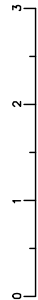
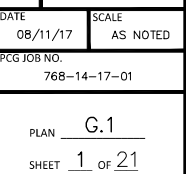
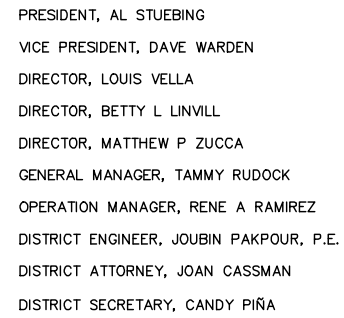


REVIEWED BY:	DATE:	REVIEWED BY:	DATE:



<u>SHEET NO.</u>	<u>TITLE</u>
G.1	TITLE SHEET, LOCATION MAP, VICINITY MAP, AND SHEET INDEX
G.2	LEGEND, ABBREVIATIONS, AND DETAIL DESIGNATION
G.3	UTILITY CONTACTS, SURVEY NOTES, AND KEY MAP
G.4	GENERAL NOTES
C.1	PLAN AND PROFILE STA 10+00 TO STA 13+00
C.2	PLAN AND PROFILE STA 13+00 TO STA 16+50
C.3	PLAN AND PROFILE STA 16+50 TO STA 20+50
C.4	PLAN AND PROFILE STA 20+50 TO STA 25+00
C.5	PLAN AND PROFILE STA 25+00 TO STA 29+00
C.6	PLAN AND PROFILE STA 29+00 TO STA 32+50
C.7	PLAN AND PROFILE STA 99+50 TO 105+50
CP.1	CATHODIC PROTECTION DETAILS 1
CP.2	CATHODIC PROTECTION DETAILS 2
CP.3	CATHODIC PROTECTION DETAILS 3
CP.4	CATHODIC PROTECTION DETAILS 4
D.1	CIVIL DETAILS 1
D.2	CIVIL DETAILS 2
D.3	DISTRICT DETAILS 1
D.4	DISTRICT DETAILS 2
D.5	DISTRICT DETAILS 3
D.6	DISTRICT DETAILS 4



REVIEWED BY:	DATE:
REVIEWED BY:	DATE:

LEGEND

NATURAL GROUND OR GRADE

COMPACTED NATIVE OR ENGINEERED FILL

GRANULAR MATERIAL SUCH AS CRUSHED ROCK OR GRAVEL

ASPHALT PAVEMENT (PLAN)

ASPHALT PAVEMENT (SECTION)

CONCRETE

CLII AB

EXISTING GROUND SURFACE (PAVED UNO)

FENCE

EXISTING GRADE CONTOURS

PROPOSED GRADE CONTOURS

PROPERTY LINE OR RIGHT OF WAY

EDGE OF PAVEMENT

BACK OF WALK

FACE OF CURB

EXISTING SPOT ELEVATION

EXISTING TREES, SHRUBS OR HEDGE

FINISH GRADE SPOT ELEVATION

ABANDON IN PLACE

EARTH DITCH

POTHOLE LOCATION

BORING/RECEIVING PIT

GEOTECH BORING LOCATION

EXISTING TREE

SECTION CUT ON DWG C21

ON DWG C23, THIS SECTION IS IDENTIFIED AS:

SECTION AND DETAIL DESIGNATIONS

SECTION NUMBER
DRAWING WHERE SECTION APPEARS

SECTION NUMBER

DETAILS ARE CROSS REFERENCED IN A SIMILAR MANNER, EXCEPT THAT DETAILS ARE IDENTIFIED BY NUMBER RATHER THAN LETTER

LEGEND (INFRASTRUCTURE LABELS)

NEW

HORZ/VERT CONTROL POINT

HORIZONTAL POINT OF INTERSECTION

STUB OUT

WATER

BUTTERFLY VALVE

GATE VALVE

ANODE

CATHODIC PROTECTION TEST STATION

FIRE HYDRANT

COMBINATION AIR VALVE

ABBREVIATIONS

AB	AGGREGATE BASE	EC	END CURVE
AC	ASPHALT CONCRETE	EP	EDGE OF PAVEMENT
ACP	ASBESTOS CEMENT PIPE	EQUIP	EQUIPMENT
ADJ	ADJUSTABLE	EW	EACH WAY
AFF	ABOVE FINISHED FLOOR	EX	EXISTING
AGG	AGGREGATE	EXP	EXPANSION
ALT	ALTERNATIVE	FF	FINISHED FLOOR
APPROX	APPROXIMATE	FG	FINISHED GRADE
ARV	AIR RELIEF VALVE	FH	FIRE HYDRANT
ASPH	ASPHALT	FC	FACE OF CURB
BC	BEGIN CURVE	FCA	FLANGED COUPLING ADAPTER
BD	BUILDING DRAIN	FCO	FLOOR CLEANOUT
BF	BLIND FLANGE	FD	FLOOR DRAIN
BV, BFV	BUTTERFLY VALVE	FIG	FIGURE
BW	BOTH WAYS, BACK OF WALK	FL	FLOW LINE
CAV	COMBINATION AIR VALVE	FLG	FLANGE
CB	CATCH BASIN	FM	FORCE MAIN
CDP	CONTROLLED DENSITY FILL	FO	FIBER OPTIC
CIP	CAST IRON PIPE	FRP	FIBERGLASS REINFORCED PLASTIC
CL	CL CENTER LINE	F/C	FACE OF CURB
CLR	CLEAR	FT, '	FEET, FOOT
CLSM	CONTROL LOW STRENGTH MATERIAL	G	GAUGE
CO	CLEAN OUT	CA	CALCULATED
CONC	CONCRETE	GALV	GALVANIZED
CONN	CONNECTION	CB	GRADE BREAK
CONT	CONTINUOUS	GS	GROUND SURFACE
CMU	CONCRETE MASONRY UNIT	GSP	GROUND SURFACE PROFILE
CS	CHLORINE SOLUTION	GV	GATE VALVE
CTS	CATHODIC PROTECTION TEST STATION	HC	HANDICAPPED
CV	CHECK VALVE	HP	HIGH POINT IN PVM'T, HIGH PRESSURE
CY	CUBIC YARDS	HORZ	HORIZONTAL
DI	DRAIN INLET	HPI	HORIZONTAL POINT OF INTERSECTION
E	EAST, ELECTRIC, EXISTING	IE	INVERT ELEVATION
EA	EACH	IN, "	INCH
EF	EACH FACE	INV	INVERT
DIA, Ø	DIAMETER	IPS	IRON PIPE SIZE
DIP	DUCTILE IRON PIPE	IRR	IRRIGATION
D, DR	DRAIN	JT	JOINT TRENCH
DWG	DRAWING	LAT	LATERAL
DWY	DRIVEWAY	LF	LINEAL FEET
EJF	EXPANSION JOINT FILLER	LG	LIP OF GUTTER
EL	ELEVATION	LGT	LIGHT
ELEC	ELECTRIC	LPM	LITERS PER MINUTE
		MAX	MAXIMUM
		MIN	MINIMUM
		MH	MANHOLE

EXISTING

12"W

W

EX WATER

4"G

G

EX NAT GAS

12"SS

S

EX SEWER

12"SD

SD

EX STORM DRAIN

20"FM

FM

EX FORCE MAIN

E

EX UNDERGROUND ELECTRIC

OH

EX OH

FO

EX FIBER OPTIC

X

EX FENCE LINE

EX PROPERTY LINE

EX EDGE OF PAVEMENT

EX FACE OF CURB

EX BACK OF WALK

EX CALTRANS ROW

EX WATER SERVICE

EX POST INDICATOR VALVE

EX CATHODIC PROTECTION

EX FIRE SERVICE CONNECTION

EX CLEANOUT

EX WATER METER

EX LARGE ELEC TRANSMISSION TOWER

EX FIRE HYDRANT

EX MANHOLE

EX STORM DRAIN INLET

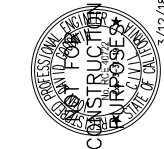
STREET LIGHT

EX WATER/GAS VALVE

LIGHT/ELEC POLE

WATER/ELEC/COMM VAULTS

REVISIONS



WEST YOST ASSOCIATES

CHECKED: LCO

DESIGNED: NAM

DRAWN: ERG

APPROVED: JDC

MID-PENINSULA WATER DISTRICT

SR101 CROSSING AT PAMF

LEGEND, ABBREVIATIONS, AND DETAIL DESIGNATION

REVIEWED AND APPROVED BY

REVIEWED AND APPROVED BY
MID-PENINSULA WATER DISTRICT

TAMMY RUDDOCK, GENERAL MANAGER DATE

60% SUBMITTAL
NOT FOR CONSTRUCTION

DATE: 08/11/17

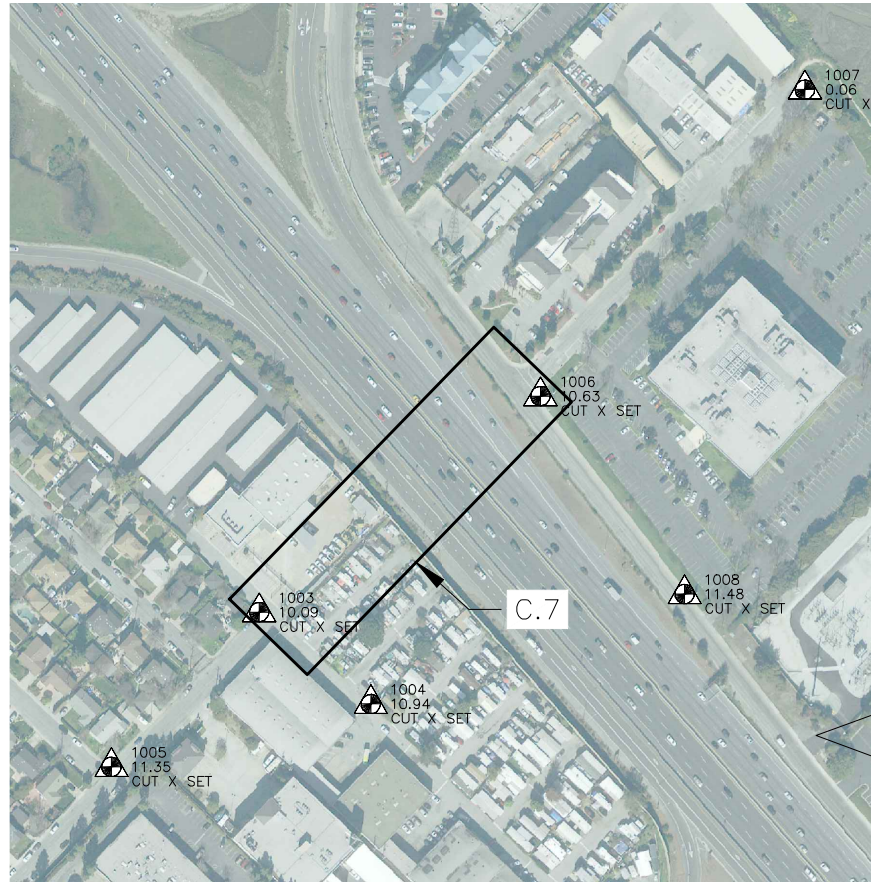
SCALE: AS NOTED

PG# JOB NO.: 768-14-17-01

PLAN: G.2

SHEET: 2 OF 21

REVIEWED BY:	DATE:	REVIEWED BY:	DATE:

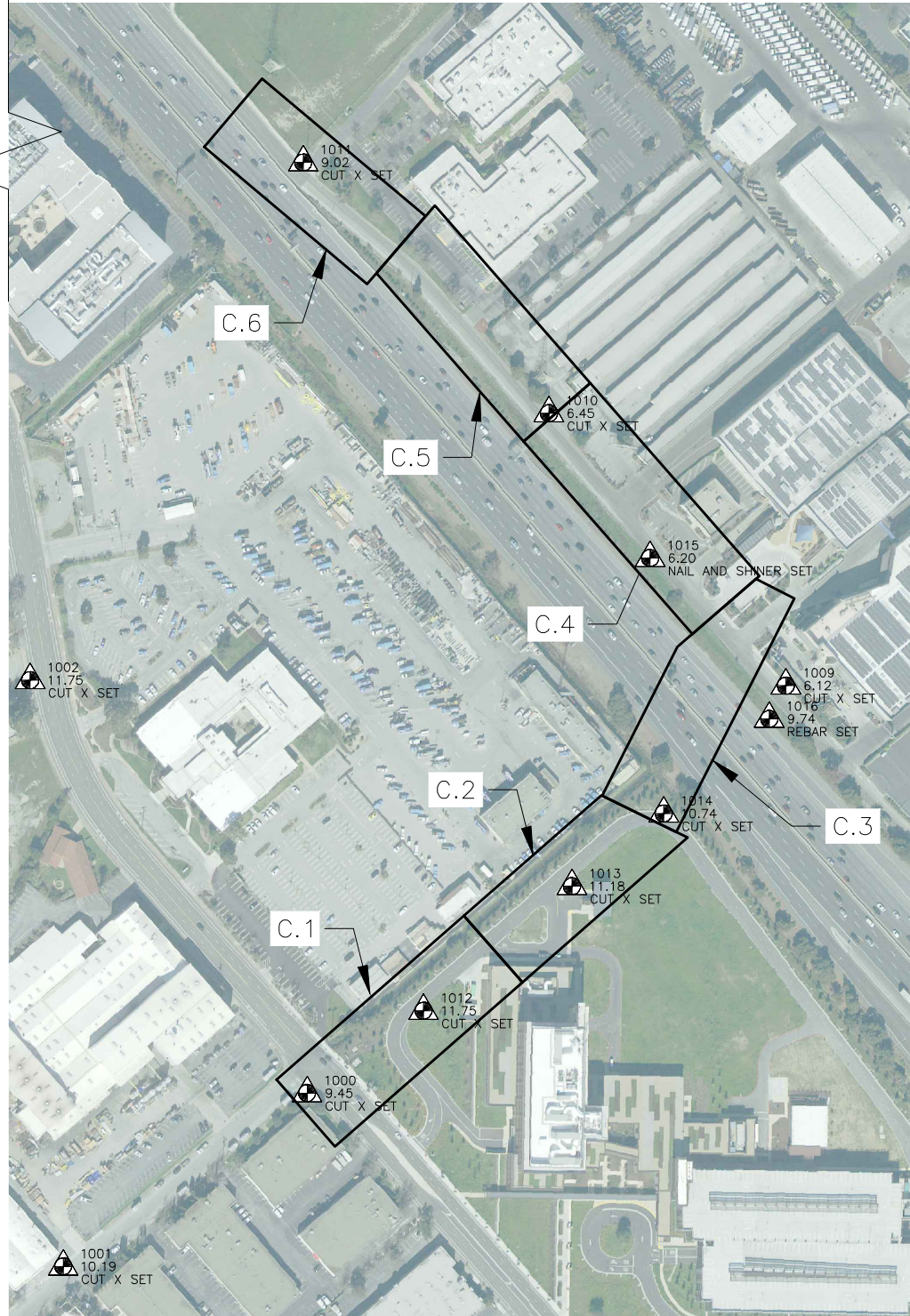


SURVEY NOTES

COORDINATES SHOWN ARE CCS83(2011) ZONE 3, EPOCH 2010.00
ELEVATIONS SHOWN ARE NAVD88 BASED ON THE FOUND NGS BENCHMARK PID: DG6886
HAVING AN ELEVATION OF 19.59 FEET.

COORDINATES AND ELEVATIONS SHOWN ARE IN U.S. SURVEY FEET.
AN AVERAGE COMBINED FACTOR OF 0.99994 WILL BE USED FOR THIS PROJECT.

