

Plot Date: 10/5/2022 11:10:43 AM



CITY OF PACIFICA

ANZA DRIVE STORM DRAIN IMPROVEMENTS

NOVEMBER 2023



VICINITY MAP



LOCATION MAP

DRAWING INDEX

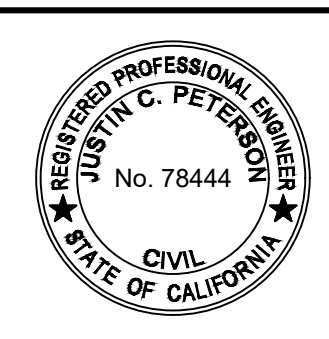
SHEET	TITLE
G01	COVER SHEET AND DRAWING INDEX
G02	CIVIL NOTES, ABBREVIATIONS, AND LEGEND
C01	PLAN AND PROFILE - ANZA DRIVE
C02	PLAN AND PROFILE - RESIDENTIAL EASEMENT
TC01	CIVIL DETAILS 1



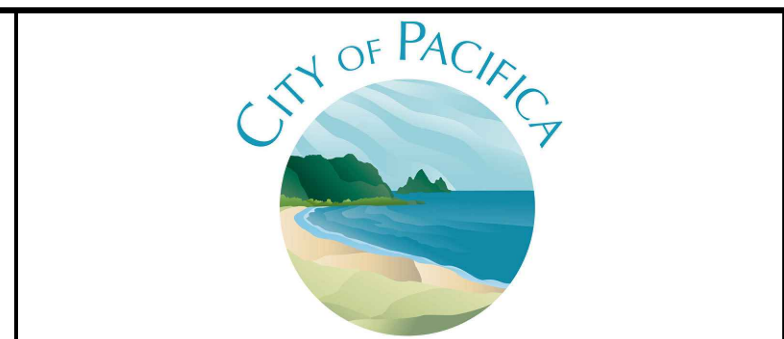
LAST SAVED BY: aucker

REV	DATE	BY	DESCRIPTION

DESIGNED JCP
DRAWN ART
CHECKED BAB
DATE NOVEMBER 2023



Digitally signed by Justin C. Peterson
 Contact Info: Carollo Engineers, Inc.
 Date: 2023.11.05 11:10:43 AM



CITY OF PACIFICA

ANZA DRIVE STORM DRAIN IMPROVEMENTS

GENERAL

COVER SHEET

VERIFY SCALES

BAR IS ONE INCH ON ORIGINAL DRAWING

IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 202521
DRAWING NO. G01
SHEET NO. 1 OF 5

Plot Date: 10/26/2022 11:06:47 AM

LAST SAVED BY: aubcker

ABBREVIATIONS

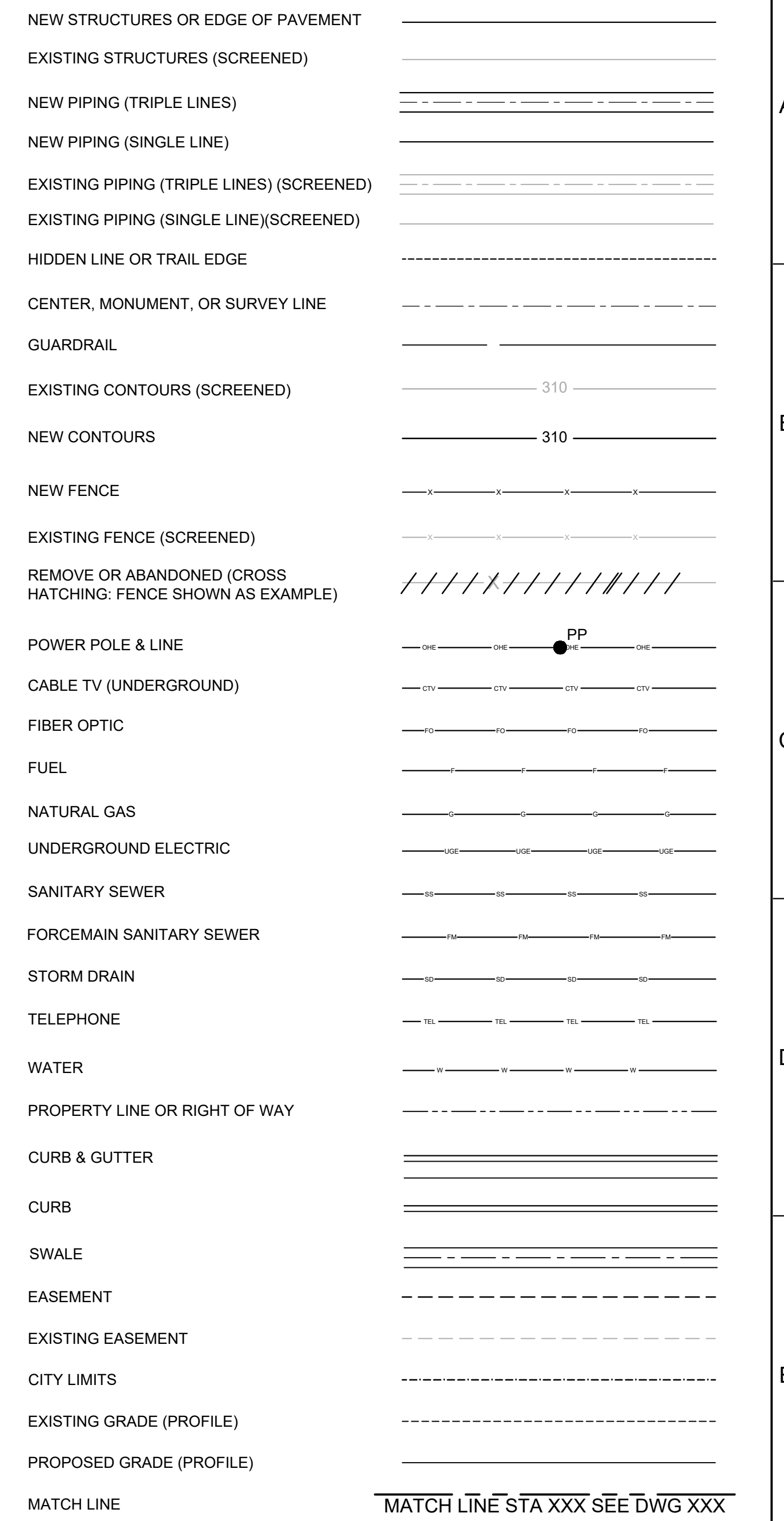
A	△ DELTA, DEFLECTION ANGLE, OR CENTRAL ANGLE # NUMBER (REBAR Ø) @ AT (MEASUREMENT) +/- PLUS/MINUS	F	FC FLEXIBLE COUPLING FCA FLANGE COUPLING ADAPTER FF FINISHED FLOOR FG FINISHED GRADE FH FIRE HYDRANT FIN FINISH FL FLOOR, FLOW LINE FLEX FLEXIBLE FLG FLANGE(D) FM FORCE MAIN FND FOUNDATION FO FIBER OPTIC FOB FLAT ON BOTTOM FOC FACE OF CURB FOT FLAT ON TOP FPM FEET PER MINUTE FS FIRE SERVICES FSP FABRICATED STEEL PIPE FT or ' FOOT, FEET FTG FOOTING	PROP	PROPERTY PL PROPERTY LINE PSI POUNDS PER SQUARE INCH PT POINT, POINT OF TANGENCY PV PLUG VALVE PVC POINT OF VERTICAL CURVATURE PVC POLYVINYL CHLORIDE PVI POINT OF VERTICAL INTERSECTION PVMT PAVEMENT PVT POINT OF VERTICAL TANGENCY
B	ABC AGGREGATE BASE COURSE ABND ABANDONED AC ASPHALTIC CONCRETE ACI AMERICAN CONCRETE INSTITUTE ACQ ACQUISITION CEMENT PIPE ADDL ADDITIONAL ADJ ADJACENT, ADJUST(ABLE) AL ALUMINUM APPROX APPROXIMATE(LY) ARV AIR RELEASE VALVE ASSY ASSEMBLY ASTM AMERICAN SOCIETY FOR TESTING AND MATERIALS AVG AVERAGE AVV AIR AND VACUUM VALVE	G	G GAS, GUTTER GA GAUGE GAL GALLONS GALV GALVANIZE(D) GB GRADE BREAK GC GROOVED COUPLING GEN GENERAL, GENERATOR GM GAS METER GND GROUND GPD GALLONS PER DAY GPM GALLONS PER MINUTE GR GRADE GRTG GRATING GSP GALVANIZED STEEL PIPE GV GATE VALVE	RQ	R RADIUS RAD RADIAL RCB REINFORCED CONCRETE BOX CULVERT RCP REINFORCED CONCRETE PIPE RED REDUCER REF REFERENCE REINF REINFORCE(D)(ING)(MENT) REQ'D REQUIRED REV REVISION RFCA RESTRAINED FLEX COUPLING ADAPTER RH RIGHT HAND ROW RIGHT OF WAY RR RAILROAD RT RIGHT
C	BC BEGIN CURB BF BLIND FLANGE BFP BACK FLOW PREVENTER BFV BUTTERFLY VALVE BH BOREHOLE BLDG BUILDING BM BENCH MARK BO BLOW OFF BOC BACK OF CURB BOP BOTTOM OF PIPE BOT BOTTOM BV BALL VALVE BVC BEGINNING OF VERTICAL CURVE BYP BYPASS	H	HDPPE HIGH DENSITY POLYETHYLENE HORIZ HORIZONTAL HP HIGH POINT HPGM HIGH PRESSURE GAS MAIN HW HEADWALL, HOT WATER HWL HIGH WATER LEVEL HWY HIGHWAY HYD HYDRANT	S	S SLOPE, SOUTH SCH SCHEDULE SD STORM DRAIN SDDI STORM DRAIN DROP INLET SDMH STORM DRAIN MANHOLE SE SOUTHEAST SECT SECTION SHLD SHOULDER SHT SHEET SIM SIMILAR SL SLOPE SPEC(S) SPECIFICATION(S) SQ SQUARE SS SANITARY SEWER SSCO SANITARY SEWER CLEANOUT SSMH SANITARY SEWER MANHOLE SST STAINLESS STEEL ST STREET STA STATION STD(S) STANDARD(S) STL STEEL STRUCT STRUCTURAL SW SOUTHWEST SWK SIDEWALK SYM SYMMETRICAL
