

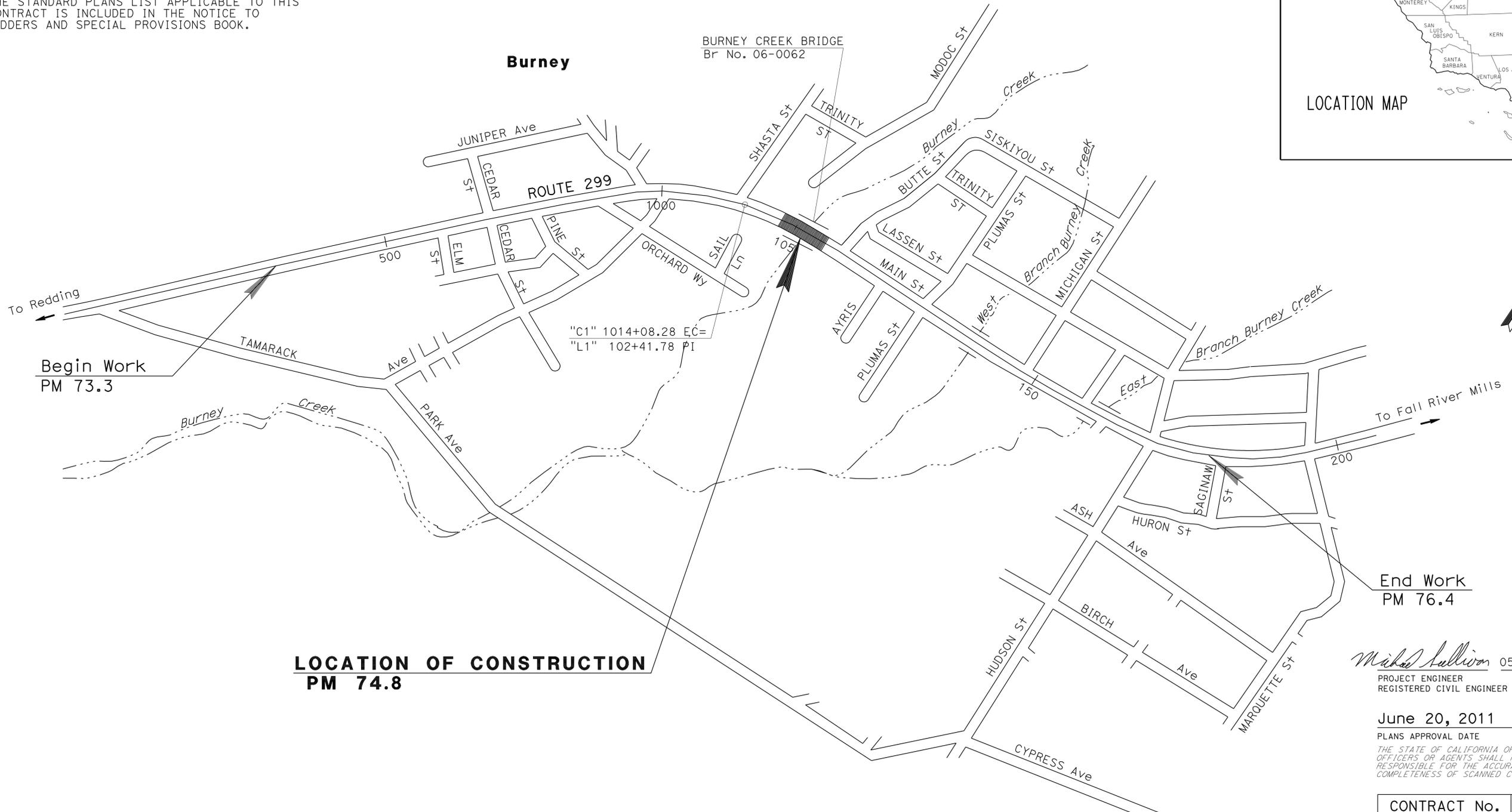
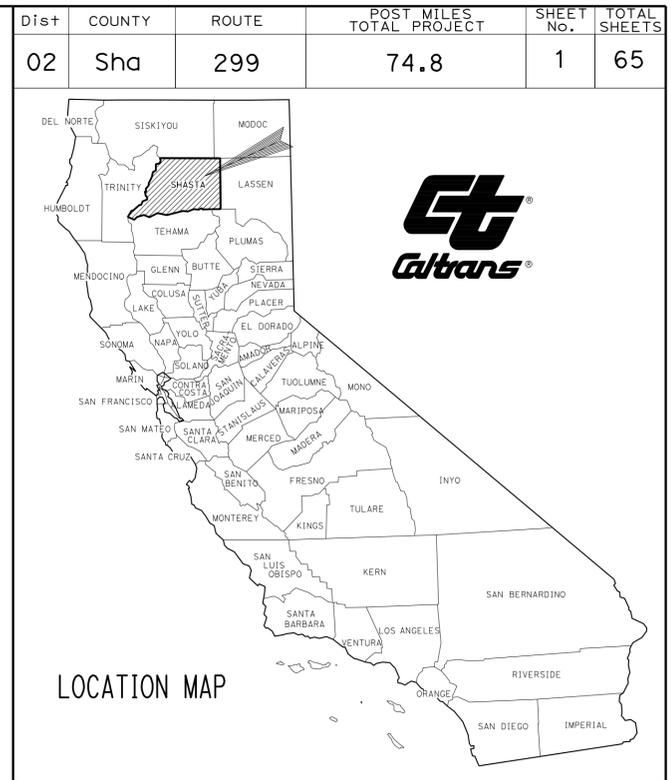
INDEX OF PLANS

SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
2	TYPICAL CROSS SECTIONS
3-4	LAYOUTS
5-7	CONSTRUCTION DETAILS
8-9	UTILITY PLANS
10-14	TRAFFIC HANDLING PLANS AND QUANTITIES
15-18	PAVEMENT DELINEATION PLANS AND QUANTITIES
19	SUMMARY OF QUANTITIES
20	CONSTRUCTION AREA SIGNS
21-33	REVISED AND NEW STANDARD PLANS
STRUCTURE PLANS	
34-65	BURNEY CREEK BRIDGE Br No. 06-0062

THE STANDARD PLANS LIST APPLICABLE TO THIS CONTRACT IS INCLUDED IN THE NOTICE TO BIDDERS AND SPECIAL PROVISIONS BOOK.

STATE OF CALIFORNIA  
**DEPARTMENT OF TRANSPORTATION**  
**BRSTP-P299(165)E**  
**PROJECT PLANS FOR CONSTRUCTION ON**  
**STATE HIGHWAY**  
**IN SHASTA COUNTY**  
**IN BURNEY**  
**AT BURNEY CREEK BRIDGE**

TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006



*Michael Sullivan* 05-19-11  
 PROJECT ENGINEER DATE  
 REGISTERED CIVIL ENGINEER  
**June 20, 2011**  
 PLANS APPROVAL DATE  
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



CONTRACT No.	<b>02-2C2224</b>
PROJECT ID	<b>0200000166</b>

PROJECT MANAGER  
**ERIC ORR**  
 DESIGN ENGINEER  
**DEENA MATAGULAY**

THE CONTRACTOR SHALL POSSESS THE CLASS (OR CLASSES) OF LICENSE AS SPECIFIED IN THE "NOTICE TO BIDDERS."

DATE PLOTTED => 01-AUG-2011 TIME PLOTTED => 09:00

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 DESIGN

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BORDER LAST REVISED 7/2/2010

USERNAME => trpierce  
 DGN FILE => 0200000166ca001.dgn

RELATIVE BORDER SCALE  
 IS IN INCHES



UNIT 0328

PROJECT NUMBER & PHASE

02000001661

**NOTE:**

1. DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.

**STRUCTURAL SECTION LEGEND:**

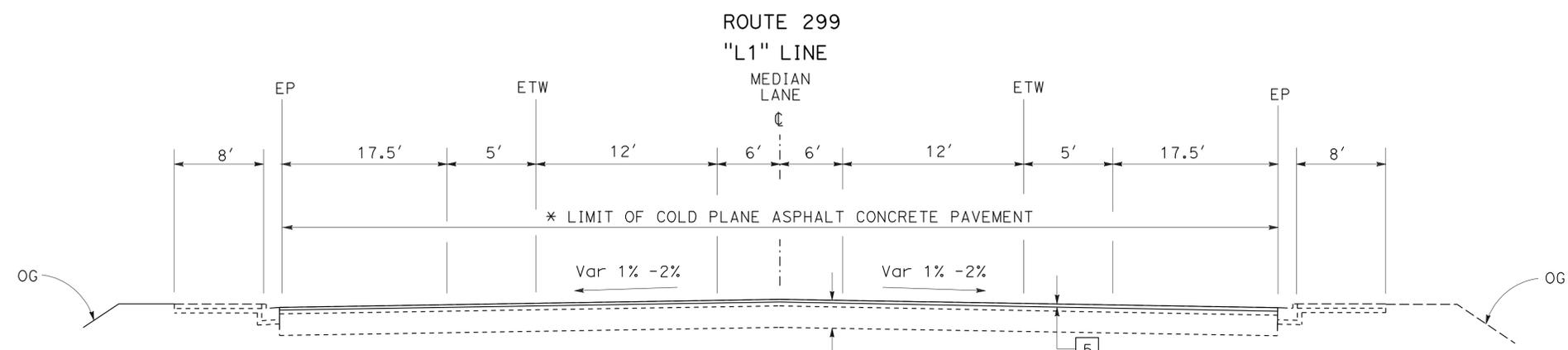
- 1 0.50' HMA (TYPE A)  
0.65' CLASS 2 AB
- 2 0.33' MINOR CONCRETE (Misc CONSTRUCTION)  
0.33' CLASS 2 AB
- 3 0.50' PCC  
0.33' CLASS 2 AB
- 4 EXISTING  
0.50' AC  
1.0' AB
- 5 0.15' HMA (TYPE A)  
0.15' COLD PLANE ASPHALT CONCRETE PAVEMENT

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha	299	74.8	2	65

*Michael Sullivan* 05-19-11  
 REGISTERED CIVIL ENGINEER DATE  
 6-20-11  
 PLANS APPROVAL DATE

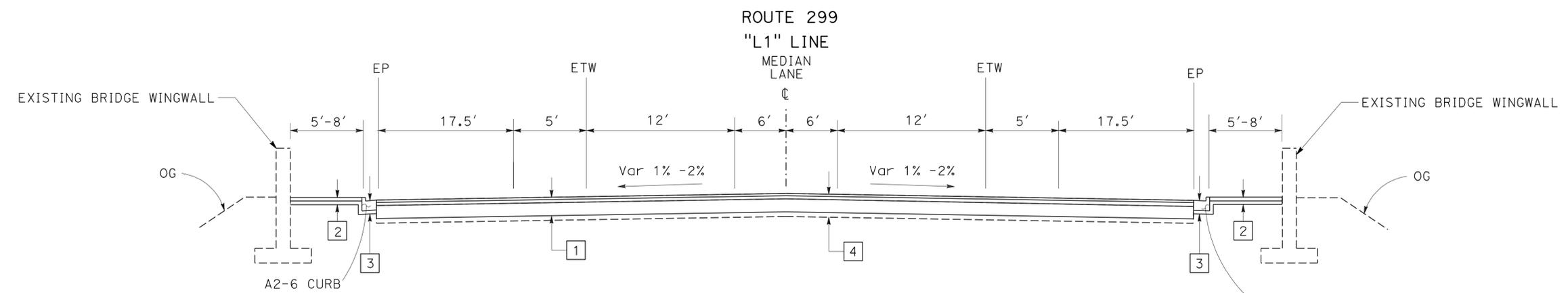
REGISTERED PROFESSIONAL ENGINEER  
 MICHAEL B. SULLIVAN  
 No. C65245  
 Exp. 9-30-11  
 CIVIL  
 STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



Sta "L1" 1+66.19 TO "L1" 4+95.97  
 Sta "L1" 6+24.03 TO "L1" 9+12.85

\* SEE LAYOUT SHEETS



Sta "L1" 4+95.97 TO 5+05.97  
 Sta "L1" 6+14.03 TO 6+24.03

**TYPICAL CROSS SECTIONS**  
 NO SCALE  
**X-1**

LAST REVISION DATE PLOTTED => 21-JUN-2011  
 05-19-11 TIME PLOTTED => 13:16

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha	299	74.8	3	65

Michael Sullivan 05-19-11  
 REGISTERED CIVIL ENGINEER DATE  
 6-20-11  
 PLANS APPROVAL DATE

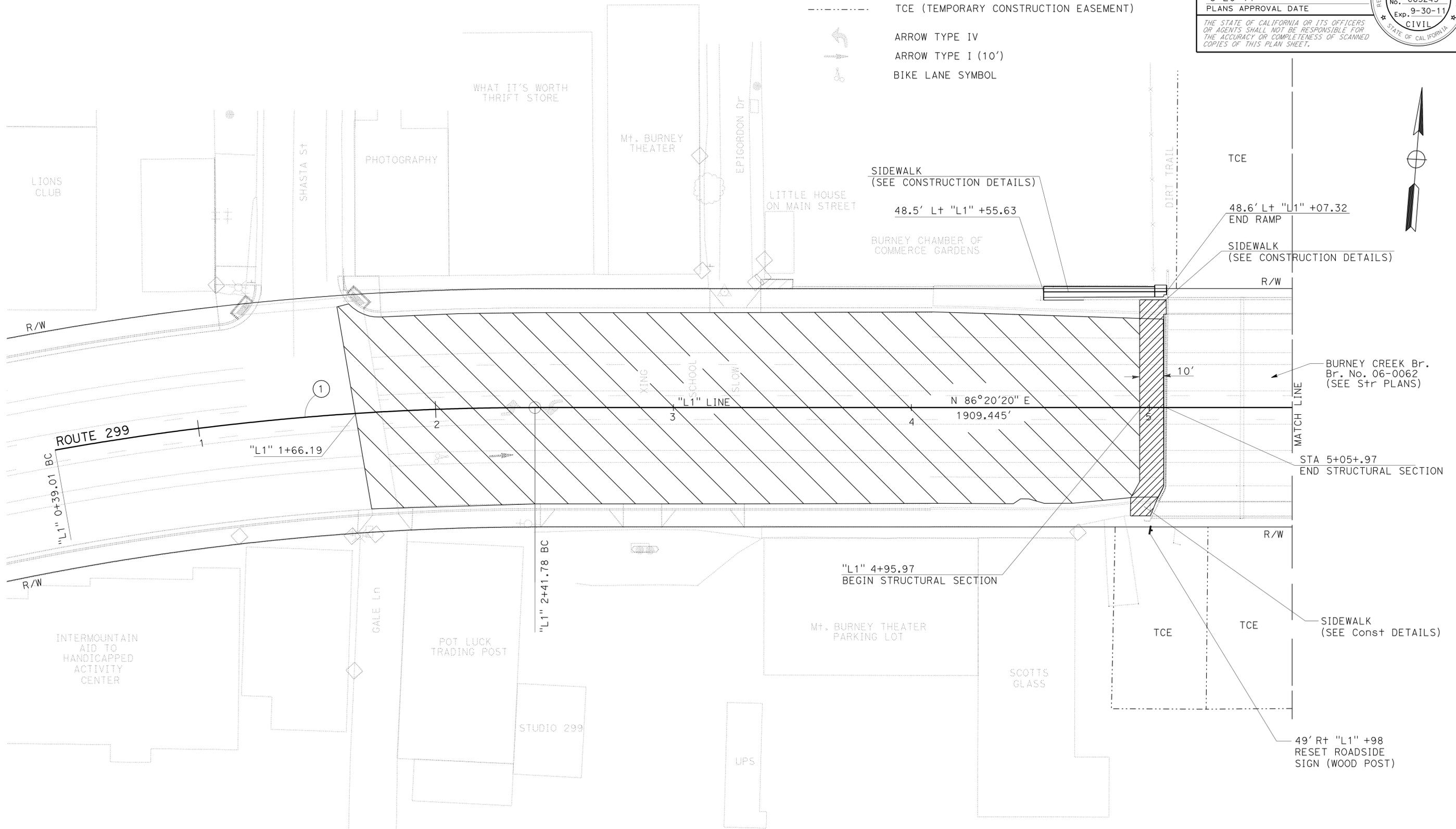
REGISTERED PROFESSIONAL ENGINEER  
 MICHAEL B. SULLIVAN  
 No. C65245  
 Exp. 9-30-11  
 CIVIL  
 STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

**NOTE:**

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

- LEGEND:**
-  LIMITS OF COLD PLANE AC PAVEMENT
  -  STRUCTURAL SECTION RECONSTRUCTION
  -  TCE (TEMPORARY CONSTRUCTION EASEMENT)
  -  ARROW TYPE IV
  -  ARROW TYPE I (10')
  -  BIKE LANE SYMBOL



**CURVE DATA**

No.	R	Δ	T	L
①	1150'	10° 6' 9"	101.65'	202.77'

**LAYOUT**  
SCALE: 1" = 20'

**L-1**

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 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
 DESIGN  
 DEENA MATAULAY  
 R. AVILA  
 M. HUTZELMAN  
 REVISIONS:

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha	299	74.8	4	65

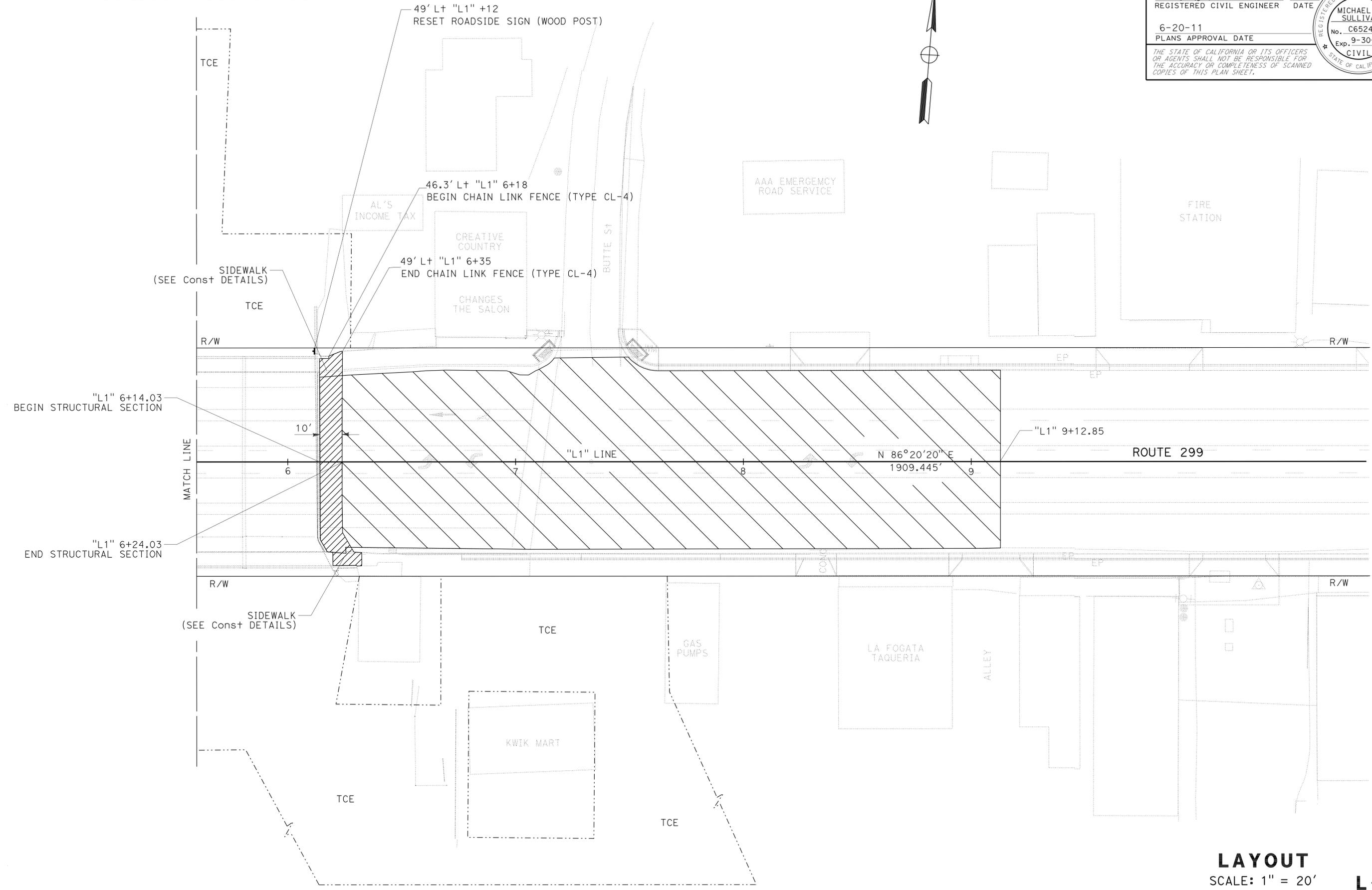
<i>Michael Sullivan</i>	05-19-11
REGISTERED CIVIL ENGINEER	DATE
6-20-11	
PLANS APPROVAL DATE	

MICHAEL B. SULLIVAN
No. C65245
Exp. 9-30-11
CIVIL

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**NOTE:**  
 1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



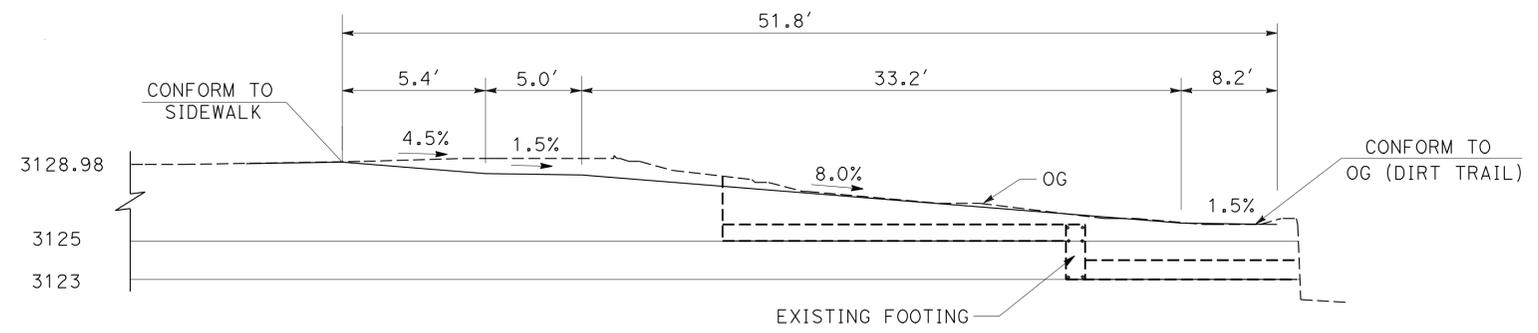
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 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**DESIGN**  
 Et Caltans®  
 FUNCTIONAL SUPERVISOR: DEENA MATAOULAY  
 CALCULATED/DESIGNED BY: CHECKED BY:  
 R. AVILA M. HUTZELMAN  
 REVISED BY: DATE REVISED:  
 x x x x x

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha	299	74.8	5	65

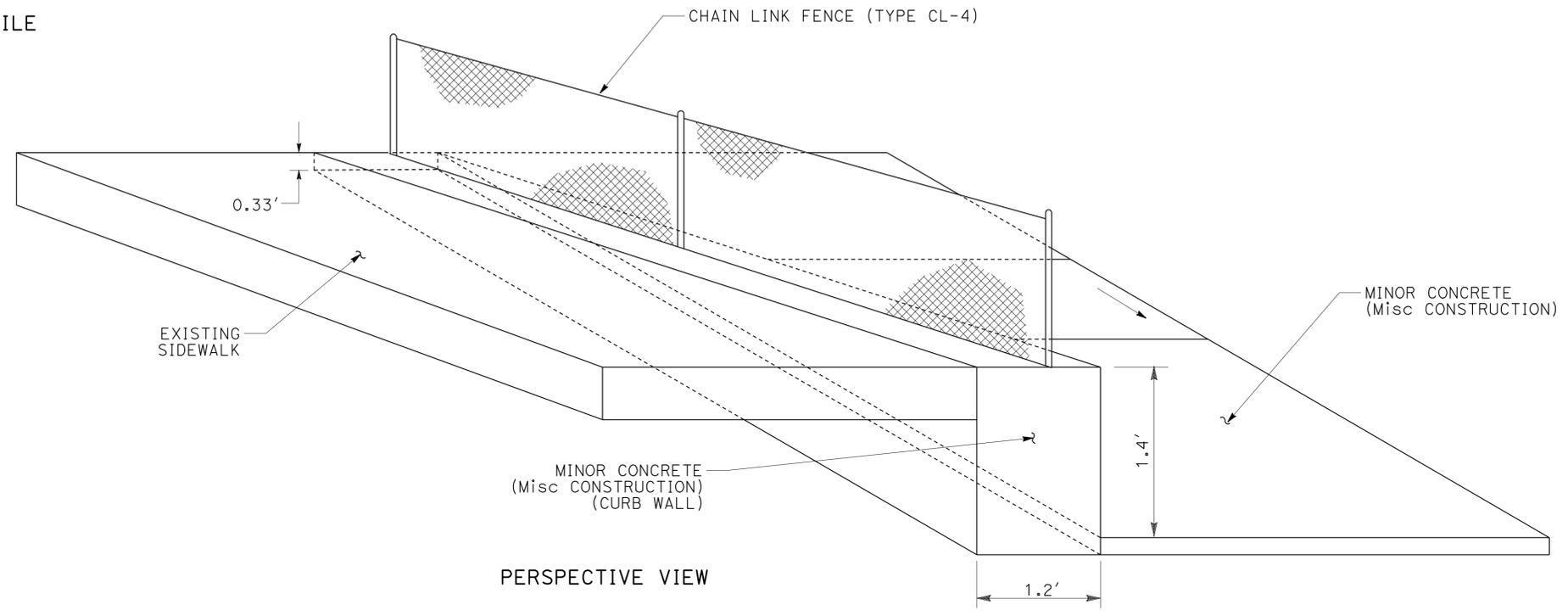
*Michael Sullivan* 05-19-11  
 REGISTERED CIVIL ENGINEER DATE  
 6-20-11  
 PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

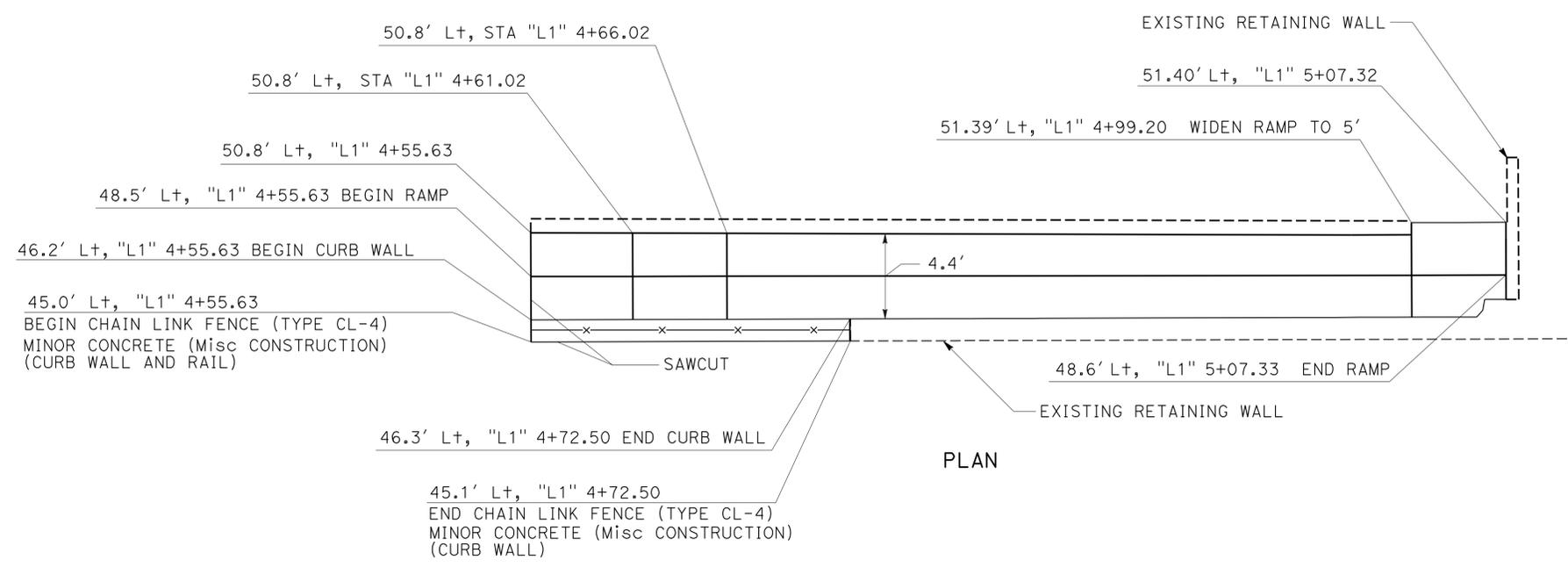
REGISTERED PROFESSIONAL ENGINEER  
 MICHAEL B. SULLIVAN  
 No. C65245  
 Exp. 9-30-11  
 CIVIL  
 STATE OF CALIFORNIA



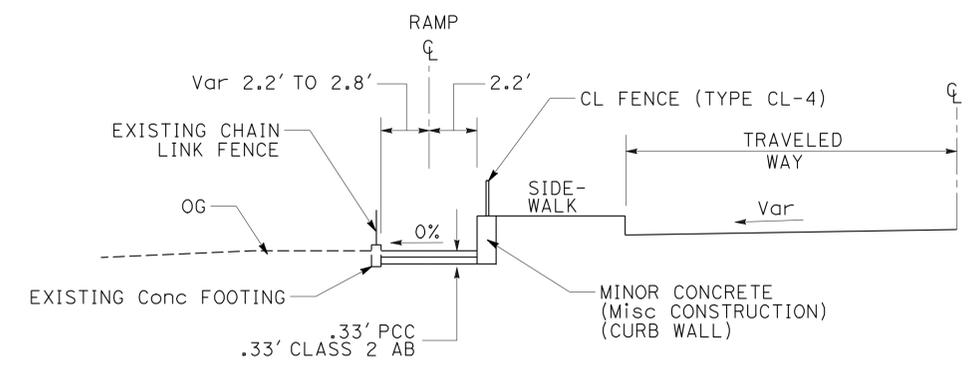
PROFILE



PERSPECTIVE VIEW



PLAN



TYPICAL CROSS SECTION

**SIDEWALK CONSTRUCTION DETAILS**  
NO SCALE

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 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
 DESIGN  
 R. AVILA  
 M. HUTZELMAN  
 DEENA MATAGULAY  
 REVISIONS: 05-19-11 10:21



**TCE LOCATION TABLE**

Loc	STATION	OFFSET
1	4+85.7	50.1' R+
2	4+84.1	126.4' R+
3	5+81.5	126.1' R+
4	6+24.7	205.6' R+
5	6+24.1	340.0' R+
6	8+14.6	340.9' R+
7	8+15.2	206.4' R+
8	7+67.5	100.8 R+
9	7+66.6	50.7' R+
10	6+67.3	50.1' R+
11	6+67.1	106.5' R+
12	6+21.1	106.1' R+
13	6+31.4	50.1' R+
14	6+78.9	100.5' R+
15	7+34.3	165.0' R+
16	7+34.8	165.0' R+
17	6+79.5	100.5' R+
18	5+11.4	50.4' L+
19	5+12.3	189.5' L+
20	5+75.0	189.7' L+
21	5+71.2	99.9' L+
22	6+28.0	99.9' L+
23	6+27.6	49.9' L+

**ESA LOCATION TABLE**

Loc	STATION	OFFSET
24	5+86.8	116.2' R+
25	6+34.5	204.0' R+
26	6+33.9	336.0' R+
27	5+44.6	189.5' L+
28	5+63.3	50.4' L+

**LEGEND:**

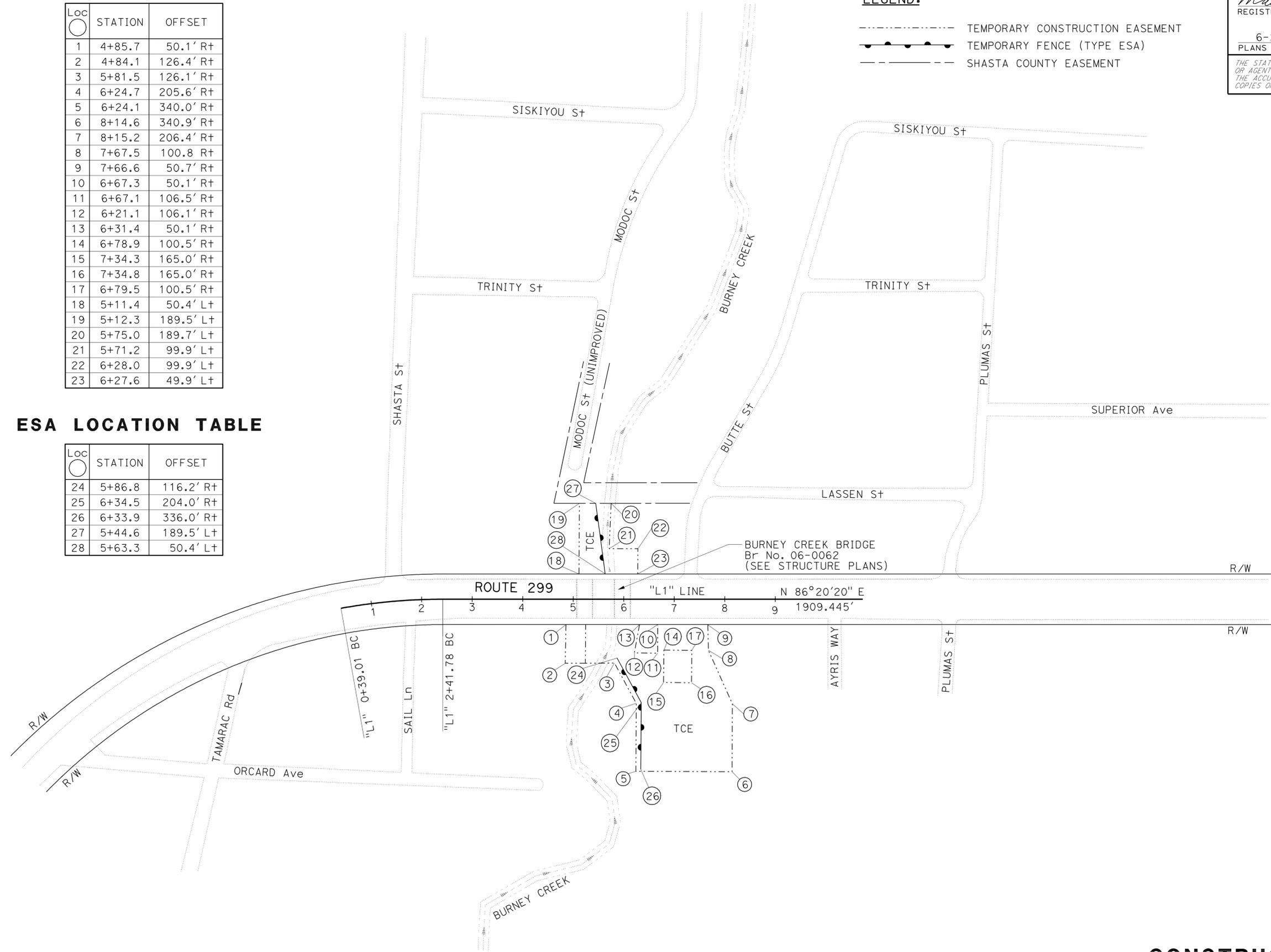
- TEMPORARY CONSTRUCTION EASEMENT
- TEMPORARY FENCE (TYPE ESA)
- SHASTA COUNTY EASEMENT

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha	299	74.8	7	65

*Michael Sullivan* 05-19-11  
 REGISTERED CIVIL ENGINEER DATE  
 6-20-11  
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER  
 MICHAEL B. SULLIVAN  
 No. C65245  
 Exp. 9-30-11  
 CIVIL  
 STATE OF CALIFORNIA

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**DESIGN**  
 DEENA MATAULAY  
 FUNCTIONAL SUPERVISOR  
 R. AVILA  
 M. HUTZELMAN  
 REVISOR  
 MICHIGAN STATE UNIVERSITY  
 CIVIL ENGINEERING  
 2011

**CONSTRUCTION DETAILS**  
 SCALE: 1" = 100'  
**C-3**

LAST REVISION     
 DATE PLOTTED => 21-JUN-2011     
 TIME PLOTTED => 11:05

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha	299	74.8	8	65

<i>Michael Sullivan</i> 05-19-11 REGISTERED CIVIL ENGINEER DATE	
6-20-11	PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.	

REGISTERED PROFESSIONAL ENGINEER MICHAEL B. SULLIVAN No. C65245 Exp. 9-30-11 CIVIL STATE OF CALIFORNIA
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**NOTES:**

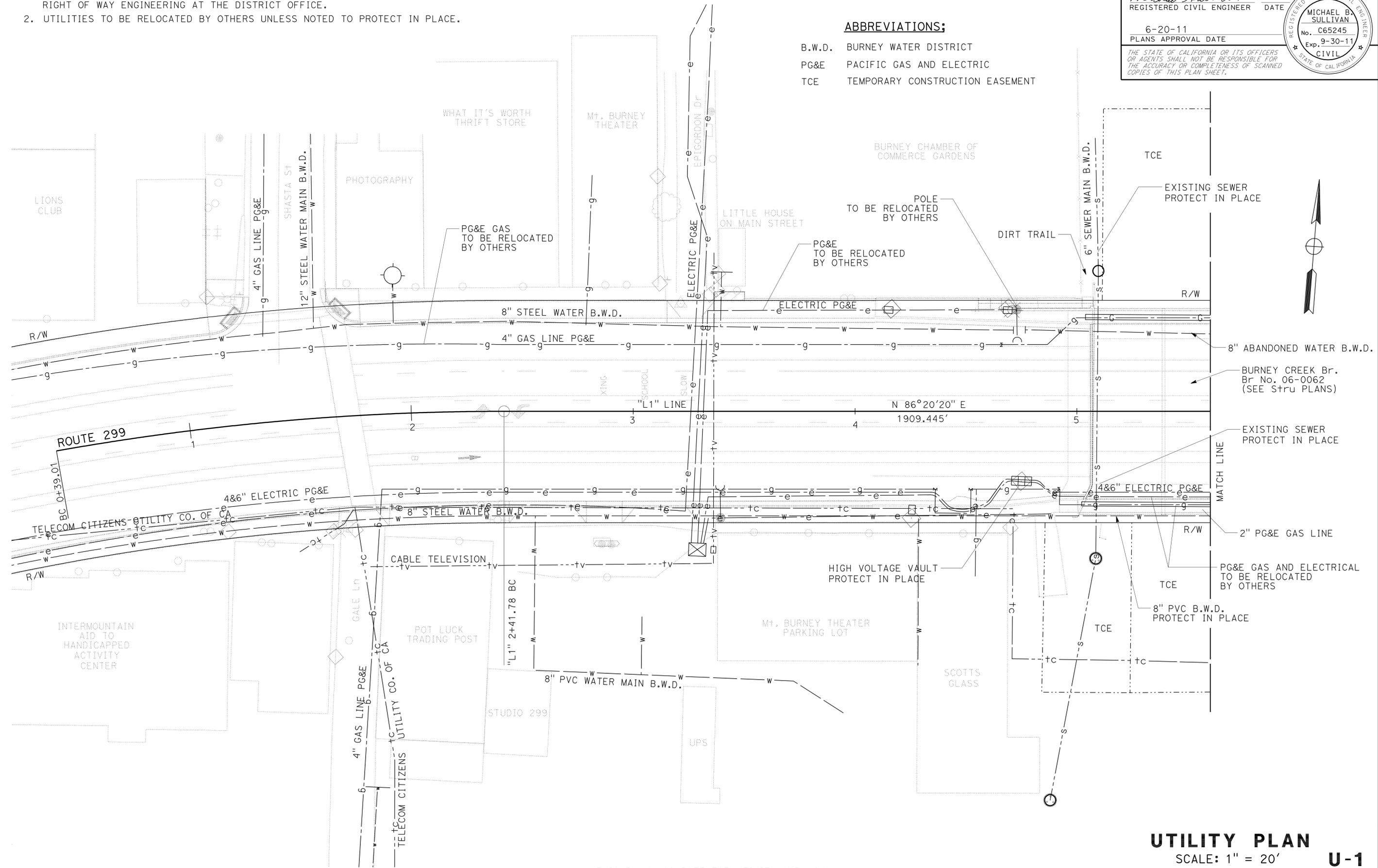
- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- UTILITIES TO BE RELOCATED BY OTHERS UNLESS NOTED TO PROTECT IN PLACE.