POINT TABLE				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
1000	2014854.77	6050677.77	9.45	CUT X SET
1001	2014550.38	6050249.70	10.19	CUT X SET
1002	2015580.25	6050192.24	10.62	CUT X SET
1003	2017870.20	6048806.32	10.09	CUT X SET
1004	2017726.51	6048980.71	10.94	CUT X SET
1005	2017628.37	6048575.56	11.35	CUT X SET
1006	2018207.60	6049245.74	10.63	CUT X SET
1007	2018685.99	6049658.75	9.98	NAIL AND SHINER FND
1008	2017898.32	6049470.91	11.48	CUT X SET
1009	2015570.35	6051518.33	6.12	CUT X SET
1010	2016049.07	6051102.34	6.45	CUT X SET
1011	2016489.61	6050671.06	9.02	CUT X SET
1012	2014999.47	6050882.32	11.75	CUT X SET
1013	2015217.97	6051142.77	11.18	CUT X SET
1014	2015345.99	6051303.95	10.74	CUT X SET
1015	2015794.76	6051280.07	6.20	NAIL AND SHINER SET
1016	2015512.04	6051489.23	9.74	REBAR SET



AGENCY CONTACTS

MUNICIPALITY/COMPANY	CONTACT	PHONE	COMMENTS
AT&T	MR. BRUNO CZECH	408-635-8881	
CALIFORNIA WATER SERVICE	MR. ROD ZAVALA	650-558-7859	
CITY OF BELMONT	PHILLIP ESQUEDA	650-595-7465	
CITY OF REDWOOD CITY	KELLY YONG	650-780-7352	
CITY OF SAN CARLOS	HENRY PASCUAL	650-802-4200	
CITY OF SAN MATEO	ANN STILLMAN	650-599-1497	
COMCAST	DORI WOODSTRUP	707-759-4078 x259	
CITY OF SAN MATEO	GEORGE SKEEN	650-522-7300	
KINDER MORGAN	KARLY PAYNE	714-560-4604	
LEVEL 3 COMMUNICATIONS	CALEB KING	918-547-0007	
MCI WORLDCOM (VERIZON)	DEAN BOYERS	469-886-4238	
PG&E	BARBARA GARCIA	408-725-2077	
QWEST COMMUNICATIONS	GEORGE MCELVAIN	720-260-2514	
SILICON VALLEY CLEAN WATER	KIM HACKETT	650-832-2621 7	
WAVE BROADBAND	CRAIG CORDOVA	925-459-1077	
XO COMMUNICATIONS	CHAD AUCHEY	510-580-6363	

POTHOLE TABLE

PH #	SHEET	UTILITY	SIZE (IN)	DEPTH TO TOP (IN)	COMMENTS
1	C.6	GAS	3	41	5" ASPHALT
2	C.6	SEWER FM	24	51	5" ASPHALT
3	C.6	GAS	2	35	IN DIRT
4	C.6	GAS	4	44	IN DIRT
5	C.6	WATER	12	57	IN DIRT
6	C.6	FIBER OPTIC	4	32	9" ASPHALT
7	C.6	SEWER FM	54	60	5" ASPHALT
8	C.3	SEWER FM	20	58	10" ASPHALT
9	C.4	STORM DRAIN	39	21	7" ASPHALT
10	C.4	STORM DRAIN	39	7	7" ASPHALT
11	C.3	SEWER FM	54	65	12" ASPHALT
12	C.3	SEWER FM	54	65	12" ASPHALT
13	C.6	SEWER	10	48	IN DIRT
EP1	C.3	GAS	4	38	ELCTRONIC POTHOLE

REVIEWED AND APPROVED BY

REVIEWED AND APPROVED BY
MID-PENINSULA WATER DISTRICT

TAMMY RUDECK, GENERAL MANAGER DATE

60% SUBMITTAL
NOT FOR CONSTRUCTION

REVISIONS



WEST YOST ASSOCIATES

DRAWN: ERG	CHECKED: LCO
DESIGNED: NAM	APPROVED: JRG

MID-PENINSULA WATER DISTRICT

SR101 CROSSING AT PAMF

UTILITY CONTACTS, SURVEY NOTES, AND KEY MAP

DATE 08/11/17	SCALE AS NOTED
PCG JOB NO. 768-14-17-01	
PLAN <u>G.3</u>	
SHEET <u>3</u> OF <u>21</u>	

FOR REDUCED ENGLISH PLANS
ORIGINAL SCALE IS IN INCHES

DRAWING NAME: N:\Clients\768 Mid-Peninsula WD\14-17-01 SR101 Crossing\CAD\Production\76814-1701-603.dwg

REVIEWED BY:	DATE:	REVIEWED BY:	DATE:

FOR REDUCED ENGLISH PLANS
ORIGINAL SCALE IS IN INCHES

DRAWING NAME: N:\Clients\768 Mid-Peninsula WD\14-17-01 SR101 Crossing\CAD\Production\76814-1701-G04.dwg
PLOT DATE: 03-12-18 PLOTTED BY: aarraf

GENERAL NOTES

- THE TYPE, LOCATION, SIZE AND DEPTH OF EXISTING UNDERGROUND UTILITIES SHOWN ON THESE PLANS WERE OBTAINED FROM SOURCES OF VARYING RELIABILITY. EFFORTS HAVE BEEN MADE TO LOCATE AND DELINEATE ALL KNOWN UNDERGROUND FACILITIES. HOWEVER, THE ENGINEER DOES NOT ASSUME RESPONSIBILITY FOR THE COMPLETENESS AND/OR ACCURACY OF THE DELINEATION OF SUCH UNDERGROUND FACILITIES, NOR FOR EXISTENCE OF OTHER BURIED OBJECTS AND/OR FACILITIES WHICH MAY BE ENCOUNTERED BUT ARE NOT SHOWN ON THESE DRAWINGS. THE CONTRACTOR SHALL EXPOSE ALL UNDERGROUND FACILITIES THAT ARE TO BE CONNECTED TO, OR THAT ARE IN THE PATH OF, THE PROPOSED IMPROVEMENTS FOR VERIFICATION OF LOCATION AND ELEVATION PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTING THE WORK OF THE PROJECT PER THE IMPROVEMENT PLANS DESPITE BURIED OBJECTS OR FACILITIES WHICH WERE NOT EXPECTED TO BE ENCOUNTERED.
- ALL CONSTRUCTION MUST BE TO THE MID-PENINSULA WATER DISTRICT, CITY OF BELMONT, CITY OF SAN CARLOS, COUNTY OF SAN MATEO, AND CALTRANS STANDARDS AND ACCEPTED BY THE DISTRICT. CONTRACTOR IS RESPONSIBLE TO MAKE ALL ARRANGEMENTS FOR SITE INSPECTIONS AND ENSURE THAT ALL CURRENT STANDARDS FOR THE CITY, COUNTY, CALTRANS, AND THE DISTRICT ARE FOLLOWED PRIOR TO BEGINNING ANY PHASE OF CONSTRUCTION WORK.
- DUST CONTROL DURING ALL PHASES OF CONSTRUCTION IS THE RESPONSIBILITY OF THE CONTRACTOR. IT IS ALSO THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN GOOD HOUSEKEEPING OF THE EXISTING IMPROVEMENTS IN THE CONSTRUCTION AREA. CONTRACTOR SHALL PROTECT EXCAVATED SOILS PER WATER POLLUTION CONTROL PLAN (WPCP) AS SPECIFIED IN THE TECHNICAL SPECIFICATIONS.
- NO ASPHALT SHALL BE DELIVERED TO THE JOB SITE AFTER 3:00 P.M. ON ANY DAY WITHOUT PRIOR APPROVAL OF THE DISTRICT. NO SLURRY SEAL SHALL BE PLACED AFTER 2:00 P.M.
- THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN (INCLUDING ANY STREET CLOSURE DETAILS AND DETOUR PLANS), PREPARED AND SIGNED BY A TRAFFIC ENGINEER, TO THE DISTRICT. TRAFFIC CONTROL PLAN TO BE APPROVED BY AGENCY HAVING JURISDICTION (CITY, COUNTY, CALTRANS). NO WORK CAN BEGIN WITHOUT AN APPROVED AND SIGNED TRAFFIC CONTROL PLAN.
- ANY DAMAGE TO EXISTING FACILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. CONTRACTOR SHALL RESTORE ANY AND ALL PAVEMENT AND OTHER FACILITIES OUTSIDE LIMITS OF WORK AFFECTED BY THE CONSTRUCTION OPERATIONS AT NO ADDITIONAL COST. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DOCUMENT EXISTING CONDITIONS PRIOR TO START OF WORK TO SUBSTANTIATE ANY PRE-EXISTING DAMAGES.
- TIE-INS ARE DIAGRAMATIC. THE CONTRACTOR SHALL NOT BE ENTITLED TO EXTRA PAYMENT IF ADDITIONAL PIPE, COUPLINGS, OR OTHER APPURTENANCES ARE REQUIRED TO COMPLETE TIE-IN.
- PIPE BEDDING AND TRENCH BACKFILL SHALL BE IN ACCORDANCE WITH DISTRICT STANDARDS. SEE DISTRICT STANDARD TRENCH DETAILS ON SHEET D.3.
- PROCEDURES FOR ABANDONING EXISTING PIPE ARE INCLUDED IN SECTION 02111 "ABANDONMENT OF EXISTING FACILITIES".
- THE WATER SYSTEM SHALL REMAIN IN SERVICE THROUGHOUT THE PROJECT. INTERRUPTIONS TO SERVICE SHALL BE MINIMIZED AND SHALL BE COORDINATED WITH THE DISTRICT AT (650) 591-8914. THE CONTRACTOR SHALL NOT OPERATE DISTRICT OWNED VALVES AND HYDRANTS UNLESS AUTHORIZED BY THE DISTRICT.
- THE CONTRACTOR SHALL NOT OPERATE DISTRICT FACILITIES UNLESS DIRECTED BY THE DISTRICT.
- THE DISTRICT SHALL BE NOTIFIED AT LEAST 72 HOURS IN ADVANCE FOR ANY SCHEDULED TIE-INS. NO TIE-INS OR SHUTDOWNS WILL BE ALLOWED ON MONDAYS AND FRIDAYS OR THE DAY PRECEDING A HOLIDAY. ONLY TWO SHUTDOWNS PER WEEK ARE ALLOWED.
- THE CONTRACTOR SHALL DESIGNATE A PERSON TO CONTACT SHOULD PROBLEMS ARISE DURING NON-WORKING HOURS OR DAYS. THE DISTRICT SHALL BE GIVEN THAT PERSON'S NAME, PHONE NUMBER.
- WATER STRUCTURES REMOVED FROM THE GROUND NOT LIMITED TO GATE VALVES, CHECK VALVES, COPPER SERVICE LINES, ETC SHALL BE RETURNED TO THE DISTRICT. FITTINGS AND PIPE REMOVED FROM THE GROUND SHALL BECOME PROPERTY OF THE CONTRACTOR. CONTRACTOR TO DISPOSE OF EXISTING MATERIALS IN A LEGAL MANNER.
- DEFLECT PIPE JOINTS A MAXIMUM OF 1 DEGREE AS RECOMMENDED BY THE MANUFACTURER.
- EXISTING UTILITIES SHOWN ARE BASED ON FIELD VERIFICATION AND RECORD DRAWINGS AND ARE SHOWN SCHEMATICALLY ON THE PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT USA (1-800-227-2600) AND VERIFY SAID UTILITIES.
- EXISTING WATER MAIN ELEVATIONS, BASED ON NEARBY GATE VALVE NUTS, ARE APPROXIMATE.
- EXISTING STORM DRAIN AND SEWER MAIN ELEVATIONS, BASED ON NEARBY MANHOLE/CATCH BASIN INVERTS, ARE APPROXIMATE.
- TIE-INS TO EXISTING WATER MAIN SHALL BE 30" MIN AWAY FROM A SLEEVE OR AS DIRECTED BY THE DISTRICT.
- SHORING IS REQUIRED FOR TRENCH DEPTHS GREATER THAN 60".
- NO BENDS OR JOINTS WITHIN 10' OF SANITARY SEWER MAIN IS ALLOWED UNLESS OTHERWISE DIRECTED BY THE DISTRICT.
- CONTRACTOR TO COMPLY WITH NOISE CONTROL ORDINANCES OF THE AGENCIES WITH JURISDICTION.
- CONTRACTOR SHALL LOCATE AND PRESERVE ALL FACILITIES INCLUDING SEWER, GAS, IRRIGATION, POWER, STREET LIGHTS, TRAFFIC SIGNALS, TELEPHONE AND OTHERS WHICH MAY BE IN AREA OF CONSTRUCTION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD SURVEYING AND ESTABLISHING GRADE STAKING. ALL CONSTRUCTION FOR CURB AND GUTTER, SIDEWALK, SANITARY SEWER, STORM DRAIN, WATER LINES, ELECTRICAL, ETC., SHALL BE PROVIDED BY CONTRACTOR. PROVIDE CUT SHEETS PRIOR TO CONSTRUCTION REFERENCING STATIONING AND IMPROVEMENTS. STAKING SHALL BE PERFORMED BY A REGISTERED CIVIL ENGINEER OR LICENSED LAND SURVEYOR.
- THE CONTRACTOR IS RESPONSIBLE FOR THE PRESERVATION OF SURVEY MONUMENTS LOCATED WITHIN THE AREA OF WORK HEREIN PERMITTED. PRIOR TO THE START OF CONSTRUCTION, SURVEY MONUMENTS THAT POTENTIALLY MAY BE DISTURBED SHALL BE LOCATED AND REFERENCED BY A LICENSED LAND SURVEYOR, AND A CORNER RECORD FILED WITH THE COUNTY SURVEYOR. ANY SURVEY MONUMENTS DISTURBED DURING THE COURSE OF CONSTRUCTION SHALL BE REESTABLISHED BY A LICENSED LAND SURVEYOR. (LAND SURVEYORS' ACT SECTION 8771).
- IT IS INTENDED THAT THESE PLANS REQUIRE ALL LABOR AND MATERIALS NECESSARY FOR COMPLETION OF WORK IN ACCORDANCE WITH THEIR TRUE INTENT AND PURPOSE. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY INTERPRETATION OR CORRECTION THEREOF SHALL BE FINAL AND CONCLUSIVE. WHERE PLANS OR SPECIFICATIONS DESCRIBE PORTIONS OF WORK IN GENERAL TERMS BUT NOT IN COMPLETE DETAILS, IT IS UNDERSTOOD THAT ONLY THE BEST GENERAL PRACTICE SHALL PREVAIL AND ONLY MATERIALS AND WORKSMANSHIP OF FIRST QUALITY SHALL BE USED.
- CONTRACTOR SHALL AT ALL TIMES, KEEP WORK AREA IN A NEAT AND SAFE CONDITION. UPON COMPLETION OF ANY PORTION OF WORK, CONTRACTOR SHALL PROMPTLY REMOVE ALL ITS EQUIPMENT AND SURPLUS MATERIALS, UNLESS NOTED OTHERWISE. CONTRACTOR SHALL, AT NO ADDITIONAL COST TO THE DISTRICT, DISPOSE OF ALL RUBBISH, UNUSED MATERIALS AND OTHER EQUIPMENT BELONGING TO OR USED IN PERFORMANCE OF WORK, TO THE SATISFACTION OF THE ENGINEER. AFTER COMPLETION OF THE PROJECT, CONTRACTOR SHALL LEAVE THE PROJECT SITE IN EQUAL OR BETTER CONDITION THAN WHEN CONSTRUCTION BEGAN.
- CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITION, PROTECTION OF PUBLIC AND PRIVATE PROPERTY ADJACENT TO WORK DURING THE CONSTRUCTION OF PROJECT.
- CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH ALL CURRENTLY APPLICABLE SAFETY LAWS OF ANY JURISDICTIONAL BODY. CONTRACTOR IS DIRECTED TO CONTACT STATE OF CALIFORNIA INDUSTRIAL RELATIONS DEPARTMENT (209) 948-7763. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ALL BARRICADES, SAFETY DEVICES AND CONTROL OF TRAFFIC WITHIN CONSTRUCTION AREAS AS REQUIRED. CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR COMPLIANCE WITH ADDITIONAL PUBLIC SAFETY REQUIREMENTS WHICH MAY ARISE DURING CONSTRUCTION.
- CONTRACTOR TO OBTAIN A CALTRANS ENCROACHMENT PERMIT FOR CONSTRUCTING CROSSING UNDER SR101.

