WITH FINISH GRADE IN TURF AREA.  
 4. SET VALVE BOX ASSEMBLY IN GROUND COVER/SHRUB AREA WHERE POSSIBLE. INSTALL IN LAWN AREA ONLY IF GROUND COVER/SHRUB AREA DOES NOT EXIST ADJACENT TO LAWN.  
 5. SET BOXES PARALLEL TO EACH OTHER AND PERPENDICULAR TO EDGE.  
 6. AVOID HEAVILY COMPACTING SOIL AROUND VALVE BOX EDGES TO PREVENT COLLAPSE AND DEFORMATION OF VALVE BOX SIDES.  
 7. VALVE BOXES SHALL HAVE BOLT DOWN LIDS WITH BOLTS INSTALLED.  
 8. VALVE BOXES SHALL BE BY CARSON, APPLIED ENGINEERING, OR EQUAL.

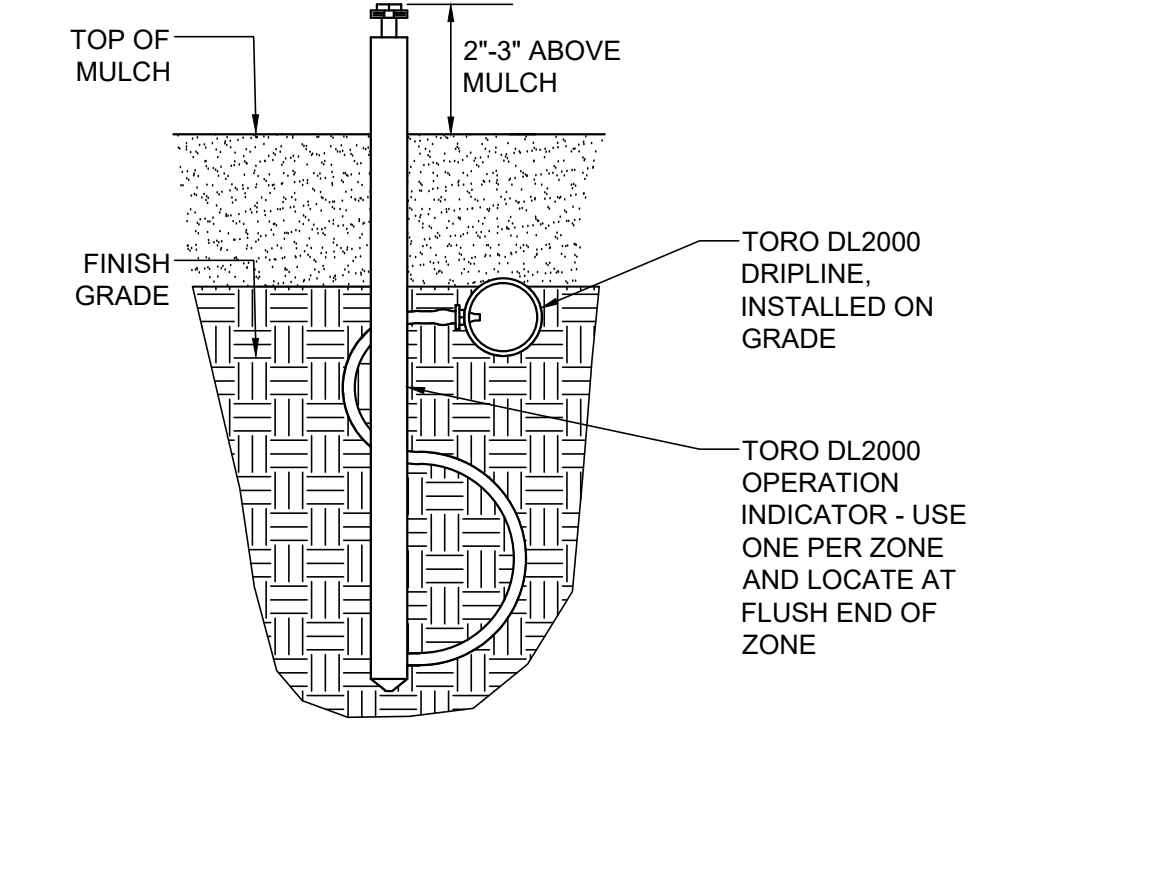


**9** WIRE CONNECTION DETAIL  
NOT TO SCALE

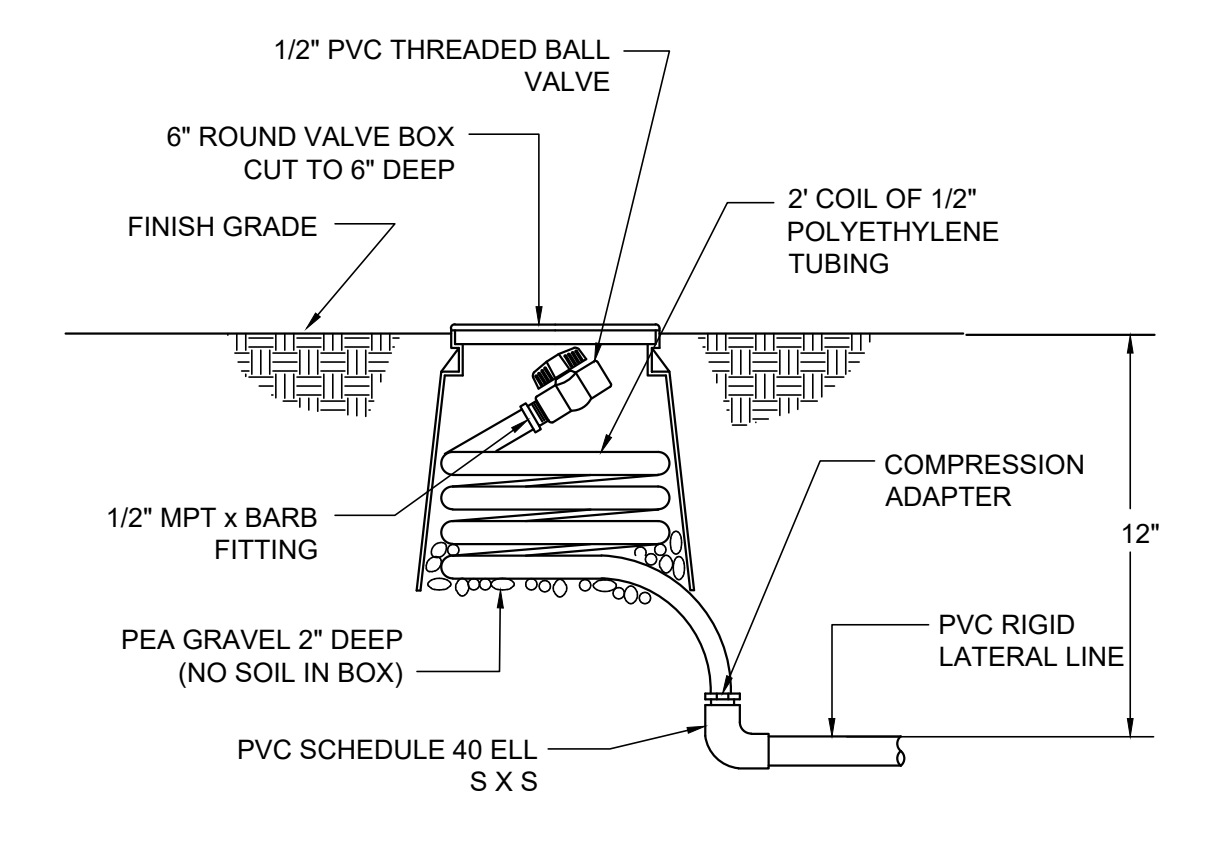
NOTE: MAXIMUM WIRE SIZES PER DBY-6 CONNECTOR ARE THREE #14'S OR TWO #12'S AND PER DBR-6 CONNECTOR ARE FOUR #14'S OR THREE #12'S.