**LEGEND:**

----- TEMPORARY CONSTRUCTION EASEMENT

**ABBREVIATIONS:**

- B.W.D. BURNIEY WATER DISTRICT  
 PG&E PACIFIC GAS AND ELECTRIC  
 TCE TEMPORARY CONSTRUCTION EASEMENT



**UTILITY PLAN**  
 SCALE: 1" = 20'  
**U-1**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**DESIGN**  
 FUNCTIONAL SUPERVISOR: DEENA MATAULAY  
 CALCULATED/DESIGNED BY: R. AVILA  
 CHECKED BY: M. HUTZELMAN  
 REVISED BY: DATE REVISION

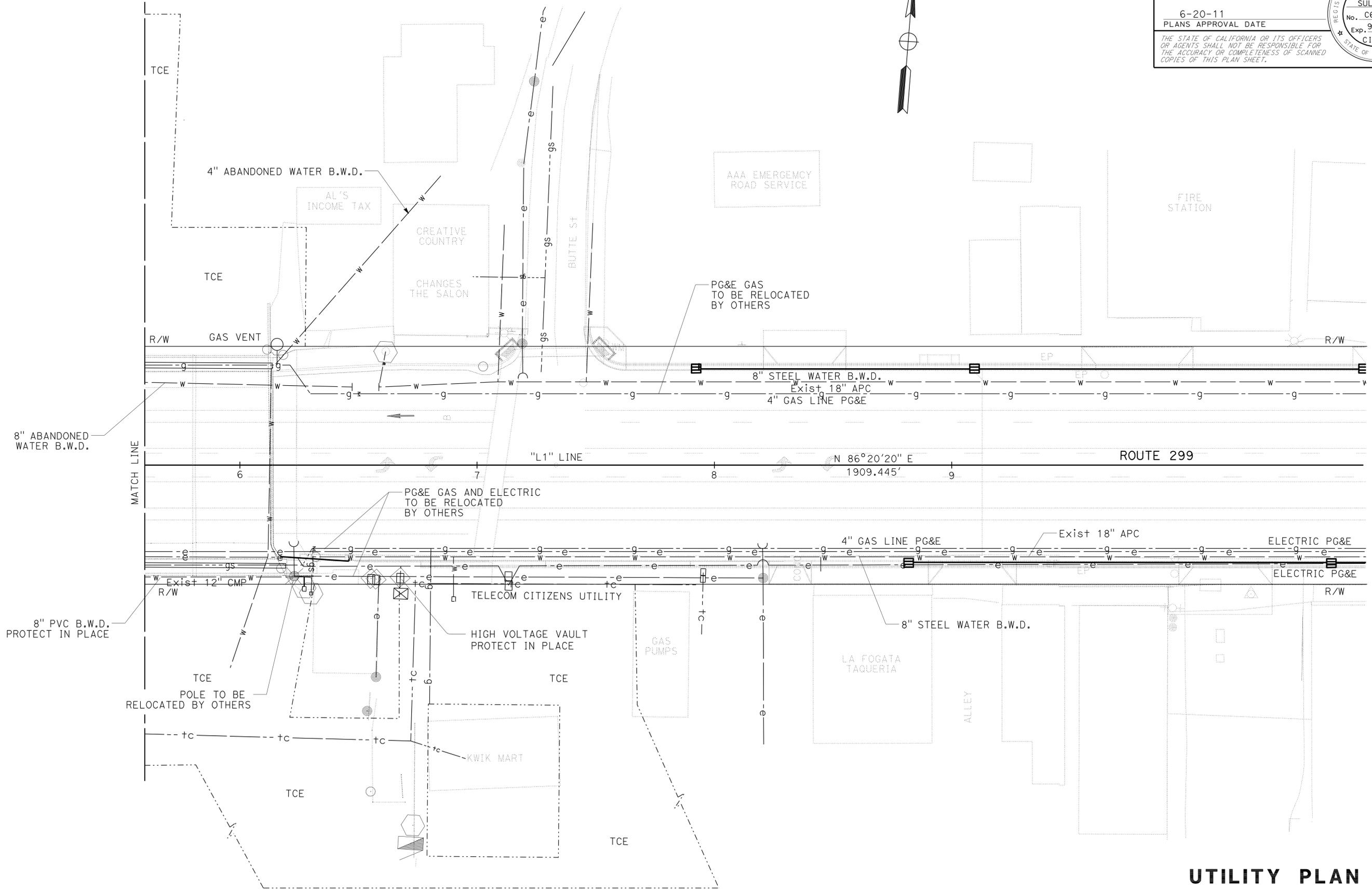
**NOTE:**  
FOR ACCURATE RIGHT OF WAY DATA, CONTACT  
RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha	299	74.8	9	65

*Michael Sullivan* 05-19-11  
 REGISTERED CIVIL ENGINEER DATE  
 6-20-11  
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER  
 MICHAEL B. SULLIVAN  
 No. C65245  
 Exp. 9-30-11  
 CIVIL  
 STATE OF CALIFORNIA

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**Caltrans**  
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 FUNCTIONAL SUPERVISOR: DEENA MATAUGALAY  
 CALCULATED/DESIGNED BY: R. AVILA  
 CHECKED BY: M. HUTZELMAN  
 REVISED BY: R. AVILA  
 DATE REVISED: M. HUTZELMAN

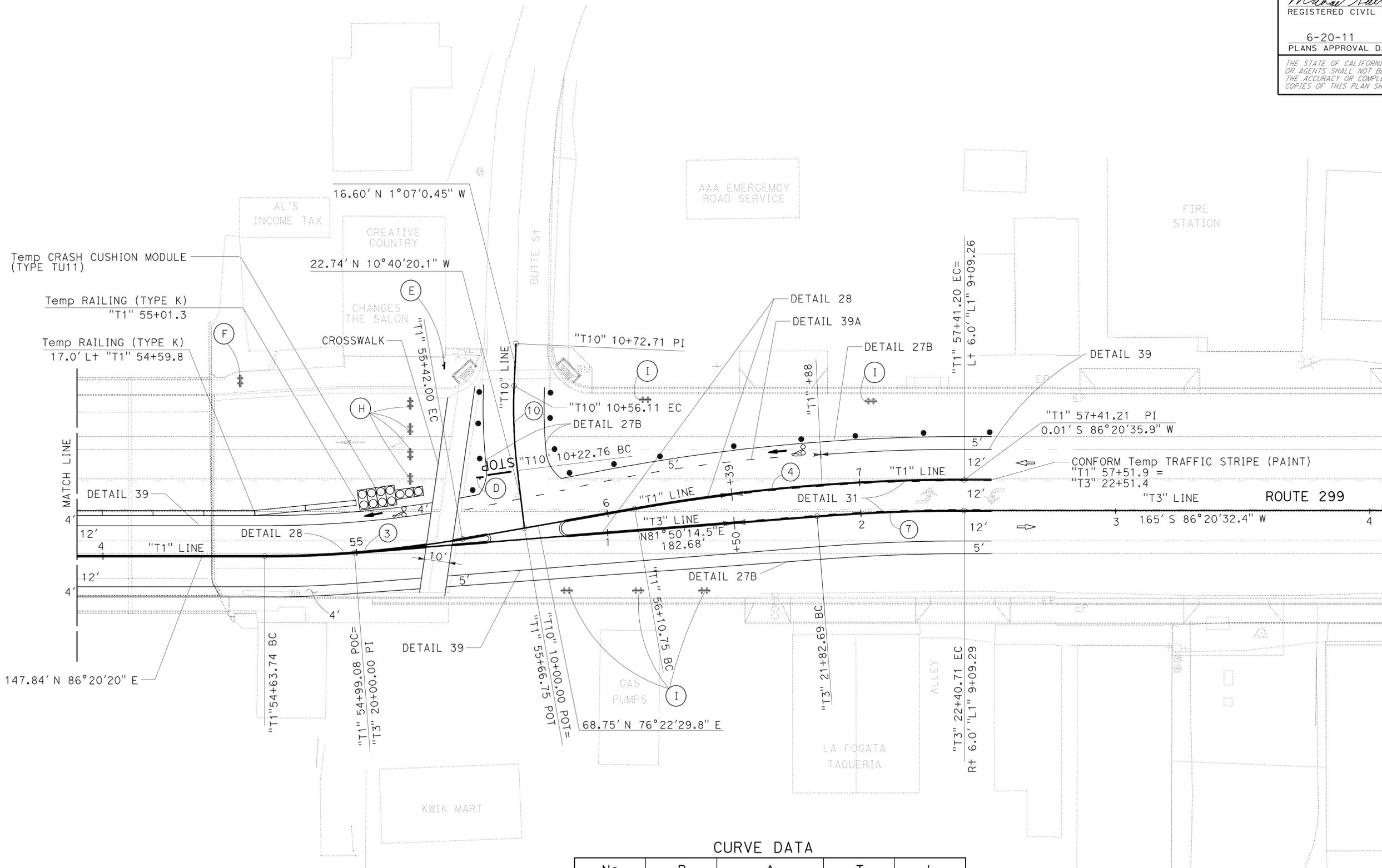
**UTILITY PLAN**  
SCALE: 1" = 20' **U-2**

THIS PLAN ACCURATE FOR UTILITY WORK ONLY

LAST REVISION: DATE PLOTTED => 21-JUN-2011  
 05-19-11 TIME PLOTTED => 11:05



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**DESIGN**  
 FUNCTIONAL SUPERVISOR: DEENA MATACALAY  
 CALCULATED/DESIGNED BY: R. AVILA  
 CHECKED BY: M. HUTZELMAN  
 REVISED BY: DATE REVISION  
 M. AVILA M. HUTZELMAN



**CURVE DATA**

No.	R	Δ	T	L
③	450'	9°57'51"	39.23'	78.26'
④	750'	9°58'06"	65.39'	130.46'
⑦	738'	4°30'17"	29.03'	58.03'
⑩	200'	9°33'16"	16.71'	33.35'

THIS PLAN ACCURATE FOR TRAFFIC HANDLING WORK ONLY.

**STAGE 1**  
**TRAFFIC HANDLING PLAN**  
 SCALE: 1" = 20'  
**TH-2**

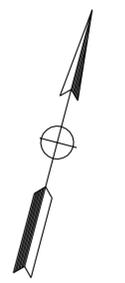
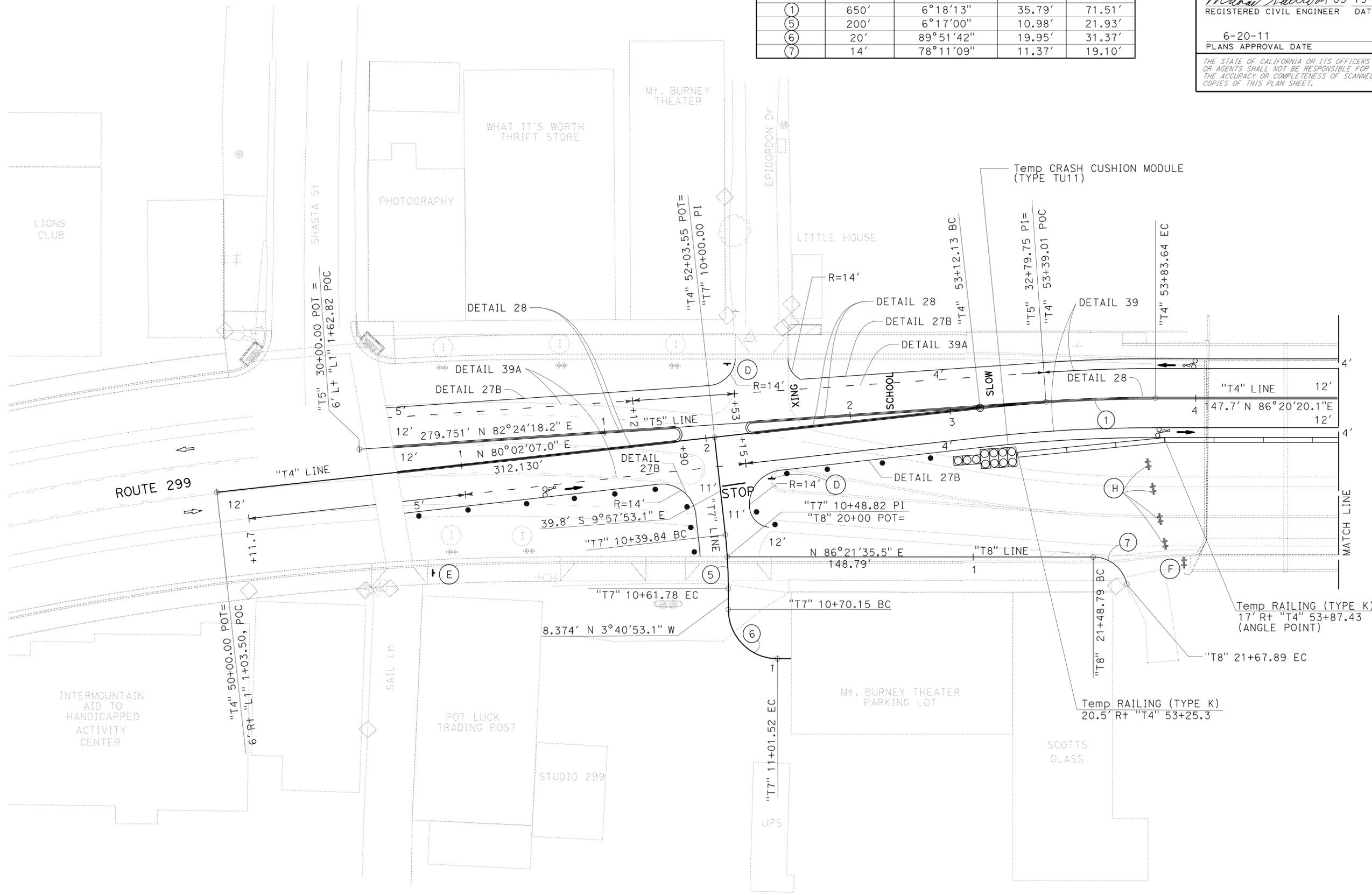
LAST REVISION DATE PLOTTED => 21-JUN-2011 05-19-11 TIME PLOTTED => 13:29

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** DESIGN  
 FUNCTIONAL SUPERVISOR: DEENA MATAULAY  
 CALCULATED/DESIGNED BY: R. AVILA  
 CHECKED BY: M. HUTZELMAN  
 REVISED BY: DATE REVISIONS

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha	299	74.8	12	65

Michael Sullivan 05-19-11  
 REGISTERED CIVIL ENGINEER DATE  
 6-20-11  
 PLANS APPROVAL DATE  
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

No.	R	Δ	T	L
1	650'	6°18'13"	35.79'	71.51'
5	200'	6°17'00"	10.98'	21.93'
6	20'	89°51'42"	19.95'	31.37'
7	14'	78°11'09"	11.37'	19.10'



**STAGE 2**  
**TRAFFIC HANDLING PLAN**  
 SCALE: 1" = 20'  
**TH-3**

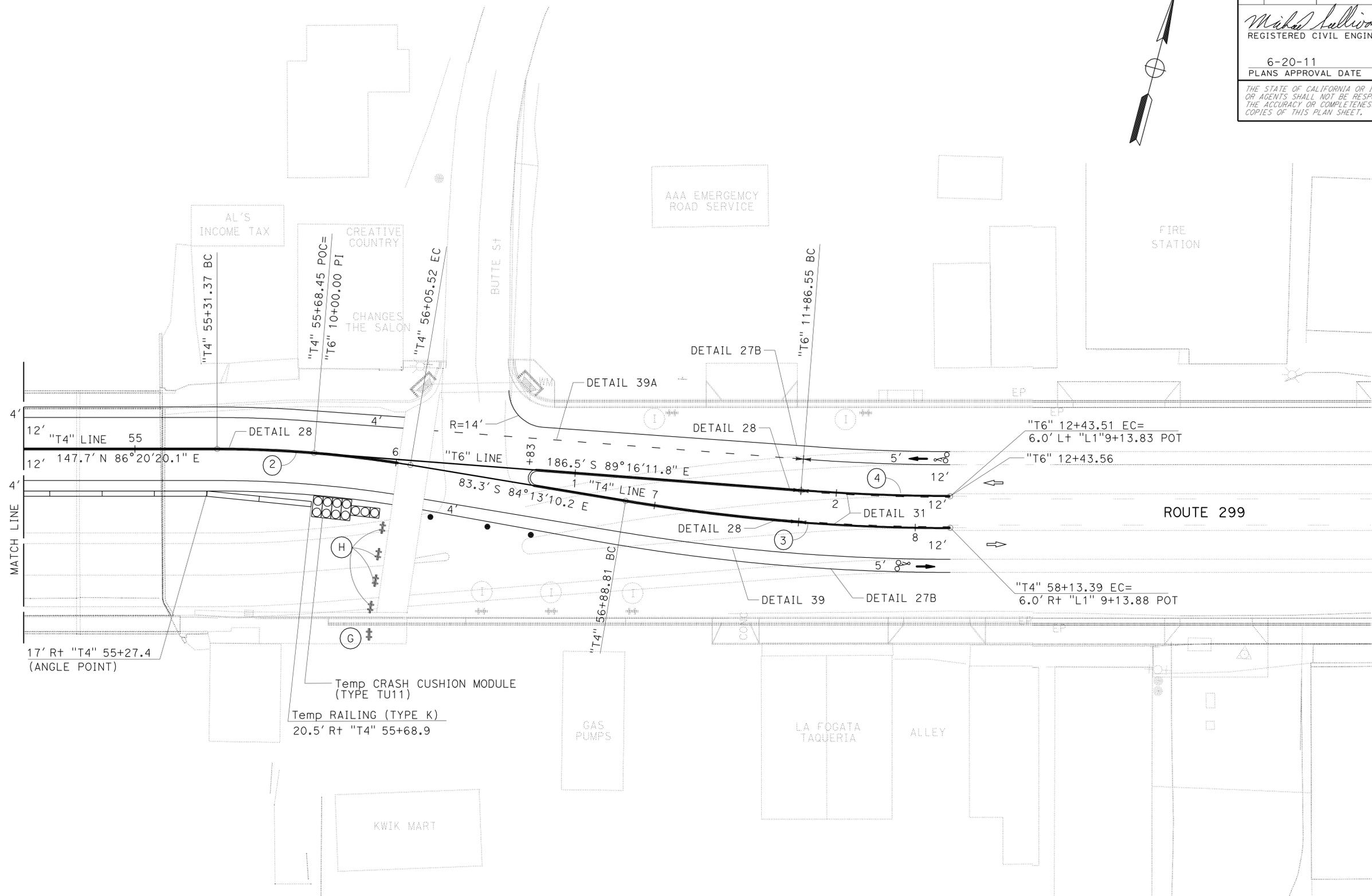
THIS PLAN ACCURATE FOR TRAFFIC HANDLING WORK ONLY

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha	299	74.8	13	65

*Michael Sullivan* 05-19-11  
 REGISTERED CIVIL ENGINEER DATE  
 6-20-11  
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER  
 MICHAEL B. SULLIVAN  
 No. C65245  
 Exp. 9-30-11  
 CIVIL  
 STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



**CURVE DATA**

No.	R	Δ	T	L
②	450'	9°26'30"	37.16'	74.15'
③	756'	9°26'30"	62.43'	124.58'
④	744'	4°23'12"	28.49'	56.96'

**STAGE 2**  
**TRAFFIC HANDLING PLAN**  
 SCALE: 1" = 20'  
**TH-4**

THIS PLAN ACCURATE FOR TRAFFIC HANDLING WORK ONLY

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 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
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 DEENA MATAULAY  
 FUNCTIONAL SUPERVISOR  
 CHECKED BY  
 CALCULATED/DESIGNED BY  
 R. AVILA  
 M. HUTZELMAN  
 REVISOR BY  
 DATE REVISOR

LAST REVISION DATE PLOTTED => 21-JUN-2011  
 05-19-11 TIME PLOTTED => 11:05

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha	299	74.8	14	65

*Michael Sullivan* 05-19-11  
 REGISTERED CIVIL ENGINEER DATE  
 6-20-11  
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER  
 MICHAEL B. SULLIVAN  
 No. C65245  
 Exp. 9-30-11  
 CIVIL  
 STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

### TEMPORARY TRAFFIC HANDLING DEVICES

STAGE	TEMPORARY RAILING (TYPE K)	Temp CRASH CUSHION MODULE (TYPE TU11)	TYPE III BARRICADE	CHANNELIZER (SURFACE MOUNTED)
	LF	EA	EA	EA
STAGE 1	240	22	23*	28
STAGE 2	240	22	10	18
<b>TOTAL</b>	<b>480</b>	<b>44</b>	<b>33</b>	<b>46</b>

\* FOR BARRICADE LOCATIONS SEE TRAFFIC HANDLING SHEETS

### TEMPORARY TRAFFIC STRIPE (PAINT)

STATION	6" WHITE BIKE LANE LINE	6" DASHED BIKE LANE LINE	4" WHITE EDGE OF TRAVELED WAY	DETAIL 31	DETAIL 28
	DETAIL 39	DETAIL 39A	DETAIL 27B		
	LF	LF	LF	LF	LF
<b>STAGE 1</b>					
"T1" 50+00 TO 57+52				462	
"T1" 51+60 TO 56+39					667
"T1" 50+00 TO 56+88		444			
"T1" 50+00 TO 57+52	1031				
"T1" 50+00 TO 57+52			1543		
<b>STAGE 2</b>					
"T4" 50+74 TO 58+14	977	400	1449	115	930
<b>SUB-TOTAL</b>	<b>2008</b>	<b>844</b>	<b>2992</b>	<b>577</b>	<b>1597</b>
<b>TOTAL</b>			<b>8018</b>		

### TEMPORARY PAVEMENT MARKING (PAINT)

STATION STAGE 1	ARROW TYPE I (10')	CROSS WALK	SLOW/SCHOOL XING	BIKE LANE SYMBOL	STOP	LIMIT LINE
	SQFT	SQFT	SQFT	SQFT	SQFT	SQFT
"T2" 11+60, R+				7		
"T2" 11+68, R+	14					
"T2" 12+27 TO 13+80, L+			79			
"T1" 55+17, L+	14					
"T1" 55+25, L+				7		
"T1" 55+28		161				
"T1" 56+75, L+	14					
"T1" 56+83, L+				7		
"T10" 10+23, L+					22	10
<b>STAGE 2</b>						
"T4" 51+40, L+				7		
"T4" 51+50, L+	14					
"T4" 52+40 TO 53+15, R+			79			
"T4" 53+80, R+	14					
"T4" 53+80, R+				7		
"T4" 53+90, L+				7		
"T4" 57+95, R+				7		
"T4" 58+00, R+	14					
"T4" 58+10, L+				7		
"T7" 10+20, L+					22	10
"T4" 53+90, L+	14					
"T4" 58+05, L+	14					
<b>SUB-TOTAL</b>	<b>112</b>	<b>161</b>	<b>158</b>	<b>56</b>	<b>44</b>	<b>20</b>
<b>TOTAL</b>			<b>551</b>			

## TRAFFIC HANDLING QUANTITIES THQ-1

P:\proj\1\02\2c222\plans\pse\0200000166mf001.dgn  
 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
 DESIGN  
 DEENA MATAOULAY  
 FUNCTIONAL SUPERVISOR  
 R. AVILA  
 M. HUTZELMAN  
 REVISOR  
 M. HUTZELMAN  
 DATE REVISOR  
 M. HUTZELMAN  
 DATE REVISOR

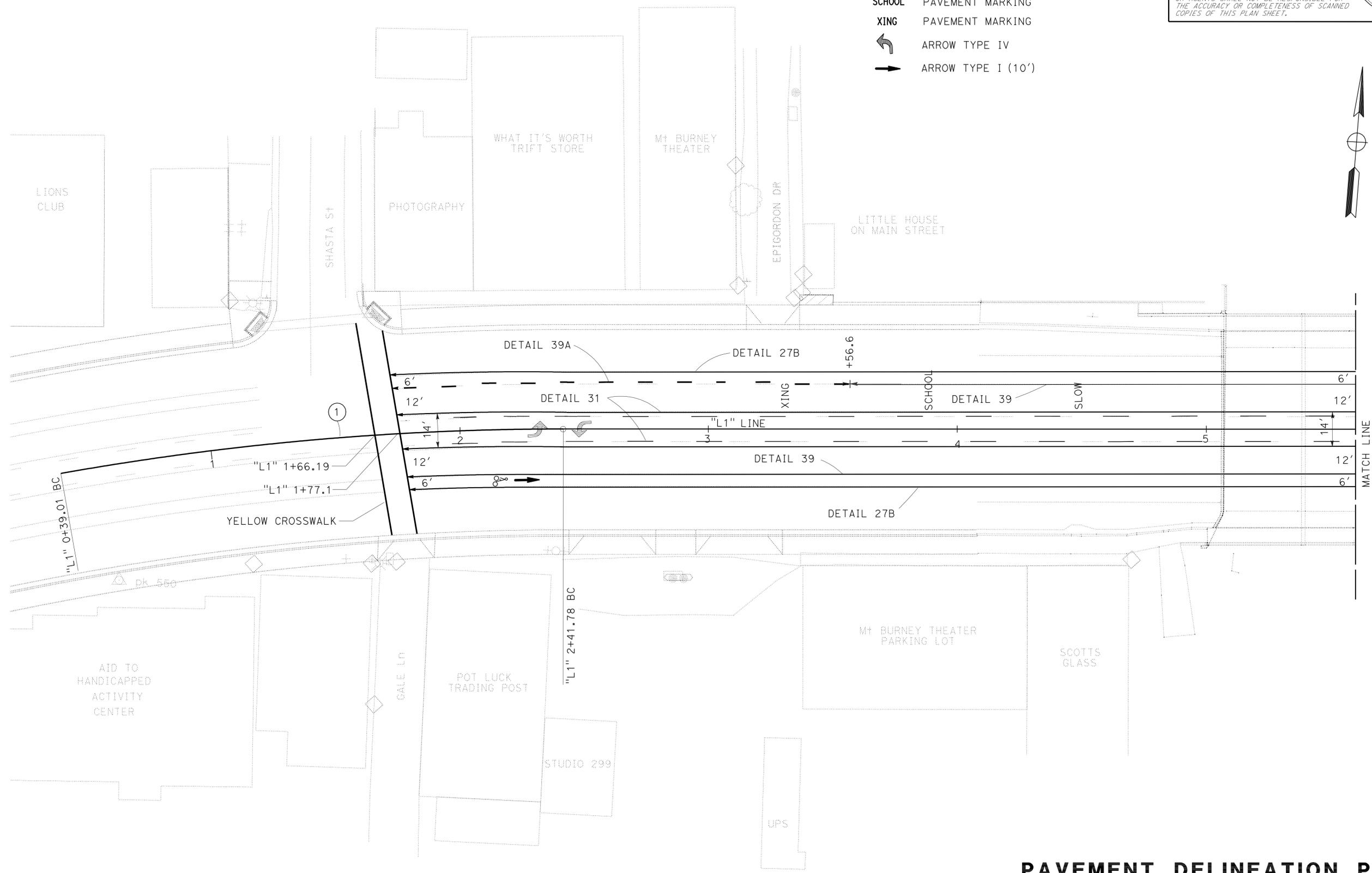
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 DESIGN  
 FUNCTIONAL SUPERVISOR: DEENA MATAUGALAY  
 CALCULATED/DESIGNED BY: R. AVILA  
 CHECKED BY: M. HUTZELMAN  
 REVISIONS: REVISOR: DATE  
 REVISOR: DATE

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha	299	74.8	15	65

REGISTERED CIVIL ENGINEER: *Michael Sullivan* 05-19-11  
 DATE: 05-19-11  
 PLANS APPROVAL DATE: 6-20-11  
 No. C65245  
 Exp. 9-30-11  
 CIVIL  
 STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

- LEGEND:**
- BEGIN OR END TRAFFIC STRIPE
  - CHANGE TRAFFIC STRIPE DETAIL
  - BIKE LANE SYMBOL
  - SLOW PAVEMENT MARKING
  - SCHOOL PAVEMENT MARKING
  - XING PAVEMENT MARKING
  - ARROW TYPE IV
  - ARROW TYPE I (10')



THIS PLAN ACCURATE FOR PAVEMENT DELINEATION WORK ONLY

**PAVEMENT DELINEATION PLAN**  
 SCALE: 1" = 20'  
**PD-1**

LAST REVISION: 05-19-11  
 DATE PLOTTED => 21-JUN-2011  
 TIME PLOTTED => 11:06



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha	299	74.8	17	65

*Michael Sullivan* 05-19-11  
 REGISTERED CIVIL ENGINEER DATE

6-20-11  
 PLANS APPROVAL DATE

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 OR AGENTS SHALL NOT BE RESPONSIBLE FOR  
 THE ACCURACY OR COMPLETENESS OF SCANNED  
 COPIES OF THIS PLAN SHEET.

**THERMOPLASTIC TRAFFIC STRIPE (SPRAYABLE)**

STATION	6" WHITE BIKE LANE LINE	6" DASHED BIKE LANE LINE	4" WHITE EDGE OF TRAVELED WAY	DETAIL 31	DETAIL 27C
	DETAIL 39	DETAIL 39A	DETAIL 27B		
	LF	LF	LF		
"L1" 1+77 TO 9+13				1400	
"L1" 1+77 TO 9+13	1070				
"L1" 7+15 TO 7+54					39
"L1" 1+77 TO 9+13		375			
"L1" 1+77 TO 9+13			1410		
SUBTOTAL	1070	375	1410	1400	39
TOTAL	4294				

**PAINT CURB (2-COAT)**

STATION	RED PAINT
	LF
"L1" 4+90 TO 5+06, Lt	16

**THERMOPLASTIC PAVEMENT MARKING**

STATION	ARROW TYPE IV	ARROW TYPE I (10')	CROSS WALK	SLOW/SCHOOL XING	DETAIL BIKE LANE SYMBOL
	SQFT	SQFT	SQFT	SQFT	SQFT
"L1" 2+31	15				
"L1" 2+48	15				
"L1" 1+66 (YELLOW)			180		
"L1" 3+37 TO 4+47, Lt				79	
"L1" 6+59	15				
"L1" 6+87	15				
"L1" 8+28	15				
"L1" 8+50	15				
"L1" 7+04 (WHITE)			169		
"L1" 6+65, Rt		14			
"L1" 6+65, Lt		14			
"L1" 6+87, Lt					7
"L1" 2+24, Rt					7
"L1" 2+32, Rt		14			
"L1" 6+59, Rt					7
SUBTOTAL	90	42	349	79	21
TOTAL	581				

**PAVEMENT DELINEATION QUANTITIES PDQ-1**

P:\proj\102\2c222\plans\pse\0200000166nc001.dgn  
 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 DESIGN  
 DEENA MATAGULAY  
 FUNCTIONAL SUPERVISOR  
 CHECKED BY  
 R. AVILA  
 M. HUTZELMAN  
 REVISOR BY  
 DATE REVISOR

LAST REVISION DATE PLOTTED => 24-JUN-2011  
 05-19-11 TIME PLOTTED => 07:15

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha	299	74.8	18	65

*Michael Sullivan* 05-19-11  
 REGISTERED CIVIL ENGINEER DATE  
 6-20-11  
 PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER  
 MICHAEL B. SULLIVAN  
 No. C65245  
 Exp. 9-30-11  
 CIVIL  
 STATE OF CALIFORNIA

### REMOVE TRAFFIC STRIPE

STATION	6" WHITE BIKE LANE LINE	6" DASHED BIKE LANE LINE	EDGE OF TRAVELED WAY (WHITE)	LEFT TURN LANE	MEDIAN ISLAND	COMMENTS
	DETAIL 39	DETAIL 39A	DETAIL 27B	DETAIL 31	DETAIL 28	
	LF	LF	LF	LF	LF	
"L1" 1+77 TO 9+13	1070	375	1410			FROM LAYOUT SHEETS
"T4" 50+74 TO 53+00			245			FROM TRAFFIC HANDLING SHEETS
"T4" 52+33 TO 52+80	50					
"T4" 50+74 TO 52+33		196				
"T4" 50+74 TO 52+00				236		
"T4" 52+23 TO 52+35					162	
"T4" 56+13 TO 58+13			321			
"T4" 57+46 TO 58+13	67					
"T4" 56+43 TO 57+46		103				
"T4" 56+68 TO 58+13				226		
SUBTOTAL	1187	674	1976	462	162	
TOTAL	4461					

### REMOVE YELLOW THERMOPLASTIC TRAFFIC STRIPE (HAZARDOUS WASTE)

STATION	DETAIL 31 (YELLOW)
	LF
"L1" 1+77 TO 9+13	1292
TOTAL	1292

### REMOVE PAVEMENT MARKING

STATION	ARROW TYPE IV	ARROW TYPE I (10')	CROSS WALK	DETAIL BIKE LANE SYMBOL	STOP	LIMIT LINE (STOP BAR)	SLOW/SCHOOL XING	COMMENTS
	SQFT	SQFT	SQFT	SQFT	SQFT	SQFT	SQFT	
"L1" 2+31	15							FROM LAYOUT SHEETS
"L1" 2+48	15							
"L1" 6+59	15							
"L1" 6+87	15							
"L1" 8+28	15							
"L1" 8+50	15							
"L1" 7+04 (WHITE)			169					
"L1" 6+63, Lt		14						
"L1" 6+87, Lt				7				
"L1" 2+32, Rt		14						
"L1" 2+05, Rt				7				
"T4" 51+42, Rt				7				
"T4" 58+10, Lt				7				
"T10" 10+23					22	10		FROM TRAFFIC HANDLING SHEETS
"T7" 10+20					22	10		
"T2" 12+27 TO 13+80						79		
SUBTOTAL	90	28	169	28	44	20	79	
TOTAL	458							

### REMOVE YELLOW THERMOPLASTIC PAVEMENT MARKING (HAZARDOUS WASTE)

STATION	SLOW/SCHOOL XING (YELLOW)
	SQFT
"L1" 3+37 TO 4+47	79
TOTAL	79

## PAVEMENT DELINEATION QUANTITIES PDQ-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
 DESIGN  
 DEENA MATAJULAY  
 R. AVILA  
 M. HUTZELMAN  
 CALCULATED/DESIGNED BY  
 CHECKED BY  
 REVISOR BY  
 DATE REVISED  
 PROJECT NUMBER & PHASE  
 02000001661

P:\proj\102\2c222\plans\pse\0200000166pa001.dgn  
 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
**DESIGN**  
 FUNCTIONAL SUPERVISOR  
 DEENA MATAGULAY  
 CALCULATED/DESIGNED BY  
 CHECKED BY  
 R. AVILA  
 M. HUTZELMAN  
 REVISED BY  
 DATE REVISED

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha	299	74.8	19	65

*Michael Sullivan* 05-19-11  
 REGISTERED CIVIL ENGINEER DATE  
 6-20-11  
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER  
 MICHAEL B. SULLIVAN  
 No. C65245  
 Exp. 9-30-11  
 CIVIL  
 STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

### TEMPORARY FENCE (TYPE ESA)

SHEET No.	LOCATION	LF
C-3	"L1" 5+86.8, 116.2' Rt TO 6+33.9, 336.0' Rt	140
C-3	"L1" 5+44.6, 189.5' Lt TO 5+63.3, 50.4' Lt	232
TOTAL		372

### CHAIN LINK FENCE (TYPE CL-4)

SHEET No.	LOCATION	LF
C-1	"L1" 4+55.63, 45' Lt TO 4+72.50, 45.1' Lt	16.9
	"L1" 6+18, 46.3' Lt TO 6+35, 49' Lt	17.4
TOTAL		34.3

### EROSION CONTROL \* (HYDROSEED)

UNIT	QUANTITY
ACRE	.6

\* APPLY TO DISTURBED SOIL AREAS

### ROADWAY QUANTITIES

STATION	COLD PLANE AC PAVEMENT	HOT MIX ASPHALT (TYPE A)	TACK COAT	CLASS 2 AGGREGATE BASE	REMOVE CONCRETE	MINOR CONCRETE (MISCELLANEOUS CONSTRUCTION)	ROADWAY EXCAVATION	REMARKS
	SQYD	TON	TON	CY	CY	CY	CY	
"L1" 4+95.97 TO 5+05.97		30		21.0			36	
"L1" 6+14.03 TO 6+24.03		28		19.0			33	
"L1" 4+96.0 TO 5+07.0 Lt				0.6	0.8	1.2		SIDEWALK, CURB AND GUTTER SEE SHEET C-2
"L1" 6+14.0 TO 6+24.0 Lt				0.6	0.9	1.1		
"L1" 6+19.7 TO 6+32.4 Rt				0.9	1.1	0.9		
"L1" 4+92.2 TO 5+03.7 Rt				0.5	0.7	1.2		
"L1" 4+55.6 TO 5+07.3 Lt				2.4	4.7	2.7		RAMP, SEE SHEET C-1
"L1" 4+55.6 TO 4+72.5					0.8	0.6		CURB WALL, SEE SHEET C-1
"L1" 1+66.19 TO "L1" 4+95.97	2930	295	2.5					
"L1" 6+24.03 TO 9+12.85	2510	255	2.5					
TOTAL	5440	608	5.0	45.0	9.0	7.7	69	

### TEMPORARY WATER POLLUTION CONTROL

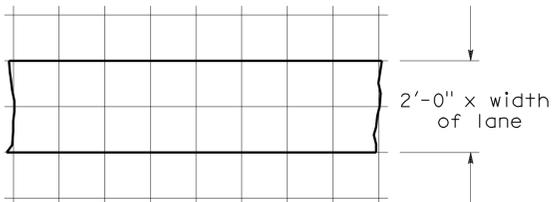
TEMPORARY COVER	TEMPORARY FIBER ROLL	TEMPORARY SILT FENCE	TEMPORARY CONSTRUCTION ENTRANCE	TEMPORARY HYDRAULIC MULCH (POLYMER STABILIZED FIBER MATRIX)
SQYD	LF	LF	EA	SQYD
580	200	200	2	1100

## SUMMARY OF QUANTITIES Q-1

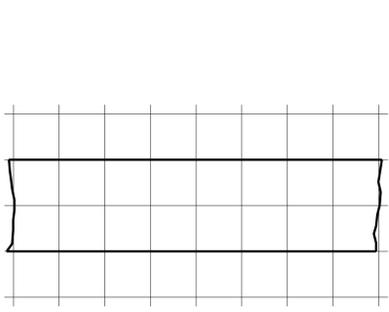
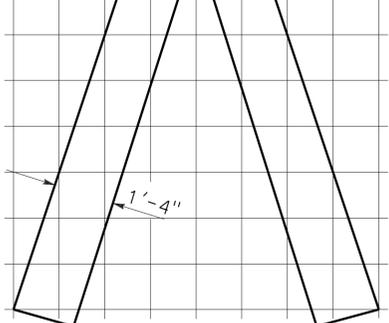
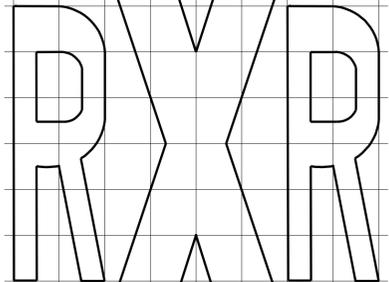
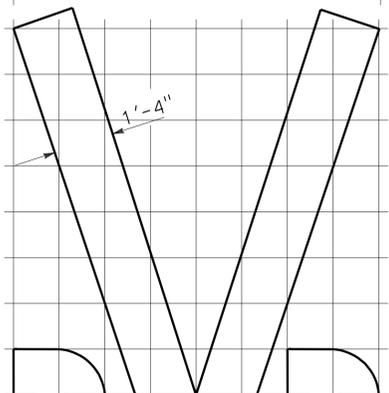
LAST REVISION      DATE PLOTTED => 21-JUN-2011      TIME PLOTTED => 10:29



To accompany plans dated 6-20-11



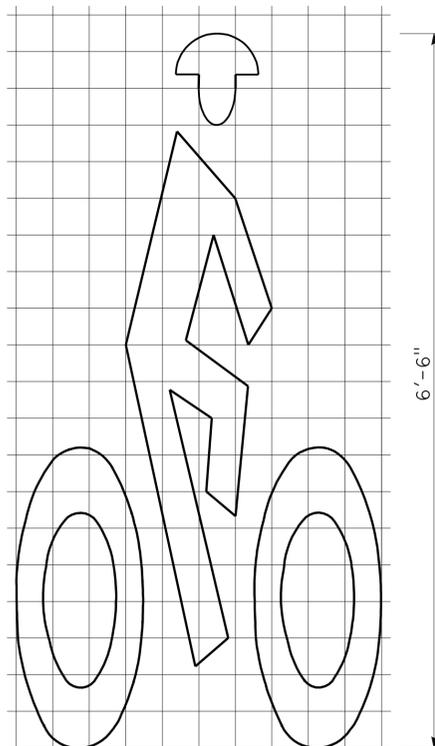
8'-0"



1'-0" GRID  
A=70 sq ft \*

**RAILROAD CROSSING SYMBOL**

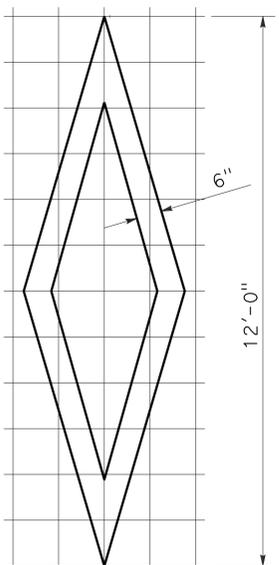
\*70 sq ft DOES NOT INCLUDE THE 2'-0" x VARIABLE WIDTH TRANSVERSE LINES.



4" GRID  
3'-4"

A=7 sq ft

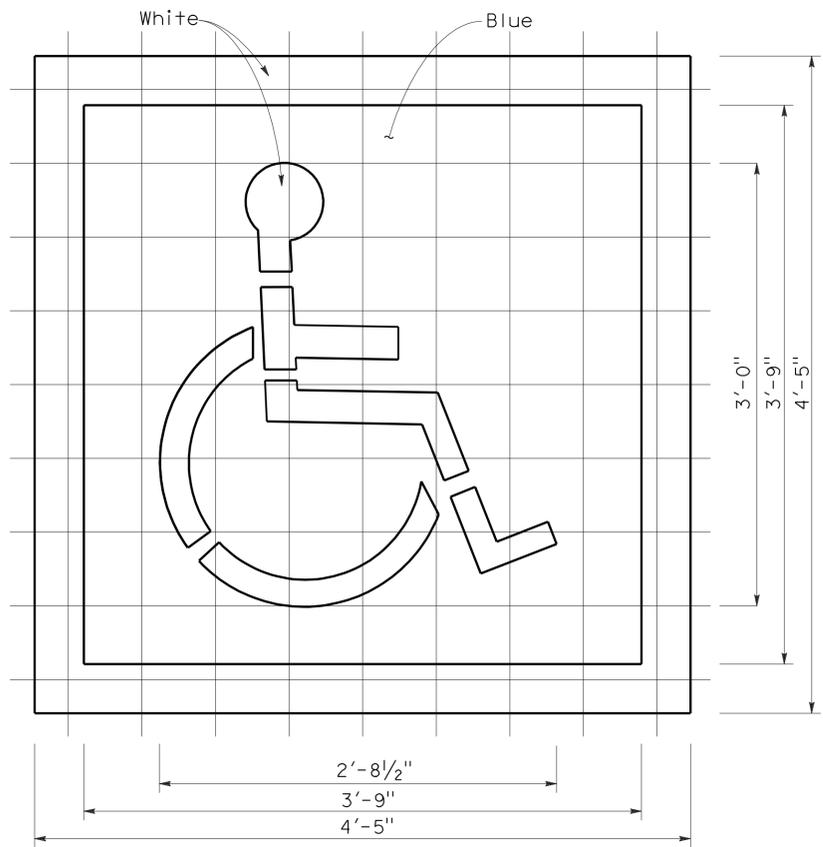
**BIKE LANE SYMBOL**



1'-0" GRID  
3'-3"

A=11 sq ft

**DIAMOND SYMBOL**

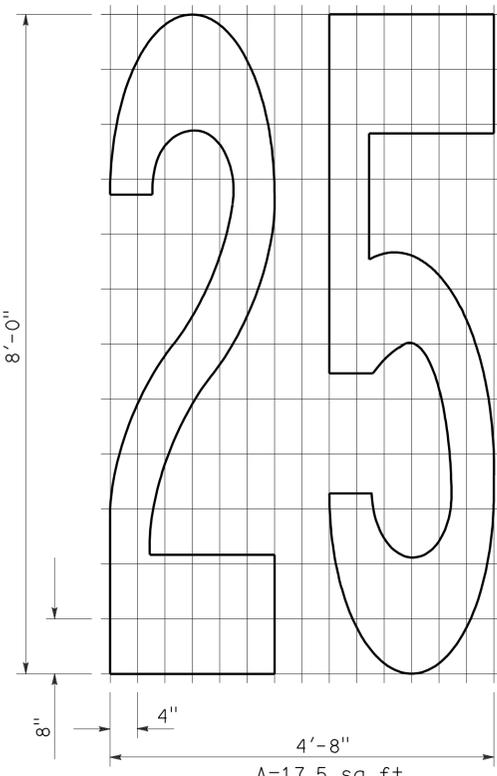


6" GRID

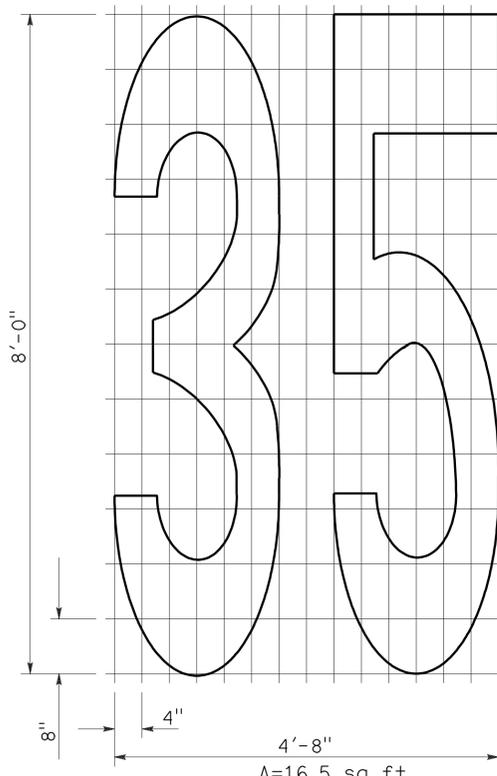
A (White) = 9 sq ft

A (Blue) = 14 sq ft

**INTERNATIONAL SYMBOL OF ACCESSIBILITY MARKING**

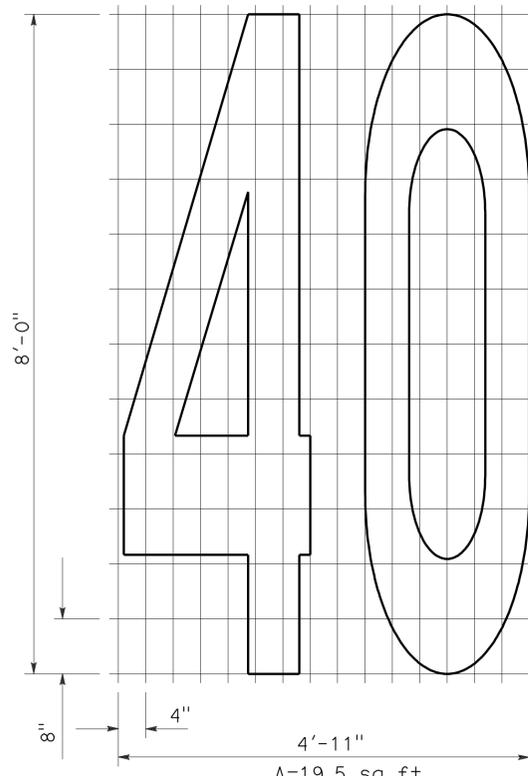


A=17.5 sq ft

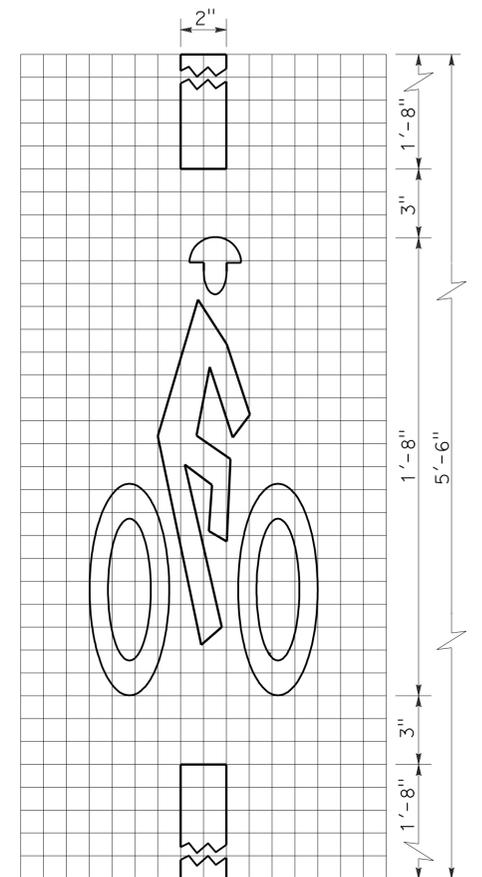


A=16.5 sq ft

**NUMERALS**



A=19.5 sq ft



1" GRID  
10"

A=2 sq ft

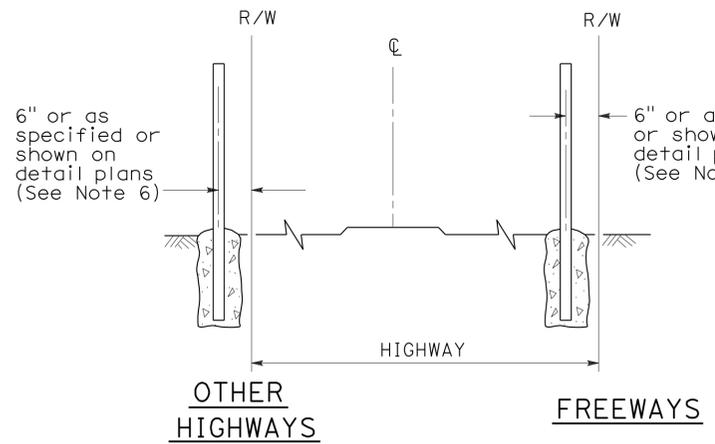
**BICYCLE LOOP DETECTOR SYMBOL**

**NOTE:**

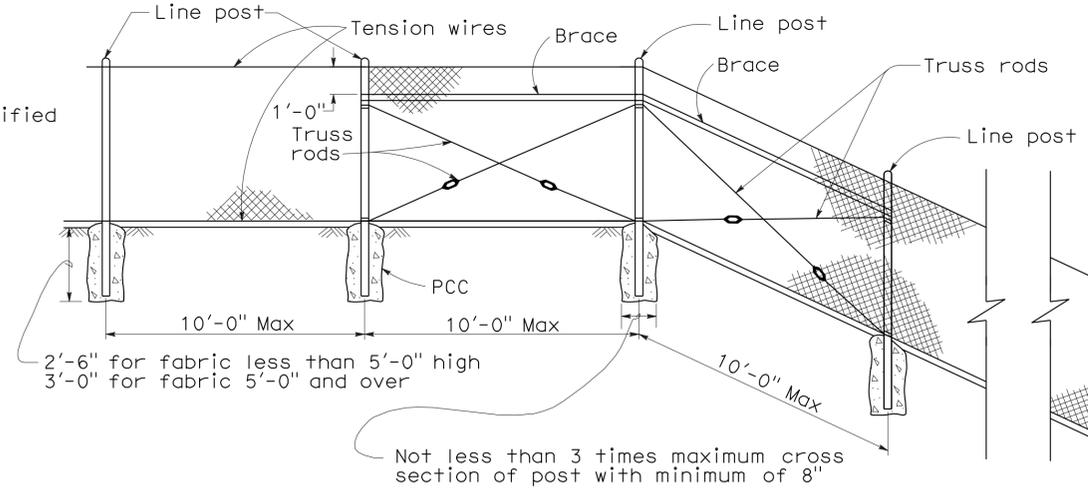
1. Minor variations in dimensions may be accepted by the Engineer.