REVIEWED AND APPROVED BY _____

REVIEWED AND APPROVED BY

MID-PENINSULA WATER DISTRICT

TAMMY RUDOCK, GENERAL MANAGER	DATE
-------------------------------	------

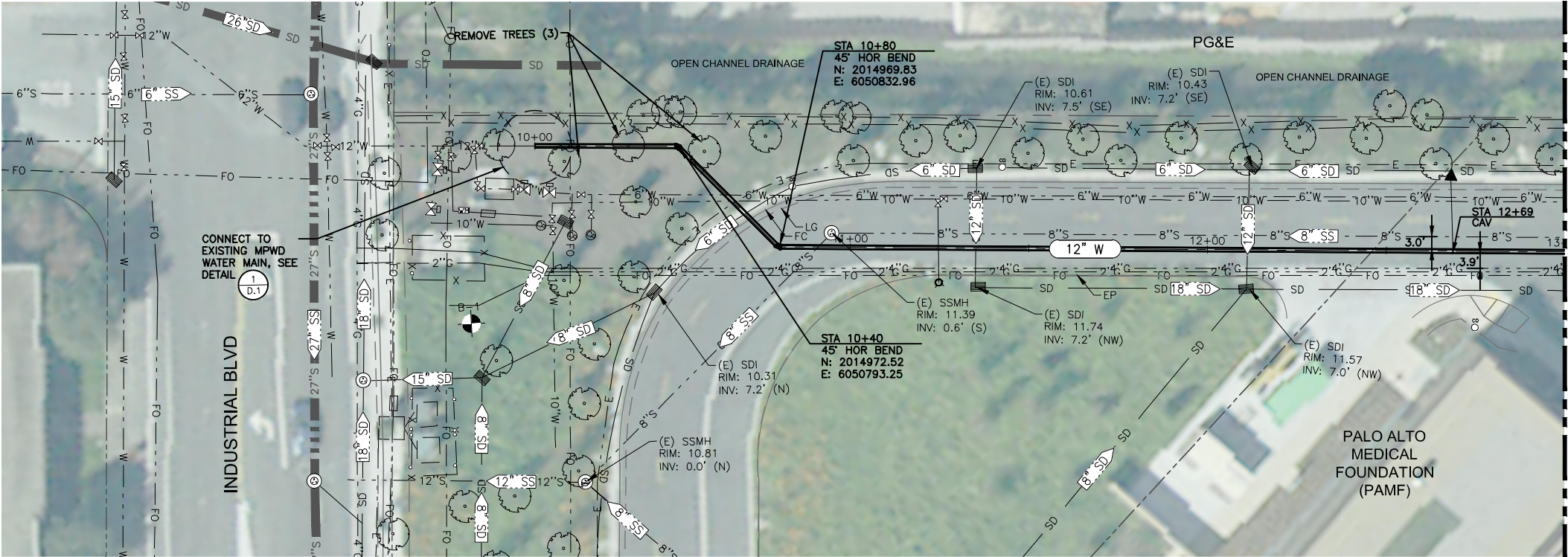
60% SUBMITTAL
NOT FOR CONSTRUCTION

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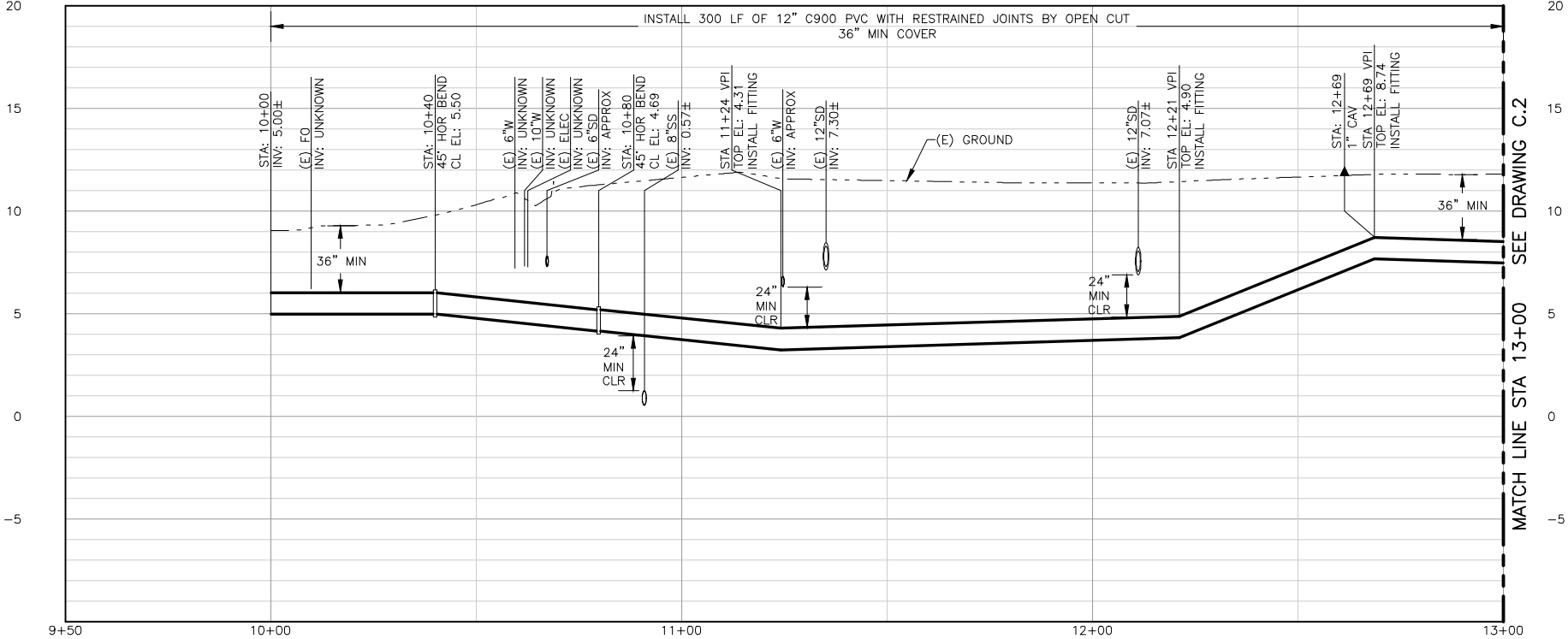
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FOR REDUCED ENGLISH PLANS
ORIGINAL SCALE IS IN INCHES

DRAWING NAME: N:\Client\1768 Mid Peninsula WD\17-01 SR101 Crossing\CAO\Production\176814.3701.C06.dwg
PLOT DATE: 03-12-18 PLOTTED BY: regif



MATCH LINE STA 13+00 SEE DRAWING C.2



PROFILE

SCALE: H:1"=20', V:1"=4'

REVIEWED AND APPROVED BY

REVIEWED AND APPROVED BY
MID-PENINSULA WATER DISTRICT

TAMMY RUDOCK, GENERAL MANAGER DATE

60% SUBMITTAL
NOT FOR CONSTRUCTION

REVISIONS

NO.	DESCRIPTION	BY	DATE	APPVD



DRAWN: ERG	CHECKED: LCO	APPROVED: JDC
DESIGNED: NAM		

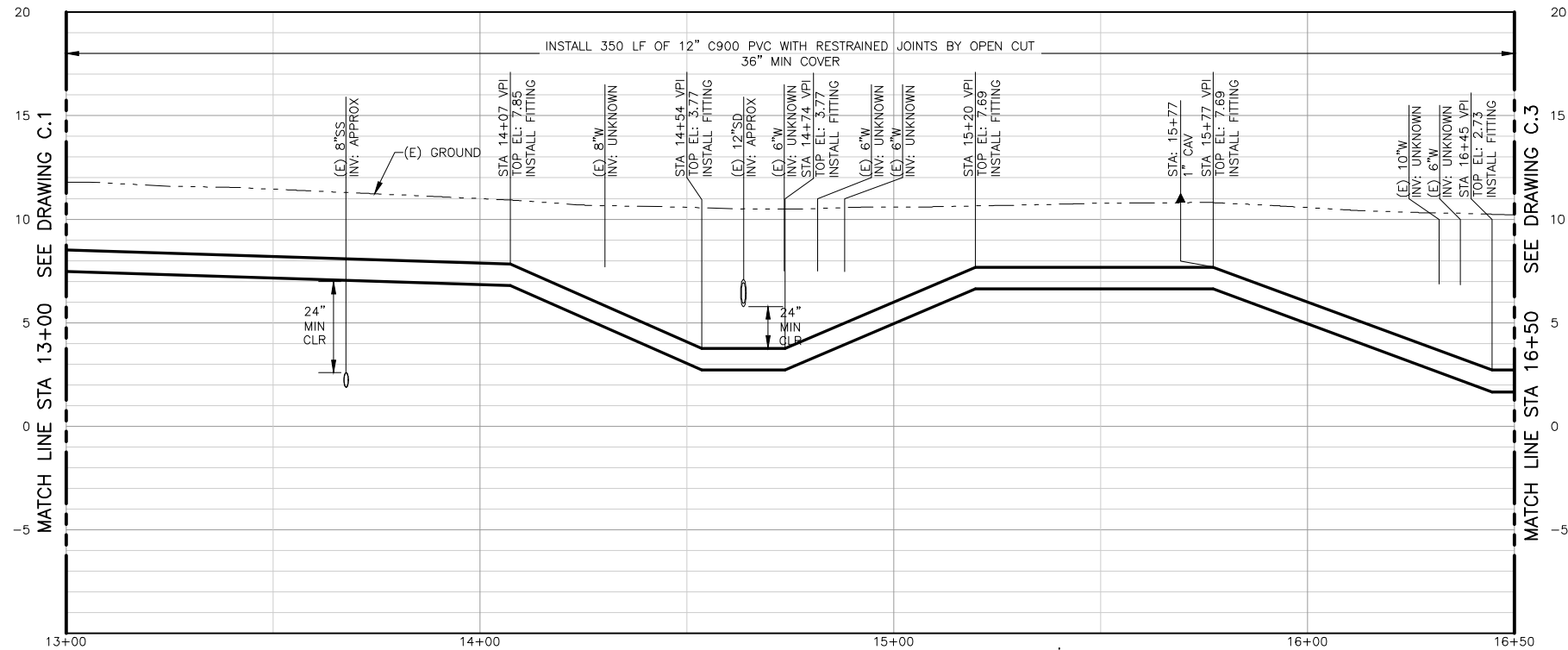
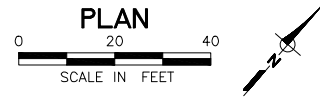
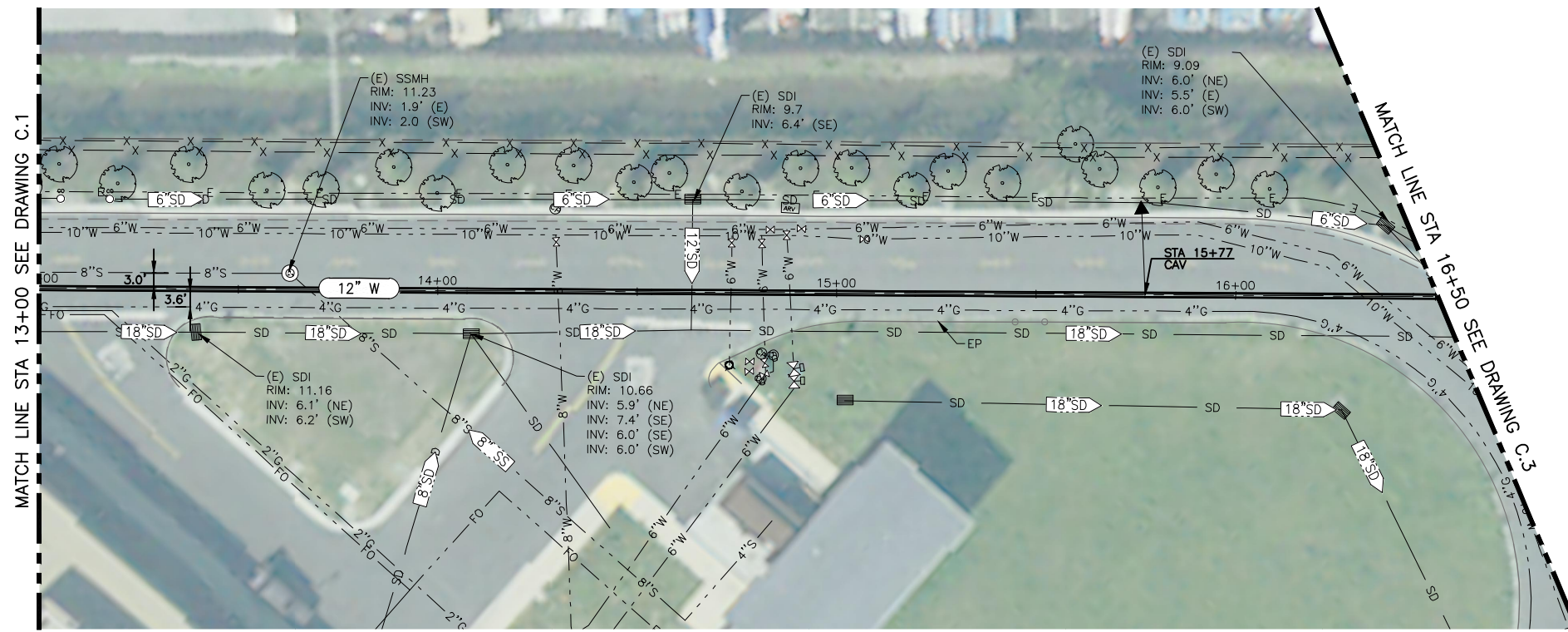
MID-PENINSULA WATER DISTRICT

SR101 CROSSING AT PAMF

PLAN AND PROFILE STA 10+00 TO STA 13+00

DATE 08/11/17	SCALE AS NOTED
PGC JOB NO. 768-14-17-01	
PLAN C.1	
SHEET 5 OF 21	

REVIEWED BY:	DATE:	REVIEWED BY:	DATE:



PROFILE


SCALE: H:1"=20', V:1"=4'

REVIEWED AND APPROVED BY

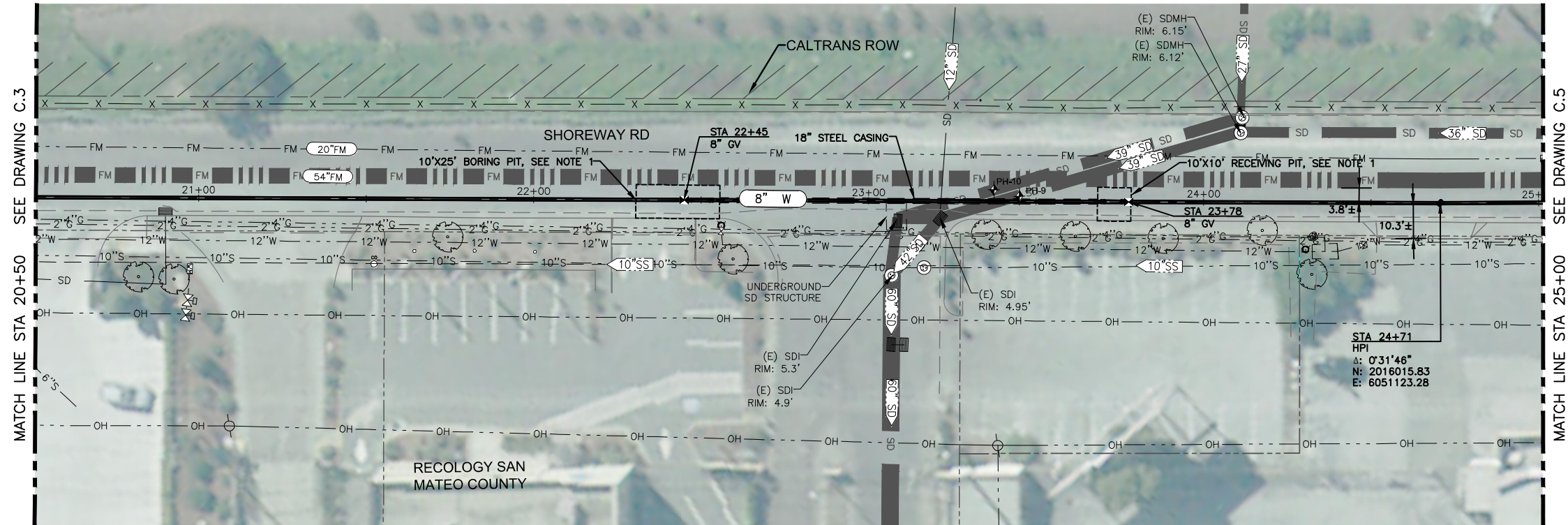
REVIEWED AND APPROVED BY
MID-PENINSULA WATER DISTRICT

TAMMY RUDOCK, GENERAL MANAGER DATE

60% SUBMITTAL
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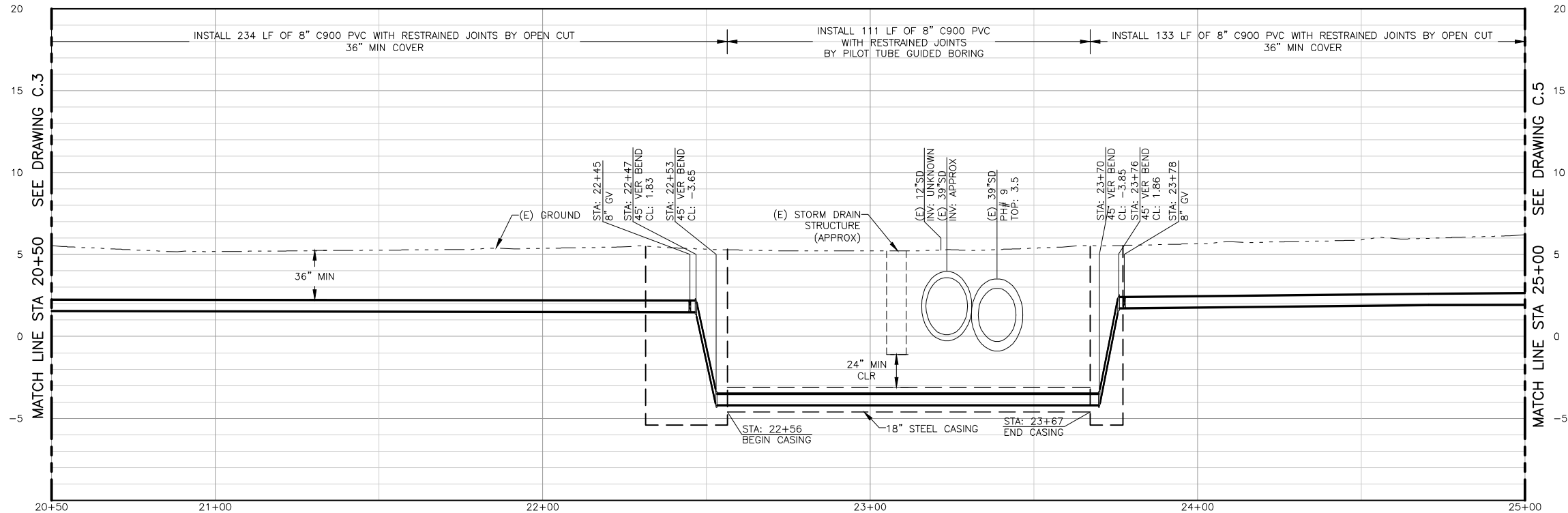
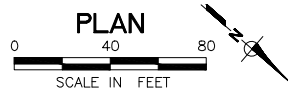
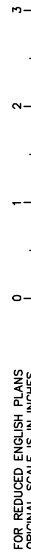
DATE 08/11/17		SCALE AS NOTED		PCG JOB NO. 768-14-17-01		PLAN <u>C.2</u>			
MID-PENINSULA WATER DISTRICT				SR101 CROSSING AT PAMF				PLAN AND PROFILE STA 13+00 TO STA 16+50	
DRAWN: ERG		CHECKED: LCO		DESIGNED: NAM		APPROVED: JDC		WEST YOST ASSOCIATES	
								NOT FOR CONSTRUCTION PURPOSES	
								3/12/18	
								NO.	
								BY	
								DATE	
								APPROV'D	
								REVISIONS	

REVIEWED BY:	DATE:	REVIEWED BY:	DATE:



NOTES:

1. BORING AND RECEIVING PITS SHOWN ARE APPROXIMATE. CONTRACTOR TO DETERMINE EXACT SIZE AND LOCATION.



PROFILE

SCALE: H:1"=20', V:1"=4'

REVIEWED AND APPROVED BY

REVIEWED AND APPROVED BY
MID-PENINSULA WATER DISTRICT

TAMMY RUDECK, GENERAL MANAGER DATE

60% SUBMITTAL
NOT FOR CONSTRUCTION

[illegible]

ERG	LCO
DESIGNED: NAM	APPROVED: JDG

MID-PENINSULA WATER DISTRICT

SR101 CROSSING A1 PAMF

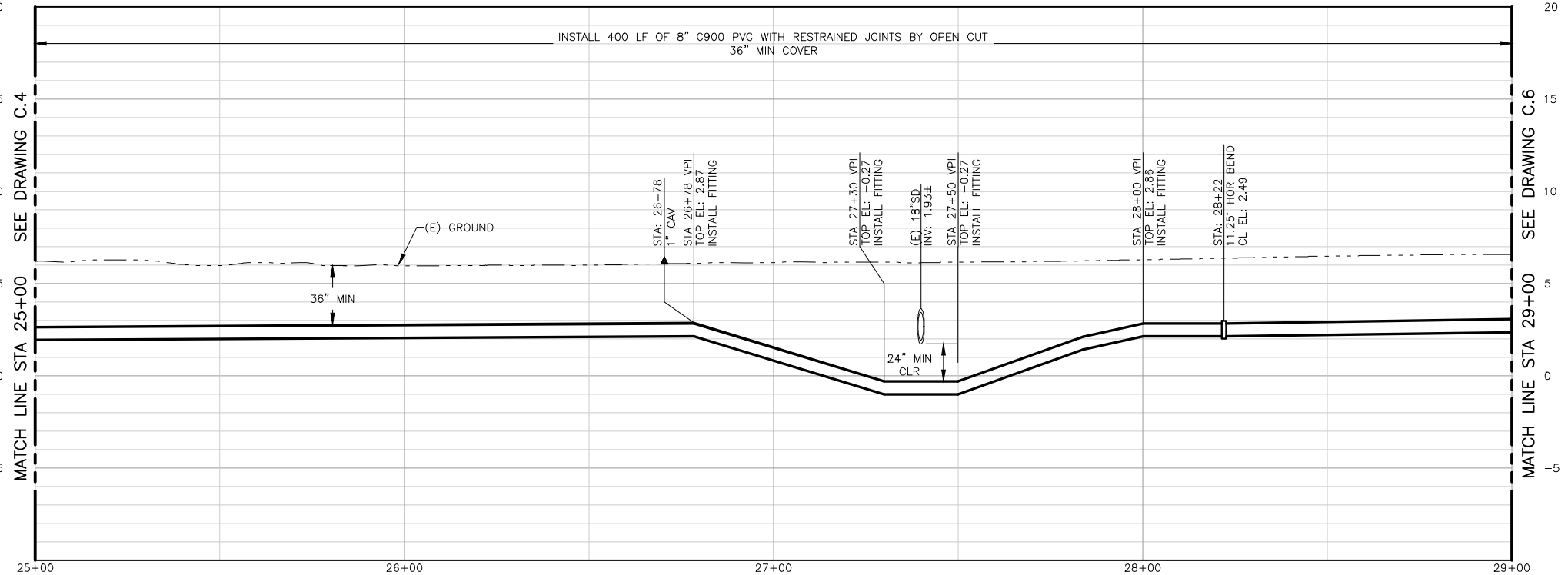
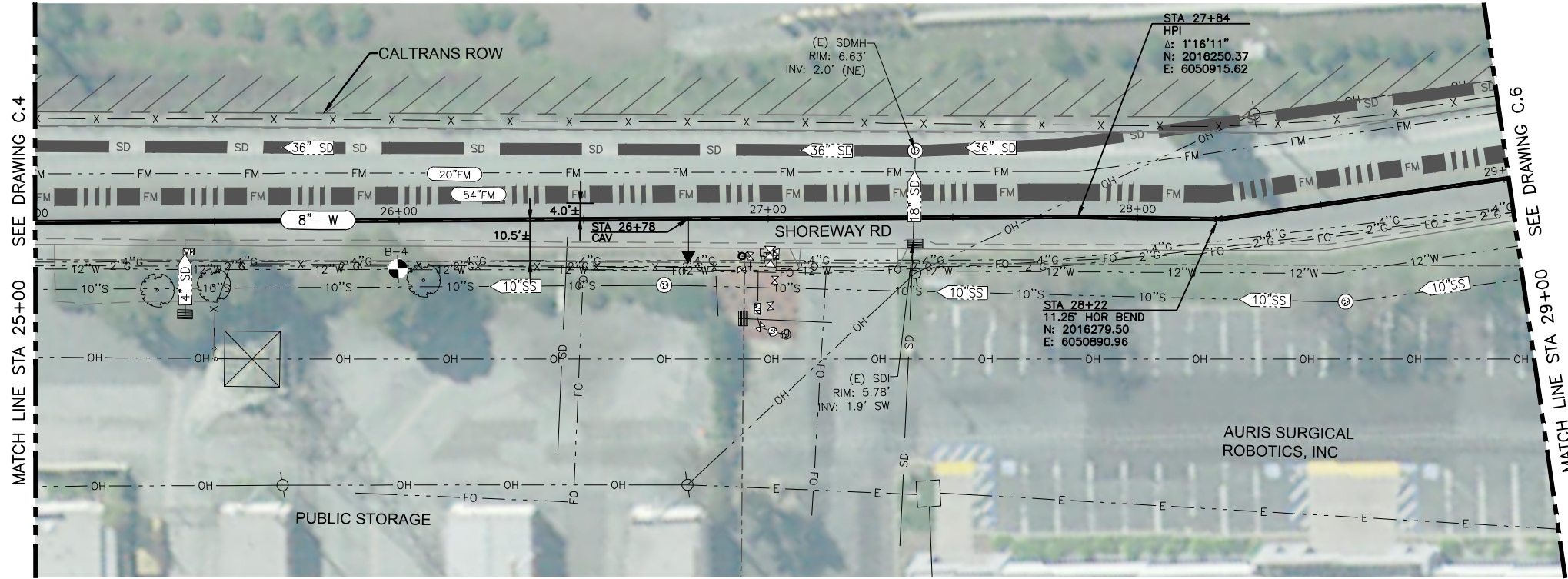
PLAN AND PROFILE STA 20+50 TO STA 25+00

DATE	SCALE
08/11/17	AS NOTED
REG JOB NO.	
768-14-17-01	
PLAN <u>C.4</u>	
SHEET <u>8</u> OF <u>21</u>	

REVIEWED BY:	DATE:
REVIEWED BY:	DATE:

FOR REDUCED ENGLISH PLANS
ORIGINAL SCALE IS IN INCHES

DRAWING NAME: N:\Client\308 Mid Peninsula.wpd (3/17/2018) Drawing(CAD Production)\30814-1701-006.dwg
PLOT DATE: 03-12-18 PLOTTED BY: gghf



PROFILE

SCALE: H:1"=20', V:1"=4'

REVIEWED AND APPROVED BY

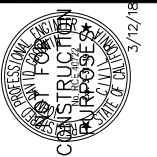
REVIEWED AND APPROVED BY
MID-PENINSULA WATER DISTRICT

TAMMY RUDDOCK, GENERAL MANAGER DATE

60% SUBMITTAL
NOT FOR CONSTRUCTION

REVISIONS

NO.	DESCRIPTION	BY	DATE	APP'D



DRAWN: ERG	CHECKED: LCO	APPROVED: JDC	DESIGNED: NAM

MID-PENINSULA WATER DISTRICT

SR101 CROSSING AT PAMF

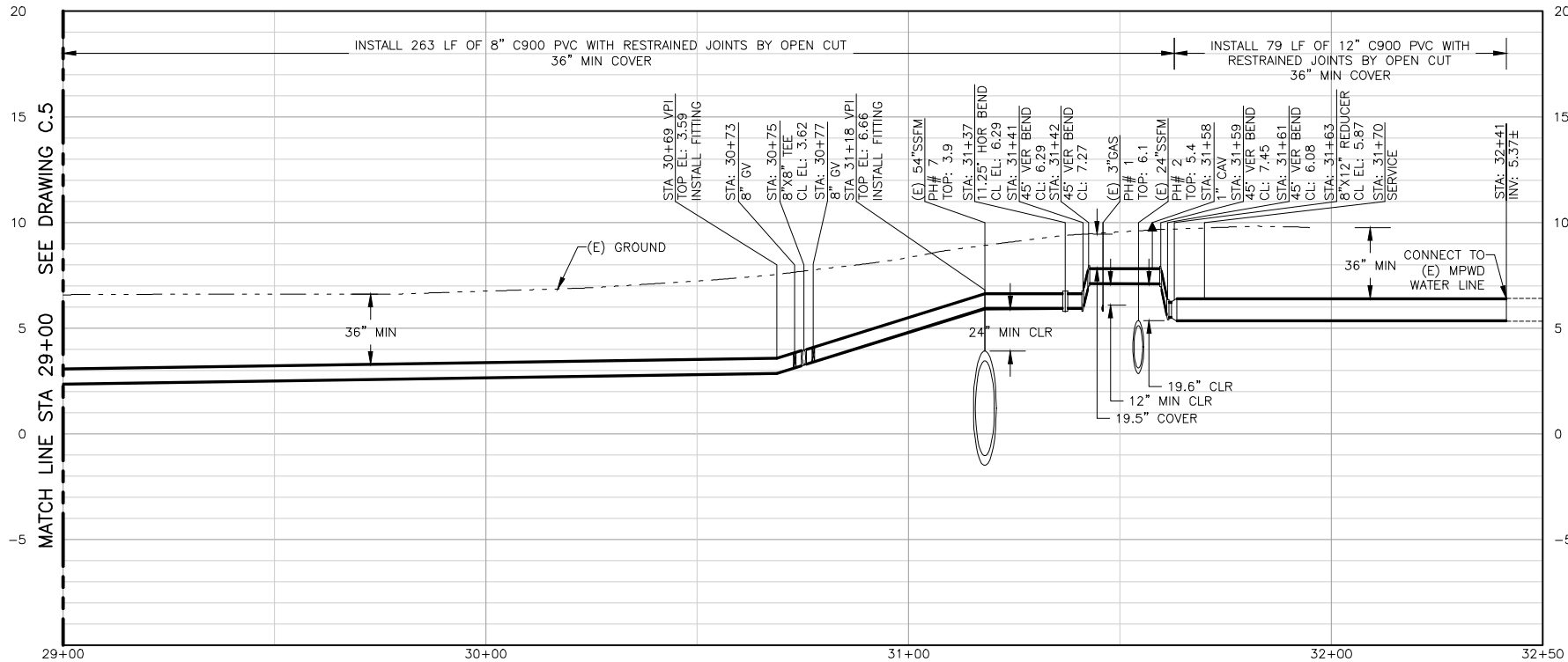
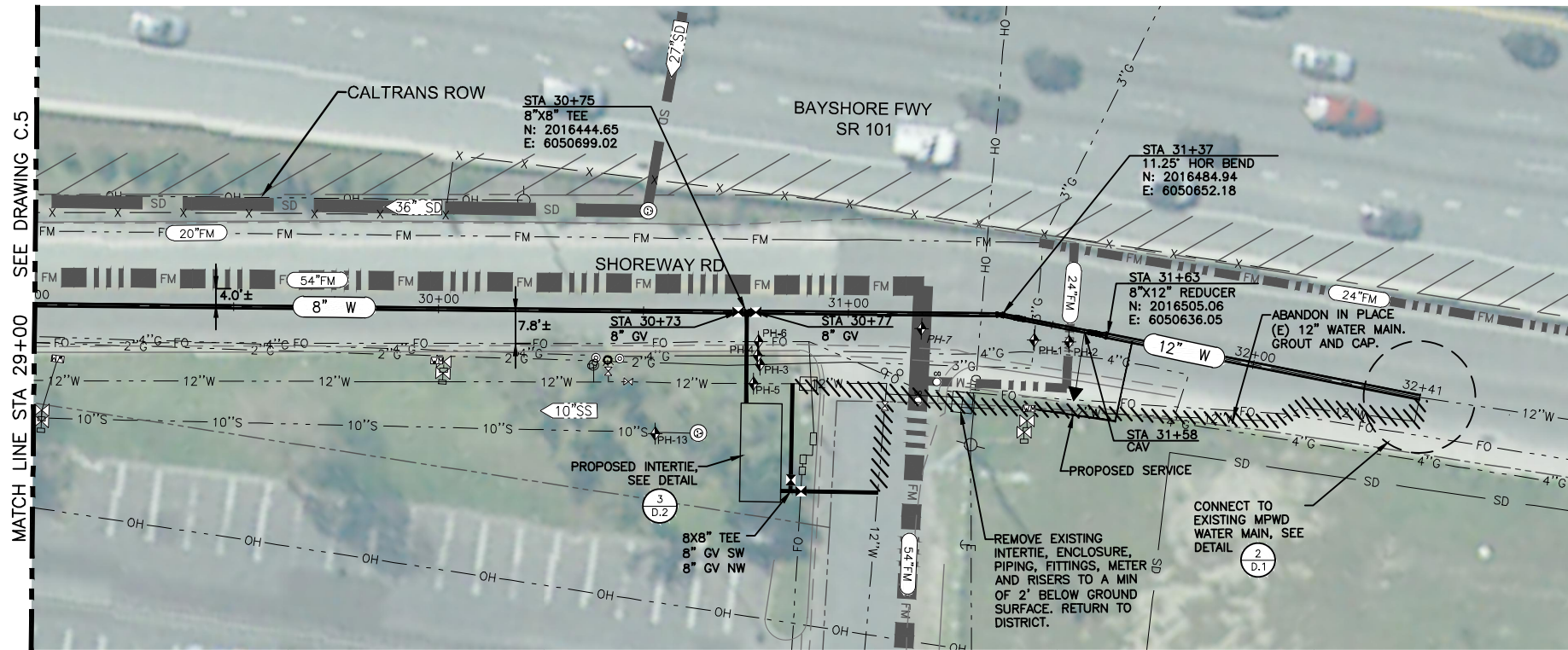
PLAN AND PROFILE STA 25+00 TO STA 29+00

DATE 08/11/17	SCALE AS NOTED
PG# JOB NO. 768-14-17-01	
PLAN C.5	SHEET 9 of 21

REVIEWED BY:	DATE:
REVIEWED BY:	DATE:

FOR REDUCED ENGLISH PLANS
ORIGINAL SCALE IS IN INCHES

DRAWING NAME: N:\Gis\m\2016\midpeninsula\wp\14-17-01_SR101 Crossing\CAD Production\76814-1701-010.dwg
PLOT DATE: 03-12-18 PLOTTED BY: gregf



PROFILE

SCALE: H:1"=20', V:1"=4'

REVIEWED AND APPROVED BY

REVIEWED AND APPROVED BY
MID-PENINSULA WATER DISTRICT

TAMMY RUDDOCK, GENERAL MANAGER DATE

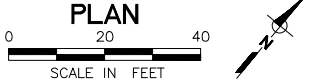
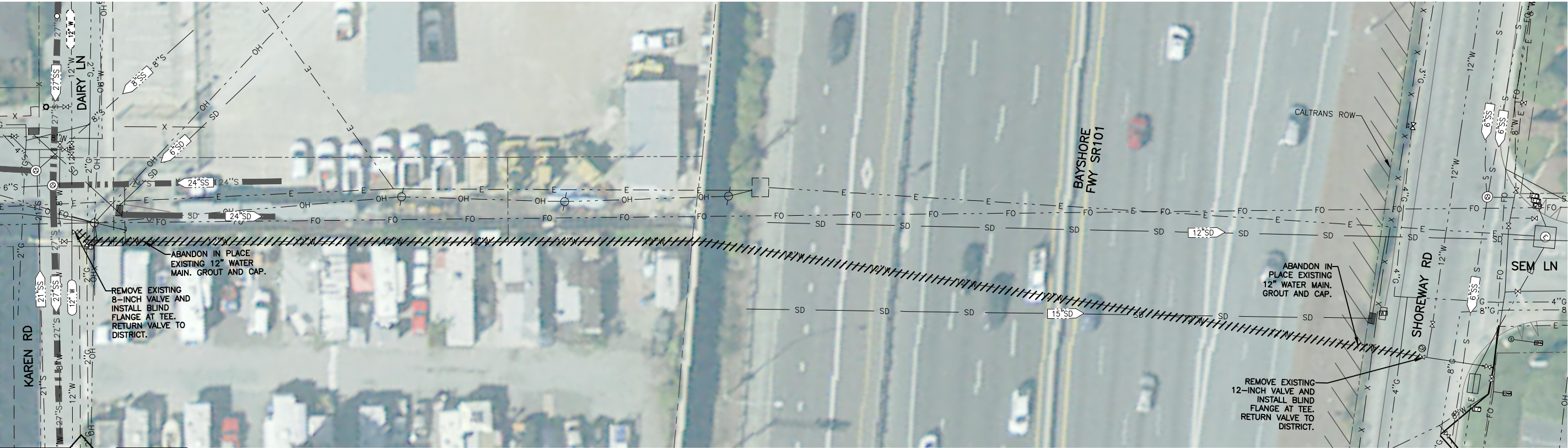
60% SUBMITTAL
NOT FOR CONSTRUCTION

MID-PENINSULA WATER DISTRICT		SR101 CROSSING AT PAMF		PLAN AND PROFILE STA 29+00 TO STA 32+50	
		REVIEWED AND APPROVED BY		DATE	
WEST YOST ASSOCIATES		CHECKED: LCO		DATE	
		APPROVED: JDC		BY	
CONSTRUCTION		DESIGNER: NAM		DESCRIPTION	
		DRAWN: ERG		NO.	
REVISIONS		3/12/18		APPVD	
		768-14-17-01		SHEET	
PLAN		C.6		10 of 21	
		768-14-17-01		SHEET	

REVIEWED BY:	DATE:
REVIEWED BY:	DATE:

FOR REDUCED ENGLISH PLANS
ORIGINAL SCALE IS IN INCHES

Drawings Name: N:\City\1508 Mid-Peninsula-WD\15-17-01 SR101 Crossing\CAD Production\1508-17-01-001.dwg
Plot Date: 03-12-18 PLOTTED BY: gregf



- NOTES
1. ALL AC PIPE WORK WILL REQUIRE PERSONAL PROTECTIVE EQUIPMENT AND PROPER DISPOSAL.