**10** TORO DRIP ZONE KIT  
NOT TO SCALE



**11** TORO DL2000 OPERATION INDICATOR  
NOT TO SCALE



**12** MANUAL FLUSH VALVE DETAIL  
NOT TO SCALE

DATE: \_\_\_\_\_

REVISIONS: \_\_\_\_\_

NO. \_\_\_\_\_

DESIGNED: \_\_\_\_\_

DRAWN: \_\_\_\_\_

APPROVED: \_\_\_\_\_

**JANET S. LUEHR**  
 Central Irrigation Engineer  
**CID**  
 Irrigation Association  
 43274

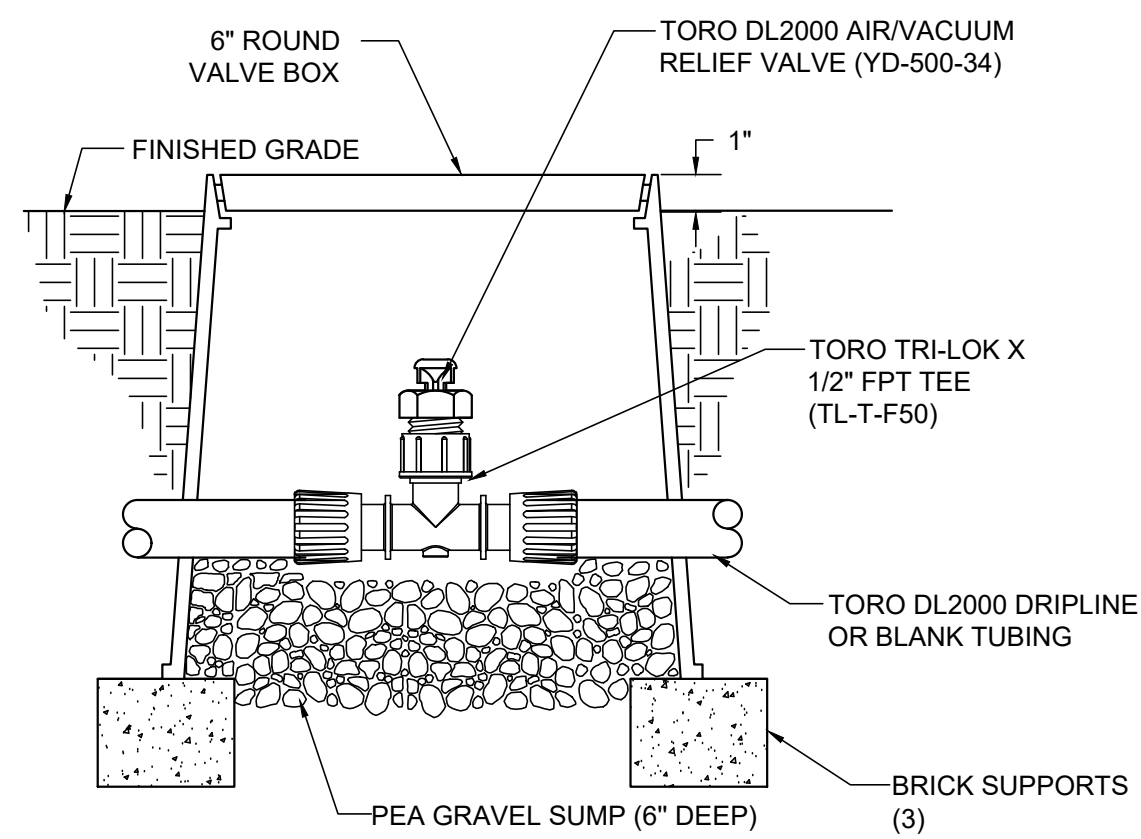
**BROOK WATER**  
 IRRIGATION CONSULTANTS  
 480 ST. JOHN STREET, SUITE 220  
 PLEASANTON, CALIFORNIA 94566  
 TEL: 925.551.0101 FAX: 925.551.0101  
 E-MAIL: JANET@BROOKWATER.COM