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**PAVEMENT MARKINGS SYMBOLS AND NUMERALS**

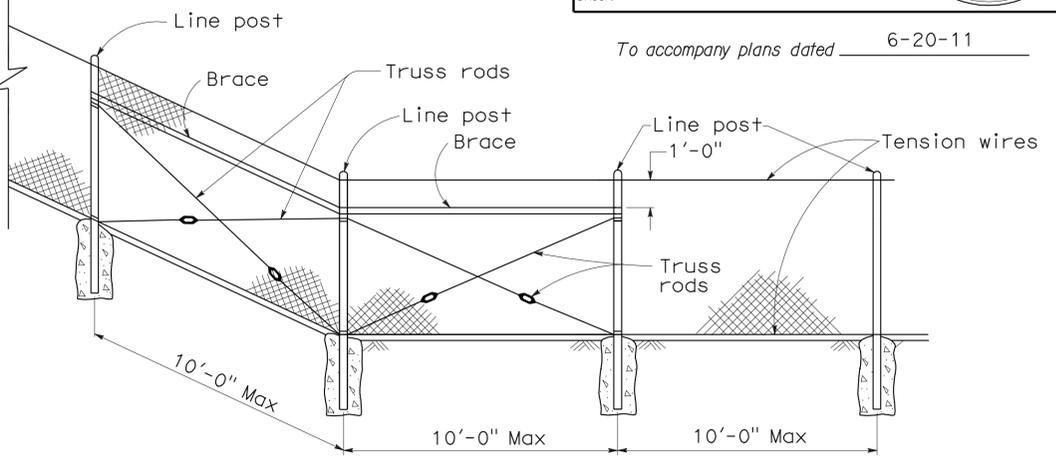
NO SCALE



**FENCE LOCATION**

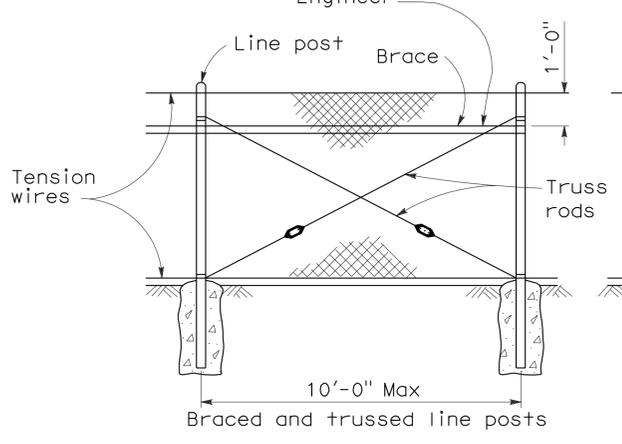


**CHAIN LINK FENCE ON SHARP BREAK IN GRADE**

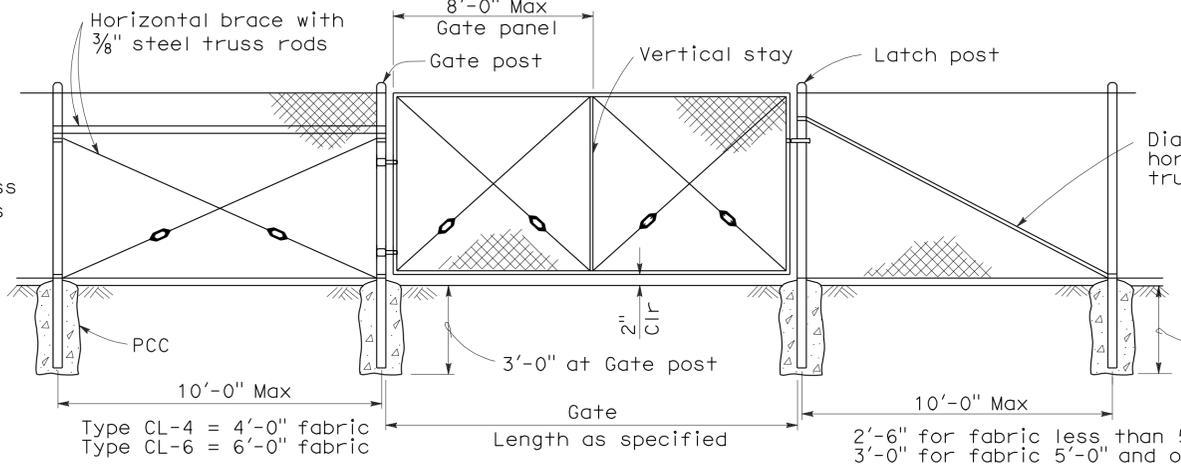


To accompany plans dated 6-20-11

Brace to be removed after all other fence construction is completed unless otherwise directed by the Engineer



Braced and trussed line posts



**CHAIN LINK GATE INSTALLATION**

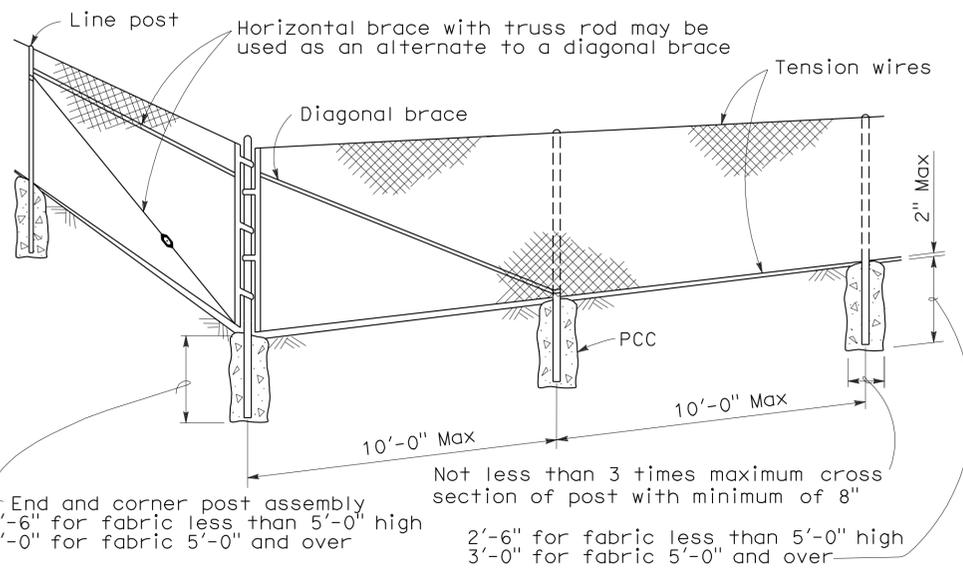
GATE POST			
FENCE HEIGHT	GATE WIDTHS	NOMINAL ID	WEIGHT PER FOOT
6'-0" and Less	Up thru 6'-0"	2 1/2"	4.95 LB
	Over 6'-0" thru 12'-0"	4"	10.79 LB
	Over 12'-0" thru 18'-0"	5"	14.62 LB
Over 6'-0"	Over 18'-0" to 24'-0" Max	6"	18.97 LB
	Up thru 6'-0"	3"	7.58 LB
	Over 6'-0" thru 12'-0"	5"	14.62 LB
	Over 12'-0" thru 18'-0"	6"	18.97 LB
	Over 18'-0" to 24'-0" Max	8"	28.55 LB

Above post dimensions and weights are minimums. Larger sizes may be used on approval of the Engineer.

**NOTES:**

- The below table shows examples of post and brace sections which may comply with the Specifications.
- Sections shown in the tables must also comply with the strength requirements and other provisions of the Specifications.
- Other sections which comply with the strength requirements and other provisions of the Specifications may be used on approval of the Engineer.
- Options exercised shall be uniform on any one project.
- Dimensions shown are nominal.
- Offset to be 2'-0" at monument locations, measured at right angles to R/W lines. Taper to achieve offset to be at least 20'-0" long.

FENCE HEIGHT	TYPICAL MEMBER DIMENSIONS (See Notes)									
	LINE POSTS			END, LATCH & CORNER POSTS			BRACES			
	ROUND ID	H	ROLL FORMED	ROUND ID	ROLL FORMED		ROUND ID	H	ROLL FORMED	
6' & less	1 1/2"	1 7/8" x 1 5/8"	1 7/8" x 1 5/8"	2"	3 1/2" x 3 1/2"	2" x 1 3/4"	1 1/4"	1 1/2" x 1 5/16"	1 5/8" x 1 1/4"	1 3/4" x 1 1/4"
Over 6'	2"	2 1/4" x 2"	2" x 1 3/4"	2 1/2"	3 1/2" x 3 1/2"	2 1/2" x 2 1/2"	1 1/4"	1 1/2" x 1 5/16"	1 5/8" x 1 1/4"	1 3/4" x 1 1/4"



**CORNER POST**

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**CHAIN LINK FENCE**  
 NO SCALE

RSP A85 DATED JUNE 5, 2009 SUPERSEDES STANDARD PLAN A85  
 DATED MAY 1, 2006 - PAGE 111 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP A85**

2006 REVISED STANDARD PLAN RSP A85

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Sha	299	74.8	23	65

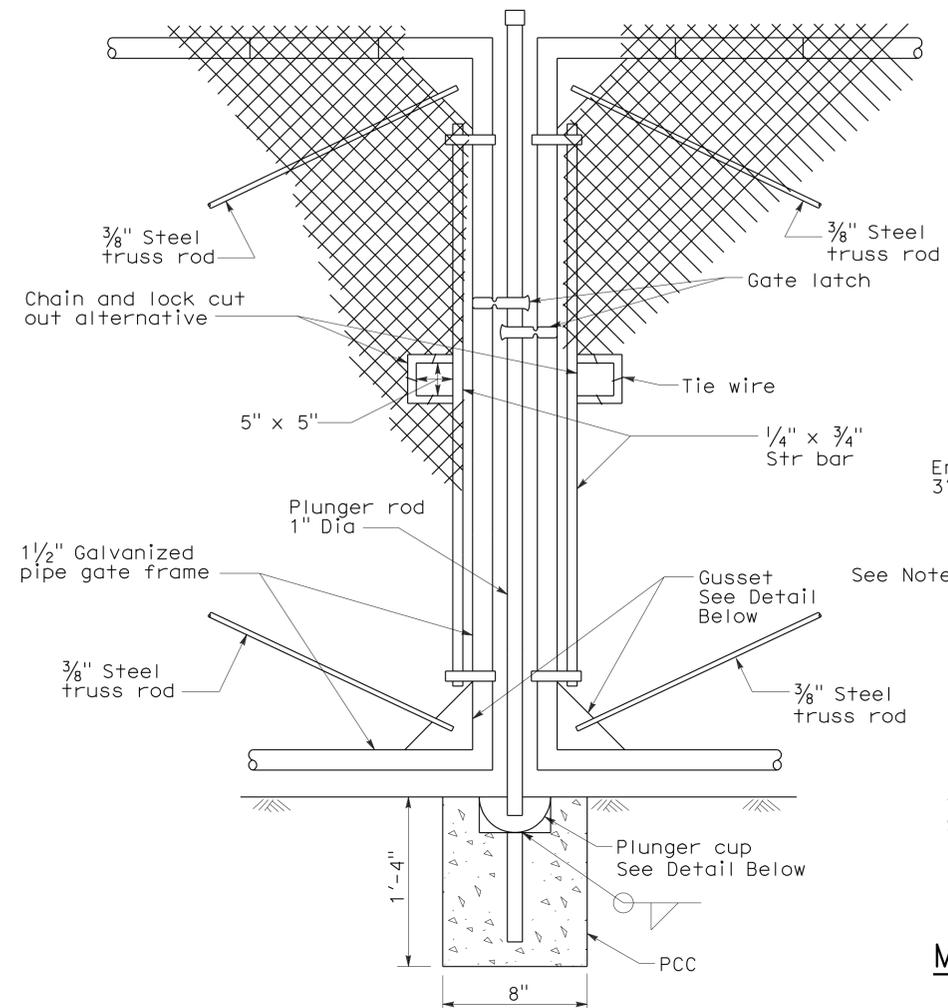
Glenn DeCou  
 REGISTERED CIVIL ENGINEER  
 No. C34547  
 Exp. 9-30-09  
 CIVIL  
 STATE OF CALIFORNIA

June 5, 2009  
 PLANS APPROVAL DATE

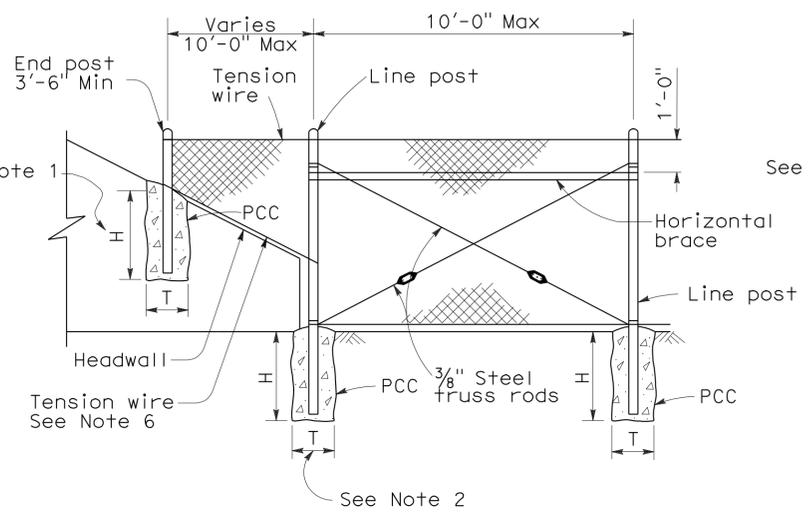
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To accompany plans dated 6-20-11

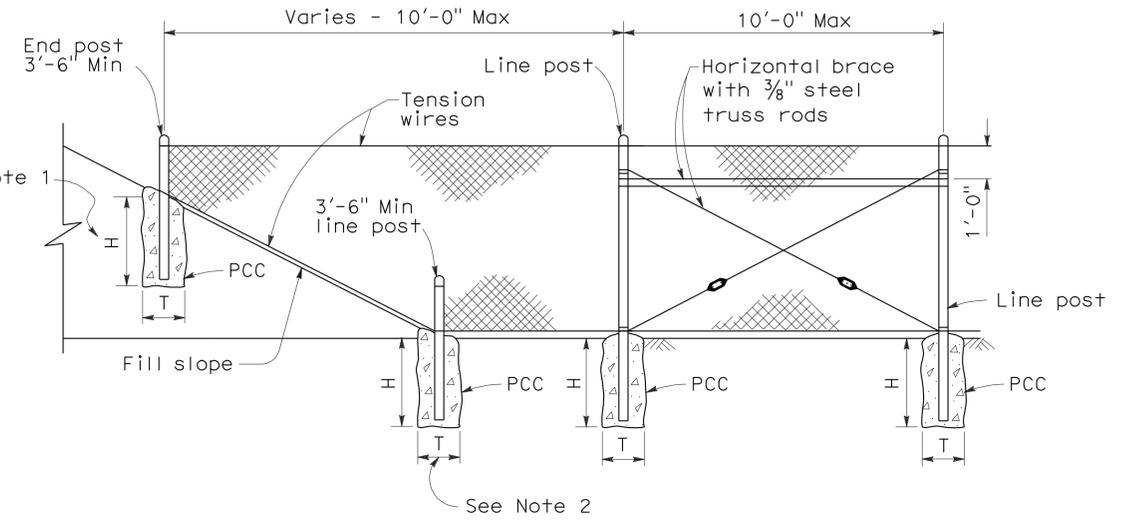
- NOTES:**
- H is 2'-6" for fabric less than 5'-0" high.  
H is 3'-0" for fabric 5'-0" and over.
  - T is not less than 3 times maximum cross section of post with minimum of 8".
  - Arms with barbed wire to be used where shown on plans.
  - See Revised Standard Plan RSP A85 for Chain Link Fencing dimensions.
  - Reinforcing must comply with ASTM A 706.
  - See Detail A on New Standard Plan NSP A86B for connection at headwall.



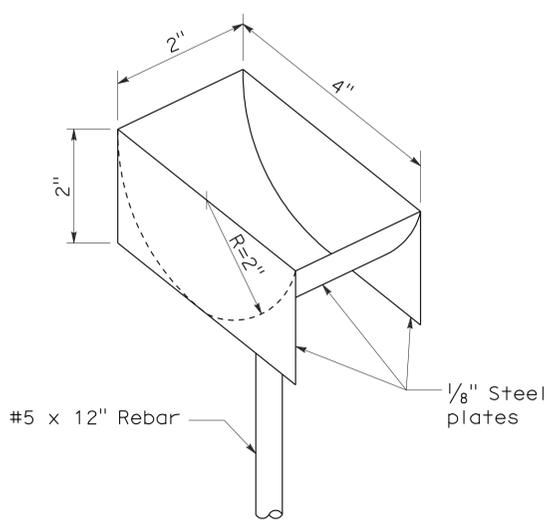
**TYPICAL DOUBLE GATE REMOVABLE CENTER POST**



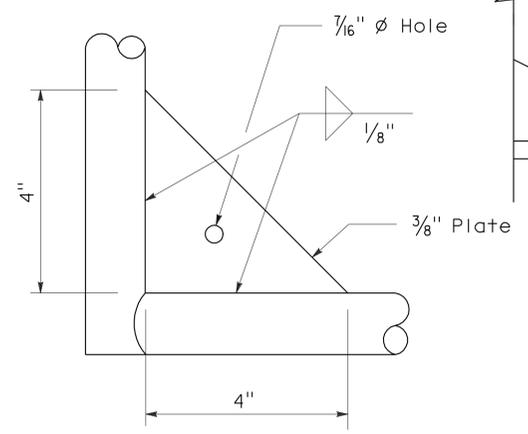
**METHOD OF TYING FENCE TO HEADWALL**



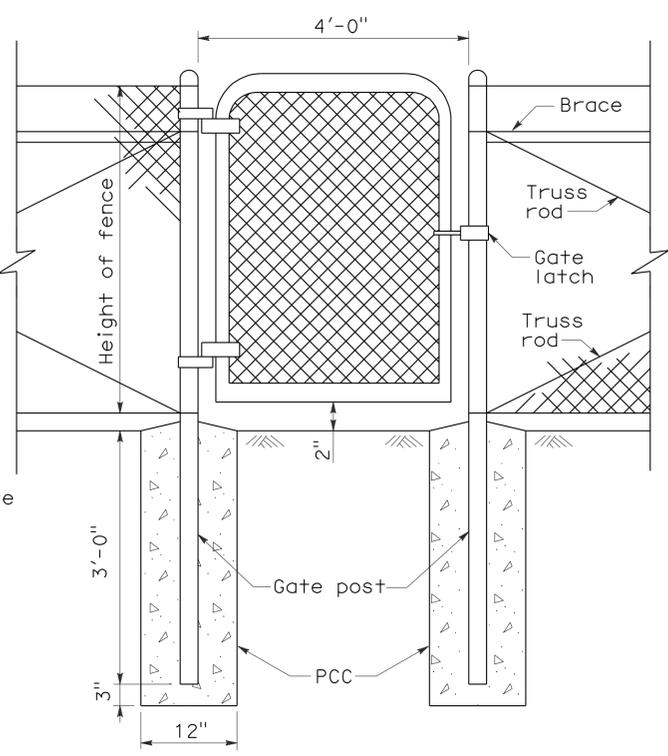
**METHOD OF ERECTING FENCE FOR FILL SLOPE**



**PLUNGER CUP DETAIL**



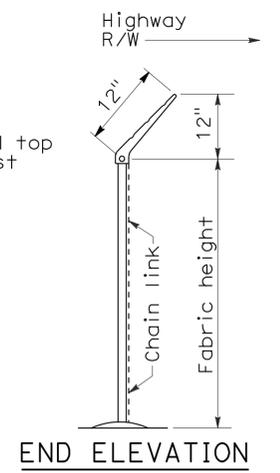
**GUSSET DETAIL**



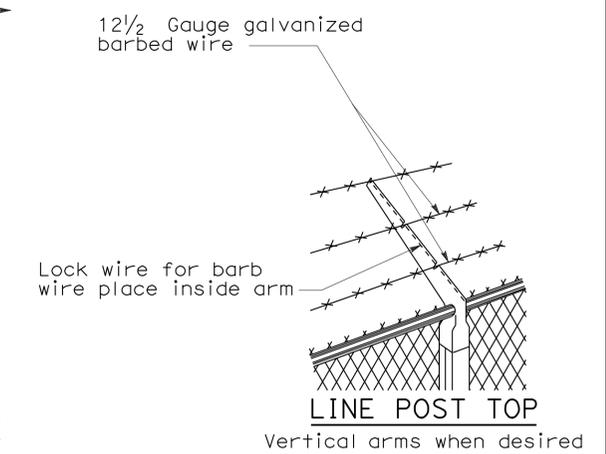
**WALK GATE**



**POST TOP END**



**BARBED WIRE POST TOP**  
See Note 3



STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**CHAIN LINK FENCE DETAILS**  
 NO SCALE

NSP A85A DATED JUNE 5, 2009 SUPPLEMENTS THE STANDARD PLANS BOOK DATED MAY 2006.

**NEW STANDARD PLAN NSP A85A**

2006 NEW STANDARD PLAN NSP A85A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Sha	299	74.8	24	65

Glenn De Cou  
 REGISTERED CIVIL ENGINEER  
 No. C34547  
 Exp. 9-30-09  
 STATE OF CALIFORNIA

June 5, 2009  
 PLANS APPROVAL DATE

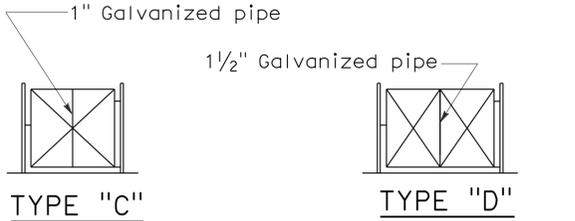
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To accompany plans dated 6-20-11



**TYPE "A"**  
3' and 6' Single  
6' and 12' Double

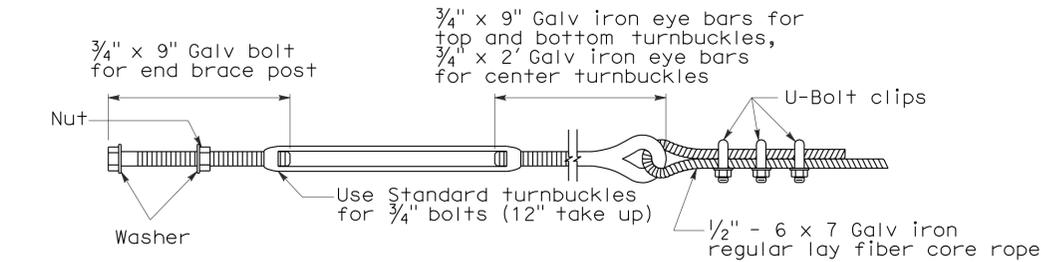
**TYPE "B"**  
Over 6' to 12' Single.  
Over 12' to 24' Double



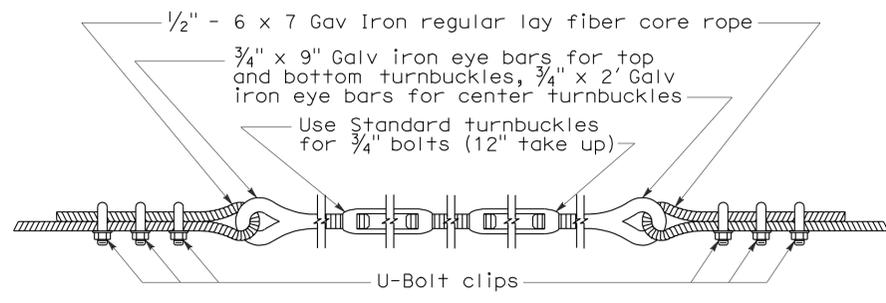
**TYPE "C"**  
Over 12' to 18' Single  
Over 24' to 36' Double.

**TYPE "D"**  
Over 18' to 24' Single  
Over 36' to 48' Double

**TYPICAL FRAMEWORK SHOWING NUMBER OF BAYS IN GATE**



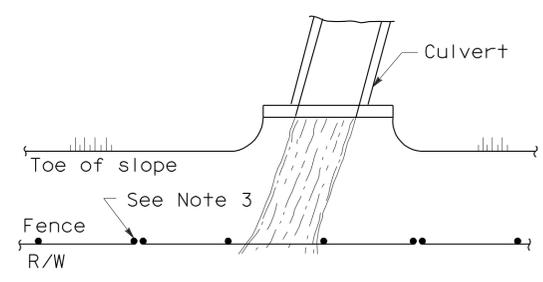
**TURNBUCKLE A**



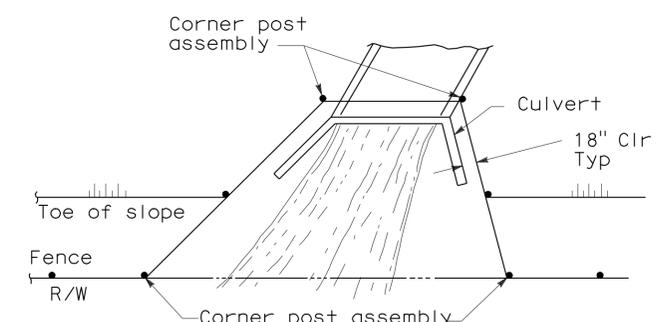
**TURNBUCKLE B**

**NOTES:**

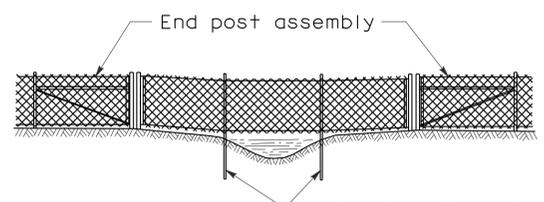
1. All material for abutment connection to be galvanized.
2. The chain link fabric shall be replaced by barbed wire strands at 12" maximum centers between the double posts.
3. When the width of the culvert makes it necessary to anchor a post to the top of the culvert, a cast iron shoe or other device approved by the Engineer shall be used.
4. Fencing over stream and around headwall may also use Barbed Wire or Wire Mesh fencing with either wood post or steel post installation.
5. See Revised Standard Plan RSP A85 for Chain Link fence dimensions. See Standard Plan A86 for Barbed Wire and Wire Mesh fence dimensions and for wood post and steel post installation.



**PLAN**

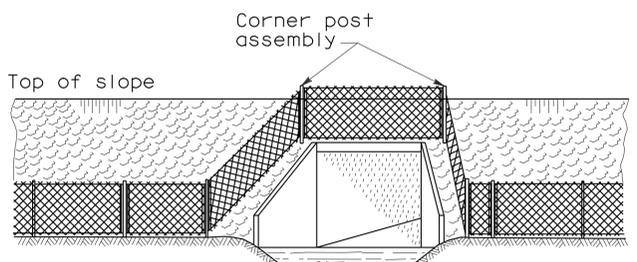


**PLAN**



**ELEVATION**

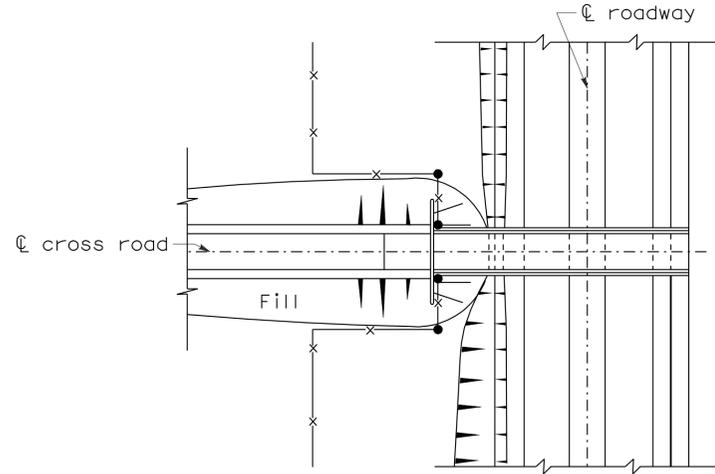
**INSTALLATION OVER STREAM**



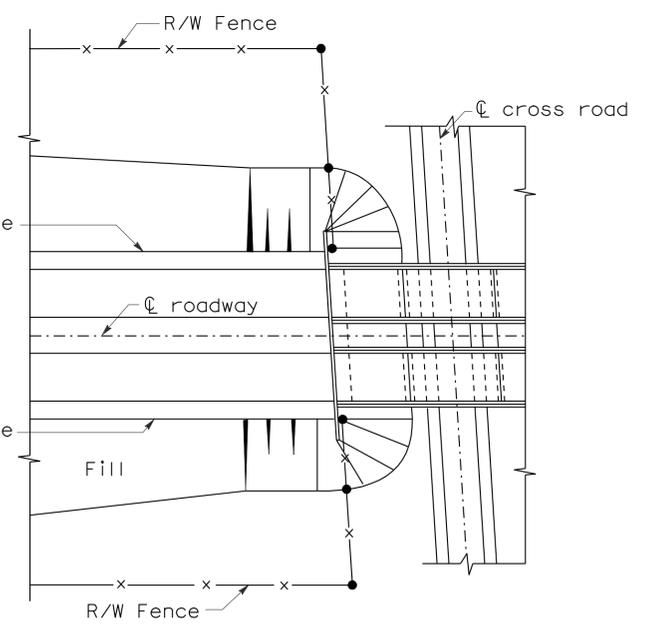
**ELEVATION**

**INSTALLATION AROUND HEADWALL**

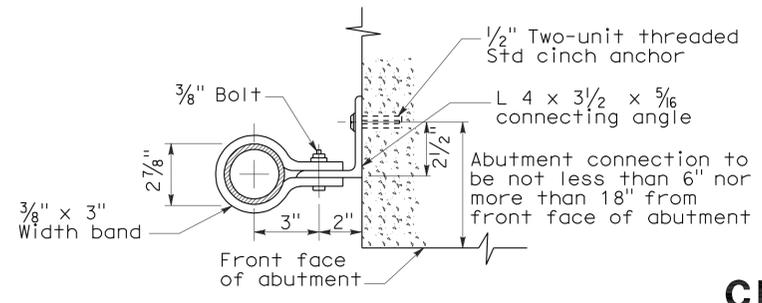
See Note 4



**PLAN OF ROADWAY - UNDERPASS**



**PLAN OF ROADWAY - OVERPASS**



**ABUTMENT CONNECTION**

**TYPICAL INSTALLATION AT BRIDGES**

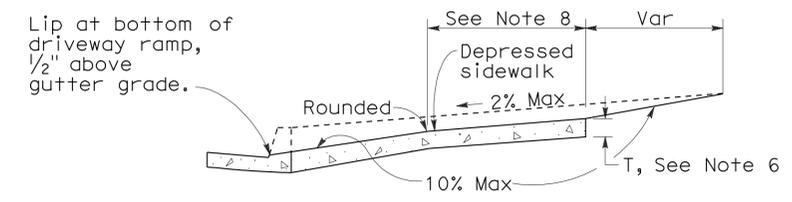
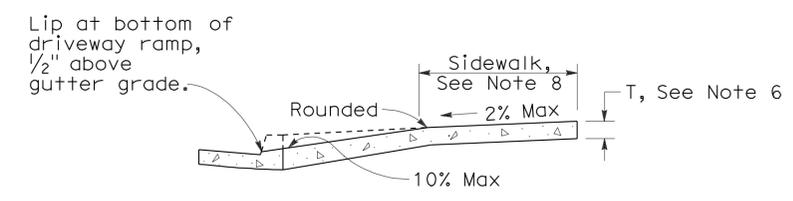
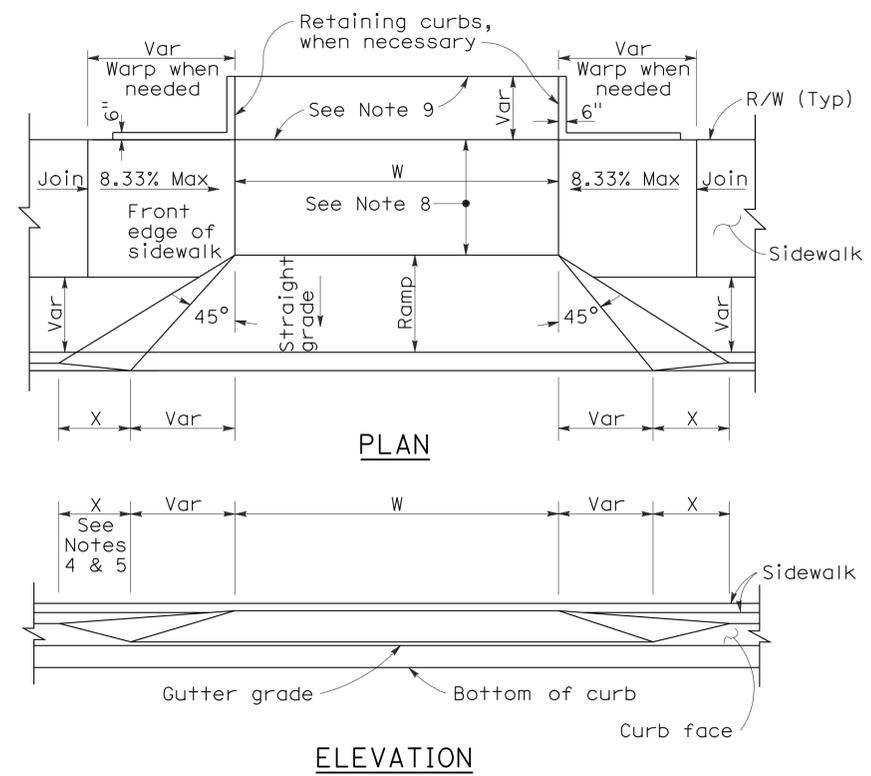
**CHAIN LINK FENCE DETAILS**

NO SCALE

NSP A85B DATED JUNE 5, 2009 SUPPLEMENTS THE STANDARD PLANS BOOK DATED MAY 2006.

**NEW STANDARD PLAN NSP A85B**

2006 NEW STANDARD PLAN NSP A85B



**CASE A**

Typical driveway, sidewalk not depressed

**CASE B**

Driveway with depressed sidewalk

**SECTIONS**

**CURB QUANTITIES**

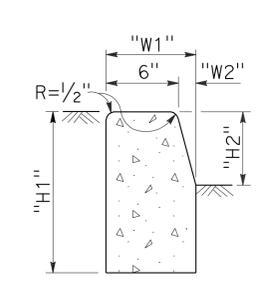
TYPE	CUBIC YARDS PER LINEAR FOOT
A1-6	0.02585
A1-8	0.03084
A2-6	0.05903
A2-8	0.06379
A3-6	0.01036
A3-8	0.01435
B1-4	0.02185
B1-6	0.02930
B2-4	0.05515
B2-6	0.06171
B3-4	0.00641
B3-6	0.01074
B4	0.05709
D-4	0.04083
D-6	0.06804
E	0.06661

**TABLE A**

CURB TYPE	DIMENSIONS			
	"H1"	"H2"	"W1"	"W2"
A1-6	1'-2"	6"	7 1/2"	1 1/2"
A1-8	1'-4"	8"	8"	2"
A2-6	1'-0"	6"	2'-7 1/2"	1 1/2"
A2-8	1'-2"	8"	2'-8"	2"
A3-6	6"	5"	7 1/4"	1 1/4"
A3-8	8"	7"	7 3/4"	1 3/4"
B1-4	1'-0"	4"	7 1/2"	2 1/2"
B1-6	1'-2"	6"	9"	4"
B2-4	10"	4"	2'-7 1/2"	2 1/2"
B2-6	1'-0"	6"	2'-9"	4"
B3-4	4"	3"	7"	2"
B3-6	6"	5"	8 1/2"	3 1/2"
D-4	10"	4"	1'-6"	1'-1"
D-6	1'-0"	6"	2'-2"	1'-8"

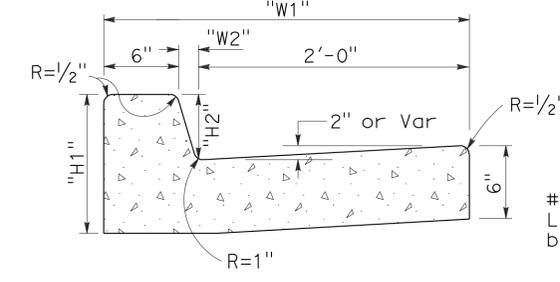
To accompany plans dated 6-20-11

**DRIVEWAYS**



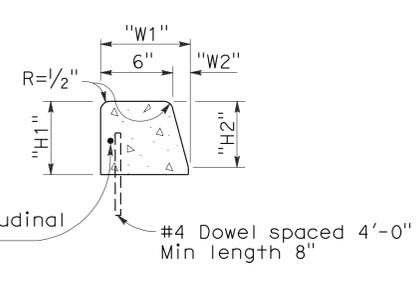
**TYPE A1 CURBS**

See Table A



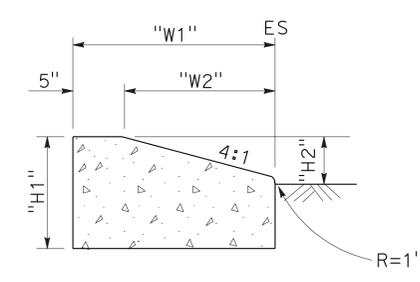
**TYPE A2 CURBS**

See Table A



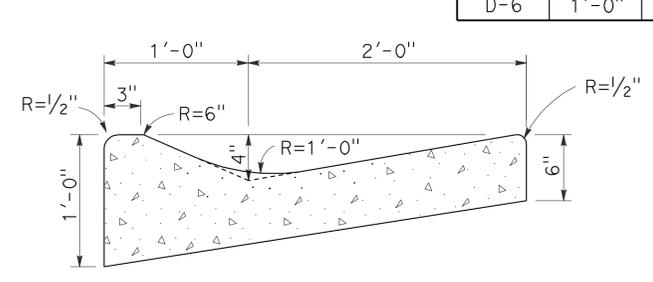
**TYPE A3 CURBS**

Superimposed on existing pavement  
See Table A

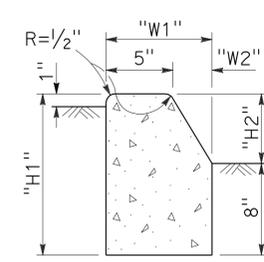


**TYPE D CURBS**

See Table A

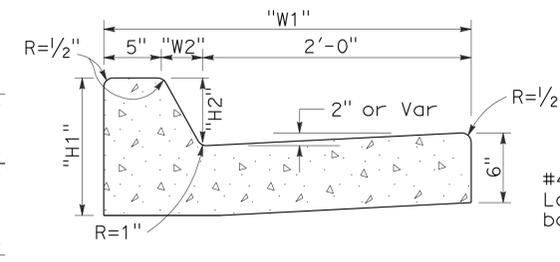


**TYPE E CURB**



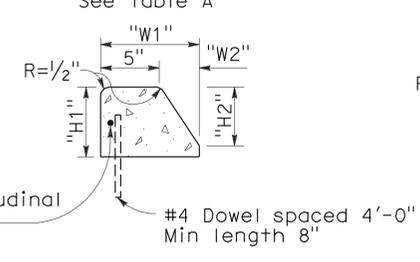
**TYPE B1 CURBS**

See Table A



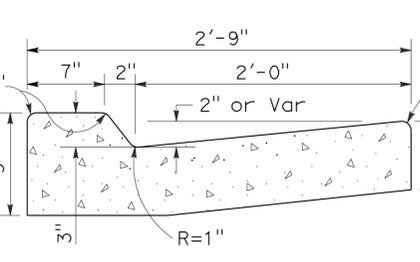
**TYPE B2 CURBS**

See Table A

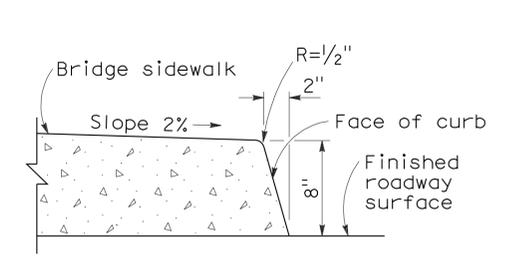


**TYPE B3 CURBS**

Superimposed on existing pavement  
See Table A



**TYPE B4 CURBS**



**TYPE H CURB**

On Bridges

**NOTES:**

- Case A driveway section typically applies.
- Use Case B driveway section when ramp slopes would exceed 10% in Case A.
- Use Case B driveway section when sidewalk cross slope would exceed 2% in Case A.
- X=3'-0" except for curb heights over 10" where 4:1 slopes shall be used on curb slope.
- X is a variable when sidewalk is located where wheelchairs may traverse the surface. Slopes shall not exceed 8.33%.
- Sidewalk and ramp thickness "T" at driveway shall be 4" for residential and 6" for commercial.
- Difference in slope of the driveway ramp and the slope of a line between the gutter and a point on the roadway 5'-0" from gutter line shall not exceed 15%. Reduce driveway ramp slope, not gutter slope, where required.
- Minimum width of clear passageway for sidewalk shall be 4'-0".
- Retaining curbs and acquisition of construction easement may be necessary for narrow sidewalks or curb heights in excess of 6".
- Across the pedestrian route at curb ramp locations, the gutter pan slope shall not exceed 1" of depth for each 2'-0" of width.