REVIEWED AND APPROVED BY

REVIEWED AND APPROVED BY
MID-PENINSULA WATER DISTRICT

TAMMY RUDOCK, GENERAL MANAGER DATE

NOTE: TOTAL LENGTH OF PIPE TO
BE ABANDONED IS 517 FEET

60% SUBMITTAL
NOT FOR CONSTRUCTION

MID-PENINSULA WATER DISTRICT		SR101 CROSSING AT PAMF		PLAN AND PROFILE STA 99+50 TO 105+50		REVISIONS	
DATE	08/11/17	SCALE	AS NOTED	DESIGNED	NAM	NO.	NO.
PGC JOB NO.	768-14-17-01	DATE	DATE	BY	BY	DATE	DATE
PLAN	C.7	DATE	DATE	BY	BY	DATE	DATE
SHEET	11 of 21	DATE	DATE	BY	BY	DATE	DATE

I. 12" DOMESTIC WATER PIPELINE

A. PVC PIPE WITH DUCTILE IRON FITTINGS

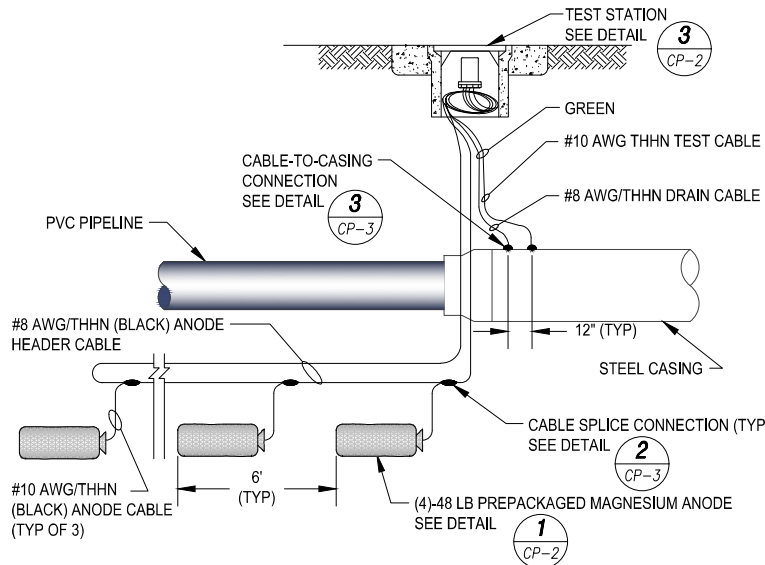
- CATHODIC PROTECTION FOR THE DUCTILE IRON FITTINGS SHALL CONSIST OF PREPACKAGED H-1 ALLOY MAGNESIUM ANODES INSTALLED AT VALVE ANODE TEST STATIONS (VATS) AND ISOLATED FITTINGS AS INDICATED IN THE CATHODIC PROTECTION DETAILS ON SHEET CP-1.
- ALL BURIED, NON-WELDED, NON-INSULATING DUCTILE PIPE JOINTS, EXCEPT INSULATING JOINTS, SHALL BE BONDED PER DETAIL 1/CP-3.
- ENCASE ALL BURIED DUCTILE IRON PIPE, VALVES, AND FITTINGS IN 8-MIL POLYETHYLENE PER AWWA C105.
- ALL BURIED BOLTS & NUTS SHALL BE COATED WITH BITUMASTIC AFTER INSTALLATION PER SPECIFICATIONS.
- FOR ANY THRUST RESTRAINT HARNESSES INSTALLED, PROVIDE ANODE PER DETAIL 4/CP-2.

B. COPPER PIPE & FITTINGS

- CATHODIC PROTECTION FOR THE COPPER LATERALS OF BLOW OFFS AND ARV'S SHALL CONSIST OF PREPACKAGED H-1 ALLOY MAGNESIUM ANODES DIRECTLY CONNECTED TO THE PIPE AT THE BOX .
- ALL BURIED COPPER AND/OR BRASS/BRONZE CORPORATION STOPS AND FITTINGS SHALL BE COATED WITH BITUMASTIC.
- ALL BURIED COPPER PIPE AND/OR BRASS/BRONZE CORPORATION STOPS AND FITTINGS CONNECTED TO A DUCTILE IRON PIPE/FITTING SHALL BE ELECTRICALLY ISOLATED FROM THE FITTING BY MEANS OF A NYLON BUSHING OR AN INSULATING CORPORATION STOP INSTALLED, AND SHALL BE ENCASED IN A 6-MIL POLYETHYLENE SLEEVE.

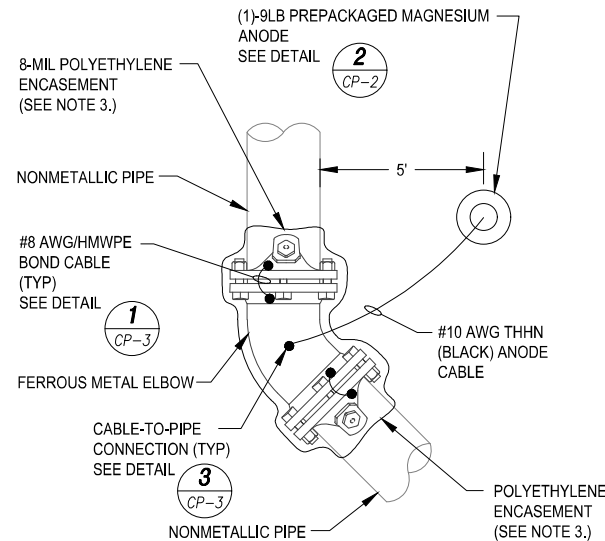
C. STEEL CASING

- STEEL CASING SHALL BE COATED PER SPECIFICATIONS WITH AN ABRASION RESISTANT COATING FOLLOWING MANUFACTURER'S RECOMMENDATIONS FOR SURFACE PREPARATION.
- CATHODIC PROTECTION FOR THE STEEL CASING SHALL CONSIST OF PREPACKAGED H-1 ALLOY MAGNESIUM ANODES INSTALLED AT EACH CASING ANODE TEST STATION (CATS) AS INDICATED IN THE CATHODIC PROTECTION DETAIL ON SHEET CP-1.



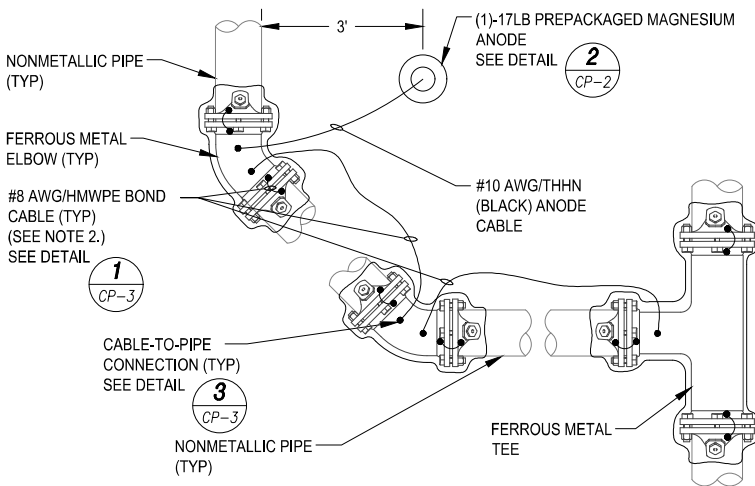
NOTES:

- THE ANODES SHALL BE INSTALLED A MINIMUM OF 5 FEET OFF THE EDGE OF THE CASING.
- INSTALL CATS AT EACH END OF CASING.
- LOOP BACK ANODE HEADER CABLE TO TEST STATION.
- CONDUIT OMITTED FOR CLARITY. INSTALL ANODE HEADER CABLES AND TEST CABLES IN 1" Ø PVC CONDUIT.
- CASING SHALL BE COATED WITH AN ABRASION RESISTANT COATING.

1 CATS - CASING ANODE TEST STATION W/ANODES
CP-1 NOT TO SCALE

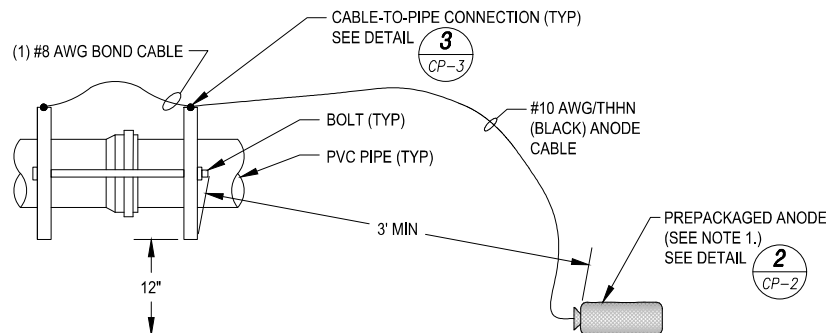
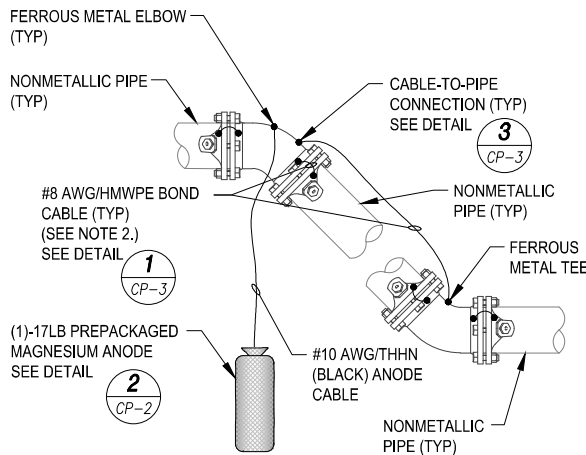
NOTES:

- THIS DETAIL IS TYPICAL OF ELBOWS, REDUCERS & OTHER ISOLATED FITTINGS.
- NO TEST STATION IS REQUIRED FOR THESE FITTINGS, HOWEVER A RECORD OF ALL INSTALLATIONS SHALL BE PROVIDED TO THE PROJECT ENGINEER.
- COAT ALL BURIED BOLTS & NUTS WITH BITUMASTIC, AND ENCASE ALL DUCTILE IRON PIPE AND FITTINGS IN POLYETHYLENE PER CATHODIC PROTECTION GENERAL NOTE I.A.4. ON SHEET CP-1.

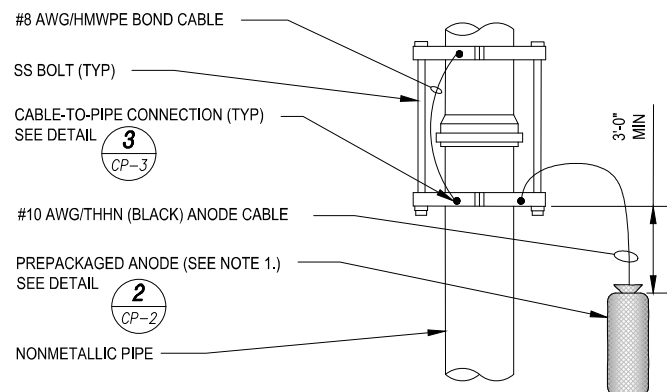
2 FITTING - ANODE INSTALLATION
CP-1 NOT TO SCALE

NOTES:

- THIS DETAIL IS TYPICAL OF TEES, ELBOWS, REDUCERS & OTHER FITTINGS.
- THE LENGTH OF THE BOND CABLES BETWEEN FITTINGS SHALL BE OF SUFFICIENT LENGTH TO ALLOW FOR ANY SOIL CONTRACTION OR PIPE MOVEMENT.
- NO TEST STATION IS REQUIRED FOR THESE FITTINGS (UNLESS A VALVE IS INCLUDED), HOWEVER A RECORD OF ALL INSTALLATIONS SHALL BE PROVIDED TO THE PROJECT ENGINEER.
- COAT ALL NUTS AND BOLTS WITH BITUMASTIC AND ENCASE ALL DUCTILE IRON PIPE AND FITTINGS IN POLYETHYLENE PER CATHODIC PROTECTION GENERAL NOTE I.A.4 ON SHEET CP-1.
- IF THIS DETAIL IS COMBINED WITH ANOTHER DETAIL INVOLVING AN ANODE TEST STATION DETAIL, DO NOT CONNECT ANODE DIRECTLY TO FITTING. INSTALL ANODE AS SHOWN IN THE ANODE TEST STATION DETAIL.

3 MULTIPLE FITTINGS - ANODE INSTALLATION
CP-1 NOT TO SCALE

ELEVATION VIEW



PLAN VIEW

NOTES:

- INSTALL THE 9 POUND ANODES FOR UP TO 12" FITTING, AND 17" ANODE FOR LARGER THAN 16" FITTING. INSTALL THE ANODE 1'-0" BELOW BOTTOM OF TRENCH IN 1 FOOT OF NATIVE BACKFILL. ATTACH ANODE CABLE DIRECTLY TO THRUST RESTRAINT FITTING.
- INSTALL ONE #8 AWG HMWPE BOND CABLE PER DETAIL 1/CP-3. COAT ALL BURIED RODS & NUTS WITH BITUMASTIC AND ENCASE ALL THRUST RESTRAINTS IN 8 MIL THICK POLYETHYLENE PER AWWA C-105.

4 THRUST RESTRAINT HARNESS - ANODE INSTALLATION
CP-1 NOT TO SCALE

DESCRIPTION	50% SUBMITTAL
CHK	JDH
ENG	TDH
DATE	3/9/2018
REV	0

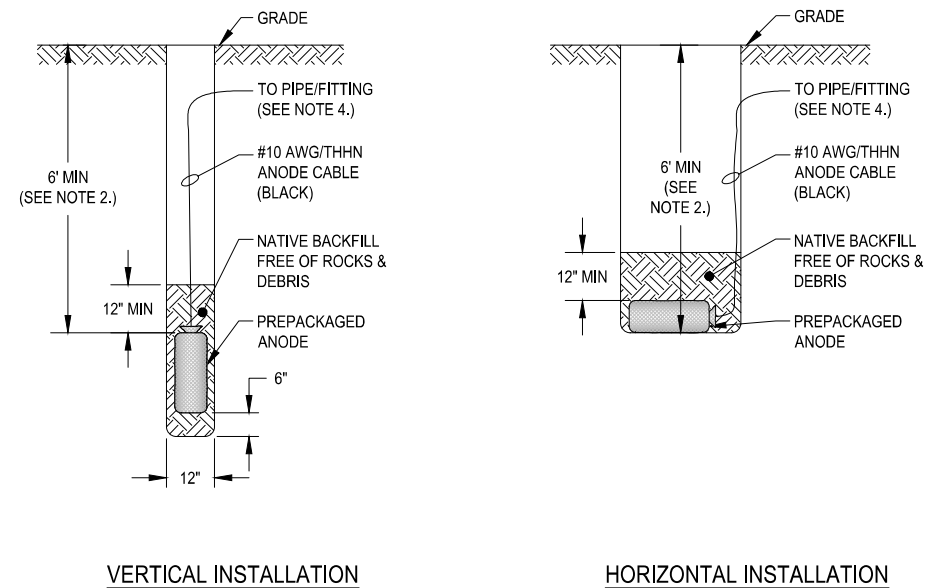
CATHODIC PROTECTION
WEST YOST
MID-PENINSULA WATER DISTRICT SR101 CROSSING AT PAMF
12" WATER PIPELINE & STEEL CASING
CATHODIC PROTECTION NOTES & DETAILS 1
ENG: TDH CAD: TDH CHK: JDH DATE: 3/7/2018 JOB: 17172 FILE: 17172

1100 Willow Pass Court
Concord, CA 94520

(925)927-6630

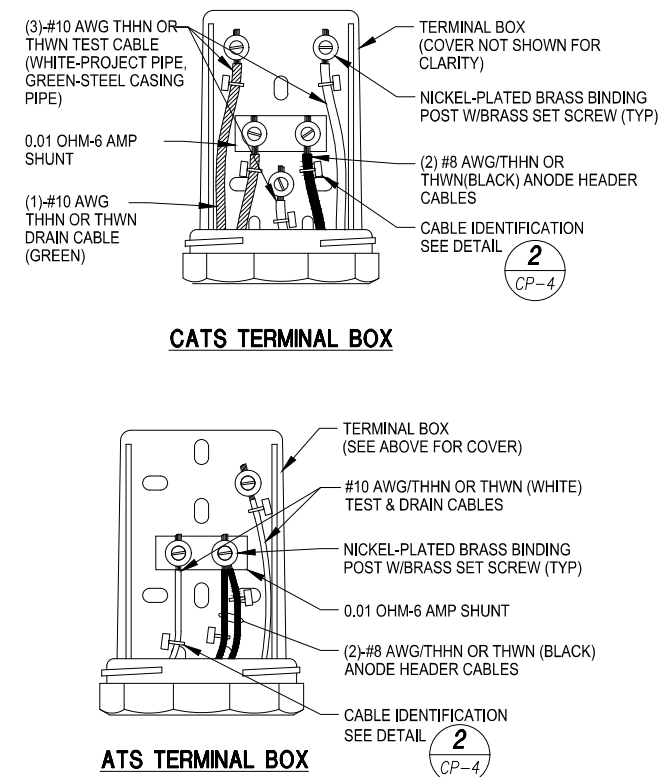
FAX (925)927-6634

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- NOTES:
1. INSTALL ANODES 3 FEET OFF THE PIPE/FITTING IN NATIVE SOIL.
 2. THE ANODES MAY BE INSTALLED HORIZONTALLY OR VERTICALLY UPON DISCRETION OF THE CONTRACTOR.
 3. MAINTAIN A MIN. DISTANCE OF 10 FEET BETWEEN ANODES IF MULTIPLE ANODES ARE INSTALLED.
 4. CONNECT ANODE CABLE TO TEST STATION OR DIRECTLY TO PIPE OR FITTING AS SHOWN IN THE DRAWINGS.