PREPARED FOR:  
**TOWN OF COLMA**  
 1198 EL CAMINO REAL  
 COLMA, CA 94014

IRRIGATION DETAILS  
 MISSION ROAD  
 BICYCLE & PEDESTRIAN IMPROVEMENTS PROJECT

SHEET L5  
 OF  
 43

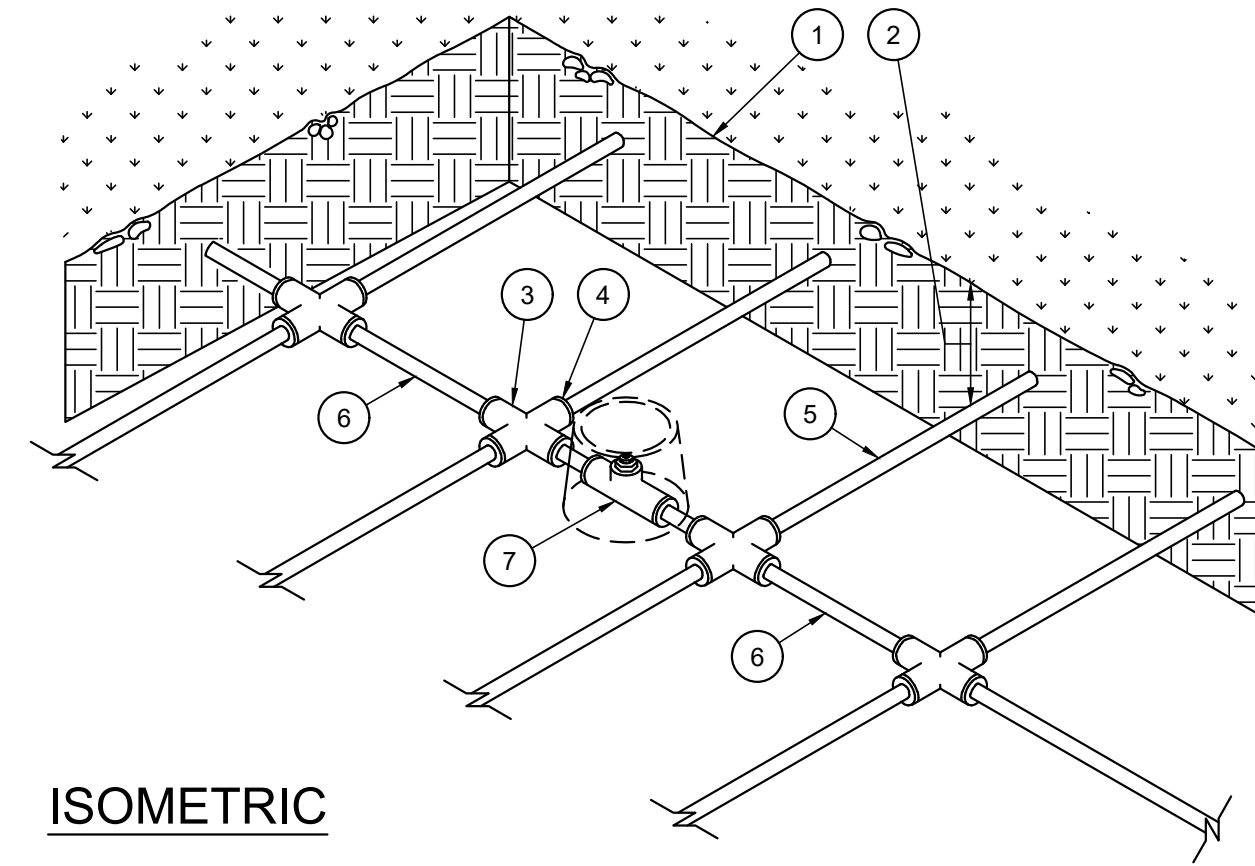
DATE: 4/17/20  
 JOB#: 18.393  
 4/22/20  
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**TORO DL2000 AIR/VACUUM RELIEF VALVE - PLUMBED TO TUBING**