**CURBS**

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**CURBS AND DRIVEWAYS**

NO SCALE

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Sha	299	74.8	26	65

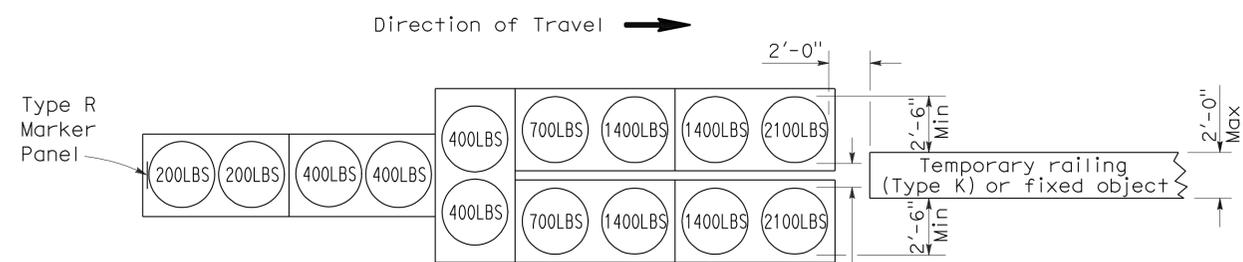
*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

June 6, 2008  
PLANS APPROVAL DATE

*Randell D. Hiatt*  
REGISTERED PROFESSIONAL ENGINEER  
No. C50200  
Exp. 6-30-09  
CIVIL  
STATE OF CALIFORNIA

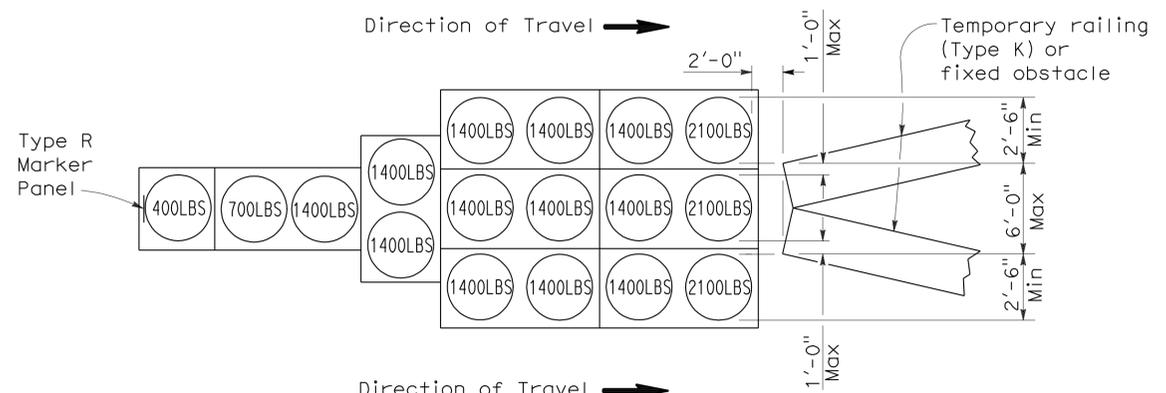
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To accompany plans dated 6-20-11



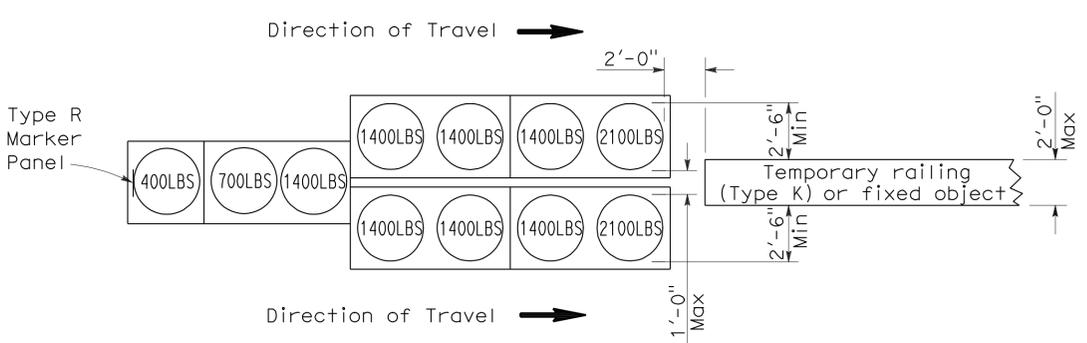
**ARRAY 'TU14'**

Approach speed 45 mph or more



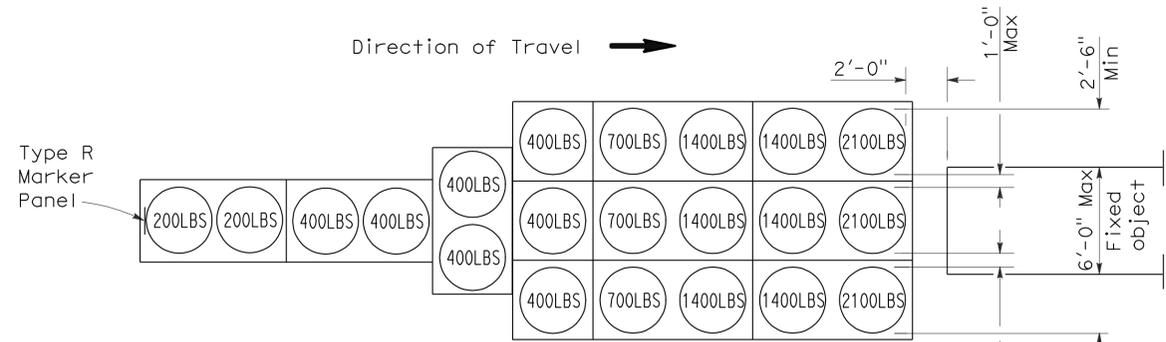
**ARRAY 'TU17'**

Approach speed less than 45 mph



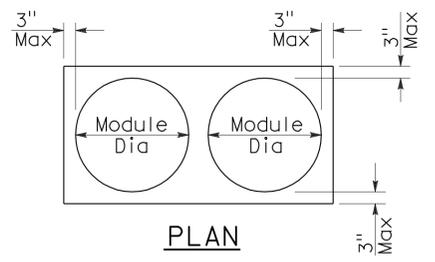
**ARRAY 'TU11'**

Approach speed less than 45 mph

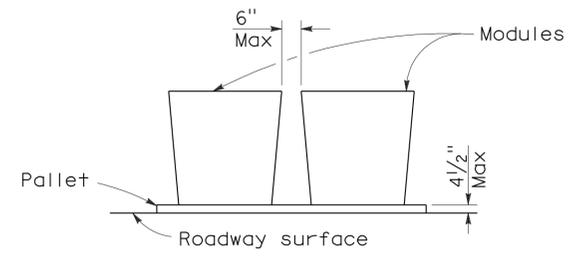


**ARRAY 'TU21'**

Approach speed 45 mph or more



**PLAN**



**ELEVATION**

**CRASH CUSHION PALLET DETAIL**

See Note 7

**NOTES:**

1. (XXX) Indicates sand filled module location and weight of sand in pounds for each module. Module spacing is based on the greater diameter of the module.
2. All sand weights are nominal.
3. Temporary crash cushion arrays shall not encroach on the traveled way.
4. Place the top of Type R marker panel 1" below the module lid.
5. Refer to Standard Plan A73B for marker details.
6. Approach speeds indicated conform to NCHRP 350 Report criteria.
7. Use of pallets is optional.

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**TEMPORARY CRASH CUSHION,  
SAND FILLED  
(UNIDIRECTIONAL)**

NO SCALE

RSP T1A DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN T1A  
DATED MAY 1, 2006 - PAGE 211 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP T1A**

2006 REVISED STANDARD PLAN RSP T1A

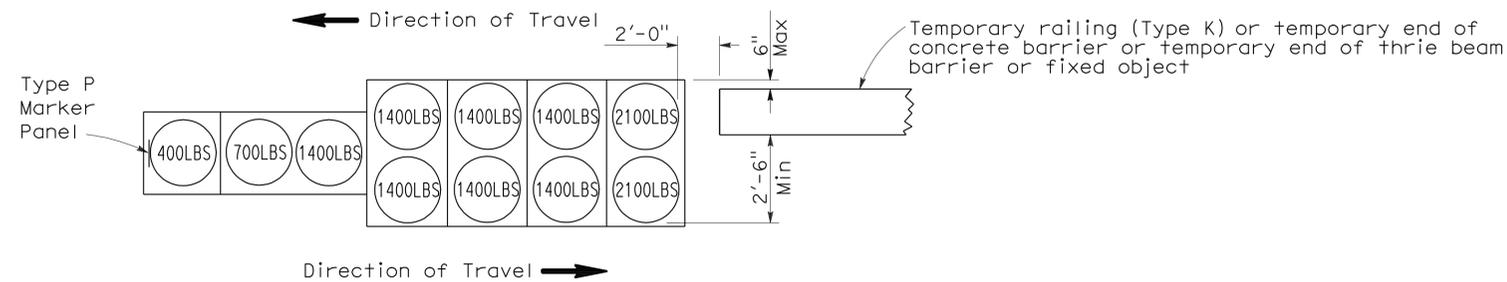
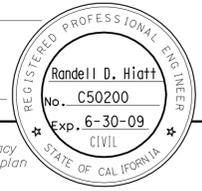
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Sha	299	74.8	27	65

*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

June 6, 2008  
PLANS APPROVAL DATE

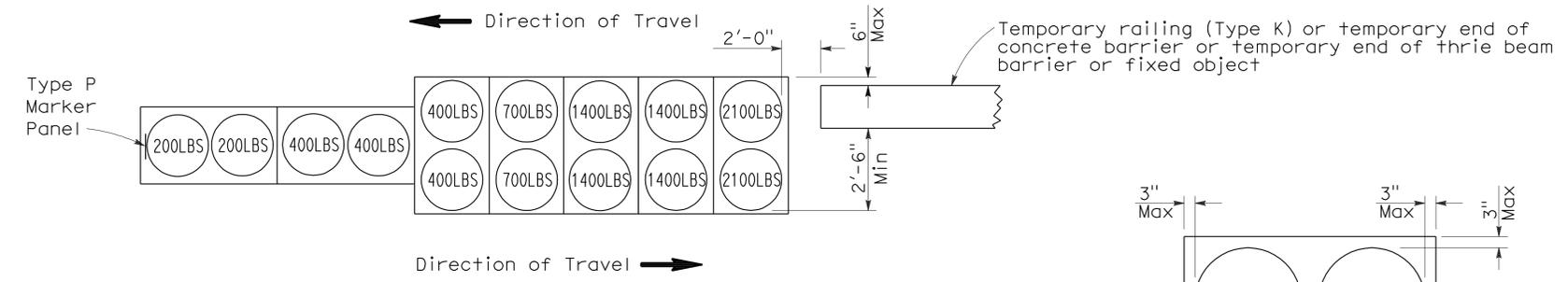
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To accompany plans dated 6-20-11



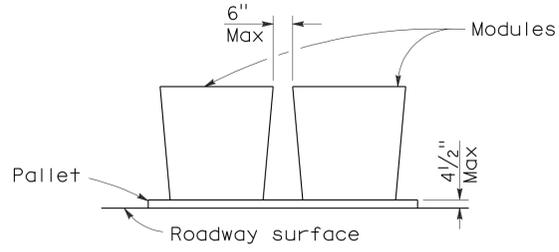
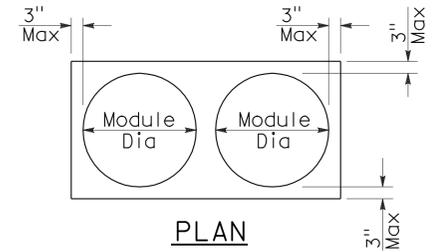
**ARRAY 'TB11'**

Approach speed less than 45 mph



**ARRAY 'TB14'**

Approach speed 45 mph or more



**CRASH CUSHION PALLET DETAIL**  
See Note 7

**NOTES:**

1. (XXX) Indicates sand filled module location and weight of sand in pounds for each module. Module spacing is based on the greater diameter of the module.
2. All sand weights are nominal.
3. Temporary crash cushion arrays shall not encroach on the traveled way.
4. Place the Type P marker panel so that the bottom of the panel rests upon the pallet.
5. Refer to Standard Plan A73B for marker details.
6. Approach speeds indicated conform to NCHRP 350 Report criteria.
7. Use of pallets is optional.

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**TEMPORARY CRASH CUSHION,  
SAND FILLED  
(BIDIRECTIONAL)**

NO SCALE

RSP T1B DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN T1B  
DATED MAY 1, 2006 - PAGE 212 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP T1B**

2006 REVISED STANDARD PLAN RSP T1B

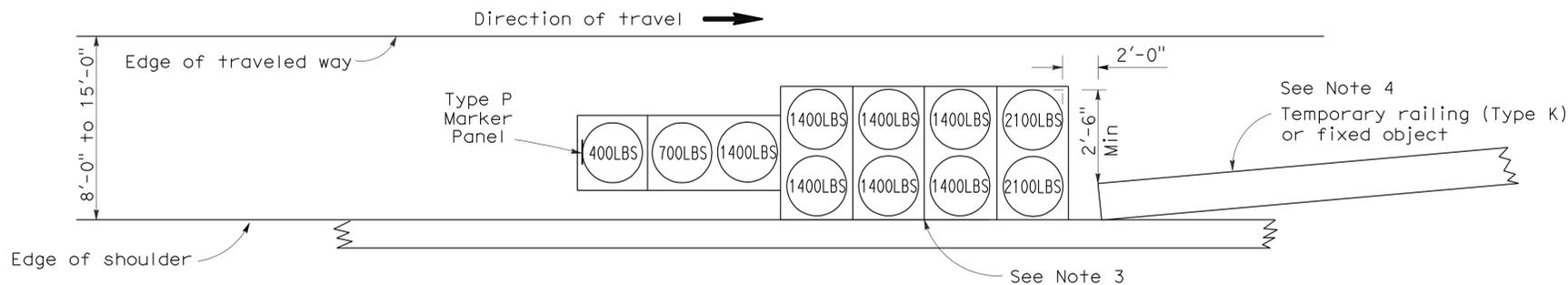
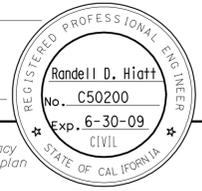
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Sha	299	74.8	28	65

*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

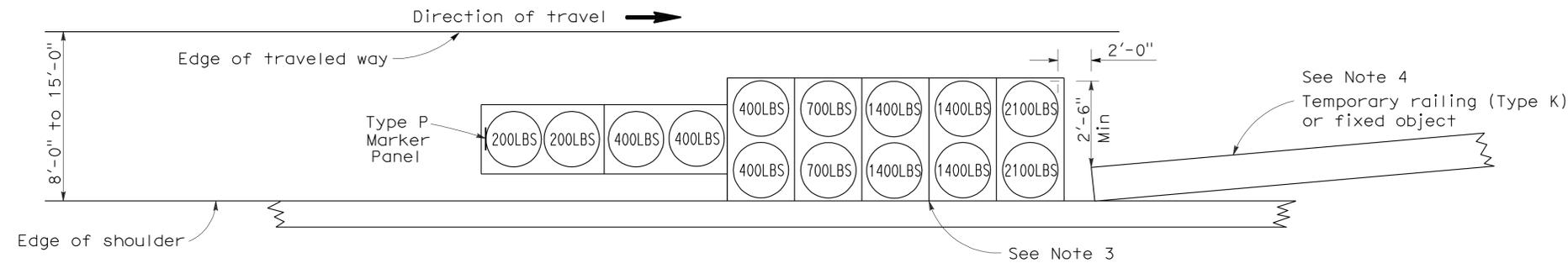
June 6, 2008  
PLANS APPROVAL DATE

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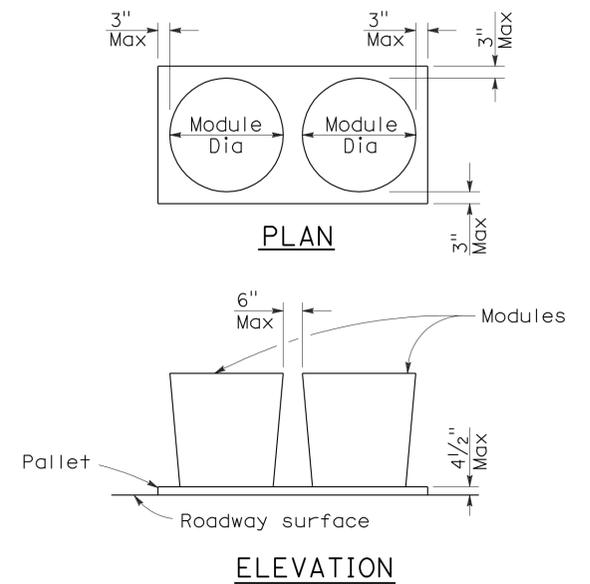
To accompany plans dated 6-20-11



**ARRAY 'TS11'**  
Approach speed less than 45 mph  
See Note 9



**ARRAY 'TS14'**  
Approach speed 45 mph or more  
See Note 9



**CRASH CUSHION PALLET DETAIL**  
See Note 11

**NOTES:**

- (XXX) Indicates sand filled module location and weight of sand in pounds for each module. Module spacing is based on the greater diameter of the module.
- All sand weights are nominal.
- The temporary crash cushion arrays shown on this plan shall be used only in locations where there will be traffic on one side of the temporary crash cushion array.
- If the fixed object or approach end of the temporary railing is less than 15'-0" from the edge of traveled way, a temporary crash cushion is required in a construction or work zone.
- Temporary crash cushion arrays shall not encroach on the traveled way.
- Arrays for median shoulders shall conform to details shown on this plan for outside shoulders.
- Place the Type P marker panel so that the bottom of the panel rests upon the pallet and faces traffic.
- Refer to Standard Plan A73B for marker details.
- For shoulder widths less than 8'-0", appropriate approved crash cushion protection, other than sand filled modules, shall be provided at fixed objects and at approach ends of temporary railing. The specific type of crash cushion shall be as shown on the project plans or as specified in the Special Provisions, or if not shown on the project plans or specified in the Special Provisions, shall be as approved by the Engineer.
- Approach speeds indicated conform to NCHRP 350 Report criteria.
- Use of pallets is optional.

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**TEMPORARY CRASH CUSHION,  
SAND FILLED  
(SHOULDER INSTALLATIONS)**

NO SCALE  
RSP T2 DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN T2  
DATED MAY 1, 2006 - PAGE 213 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP T2**

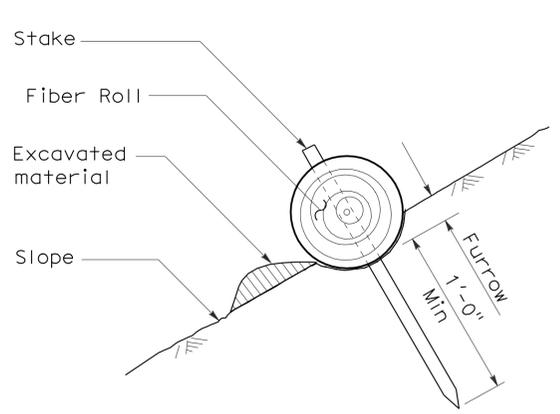
2006 REVISED STANDARD PLAN RSP T2



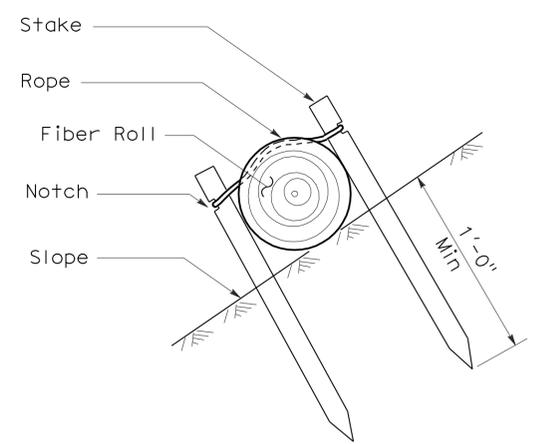
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Sha	299	74.8	30	65

*Robert B. Schott*  
 LICENSED LANDSCAPE ARCHITECT  
 April 3, 2009  
 PLANS APPROVAL DATE  
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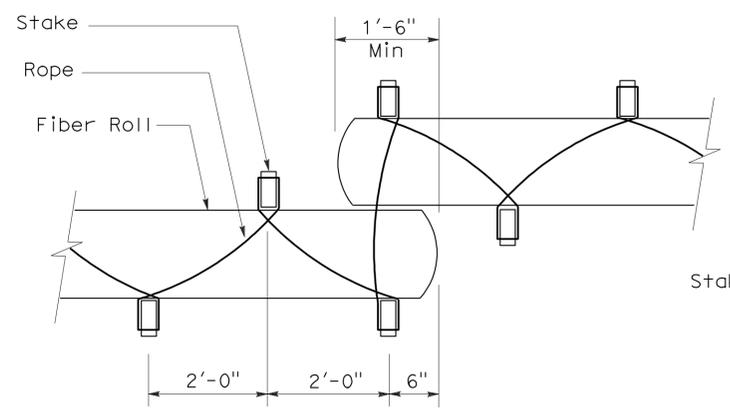
To accompany plans dated 6-20-11



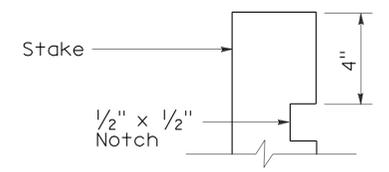
**SECTION**  
**TEMPORARY FIBER ROLL**  
**(TYPE 1)**



**SECTION**  
**TEMPORARY FIBER ROLL**  
**(TYPE 2)**

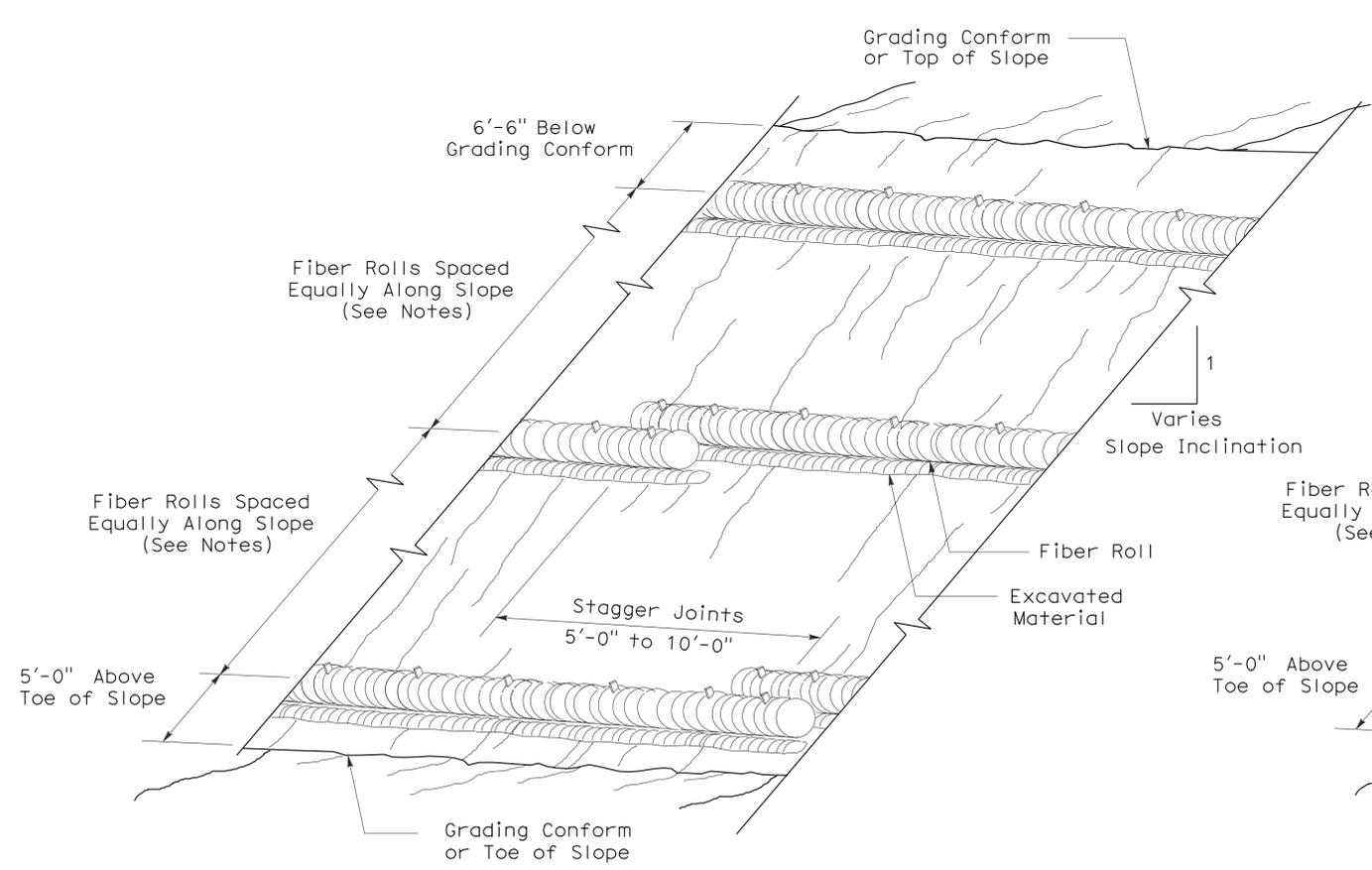


**PLAN**

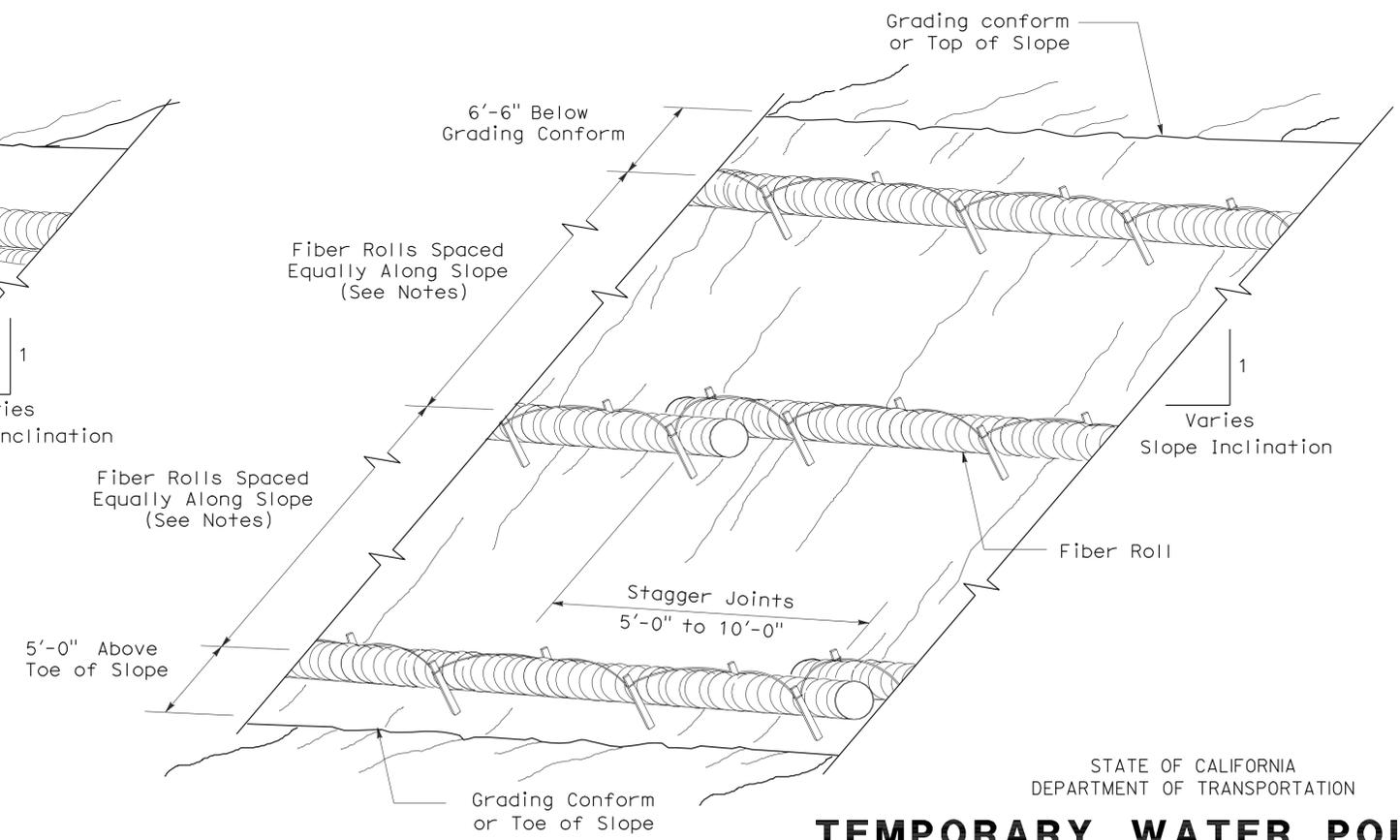


**ELEVATION**  
**STAKE NOTCH DETAIL**

- NOTES:**
1. Temporary fiber roll spacing varies depending upon slope inclination.
  2. Installations shown in the perspectives are for slope inclination of 10:1 and steeper.



**PERSPECTIVE**  
**TEMPORARY FIBER ROLL (TYPE 1)**



**PERSPECTIVE**  
**TEMPORARY FIBER ROLL (TYPE 2)**

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION

**TEMPORARY WATER POLLUTION CONTROL DETAILS**  
**(TEMPORARY FIBER ROLL)**

NO SCALE

RSP T56 DATED APRIL 3, 2009 SUPERSEDES STANDARD PLAN T56  
 DATED MAY 1, 2006 - PAGE 232 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP T56**

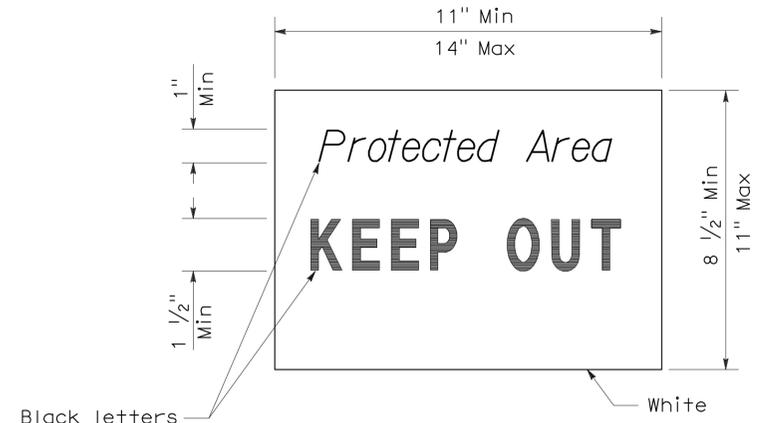
2006 REVISED STANDARD PLAN RSP T56

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Sha	299	74.8	31	65

*Robert B. Schott*  
 LICENSED LANDSCAPE ARCHITECT  
 April 3, 2009  
 PLANS APPROVAL DATE  
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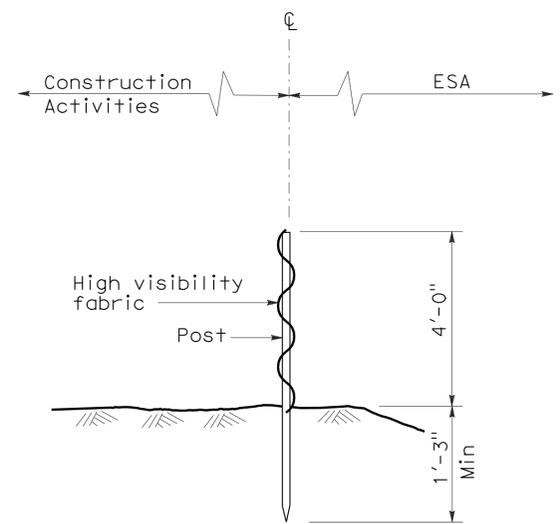
To accompany plans dated 6-20-11



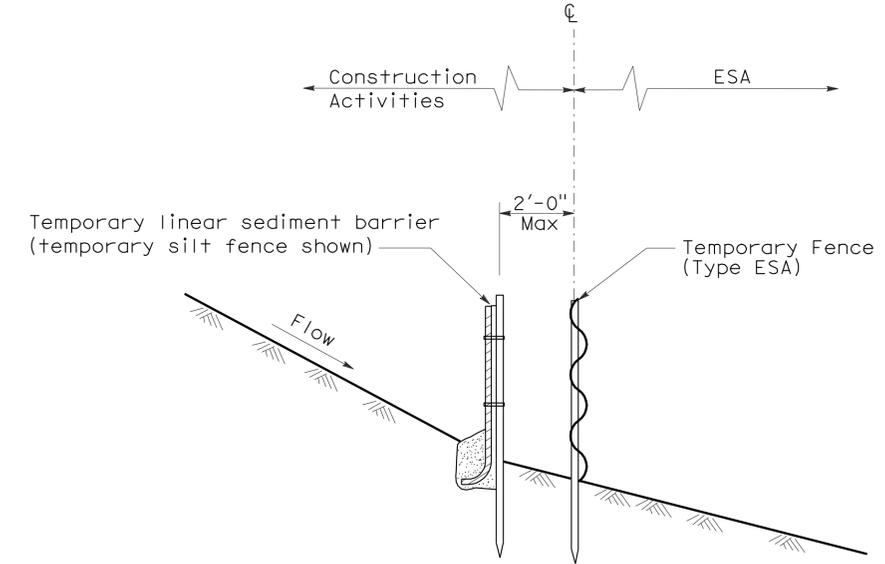
SIGN DETAIL

**NOTE:**

1. Temporary silt fence and temporary straw bale barrier shown for reference purposes only.

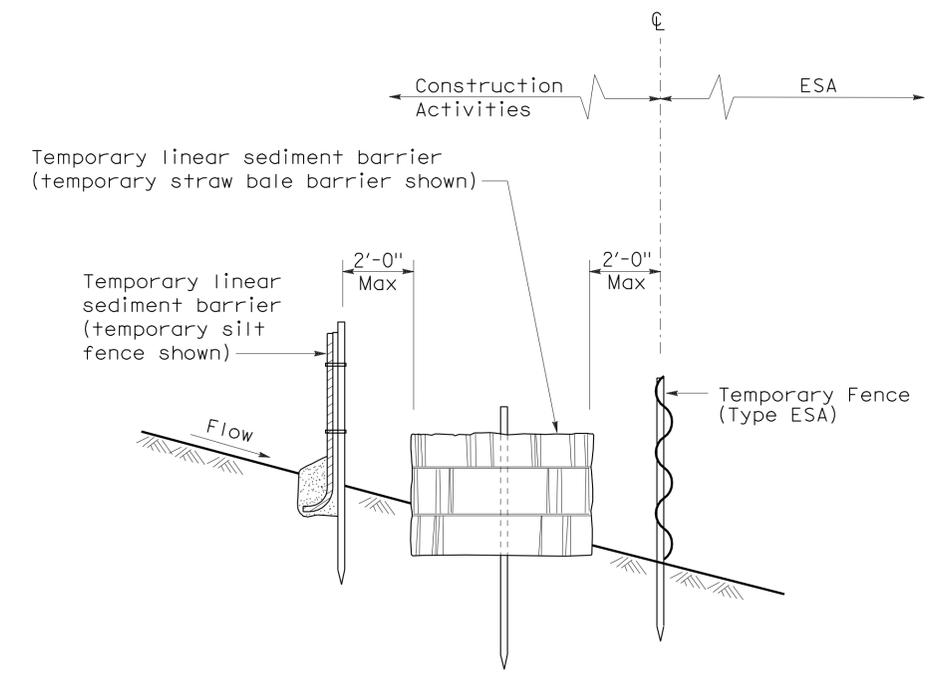


SECTION  
TEMPORARY FENCE (TYPE ESA)



SECTION  
PLACEMENT DETAIL  
FOR TEMPORARY LINEAR SEDIMENT BARRIER  
USED WITH TEMPORARY FENCE (TYPE ESA)

(See Note 1 )



SECTION  
PLACEMENT DETAIL  
FOR TEMPORARY SILT FENCE  
AND TEMPORARY STRAW BALE BARRIER  
USED WITH TEMPORARY FENCE (TYPE ESA)

(See Note 1 )

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**TEMPORARY WATER POLLUTION CONTROL DETAILS**  
**[TEMPORARY FENCE (TYPE ESA)]**

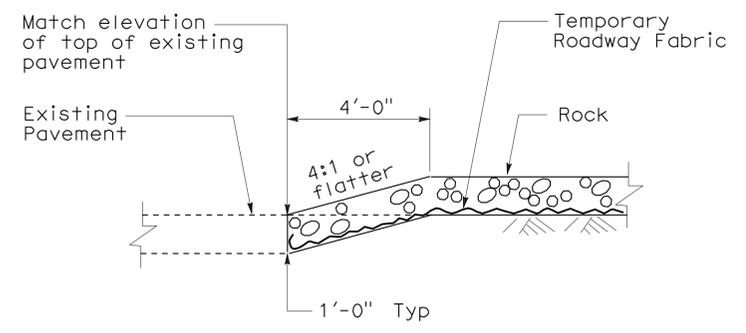
NO SCALE

NSP T65 DATED APRIL 3, 2009 SUPPLEMENTS  
THE STANDARD PLANS BOOK DATED MAY 2006.

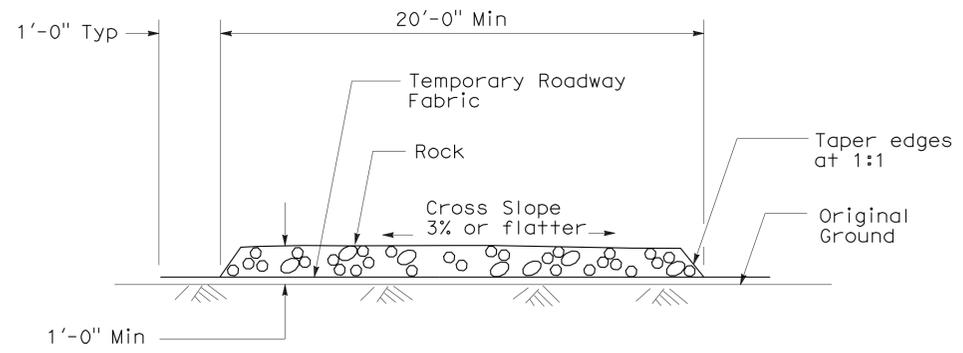
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Sha	299	74.8	32	65

*Robert B. Schott*  
 LICENSED LANDSCAPE ARCHITECT  
 June 5, 2009  
 PLANS APPROVAL DATE  
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To accompany plans dated 6-20-11



SECTION  
CONFORM DETAIL

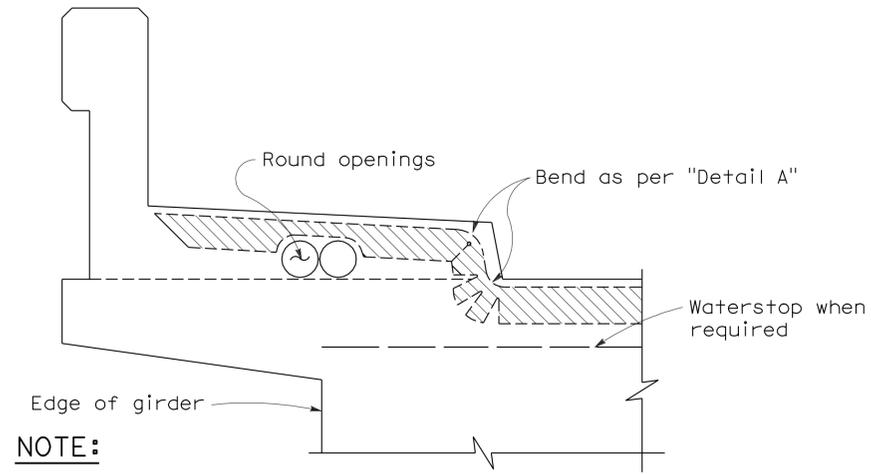
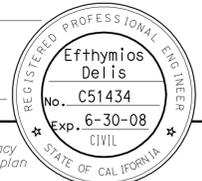


SECTION  
TEMPORARY CONSTRUCTION ROADWAY

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**TEMPORARY WATER POLLUTION  
CONTROL DETAILS  
(TEMPORARY CONSTRUCTION  
ROADWAY)**

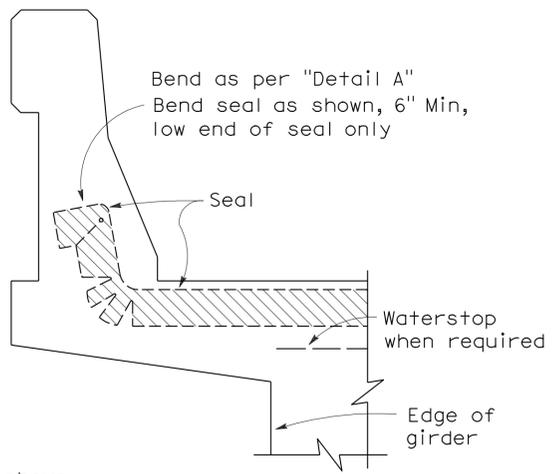
NO SCALE  
NSP T67 DATED JUNE 5, 2009 SUPPLEMENTS  
THE STANDARD PLANS BOOK DATED MAY 2006.

2006 NEW STANDARD PLAN NSP T67

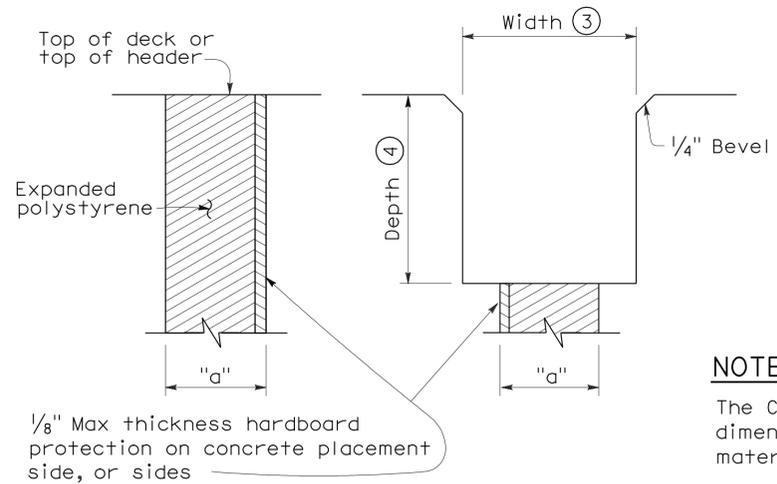


**NOTE:**  
 Type "B" seal shown. Type "A" seals to conform to the general path of seal shown, cuts for bending not required. Bend Type "A" seals 3" up into curb or barrier rail on only the low end of the seal.

**CONCRETE BARRIER AND SIDEWALK**



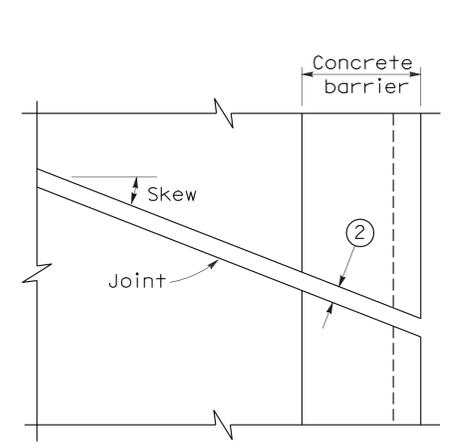
**CONCRETE BARRIER**



**FORMING DETAIL SAWCUT DETAIL**

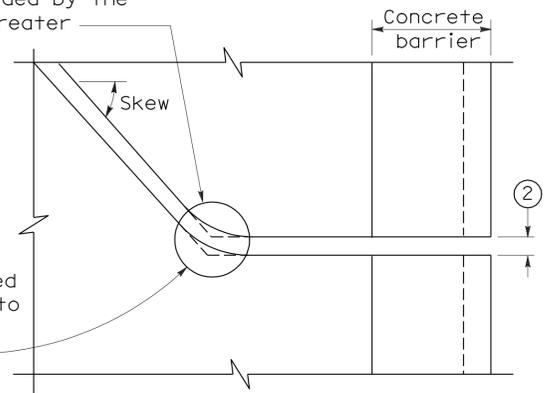
**NOTE:**  
 The Contractor shall verify all controlling field dimensions before ordering or fabricating any material.

**JOINT SEALS DETAILS**



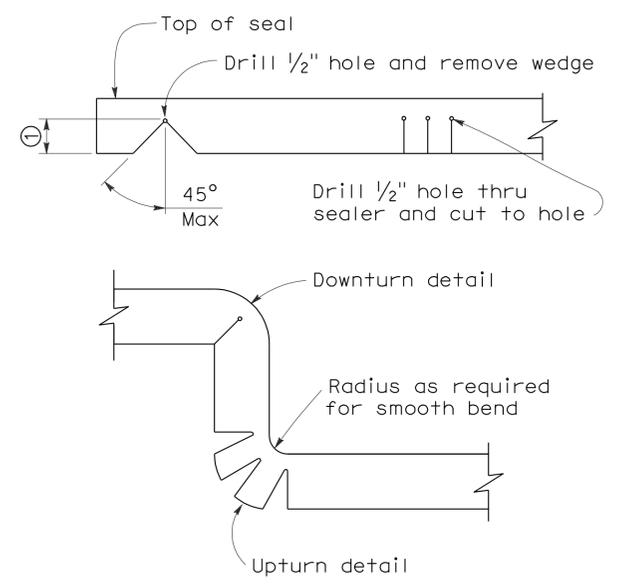
**PLAN OF JOINT (SKEW ≤ 20°)**

Min  $\phi$  radius to be 4 times uncompressed width of seal or as recommended by the manufacturer, whichever is greater



**PLAN OF JOINT (SKEW > 20°)**

In lieu of saw cutting, this area may be blocked out and reconstructed to match saw cutting on both sides.

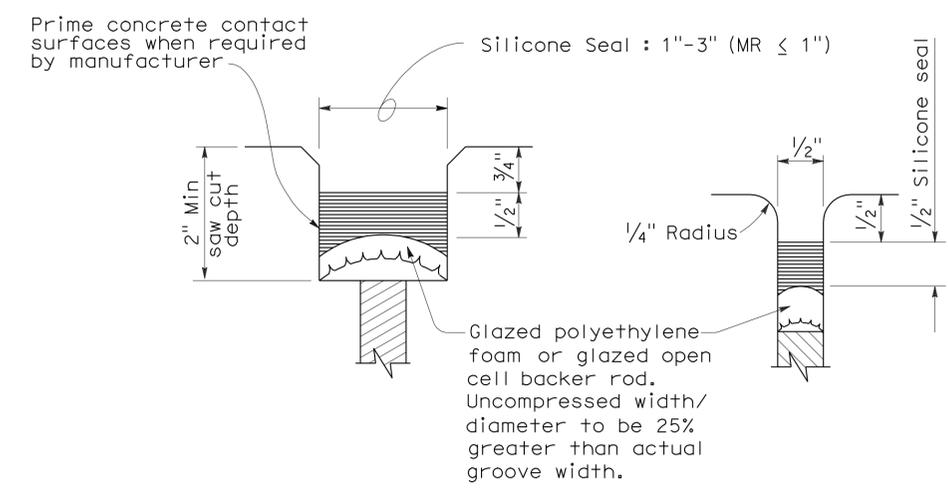


**DETAIL A**

- NOTES:**
- Make smooth cuts from the bottom of seal to 1 1/2" clear of top leaving at least one complete cell between the top of the cut and top of the seal. When necessary cut back of seal to clear conduit and round openings.
  - Opening in barrier to match width of sawn deck joint.
  - Sawcut groove widths shall be as ordered by the Engineer.
  - Depth of sawcut: Type A - Depth to be 2" minimum.  
 Type B - Depth to be equal to or greater than the depth of seal measured along the contact surface, when compressed to minimum width position (W<sub>2</sub>) plus dimensions shown.
  - MR (movement rating) as shown on other plan sheets.
  - Other depths must be approved by the Engineer.