D	CATV CABLE TV CAV COMBINATION AIR VALVE CB CATCH BASIN CC CENTER OF CURVATURE, CENTER TO CENTER, CONCRETE CURB CDT CONDUIT CF CUBIC FEET CFM CUBIC FOOT PER MINUTE CFS CUBIC FEET PER SECOND CI CAST IRON CIP CAST IRON PIPE CIPP CURED IN PLACE PIPE CJ CONSTRUCTION JOINT CL CENTER LINE CLK CHAIN LINK CLR CLEAR / CLEARANCE CLSM CONTROL LOW STRENGTH MATERIAL CMLC CEMENT MORTAR LINED AND COATED CMP CORRUGATED METAL PIPE CMU CONCRETE MASONRY UNIT CO CLEANOUT CONC CONCRETE CONN CONNECT, CONNECTION CONST CONSTRUCTION CONT CONTINUOUS OR CONTINUATION OR (D) COORD COORDINATE CP CONTROL POINT CPLG COUPLING CSP CORRUGATED STEEL PIPE CTJ CONTROL JOINT CTL CONTROL CTR CENTER, CENTERED CU CUBIC CULV CULVERT CY CUBIC YARD	I	ID INSIDE DIAMETER IE INVERT ELEVATION IN or " INCHES INCL INCLUDE, INCLUDING INSTR INSTRUMENTATION INV INVERT IP IRON PIPE IRR IRRIGATION	T	TB THRUST BLOCK TC TOP OF CURB TEL TELEPHONE TOG TOP OF GRATING TMH TELEPHONE MANHOLE TOC TOP OF CONCRETE TOP TOP OF PIPE TOW or TW TOP OF WALL TRD TREAD TYP TYPICAL
E	CDT CONDUIT CF CUBIC FEET CFM CUBIC FOOT PER MINUTE CFS CUBIC FEET PER SECOND CI CAST IRON CIP CAST IRON PIPE CIPP CURED IN PLACE PIPE CJ CONSTRUCTION JOINT CL CENTER LINE CLK CHAIN LINK CLR CLEAR / CLEARANCE CLSM CONTROL LOW STRENGTH MATERIAL CMLC CEMENT MORTAR LINED AND COATED CMP CORRUGATED METAL PIPE CMU CONCRETE MASONRY UNIT CO CLEANOUT CONC CONCRETE CONN CONNECT, CONNECTION CONST CONSTRUCTION CONT CONTINUOUS OR CONTINUATION OR (D) COORD COORDINATE CP CONTROL POINT CPLG COUPLING CSP CORRUGATED STEEL PIPE CTJ CONTROL JOINT CTL CONTROL CTR CENTER, CENTERED CU CUBIC CULV CULVERT CY CUBIC YARD	J	JT JOINT	U	UC UNDERCUT UG UNDERGROUND UGE UNDERGROUND ELECTRIC UNK UNKNOWN UNO UNLESS NOTED OTHERWISE USA UNDERGROUND SERVICE ALERT
F	D DRAIN, DEPTH D/W DRIVEWAY APRON DEG or ° DEGREE DEMO DEMOLISH, DEMOLITION DET DETAIL DI DROP INLET DIA or Ø DIAMETER DIFF DIFFERENCE DIM DIMENSION DIP DUCTILE IRON PIPE DIST DISTANCE DR DRIVE, DRAIN DWG(S) DRAWING(S)	L	L LENGTH LAT LATERAL LATITUDE LB(S) POUND(S) LF LINEAL FEET LH LEFT HAND LONG LONGITUDINAL LP LOW POINT LT LEFT LWL LOW WATER LEVEL	V	V VERTICAL, VALVE VAR VARIES VB VALVE BOX VC VERTICAL CURVE, VICTAULIC COUPLER VERT VERTICAL CLAY PIPE VLT VAULT VPI VERTICAL POINT OF INTERSECTION
G	DRAIN, DEPTH DRIVEWAY APRON DEGREE DEMOLISH, DEMOLITION DETAIL DROP INLET DIAMETER DIFFERENCE DIMENSION DUCTILE IRON PIPE DISTANCE DRIVE, DRAIN DRAWING(S)	M	MATL MATERIAL MAX MAXIMUM MECH MECHANICAL MFR MANUFACTURER MGD MILLION GALLONS PER DAY MH MANHOLE MIN MINIMUM MISC MISCELLANEOUS MJ MECHANICAL JOINT MON MONUMENT	W	W WATER, WIDTH OR WEST W WITH W/O WITHOUT WL WATER LEVEL WM WATER METER WS WATER SURFACE WSP WELDED STEEL PIPE WSTP WATERSTOP WV WATER CONTROL VALVE WW WASTEWATER
H	DRAIN, DEPTH DRIVEWAY APRON DEGREE DEMOLISH, DEMOLITION DETAIL DROP INLET DIAMETER DIFFERENCE DIMENSION DUCTILE IRON PIPE DISTANCE DRIVE, DRAIN DRAWING(S)	N	N NORTH, NORTHING NA NOT APPLICABLE NE NORTHEAST NG NATURAL GAS NIC NOT IN CONTRACT NO OR # NUMBER NOM NOMINAL NW NORTHWEST	X	XFMR TRANSFORMER
I	DRAIN, DEPTH DRIVEWAY APRON DEGREE DEMOLISH, DEMOLITION DETAIL DROP INLET DIAMETER DIFFERENCE DIMENSION DUCTILE IRON PIPE DISTANCE DRIVE, DRAIN DRAWING(S)	O	O.F. OUTSIDE FACE OC ON CENTER OD OUTSIDE DIAMETER, OUTSIDE DIMENSION OHE OVERHEAD ELECTRIC	Y	YD YARD
J	DRAIN, DEPTH DRIVEWAY APRON DEGREE DEMOLISH, DEMOLITION DETAIL DROP INLET DIAMETER DIFFERENCE DIMENSION DUCTILE IRON PIPE DISTANCE DRIVE, DRAIN DRAWING(S)	P	PB PULLBOX PC POINT OF CURVATURE PCC POINT OF COMPOUND CURVE PERP PERPENDICULAR PH POTHOLE PI POINT OF INTERSECTION PL PLATE, PROPERTY LINE POB POINT OF BEGINNING PP POWER POLE PRC POINT OF REVERSE CURVATURE		