NOT TO SCALE

13



**ISOMETRIC**

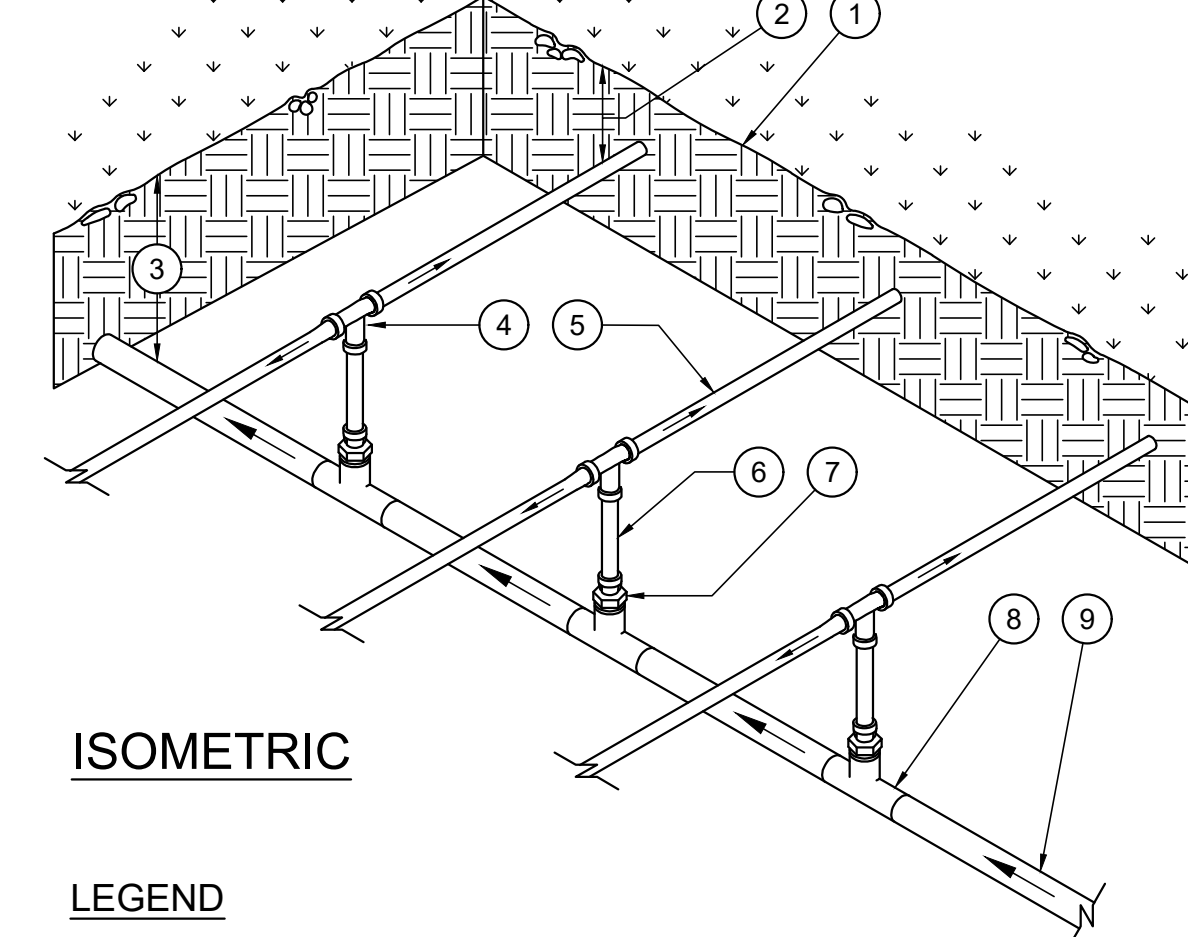
**LEGEND**

- 1. FINISH GRADE.
- 2. DEPTH OF TUBING PER SPECIFICATIONS
- 3. PVC CROSS (SxSxS)
- 4. COMPRESSION ADAPER.
- 5. DRIPLINE LATERAL.
- 6. AIR/VACUUM RELIEF LATERAL, BLANK POLY TUBING CENTERED ON MOUND OR BERM
- 7. AIR/VACUUM RELIEF VALVE AT HIGH POINT. REFER TO AIR/VACUUM RELIEF VALVE DETAIL.

