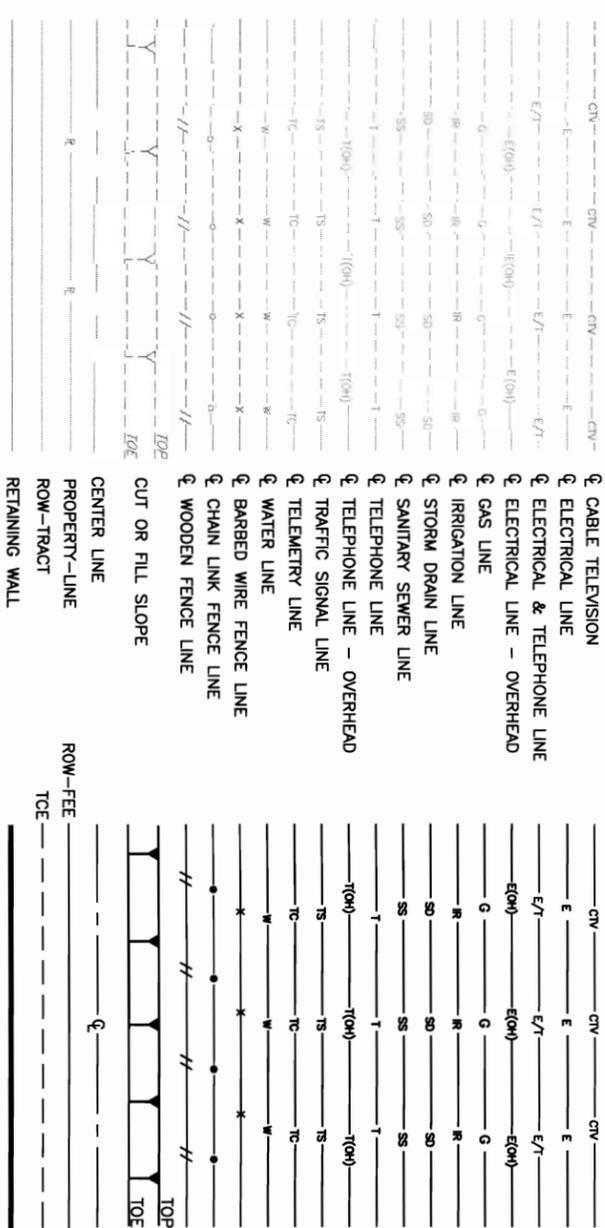


ABBREVIATIONS

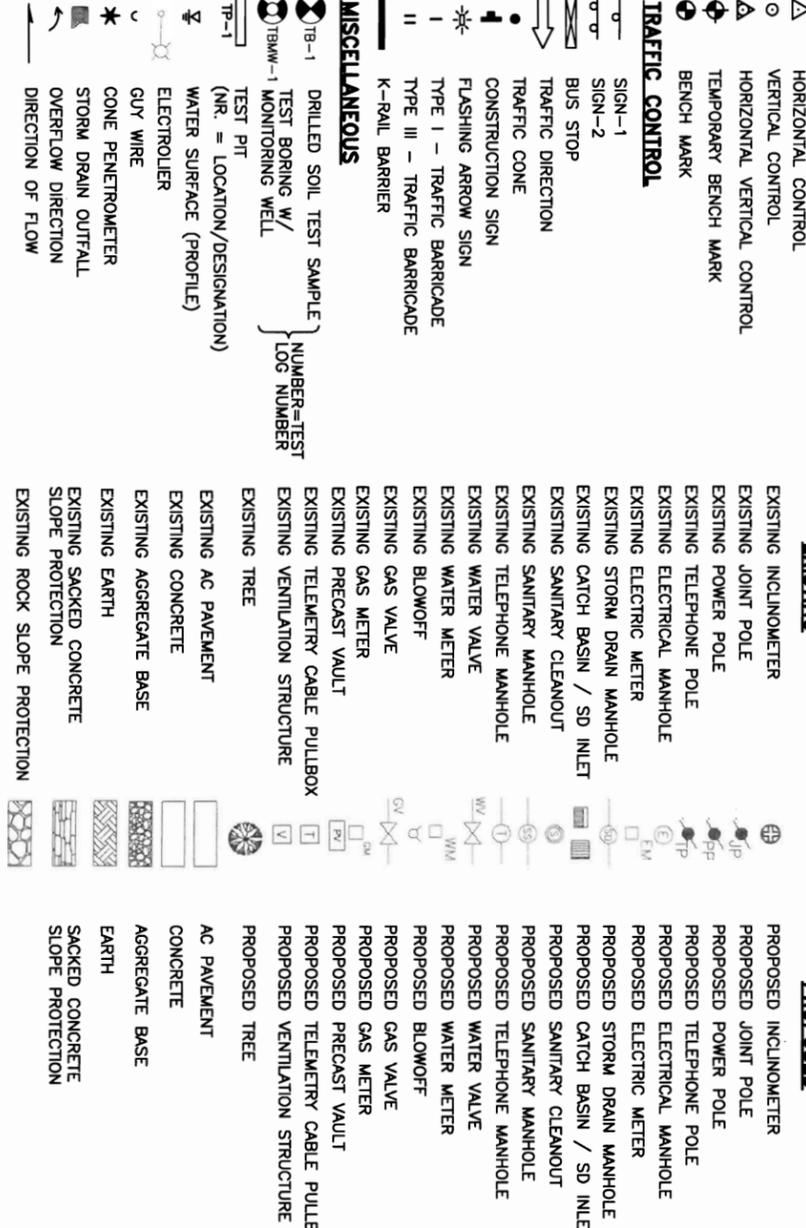
AB	AGGREGATE BASE	JT	JOINT
ABM	AIR BLOWN MORTAR	KV	KILOVOLT
ABS	ACRYLONITRILE-BUTADIENE-STYRENE	LB	CONDUIT FITTING ELBOW
AC	ASPHALT CONCRETE	LG	LONG LEG VERTICAL
ACP	ASBESTOS CEMENT PIPE	LL	LEFT
ALSI	AMERICAN IRON & STEEL INSTITUTE	LT	MAINTENANCE
ALUN	ALIGNMENT	MAINT	MAINTENANCE
AMP	AMPERES	MAX	MAXIMUM
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	MCD	MULTIPLE CONDUITS
APPROX	APPROXIMATE	MCI	MCI TELECOMMUNICATION CORP.
ARY	AIR RELEASE VALVE	MIN	MINIMUM
ASA	AMERICAN STANDARD ASSOCIATION	MON	MONUMENT
ASTM	AMERICAN SOCIETY FOR TESTING MATERIALS	N/A	NITROGEN
AWE	AWENUE	NE	NORTH EAST
AWG	AMERICAN WIRE GAGE	NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
AWWA	AMERICAN WATER WORKS ASSOCIATION	NW	NORTH WEST
BC	BEGIN CURVE	NO	NUMBER
BM	BENCH MARK	OC	OUTBOARD SIDE
BT	BACKHOE TRENCH	OD	ON CENTER
BP	BEGIN POINT	OE	OUTSIDE DIAMETER
BW	BOTH WAYS	OF	OUTSIDE FACE
CB	CATCH BASIN (INLET)	OH	OVERHEAD
CCCL	CEMENT MORTAR COATED & LINED STEEL PIPE	OW	OBSERVATION WELL
CCEM	CEMENT CONDUIT	PCC	PORTLAND CEMENT CONCRETE
CCTL	CORROSION CONTROL TEST LEADS	PCCP	POINT OF COMPOUND CURVE
CCP	CONCRETE CYLINDER PIPE	PCF	PRESTRESSED CONCRETE CYLINDER PIPE
CFM	CUBIC FEET PER MINUTE	PE	PLAIN END
CI	CAST IRON	PG&E	PACIFIC GAS AND ELECTRIC
CIDH	CAST-AND-DRILLED HOLE	PI	POINT OF INTERSECTION
CIP	CAST IRON PIPE	PK	PARKER-KALON SURVEY MAIL
CIPP	CAST-IN-PLACE PIPE	PL	PLASTIC LINE
CL	CHAIN LINK	POT	POINT ON TANGENT
CLR	CLEAR CLEARANCE	PP	POWER POLE
CLM	CEMENT MORTAR COAT	PRC	POINT OF REVERSE CURVE
CMP	CEMENT MORTAR LINE	PSI	POUND PER SQUARE INCH
CMS	CORRUGATED METAL PIPE	PT	POINT
CO	CUBIC METER PER SECOND	AT&T	AMERICAN TELEPHONE & TELEGRAPH
CO	CLEAN OUT	PUE	PUBLIC UTILITY EASEMENT
CONC	CONCRETE	PVC	POLYVINYL CHLORIDE
CONT	CONTINUOUS	PV	PRECAST VAULT
CP	CEMENT PIPE	PW	PUMPING WELL
CPC	PLASTIC CONDUIT	RCB	REINFORCED CONCRETE BOX
CSP	CORRUGATED STEEL PIPE	RCP	REINFORCED CONCRETE PIPE
CTP	CABLE TELEVISION POLE	RD	ROAD
CTV	CABLE TV	RE	REFERENCE ELECTRODE