NOTES

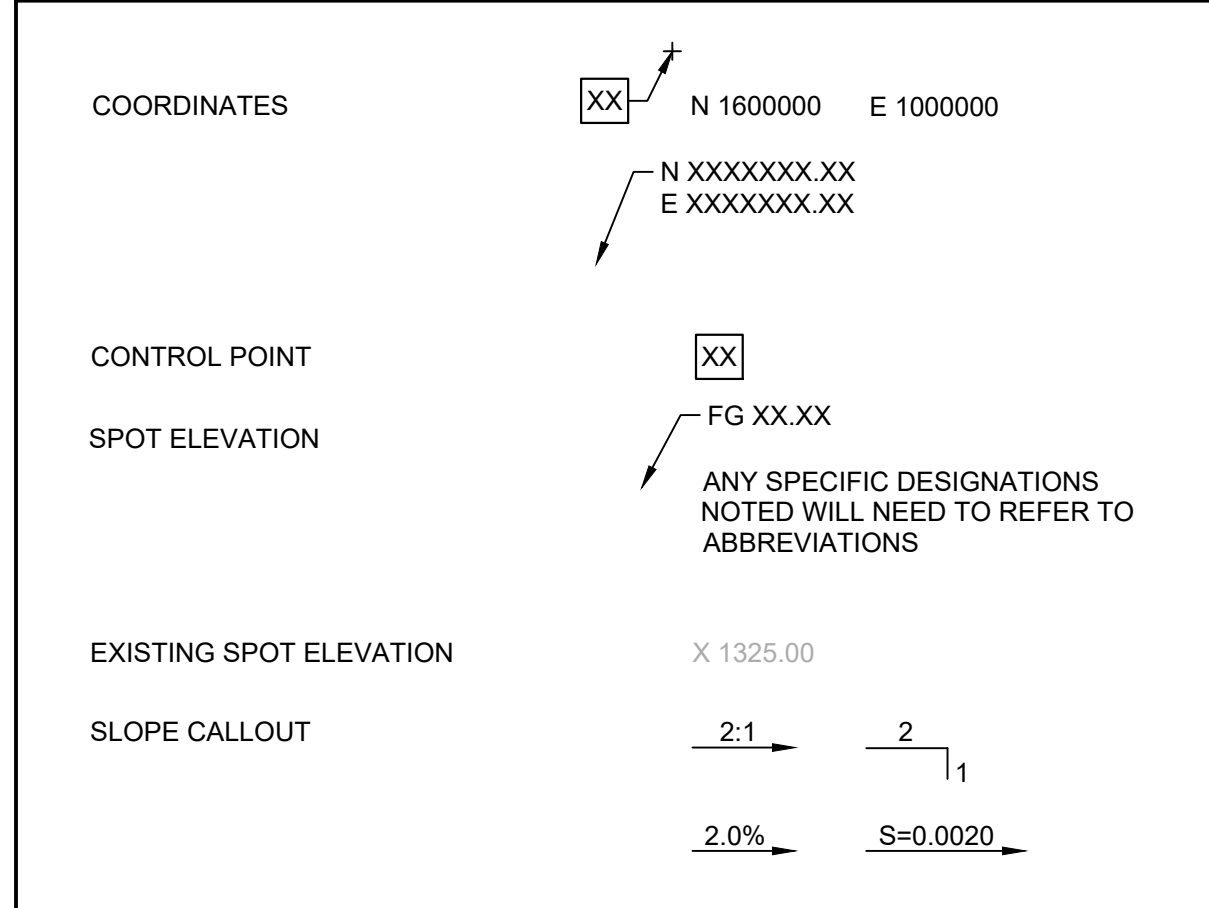
- GENERAL NOTES:**
- FOLLOWING NOTES ARE GENERAL AND APPLY TO ALL SHEETS OF THESE CONTRACT DOCUMENTS AS IF THEY WERE WRITTEN IN THEIR ENTIRETY ON EACH SHEET.
 - CONTRACTOR SHALL VERIFY ALL DIMENSIONS BEFORE STARTING WORK AND SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES. CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING ALL EXISTING CONDITIONS INCLUDING LOCATION AND DIMENSIONS OF ALL EXISTING CONSTRUCTION AND UTILITIES. CONTRACTOR SHALL NOTIFY ENGINEER IF THERE IS A CONFLICT BETWEEN THE CONTRACT DOCUMENTS AND EXISTING CONSTRUCTION BEFORE PROCEEDING WITH WORK.
 - UNLESS DETAILED, SPECIFIED, OR OTHERWISE INDICATED ON THE DRAWINGS, CONSTRUCTION SHALL BE AS INDICATED IN THE APPLICABLE TYPICAL DETAILS AND GENERAL NOTES. TYPICAL DETAILS SHALL APPLY EVEN THOUGH NOT REFERENCED AT SPECIFIC LOCATIONS ON DRAWINGS.
 - WHERE NO CONSTRUCTION DETAILS ARE SHOWN OR NOTED FOR ANY PART OF WORK, DETAILS SHALL BE IN THE SAME AS FOR OTHER SIMILAR WORK.
 - CONTRACTOR SHALL COMPLY WITH LOCAL CONSTRUCTION STORM WATER DISCHARGE REGULATIONS AND REQUIREMENTS.
 - PRIOR TO EXCAVATION FOR NEW STRUCTURES, ELECTRICAL CONDUIT, FABRICATION OF NEW PIPING AND/OR OTHER PROPOSED UTILITIES, CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL EXISTING PIPING AND UTILITIES IN THE CONSTRUCTION AREA. THE CONTRACTOR SHALL TEMPORARILY RELOCATE CONFLICTING EXISTING UTILITIES AT TIE-IN/CONNECTION LOCATIONS AND REINSTALL THEM AS REQUIRED TO ELIMINATE THE CONFLICT AT NO ADDITIONAL COST TO THE OWNER.
 - ALL PIPELINES 12" AND LARGER SHALL HAVE A MINIMUM COVER OF 36" UNLESS THE COVER DEPTH IS SPECIFICALLY INDICATED ON THE DRAWINGS. PIPE SMALLER THAN 12" SHALL HAVE A MINIMUM COVER OF 30" UNLESS NOTED OTHERWISE. PIPES SHALL BE ROUTED AS SHOWN UNLESS MINOR REVISIONS ARE NECESSARY TO MISS EXISTING PIPES, STRUCTURES, ETC. CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING ALL FITTINGS AND ADAPTERS REQUIRED TO MAKE THE ROUTING CHANGES AT NO ADDITIONAL COST TO THE OWNER. CONTRACTOR SHALL INCLUDE COST FOR THIS IN THE BID.
 - EXISTING FACILITY AND UTILITY INFORMATION SHOWN ON THE DRAWINGS WAS OBTAINED FROM AVAILABLE RECORDS OR ELECTRONIC FILES. NEITHER THE OWNER NOR ENGINEER ASSUMES ANY RESPONSIBILITY FOR FACILITIES AND UTILITIES NOT SHOWN OR NOT IN THE LOCATION SHOWN. THE CONTRACTOR SHALL FIELD VERIFY ALL LOCATIONS, SIZES, MATERIAL TYPES, AND ELEVATIONS SHOWN AROUND OR NEAR AREAS OF NEW CONSTRUCTION PRIOR TO START OF CONSTRUCTION.
 - THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT FROM DAMAGE EXISTING FACILITIES AND UTILITIES SHOWN OR NOT SHOWN THAT ARE TO REMAIN IN PLACE. ALL FACILITIES DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE EXPEDITIOUSLY REPAIRED OR RECONSTRUCTED TO THE ORIGINAL OR BETTER CONDITION AT THE CONTRACTOR'S EXPENSE WITHOUT ADDITIONAL COMPENSATION.
 - CONTRACTOR SHALL MAKE CONNECTIONS TO EXISTING PIPE, EQUIPMENT, ETC. AS REQUIRED AND SHALL PROVIDE ALL FITTINGS, ADAPTERS, AND APPURTENANCES REQUIRED TO MAKE THE CONNECTIONS. PROVIDE ALL SUPPORTS REQUIRED FOR A RIGIDLY SUPPORTED COMPLETE AND WORKING SYSTEM.
 - ADJUST ALL VALVE BOXES, VAULTS, PULL BOXES, AND MANHOLES TO FINISHED GRADE UNLESS OTHERWISE SHOWN OR DIRECTED. MANHOLES IN OPEN FIELDS SHALL BE SET TWELVE INCHES ABOVE FINISHED GRADE AND VAULTS SHALL BE SIX INCHES ABOVE FINISHED GRADE.
 - THE CONTRACTOR SHALL CONTACT THE PROPER UTILITY REPRESENTATIVE AS FOLLOWS FOR QUESTIONS OR COORDINATION OF CONSTRUCTION RELATED TO EXISTING UTILITIES.
CITY OF PACIFICA: 650-738-3760 UNDERGROUND SERVICE ALERT: 811
 - CONTRACTOR SHALL VERIFY THAT PIPING SHOWN TO BE ABANDONED OR AS ABANDONED PREVIOUSLY IS NO LONGER IN SERVICE. LINES IN SERVICE SHALL BE MAINTAINED UNTIL NO LONGER REQUIRED BY THE PLANT.
 - ALL EXISTING PIPES THAT ARE TO BE ABANDONED IN PLACE OR REMOVED MAY NOT BE SHOWN. WHERE PIPING IS TO BE ABANDONED AND MUST REMAIN IN SERVICE UNTIL COMPLETION OF OTHER PHASES OF WORK, AND IT CONFLICTS WITH NEW PIPING, TEMPORARILY RELOCATE PIPING AS REQUIRED TO MAINTAIN SERVICE BY THE PLANT.
 - CONTRACTOR SHALL REROUTE THE EXISTING PIPING IF REQUIRED TO MISS THE PROPOSED STRUCTURES. THE EXISTING PIPE SHALL REMAIN IN SERVICE UNTIL NEW PIPING IS READY TO BE PLACED INTO SERVICE. DOWNTIME SHALL BE A MAXIMUM OF 2 HOURS, UNLESS SPECIFIED OR SHOWN OTHERWISE.
 - ALL SIDEWALKS TO BE 3'-0" WIDE UNLESS SHOWN OTHERWISE.
 - THE CONTRACTOR SHALL TAKE SPECIAL PRECAUTIONS IN THE VICINITY OF ANY OVERHEAD ELECTRIC LINES. CONTRACTOR SHALL ABIDE BY THE NATIONAL ELECTRIC CODE AND ANY REQUIREMENT BY THE OWNER OF THE ELECTRIC LINES.
 - PROVIDE ALL SHEETING/SHORING REQUIRED TO PROTECT EXISTING STRUCTURES, PIPES AND FACILITIES.
 - CONTRACTOR SHALL VERIFY LOCATION OF ALL ARCHITECTURAL, MECHANICAL, AND ELECTRICAL ITEMS BEFORE PLACING ANY STRUCTURAL STEEL OR CONCRETE. ALSO, STRUCTURAL DIMENSIONS AND OPENINGS CONTROLLED BY ARCHITECTURAL, MECHANICAL, OR ELECTRICAL EQUIPMENT SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
 - MECHANICAL AND ELECTRICAL EQUIPMENT SUPPORTS, ANCHORAGES, OPENINGS, RECESSES, AND REVEALS NOT SHOWN ON THE STRUCTURAL DRAWINGS, THAT ARE REQUIRED BY OTHER CONTRACT DRAWINGS, SHALL BE PROVIDED PRIOR TO CASTING CONCRETE.

- GENERAL PIPELINE NOTES:**
- DIMENSIONS TO STRUCTURES, REFERENCED PIPING, PAVING, AND OTHER IMPROVEMENTS IS APPROXIMATE. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND CONDITIONS 14 DAYS IN ADVANCE OF THE CONSTRUCTION PROGRESS. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES TO THE ENGINEER.
 - CONTRACTOR SHALL MAINTAIN A MINIMUM CLEARANCE OF 10 FEET HORIZONTAL AND 3 FEET VERTICAL BETWEEN THE SEWER LINES AND EXISTING WATER LINES.
 - IN ALL LOCATIONS WHERE TRENCH PLATE IS USED FOR VEHICULAR OR PEDESTRIAN TRAFFIC, THE CONTRACTOR SHALL APPLY SKID RESISTANT COATING ON THE TRENCH PLATES AND COLD MIX ASPHALT CONCRETE AT THE EDGES. THE TRENCH PLATES SHALL BE NOTCHED INTO THE ASPHALT, CONCRETE, OR TRAVELED SURFACE TO PREVENT SLIPPAGE AND ROCKING UNDER TRAFFIC.
 - THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTIES ADJACENT TO THE WORK, THROUGHOUT THE CONSTRUCTION PERIOD.
 - ALL OPEN TRENCHES, WORK AREAS AND SHAFTS SHALL HAVE A SHORING SYSTEM IN ACCORDANCE WITH OSHA, STATE AND LOCAL REQUIREMENTS.
 - THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE, COUNTY, AND LOCAL LAWS AND ORDINANCES RELATING TO THE SAFETY AND CHARACTER OF WORK, EQUIPMENT AND PERSONNEL. THIS INCLUDES BUT IS NOT LIMITED TO SHEETING, SHORING, BRACING, VENTILATION, CONFORMANCE WITH TRAFFIC CONTROL AND MAINTENANCE OF BARRICADES AND WARNING DEVICES.
- UTILITY NOTES:**
- EXISTING UTILITIES IN THE PROJECT MAY BE IN A FRAGILE CONDITION. THE CONTRACTOR SHALL EXERCISE NECESSARY CAUTION WHEN WORKING NEAR EXISTING UTILITIES.
 - PLAN LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES ARE BASED ON RECORD DRAWINGS, POT-HOLING AND SURVEY INFORMATION AND ARE CONSIDERED APPROXIMATE ONLY. WHERE NO ELEVATIONS ARE SHOWN, NO INFORMATION WAS AVAILABLE DURING THE DESIGN PERIOD.
 - SOME UTILITY SERVICES MAY NOT BE SHOWN ON THESE DRAWINGS. THE CONTRACTOR SHALL TAKE NECESSARY MEASURES TO LOCATE AND PROTECT SERVICE DURING CONSTRUCTION.
 - CONTRACTOR SHALL CALL THE "LOCAL UTILITY LOCATOR" AT 811 PRIOR TO ANY EXCAVATION ACTIVITIES.
 - THE LOCATION, SIZE, AND MATERIALS OF EXISTING UNDERGROUND UTILITIES SHOWN ON THESE DRAWINGS ARE APPROXIMATE AND IS SHOWN FOR BIDDING PURPOSES. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT THE UTILITY OWNERS SO THAT THOSE UTILITIES MAY MARK THE LOCATION OF THEIR UTILITIES PRIOR TO ANY EXCAVATION ACTIVITIES. THE CONTRACTOR SHALL BE RESPONSIBLE TO LOCATE AND PROTECT EXISTING UTILITIES.