**DIMENSIONS "a" OF JOINT REQUIRED**

Movement Rating (MR) ⑤	Bridge Type	"a" Dimension		
		Deck Concrete Placed		
		Winter	Fall-Spring	Summer
2"	All except CIP/PS	1 1/2"	1 1/4"	3/4"
	CIP/PS	1 1/4"	1"	1/2"
1 1/2"	All except CIP/PS	1 1/4"	1"	1/2"
	CIP/PS	1"	3/4"	1/2"
1"	All except CIP/PS	1"	3/4"	1/2"
	CIP/PS	3/4"	1/2"	1/2"
1/2"	All except CIP/PS	3/4"	3/4"	1/2"
	CIP/PS	1/2"	1/2"	1/2"

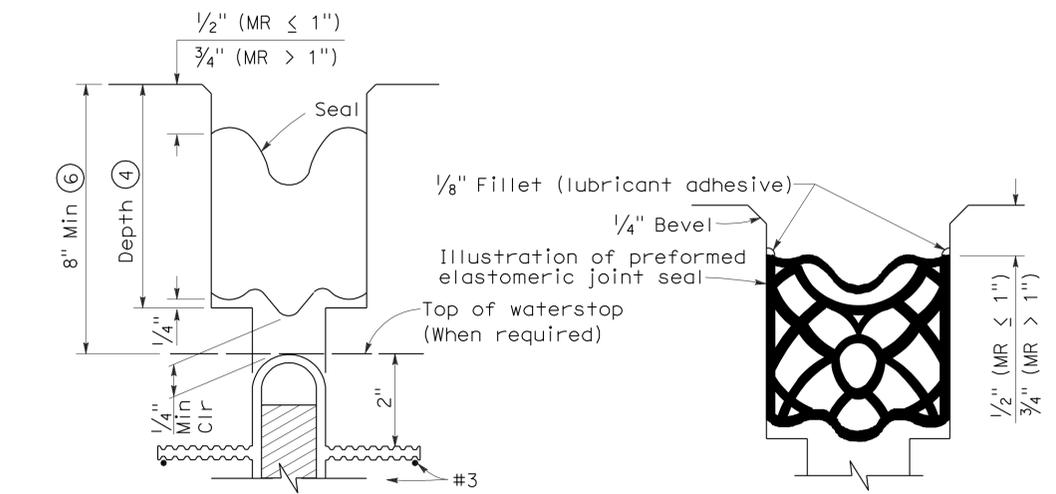


**TYPE A SEAL**

Movement rating : Silicone = 1" Max

**TYPE AL SEAL**

Longitudinal joints only



**TYPE B JOINT SEAL IN MINIMUM WIDTH POSITION (W<sub>2</sub>)**

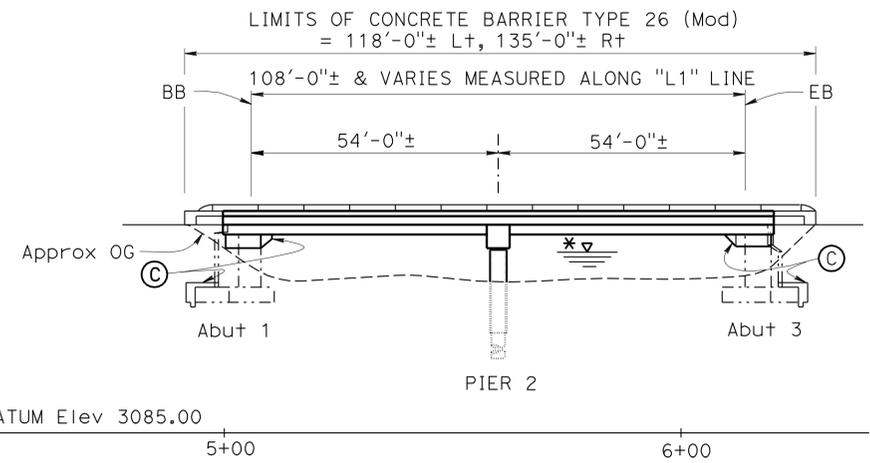
**TYPE B SEAL**

Movement Rating ≤ 2"

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**JOINT SEALS**  
**(MAXIMUM MOVEMENT RATING = 2")**  
 NO SCALE

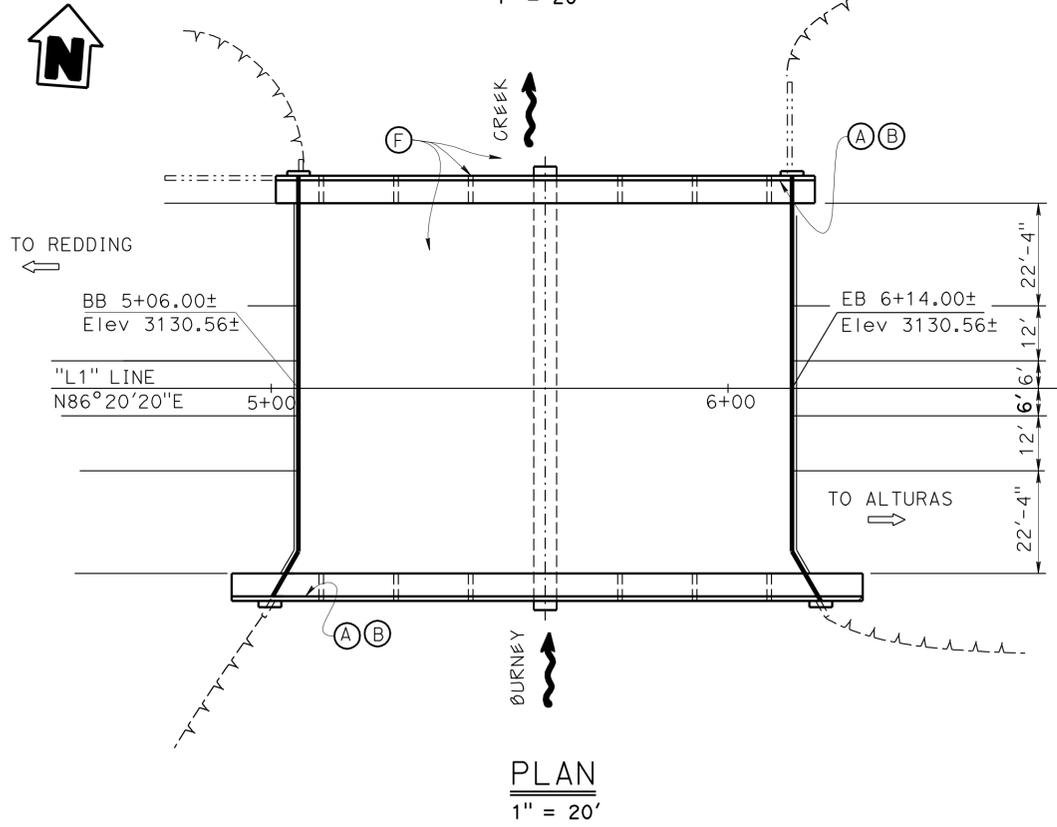
RSP B6-21 DATED OCTOBER 5, 2007 SUPERSEDES STANDARD PLAN B6-21 DATED MAY 1, 2006 - PAGE 258 OF THE STANDARD PLANS BOOK DATED MAY 2006.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
02	Sha	299	74.8	34	65
Jose M. Aquino III REGISTERED CIVIL ENGINEER DATE 3-25-11			6-20-11 PLANS APPROVAL DATE		
Jose M. Aquino III No. 58386 Exp. 12-31-12 CIVIL STATE OF CALIFORNIA			The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.		



\* For "HYDROLOGIC SUMMARY" see "FOUNDATION PLAN"

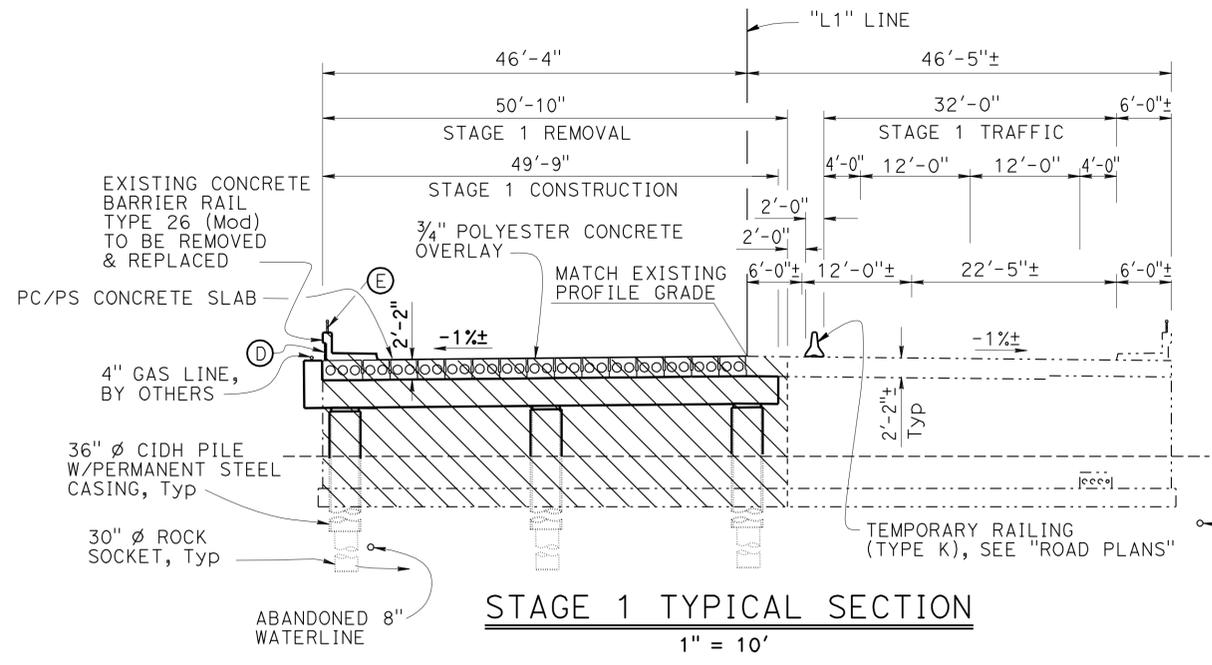
**ELEVATION**  
1" = 20'



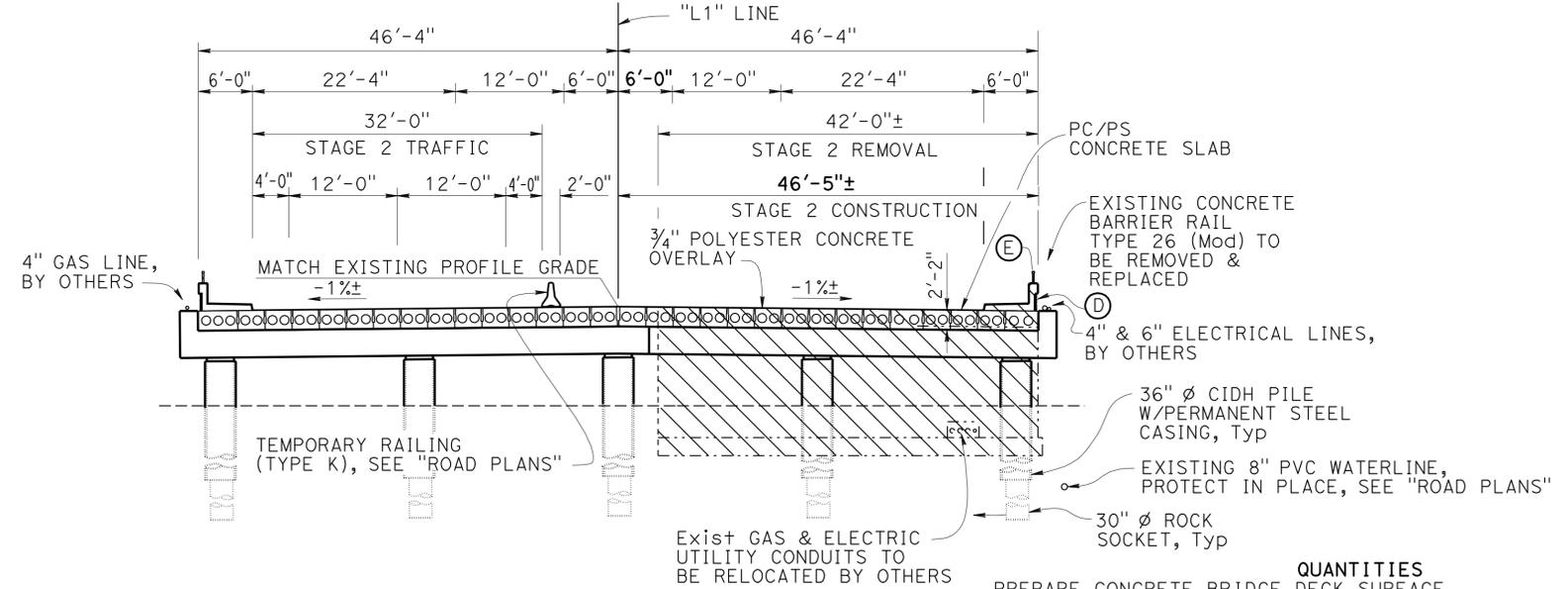
**PLAN**  
1" = 20'

NOTE:  
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

NOTE:  
Existing bridge not shown



**STAGE 1 TYPICAL SECTION**  
1" = 10'



**STAGE 2 TYPICAL SECTION**  
1" = 10'

- LEGEND:**
- INDICATES EXIST STRUCTURE
  - INDICATES NEW CONSTRUCTION
  - INDICATES NEW JOINT SEAL
  - ▨ INDICATES EXISTING DECK SLAB, PIER WALL, PIER FOOTINGS AND BARRIER REMOVAL

- NOTES:**
- (A) PAINT "BURNEY CREEK BRIDGE"
  - (B) PAINT "Br No. 06-0062"
  - (C) ABUTMENT RETROFIT
  - (D) ARCHITECTURAL TREATMENT
  - (E) TUBULAR HAND RAILING
  - (F) SCUPPER, Typ

**QUANTITIES**

PREPARE CONCRETE BRIDGE DECK SURFACE	8,712	SQFT
BRIDGE REMOVAL (PORTION)	LUMP	SUM
STRUCTURE EXCAVATION (BRIDGE)	373	CY
STRUCTURE EXCAVATION (TYPE D)	288	CY
STRUCTURE BACKFILL (BRIDGE)	627	CY
36" PERMANENT STEEL CASING	190	LF
36" CAST-IN-DRILLED-HOLE CONCRETE PILING	150	LF
30" CAST-IN-DRILLED-HOLE CONCRETE PILING (ROCK SOCKET)	100	LF
STRUCTURAL CONCRETE, BRIDGE FOOTING	53	CY
STRUCTURAL CONCRETE, BRIDGE	86	CY
DRILL AND BOND DOWEL	376	LF
FURNISH PRECAST PRESTRESSED CONCRETE SLAB	10,110	SQFT
ERECT PRECAST PRESTRESSED CONCRETE SLAB	60	EA
FURNISH POLYESTER CONCRETE OVERLAY	726	CF
PLACE POLYESTER CONCRETE OVERLAY	8,712	SQFT
PUBLIC SAFETY PLAN	LUMP	SUM
JOINT SEAL (MR 1 1/2")	189	LF
BAR REINFORCING STEEL (BRIDGE)	44,433	LB
CLEAN AND PAINT STEEL CASING	LUMP	SUM
TUBULAR HANDRAILING	253	LF
CONCRETE BARRIER (TYPE 26 MODIFIED)	253	LF

For "GENERAL NOTES", "INDEX TO PLANS" and "PILE DATA TABLE" see "INDEX TO PLANS" sheet

Joseph E. Downing DESIGN ENGINEER	DESIGN	BY Eric G. Burgeson	CHECKED Quang H. Nguyen	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO.	06-0062	BURNIEY CREEK BRIDGE (SCOUR RETROFIT) GENERAL PLAN
	DETAILS	BY J. Chlubna/N. Gwynn	CHECKED Quang H. Nguyen	LAYOUT	BY Eric Burgeson			CHECKED Quang H. Nguyen	POST MILE	
	QUANTITIES	BY Joey Aquino	CHECKED Ashraf Ahmed	SPECIFICATIONS	BY Jim Corrado	PLANS AND SPECS COMPARED Jim Corrado				

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS: 0 1 2 3

CU 03258 EA 2C2221

DISREGARD PRINTS BEARING EARLIER REVISION DATES

4-21-08	6-7-10	3-23-11	5-4-11	5-17-10	5-18-10	5-25-10	5-28-10	7-2-10
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SHEET 1 OF 32

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
02	Sha	299	74.8	35	65

3-25-11  
 REGISTERED CIVIL ENGINEER DATE  
 6-20-11  
 PLANS APPROVAL DATE  
 Jose M. Aquino III  
 No. 58386  
 Exp. 12-31-12  
 CIVIL  
 STATE OF CALIFORNIA  
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

**GENERAL NOTES  
LOAD FACTOR DESIGN**

**DESIGN:**  
BRIDGE DESIGN SPECIFICATIONS ('96 AASHTO WITH REVISIONS BY CALTRANS)

**SEISMIC DESIGN:**  
CALTRANS SEISMIC DESIGN CRITERIA (SDC), VERSION 1.4 DATED JUNE 2006

**LIVE LOADING:**  
HS20-44 ALTERNATIVE AND PERMIT DESIGN LOAD

**SEISMIC LOADING:**  
SOIL PROFILE TYPE (C)  
MAGNITUDE GROUP (6.5 +/- 0.25)  
PEAK ROCK ACCELERATION 0.4g

**CONCRETE:**  
f<sub>y</sub> = 60 ksi  
f'c = 3.6 ksi  
n = 8  
SEE "PRESTRESSING NOTES" ON "PRESTRESSED CONCRETE SLAB DETAILS NO. 2" SHEET

**STRUCTURAL STEEL (new construction):**  
PERMANENT STEEL CASING: ASTM 252, GRADE 3,  
f<sub>y</sub> = 45 ksi  
f<sub>u</sub> = 66 ksi

TIE ROD PLATES: ASTM 709 GRADE 36

**PILE DATA TABLE**

LOCATION	PILE TYPE	NOMINAL RESISTANCE (kips)		CIDH PILE CUT-OFF ELEVATION (F+)	PERMANENT STEEL CASING SPECIFIED TIP ELEVATION (F+)	CIDH ROCK SOCKET DESIGN TIP ELEVATION (F+)	CIDH ROCK SOCKET SPECIFIED TIP ELEVATION (F+)
		COMPRESSION	TENSION				
PIER 2	36" CIDH W/NPS 36 x 1/2" PERMANENT STEEL CASING 30" CIDH ROCK SOCKET	1500	0	3117.00	3087.00	3067.00 (a) 3089.00 (b)	3067.00

- NOTES:**
- DESIGN TIP ELEVATIONS ARE CONTROLLED BY  
(A) COMPRESSION  
(B) LATERAL AND SCOUR
  - THE CIDH ROCK SOCKET SPECIFIED TIP ELEVATION SHALL NOT BE RAISED
  - TOTAL POTENTIAL SCOUR ELEVATION = 3108 FEET

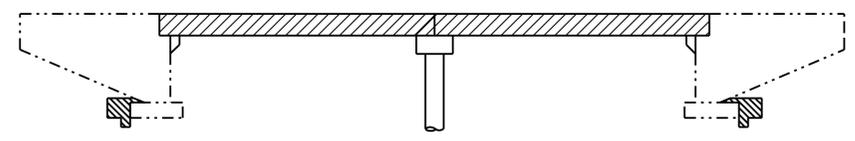
**INDEX TO PLANS**

SHEET NO.	TITLE
1	GENERAL PLAN
2	INDEX TO PLANS
3	FOUNDATION PLAN
4	ABUTMENT 1 LAYOUT
5	ABUTMENT 3 LAYOUT
6	ABUTMENT DETAILS NO. 1
7	ABUTMENT DETAILS NO. 2
8	ABUTMENT DETAILS NO. 3
9	ABUTMENT DETAILS NO. 4
10	PIER DETAILS NO. 1
11	PIER DETAILS NO. 2
12	PRESTRESSED SLAB LAYOUT
13	PRESTRESSED SLAB DETAILS NO. 1
14	PRESTRESSED SLAB DETAILS NO. 2
15	MISCELLANEOUS DETAILS
16	BARRIER DETAILS NO. 1
17	BARRIER DETAILS NO. 2
18	36" CIDH PILE/COLUMN DETAILS
19	PRESTRESSED CONCRETE SLAB DETAILS NO. 1
20	PRESTRESSED CONCRETE SLAB DETAILS NO. 2
21	SCUPPER DETAILS
22	LOG OF TEST BORINGS 1 OF 11
23	LOG OF TEST BORINGS 2 OF 11
24	LOG OF TEST BORINGS 3 OF 11
25	LOG OF TEST BORINGS 4 OF 11
26	LOG OF TEST BORINGS 5 OF 11
27	LOG OF TEST BORINGS 6 OF 11
28	LOG OF TEST BORINGS 7 OF 11
29	LOG OF TEST BORINGS 8 OF 11
30	LOG OF TEST BORINGS 9 OF 11
31	LOG OF TEST BORINGS 10 OF 11
32	LOG OF TEST BORINGS 11 OF 11

**SPREAD FOOTING TABLE**

LOCATION	ALLOWABLE GROSS CAPACITY (WSD)
Abut 1	5.00 ksf
Abut 3	5.00 ksf

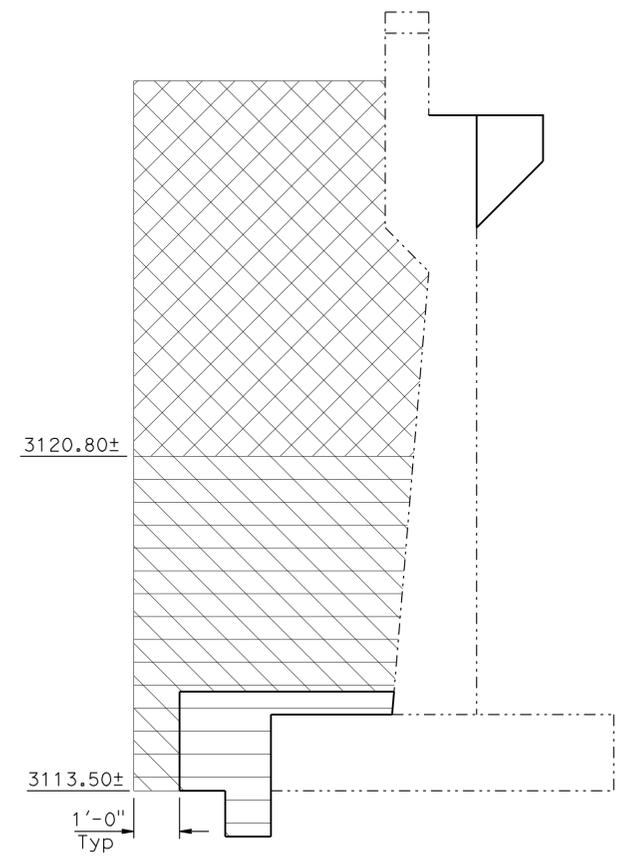
**NOTE:**  
1. WORKING STRESS DESIGN (WSD), THE MAXIMUM CONTACT PRESSURE (q<sub>Max</sub>) IS NOT TO EXCEED THE RECOMMENDED GROSS ALLOWABLE BEARING CAPACITY (q<sub>all</sub>)



- STRUCTURAL CONCRETE, BRIDGE
- STRUCTURAL CONCRETE, BRIDGE (5,500 psi AT 28 DAYS)
- STRUCTURAL CONCRETE, BRIDGE FOOTING

**CONCRETE STRENGTH AND TYPE LIMITS**  
NO SCALE

**NOTE:**  
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

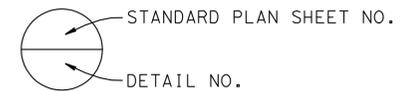


- STRUCTURE EXCAVATION (TYPE D)
- STRUCTURE EXCAVATION
- STRUCTURE BACKFILL

**LIMITS OF EXCAVATION AND BACKFILL**  
NO SCALE

**STANDARD PLANS DATED MAY 2006**

- A10A ACRONYMS AND ABBREVIATIONS (SHEET 1 OF 2)
- A10B ACRONYMS AND ABBREVIATIONS (SHEET 2 OF 2)
- A10C SYMBOLS (SHEET 1 OF 2)
- A10D SYMBOLS (SHEET 2 OF 2)
- B0-3 BRIDGE DETAILS
- RSP B6-21 JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")
- B11-51 TUBULAR HAND RAILING
- B11-54 CONCRETE BARRIER TYPE 26



STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05)	DESIGN	BY Eric Burgeson	CHECKED Quang H Nguyen	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO.	06-0062	BURN EY CREEK BRIDGE (SCOUR RETROFIT)
	DETAILS	BY Janie Chlubna/Shadi Motalebi	CHECKED Quang H Nguyen			POST MILE	74.85	
	QUANTITIES	BY Joey Aquino	CHECKED Ashraf Ahmed			<b>INDEX TO PLANS</b>		

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS: 0 1 2 3  
 CU 03258  
 EA 2C2221  
 DISREGARD PRINTS BEARING EARLIER REVISION DATES  
 REVISION DATES: 9-23-08, 5-28-10, 6-1-10, 7-2-10, 6-7-10, 3-23-11  
 SHEET 2 OF 32  
 USERNAME => HSTFK DATE PLOTTED => 21-JUN-2011 TIME PLOTTED => 11:43  
 FILE => 06-0062-b-1+p.dgn

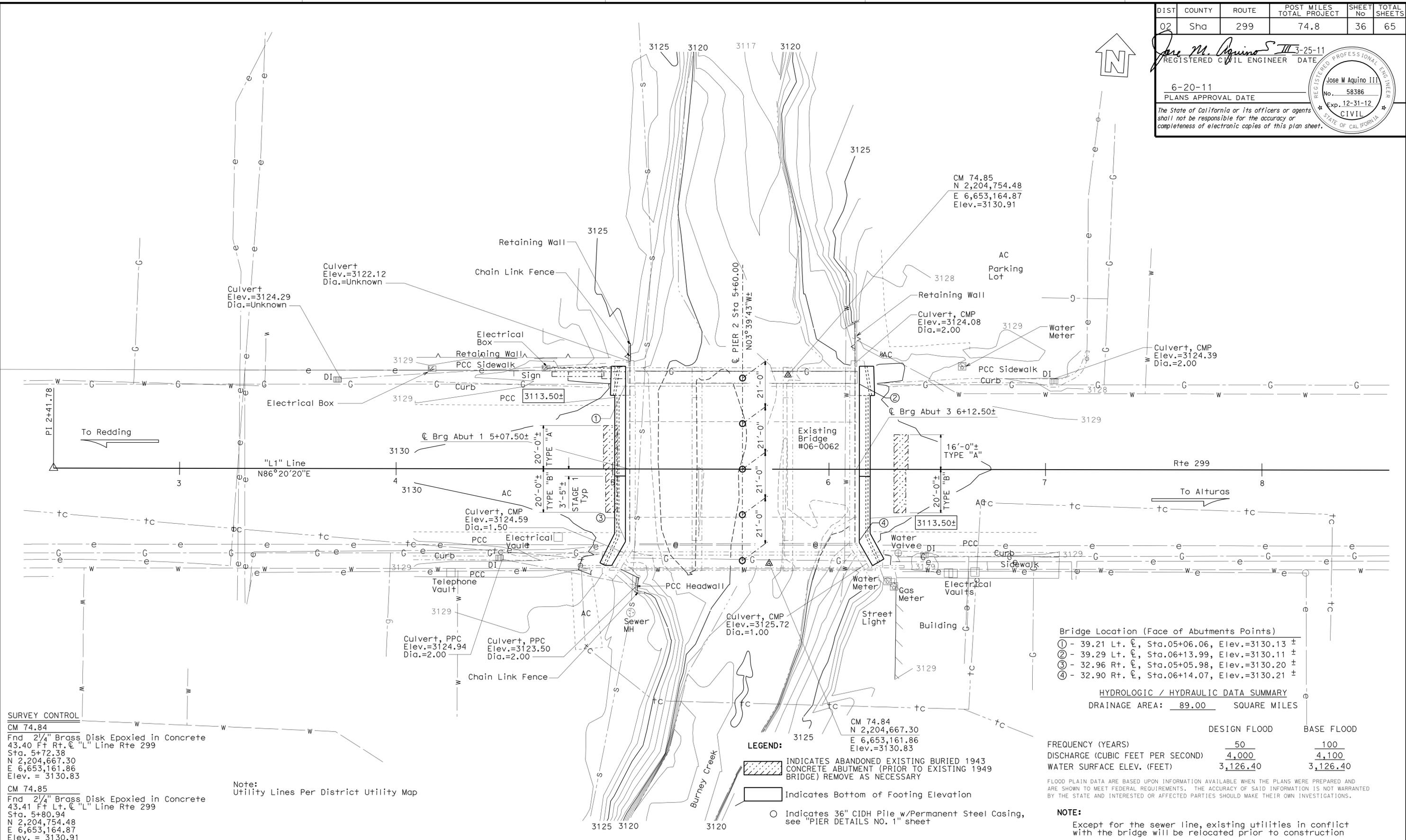
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
02	Sha	299	74.8	36	65

Jose M. Aquino III 3-25-11  
 REGISTERED CIVIL ENGINEER DATE

6-20-11  
 PLANS APPROVAL DATE

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

REGISTERED PROFESSIONAL ENGINEER  
 Jose M. Aquino III  
 No. 58386  
 Exp. 12-31-12  
 CIVIL  
 STATE OF CALIFORNIA



Bridge Location (Face of Abutments Points)

①	- 39.21 Lt. C, Sta.05+06.06, Elev.=3130.13 ±
②	- 39.29 Lt. C, Sta.06+13.99, Elev.=3130.11 ±
③	- 32.96 Rt. C, Sta.05+05.98, Elev.=3130.20 ±
④	- 32.90 Rt. C, Sta.06+14.07, Elev.=3130.21 ±

HYDROLOGIC / HYDRAULIC DATA SUMMARY

DRAINAGE AREA: 89.00 SQUARE MILES

	DESIGN FLOOD	BASE FLOOD
FREQUENCY (YEARS)	50	100
DISCHARGE (CUBIC FEET PER SECOND)	4,000	4,100
WATER SURFACE ELEV. (FEET)	3,126.40	3,126.40

FLOOD PLAIN DATA ARE BASED UPON INFORMATION AVAILABLE WHEN THE PLANS WERE PREPARED AND ARE SHOWN TO MEET FEDERAL REQUIREMENTS. THE ACCURACY OF SAID INFORMATION IS NOT WARRANTED BY THE STATE AND INTERESTED OR AFFECTED PARTIES SHOULD MAKE THEIR OWN INVESTIGATIONS.

NOTE:  
Except for the sewer line, existing utilities in conflict with the bridge will be relocated prior to construction

PRELIMINARY INVESTIGATION SECTION				DESIGN BY Eric Burgeson	CHECKED Quang H Nguyen	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO. 06-0062	<b>BURNEY CREEK BRIDGE (SCOUR RETROFIT)</b> <b>FOUNDATION PLAN</b>
SCALE VERT. DATUM NGVD29	PHOTOGRAMMETRY AS OF: X	DETAILS BY Janie Chlubna	CHECKED Quang H Nguyen	POST MILE 74.85					
1"=20' HORZ. DATUM NAD83(92)	SURVEYED BY District/T.Gillett	CHECKED BY T.Gillett	09/2008	QUANTITIES BY Joey Aquino	CHECKED Ashraf Ahmed				

STRUCTURES FOUNDATION PLAN SHEET (ENGLISH) (REV. 10/25/05)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

CU 02258  
EA 2C2221

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES					SHEET	OF
09/10/08	5-17-10	6-1-10	7-2-10	7-8-10	3	32

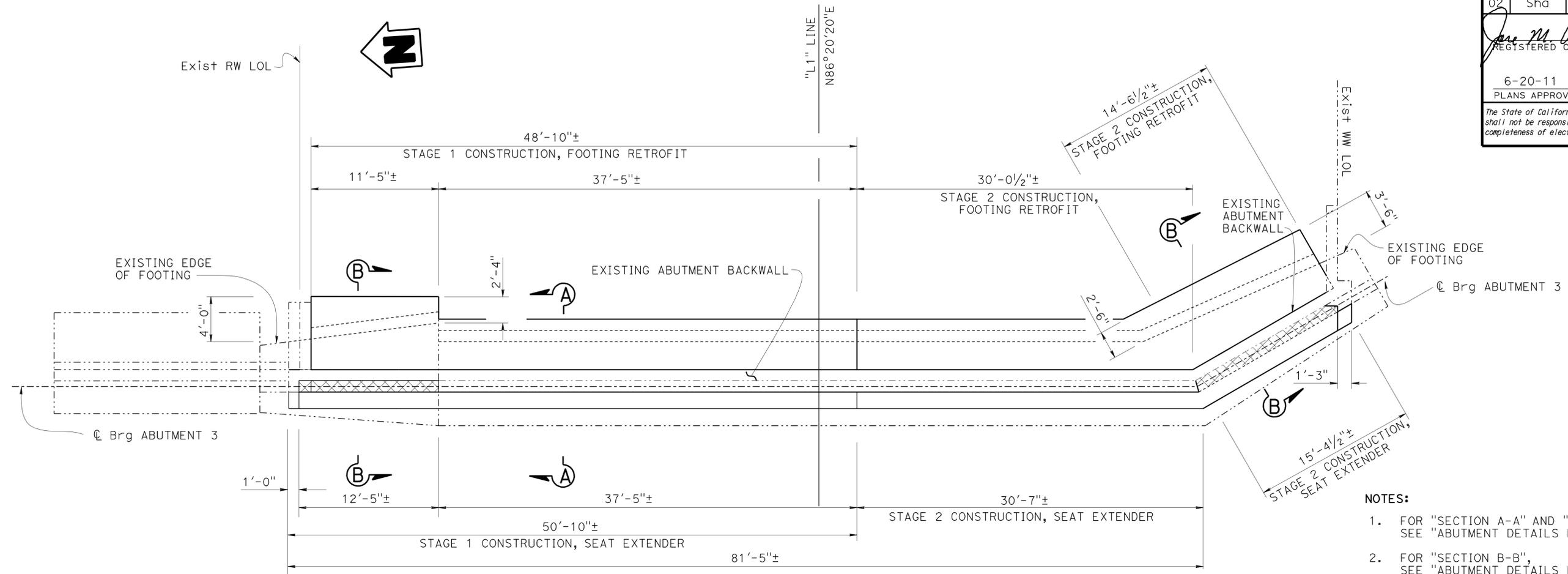
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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
02	Sha	299	74.8	38	65

REGISTERED CIVIL ENGINEER DATE 3-25-11  
 Jose M. Aquino III  
 No. 58386  
 Exp. 12-31-12  
 CIVIL  
 STATE OF CALIFORNIA

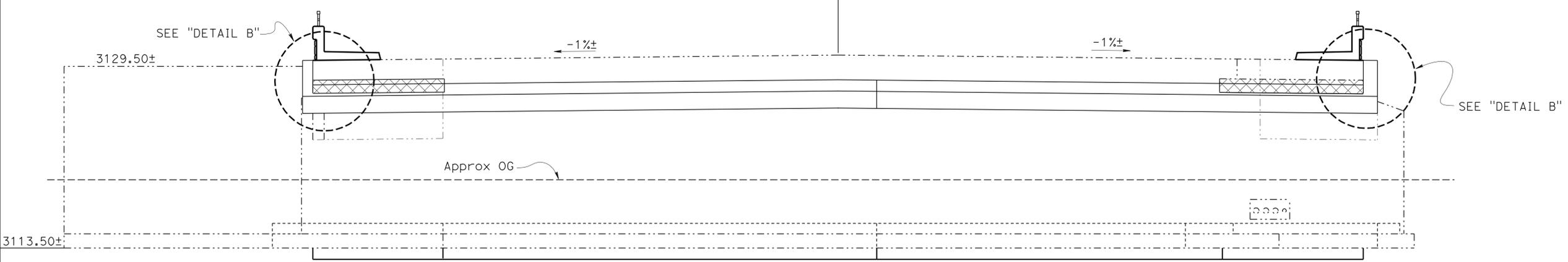
6-20-11  
 PLANS APPROVAL DATE  
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**PLAN**  
1" = 5'

- NOTES:**
- FOR "SECTION A-A" AND "DETAIL B", SEE "ABUTMENT DETAILS NO. 1" SHEET.
  - FOR "SECTION B-B", SEE "ABUTMENT DETAILS NO. 2" SHEET.

- LEGEND:**
- INDICATES CONCRETE REMOVAL
  - INDICATES EXISTING STRUCTURE
  - INDICATES NEW STRUCTURE



**ELEVATION**  
1" = 5'

**NOTE:**  
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

DESIGN	BY Eric Burgeson	CHECKED Quang H Nguyen
DETAILS	BY Janie Chlubna/Shadi Motalebi	CHECKED Quang H Nguyen
QUANTITIES	BY Joey Aquino	CHECKED Ashraf Ahmed

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES  
STRUCTURE DESIGN  
DESIGN BRANCH **3**

BRIDGE NO.  
06-0062  
POST MILE  
74.85

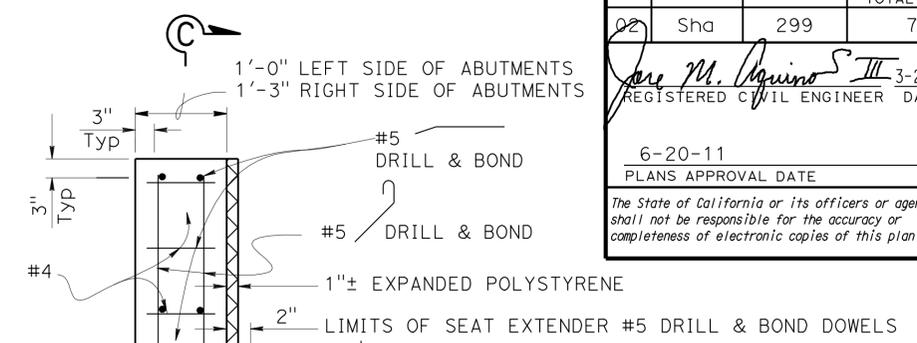
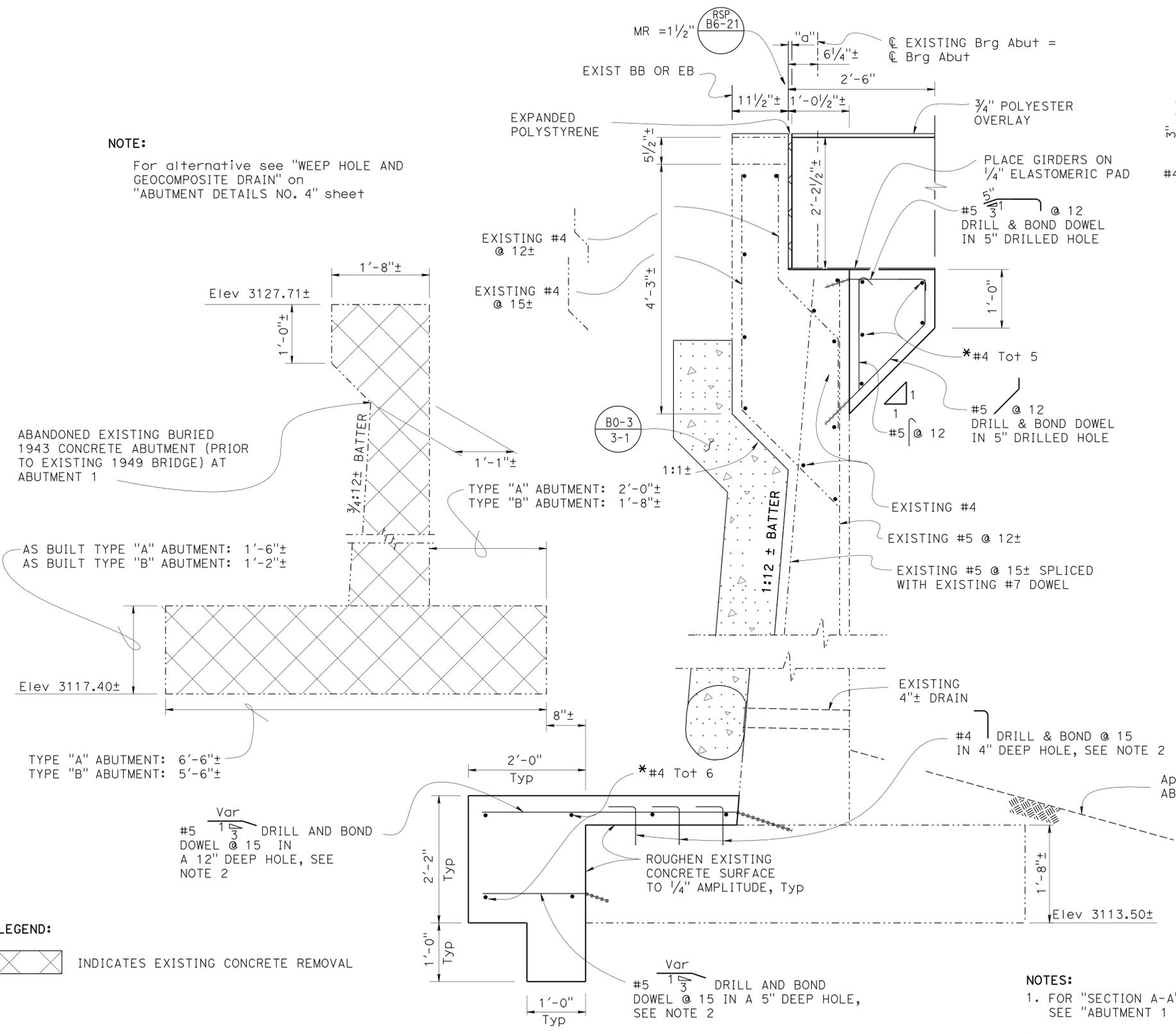
**BURNEY CREEK BRIDGE (SCOUR RETROFIT)**  
**ABUTMENT 3 LAYOUT**

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
02	Sha	299	74.8	39	65

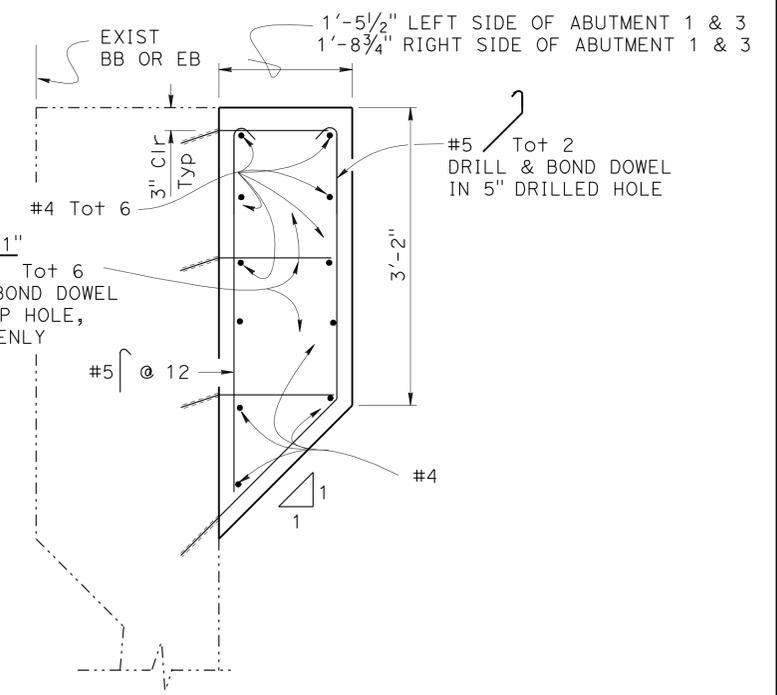
REGISTERED CIVIL ENGINEER DATE 3-25-11  
 REGISTERED PROFESSIONAL ENGINEER  
 Jose M Aquino III  
 No. 58386  
 Exp. 12-31-12  
 CIVIL  
 STATE OF CALIFORNIA  
 PLANS APPROVAL DATE 6-20-11  
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

**NOTE:**

For alternative see "WEEP HOLE AND GEOCOMPOSITE DRAIN" on "ABUTMENT DETAILS NO. 4" sheet



**DETAIL B**  
1" = 1'-0"



**SECTION C-C**  
1" = 1'-0"

**LEGEND:**  
 INDICATES EXISTING CONCRETE REMOVAL

**NOTE:**  
 THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

- NOTES:**
- FOR "SECTION A-A" AND "DETAIL B", SEE "ABUTMENT 1 LAYOUT" AND "ABUTMENT 3 LAYOUT" SHEETS.
  - FOR DOWEL PLACEMENT, SEE "ABUTMENT DETAILS NO. 3" SHEET.