CU FT	CUBIC FEET	REBAR	REINFORCING BAR
CYL	CYLINDER	REIN	REINFORCED
DET	DETAIL	REO'D	REQUIRED
DH	DRILL HOLES	RET	RETAINING
DIA	DIAMETER	RR	RAILROAD
DICL	DUCTILE IRON CEMENT LINED	RR/USE	RAILROAD UNDERGROUND SERVICE ENTRANCE
DIP	DUCTILE IRON PIPE	R/R	RADIUS
DPT	DOUBLE POLE DOUBLE THROW	RSP	ROCK SLOPE PROTECTION
DR	DRIVE	RT	RIGHT
D/S	DOWNSTREAM	RTU	REMOTE TERMINAL UNIT
DWR	DEPARTMENT OF WATER RESOURCES	R/W	RIGHT OF WAY
EB	EAST BANK	S	SLOPE
EBW	EAST BANK FLOODWALL	SCHED	SCHEDULE
ELEC	ELECTRICAL	SCSP	SACKED CONCRETE SLOPE PROTECTION
EC	END CURVE	SCWD	SANTA CLARA VALLEY WATER DISTRICT
EL ELEV	ELEVATION	SD	STORM DRAIN
EP	EDGE OF PAVEMENT	SE	SOUTHEAST
EXIST	EXISTING	SEC. SECT	SECTION
EW	EACH WAY	SHT	SHEET
FF	FULL FORCE	SI	SAN JOSE MUNICIPAL WATER
FH	FIRE HYDRANT	SIWC	SAN JOSE WATER COMPANY
FKCL	FIBERGLASS-KRAFT WRAP CEMENT LINED	SMCFD	SAN MATEO COUNTY FLOOD CONTROL
FL	FLOW LINE	SOMCL	STANDARD OIL MASTIC CEMENT LINED
FLG	FLANGE	SPECS	SPECIFICATIONS
FP	FEEDER PRESSURE	SPRR	SOUTHERN PACIFIC RAILROAD
FT	FEET	SQ	SQUARE
F/W	FLOODWALL LAYOUT LINE	SS	SANITARY SEWER
F/W	FLOODWALL	SS	STAINLESS STEEL
GA	GAGE	ST	STATION
GALV	GALVANIZED	STA	STANDARD
GFI	GROUND FAULT INTERRUPTER	STD	STEEL
HORIZ	HORIZONTAL	STL	STRANDED
HP	HORSEPOWER	SW	SOUTHWEST
HT	HEIGHT	SYM	SYMMETRICAL
IBS	INBOARD SIDE		
ID	INSIDE DIAMETER		
IF	INSIDE FACE		
IL	INDUCTIVE LOOP		
IN	INCH		
INSUL	INSULATION		
INV	INVERT		
IP	IRON PIPE		
IPS	IRON PIPE SIZE		

EXISTING

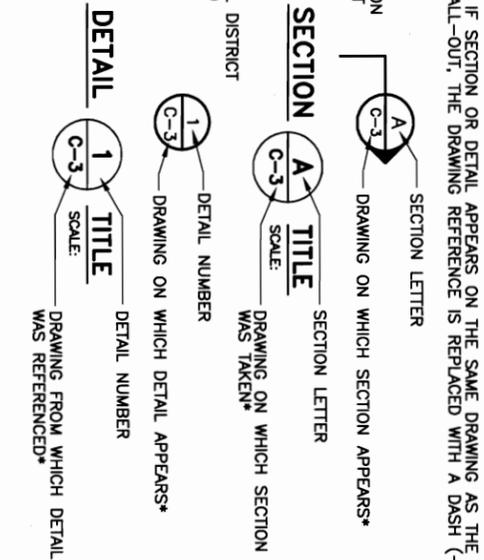
LINE TYPE LEGEND



SYMBOLS LEGEND



DETAIL AND SECTION DESIGNATION



REFERENCE INFORMATION AND NOTES

* IF SECTION OR DETAIL APPEARS ON THE SAME DRAWING AS THE CALL-OUT, THE DRAWING REFERENCE IS REPLACED WITH A DASH (-)

ENGINEERING CERTIFICATION

DATE: JAN 2013
 DESIGN: K. SIBLEY
 DRAWN: J. CORDOVA
 CHECKED: S. HOSSEINI

PROJECT ENGINEER: _____ DATE: _____

PROJECT NAME AND SHEET DESCRIPTION:

SAN FRANCISQUITO CREEK
 WEST BAYSHORE ROAD TO
 POPE/CHAUCER STREET

SCALE

NOT TO SCALE
 VERIFY SCALES

PROJECT NUMBER

26284001

SHEET CODE:

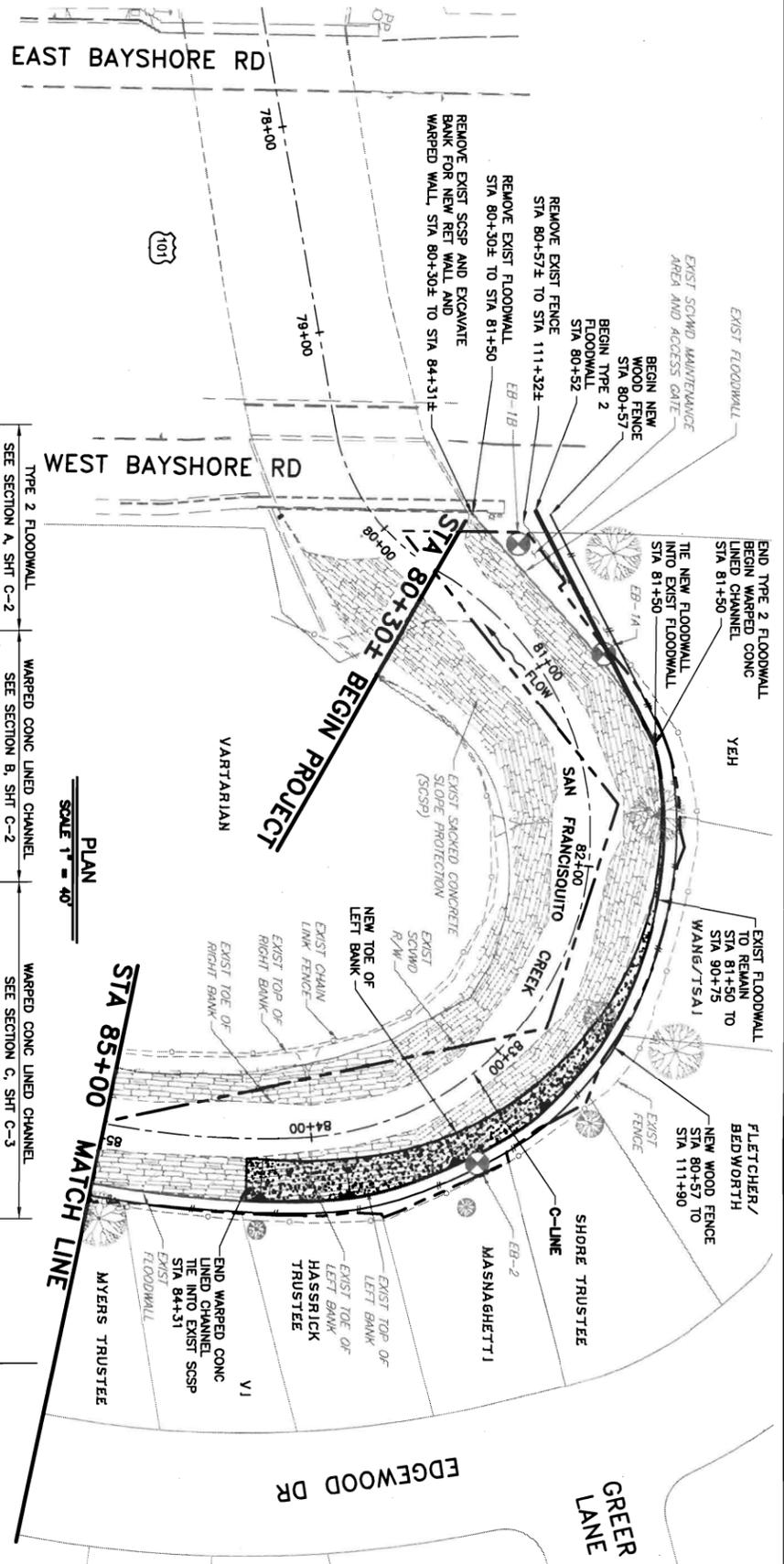
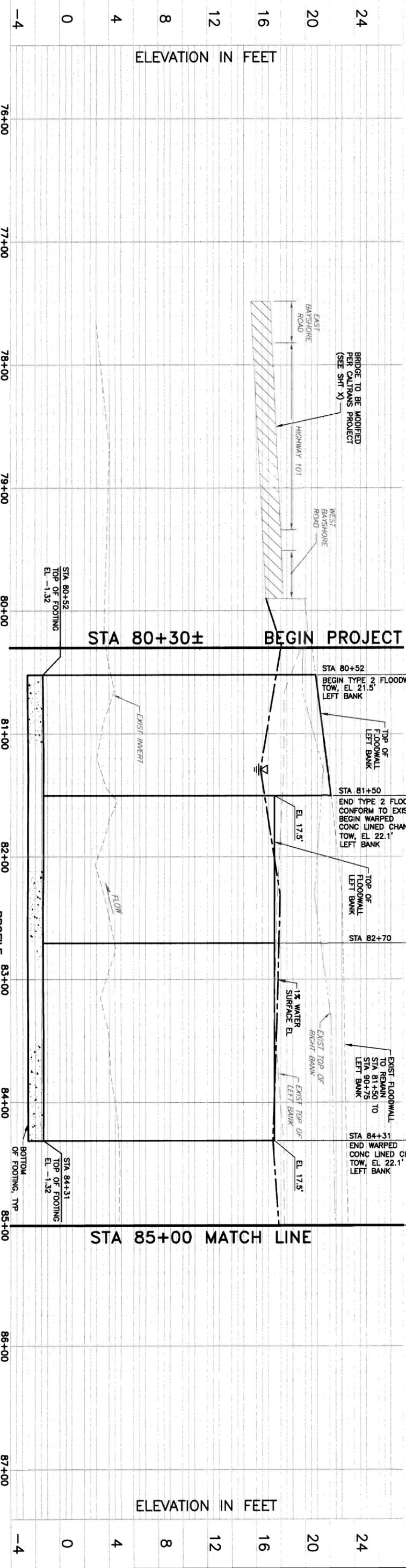
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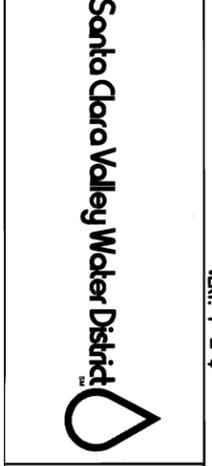
1 OF 8