LINE WORK



COORDINATES / ELEVATION



REV	DATE	BY	DESCRIPTION

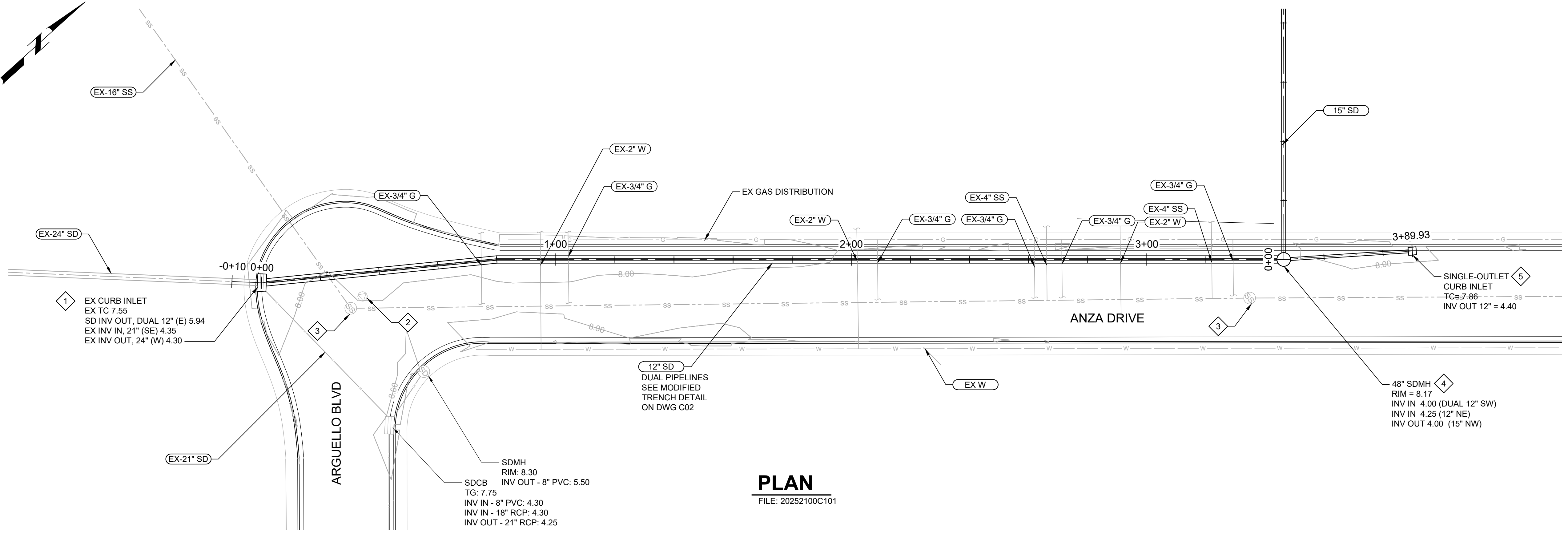
DESIGNED JCP	
DRAWN ART	
CHECKED BAB	
DATE NOVEMBER 2023	

Digitally signed by Justin C. Peterson
Contact Info: Carollo Engineers, Inc.
Date: 2023.11.08 15:03:00 -0800

CITY OF PACIFICA
ANZA DRIVE STORM DRAIN IMPROVEMENTS
GENERAL
CIVIL NOTES, ABBREVIATIONS, AND LEGEND

VERIFY SCALES BAR IS ONE INCH ON ORIGINAL DRAWING 0 1"	JOB NO. 202521
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	DRAWING NO. G02
	SHEET NO. 2 OF 5

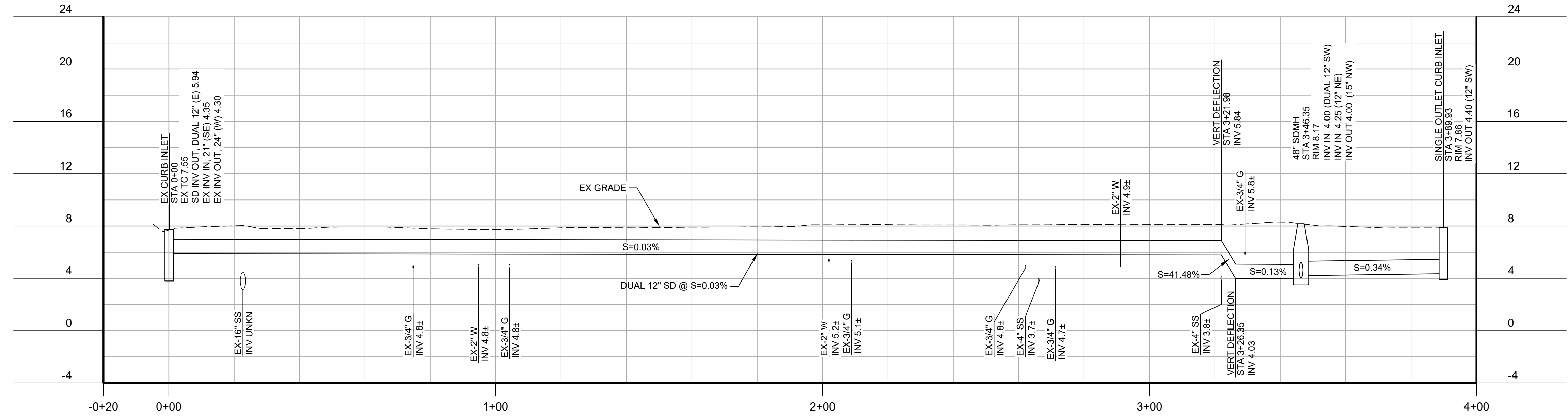
Plot Date: 10/19/2023 2:24:52 PM



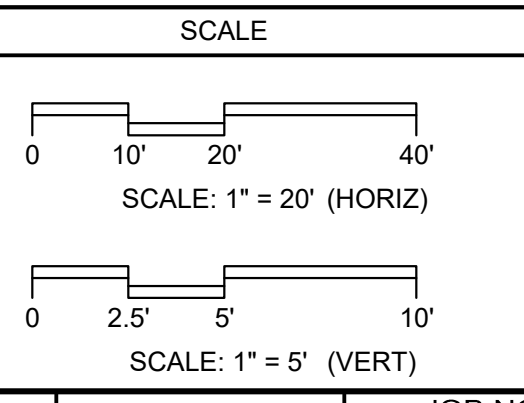
PLAN
FILE: 20252100C101

- GENERAL NOTES:**
- SEE DWG TC01 FOR CITY STANDARD CURB, GUTTER, TRENCH, PIPELINE, AND MANHOLE DETAILS.
 - STORM DRAIN PIPELINES IN ANZA DRIVE SHALL BE CORRUGATED SMOOTH-WALL HDPE (DR 11).
 - STORM DRAIN PIPELINES IN RESIDENTIAL EASEMENTS SHALL BE CORRUGATED SMOOTH-WALL HDPE (DR 11).
 - RADIUS OF CURVATURE FOR HDPE PIPELINES SHALL CONFORM TO MANUFACTURER'S MINIMUM RECOMMENDATIONS.
 - HDPE PIPELINES SHALL BE SILT TIGHT PER AASHTO M294, TYPE S OR ASTM F2306. JOINTS SHALL MEET REQUIREMENTS OF ASTM D3212. GASKETS SHALL MEET REQUIREMENTS OF ASTM F477.

- KEY NOTES:**
- INSTALL NEW 3'X3' GO INLET COVER AT EXISTING CURB INLET. INSTALL TWO PARALLEL 12" HDPE PIPELINES IN EXISTING CURB INLET.
 - PROTECT EXISTING SURVEY MONUMENT IN PLACE.
 - EXISTING SSMH.
 - 48" SSMH PER CITY STANDARD DETAIL 304.
 - INSTALL NEW CURB INLET MID STATE CONCRETE PRODUCTS, GO CURB INLET (CALTRANS STANDARD) OR APPROVED EQUAL. INSTALL INLET AT LOCAL LOW POINT IN EXISTING STREET. CONFORM TO EXISTING GRADE.



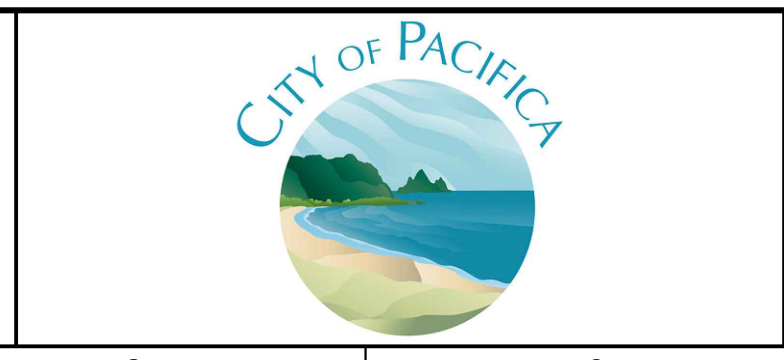
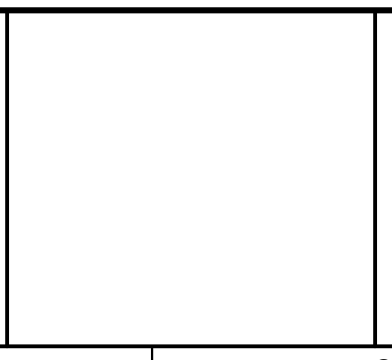
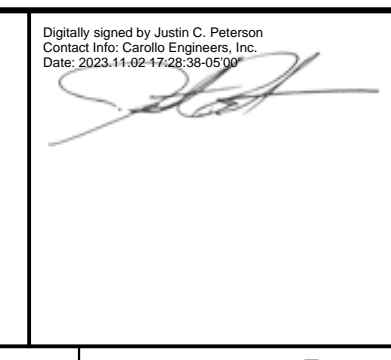
PROFILE
FILE: 20252100C101