**SECTION A-A**  
1" = 1'-0"

DESIGN	BY Eric Burgeson	CHECKED Quang H Nguyen
DETAILS	BY Janie Chlubna/Shadi Motalebi	CHECKED Quang H Nguyen
QUANTITIES	BY Joey Aquino	CHECKED Ashraf Ahmed

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION

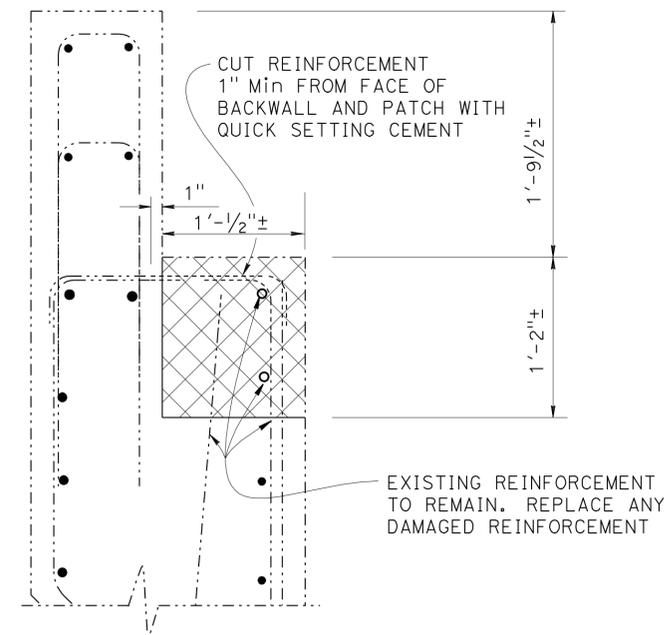
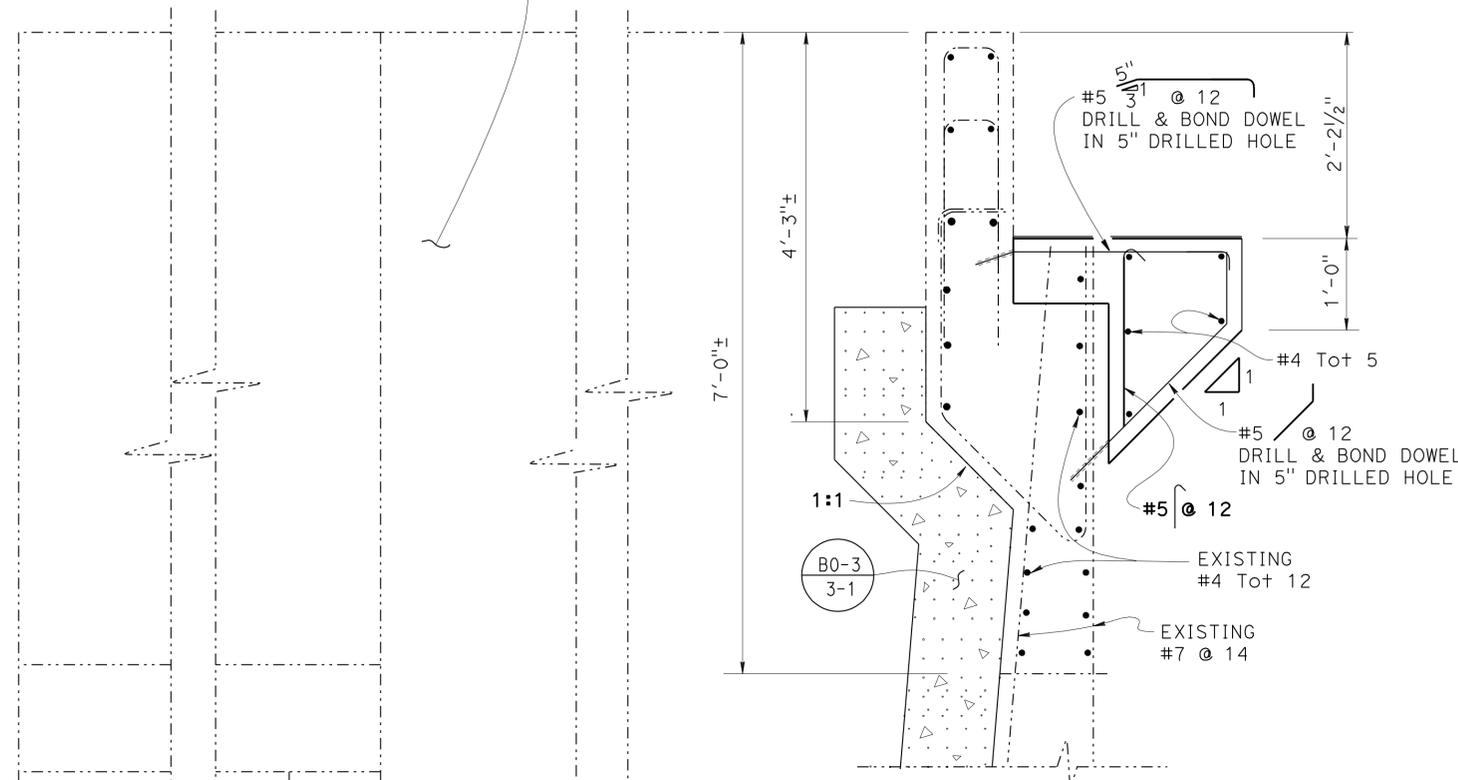
DIVISION OF ENGINEERING SERVICES  
 STRUCTURE DESIGN  
 DESIGN BRANCH 3

BRIDGE NO. 06-0062  
 POST MILE 74.85  
**BURNEY CREEK BRIDGE (SCOUR RETROFIT)**  
**ABUTMENT DETAILS NO. 1**

USERNAME => HSTFK DATE PLOTTED => 21-JUN-2011 TIME PLOTTED => 11:44

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
02	Sha	299	74.8	40	65
Jose M. Aquino III REGISTERED CIVIL ENGINEER DATE 3-25-11				PLANS APPROVAL DATE 6-20-11	
No. 58386 Exp. 12-31-12 CIVIL STATE OF CALIFORNIA				The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.	

RETAINING WALL @ ABUTMENT 1 LEFT  
SEE NOTE 3



NOTE:  
For details not shown see "SECTION B-B"

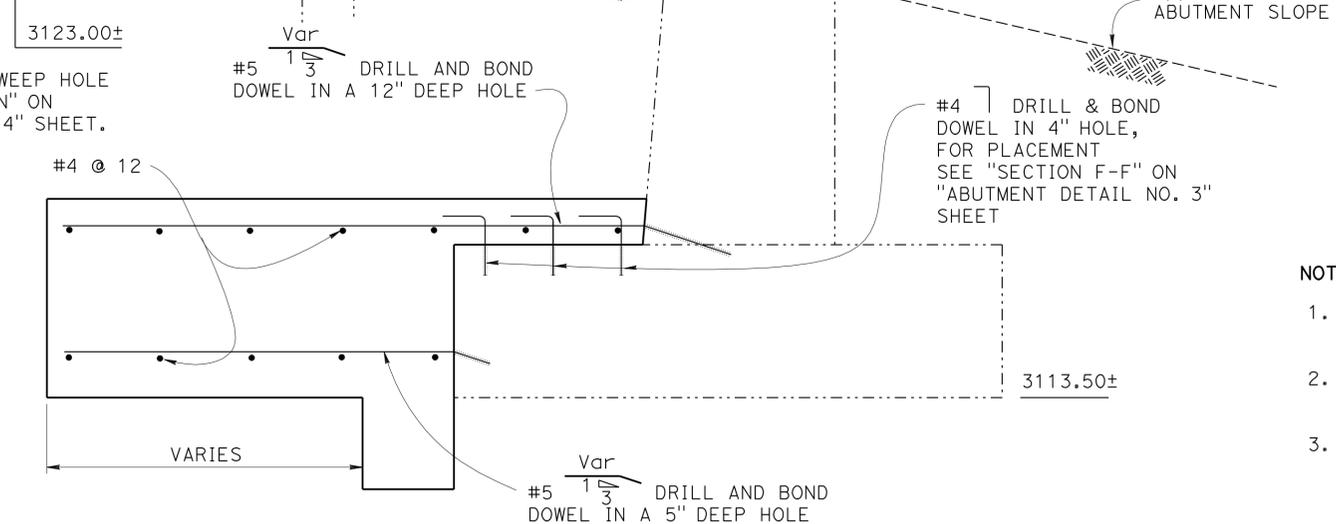
**LIMITS OF CONCRETE REMOVAL**

$1/2" = 1'$

**LEGEND:**

- Indicates Existing Reinforcement to be removed
- Limits of Concrete Removal

NOTE:  
FOR ALTERNATIVE SEE "WEEP HOLE AND GEOCOMPOSITE DRAIN" ON "ABUTMENT DETAILS NO. 4" SHEET.



**SECTION B-B**

$1" = 1'-0"$

NOTE:  
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

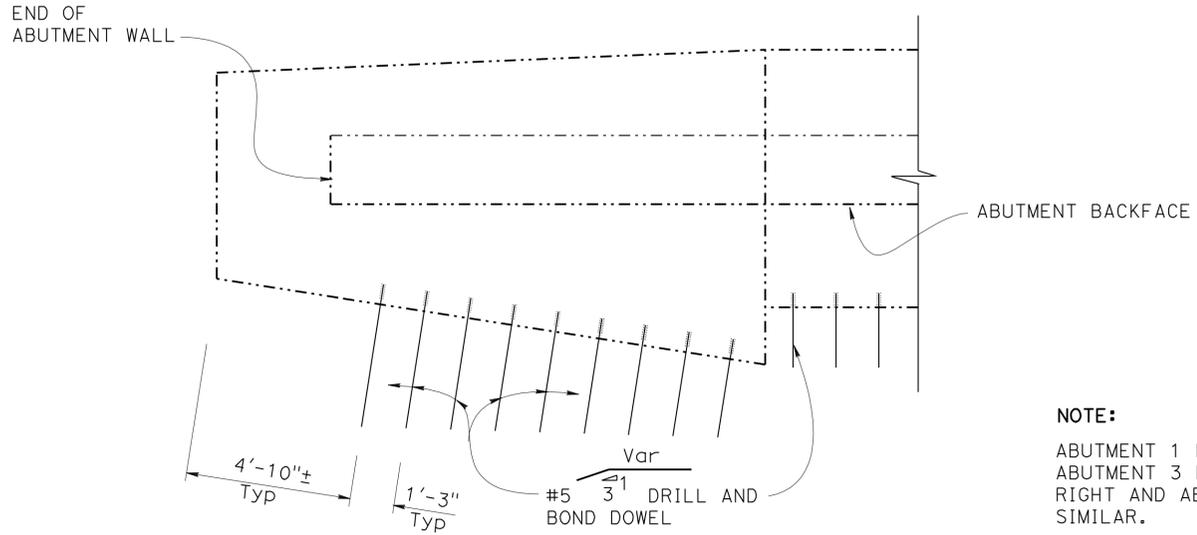
**NOTES:**

1. FOR DETAILS NOT SHOWN, SEE "SECTION A-A" ON "ABUTMENT DETAILS NO. 1" SHEET.
2. FOR "SECTION B-B", SEE "ABUTMENT 1 LAYOUT" AND "ABUTMENT 3 LAYOUT" SHEETS.
3. EXISTING RETAINING WALL TO REMAIN DURING FOOTING RETROFIT.

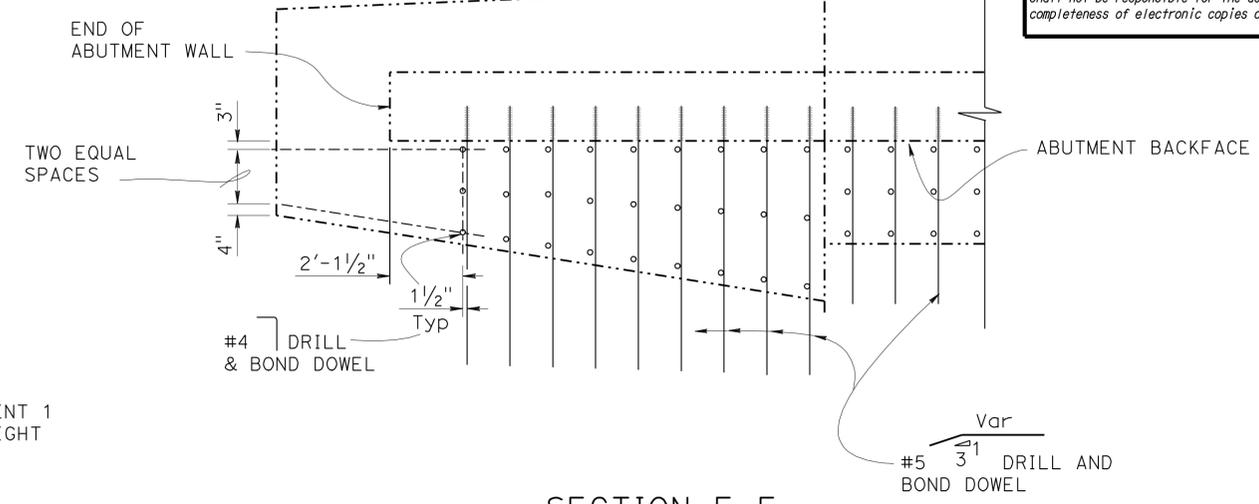
DESIGN	BY Eric Burgeson	CHECKED Quang H Nguyen	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH <b>3</b>	BRIDGE NO. 06-0062	<b>BURNEY CREEK BRIDGE (SCOUR RETROFIT)</b>
	DETAILS BY Janie Chlubna/Shadi Motalebi	CHECKED Quang H Nguyen			POST MILE 74.85	
QUANTITIES	BY Joey Aquino	CHECKED Ashraf Ahmed	CU 03258 EA 2C2221	FILE => 06-0062-f-adf02.dgn	REVISION DATES 9-24-08 1-28-10 3-8-10 5-28-10 7-8-10 3-23-11	
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05)					SHEET	OF
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS					7	32

USERNAME => HSTFK DATE PLOTTED => 21-JUN-2011 TIME PLOTTED => 11:44

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
02	Sha	299	74.8	41	65
Jose M. Aquino III REGISTERED CIVIL ENGINEER DATE 3-25-11				6-20-11 PLANS APPROVAL DATE	
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.				REGISTERED PROFESSIONAL ENGINEER Jose M. Aquino III No. 58386 Exp. 12-31-12 CIVIL STATE OF CALIFORNIA	

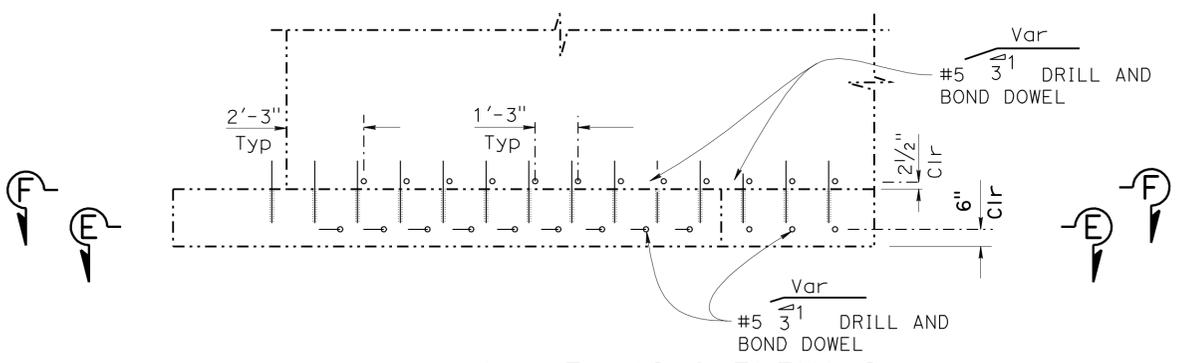


**SECTION E-E**  
3/8" = 1'-0"



**SECTION F-F**  
3/8" = 1'-0"

**NOTE:**  
 ABUTMENT 1 LEFT SHOWN,  
 ABUTMENT 3 LEFT, ABUTMENT 1  
 RIGHT AND ABUTMENT 3 RIGHT  
 SIMILAR.



**PART FOOTING ELEVATION**  
3/8" = 1'-0"

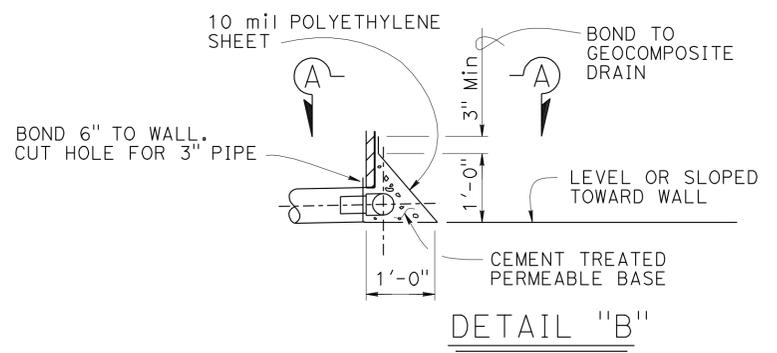
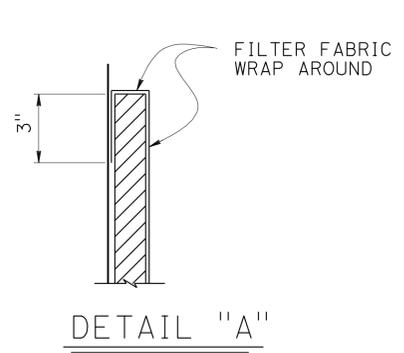
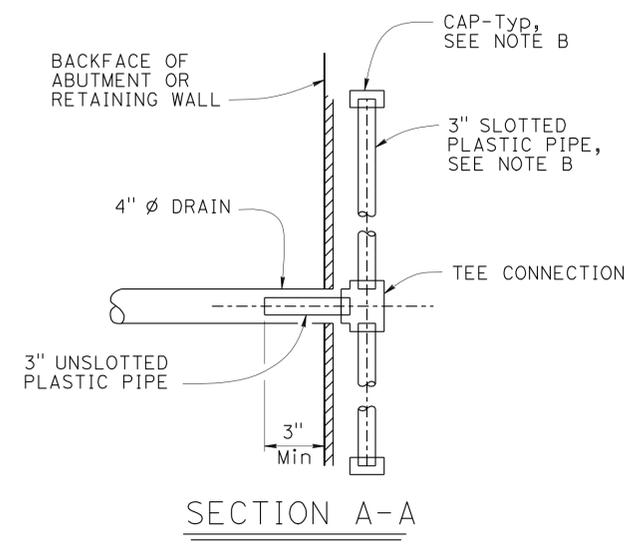
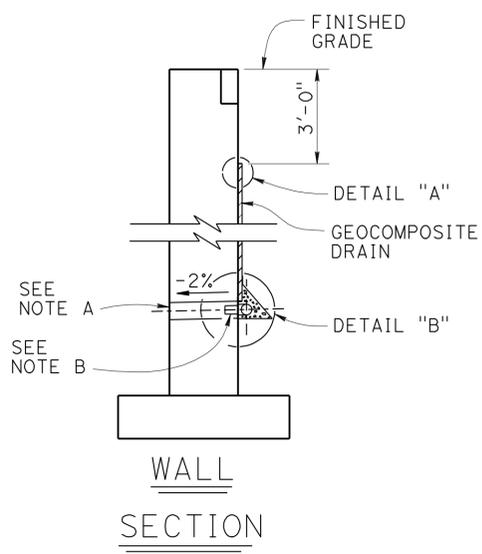
**NOTE:**  
 FOR DETAILS NOT SHOWN, SEE "ABUTMENT DETAILS  
 NO. 1 & 2" SHEETS AND "ABUTMENT 1 & 3 LAYOUT"  
 SHEETS.

**NOTE:**  
 THE CONTRACTOR SHALL VERIFY ALL  
 CONTROLLING FIELD DIMENSIONS  
 BEFORE ORDERING OR FABRICATING  
 ANY MATERIAL.

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05)	DESIGN	BY Eric Burgeson	CHECKED Quang H. Nguyen	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH <b>3</b>	BRIDGE NO.	BURNLEY CREEK BRIDGE (SCOUR RETROFIT)			
	DETAILS	BY Janie Chlubna/Shadi Motalebi	CHECKED Quang H. Nguyen			06-0062	ABUTMENT DETAILS NO. 3			
	QUANTITIES	BY Joey Aquino	CHECKED Ashraf Ahmed			POST MILE	74.85			
				ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	CU 03258 EA 2C2221	DISREGARD PRINTS BEARING EARLIER REVISION DATES	5-19-10	6-1-10	7-8-10	SHEET 8 OF 32

USERNAME => HSTFK DATE PLOTTED => 21-JUN-2011 TIME PLOTTED => 11:44

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
02	Sha	299	74.8	42	65
Jose M. Aquino III REGISTERED CIVIL ENGINEER			3-25-11	DATE	
6-20-11 PLANS APPROVAL DATE					
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.					



**WEEP HOLE AND GEOCOMPOSITE DRAIN**

ALTERNATIVE TO BRIDGE DETAIL 

BO-3
3-1

- Notes:
- A. 4"  $\phi$  drains at intermediate sag points and at 25' max center to center (9' c-c for Type 3 and 9'-3" c-c for Type 4 retaining walls). For walls adjacent to sidewalks or curbs, provide 4" cast iron or asbestos cement pipe under the sidewalk to discharge through curb face. Exposed wall drains shall be located 3"  $\pm$  above finished grade.
  - B. Geocomposite drain, cement treated permeable base, and 3"  $\phi$  slotted plastic pipe continuous behind retaining wall or abutment. Cap ends of pipe. Provide "Tee" connection at each 4"  $\phi$  drain.
  - C. Connect the low end of plastic pipe to the main outlet pipe as applicable.

DESIGN	BY Eric Burgeson	CHECKED Quang H Nguyen
DETAILS	BY Shadi Motalebi	CHECKED Quang H Nguyen
QUANTITIES	BY Joey Aquino	CHECKED Ashraf Ahmed

**STATE OF CALIFORNIA**  
DEPARTMENT OF TRANSPORTATION

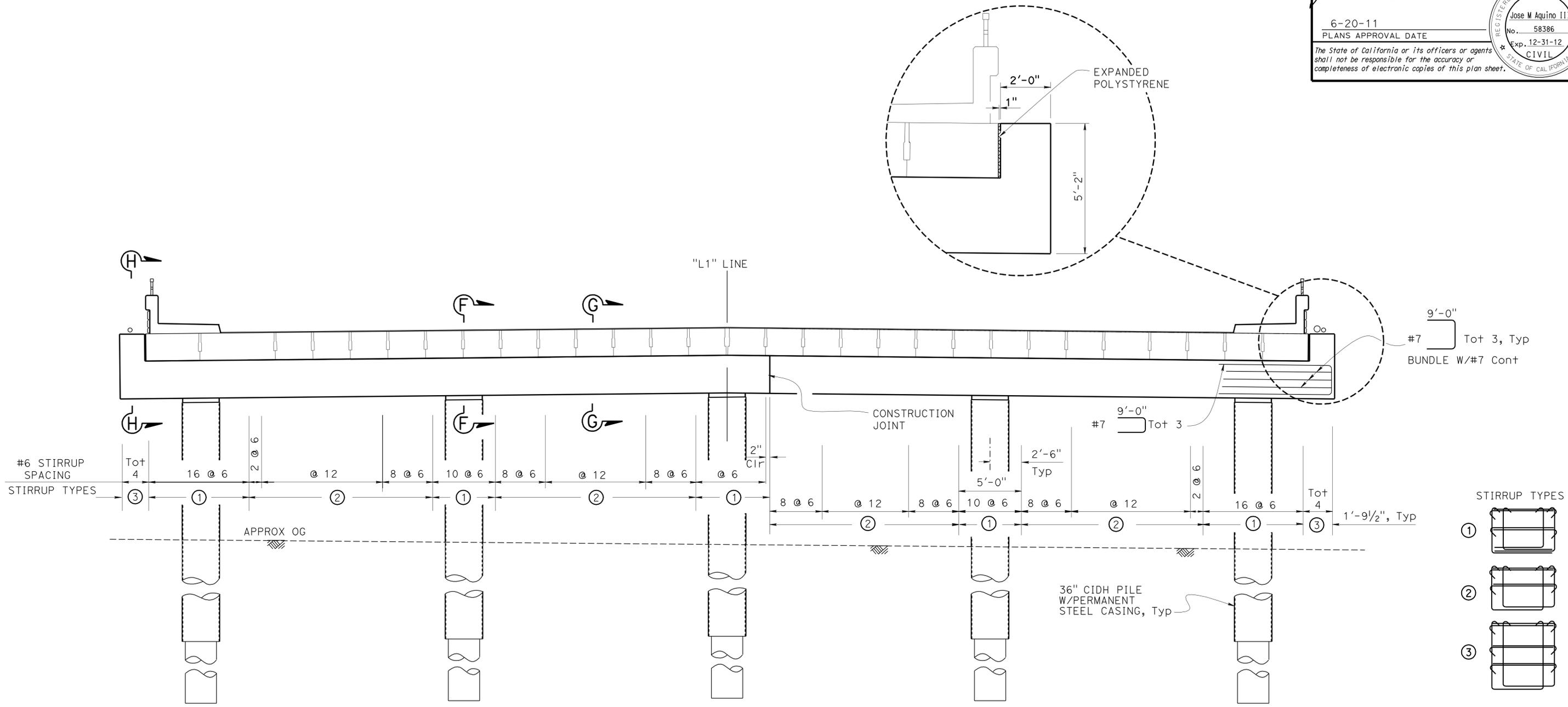
DIVISION OF ENGINEERING SERVICES  
STRUCTURE DESIGN  
**DESIGN BRANCH 3**

BRIDGE NO.	06-0062	<b>BURNY CREEK BRIDGE (SCOUR RETROFIT)</b>
POST MILE	74.85	
		<b>ABUTMENT DETAILS NO. 4</b>

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
02	Sha	299	74.8	43	65

Jose M. Aquino III 3-25-11  
 REGISTERED CIVIL ENGINEER DATE  
 6-20-11  
 PLANS APPROVAL DATE  
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REGISTERED PROFESSIONAL ENGINEER  
 Jose M. Aquino III  
 No. 58386  
 Exp. 12-31-12  
 CIVIL  
 STATE OF CALIFORNIA



**ELEVATION**  
 $\frac{1}{4}'' = 1'-0''$

NOTE:  
 THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

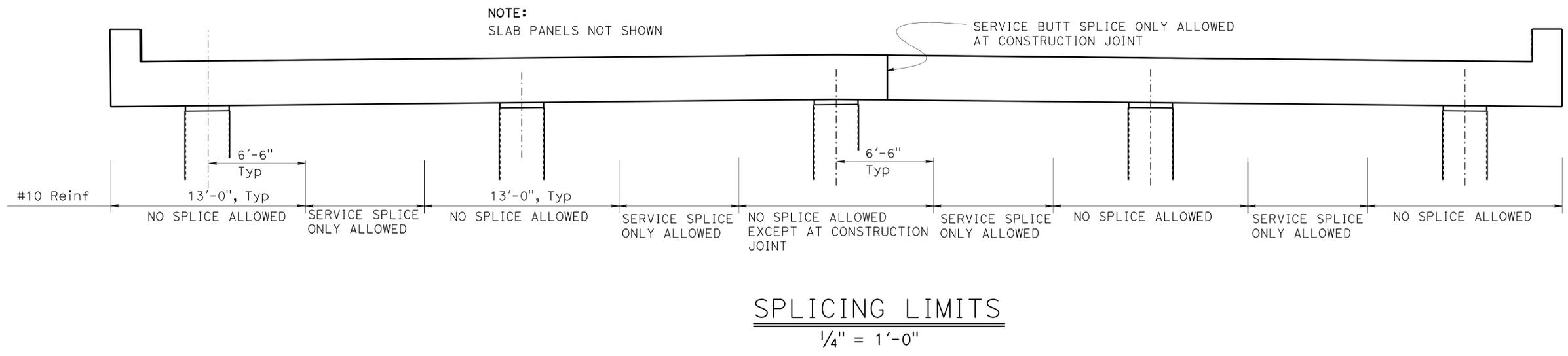
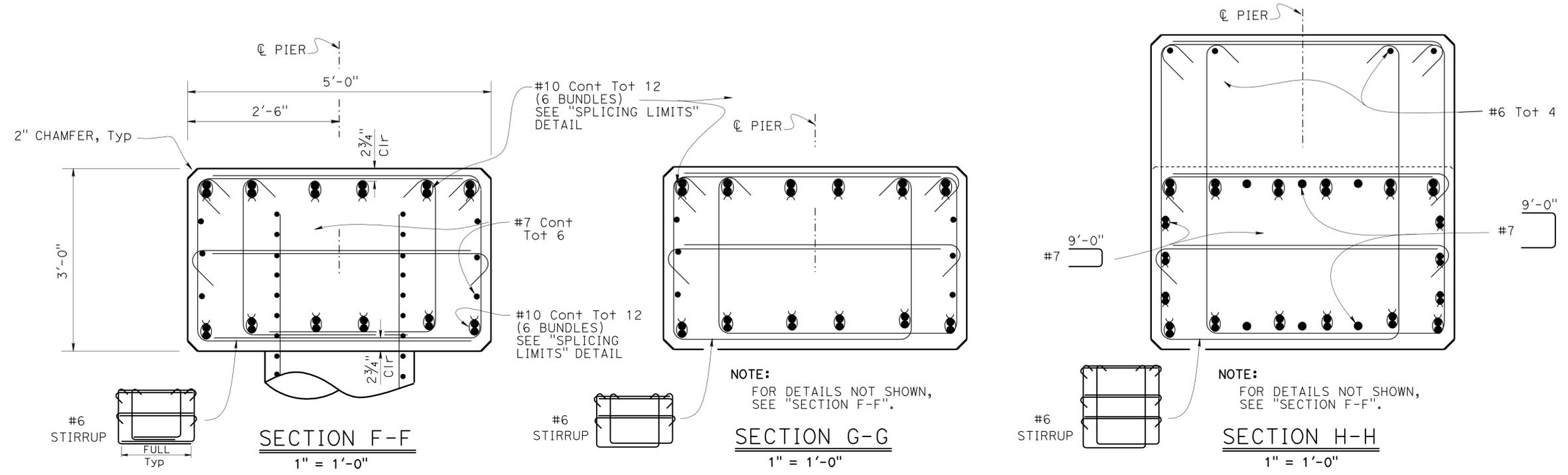
DESIGN	BY Eric Burgeson	CHECKED Quang H. Nguyen
DETAILS	BY Janie Chlubna/Shadi Motalebi	CHECKED Quang H. Nguyen
QUANTITIES	BY Joey Aquino	CHECKED Ashraf Ahmed

**STATE OF CALIFORNIA**  
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES  
 STRUCTURE DESIGN  
**DESIGN BRANCH 3**

BRIDGE NO.	06-0062	<b>BURNEY CREEK BRIDGE (SCOUR RETROFIT)</b>
POST MILE	74.85	
<b>PIER DETAILS NO. 1</b>		

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
02	Sha	299	74.8	44	65
REGISTERED CIVIL ENGINEER DATE <i>Jose M. Aquino III</i> 3-25-11			REGISTERED PROFESSIONAL ENGINEER No. 58386 Exp. 12-31-12 CIVIL STATE OF CALIFORNIA		
PLANS APPROVAL DATE 6-20-11					
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.					



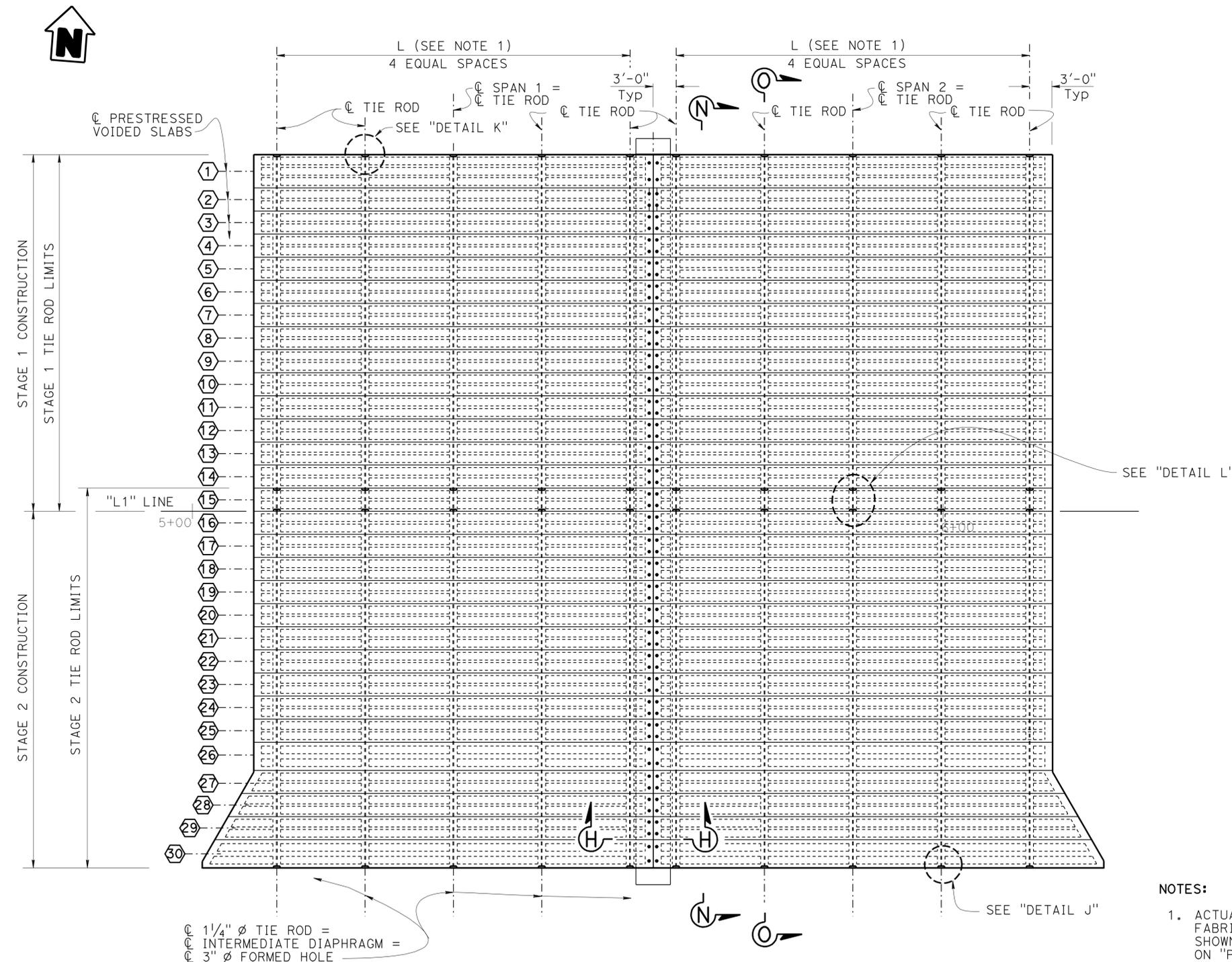
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05)	DESIGN	BY Eric Burgeson	CHECKED Quang H Nguyen	<b>STATE OF CALIFORNIA</b> DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN <b>DESIGN BRANCH 3</b>	BRIDGE NO.	06-0062	<b>BURNEY CREEK BRIDGE (SCOUR RETROFIT)</b> <b>PIER DETAILS NO. 2</b>	
	DETAILS	BY Shadi Motalebi	CHECKED Quang H Nguyen			POST MILE	74.85		
	QUANTITIES	BY Joey Aquino	CHECKED Ashraf Ahmed						
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				CU 03258 EA 2C2221		DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES 8-9-10 3-23-11	SHEET 11 OF 32

USERNAME => HSTFK DATE PLOTTED => 21-JUN-2011 TIME PLOTTED => 11:45

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
02	Sha	299	74.8	45	65

Jose M. Aquino III 3-25-11  
 REGISTERED CIVIL ENGINEER DATE  
 6-20-11  
 PLANS APPROVAL DATE  
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REGISTERED PROFESSIONAL ENGINEER  
 Jose M. Aquino III  
 No. 58386  
 Exp. 12-31-12  
 CIVIL  
 STATE OF CALIFORNIA



**PLAN**  
1/8" = 1'-0"

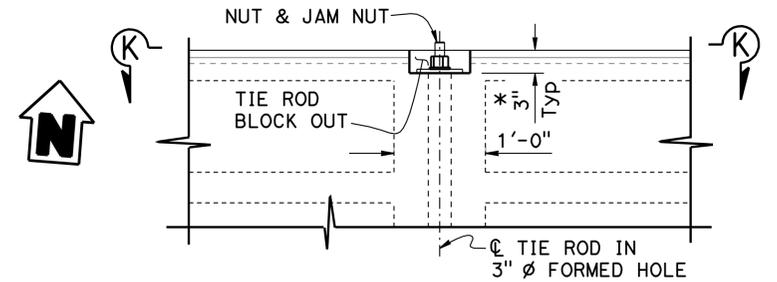
**NOTE:**  
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

- NOTES:**
1. ACTUAL SLAB UNIT LENGTH (L) TO BE FIELD VERIFIED PRIOR TO SLAB FABRICATION (AT TIME OF CASTING) AND THE "A" DIMENTION AS SHOWN ON RSP STANDARD PLAN B6-21; SEE "PRETENSIONING INFORMATION" ON "PRESTRESSED CONCRETE SLAB DETAILS NO. 2" SHEET.
  2. FOR "SECTION H-H", SEE "PRESTRESSED CONCRETE SLAB DETAILS NO. 1" SHEET.
  3. FOR "DETAIL J", "DETAIL K" AND "DETAIL L", SEE "PRESTRESSED CONCRETE SLAB DETAILS NO. 1" SHEET.
  4. FOR "SECTION N-N" AND "SECTION O-O", SEE "PRESTRESSED CONCRETE SLAB DETAILS NO. 2" SHEET.

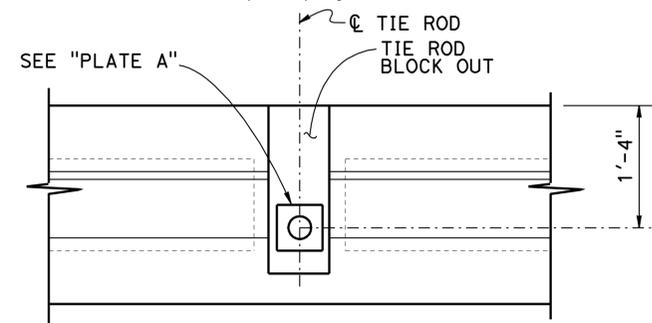
DESIGN BY Eric Burgeson CHECKED Quang H Nguyen DETAILS BY Janie Chlubna/Shadi Motalebi CHECKED Quang H Nguyen QUANTITIES BY Joey Aquino CHECKED Ashraf Ahmed	<b>STATE OF CALIFORNIA</b> DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN <b>DESIGN BRANCH 3</b>	BRIDGE NO.	<b>BURNEY CREEK BRIDGE (SCOUR RETROFIT)</b>
			POST MILE	<b>74.85</b>
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS			CU 03258 EA 2C2221	DISREGARD PRINTS BEARING EARLIER REVISION DATES
			REVISION DATES 2-11-10 5-20-10 6-3-10 3-22-11 3-23-11	SHEET 12 OF 32

USERNAME => HSTFK DATE PLOTTED => 21-JUN-2011 TIME PLOTTED => 11:45

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
02	Sha	299	74.8	46	65
REGISTERED CIVIL ENGINEER Jose M. Aquino III No. 58386 Exp. 12-31-12 CIVIL STATE OF CALIFORNIA			3-25-11 DATE 6-20-11 PLANS APPROVAL DATE The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.		