Santa Clara Valley Water District



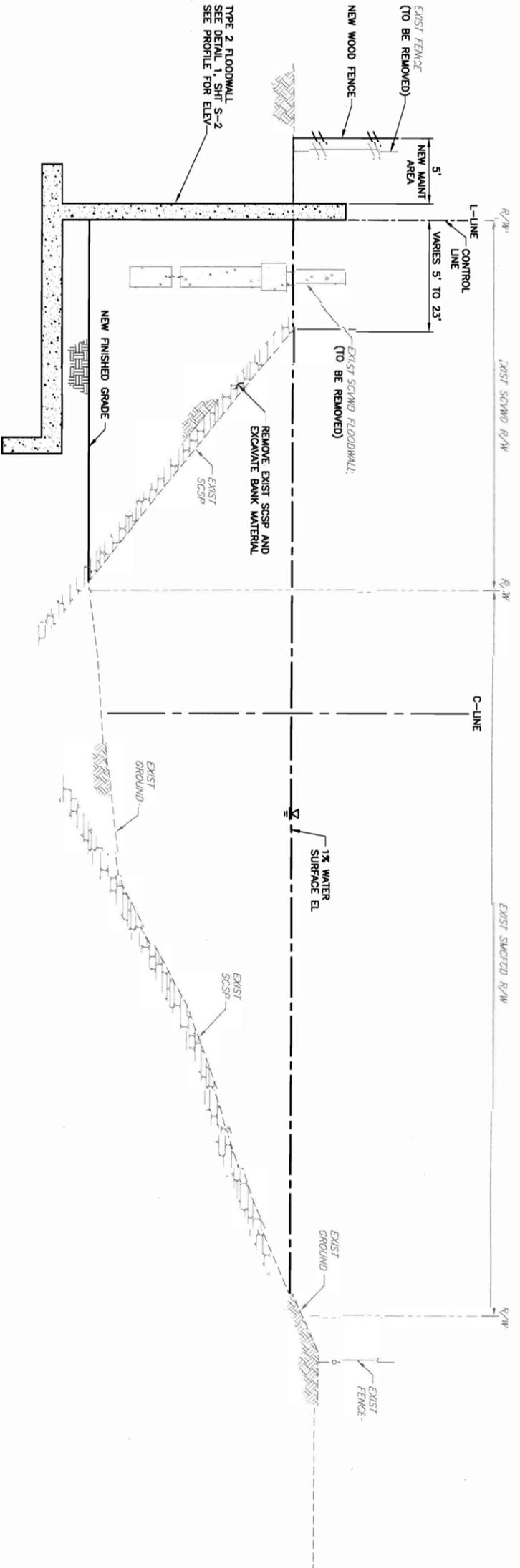
REV	DESCRIPTION	DATE	APPR	REFERENCE INFORMATION AND NOTES	DATE	DESIGN	DRAWN	CHECKED	PROJECT ENGINEER	DATE	PROJECT NAME AND SHEET DESCRIPTION:	SCALE	VERIFY SCALES	PROJECT NUMBER	SHEET CODE:	SHEET NUMBER:	
	90% DESIGN 01-18-2013			1. HORIZONTAL DATUM: CALIFORNIA STATE PLANE NAD83, ZONE 3, FEET. 2. SAN FRANCISCO CREEK IN-CHANNEL TOPOGRAPHIC SURVEY PERFORMED BY BESTOR ENGINEERS, 2008. 3. TOP OF BANK SURVEY PERFORMED BY SCWD, 2010. 4. TREE SURVEY PERFORMED BY SCWD, 2010. 5. SEE SURVEY LAYOUT SHEETS FOR CREEKSIDE RIGHT-OF-WAY INFORMATION.	JAN 2013	K. SIBLEY	J. CORDOVA	S. HOSSEINI				SAN FRANCISCO CREEK WEST BAYSHORE ROAD TO POPE/CHAUCER STREET PLAN AND PROFILE STA 80+30± TO STA 85+00	AS SHOWN	0 1" = 40'	26284001	C-1	2 OF 8



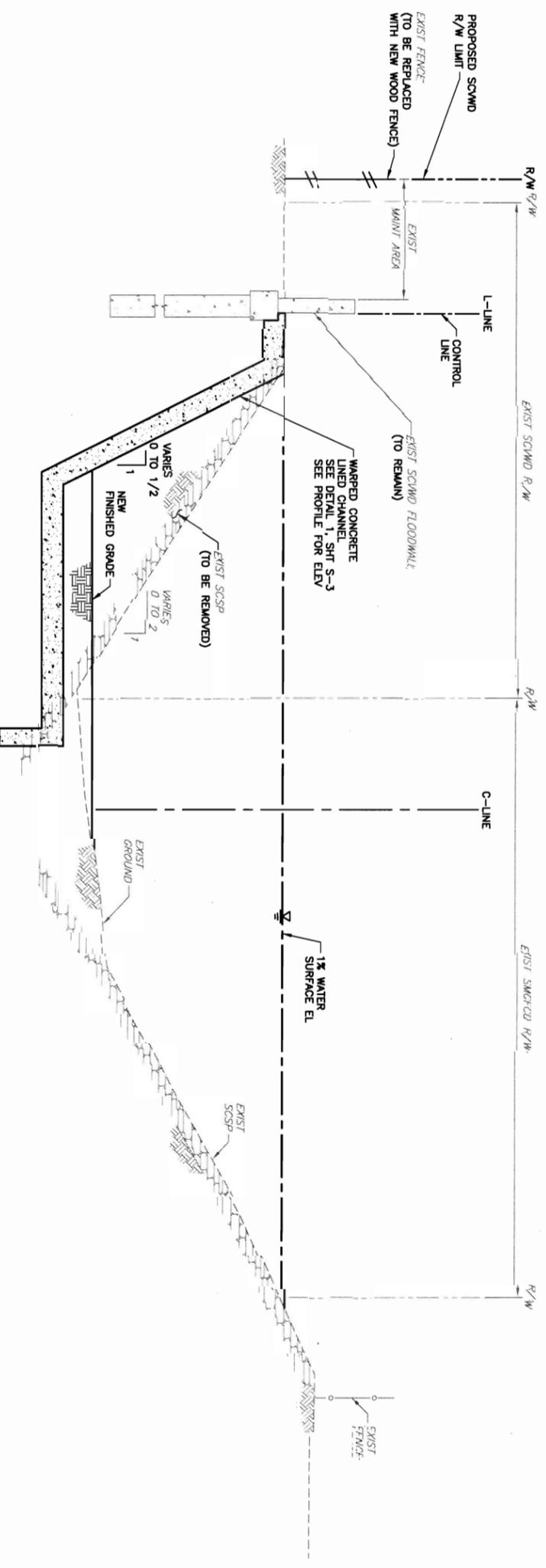
PROJECT NAME AND SHEET DESCRIPTION:
SAN FRANCISCO CREEK
WEST BAYSHORE ROAD TO
POPE/CHAUCER STREET
 PLAN AND PROFILE
 STA 80+30± TO STA 85+00

SCALE AS SHOWN
 VERIFY SCALES
 0 1" = 40'
 DATE IS ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

PROJECT NUMBER: **26284001**
 SHEET CODE: **C-1**
 SHEET NUMBER: **2 OF 8**



TYPICAL SECTION A
 STA 80+52 TO STA 81+50
 TYPE 2 FLOODWALL AND FENCE
 SCALE: N.T.S.



TYPICAL SECTION B
 STA 81+50 TO STA 82+70
 WARPED CONCRETE LINED CHANNEL AND FENCE
 SCALE: N.T.S.

REV	DESCRIPTION	DATE	APPR.	REFERENCE INFORMATION AND NOTES
				1. ALL TYPICAL SECTIONS ARE LOOKING UPSTREAM.