**AIR/VACUUM RELIEF LATERAL**

NOT TO SCALE

14



**ISOMETRIC**

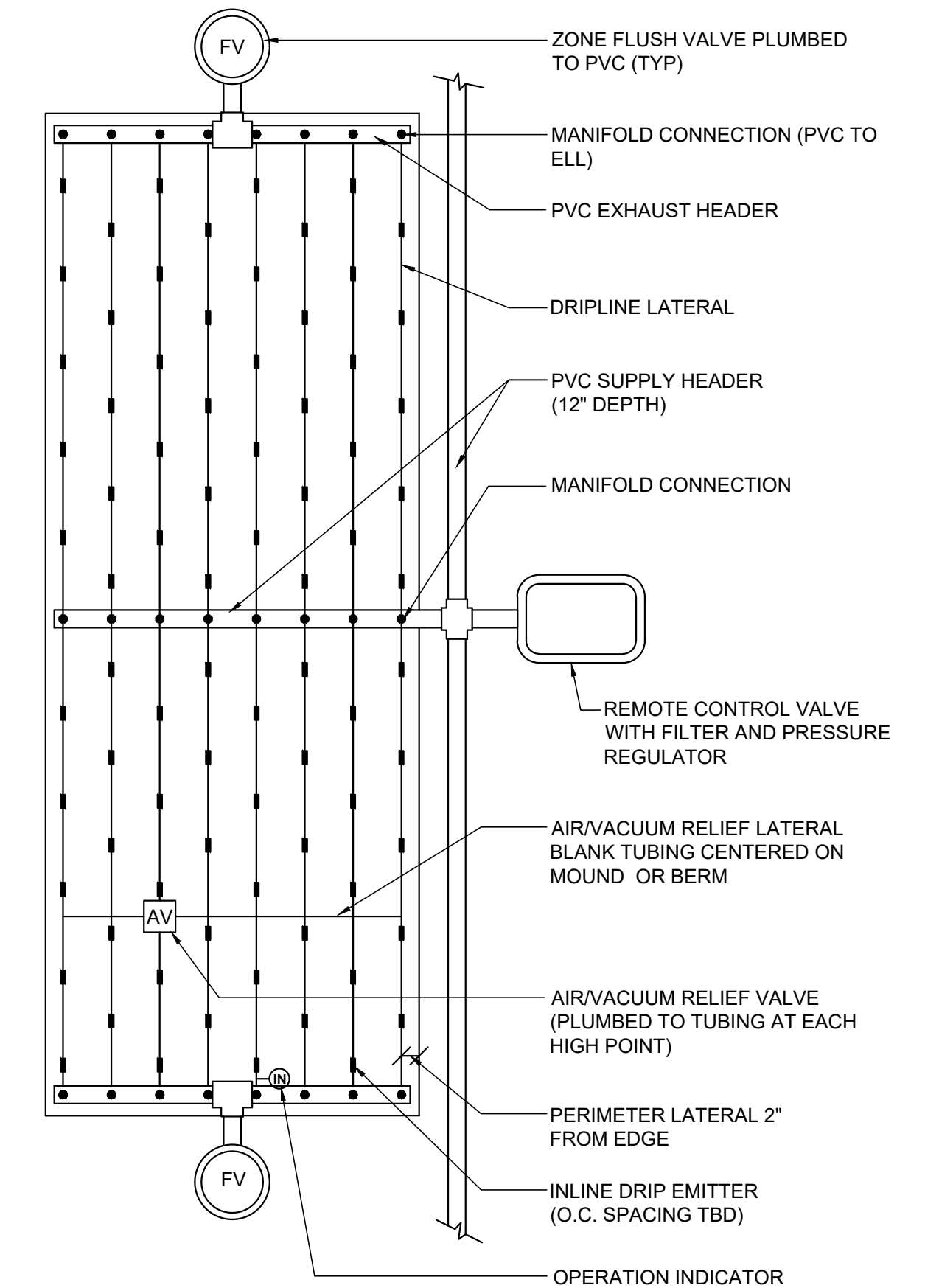
**LEGEND**

- 1. FINISH GRADE.
- 2. DEPTH OF TUBING PER SPECIFICATIONS
- 3. DEPTH OF PVC SUPPLY MANIFOLD PER SPECIFICATIONS.
- 4. DRIPLINE TEE FITTING.
- 5. DRIPLINE LATERAL.
- 6. BLANK POLY TUBING, LENGTH AS NECESSARY.
- 7. DRIPLINE MPT ADAPTER.
- 8. PVC TEE (SxSxT) WITH 1/2" FPT OUTLET.
- 9. PVC SUPPLY MANIFOLD FROM REMOTE CONTROL VALVE ASSEMBLY.