LAST SAVED BY: aucker

REV	DATE	BY	DESCRIPTION
1			
2			
3			

DESIGNED	JEP
DRAWN	ART
CHECKED	BAB
DATE	NOVEMBER 2023

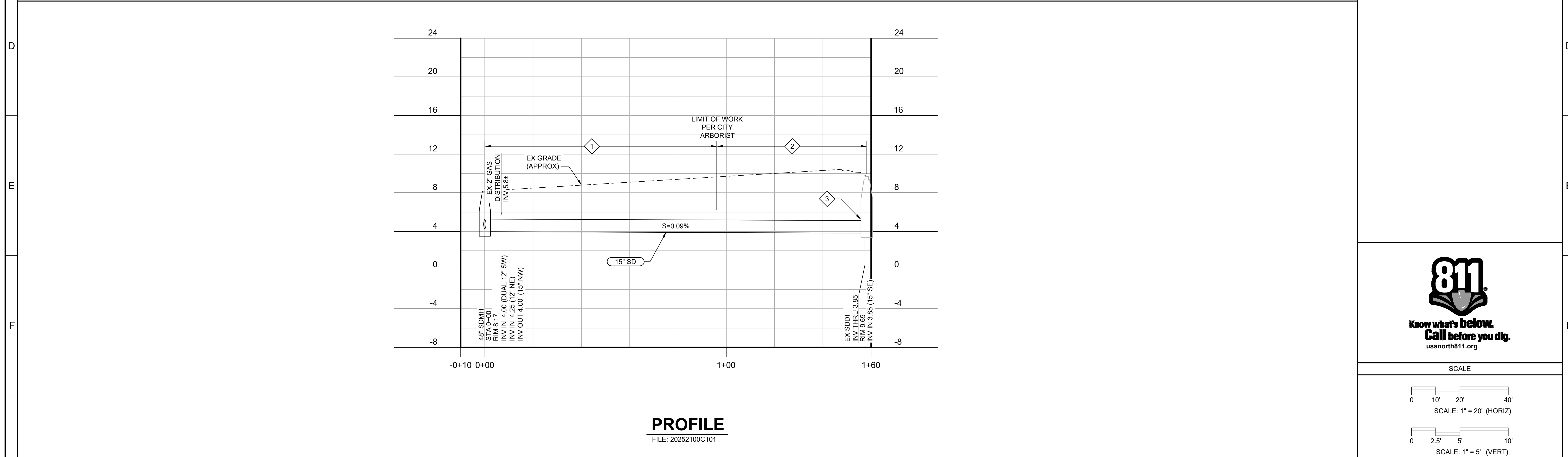
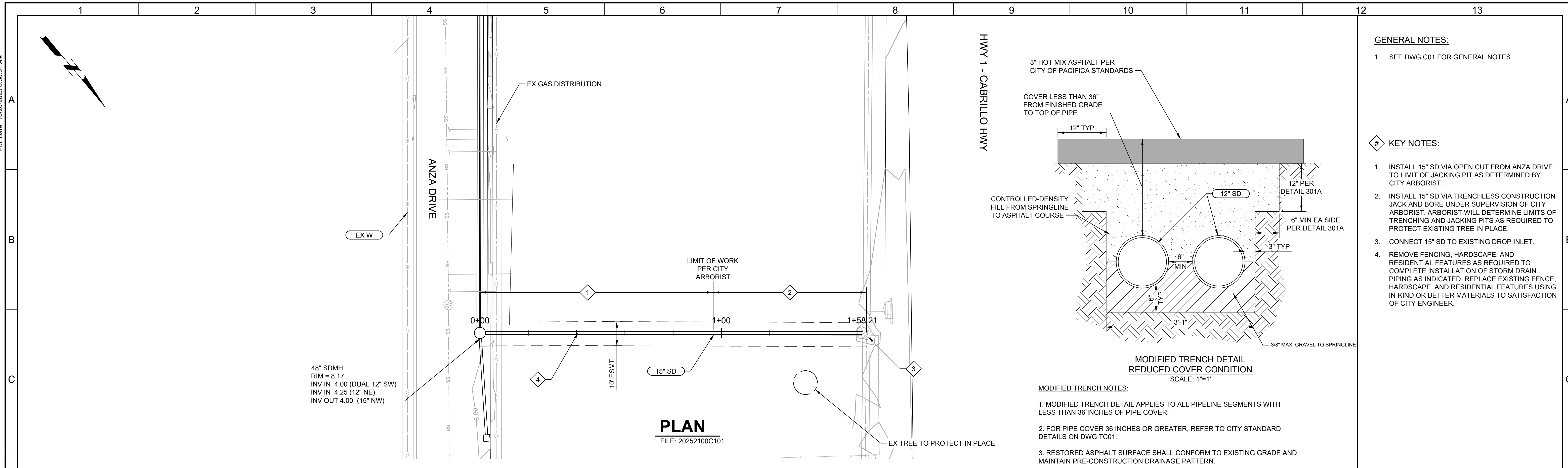


CITY OF PACIFICA
ANZA DRIVE STORM DRAIN IMPROVEMENTS
CIVIL
PLAN AND PROFILE
ANZA DRIVE

VERIFY SCALES	JOB NO. 202521
BAR IS ONE INCH ON ORIGINAL DRAWING	DRAWING NO. C01
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	SHEET NO. 3 OF 5

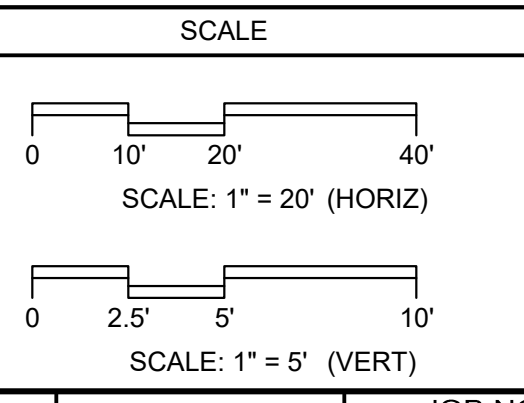
Plot Date: 10/20/2023 8:36:51 AM

LAST SAVED BY: aucker



- GENERAL NOTES:**
- SEE DWG C01 FOR GENERAL NOTES.
- KEY NOTES:**
- INSTALL 15" SD VIA OPEN CUT FROM ANZA DRIVE TO LIMIT OF JACKING PIT AS DETERMINED BY CITY ARBORIST.
 - INSTALL 15" SD VIA TRENCHLESS CONSTRUCTION JACK AND BORE UNDER SUPERVISION OF CITY ARBORIST. ARBORIST WILL DETERMINE LIMITS OF TRENCHING AND JACKING PITS AS REQUIRED TO PROTECT EXISTING TREE IN PLACE.
 - CONNECT 15" SD TO EXISTING DROP INLET.
 - REMOVE FENCING, HARDSCAPE, AND RESIDENTIAL FEATURES AS REQUIRED TO COMPLETE INSTALLATION OF STORM DRAIN PIPING AS INDICATED. REPLACE EXISTING FENCE, HARDSCAPE, AND RESIDENTIAL FEATURES USING IN-KIND OR BETTER MATERIALS TO SATISFACTION OF CITY ENGINEER.

- MODIFIED TRENCH NOTES:**
- MODIFIED TRENCH DETAIL APPLIES TO ALL PIPELINE SEGMENTS WITH LESS THAN 36 INCHES OF PIPE COVER.
 - FOR PIPE COVER 36 INCHES OR GREATER, REFER TO CITY STANDARD DETAILS ON DWG TC01.
 - RESTORED ASPHALT SURFACE SHALL CONFORM TO EXISTING GRADE AND MAINTAIN PRE-CONSTRUCTION DRAINAGE PATTERN.



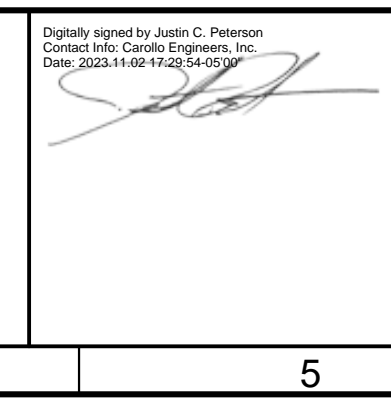
REV	DATE	BY	DESCRIPTION
1			
2			
3			

DESIGNED
JEP

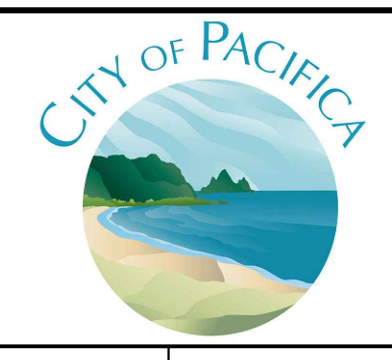
DRAWN
ART

CHECKED
BAB

DATE
NOVEMBER 2023



Digitally signed by Justin C. Peterson
Contact Info: Carollo Engineers, Inc.
Date: 2023.11.08 11:30:40-0800



CITY OF PACIFICA

ANZA DRIVE STORM DRAIN IMPROVEMENTS

CIVIL

PLAN AND PROFILE
ANZA DRIVE

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING

0 1" 1'

IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO.
202521

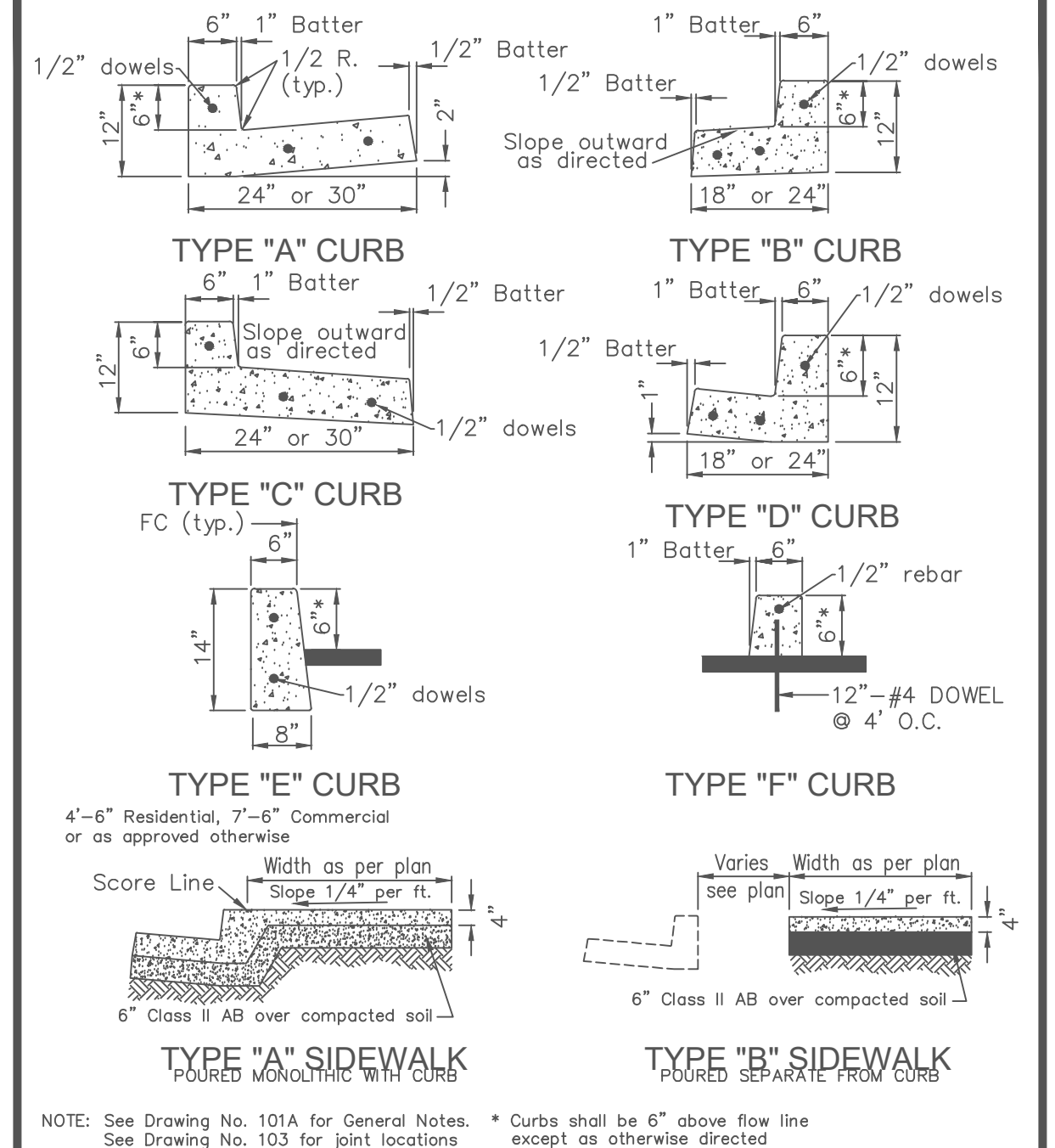
DRAWING NO.
C02

SHEET NO.
4 OF 5

Plot Date: 10/6/2022 11:06:47 AM

- Subgrade shall be compacted to at least 90% of maximum density in the top 6 inches prior to placing base material as specified below.
- Where unsuitable subgrade material is encountered, the City Engineer may require remedial work to be done, including, but not limited to, removing additional soil and placing an additional layer of crushed rock and/or geotechnical fabric under the base material.
- Base material under curbs, gutters, and sidewalks shall be Caltrans Class 2 Aggregate Base, compacted to approximately 95% of maximum density. The compacted thickness of base material must not be less than 6 inches.
- Existing concrete shall be removed at expansion joints or shall be saw cut. Saw-cuts in sidewalk or curb shall be at an existing score line in the sidewalk.
- Concrete thicker than 4 inches must be saw-cut to at least 4 inches deep before chipping out the rest, but if remaining concrete becomes cracked or damaged it shall be replaced as well.
- No utility boxes, clearouts, poles, or structures of any kind will be permitted in the sidewalk area without the written approval of the City Engineer.
- New work shall reasonably match existing texture and color of adjacent existing concrete.
- Concrete shall be moistened immediately prior to placing concrete.
- Concrete shall be designated as 3,000 psi 28-day compressive strength with Type II or V Portland cement and 3/4 inch maximum crushed rock aggregate. No admixtures shall be used without the written permission of the City Engineer. For in-fill or replacement concrete, where adjacent concrete is darkened with oxide, one pound of lampblack may be added per C.Y.
- Concrete shall have a slump of not more than 4 inches.
- New sidewalk, curb or gutter shall be connected to adjacent existing concrete using 12 inch long by 1/2 inch diameter steel dowels (#4 rebar is acceptable) in tight fitting holes drilled into the existing concrete (approximately 6 inches into adjacent sidewalk, curb and gutter, or 4" into the back of curb).
- Half inch thick expansion joints shall be placed on both sides of driveway approaches, curb and sidewalk return points, fixed structures (including storm drain inlets), and at approximately 24 feet on center. An expansion joint shall also be placed between the back of sidewalk or driveway approach and any driveway, walkway or foundation poured against it. Weakened plane joints shall be placed at all inside corners (including tree wells and parking strips), both sides of utility boxes and wherever shrinkage would concentrate stresses, and otherwise at no more than 12 feet on center. See Standard 110 for more. Expansion joint material shall completely separate the concrete all the way to the forms and down to base material, and it shall be cut to match curved surfaces. Expansion joints within sidewalk, curb and gutter shall have steel dowels joining the concrete on both sides of the joint. These dowels shall be smooth, or one side of the joint shall have the dowels wrapped with sleeves to allow them to move.
- One quarter inch deep by one quarter inch radius score lines in sidewalks shall be evenly spaced at approximately 4 feet apart or as directed by the City Engineer. In addition, a similar score mark shall be placed 6 inches back from the face of curb where curb and sidewalk are poured monolithically. See Standard 101A.
- No concrete shall be placed until the City Engineer has inspected and approved forms, subgrade and base material, and dowels into adjacent existing concrete.
- All exposed edges shall be rounded with a 1/2 inch radius tool. Sidewalk shall have a medium broom finish cross-wise to the direction of travel. Curbs and gutters shall have a light wood float finish.
- No voids or rock-pockets shall be present in any exposed surfaces. Any patching done must blend completely with the surrounding surface. If any standing water falls to drain off sidewalk or gutter surfaces, that portion of sidewalk or gutter must be replaced.
- Curbs, sidewalk and driveway approaches shall be backfilled within 7 days after pouring.
- Form faces shall not vary from the dimensions shown by more than 1/4 inch.
- Unless otherwise specified on the plans, concrete shall be cured by means of the impervious membrane.
- All new sidewalk constructed adjacent to new curbs shall be Type "A" (poured monolithic with curb) unless otherwise approved in writing by the City Engineer. See Standard 101A.
- Whenever a portion of existing curb or gutter needs to be replaced it shall be replaced as a complete, curb-and-gutter unit, matching with sidewalk, if contiguous.
- Saw-cut, remove and replace a section of pavement at least sixteen inches wide by the full depth of the pavement structure and any replaced section of concrete curb, gutter or valley gutter, including where new ADA access ramps or driveway approach ramps are installed in existing sidewalk.
- Edges of remaining pavement shall be heavily coated with approved tack-coat material before new asphalt concrete is placed against them. The joint between the old and new pavement shall be sealed with tack-coat and covered with sand.
- Asphalt concrete pavement adjacent to new concrete shall not be installed for at least 7 days after pouring concrete. Concrete shall be heavily coated with approved tack-coat material before asphalt concrete is placed against it.

CITY OF PACIFICA Dept. of Public Works ENGINEERING DIVISION		STANDARD CURB, GUTTER, SIDEWALK AND DRIVEWAY NOTES		AUG 2014
REV	DATE	BY:	DWG. NO.	101A



CITY OF PACIFICA DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION		STANDARD CURB, GUTTER & SIDEWALK		AUG 2014
REV	DATE	BY:	DWG. NO.	101B

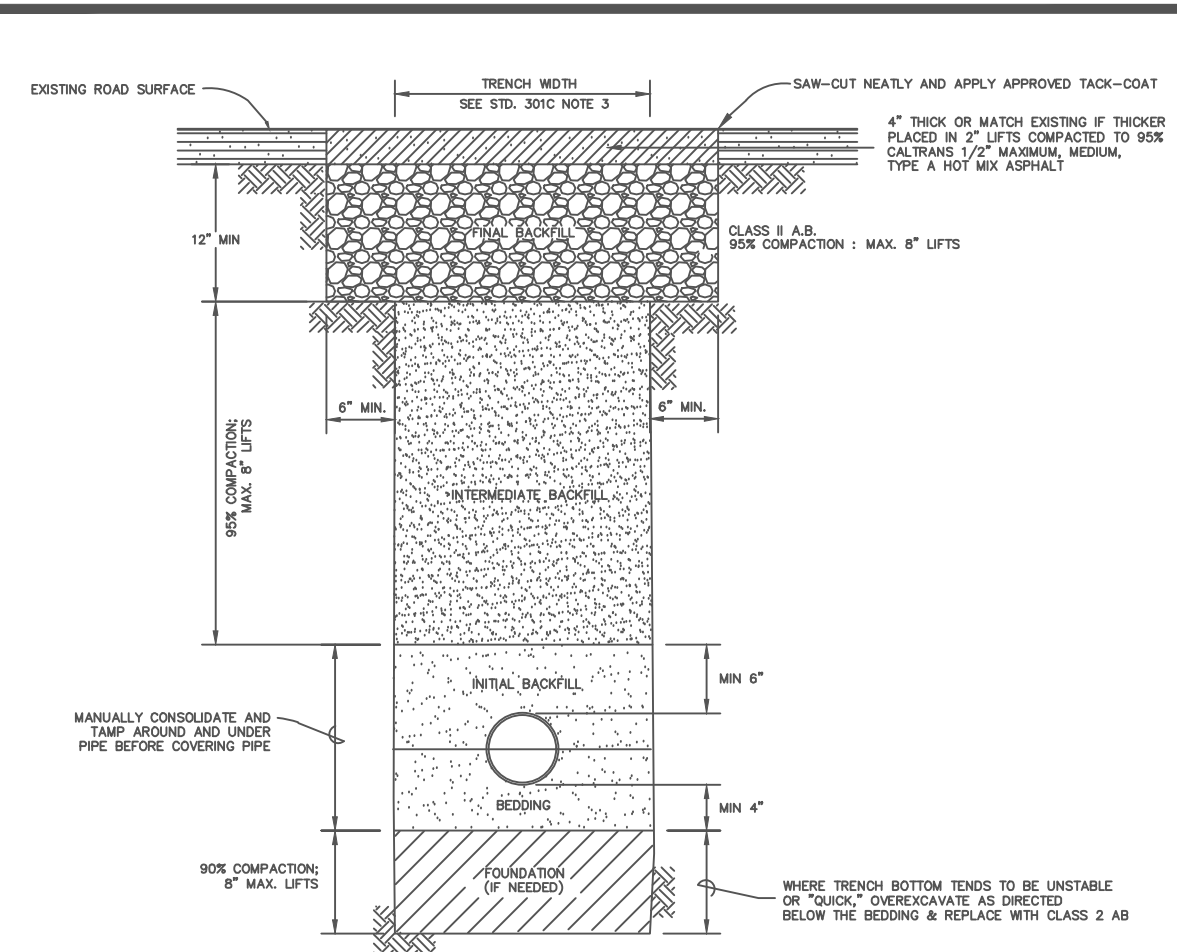
- ### GENERAL TRENCH NOTES
- Initial backfill material (see Dwg. 301A & Dwg. 301B) shall conform to requirements of the utility having jurisdiction over the installation. For sewer and storm drain pipes, initial fill shall be 3/8 (minus) clean, fractured rock chips.
 - The material to be used for intermediate backfill (see Dwg. 301A & Dwg. 301B) is dependent upon the location of the excavation and the type of native soil at that location:
 - In unpaved areas, suitable native soil (relatively dry, granular material, as approved by the Engineer) may be replaced if it can be recompacted to at least 95% of its original density (not more than 5% leftover). In planted areas the topsoil must be stockpiled separately from the subsoil, and should be replaced last.
 - In paved areas over uncemented (loose) sand, clean native material may be replaced. It can be mechanically-compacted or jetted (see below). If the trench sides begin to slough and expose voids under the pavement, the pavement must be cut further back to allow full compaction of those areas all the way up to the pavement.
 - In paved areas with anything other than uncemented sand, the intermediate fill must be Caltrans Class II Aggregate Base (3/4 maximum); see section 26 of the Caltrans Standard Specifications. It shall be compacted to approximately 95% of maximum density.
 - Fills shall be placed in loose lifts not exceeding 8 inches in thickness before compaction, except that the first lift of initial backfill over a pipe may be up to 16 inches before compaction with manually-operated jumping jack type of equipment. When using a compaction wheel on a backhoe or hydraulic excavator, the initial lift may be up to 36 inches before compaction and subsequent lifts may be up to 24 before compaction.
 - See Dwg. 300B for more information on compacting backfill.
 - In lieu of compacted granular material, trenches may be backfilled with Controlled-Density Fill (CDF or sand-cement slurry); plastic pipes must be sufficiently anchored to prevent floating between anchors.
 - Testing of materials and performance shall be in conformance with the methods stated in the latest edition of the State of California Department of Transportation Standard Specifications.
 - Additional thickness and lifts of asphalt concrete may be required to match existing structural section on major roads.
 - A T-cut is required around all trenches or pits in paved areas. It consists of a widening of the excavation near the top. At a level 12 below the underside of the pavement (generally at least 16 below the pavement surface) there shall be a horizontal ledge 6 wide all around the excavation.
- NOTES:
 a. CONTRACTOR WILL SHORE ALL TRENCHES IN CONFORMANCE WITH STATE SAFETY STANDARDS (especially Dept. of Industrial Relations, Division of Industrial Safety, Construction Safety Orders, Article 5 - Excavations).
 b. EDGES OF EXCAVATIONS IN PAVED AREAS SHALL BE SAW-CUT PARALLEL AND/OR PERPENDICULAR TO PAVEMENT EDGE (CURB LINE). PATCHES WITHIN 12 INCHES OF PAVEMENT EDGE SHALL EXTEND TO THE PAVEMENT EDGE. IF THERE IS A CONCRETE GUTTER AT THE PAVEMENT EDGE, THE NEW ASPHALT CONCRETE SHALL FINISH 1/4 HIGHER THAN THE CONCRETE.
 c. VERTICAL FACES OF PAVEMENT AND CONCRETE SHALL BE THOROUGHLY PAINTED WITH APPROVED TACK-COAT MATERIAL PRIOR TO PLACING NEW HOT MIX ASPHALT AGAINST THEM. EMULSION MATERIALS (BROWN) MUST BE ALLOWED TO CURE (TURN BLACK) BEFORE PLACING THE ASPHALT.