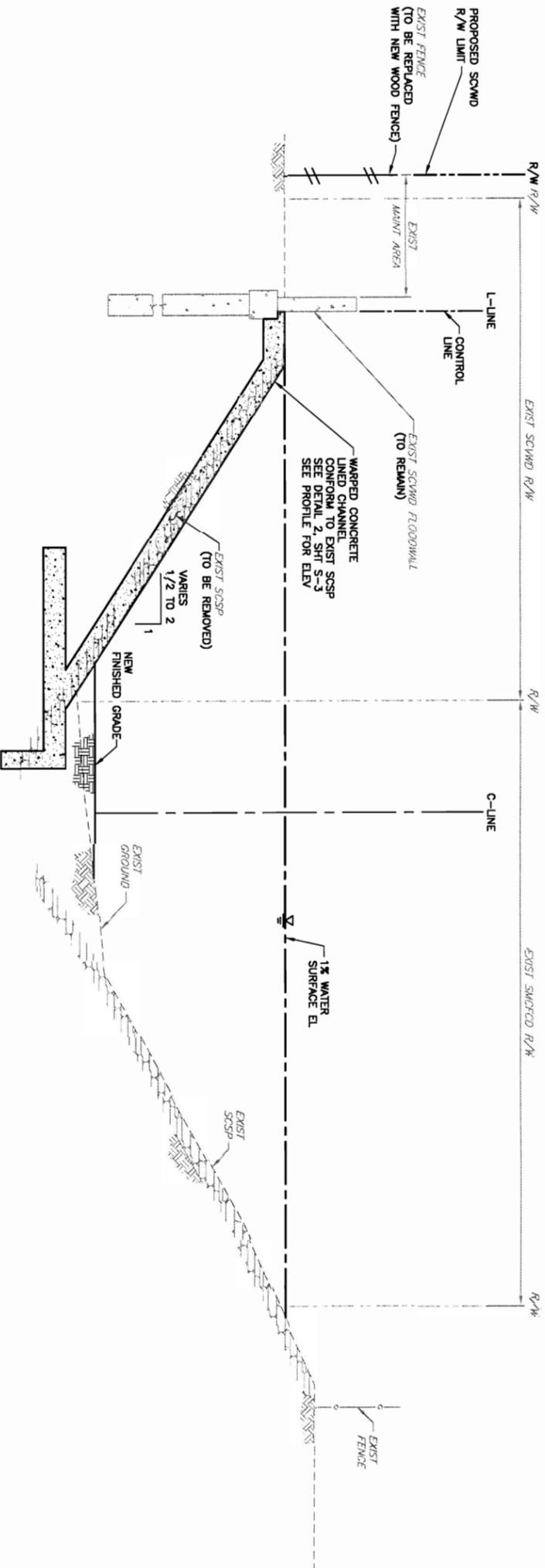
90% DESIGN
 01-22-2013

DATE	JAN 2013	ENGINEERING CERTIFICATION	
DESIGN	K. SIBLEY		
DRAWN	J. CORDOVA		
CHECKED	S. HOSSEINI	PROJECT ENGINEER	DATE



PROJECT NAME AND SHEET DESCRIPTION:
SAN FRANCISQUITO CREEK
WEST BAYSHORE ROAD TO
POPE/CHAUCER STREET
 TYPICAL CROSS-SECTIONS

SCALE	AS SHOWN	PROJECT NUMBER	26284001
VERIFY SCALES	0 1"	SHEET CODE:	C-2
BAR IS ONE INCH ON ORIGINAL DRAWING. IF THIS SHEET IS PLANNED TO BE REPRODUCED, SCALES ACCORDINGLY.		SHEET NUMBER:	3 OF 8



TYPICAL SECTION C-1
STA 82+70 TO STA 84+31
WARPED CONCRETE LINED CHANNEL AND FENCE
 SCALE: N.T.S.

REV	DESCRIPTION	DATE	APPR	REFERENCE INFORMATION AND NOTES
	90% DESIGN 01-22-2013			1. ALL TYPICAL SECTIONS ARE LOOKING UPSTREAM.
		JUN 2013		
		DESIGN		
		K. SIBLEY		
		DRAWN		
		J. CORDOVA		
		CHECKED		
		S. HOSSEINI		
		PROJECT ENGINEER		
		DATE		



PROJECT NAME AND SHEET DESCRIPTION:	SCALE	PROJECT NUMBER
SAN FRANCISQUITO CREEK WEST BAYSHORE ROAD TO POPE/CHAUCER STREET TYPICAL CROSS-SECTIONS	AS SHOWN VERIFY SCALES BARS IS ONE INCH ON ORIGINAL DRAWING IF THIS SHEET IS PLACED AT SCALES ACCORDINGLY	26284001
		SHEET CODE: C-3
		SHEET NUMBER: 4 OF 8

GENERAL NOTES: (STRUCTURAL)