2 PROFILE - ANODE INSTALLATION (FOR 1 TO 3 ANODES)
CP-2 NOT TO SCALE



- NOTE:
FOR CATS WITH NONMETALLIC CARRIER PIPELINES, THERE WILL BE NO WHITE CABLES.

4 **TERMINAL BOX**
CP-2 NOT TO SCALE

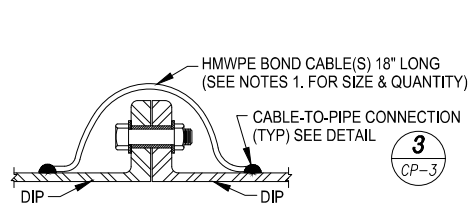


CATHODIC PROTECTION			
WEST YOST			
MID-PENNSULA WATER DISTRICT SR101 CROSSING AT PAMF			
12" WATER PIPELINE & STEEL CASING			
CATHODIC PROTECTION DETAILS 2			
ENG: TDH	CAD: TDH	CHK: JDH	DATE: 3/7/2018
JOB: 17172		FILE: 17172	
REV	DATE	ENG	CHK
0	3/9/2018	TDH	JDH
		50% SUBMITTAL	

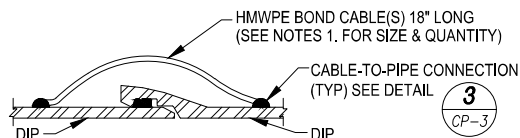


DESCRIPTION	
50% SUBMITTAL	
CHK	JDH
ENG	TDH
DATE	3/9/2018
REV	0
CATHODIC PROTECTION	
WEST YOST	
MID-PENINSULA WATER DISTRICT SR101 CROSSING AT PAMF	
12" WATER PIPELINE & STEEL CASING	
CATHODIC PROTECTION DETAILS 3	
ENG: TDH	CAD: TDH
CHK: JDH	DATE: 3/7/2018
JOB: 17172	FILE: 17172

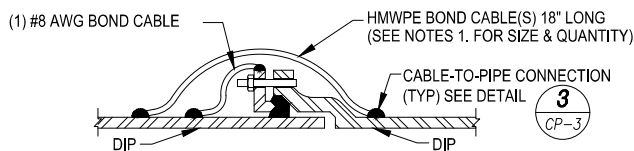
jdH corrosion
consultants, inc.
1100 Willow Pass Court
Concord, CA 94520
(925)927-6630
FAX (925)927-6634
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FLANGED JOINT



PUSH-ON JOINT



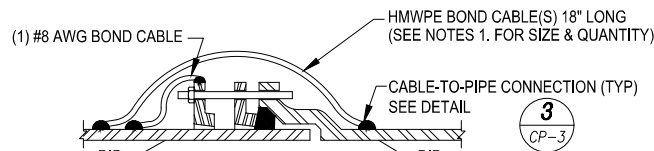
MECHANICAL JOINT

NOTES:

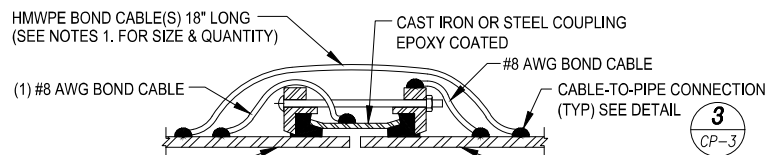
1. INSTALL BOND CABLES ACROSS ALL BURIED, NON-WELDED (NON-INSULATING) METALLIC PIPE FERROUS METAL PIPE JOINTS.
2. INSTALL ONE #8 AWG/HMWPE BOND CABLE ON EACH JOINT FOR DUCTILE IRON FITTINGS ON PVC PIPELINES.
3. INSTALL ONE #8 AWG/HMWPE BOND CABLE ON EACH JOINT FOR METALLIC PIPELINES OF UP TO 10-INCHES IN DIAMETER. INSTALL ONE #4 AWG/HMWPE BOND CABLE ON EACH JOINT FOR METALLIC PIPELINES OF UP TO 18-INCHES IN DIAMETER. INSTALL THREE #4 AWG/HMWPE BOND CABLES ON EACH JOINT FOR METALLIC PIPELINES 30" IN DIAMETER OR GREATER.
4. PROVIDE ENOUGH SLACK IN THE BOND CABLES SHALL BE OF SUFFICIENT LENGTH TO ALLOW FOR SIGNIFICANT SOIL SUBSIDENCE AND PIPE JOINT MOVEMENT.
5. (DO NOT INSTALL BOND CABLE ACROSS ANY INSULATING JOINTS).

1 BOND CABLES

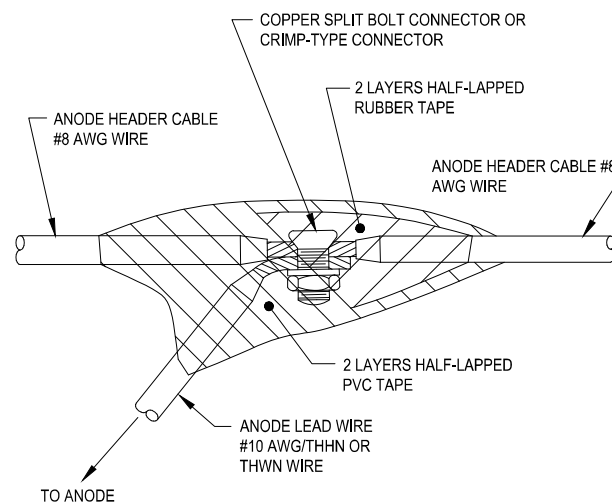
CP-3 NOT TO SCALE



TANDEM MEGALUG MECHANICAL JOINT RESTRAINT

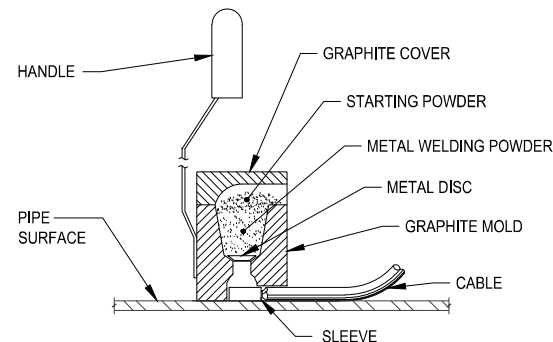


FLEXIBLE COUPLING



2 SPLICE CONNECTION

CP-3 NOT TO SCALE

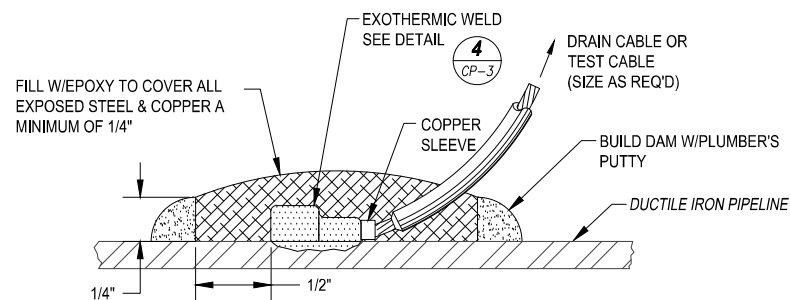


- STEP 1. FILE STRUCTURE CONNECTION AREA TO BARE SHINY METAL AND CLEAN.
- STEP 2. STRIP INSULATION FROM WIRE. ATTACH SLEEVE REQUIRED ON #6 AWG WIRE OR SMALLER
- STEP 3. HOLD MOLD FIRMLY WITH OPENING AWAY FROM OPERATOR AND IGNITE WITH FLINT GUN.
- STEP 4. REMOVE SLAG FROM CONNECTION AND PEEN WELD FOR SOUNDNESS.
- STEP 5. COVER CONNECTION AND EXPOSED STRUCTURE SURFACE WITH EPOXY COATING COMPOUND PER DETAIL 3/CP-3.

NOTE:
PROCEDURE SHOWN ABOVE IS TO BE USED AS A GENERAL GUIDE ONLY.
CONSULT MANUFACTURER'S LITERATURE FOR SPECIFIC INSTALLATION INSTRUCTIONS.

4 EXOTHERMIC WELD PROCEDURE

CP-3 NOT TO SCALE



DUCTILE IRON PIPE

3 CABLE-TO-PIPE CONNECTION

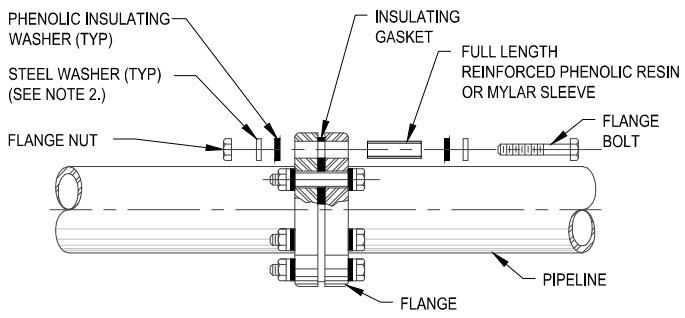
CP-3 NOT TO SCALE



CATHODIC PROTECTION				REV	DATE	ENG	CHK	DESCRIPTION
				0	3/9/2018	TDH	JDH	50% SUBMITTAL
WEST YOST								
MID-PENINSULA WATER DISTRICT SR101 CROSSING AT PAMF								
12" WATER PIPELINE & STEEL CASING								
CATHODIC PROTECTION DETAILS 4								
ENG: TDH	CAD: TDH	CHK: JDH	DATE: 3/7/2018	JOB: 17172	FILE: 17172			

jdh corrosion
consultants, inc.

1100 Willow Pass Court
Concord, CA 94520
(925)927-6630
FAX (925)927-6634
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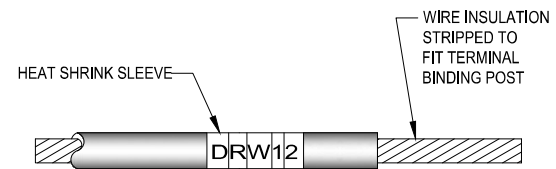


INSULATING FLANGE

- NOTES:
- THE INSULATING FLANGE KIT SHALL BE FOR WATER SERVICE, SUITABLE FOR WET & DRY LOCATIONS, AND BE OF SAME PRESSURE RATING AS THE FLANGE.
 - THE ALLOY OF THE STEEL WASHERS SHALL BE THE SAME AS IS SPECIFIED FOR THE FLANGE BOLTS.

1INSULATING JOINT

CP-4NOT TO SCALE



- ABBREVIATIONS
- AN - ANODE
DR - DRAIN CABLE
TT - TEST CABLE
W - WATER
- NUMBER
- PIPE DIA. (INCHES)

2CABLE IDENTIFICATION

CP-4NOT TO SCALE

REVIEWED BY:	DATE:	REVIEWED BY:	DATE:

DETAIL TO BE
INCLUDED IN 90%
DESIGN SUBMITTAL

CONNECTION TO EXISTING WATER AT SHOEWAY

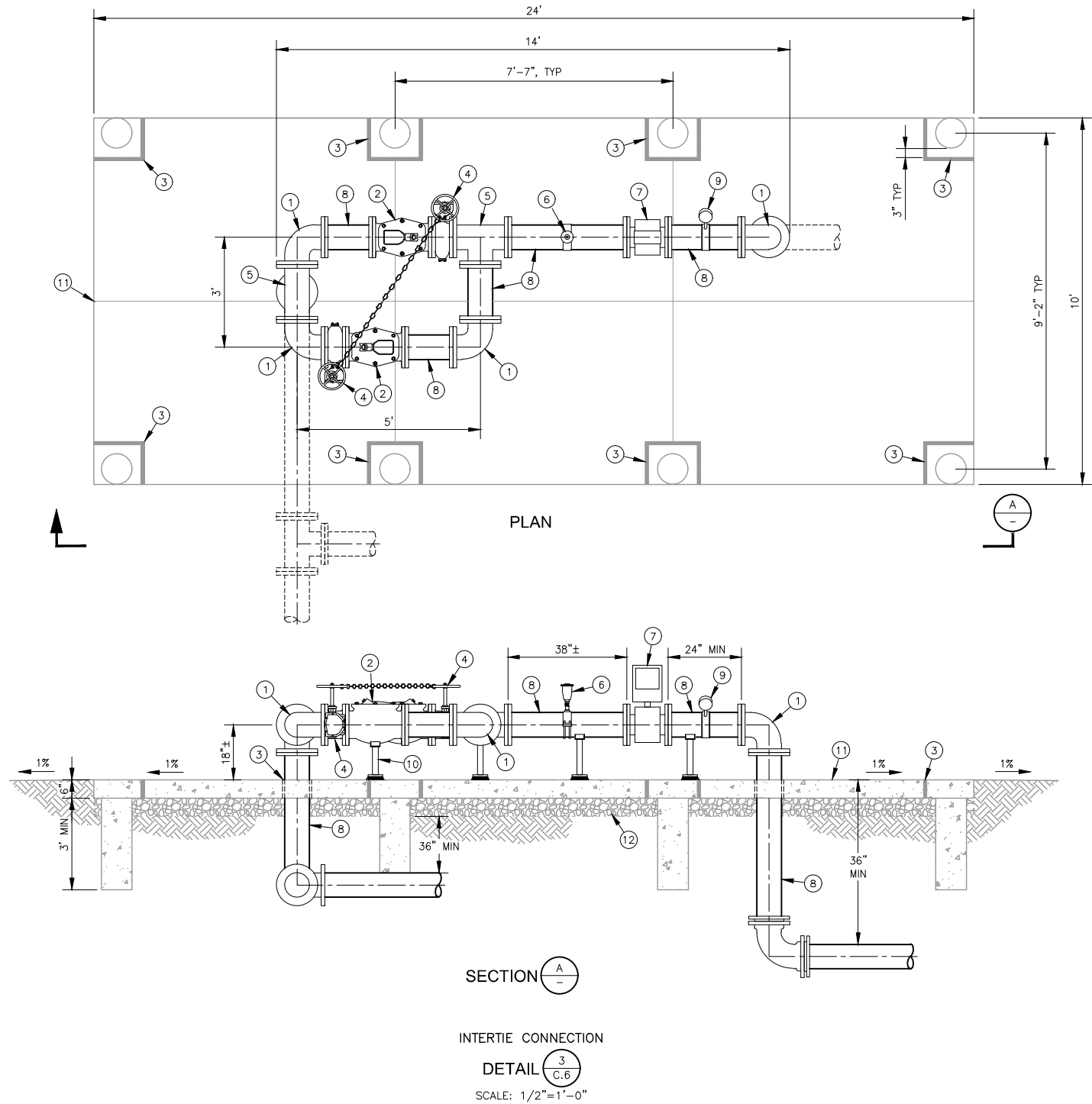
DETAIL 
NTS

[illegible]

REVIEWED BY:	DATE:	REVIEWED BY:	DATE:

FOR REDUCED ENGLISH PLANS
ORIGINAL SCALE IS IN INCHES

DRAWING NAME: N:\Clients\768 Mid-Peninsula WD\14-17-01 SR101 Crossing\CAD\Production\76814-1701-002-Interlie Detail.dwg
PLOT DATE: 03-12-18 PLOTTED BY: egr/ef



- ## LEGEND
- | | |
|---|---|
| ① | 8" 90° BED |
| ② | 8" CHECK VALVE |
| ③ | EXPANSION FILLER, TYP |
| ④ | 8" BUTTERFLY VALVE |
| ⑤ | 8" TEE |
| ⑥ | 1" AIR RELEASE VALVE |
| ⑦ | M-SERIES MAG METER |
| ⑧ | 8" SPOOL |
| ⑨ | PRESSURE GAUGE ASSEMBLY α (LIQUID FILLED PRESSURE GAUGE, CORPORATION STOP W/ PRESSURE GAUGE ADAPTOR, DOUBLE BAND BRONZE SERVICE SADDLE) |
| ⑩ | PIPE SUPPORT |
| ⑪ | 24"x10" PCC SLAB, SCORE LINE SHOWN. #4 REBAR 12" O.C. E.W. |
| ⑫ | 6" CLASS II AB COMPACT 90% RC ON UNDISTURBED SOIL |