**CENTER FEED MANIFOLD**

NOT TO SCALE

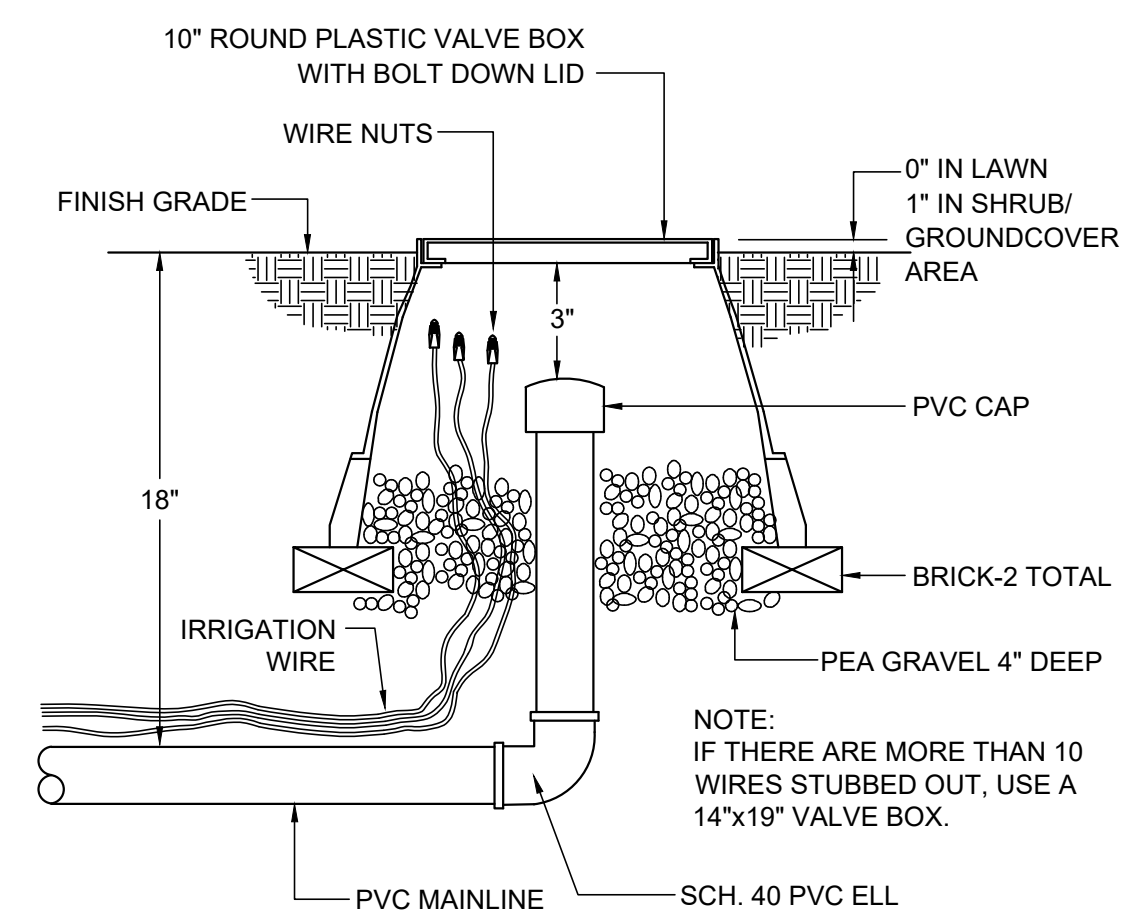
15



**CENTER FEED INLINE DRIP LAYOUT**

NOT TO SCALE

16



**MAINLINE CAP AND WIRE STUB DETAIL**

NOT TO SCALE



17

DESIGNED:	DRAWN:	APPROVED:	NO.	REVISIONS	DATE
			PREPARED FOR: <b>TOWN OF COLMA</b> 1198 EL CAMINO REAL COLMA, CA 94014		
			TITLE: <b>IRRIGATION DETAILS</b> MISSION ROAD BICYCLE & PEDESTRIAN IMPROVEMENTS PROJECT		
SHEET L6 OF 43			DATE : 4/17/20 JOB# : 18.393		
4/22/20 BID SET					

MISSION ROAD BICYCLE & PEDESTRIAN IMPROVEMENT PROJECT WATER EFFICIENT LANDSCAPE WORKSHEET										
Reference Evapotranspiration (Eto)		39.1								
ZONE NO.	PLANT TYPE	HYDROZONE* (PLANT WATER USE)	PLANT FACTOR (PF)	IRRIGATION METHOD**	IRRIGATION EFFICIENCY (IE)	ETAF (PF/IE)	HYDROZONE AREA (HA) (Sq Ft)	ETAF x HA	ESTIMATED TOTAL WATER USE (ETWU)	% LANDSCAPE AREA
<b>REGULAR LANDSCAPE AREA</b>										
B-1	SHRUB	BR	0.20	DL	0.81	0.25	670	165	4,010	30.6%
B-2	SHRUB	BR	0.20	DL	0.81	0.25	598	148	3,579	27.4%
B-3	SHRUB	BR	0.20	DL	0.81	0.25	552	136	3,304	25.3%
C-1	SHRUB	BR	0.20	DL	0.81	0.25	366	90	2,191	16.7%
<b>TOTALS (REGULAR LANDSCAPE AREAS)</b>							<b>2,186</b>	<b>540</b>	<b>13,085</b>	<b>100.0%</b>
<b>SPECIAL LANDSCAPE AREA</b>										
							0	0	0	0.0%
<b>TOTALS (SPECIAL LANDSCAPE AREAS)</b>							<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0%</b>
<b>TOTALS FOR ALL AREAS</b>							<b>2,186</b>	<b>540</b>	<b>13,085</b>	<b>100%</b>