1. ALL CONSTRUCTION SHALL BE CARRIED OUT BY CALIFORNIA LICENSED CONTRACTOR(S). ALL CONSTRUCTION PROCEDURES SHALL CONFORM TO OSHA STANDARDS AND ALL PREVALUING CODES AND REGULATIONS.
2. THE CONTRACT PLANS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. UNLESS OTHERWISE SHOWN, THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE, DIRECT AND SUPERVISE ALL THE WORK AND SHALL BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES.
3. TYPICAL DETAILS AND NOTES ARE PROVIDED FOR GENERAL CONSTRUCTION CONDITIONS. THE DETAILS ARE SHOWN IN DIAGRAMMATIC FORM AND ARE NOT TO BE SCALED.
4. CONTRACTOR SHALL COORDINATE THESE PLANS WITH PLANS OF OTHER INVOLVED TRADES OR FABRICATING ANY MATERIAL. ANY DISCREPANCY FOUND SHALL BE REPORTED TO THE ENGINEER FOR REMEDIES PRIOR TO FURTHER CONSTRUCTION. IN RELATION TO THE DISCREPANCY, IN CASE OF PROVISIONAL DISCREPANCY, THE MORE STRINGENT OF THE TWO WOULD APPLY AT NO ADDITIONAL COST.
5. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR TEMPORARY SHORING OF THE TRENCHES, EXCAVATION PITS, EXISTING STRUCTURES TO REMAIN, ETC. CONTRACTOR SHALL BE RESPONSIBLE FOR THE SELECTION, DESIGN, SAFE MAINTENANCE AND REMOVAL OF THE SHORING REQUIRED TO COMPLETE THE PROJECT. WHERE SHORING IS REQUIRED, CONTRACTOR SHALL SUBMIT SHOP DRAWINGS DULY DESIGNED, PREPARED AND WET SIGNED BY A CALIFORNIA LICENSED CIVIL/STRUCTURAL ENGINEER FOR REVIEW PRIOR TO CONSTRUCTION.
6. UNLESS OTHERWISE NOTED, ALL CONSTRUCTION JOINTS SHALL BE ROUGHENED AT ENTIRE SURFACE TO 1/4" AMPLITUDE AND CLEANED PRIOR TO NEXT CONCRETE POUR.
7. FOR EXISTING AND FINAL GRADES AND WALL ELEVATION, SEE "CML PLANS".
8. WHERE SAW CUTTING OF EXISTING STRUCTURE IS REQUIRED, DO NOT SAW CUT BEYOND THE CORNERS. REMOVE OR CHIP CONCRETE AT CORNERS FOR SQUARENESS. IF SAW CUTTING PROPAGATES BEYOND THE CORNER, CONTRACTOR SHALL SAW CUT, REMOVE CONCRETE AND REPAIR AS DIRECTED BY THE ENGINEER AT CONTRACTOR'S COST.
9. FOR WATER PROOFING, "ADEKA ULTRA SEAL MC-2010 MN - STRIP WATERSTOP" PRODUCTS ARE SHOWN FOR UNIFORM BIDS. CONTRACTOR MAY SUBSTITUTE THEM WITH EQUAL OR BETTER PRODUCT. IN CASE OF SUBSTITUTION, CONTRACTOR SHALL SUBMIT ALL DOCUMENTATION NECESSARY TO PROVE THE PRODUCT EQUAL OR BETTER AND SHALL SUBMIT COMBINED WARRANTY BY THE MANUFACTURER AND THE CONTRACTOR ASSURING FULL WATERIGHTNESS.
10. INSTALLATION OF STRIP WATERSTOP SHALL BE CONTINUOUS AS SHOWN ON PLANS, SPECIFICATIONS AND AS PER PRODUCT MANUFACTURER'S RECOMMENDATIONS TO ENSURE FULL WATERIGHTNESS.
11. UNLESS SHOWN OR NOTED ON THE PLANS, ALL JOINT FILLERS SHALL BE PRE-MIXED ASPHALT IMPREGATED JOINT FILLER MATERIAL. PRECUT PRECAST FOR EACH LOCATION AND INSTALL AS SHOWN AND AS PER MANUFACTURER'S RECOMMENDATIONS.
12. REINFORCING BARS THIS (EC) MARKED SHALL BE EPOXY COATED AFTER FABRICATION AND SHALL BE INSTALLED AS AND WHERE SHOWN ON PLANS.
13. JOINT SEALANT SHALL BE INSTALLED CONTINUOUS AT THE JOINTS AT TOP AND AT BOTH FACES OF THE WALLS. CLEAN CONCRETE SURFACES AND INSTALL SEALANT AS LATE AS PRACTICAL, PRIOR TO COMPLETION OF THE PROJECT.
14. AT CONTRACTOR'S OPTION, THE SMOOTH GALVANIZED DOWELS MAY BE SUBSTITUTED BY SMOOTH STAINLESS STEEL DOWELS OF THE SAME SIZE.
15. BACKFILL ON BOTH SIDES OF WALLS/STRUCTURES SHALL BE CARRIED OUT SIMULTANEOUSLY IN MAXIMUM 8' LIFTS WITH LIFT DIFFERENCE NO LARGER THAN 8". UNLESS OTHERWISE NOTED.
16. CONTRACTOR SHALL SUBMIT MANUFACTURER'S SPECIFICATIONS FOR BONDING MATERIAL AND PROCEDURES FOR INSTALLATION OF "DRILL AND BOND" DOWELS FOR ENGINEER'S REVIEW. PRIOR TO CONSTRUCTION, BLOW CLEAN DRILLED HOLES AND INSTALL DOWELS & ANCHORS INTO BONDING MATERIAL. PER SPECIFICATIONS DURING CONTINUOUS INSPECTION OF INDEPENDENT SPECIAL INSPECTOR. "SPECIAL INSPECTOR" AS DEFINED IN 1997 UNIFORM BUILDING CODE, SECTION 1701, SHALL BE RETAINED BY THE SANTA CLARA VALLEY WATER DISTRICT. THE SPECIAL INSPECTOR SHALL SUBMIT REPORTS TO THE WATER DISTRICT AND THE ENGINEER.
17. CONTRACTOR SHALL BE RESPONSIBLE TO SCHEDULE ALL INSPECTIONS AND TESTING PER SPECIFICATIONS AND INDIVIDUAL AGENCY'S REQUIREMENTS IN TIMELY MANNER.
18. EXCAVATE NEATLY AND CONSTRUCT GRADE BEAM OVER UNDISTURBED NATURAL SOIL. ANY OVEREXCAVATION SHALL BE BACKFILLED AND COMPACTED TO 95% COMPACTION PRIOR TO CONSTRUCTION OF THE GRADE BEAM.

DESIGN CRITERIA

1. UNIT STRESS FOR REINFORCED CONCRETE
 - a. CONCRETE: $f'_c = 4,000$ psi (UON)
 - b. REINFORCING STEEL: $f_y = 60,000$ psi (UON)

DEVELOPMENT AND SPLICE LENGTH

1. IN TENSION

CLEAR SPACING > $2d_b$, AND
 CONCRETE CLEAR COVER > d_b

d_b : NOMINAL BAR DIAMETER (INCHES)

L_d : TENSION DEVELOPMENT LENGTH (INCHES)

L_t : DEVELOPMENT LENGTH OF TOP BARS IN TENSION (INCHES)

L_{sa} : TENSION LAP SPLICE LENGTH FOR OTHER THAN TOP BARS (INCHES)

L_{sm} : TENSION LAP SPLICE LENGTH FOR TOP BARS (INCHES)

BAR SIZE	$f'_c=3000$ psi			$f'_c=4000$ psi		
	L_d	L_t	L_{sm}	L_d	L_t	L_{sm}
3	17	23	23	15	20	20
4	22	29	29	19	25	25
5	26	37	37	24	32	32
6	33	43	43	29	38	38
7	40	53	53	35	46	46
8	50	65	65	43	57	57

2. IN COMPRESSION

L_c : DEVELOPMENT LENGTH OF BARS OR DOWELS IN COMPRESSION (INCHES)

L_c : LAP SPLICE LENGTH IN COMPRESSION (INCHES)

BAR SIZE	L_c	$f'_c=3000$ psi		$f'_c=4000$ psi	
		L_c	L_c	L_c	L_c
3	11	8.2	8.2	8.8	8.8
4	15	11	11	11.9	11.9
5	19	13.7	13.7	14.2	14.2
6	23	16.4	16.4	16.6	16.6
7	26	19.2	19.2		
8	30	21.9	21.9	19	19

DOCUMENT NUMBER:

REV	DESCRIPTION	DATE	APPR	REFERENCE INFORMATION AND NOTES	DATE	ENGINEERING CERTIFICATION	PROJECT NAME AND SHEET DESCRIPTION:	SCALE	PROJECT NUMBER
	90% DESIGN 01-18-2013				JAN 2013		Santa Clara Valley Water District	NOT TO SCALE	26284001
							SAN FRANCISCO CREEK WEST BAYSHORE ROAD TO POPE/CHAUCER STREET	VERIFY SCALES 0 1"	S-1
							GENERAL STRUCTURAL NOTES		SHEET NUMBER: 5 OF 8

BAR IS ONE INCH ON ORIGINAL DRAWING IF NOT ONE INCH ON THIS DRAWING. ALL DIMENSIONS ACCORDING TO SCALES ACCORDINGLY.