CITY OF PACIFICA DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION		STANDARD GENERAL TRENCH NOTES		AUG 2014
REV	DATE	BY:	DWG. NO.	300A

- ### DETAILED TRENCHING NOTES
- Slope trench walls or provide supports in conformance with all local and national safety standards. Open only as much trench as can be safely maintained by available equipment. Backfill all trenches as soon as practicable, but not later than the end of each working day, unless otherwise approved.
 - Minimum Trench Widths:

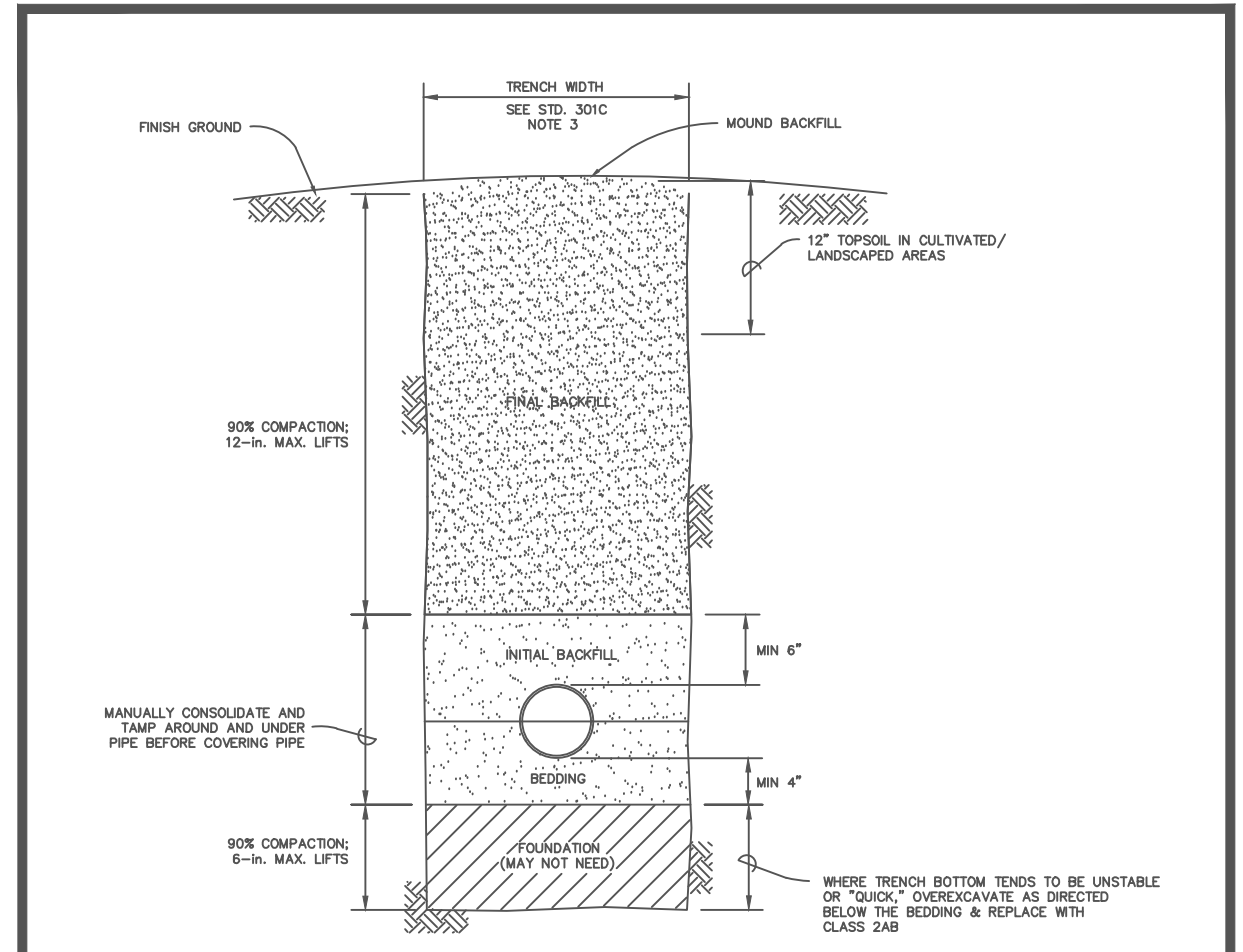
PIPE DIAMETER	TRENCH WIDTH
12" OR LESS	O.D. PLUS 24" MIN
OVER 12"	O.D. PLUS 36" MIN
ANY TRENCH, POLE, OR THE WHEEL UTILITY COMPANIES	REFER TO COMPANIES STANDARDS
 - Minimum Cover: Minimum cover, from top of roadway surface to pipe or conduit crown, shall be 36 inches or as directed by the utility owning the pipe or conduit.
 - Support of Trench Walls:
 - A. When sheeting, jacks, shields, boxes, or other trench supports are used, make sure that support of the pipe and its embedment is maintained throughout installation. Ensure sheeting is sufficiently tight to prevent the trench wall from washing out behind the sheeting.
 - B. Unless otherwise approved, sheeting driven into or below the pipe zone shall be left in place to preclude loss of support of foundation and embedment materials. When top of sheeting is to be cut off, make such cut 1.5 feet or more above the pipe crown. Leave rangers, whalers, and braces in place as required to support cutoff sheeting and the trench wall in the vicinity of the pipe zone.
 - C. When using movable trench boxes and shields, do not disturb the installed pipe and its embedment. Do not use movable supports below the top of the pipe zone unless approved methods are used for maintaining the integrity of embedment material. Before moving supports, place and compact embedment to sufficient depths to protect the pipe; as supports are moved, finish piling and compacting embedment.
 - Controlling Water in the Trench:
 - A. In general, do not lay or embed pipe in standing or running water. Prevent runoff and surface water from entering the trench. Pending approval, use sump pumps, well points, deep wells, geofabrics, perforated underdrains, or stone blankets of sufficient thickness to remove and control water in the trench. To preclude loss of soil support, use dewatering methods that minimize removal of fines and creation of voids in the surrounding soil.
 - B. Dewater groundwater to maintain stability of in-situ and imported materials. Maintain water level below pipe bedding and outside trench bottom. When excavating while depressing groundwater, make sure the groundwater is below the bottom of cut at all times to prevent trench walls from sloughing or washing out from behind sheeting. Control water in the trench before, during, and after pipe installation, and until embedment is installed and sufficient backfill has been placed to prevent flotation of the pipe.
 - C. Control running water emanating from drainage of surface or groundwater to preclude undermining of the trench bottom or walls, the foundation, or the pipe embedment. Do so by providing dams, cutoffs, or the barriers periodically along the installation to preclude transport of water along the trench bottom. Backfill all trenches after the pipe is installed to prevent disturbance of pipe and embedment.
 - Compaction Methods: In general, clean, coarse-grained materials (i.e., Caltrans Class I & Class II Aggregate) such as crushed stone, gravel, and sands are more readily compacted using vibratory equipment, whereas fine materials, such as sand require kneading and impact force along with controlled water content.
 - A. Hand-guided ("jumping jack") or walk-behind compactors may be used. Vibratory plate tampers may be used for sand, whereas hand tampers or air driven hand-held impact rammers shall be used for all other materials - gas or diesel powered jumping jacks or small, walk-behind vibratory rollers impart both vibratory and kneading or impact force and hence can be used for most classes of embedment and backfill material.
 - B. When approved, sand may be consolidated by water jetting, provided the material is densified in layers no more than 3 feet in depth. The jet pipe is at least 1 inch in diameter and 4 feet in length; the water supply provides a pressure of at least 40 psi, and adequate drainage of free water can be maintained. Work the jet pipe down, to reach the full depth of the lift being placed, and move it often to flood the entire area. Above the level of the pipe crown, use a vibratory plate to squeeze the water out of fill, and do not place the next lift until water stops appearing at the surface.
 - C. In long or exceptionally deep trenches through firm soils a compactor wheel on a backhoe or excavator may be used under the observation of a qualified inspector who will direct the lift depth and the duration of the effort.