REVIEWED AND APPROVED BY _____

REVIEWED AND APPROVED BY
MID-PENINSULA WATER DISTRICT


TAMMY RUDOCK, GENERAL MANAGER	DATE
-------------------------------	------

60% SUBMITTAL
NOT FOR CONSTRUCTION

DATE		SCALE	
08/11/17		AS NOTED	
PCG JOB NO. 768-14-17-01			
PLAN		D.2	
SHEET		17 of 21	

MID-PENINSULA WATER DISTRICT		SR101 CROSSING AT PAMF		CIVIL DETAILS 2	
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DRAWN: ERG		CHECKED: LCO	
DESIGNED: NAM		APPROVED: JDG	

WEST YOST ASSOCIATES	
	

CONSTRUCTION PURPOSES	
FOR THE	
CITY OF	
SAN JOSE	

NO.		DATE		BY		APP'D	
△		3/12/18					

REVISIONS							

DRAWING NAME: N:\Clients\768 Mid-Peninsula WD\14-17-01 SR101 Crossing\CAD\Production\76814-1701-D03.dwg
PLOT DATE: 03-12-18 PLOTTED BY: egriff

MID-PENINSULA WATER DISTRICT SR101 CROSSING AT PAMF DISTRICT DETAILS 1

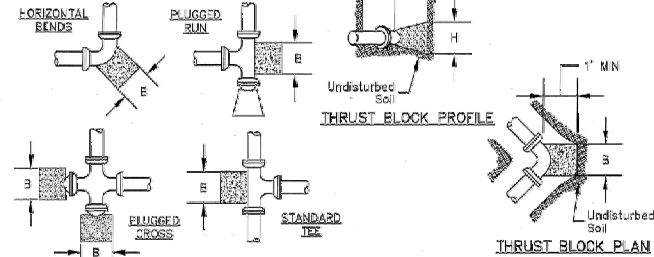
REVIEWED BY:	DATE:	REVIEWED BY:	DATE:

FOR REDUCED ENGLISH PLANS
ORIGINAL SCALE IS IN INCHES

DRAWING NAME: N:\CADD\1768 Mid Peninsula\1768-14-17-01 SR101 Crossing\1768-14-17-01.dwg
PLOT DATE: 03-12-18 PLOTTED BY: greg

VOLUME OF GRAVITY BLOCK
IN CUBIC YARDS

VERTICAL FITTING	6"	8"	10"	12"	14"	16"
90°	1.0	2.0	3.0	4.0	5.0	6.0
45°	0.5	1.0	1.5	2.0	2.5	3.0



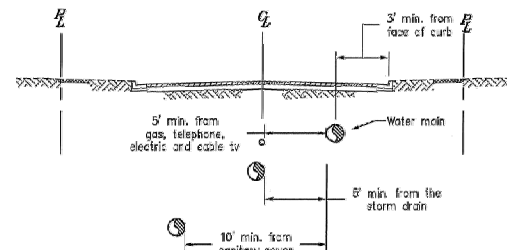
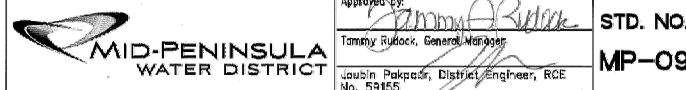
DIMENSIONS OF THRUST BLOCKS IN FEET

FITTING	DIAMETER OF PIPE											
	6"			8"			10"			12"		
90°	B	H	E	B	H	E	B	H	E	B	H	E
45°	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"
PLUG/TEE	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"

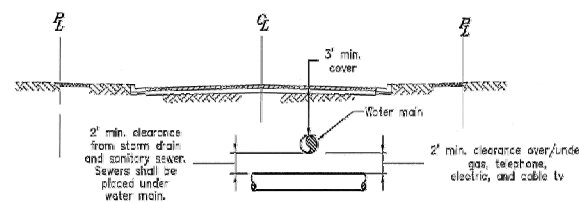
- NOTES:**
- Use 2,000 psi high early strength concrete.
 - All thrust blocks and gravity blocks shall bear against undisturbed earth.
 - Encased pipe in 8 mil. linear low-density polyethylene film.
 - Maintain a minimum clearance of 2" between the thrust block reinforcing steel and pipe.
 - Concrete not to extend beyond the face of the soil.
 - Thrust block shall encompass at least one-half of the outside diameter of the pipe.
 - Flanges, bolts, and nuts shall be kept clear of concrete.
 - Dimensions above include use of mechanical restraints on pipe.
 - If ground water is present, thrust block dimensions shall be determined by the District.

THRUST RESTRAINT - THRUST BLOCK DETAILS

REV. 01/15
05/14
05/02



MINIMUM REQUIRED HORIZONTAL CLEARANCE FROM WATER MAIN



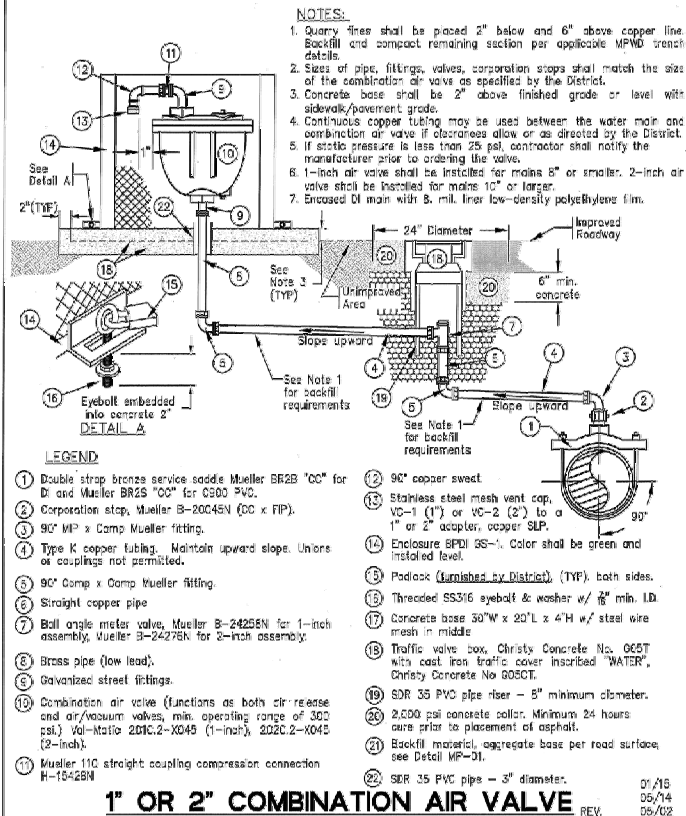
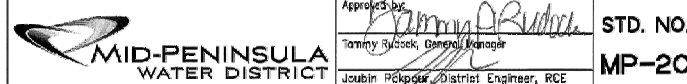
MINIMUM REQUIRED VERTICAL CLEARANCE FROM WATER MAIN AT CROSSINGS

NOTES

- Any deviation from these requirements requires written approval from the District.
- All crossings shall be at 45° to 90°.

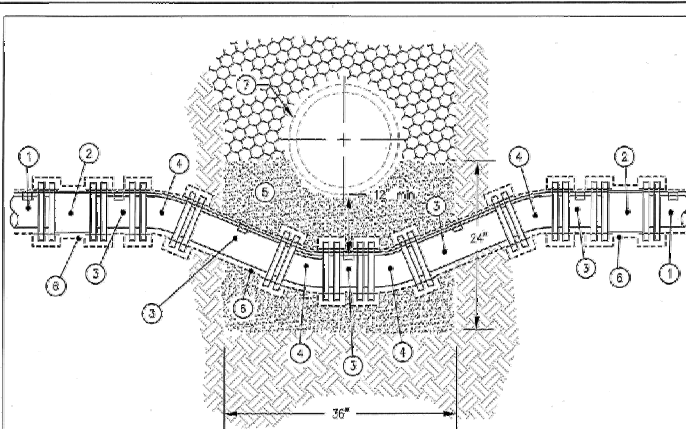
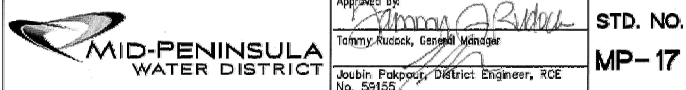
MINIMUM PIPE SEPARATION REQUIREMENTS

REV. 05/14



1" OR 2" COMBINATION AIR VALVE

REV. 01/15
05/14
05/02



LEGEND

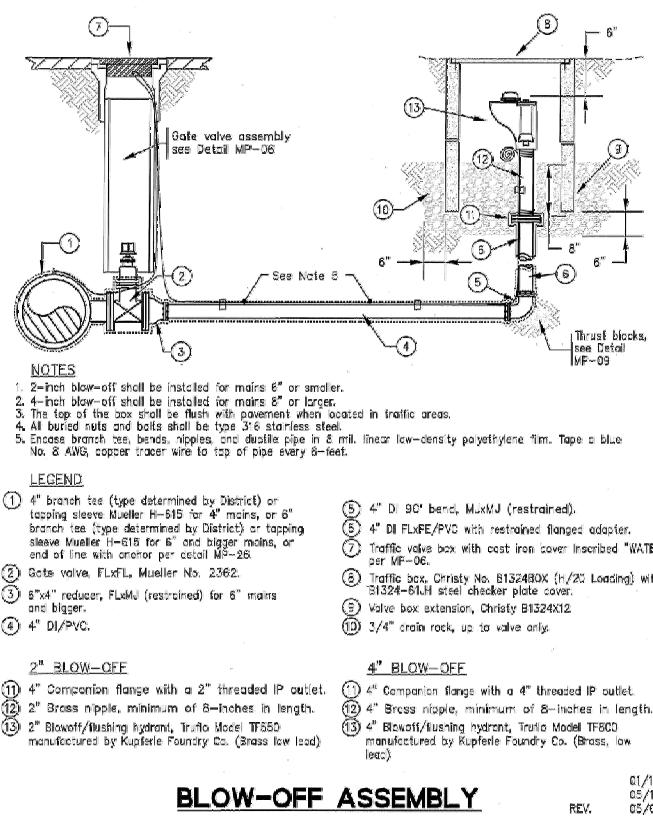
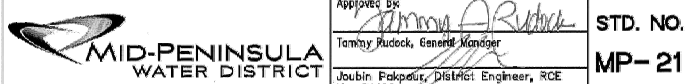
- Water main
- Solid sleeve, MJ (restrained) Megaug
- DI/PVC pipe
- 22-1/2" Band, MJ (restrained) Megaug
- 2 sack slurry
- Encased DI pipe with 8 mil. linear low-density polyethylene film. Tape a blue No. 8 AWG, copper tracer wire to top of pipe.
- Sanitary sewer or storm drain

NOTES

- When relocating existing water main, the pipe crossing assembly shall be assembled prior to cutting and removing existing water main section.
- Backfill between the crossing assembly and drainage culvert shall be 2 sack slurry, in accordance with section 33301 of the District's standard specifications.
- Pipe shall be restrained at all locations.

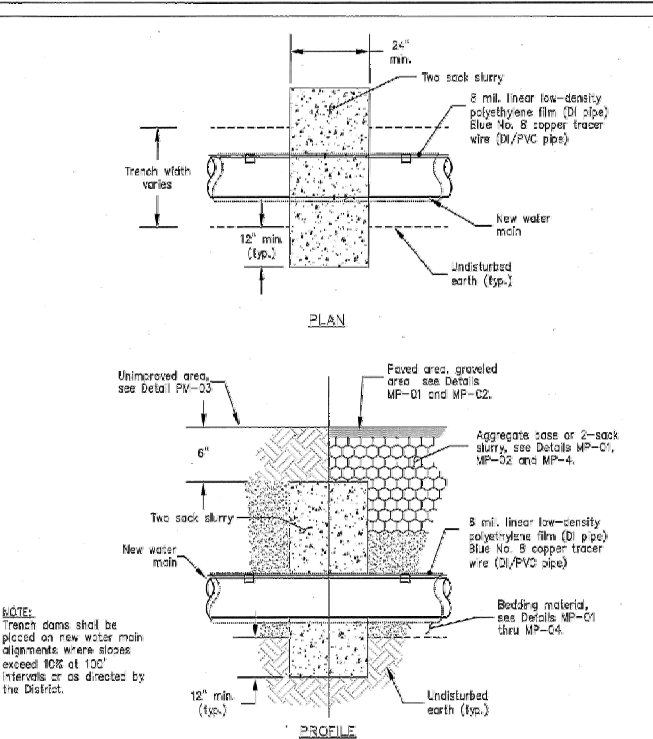
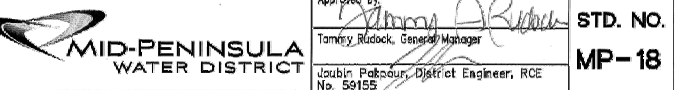
PIPE CROSSING ASSEMBLY

REV. 01/15
05/14



BLOW-OFF ASSEMBLY

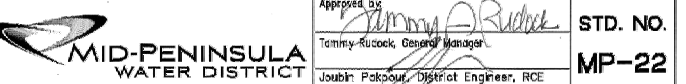
REV. 01/15
05/14
05/02



- NOTE:**
- Trench dams shall be placed on new water main alignments where slopes exceed 10% at 100' intervals or as directed by the District.

TRENCH DAM

REV. 01/15
05/14



REVIEWED AND APPROVED BY

REVIEWED AND APPROVED BY
MID-PENINSULA WATER DISTRICT

TAMMY RUDOCK, GENERAL MANAGER DATE

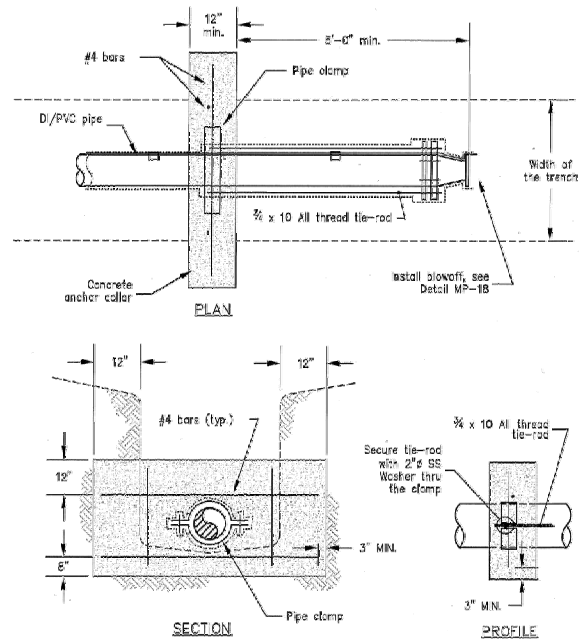
60% SUBMITTAL
NOT FOR CONSTRUCTION

DATE	08/11/17	SCALE	AS NOTED
PCG JOB NO.	768-14-17-01	PLAN	D.4
SHEET	19 OF 21	SHEET	19 OF 21

REVIEWED BY:	DATE:
REVIEWED BY:	DATE:

FOR REDUCED ENGLISH PLANS
ORIGINAL SCALE IS IN INCHES

DRAWING NAME: N:\Client\758 Mid Peninsula WDI\A17-01 SR101 Crossing\CD\Production\SR101-201.dwg
PLOT DATE: 03-12-18 PLOTTED BY: greg

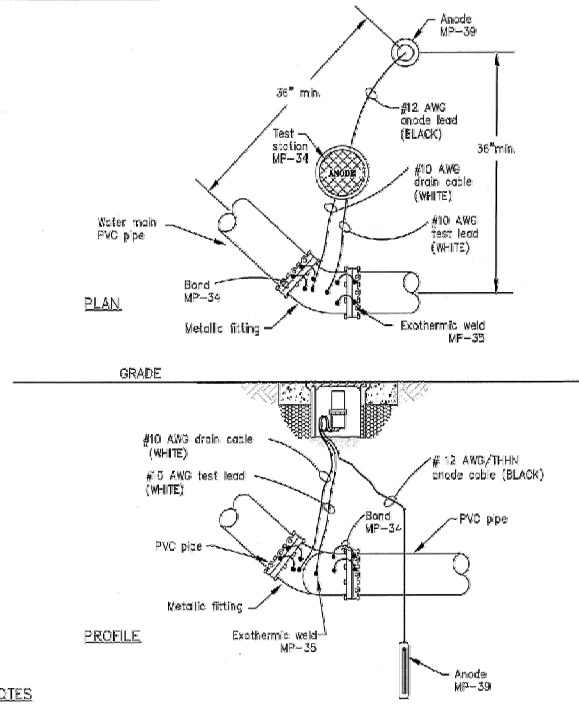


- NOTE:
1. This type of anchor shall be used when required by the District.
 2. Type 316 SS hardware shall be used.
 3. Encase 2) pipe with 8 mil. linear low-density polyethylene film. Tape a blue No. 6 AWG copper tracer wire to top of pipe every 5-feet.