REV	DESCRIPTION	DATE	APPR
	90% DESIGN 01-22-2013		

REFERENCE INFORMATION AND NOTES

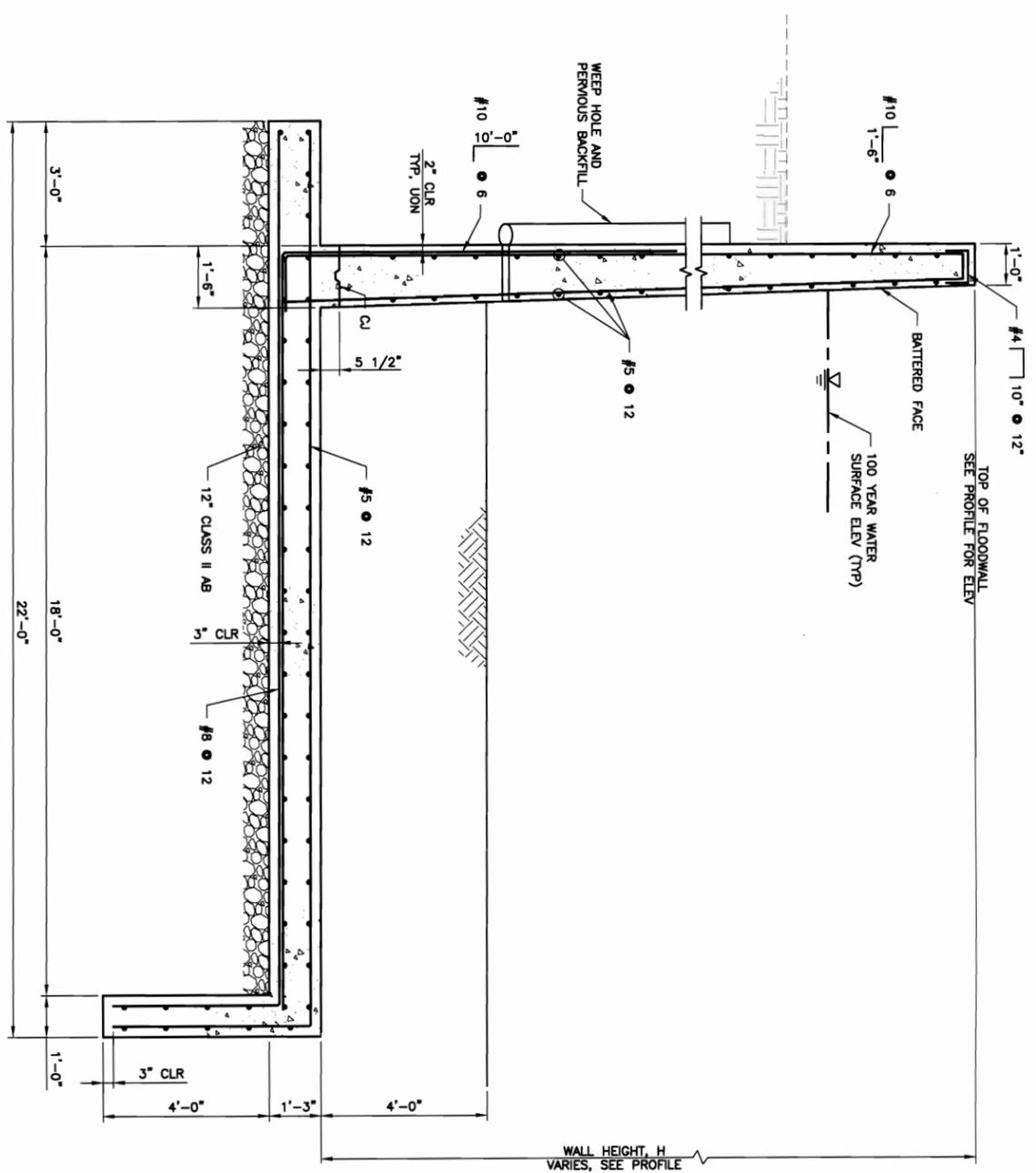
DATE JAN 2013	ENGINEERING CERTIFICATION
DESIGN N. PHAM	
DRAWN J. CORROVA	
CHECKED E. TSOU	
PROJECT ENGINEER	DATE