HYDROZONE SUMMARY		
*Hydrozone Description	Total Sq. Ft.	% of Landscape
Cool Season Turf (CST)	0	0.0%
Warm Season Turf (WST)	0	0.0%
High Water Use Plants (HW)	0	0.0%
Bioretention Plants (BR)	2,186	100.0%
Medium Water Use Plants (MW)	0	0.0%
Low Water Use Plants (LW)	0	0.0%
Very Low Water Use Plants (VLW)	0	0.0%
Water Feature	0	0.0%
Special Landscape Area (SLA)	0	0.0%
<b>TOTAL</b>	<b>2,186</b>	<b>100.0%</b>
**Irrigation Method	Total Sq. Ft.	% of Landscape
Rotor (FC-R, PC-R)	0	0.0%
Multi-Stream Rotator (MR)	0	0.0%
Spray (S)	0	0.0%
Bubbler (B)	0	0.0%
Drip (D)	0	0.0%
In-Line Drip (DL)	2,186	100.0%
Micro Spray (MS)	0	0.0%
Other (O)	0	0.0%

CITY OF COLMA LANDSCAPE WATER USE STATEMENT	
<b>PROJECT NAME:</b>	<b>MISSION ROAD BICYCLE &amp; PEDESTRIAN IMPROVEMENT PROJECT</b>
<b>PROJECT ADDRESS:</b>	MISSION ROAD
<b>PREPARED BY:</b>	JANET LUEHRS (CID, CLIA #43274) BROOKWATER INC., IRRIGATION CONSULTANTS 480 SAINT JOHN STREET, SUITE 220 PLEASANTON, CA 94566 925-855-0417 925-855-0357 (FAX) <a href="mailto:Janet@Brookwater.com">Janet@Brookwater.com (e-mail)</a>
"I have complied with the criteria of the Water Efficient Landscape Ordinance and applied them accordingly for the efficient use of water in the irrigation design plan."	
Signed: <i>Janet Luehrs</i>	
<b>PART ONE</b>	<b>MAXIMUM APPLIED WATER ALLOWANCE (MAWA)</b>
MAWA = ETo x .62 x [(ETAF x HA) + ((1-ETAF) x SLA)]	
YEARLY ETo	39.1
CONVERSION FACTOR	0.62
ETAF	0.45
TOTAL IRRIGATED LANDSCAPE AREA (HA)	2,186 SQUARE FEET
SPECIAL LANDSCAPE AREA (SLA)	0 SQUARE FEET
<b>LANDSCAPE WATER ALLOWANCE</b>	<b>23,847 GALLONS PER YEAR</b>
TOTAL ACRE FEET	0.07 ACRE FEET
<b>PART TWO</b>	<b>ESTIMATED TOTAL WATER USE (ETWU)</b>
(AVERAGE ETAF AND ETWU FROM WATER EFFICIENT LANDSCAPE WORKSHEET)	
AVERAGE ETAF FOR REGULAR LANDSCAPE AREAS (TOTAL ETAF x AREA / TOTAL AREA)	0.25
<b>ETWU FOR REGULAR LANDSCAPE AREAS</b>	<b>13,085 GALLONS PER YEAR</b>
SITE WIDE ETAF	0.25
<b>ETWU FOR ALL LANDSCAPE AREAS</b>	<b>13,085 GALLONS PER YEAR</b>
TOTAL ACRE FEET	0.04 ACRE FEET

DESIGNED:	DRAWN:	APPROVED:
		
		
PREPARED FOR: TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA 94014		
TITLE: WATER CALCULATIONS MISSION ROAD BICYCLE & PEDESTRIAN IMPROVEMENTS PROJECT		
SHEET L7 OF 43		
DATE : 4/17/20 JOB# : 18.393		
4/22/20 BID SET		