END OF LINE ANCHOR

REV. 03/15
05/14

	Approved by: <i>Tammy Rudock</i>	STD. NO. MP-26
	Tammy Rudock, General Manager Joubin Pakpour, District Engineer, RCE No. 59155	

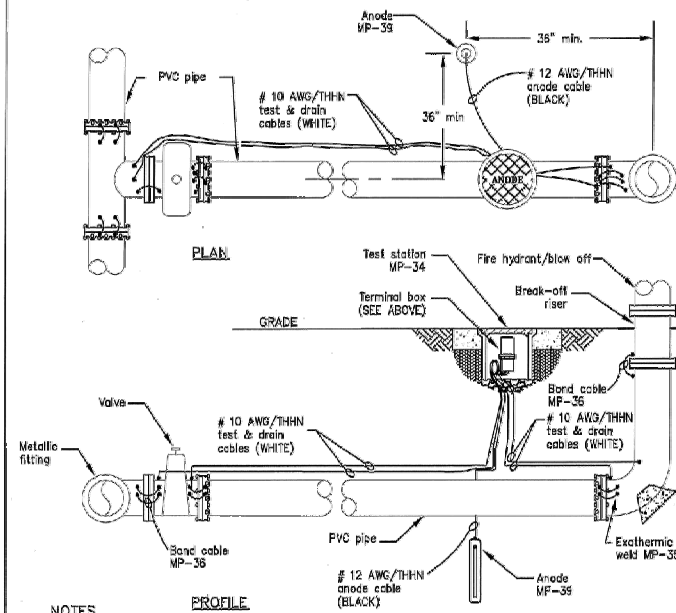


- NOTE:
1. District will only allow use of a single anode and single test station for fittings/tees/valves which are located within 20 feet or less of each other. These fittings/tees/valves shall be connected to a separate terminal with an identify labeled wire, unless directed by the District otherwise.
 2. Any fittings/tees/valves located 20 feet or more of each other shall have their own anode and test station, unless directed by the District otherwise.
 3. Long bond wires shall be taped to the pipe every 5'.

ANODE TEST STATION - FITTING

REV. 05/14
05/02

	Approved by: <i>Tammy Rudock</i>	STD. NO. MP-27
	Tammy Rudock, General Manager Joubin Pakpour, District Engineer, RCE No. 59155	

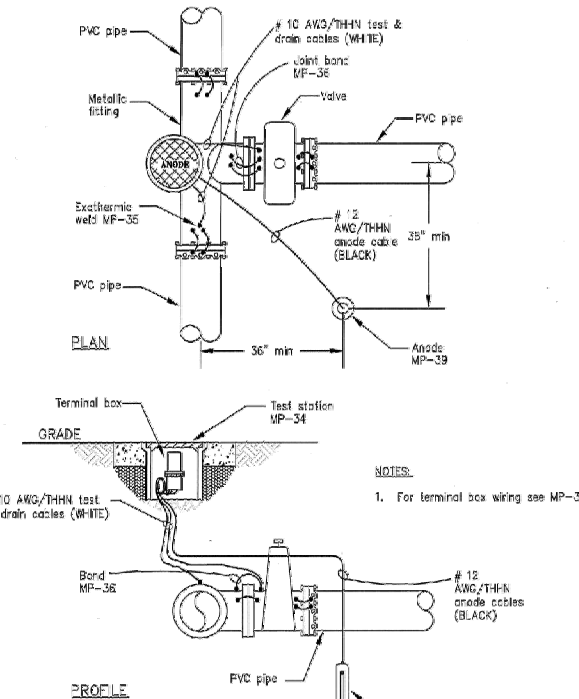


- NOTE:
1. District will only allow use of a single anode and single test station for fittings/tees/valves which are located within 20 feet or less of each other. These fittings/tees/valves shall be connected to a separate terminal with an identify labeled wire, unless directed by the District otherwise.
 2. Test station may be deleted at the discretion of the District. If test station is deleted, connect the anode lead directly to the fitting.
 3. If test and gate valve are installed with 20' or more of the fire hydrant/blow off, they should have their own anode and test station, unless otherwise directed by the District.
 4. Valve box omitted.
 5. Long bond wires shall be taped to the pipe every 5'.

ANODE TEST STATION FIRE HYDRANT/BLOW OFF

REV. 05/14
05/02

	Approved by: <i>Tammy Rudock</i>	STD. NO. MP-29
	Tammy Rudock, General Manager Joubin Pakpour, District Engineer, RCE No. 59155	

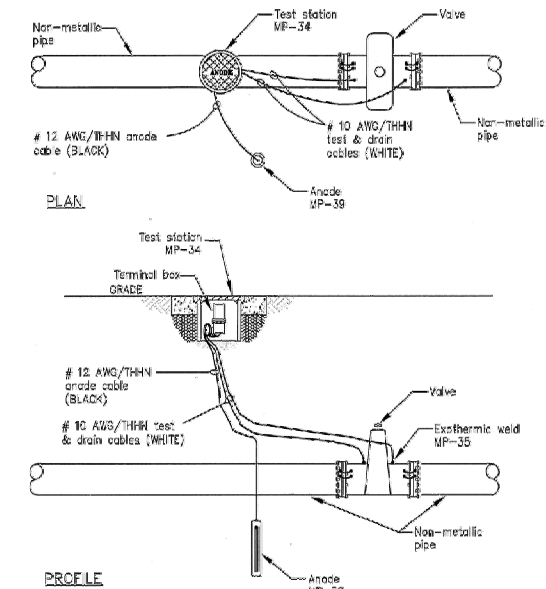


- NOTE:
1. For terminal box wiring see MP-33

ANODE TEST STATION VALVE AND TEE

REV. 05/14
03/02

	Approved by: <i>Tammy Rudock</i>	STD. NO. MP-30
	Tammy Rudock, General Manager Joubin Pakpour, District Engineer, RCE No. 59155	

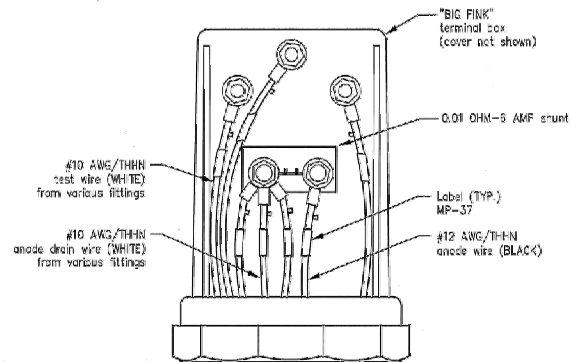


- NOTE:
1. Install anode a minimum 3' from valve.
 2. For terminal box wiring see MP-33
 3. Bond as required per MP-36
 4. Valve box omitted.

ANODE TEST STATION - VALVE

REV. 05/14
05/02

	Approved by: <i>Tammy Rudock</i>	STD. NO. MP-31
	Tammy Rudock, General Manager Joubin Pakpour, District Engineer, RCE No. 59155	



- NOTE:
1. Identify all wires per MP-37
 2. Install shunt position shown after static fitting to potential survey
 3. Number of terminals shall be determined by number of fitting/tees/valves connected to the terminal box.
 4. #10 AWG/THHN anode drain wires (WHITE) can be connected to both side of the drain terminal but not connected to anode side of shunt.

ANODE TERMINAL BOX WITH MULTIPLE FITTINGS EXAMPLE

REV. 05/14
05/02

	Approved by: <i>Tammy Rudock</i>	STD. NO. MP-33
	Tammy Rudock, General Manager Joubin Pakpour, District Engineer, RCE No. 59155	

REVIEWED AND APPROVED BY

REVIEWED AND APPROVED BY
MID-PENINSULA WATER DISTRICT

TAMMY RUDOCK, GENERAL MANAGER DATE

60% SUBMITTAL
NOT FOR CONSTRUCTION

REVISIONS



WEST YOST
ASSOCIATES
CHECKED: LCO
DESIGNED: JDC
DRAWN: ERG
DATE: 1/12/18

MID-PENINSULA WATER DISTRICT

SR101 CROSSING AT PAMF

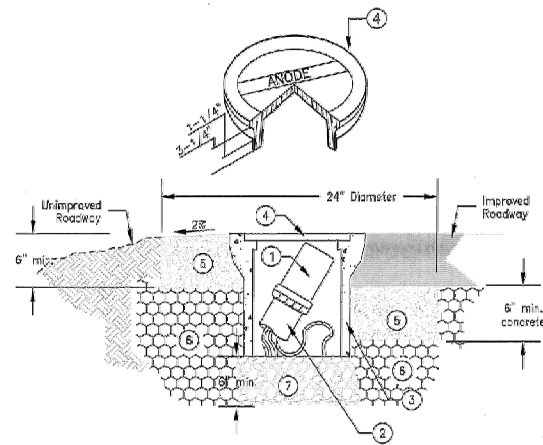
DISTRICT DETAILS 3

DATE: 08/11/17 SCALE: AS NOTED
PCG JOB NO.: 768-14-17-01
PLAN: D.5
SHEET: 20 OF 21

REVIEWED BY:	DATE:
REVIEWED BY:	DATE:

FOR REDUCED ENGLISH PLANS
ORIGINAL SCALE IS IN INCHES

DRAWING NAME: N:\Chem\758 Mid Peninsula\WD\A17-40 SR101 Crossing\CD\Production\758A17-40.dwg
PLOT DATE: 03-12-18 PLOTTED BY: greg



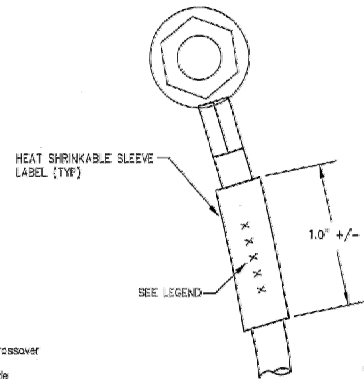
- LEGEND:**
- 2" dia Big Fink test station - Blue color. See detail VP-33.
 - 2" dia, 2" dia schedule 40 PVC - White color.
 - Traffic valve box, Christy Concrete No. 0657B0X.
 - Cast iron traffic cover inscribed "AMODE2", Christy Concrete No. 065CT.
 - 2,000 psi concrete color: Minimum 24 hours cure prior to placement of asphalt.
 - Backfill material, aggregate base per road surface, see Detail MP-01.
 - 3/4" drain rock

- NOTES:**
- All wires shall have 24" min slack in box.
 - Test box to be field located near metallic fitting.

FLUSH MOUNT TEST STATION

REV. 05/14
05/02

	Approved by: <i>Tammy Rudock</i> Tammy Rudock, General Manager	STD. NO.
	Joubin Pakpour, District Engineer, RCE No. 59155	MP-34



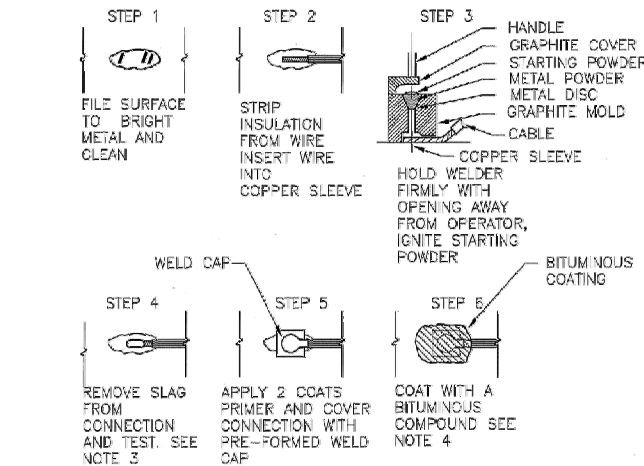
- LEGEND:**
- Cross - Crossover
 - TEE - Tee
 - ZINC - Anode
 - 90 EL - 90° Elbow
 - 45 EL - 45° Elbow
 - VAL - Valve
 - AV - Air relief valve
 - Blow - Blow off
 - FR - Fire hydrant riser

- NOTES:**
- Where two fittings of the same type exist, the compass direction relative to the test station shall be added to the label description (i.e. N, NW, W, SW, S, SE, E, NE).
 - All wires shall be labeled as directed by the District to identify the fittings/tees/values.

HEAT SHRINKABLE LABEL

REV. 05/14
05/02

	Approved by: <i>Tammy Rudock</i> Tammy Rudock, General Manager	STD. NO.
	Joubin Pakpour, District Engineer, RCE No. 59155	MP-37

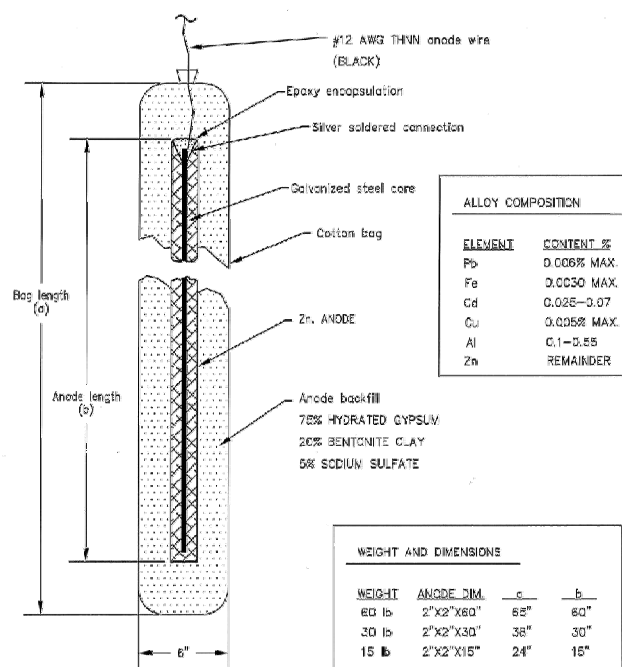


- NOTES:**
- Welder shown is for horizontal surfaces; for vertical surfaces side welder is required.
 - Attach one (1) wire per weld. All wire welds shall be minimum 3 inches apart.
 - All exposed metal (structure, wire, and weld) within a 3 inch radius of weld shall be covered with 2 coat of primer and an elastomeric weld cap.
 - Apply a generous coat of bitumen over weld cap and exposed metal up to 3 inches beyond cap.
 - All welds shall be tested by striking the weld with a 2 lb hammer while pulling firmly on wire. Any welds broken or loosened shall be rewelded and retested. The surface must be reground and clean before rewelding. All weld slag shall be removed from the weld.

EXOTHERMIC WELD

REV. 05/14
05/02

	Approved by: <i>Tammy Rudock</i> Tammy Rudock, General Manager	STD. NO.
	Joubin Pakpour, District Engineer, RCE No. 59155	MP-35



ELEMENT	CONTENT %
Pb	0.006% MAX.
Fe	0.0030 MAX.
Cd	0.02E-0.07
Cu	0.005% MAX.
Al	0.1-0.55
Zn	REMAINDER

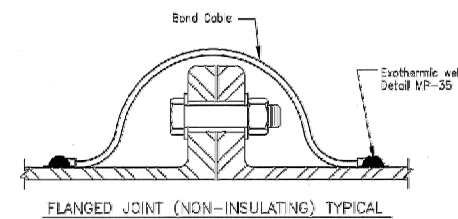
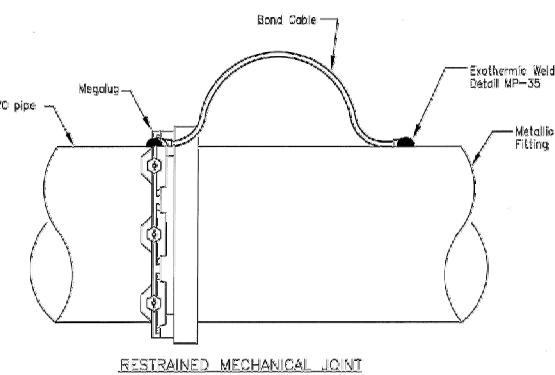
WEIGHT	ANODE DIM.	a	b
60 lb	2"x2"x60"	62"	60"
30 lb	2"x2"x30"	38"	30"
15 lb	2"x2"x15"	24"	15"

- NOTES:**
- Midpoint of anode ideally should be at same depth as spring-line (mid point) of pipe. The top of the anode should be at least four feet below grade.

60, 30, 15 LB ZINC ANODE

REV. 05/14

	Approved by: <i>Tammy Rudock</i> Tammy Rudock, General Manager	STD. NO.
	Joubin Pakpour, District Engineer, RCE No. 59155	MP-39



- NOTES:**
- All bond wire shall be standard copper wire w/ANWPE insulation, installed at 1-in. length.
 - Two #6 bond cables are required per joint for pipe diameter 16" and smaller. Three #4 bond cables are required per joint for pipe diameters greater than 16".
 - Bond wires shall be spaced min. 6" apart.
 - All wire connections shall be made by the exothermic weld. See MP-35.
 - Wax tape all surface bolted fittings.
 - Lock mechanical flanges and bolts with petroleum and petroleum wax per AWWA C217.

PIPE JOINT BONDING

REV. 05/14
05/02

	Approved by: <i>Tammy Rudock</i> Tammy Rudock, General Manager	STD. NO.
	Joubin Pakpour, District Engineer, RCE No. 59155	MP-36

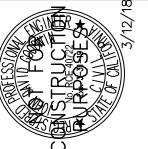
REVIEWED AND APPROVED BY

REVIEWED AND APPROVED BY
MID-PENINSULA WATER DISTRICT

TAMMY RUDOCK, GENERAL MANAGER DATE

60% SUBMITTAL
NOT FOR CONSTRUCTION

REVISIONS



	CHECKED: LCO	APPROVED: JDC
	DRAWN: ERG	DESIGNED: NAM

MID-PENINSULA WATER DISTRICT
SR101 CROSSING AT PAMF
DISTRICT DETAILS 4

DATE 08/11/17	SCALE AS NOTED
PGC JOB NO. 768-14-17-01	
PLAN D.6	SHEET 21 of 21