CITY OF PACIFICA DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION		STANDARD DETAILED TRENCHING NOTES		AUG 2014
REV	DATE	BY:	DWG. NO.	300B



- NOTES:
- CALL CITY WASTE WATER DIVISION (650-738-7472) 24 HOURS PRIOR TO SEWER PIPE INSTALLATION.
 - CALL ENGINEERING (650-738-3767) 24 HOURS PRIOR TO PLACING BACKFILL.
 - ALL TRENCHES AND/OR POHOLES SHALL BE RESTORED OR SAFELY COVERED BY 5:00 P.M. OF THE SAME DAY.
 - SEWER TAP TRENCH SHALL BE 3' x 5' MAX. OR AS DIRECTED BY THE WASTE WATER DEPT.
 - SLURRY SEAL, IF REQUIRED, SHALL BE APPLIED APPROXIMATELY TWO WEEKS AFTER ALL TRENCHES AND POHOLES ARE RESTORED.
 - CERTIFICATE OF COMPLIANCE MAY BE REQUIRED FOR THE ASPHALT AND TACK COAT.
 - SEE ALSO DETAILS 300A AND 300B.
- | TRENCH WIDTH | CONDUIT SIZE: | 3" OR LESS | 4" TO 18" | OVER 18" |
|--------------|-------------------|------------|------------|------------|
| | MIN. TRENCH WIDTH | 6" | O.D. + 24" | O.D. + 36" |

CITY OF PACIFICA DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION		STANDARD PAVED STREETS TRENCH DETAIL		AUG 2014
REV	DATE	BY:	DWG. NO.	301A

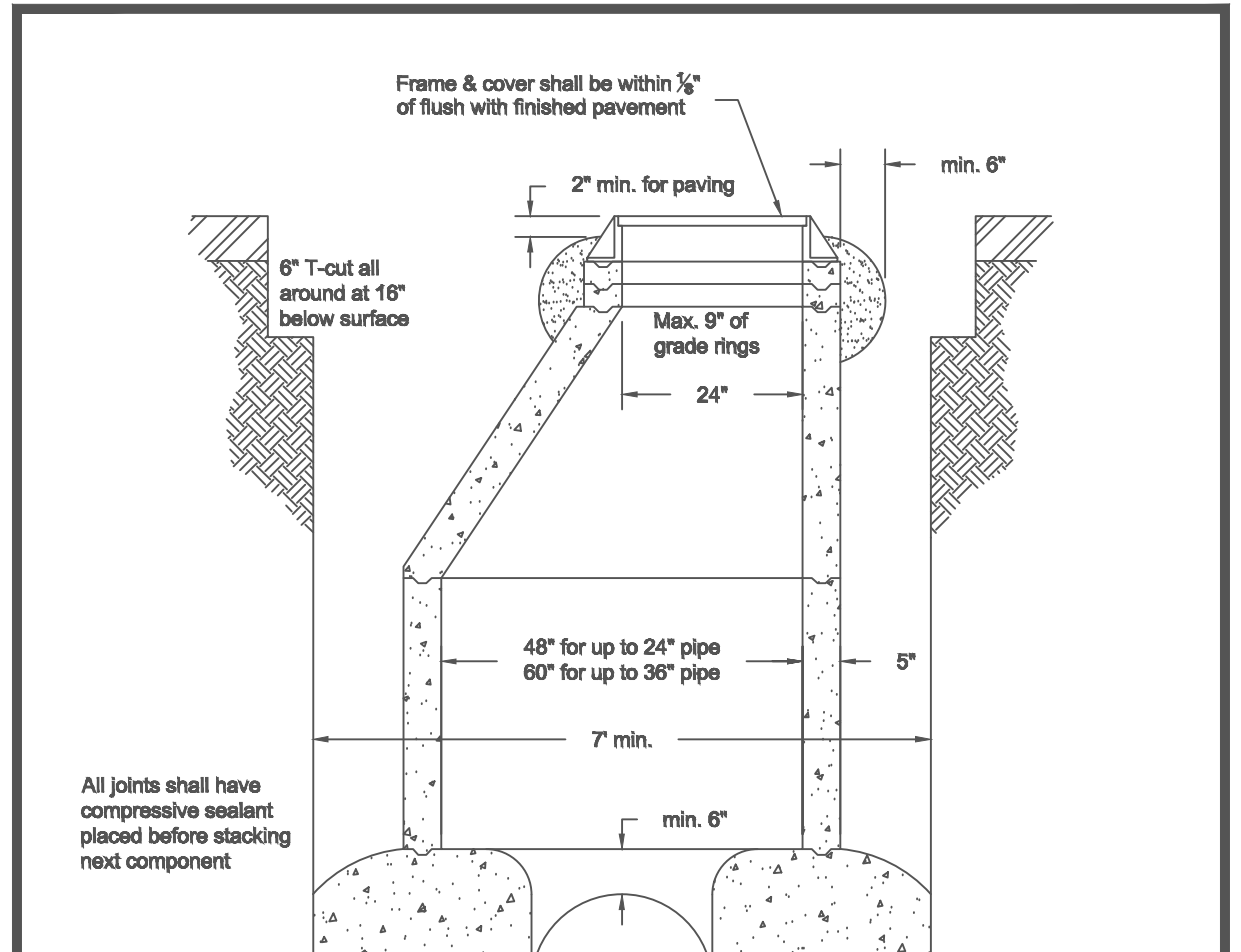


- NOTES:
- CALL CITY WASTE WATER DIVISION (650-738-7472) 24 HOURS PRIOR TO SEWER PIPE INSTALLATION.
 - CALL ENGINEERING (650-738-3767) 24 HOURS PRIOR TO PLACING BACKFILL.
 - SEE ALSO DETAILS 300A AND 300B.
- | TRENCH WIDTH | CONDUIT SIZE: | 3" OR LESS | 4" TO 18" | OVER 18" |
|--------------|-------------------|------------|------------|------------|
| | MIN. TRENCH WIDTH | 6" | O.D. + 24" | O.D. + 36" |

CITY OF PACIFICA DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION		STANDARD UNPAVED PUBLIC RIGHT OF WAY STANDARD TRENCH		AUG 2014
REV	DATE	BY:	DWG. NO.	301B

- ### STORM DRAINAGE PIPING NOTES
- All storm drain pipes shall be either DR17 solid HDPE (white or grey interior), double-walled smooth interior HDPE, SDR26 PVC or reinforced concrete pipe.
 - 1.1. Solid HDPE shall be fusion-welded together, and all fittings shall be fusion-welded to it.
 - 1.2. Double-walled HDPE pipe and fittings shall have water-tight bell-and-spigot joints with gaskets meeting ASTM F477, and shall meet AASHTO M252 or M294, type S.
 - 1.3. PVC pipe and fittings shall have bell-and-spigot joints with gaskets meeting ASTM F477, and shall meet ASTM D3034 or F679.
 - 1.4. Reinforced concrete pipe (RCP) shall be class III or better per ASTM C76 or AASHTO M170 and shall use rubber gasketed joints meeting ASTM C443.
 - Pipe bedding, where the trench bottom is competent soil approved by the City's Inspector, shall be clean crushed rock no larger than 3/4" nominal. When the trench bottom is overly wet or soft the Inspector may require over-excavation and placement of additional import material before bedding.
 - Bedding shall be recessed to accept bell-ends without the pipe being raised above grade.
 - Lay pipe with bells or female ends at the upstream ends. Joints shall be fully engaged.
 - On grades greater than 2:1 (H:V) pipes shall be fitted with anchors to prevent slippage.
 - See Dwg. 300A and Dwg. 300B for backfilling notes.
 - Changes in direction, or changes in pipe size or material, shall only be done at a structure (see Dwg. 303A).
 - Where pipes enter pre-cast concrete structures, the ends shall be flush with the inner walls and the annular space shall be completely filled with non-shrink mortar; a 12" wide concrete collar shall entirely surround the pipe outside the structure.
 - Plastic pipe shall be subject to mandrel testing after backfilling is complete.

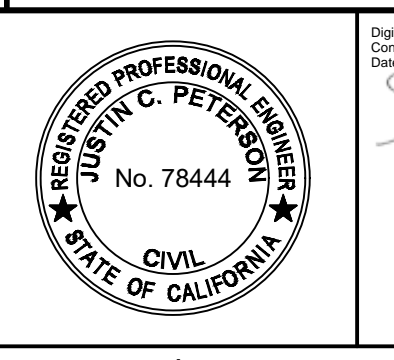
CITY OF PACIFICA DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION		STANDARD STORM DRAINAGE PIPING NOTES		AUG 2014
REV	DATE	BY:	DWG. NO.	303B



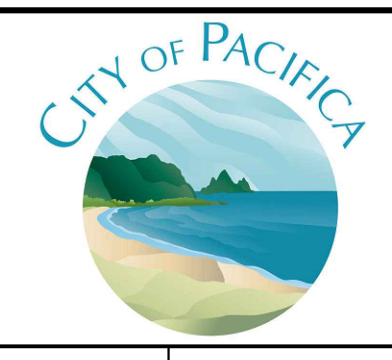
CITY OF PACIFICA DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION		STANDARD Storm Drain Manhole		AUG 2014
REV	DATE	BY:	DWG. NO.	304

LAST SAVED BY: sluckler

DESIGNED: JEP
 DRAWN: OB1
 CHECKED: BAB
 DATE: NOVEMBER 2023



Digitally signed by Justin C. Petronio
 Contact Info: Carollo Engineers, Inc.
 Date: 2023.11.08 11:06:47 AM



CITY OF PACIFICA
 ANZA DRIVE STORM DRAIN IMPROVEMENTS
 TYPICAL DETAILS
 CIVIL DETAILS 1

VERIFY SCALES
 BAR IS ONE INCH ON ORIGINAL DRAWING
 0 1"
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 202521
 DRAWING NO. TC01
 SHEET NO. 5 OF 5