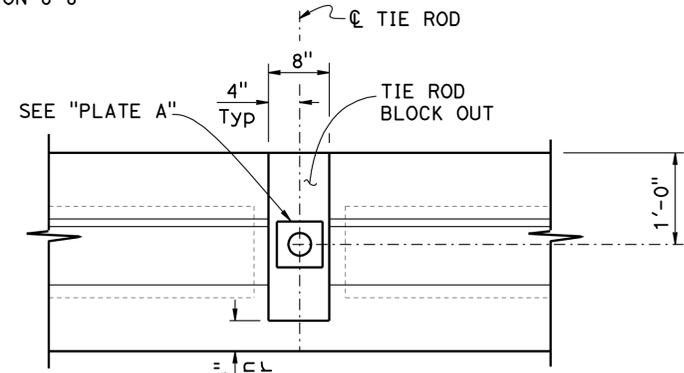


**TIE ROD @ SLAB #1**  
**DETAIL K**  
1" = 1'-0"

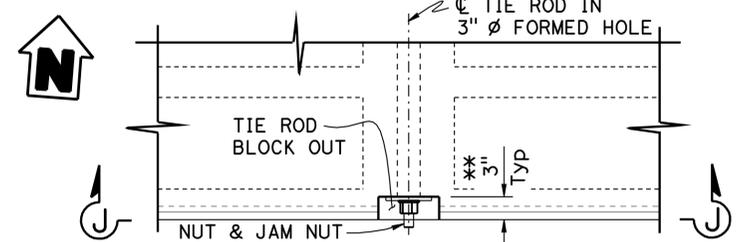


**SECTION K-K**  
1" = 1'-0"

NOTE:  
For details not shown see, "SECTION J-J"



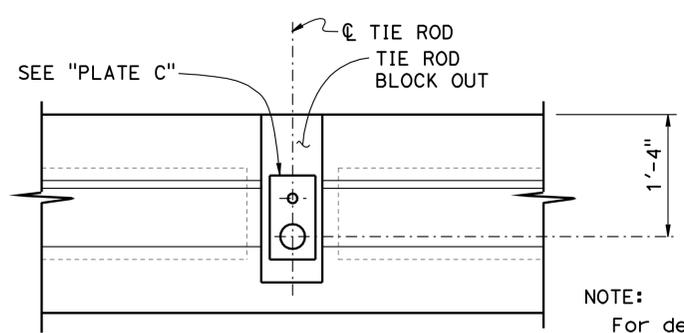
**SECTION J-J**  
1" = 1'-0"



**TIE ROD @ SLAB #30**  
**DETAIL J**  
1" = 1'-0"

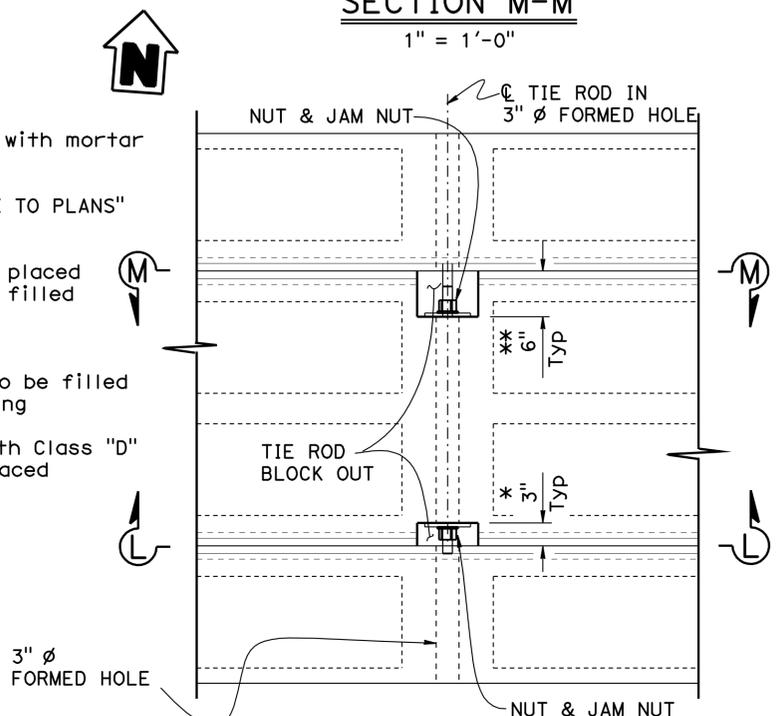
NOTE:  
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

- NOTES:
- For location of "DETAIL J", "DETAIL K" and "DETAIL L", see "PRESTRESSED SLAB LAYOUT" sheet
  - For details not shown, see "PRESTRESSED CONCRETE SLAB DETAILS No. 2" sheet
  - Tie Rod to be epoxy coated HS Bars,  $f_u = 150$  ksi
  - Tie Rod Lock off Force  $F_L = 110$  kips
  - All plate thicknesses shall be 1"
  - Plates, Nuts, bolts and washers to be hot dip galvanized
  - Longitudinal keyways to be filled with mortar prior to post-tensioning
  - For concrete strength, see "INDEX TO PLANS" sheet
  - Polyester concrete overlay to be placed after Tie Rod blockouts has been filled w/class "D" concrete
  - 3"  $\phi$  hole in interior diaphragm to be filled with grout after Tie rod tensioning
  - Tie Rod blockouts to be filled with Class "D" concrete after grout has been placed

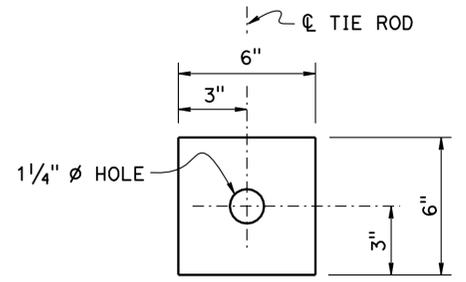


**SECTION M-M**  
1" = 1'-0"

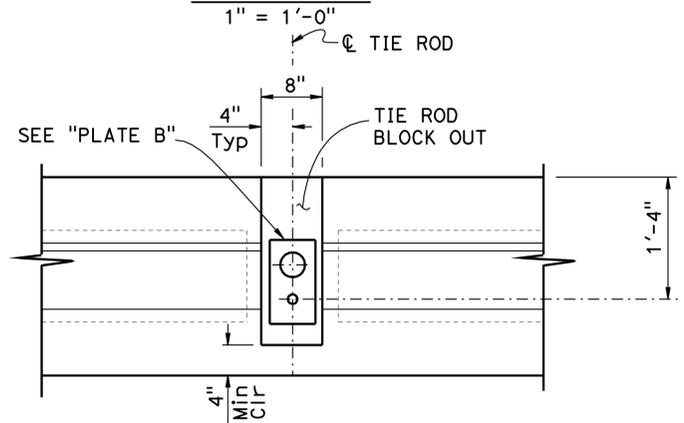
NOTE:  
For details not shown see, "SECTION L-L"



**TIE ROD @ SLAB #15**  
**DETAIL L**  
1" = 1'-0"

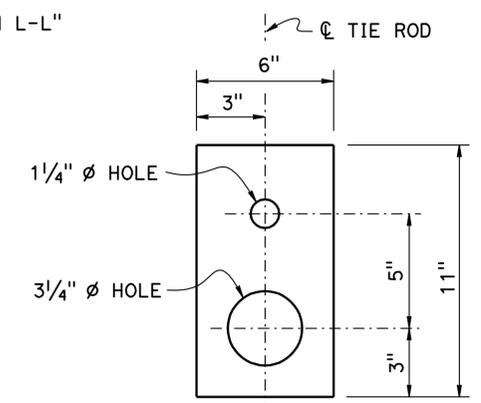


**PLATE A**  
3" = 1'-0"

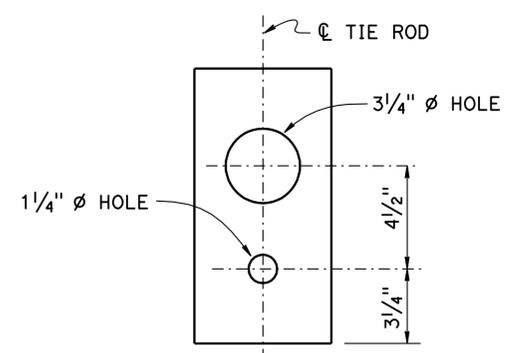


**SECTION L-L**  
1" = 1'-0"

NOTE:  
\* STAGE 1 TIE ROD  
\*\* STAGE 2 TIE ROD



**PLATE C**  
3" = 1'-0"

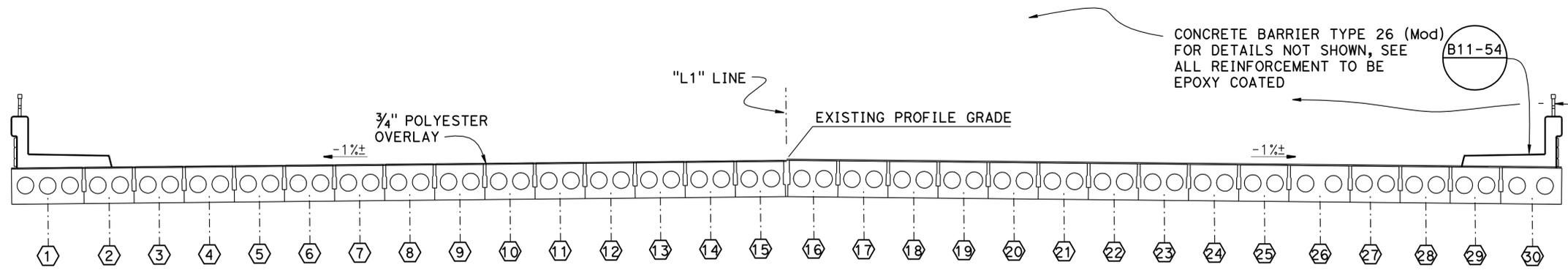


**PLATE B**  
3" = 1'-0"

NOTE:  
For details not shown see, "PLATE C"

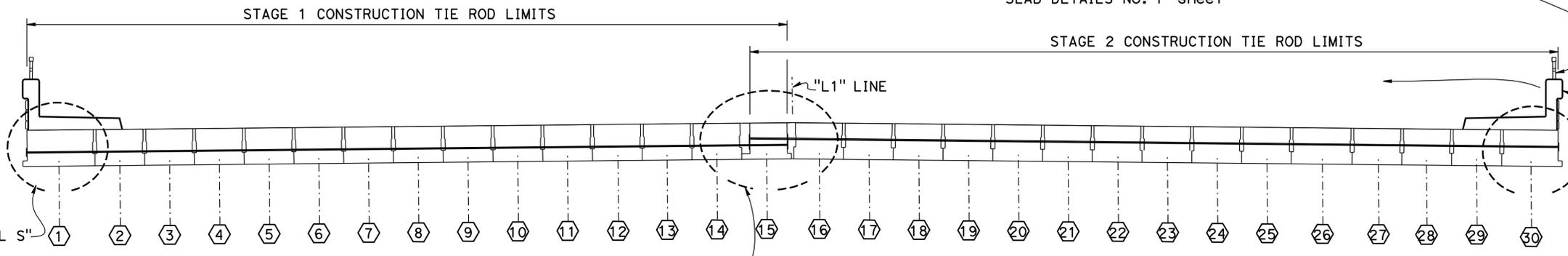
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05)	DESIGN	BY Eric Burgeson	CHECKED Quang H Nguyen	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO.	BURNAY CREEK BRIDGE (SCOUR RETROFIT)					
	DETAILS	BY Janie Chlubna/Shadi Motalebi	CHECKED Quang H Nguyen			POST MILE	74.85					
	QUANTITIES	BY Joey Aquino	CHECKED Ashraf Ahmed				PRESTRESSED SLAB DETAILS NO. 1					
				ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	CU 03258 EA 2C2221	DISREGARD PRINTS BEARING EARLIER REVISION DATES	2-25-10	5-20-10	6-1-10	7-8-10	3-22-11	SHEET 13 OF 32

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
02	Sha	299	74.8	47	65
Jose M. Aquino III REGISTERED CIVIL ENGINEER DATE 3-25-11			6-20-11 PLANS APPROVAL DATE		
Jose M. Aquino III No. 58386 Exp. 12-31-12 CIVIL STATE OF CALIFORNIA			The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.		



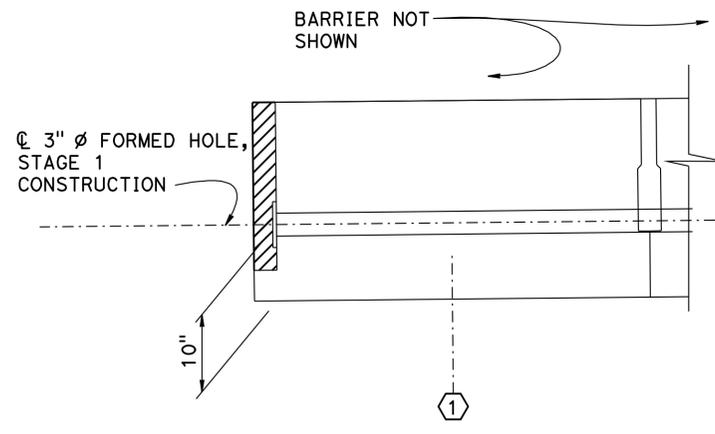
**SECTION N-N**  
1/4" = 1'-0"

NOTE:  
① Indicates Concrete Slab Number, see "PRESTRESSED CONCRETE SLAB DETAILS No. 1" sheet

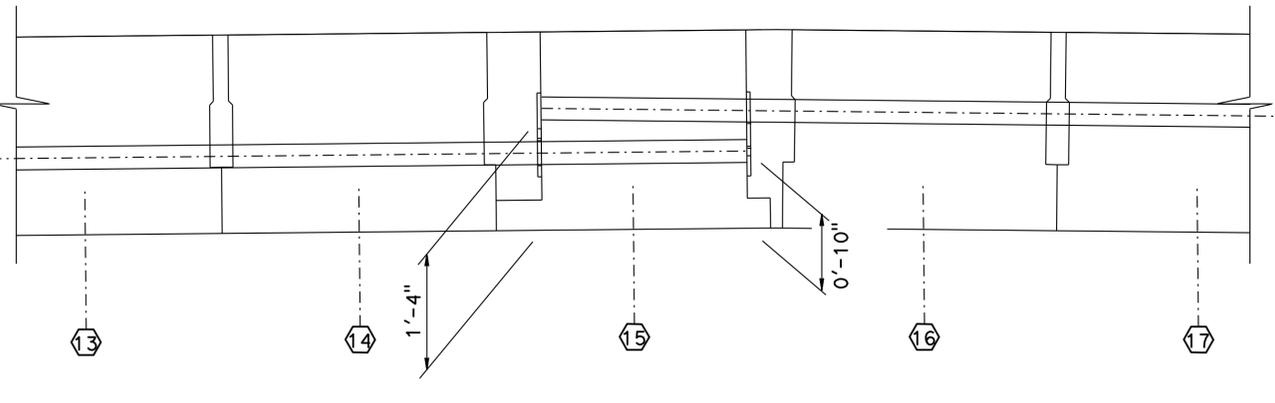


**SECTION O-O**  
1/4" = 1'-0"

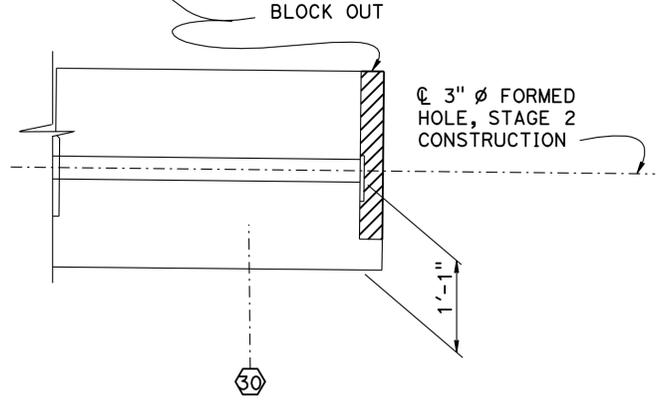
NOTE:  
All barrier Reinf to be epoxy coated  
For locations of SECTION N-N and SECTION O-O see "PRESTRESSED SLAB LAYOUT" sheet



**DETAIL "S"**  
1" = 1'-0"



**DETAIL "T"**  
1" = 1'-0"



**DETAIL "U"**  
1" = 1'-0"

NOTE:  
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

DESIGN	BY Eric Burgeson	CHECKED Quang H. Nguyen
DETAILS	BY Janie Chlubna/Shadi Motalebi	CHECKED Quang H. Nguyen
QUANTITIES	BY Joey Aquino	CHECKED Ashraf Ahmed

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES  
STRUCTURE DESIGN  
DESIGN BRANCH 3

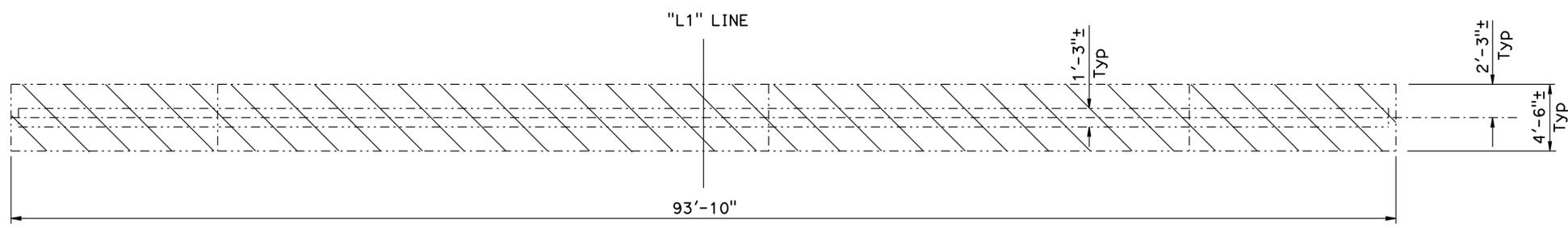
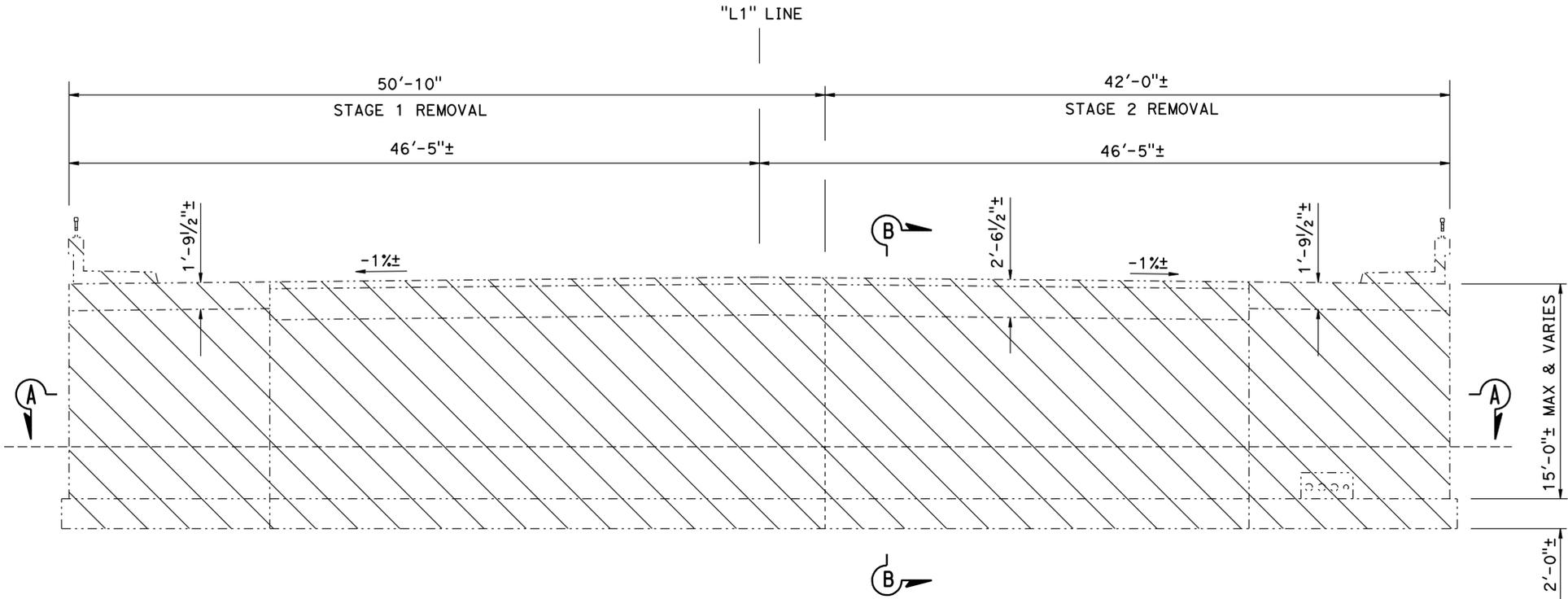
BRIDGE NO. 06-0062  
POST MILE 74.85

**BURNEY CREEK BRIDGE (SCOUR RETROFIT)**  
**PRESTRESSED SLAB DETAILS NO. 2**

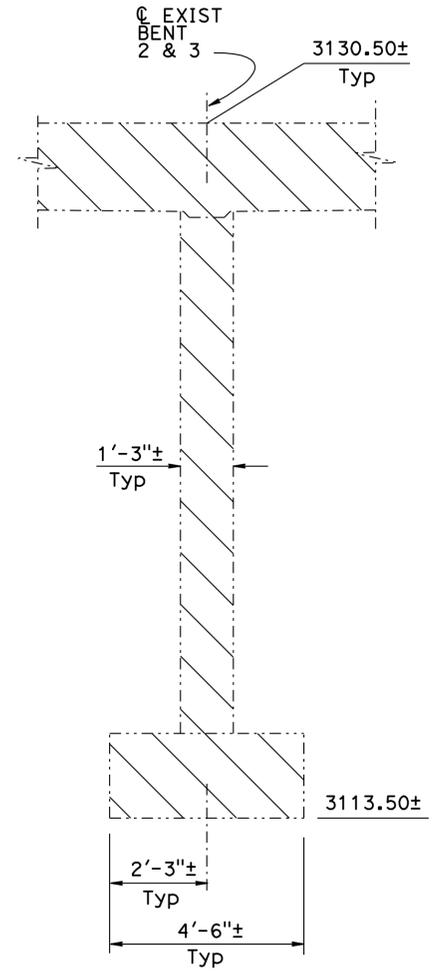
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
02	Sha	299	74.8	48	65

Jose M. Aquino III 3-25-11  
 REGISTERED CIVIL ENGINEER DATE  
 6-20-11  
 PLANS APPROVAL DATE  
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REGISTERED PROFESSIONAL ENGINEER  
 Jose M. Aquino III  
 No. 58386  
 Exp. 12-31-12  
 CIVIL  
 STATE OF CALIFORNIA



**LEGEND:**  
 Indicates Existing Slab, Pier Walls  
 Pier Footing and Barrier Removal



**NOTE:**  
 THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

DESIGN	BY Eric Burgeson	CHECKED Quang H. Nguyen
DETAILS	BY Janie Chlubna/Shadi Motalebi	CHECKED Quang H. Nguyen
QUANTITIES	BY Joey Aquino	CHECKED Ashraf Ahmed

**STATE OF CALIFORNIA**  
 DEPARTMENT OF TRANSPORTATION

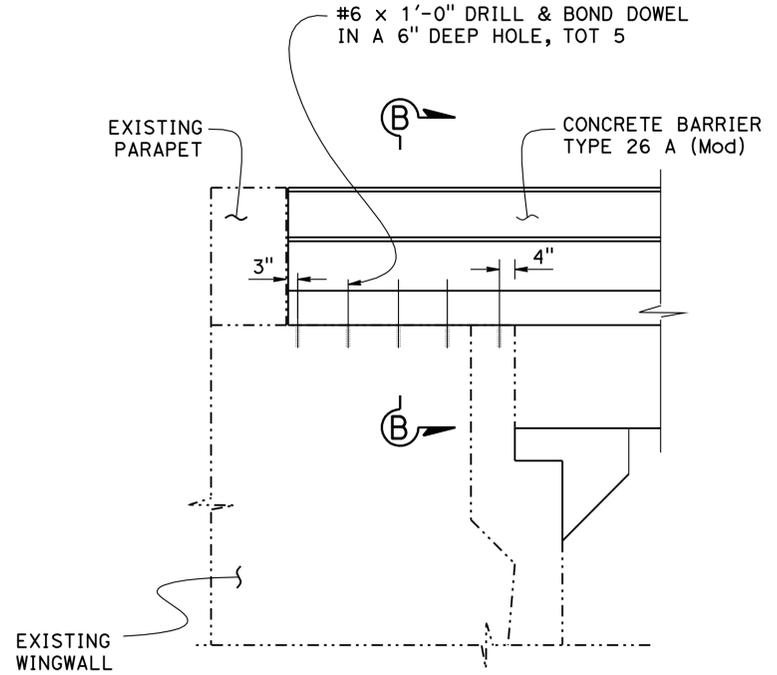
**DIVISION OF ENGINEERING SERVICES**  
 STRUCTURE DESIGN  
**DESIGN BRANCH 3**

BRIDGE NO.	06-0062
POST MILE	74.85

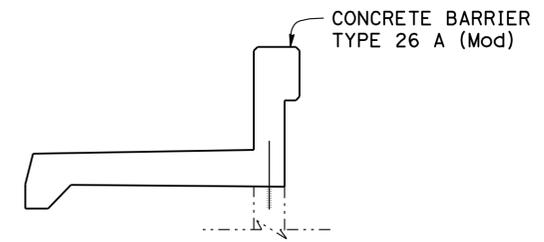
**BURNEY CREEK BRIDGE (SCOUR RETROFIT)**  
**MISCELLANEOUS DETAILS**

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
02	Sha	299	74.8	49	65

REGISTERED CIVIL ENGINEER DATE 3-25-11  
 Jose M. Aquino III  
 No. 58386  
 Exp. 12-31-12  
 CIVIL  
 STATE OF CALIFORNIA  
 PLANS APPROVAL DATE 6-20-11  
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

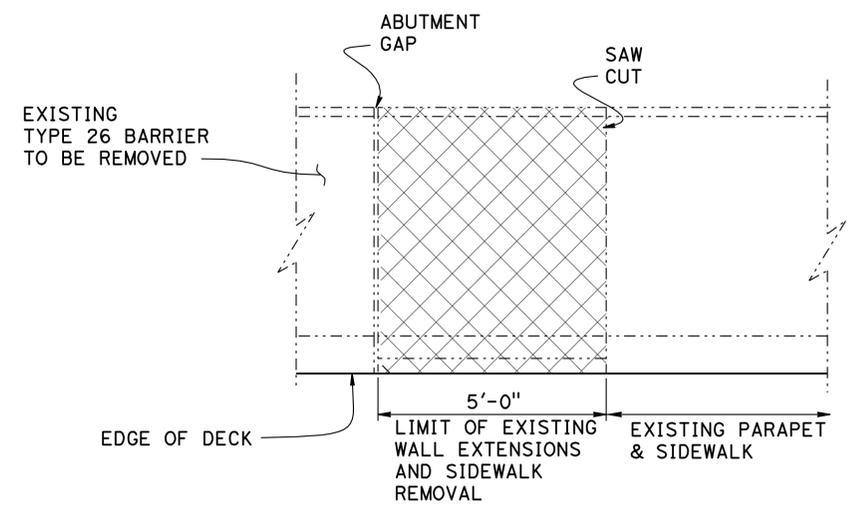


**PART WALL ELEVATION**  
1/2" = 1'-0"

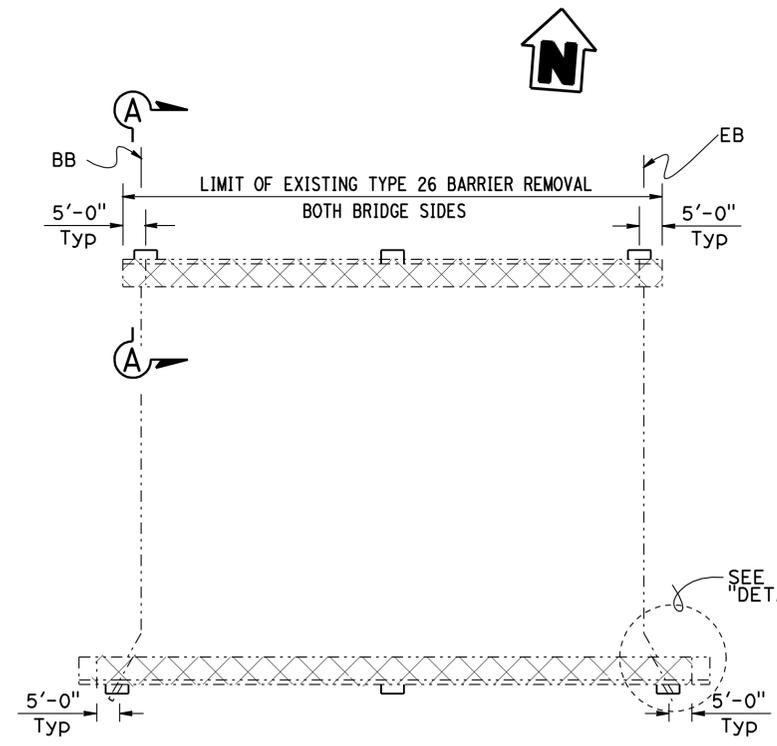


**SECTION B-B**  
NO SCALE

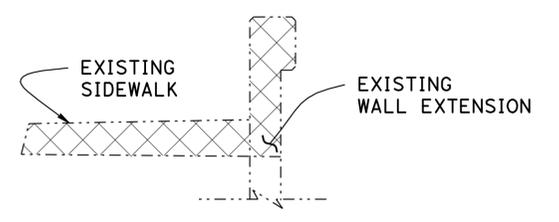
**NOTES:**  
 For Barrier details not shown, see "STANDARD PLAN B11-54"  
 Indicates concrete removal; cut existing reinforcement



**DETAIL A**  
NO SCALE



**PART PLAN**  
1" = 20'



**SECTION A-A**  
NO SCALE

DESIGN	BY Eric Burgeson	CHECKED Quang H Nguyen
DETAILS	BY Janie Chlubna/Shadi Motalabi	CHECKED Quang H Nguyen
QUANTITIES	BY Joey Aquino	CHECKED Ashraf Ahmed

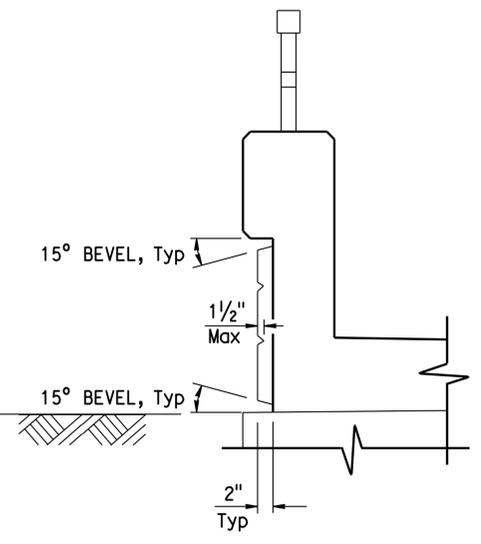
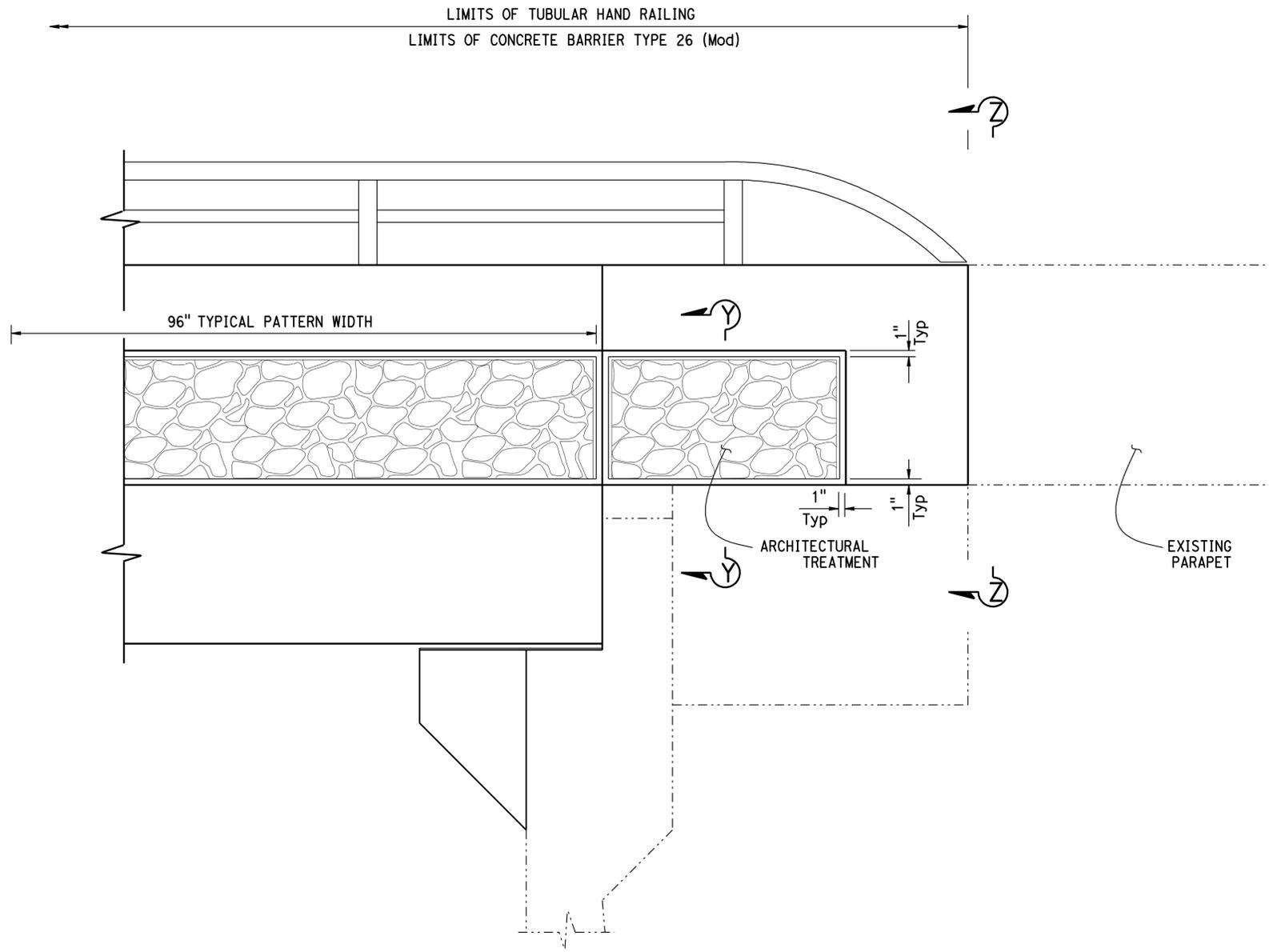
**STATE OF CALIFORNIA**  
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES  
 STRUCTURE DESIGN  
**DESIGN BRANCH 3**

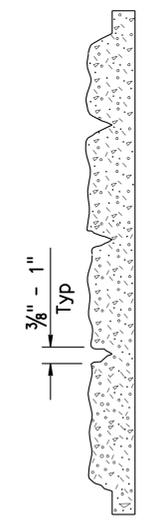
BRIDGE NO.	06-0062
POST MILE	74.85

**BURNEY CREEK BRIDGE (SCOUR RETROFIT)**  
**BARRIER DETAILS NO. 1**

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
02	Sha	299	74.8	50	65
<i>Jose M. Aquino III</i> REGISTERED CIVIL ENGINEER DATE 3-25-11				6-20-11 PLANS APPROVAL DATE	
REGISTERED PROFESSIONAL ENGINEER Jose M. Aquino III No. 58386 Exp. 12-31-12 CIVIL STATE OF CALIFORNIA					
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**SECTION Z-Z**  
1" = 1'-0"



**SECTION Y-Y**  
3" = 1'-0"

**ARCHITECTURAL TREATMENT**  
1" = 1'-0"

NOTE:  
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

DESIGN	BY Eric Burgeson	CHECKED Quang H. Nguyen
DETAILS	BY Janie Chlubna/Shadi Motalebi	CHECKED Quang H. Nguyen
QUANTITIES	BY Joey Aquino	CHECKED Ashraf Ahmed

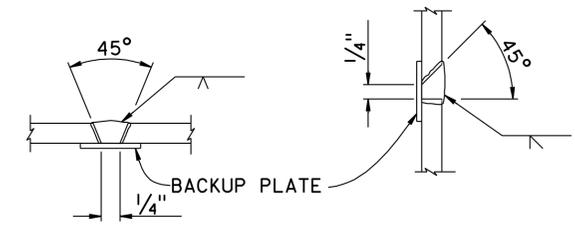
**STATE OF CALIFORNIA**  
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES  
STRUCTURE DESIGN  
**DESIGN BRANCH 3**

BRIDGE NO.	06-0062
POST MILE	74.85

**BURNEY CREEK BRIDGE (SCOUR RETROFIT)**  
**BARRIER DETAILS NO. 2**

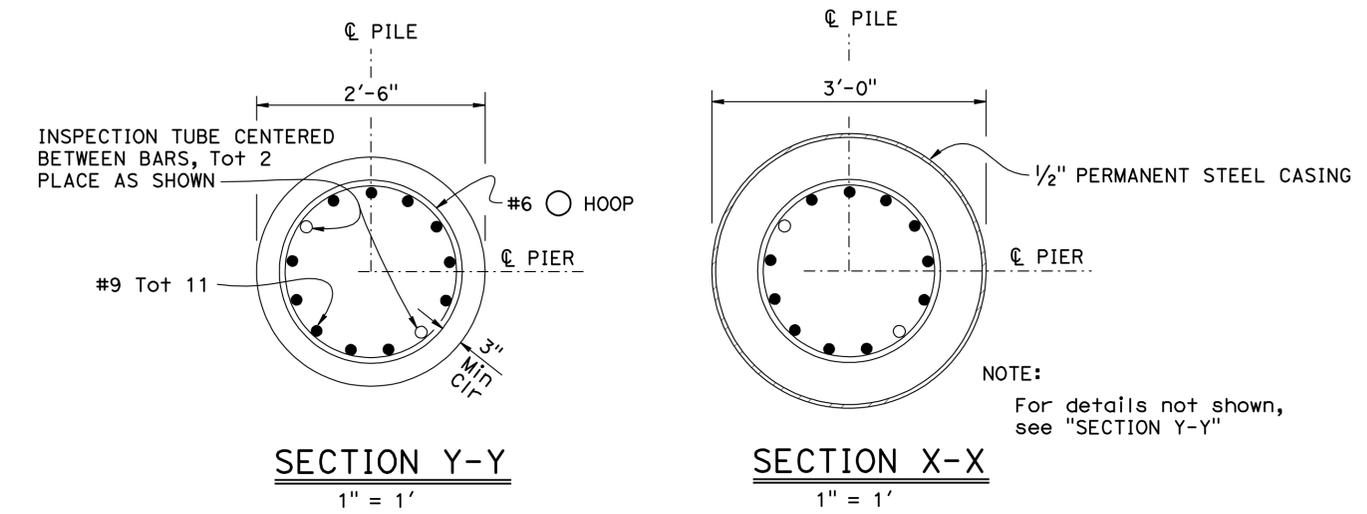
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
02	Sha	299	74.8	51	65
Jose M. Aquino III REGISTERED CIVIL ENGINEER DATE 3-25-11			6-20-11 PLANS APPROVAL DATE		
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.			REGISTERED PROFESSIONAL ENGINEER Jose M. Aquino III No. 58386 Exp. 12-31-12 CIVIL STATE OF CALIFORNIA		



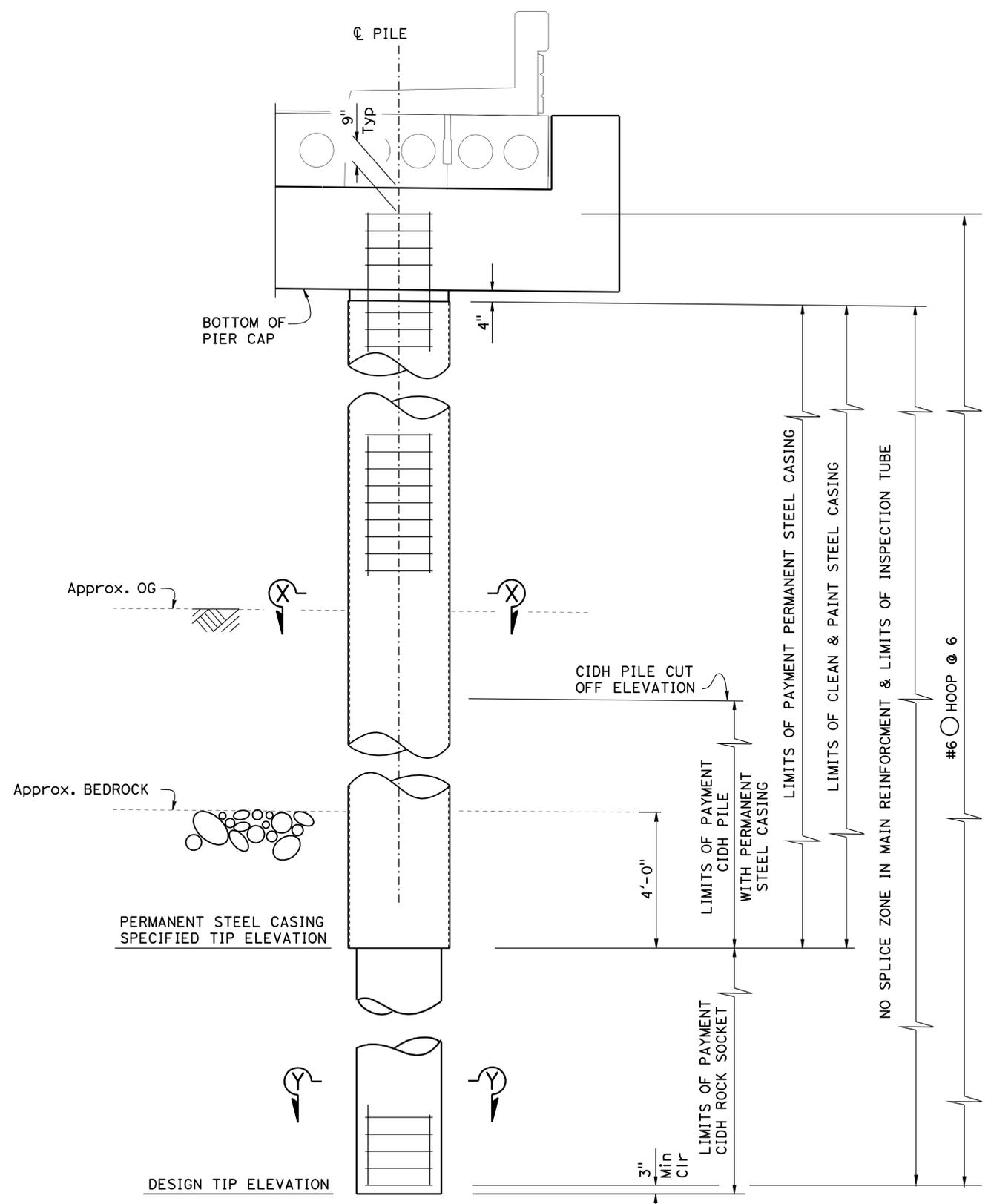
**SINGLE VEE-GROOVE      SINGLE BEVEL-GROOVE**

**CASING WELDING DETAIL-BUTT JOINTS**

- NOTES:
1. Single Vee-Groove permitted for all positions
  2. Single Bevel-Groove permitted for horizontal



- NOTES:
1. For "CIDH ROCK SOCKET DESIGN TIP ELEVATION" and "PERMANENT STEEL CASING SPECIFIED TIP ELEVATION", see "PILE DATA TABLE" on "INDEX TO PLANS" sheet
  2. Hoops are ultimate butt spliced continuous



NOTE: THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

**36" CIDH PILE/COLUMN DETAIL**  
 $\frac{1}{2}'' = 1'-0''$

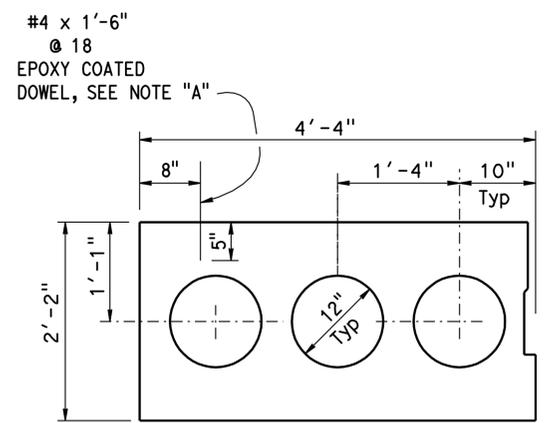
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05)	DESIGN	BY Eric Burgeson	CHECKED Quang H Nguyen	<b>STATE OF CALIFORNIA</b> DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN <b>DESIGN BRANCH 3</b>	BRIDGE NO.	06-0062	<b>BURNEY CREEK BRIDGE (SCOUR RETROFIT)</b> <b>36" CIDH PILE/COLUMN DETAILS</b>
	DETAILS	BY Janie Chlubna/Shadi Motalebi	CHECKED Quang H Nguyen			POST MILE	74.85	
	QUANTITIES	BY Joey Aquino	CHECKED Ashraf Ahmed			REVISION DATES: 2-10-10, 3-2-10, 5-4-10, 5-20-10, 6-1-10, 7-8-10		
				ORIGINAL SCALE IN INCHES FOR REDUCED PLANS: 0, 1, 2, 3	CU 03258 EA 2C2221	DISREGARD PRINTS BEARING EARLIER REVISION DATES	SHEET 18	OF 32

DATE PLOTTED => 21-JUN-2011 USERNAME => hrlim

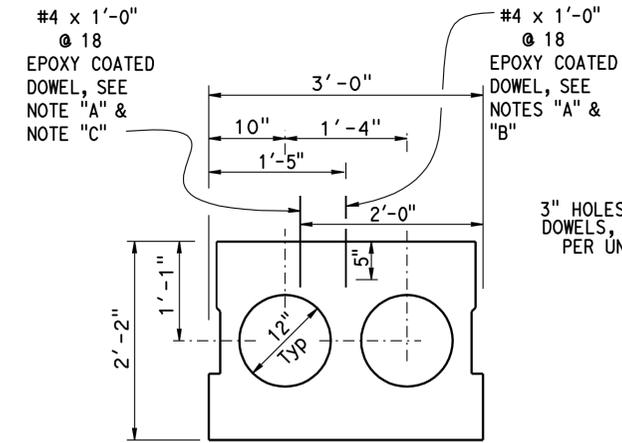
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
02	Sha	299	74.8	52	65

3-25-11  
 REGISTERED CIVIL ENGINEER DATE  
 6-20-11  
 PLANS APPROVAL DATE  
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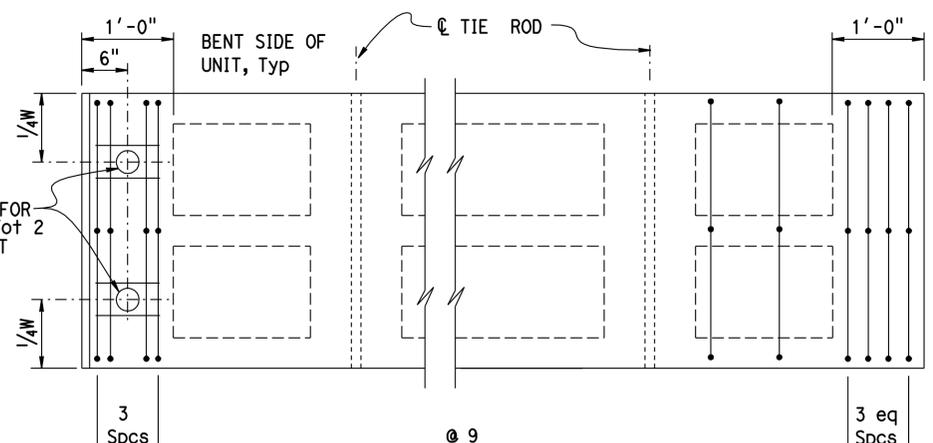
REGISTERED PROFESSIONAL ENGINEER  
 Jose M. Aquino III  
 No. 58386  
 Exp. 12-31-12  
 CIVIL  
 STATE OF CALIFORNIA



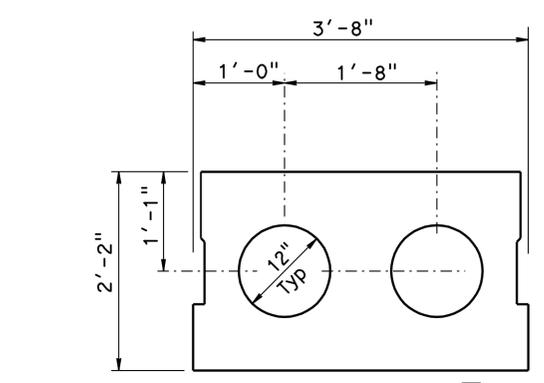
**TYPE A (SLAB 1)**



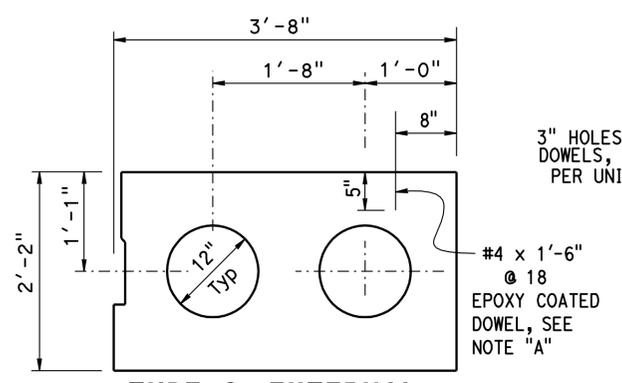
**TYPE B (SLABS 2 THRU 25 AND 27, 28 & 29)**



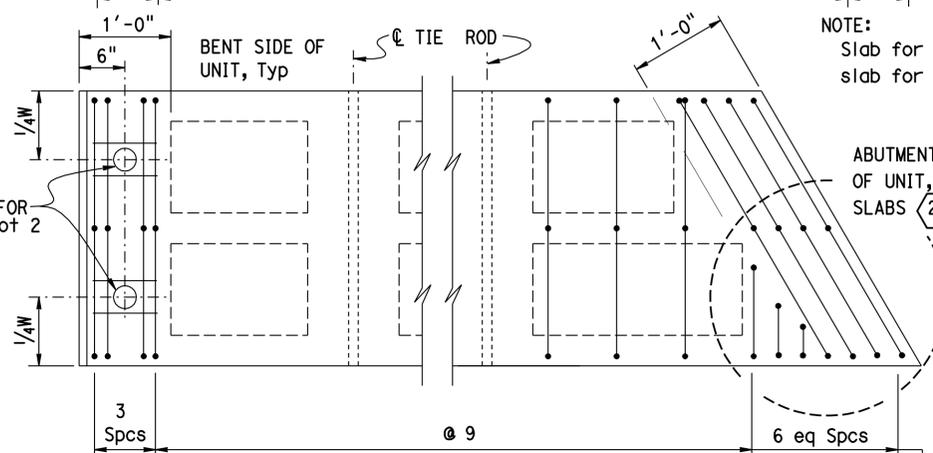
ABUTMENT SIDE OF UNIT, Typ FOR SLABS 1 THRU 26



**TYPE C (SLAB 26)**



**TYPE C-EXTERNAL (SLAB 30)**



NOTE: Slab for span 2 shown, slab for span 1 similar

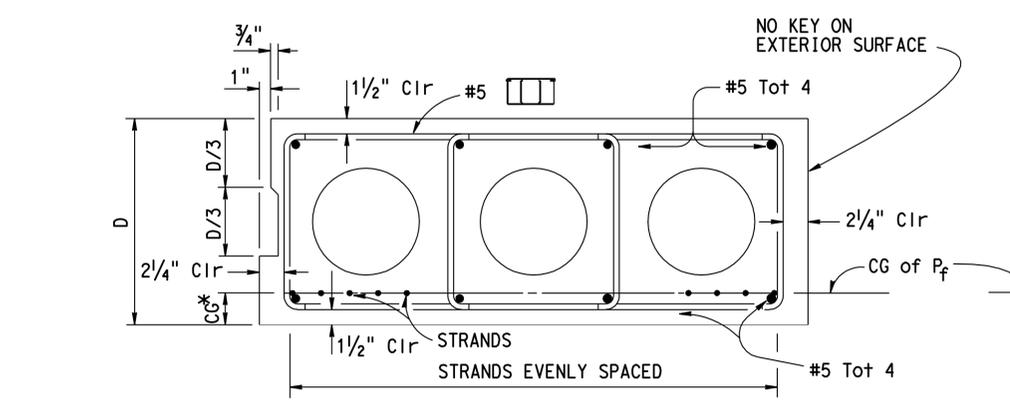
ABUTMENT SIDE OF UNIT, Typ FOR SLABS 27 THRU 30

SEE "DETAIL A", FOR SLAB 30

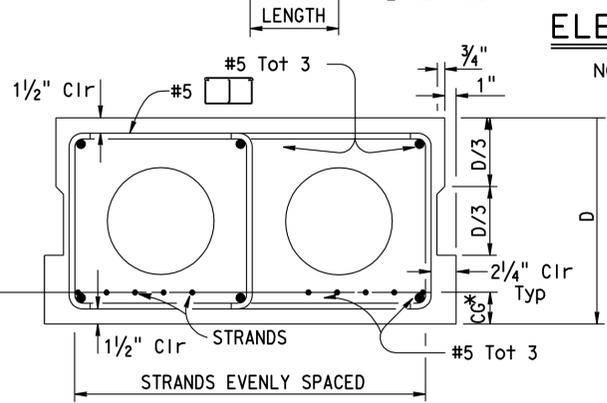
**TYPICAL SECTIONS**

1" = 1'

- NOTES:
- A. See "CONCRETE BARRIER TYPE 26" (B11-54)
  - B. Dowel on Slab 2 ONLY
  - C. Dowel on Slab 29 ONLY

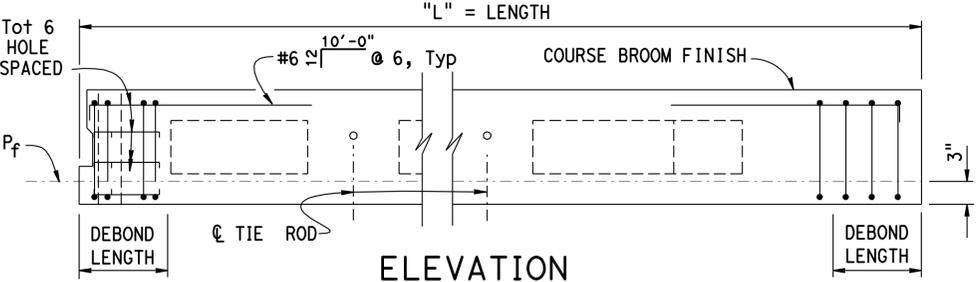


**TYPICAL REINFORCEMENT**  
NO SCALE

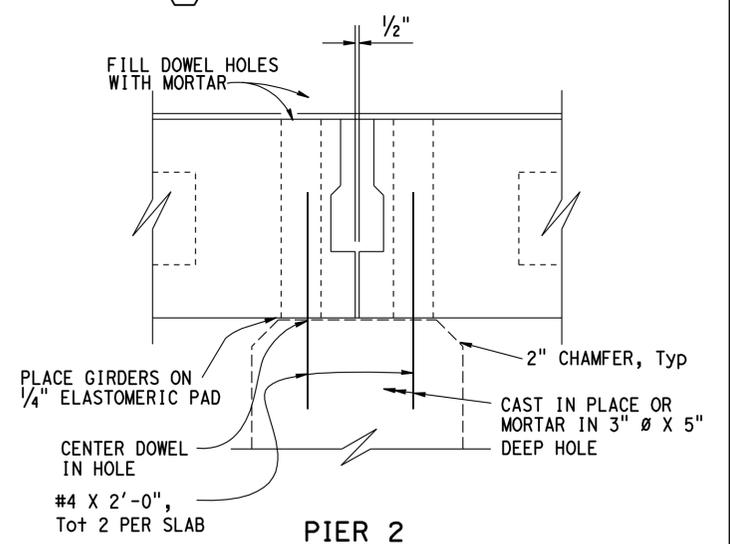


NOTE:  
\* See "PRETENSIONING INFORMATION TABLE" on "PRESTRESSED CONCRETE SLAB DETAILS NO. 2" sheet

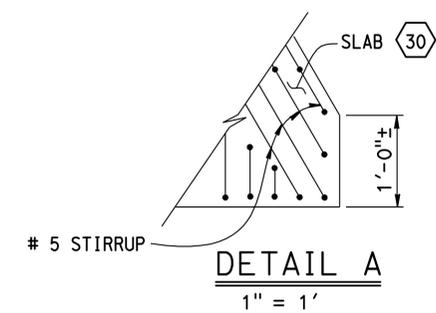
NOTE:  
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.