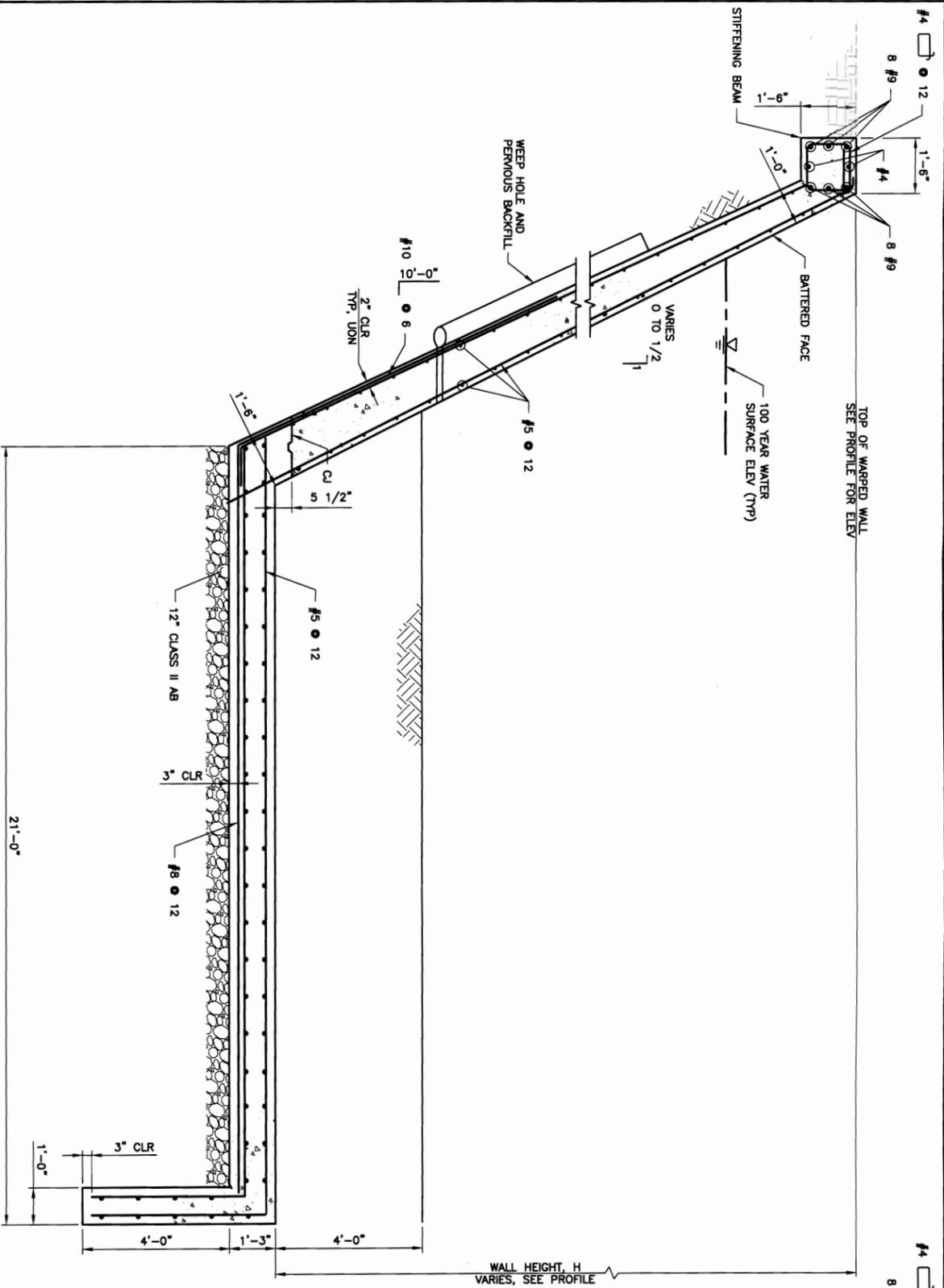


PROJECT NAME AND SHEET DESCRIPTION:
**SAN FRANCISQUITO CREEK
 WEST BAYSHORE ROAD TO
 POPE/CHAUCER STREET**
 FLOODWALL DETAIL

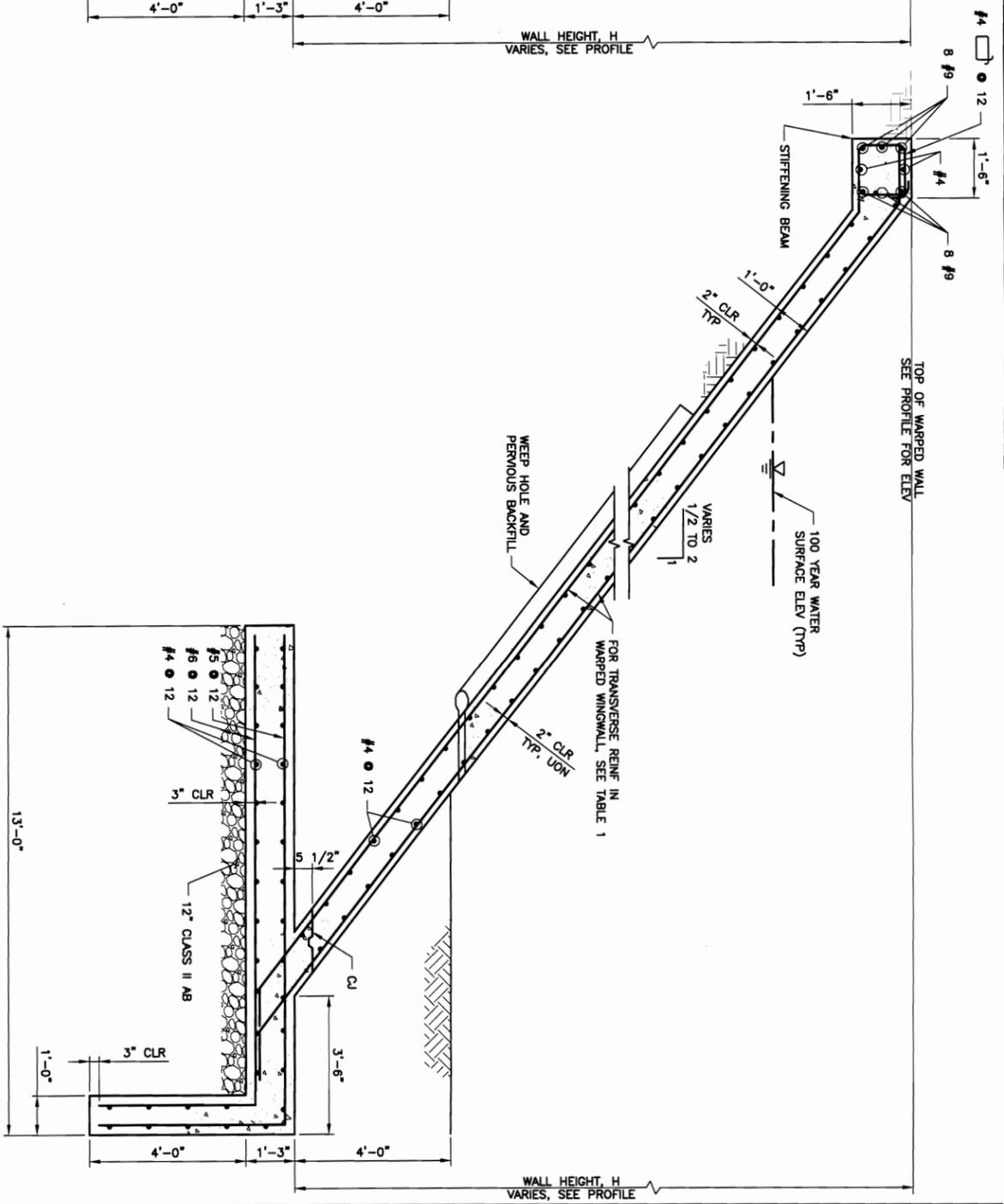
SCALE AS SHOWN	PROJECT NUMBER 26284001
VERIFY SCALES 0 1" BAR IS ONE INCH ON ORIGINAL DRAWING IF NOT ONE INCH ON THIS DRAWING. SCALES ACCORDINGLY.	SHEET CODE: S-2
	SHEET NUMBER: 6 OF 8

DETAIL 1 TYPE 2 SPREAD FOOTING
C-2 CONCRETE FLOODWALL
 SCALE: 1/2" = 1'-0"





DETAIL 1
 WARPED CONCRETE LINED CHANNEL
 (SLOPE VARIES 0 TO 1/2 : 1)
 SCALE: 1/2" = 1'-0"



DETAIL 2
 WARPED CONCRETE LINED CHANNEL
 (SLOPE VARIES 1/2 TO 2 : 1)
 SCALE: 1/2" = 1'-0"

TABLE 1: WARPED WALL DIMENSIONS AND REINFORCING

ELEMENT SLOPE	REBAR LOCATION	REBAR SIZE AND SPACING
1/2:1	FRONT FACE REINF	#4 @ 6
	REAR FACE REINF	#4 @ 12
3/4:1	FRONT FACE REINF	#4 @ 6
	REAR FACE REINF	#5 @ 6
1 1/4:1	FRONT FACE REINF	#4 @ 12
	REAR FACE REINF	#9 @ 6

REV DESCRIPTION DATE APPR. REFERENCE INFORMATION AND NOTES

90% DESIGN
 01-22-2013

DATE JUN 2013

ENGINEERING CERTIFICATION

PROJECT NAME AND SHEET DESCRIPTION:

SAN FRANCISQUITO CREEK
 WEST BAYSHORE ROAD TO
 POPE/CHAUCER STREET

SCALE AS SHOWN

PROJECT NUMBER 26284001



WARPED CONCRETE LINED CHANNEL DETAILS

DESIGN N. PHAM

DRAWN J. CORDOVA

CHECKED E. TSOU

PROJECT ENGINEER DATE

VERIFY SCALES 0

SHEET CODE: S-3
 SHEET NUMBER: 7 OF 8