**ELEVATION**  
NO SCALE



**SECTION H-H SUPPORT DETAILS**  
NO SCALE



**DETAIL A**  
1" = 1'

NOTE:  
For "END KEY DETAILS", see "TYPICAL REINFORCEMENT" details

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	DESIGN BY Eric Burgeson CHECKED Quang H. Nguyen	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN	BRIDGE NO. 06-0062 POST MILE 74.85	<b>BURNEY CREEK BRIDGE (SCOUR RETROFIT)</b> <b>PRESTRESSED CONCRETE SLAB DETAILS NO. 1</b>
	DETAILS BY Janie Chlubna/Shadi Motalabi CHECKED Quang H. Nguyen		DESIGN BRANCH 3	REVISION DATES: 10-15-08, 10-20-08, 11-20-08, 1-6-10, 6-3-10, 6-8-10, 3-22-11	
	QUANTITIES BY Joey Aquino CHECKED Ashraf Ahmed				SHEET 19 OF 32

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
02	Sha	299	74.8	53	65

*Jose M. Aquino III*  
 REGISTERED CIVIL ENGINEER DATE 3-25-11  
 6-20-11  
 PLANS APPROVAL DATE



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### PRETENSIONING INFORMATION

LOCATION	MEASURED ALONG $\phi$ SLAB LENGTH (L)	$P_f$ = WORKING FORCE IN kip	NO. OF STRANDS	* CG (in)	NO. OF DEBONDED STRANDS	DEBONDED LENGTH (ft)
SLAB 1	52'-11 $\frac{1}{4}$ " $\pm$	747	17	3.00	4	4
SLABS 2 - 25	52'-11 $\frac{1}{4}$ " $\pm$	527	12	3.00		
SLAB 26	52'-11 $\frac{1}{4}$ " $\pm$	615	14	3.00		
SLAB 27	53'-10 $\frac{1}{2}$ " $\pm$	615	14	3.00		
		88	2	23.00		
SLAB 28	55'-7 $\frac{1}{2}$ " $\pm$	615	14	3.00		
		88	2	23.00		
SLAB 29	57'-4 $\frac{1}{2}$ " $\pm$	615	14	3.00		
		88	2	23.00		
SLAB 30	59'-4" $\pm$	923	21	3.10	6	6
		88	2	23.00		

**PRESTRESSING NOTES:**

1.  $P_f$  is the force required at center of span after all losses
2. Slabs designed for pretensioning
3. Concrete strength at time of stressing  $f'_ci$  = 5500 psi  
 $f'_c$  = 5500 psi at 28 days
4. Live loading = HS 20-44, Alternative and permit design load
5. Strands shall be 0.60 in diameter  
 $f_u$  = 270 ksi Low-Lax

\* Distance to Center of Gravity (CG) of Working force ( $P_f$ )

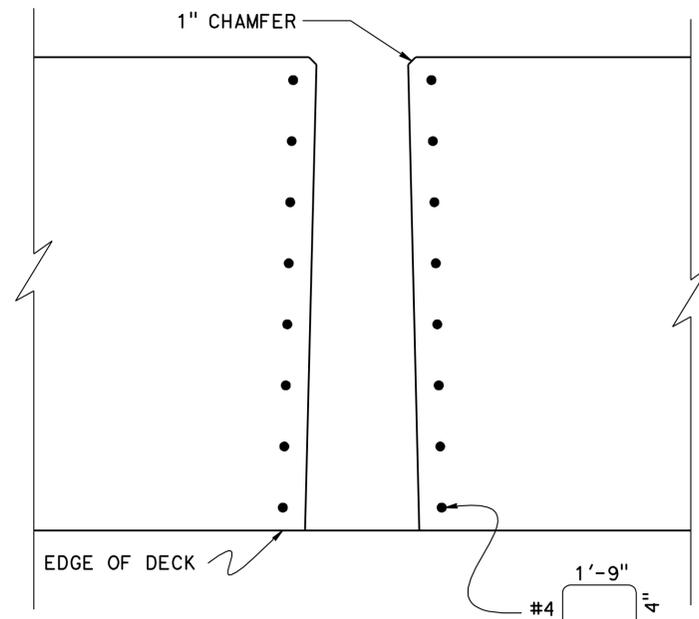
NOTE:  
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

DESIGN BY Eric Burgeson DETAILS BY Janie Chlubna/Shadi Motalebi QUANTITIES BY Joey Aquino	CHECKED Quang H Nguyen	<b>STATE OF CALIFORNIA</b> DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN <b>DESIGN BRANCH 3</b>	BRIDGE NO. 06-0062	<b>BURNEY CREEK BRIDGE (SCOUR RETROFIT)</b> <b>PRESTRESSED CONCRETE SLAB DETAILS NO. 2</b>		
	CHECKED Quang H Nguyen			POST MILE 74.85			
	CHECKED Ashraf Ahmed						
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05)		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	0 1 2 3	CU 03258 EA 2C2221	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 20 OF 32

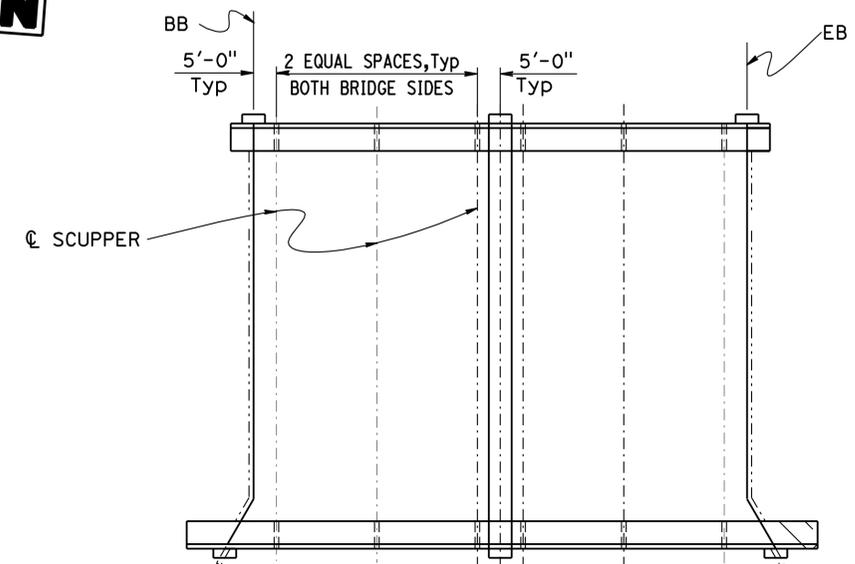
FILE => 06-0062-o-pcsdt02.dgn

USERNAME => hrmikes DATE PLOTTED => 21-JUN-2011 TIME PLOTTED => 10:10

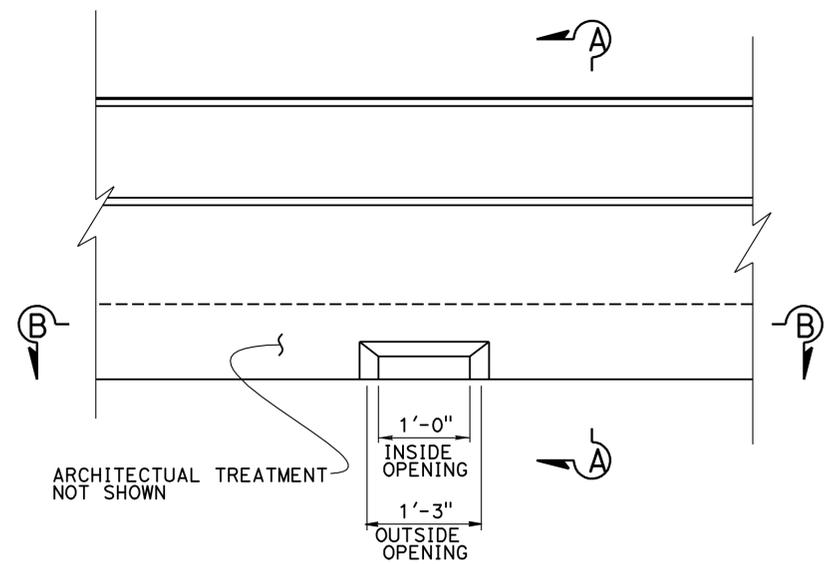
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
02	Sha	299	74.8	54	65
Jose M. Aquino III REGISTERED CIVIL ENGINEER			3-25-11	DATE	
6-20-11			PLANS APPROVAL DATE		
Jose M. Aquino III No. 58386 Exp. 12-31-12 CIVIL STATE OF CALIFORNIA			REGISTERED PROFESSIONAL ENGINEER		
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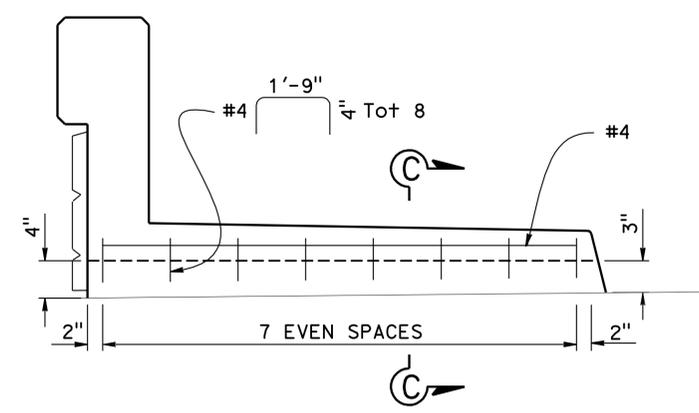
**SECTION B-B**  
1" = 1'-0"



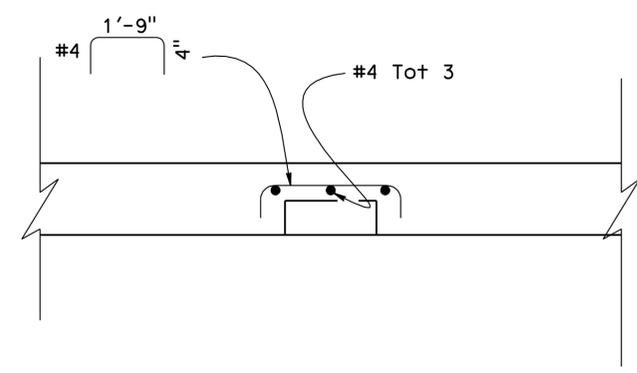
**SCUPPER PLAN**  
1" = 20'



**ELEVATION**  
1" = 1'-0"



**SECTION A-A**  
1" = 1'-0"



**SECTION C-C**  
1" = 1'-0"

DESIGN	BY Eric Bergeson	CHECKED Quang H. Nguyen
DETAILS	BY Shadi Motalebi	CHECKED Quang H. Nguyen
QUANTITIES	BY Joey Aquino	CHECKED Ashraf Ahmed

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES  
STRUCTURE DESIGN  
DESIGN BRANCH **3**

BRIDGE NO.	06-0062
POST MILE	74.85

**BURNEY CREEK BRIDGE (SCOUR RETROFIT)**  
**SCUPPER DETAILS**

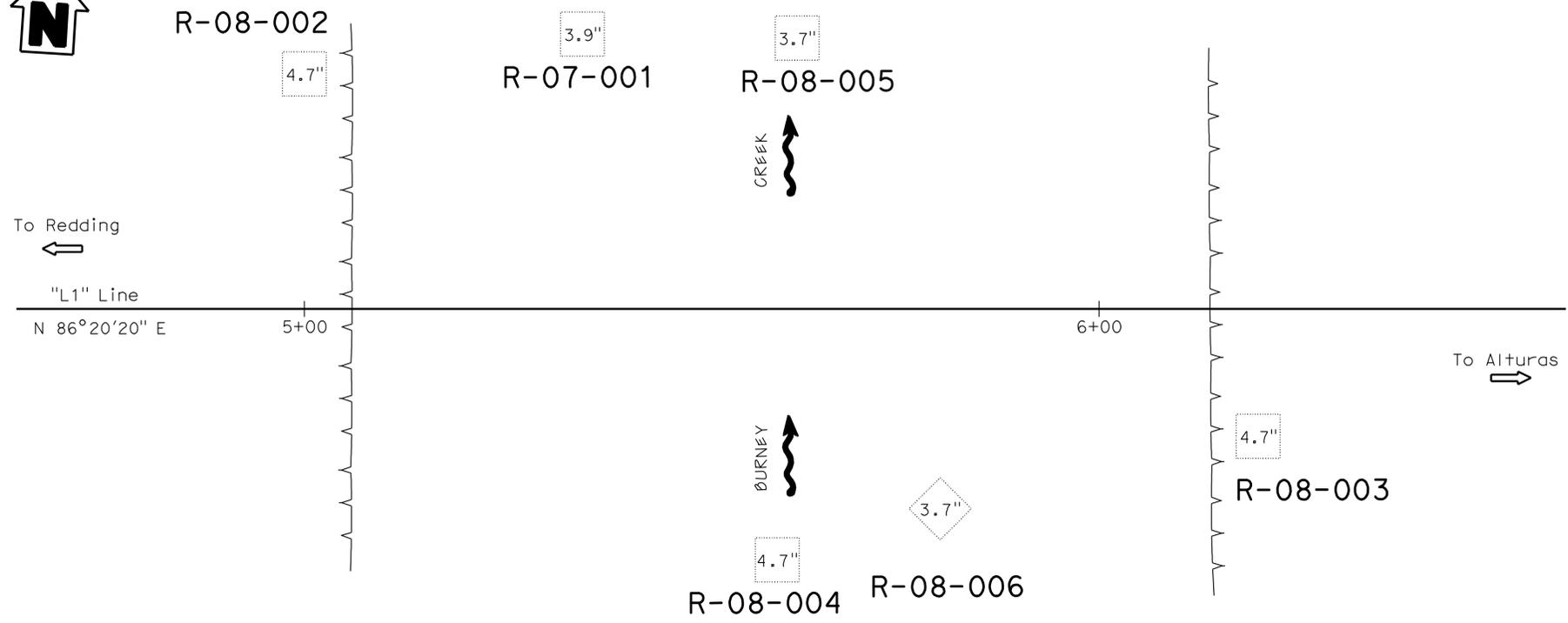
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
02	Sha	299	74.8	55	65

*Xing Zheng*  
 CERTIFIED ENGINEERING GEOLOGIST DATE 8-23-10  
 6-20-11  
 PLANS APPROVAL DATE  
 Xing Zheng  
 No. 2130  
 Exp. 3-31-11  
 CERTIFIED ENGINEERING GEOLOGIST  
 STATE OF CALIFORNIA

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KLEINFELDER INC.  
 3077 FITE CIR.  
 SACRAMENTO, CA 95827

This LOTB sheet was prepared in accordance with the Caltrans Soil & Rock Logging, Classification, and Presentation Manual (June 2007).



**PLAN**  
 1"=10'

**BENCHMARKS**

STATION	OFFSET	N	E	ELEV	DESCRIPTION
5+72.38	43.40' Rt	2,204,667.30	6,653,161.86	3130.83	CM 74.84 Fnd 2 1/4" Brass Disk Epoxied in Concrete
5+80.94	43.41' Lt	2,204,754.48	6,653,164.87	3130.91	CM 74.85 Fnd 2 1/4" Brass Disk Epoxied in Concrete

SURVEY CONTROL  
 1. Vertical Datum NGVD29

**Note:**

1. CME 85 (C# 7388) and Acker MPCA (C# 1974) Truck Mounted rigs with automatic hammer were used to obtain SPT sample.
2. SPT N values shown on the Log of Test Boring (LOTB) sheet are actual values recorded in the field.
3. PP = Unconfined Compressive Strength using a pocket penetrometer.
4. The consistency descriptors shown on the LOTB sheets are based on the pocket penetrometer readings.
5. UC = Unconfined Compressive Strength of rock.

<b>ENGINEERING SERVICES</b>		<b>GEOTECHNICAL SERVICES</b>		<b>STATE OF CALIFORNIA</b> DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN <b>DESIGN BRANCH 3</b>	BRIDGE NO. 06-0062	<b>BURNEY CREEK BRIDGE (SCOUR RETROFIT)</b> <b>LOG OF TEST BORINGS 1 OF 11</b>
FUNCTIONAL SUPERVISOR NAME: R. Buehl	DRAWN BY: A. Sanchez CHECKED BY: J. Kaump	FIELD INVESTIGATION BY: J.L. Thorne				POST MILES 74.85	
O&S CIVIL LOG OF TEST BORINGS SHEET				ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	0 1 2 3	CU 03258 EA 2C2221	DISREGARD PRINTS BEARING EARLIER REVISION DATES
						REVISION DATES	SHEET 22 OF 32

USERNAME => hrmikes DATE PLOTTED => 21-JUN-2011 TIME PLOTTED => 10:10

FOR PLAN VIEW AND ADDITIONAL NOTES, SEE  
"LOG OF TEST BORINGS" SHEET 1 OF 11

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
02	Sha	299	74.8	56	65

8-23-10  
CERTIFIED ENGINEERING GEOLOGIST DATE

6-20-11  
PLANS APPROVAL DATE

Xing Zheng  
No. 2130  
Exp. 3-31-11  
CERTIFIED ENGINEERING GEOLOGIST

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<b>ENGINEERING SERVICES</b>		<b>GEOTECHNICAL SERVICES</b>		<b>STATE OF CALIFORNIA</b>		<b>DIVISION OF ENGINEERING SERVICES</b>		<b>BRIDGE NO.</b>		<b>BURNEY CREEK BRIDGE (SCOUR RETROFIT)</b>	
FUNCTIONAL SUPERVISOR		DRAWN BY: A. Sanchez		FIELD INVESTIGATION BY:		DEPARTMENT OF TRANSPORTATION		06-0062		<b>LOG OF TEST BORINGS 2 OF 11</b>	
NAME: R. Buehl		CHECKED BY: J. Kaump		J.L. Thorne		DESIGN BRANCH 3		POST MILES			
								74.85			
065 CIVIL LOG OF TEST BORINGS SHEET		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		0 1 2 3		CU 03258 EA 2C2221		DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES	
								2-15-10 2-23-10 4-14-10 5-28-10 6-24-10 7-30-10		SHEET 23 OF 32	

FILE => 06-0062-z-1+tb02.dgn

FOR PLAN VIEW AND ADDITIONAL NOTES, SEE  
"LOG OF TEST BORINGS" SHEET 1 OF 11

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
02	Sha	299	74.8	57	65

8-23-10  
CERTIFIED ENGINEERING GEOLOGIST DATE

6-20-11  
PLANS APPROVAL DATE

Xing Zheng  
No. 2130  
Exp. 3-31-11  
CERTIFIED ENGINEERING GEOLOGIST  
STATE OF CALIFORNIA

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SACRAMENTO, CA 95827



This LOTB sheet was prepared in accordance with the Caltrans Soil & Rock Logging, Classification, and Presentation Manual (June 2007).

5+00

6+00

PROFILE

7+00

HOR. 1"=10'  
VER. 1"=10'

<b>ENGINEERING SERVICES</b>		<b>GEOTECHNICAL SERVICES</b>		<b>STATE OF CALIFORNIA</b>		<b>DIVISION OF ENGINEERING SERVICES</b>		<b>BRIDGE NO.</b>		<b>BURNEY CREEK BRIDGE (SCOUR RETROFIT)</b>	
FUNCTIONAL SUPERVISOR		DRAWN BY: A. Sanchez		DEPARTMENT OF TRANSPORTATION		STRUCTURE DESIGN		06-0062		<b>LOG OF TEST BORINGS 3 OF 11</b>	
NAME: R. Buehl		CHECKED BY: J. Kaump		FIELD INVESTIGATION BY: J.L. Thorne		<b>DESIGN BRANCH 3</b>		POST MILES			
								74.85			
06S CIVIL LOG OF TEST BORINGS SHEET		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		0 1 2 3		CU 03258 EA 2C2221		DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES	
								2-15-10 2-23-10 4-14-10 5-28-10 6-24-10 7-30-10		SHEET 24 OF 32	

USERNAME => hrmikes DATE PLOTTED => 21-JUN-2011 TIME PLOTTED => 10:11

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
02	Sha	299	74.8	58	65

FOR PLAN VIEW AND ADDITIONAL NOTES, SEE  
"LOG OF TEST BORINGS" SHEET 1 OF 11

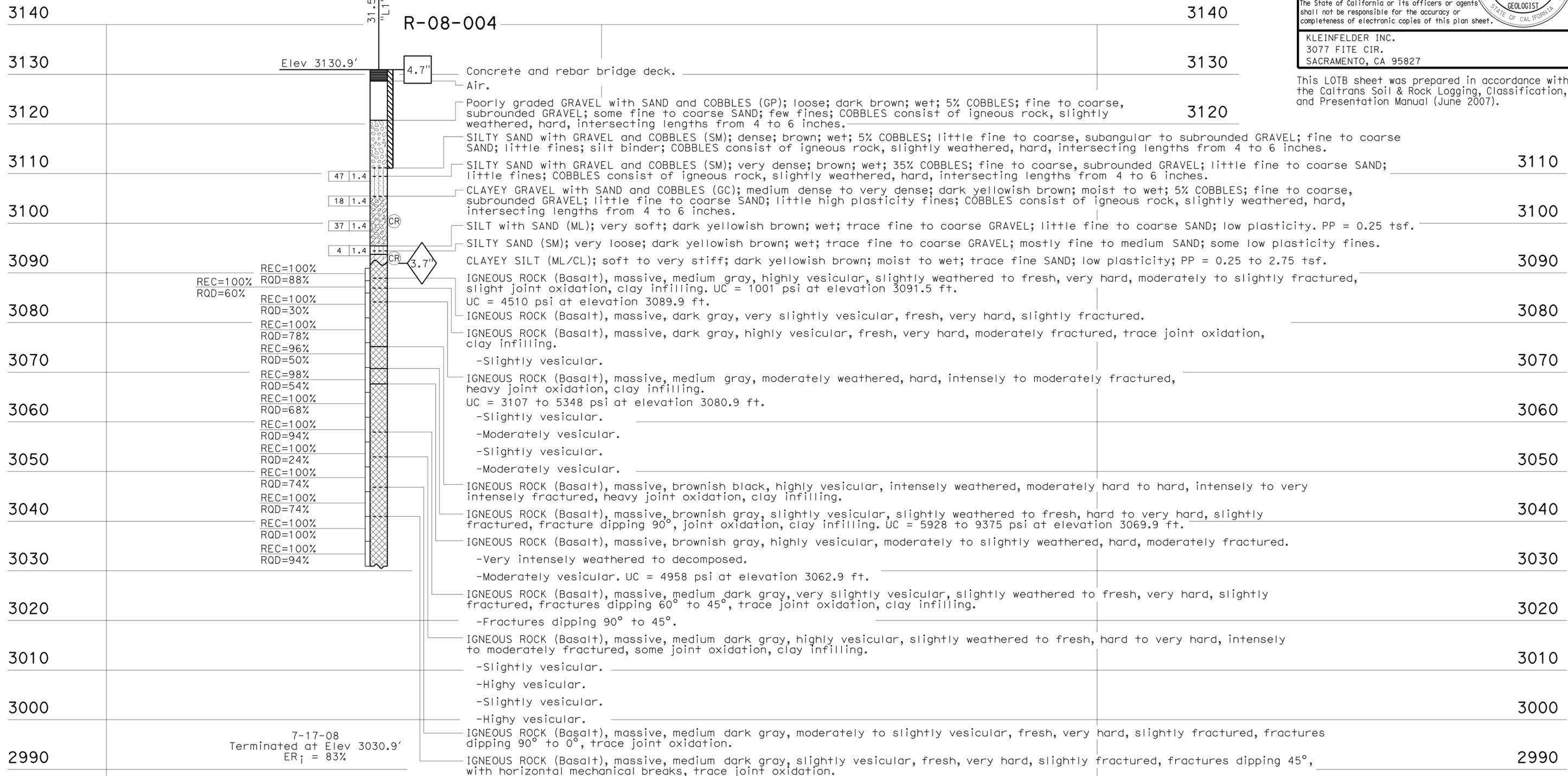
*Chang Xing*  
CERTIFIED ENGINEERING GEOLOGIST DATE 8-23-10

6-20-11  
PLANS APPROVAL DATE

Xing Zheng  
No. 2130  
Exp. 3-31-11  
CERTIFIED ENGINEERING GEOLOGIST  
STATE OF CALIFORNIA

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KLEINFELDER INC.  
3077 FITE CIR.  
SACRAMENTO, CA 95827



5+00 6+00 7+00

**PROFILE**

HOR. 1"=10'  
VER. 1"=10'

<b>ENGINEERING SERVICES</b>		<b>GEOTECHNICAL SERVICES</b>		<b>STATE OF CALIFORNIA</b>		<b>DIVISION OF ENGINEERING SERVICES</b>		<b>BRIDGE NO.</b>		<b>BURNEY CREEK BRIDGE (SCOUR RETROFIT)</b>	
FUNCTIONAL SUPERVISOR		DRAWN BY: A. Sanchez		FIELD INVESTIGATION BY:		DEPARTMENT OF TRANSPORTATION		06-0062		<b>LOG OF TEST BORINGS 4 OF 11</b>	
NAME: R. Buehl		CHECKED BY: J. Kaump		J.L. Thorne		DESIGN BRANCH 3		POST MILES			
								74.85			
065 CIVIL LOG OF TEST BORINGS SHEET		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		0 1 2 3		CU 03258 EA 2C2221		DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES	
								2-15-10 2-23-10 4-14-10 5-28-10 6-24-10 7-30-10		SHEET 25 OF 32	

USERNAME => hmfirkes1 DATE PLOTTED => 21-JUN-2011 TIME PLOTTED => 10:11

FOR PLAN VIEW AND ADDITIONAL NOTES, SEE  
"LOG OF TEST BORINGS" SHEET 1 OF 11

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
02	Sha	299	74.8	59	65

*Chang Xing*  
CERTIFIED ENGINEERING GEOLOGIST DATE 8-23-10

6-20-11  
PLANS APPROVAL DATE

Xing Zheng  
No. 2130  
Exp. 3-31-11  
CERTIFIED ENGINEERING GEOLOGIST  
STATE OF CALIFORNIA

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KLEINFELDER INC.  
3077 FITE CIR.  
SACRAMENTO, CA 95827



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ENGINEERING SERVICES

GEOTECHNICAL SERVICES

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES  
STRUCTURE DESIGN  
DESIGN BRANCH 3

BRIDGE NO. 06-0062  
POST MILES 74.85  
BURNIEY CREEK BRIDGE (SCOUR RETROFIT)  
LOG OF TEST BORINGS 5 OF 11

FUNCTIONAL SUPERVISOR  
NAME: R. Buehl

DRAWN BY: A. Sanchez  
CHECKED BY: J. Kaump

FIELD INVESTIGATION BY:  
J.L. Thorne

CU 03258  
EA 2C2221

REVISION DATES  
2-15-10 2-23-10 4-14-10 5-28-10 6-24-10 7-30-10

USERNAME => fhmikes DATE PLOTTED => 21-JUN-2011 TIME PLOTTED => 10:11

FOR PLAN VIEW AND ADDITIONAL NOTES, SEE  
 "LOG OF TEST BORINGS" SHEET 1 OF 11

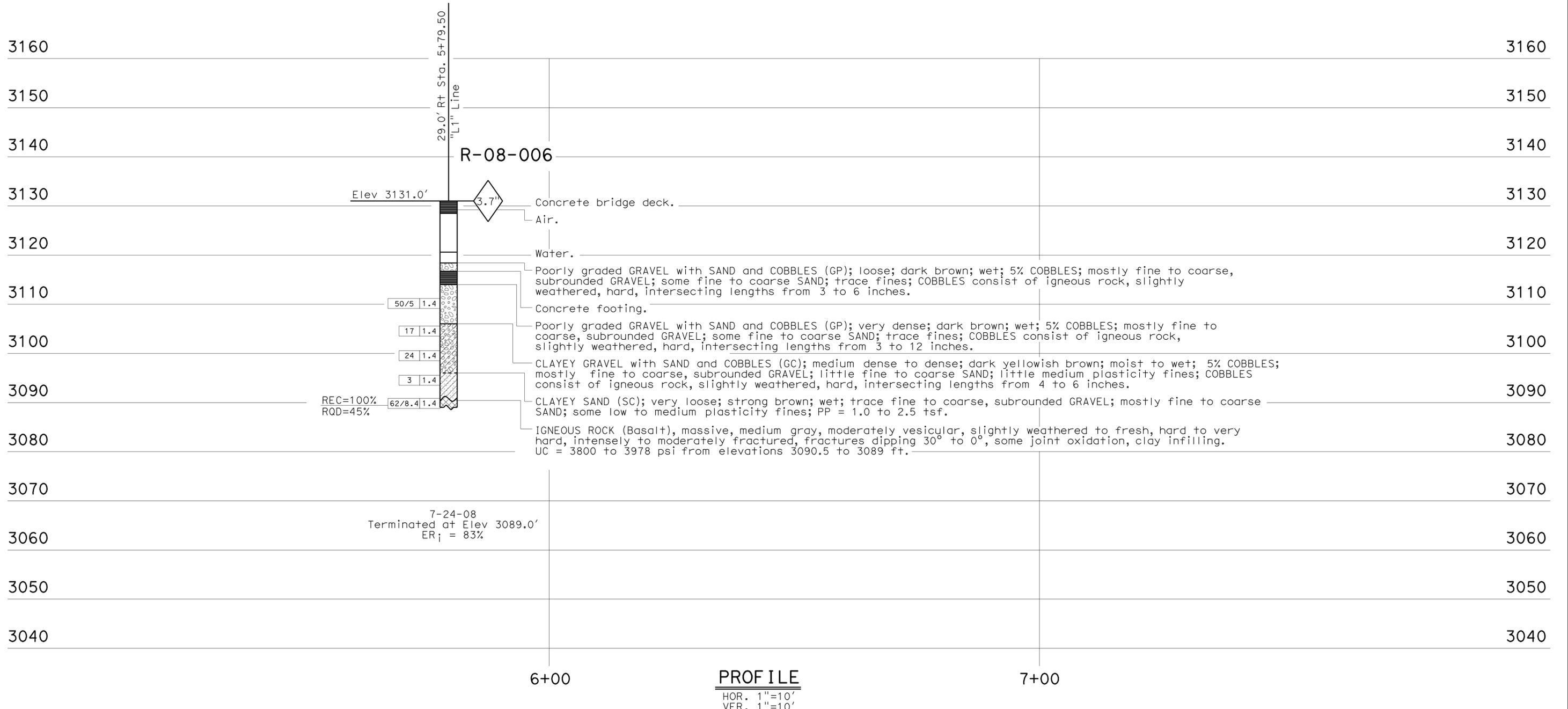
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
02	Sha	299	74.8	60	65

*Xing Zheng*  
 CERTIFIED ENGINEERING GEOLOGIST DATE 8-23-10  
 6-20-11  
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<b>ENGINEERING SERVICES</b>		<b>GEOTECHNICAL SERVICES</b>		<b>STATE OF CALIFORNIA</b> DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN <b>DESIGN BRANCH 3</b>	BRIDGE NO. 06-0062	<b>BURNEY CREEK BRIDGE (SCOUR RETROFIT)</b>	
FUNCTIONAL SUPERVISOR NAME: R. Buehl	DRAWN BY: A. Sanchez CHECKED BY: J. Kaump	FIELD INVESTIGATION BY: J.L. Thorne				POST MILES 74.85		<b>LOG OF TEST BORINGS 6 OF 11</b>
O&S CIVIL LOG OF TEST BORINGS SHEET				ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3	CU 03258 EA 2C2221	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES 2-15-10 2-23-10 4-14-10 5-28-10 6-24-10 7-30-10	SHEET 27 OF 32

USERNAME => hmfikes DATE PLOTTED => 21-JUN-2011 TIME PLOTTED => 10:11

FOR PLAN VIEW AND ADDITIONAL NOTES, SEE  
"LOG OF TEST BORINGS" SHEET 1 OF 11

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
02	Sha	299	74.8	61	65

8-23-10  
CERTIFIED ENGINEERING GEOLOGIST DATE

6-20-11  
PLANS APPROVAL DATE

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6+00 7+00 8+00  
**PROFILE**  
HOR. 1"=10'  
VER. 1"=10'

<b>ENGINEERING SERVICES</b>		<b>GEOTECHNICAL SERVICES</b>		<b>STATE OF CALIFORNIA</b>		<b>DIVISION OF ENGINEERING SERVICES</b>		<b>BRIDGE NO.</b>		<b>BURNEY CREEK BRIDGE (SCOUR RETROFIT)</b>	
FUNCTIONAL SUPERVISOR		DRAWN BY: A. Sanchez		FIELD INVESTIGATION BY:		06-0062		POST MILES		<b>LOG OF TEST BORINGS 7 OF 11</b>	
NAME: R. Buehl		CHECKED BY: J. Kaump		J.L. Thorne		74.85					
06S CIVIL LOG OF TEST BORINGS SHEET		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		0 1 2 3		CU 03258 EA 2C2221		DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES	
						FILE => 06-0062-z-1+07.dgn		2-15-10 2-23-10 4-14-10 5-28-10 6-24-10 7-30-10		SHEET 28 OF 32	

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
02	Sha	299	74.8	62	65

**PERCENT CORE RECOVERY (REC) & ROCK QUALITY DESIGNATION (RQD)**

$$REC = \frac{\sum \text{Length of the recovered core pieces (inches)}}{\text{Total length of core run (inches)}} \times 100\%$$

$$RQD = \frac{\sum \text{Length of intact core pieces} \geq 4''}{\text{Total length of core run (inches)}} \times 100\%$$

**RELATIVE STRENGTH OF INTACT ROCK**

Term	Uniaxial Compressive Strength (PSI)
Extremely Strong	> 30,000
Very Strong	14,500 - 30,000
Strong	7,000 - 14,500
Medium Strong	3,500 - 7,000
Weak	700 - 3,500
Very Weak	150 - 700
Extremely Weak	< 150

**BEDDING SPACING**

Description	Thickness / Spacing
Massive	Greater than 10 ft
Very thickly bedded	3 to 10 ft
Thickly bedded	1 to 3 ft
Moderately bedded	3-5/8" to 1 ft
Thinly bedded	1-1/4" to 3-5/8"
Very thinly bedded	3/8" to 1-1/4"
Laminated	Less than 3/8"

*Xing Zheng*  
 CERTIFIED ENGINEERING GEOLOGIST DATE 8-23-10  
 No. 2130  
 Exp. 3-31-11  
 XING ZHENG  
 CERTIFIED ENGINEERING GEOLOGIST  
 STATE OF CALIFORNIA

6-20-11  
 PLANS APPROVAL DATE

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**LEGEND OF ROCK MATERIALS**

	IGNEOUS ROCK
	SEDIMENTARY ROCK
	METAMORPHIC ROCK

**ROCK HARDNESS**

Description	Criteria
Extremely Hard	Specimen cannot be scratched with a pocket knife or sharp pick; can only be chipped with repeated heavy hammer blows.
Very Hard	Specimen cannot be scratched with a pocket knife or sharp pick. Breaks with repeated heavy hammer blows.
Hard	Specimen can be scratched with a pocket knife or sharp pick with difficulty (heavy pressure). Heavy hammer blows required to break specimen.
Moderately Hard	Specimen can be scratched with pocket knife or sharp pick with light or moderate pressure. Core breaks with moderate hammer pressure.
Moderately Soft	Specimen can be grooved 1/6" deep with a pocket knife or sharp pick with moderate or heavy pressure. Breaks with light hammer blow or heavy manual pressure.
Soft	Specimen can be grooved or gouged easily by a pocket knife or sharp pick with light pressure, can be scratched with fingernail. Breaks with light to moderate manual pressure.
Very Soft	Specimen can be readily indented, grooved or gouged with fingernail, or carved with a pocket knife. Breaks with light manual pressure.

**WEATHERING DESCRIPTORS FOR INTACT ROCK**

Description	Diagnostic features					General Characteristics
	Chemical Weathering-Discoloration and/or oxidation		Mechanical Weathering-Grain boundary conditions (disaggregation) primarily for granitics and some coarse-grained sediments	Texture and Solutioning		
	Body of Rock	Fracture Surfaces		Texture	Solutioning	
Fresh	No discoloration, not oxidized.	No discoloration or oxidation.	No separation, intact (tight).	No change.	No solutioning.	Hammer rings when crystalline rocks are struck.
Slightly Weathered	Discoloration or oxidation is limited to surface of, or short distance from, fractures; some feldspar crystals are dull.	Minor to complete discoloration or oxidation of most surfaces.	No visible separation, intact (tight).	Preserved.	Minor leaching of some soluble minerals may be noted.	Hammer rings when crystalline rocks are struck. Body of rock not weakened.
Moderately Weathered	Discoloration or oxidation extends from fractures usually throughout; Fe-Mg minerals are "rusty," feldspar crystals are "cloudy."	All fracture surfaces are discolored or oxidized.	Partial separation of boundaries visible.	Generally preserved.	Soluble minerals may be mostly leached.	Hammer does not ring when rock is struck. Body of rock is slightly weakened.
Intensely Weathered	Discoloration or oxidation throughout; all feldspars and Fe-Mg minerals are altered to clay to some extent; or chemical alteration produces in-situ disaggregation, see grain boundary conditions.	All fracture surfaces are discolored or oxidized, surfaces friable.	Partial separation, rock is friable; in semiarid conditions granitics are disaggregated.	Texture altered by chemical disintegration (hydration, argillation).	Leaching of soluble minerals may be complete.	Dull sound when struck with hammer, usually can be broken with moderate to heavy manual pressure or by light hammer blow without reference to planes of weakness such as incipient or hairline fractures, or veinlets. Rock is significantly weakened.
Decomposed	Discolored or oxidized throughout, but resistant minerals such as quartz may be unaltered; all feldspars and Fe-Mg minerals are completely altered to clay.		Complete separation of grain boundaries (disaggregated).	Resembles a soil, partial or complete remnant rock structure may be preserved; leaching of soluble minerals usually complete.		Can be granulated by hand. Resistant minerals such as quartz may be present as "stringers" or "dikes."

Combination descriptors (such as "slightly weathered to fresh") are permissible where equal distribution of both weathering characteristics is present over significant intervals or where characteristics present are "in between" the diagnostic feature. However, combination descriptors should not be used where significant, identifiable zones can be delineated. Only two adjacent descriptors may be combined. "Very intensely weathered" is the combination descriptor for "intensely weathered to decomposed."

**FRACTURE DENSITY**

Description	Observed Fracture Density
Unfractured	No fractures.
Very slightly fractured	Lengths greater than 3 feet.
Slightly fractured	Lengths from 1 to 3 feet with few lengths less than 1 foot or greater than 3 feet.
Moderately fractured	Lengths mostly in 4" to 1 foot range with most lengths about 8"
Intensely fractured	Lengths average from 1 to 4" with scattered fragmented intervals with lengths less than 4"
Very intensely fractured	Mostly chips and fragments with a few scattered short core lengths.

Combination descriptors (such as "Very intensely to intensely fractured") are used where equal distribution of both fracture density characteristics is present over a significant interval or exposure, or where characteristics are "in between" the descriptor definitions. Only two adjacent descriptors may be combined.

*Xing Zheng*  
8-23-10  
CERTIFIED ENGINEERING GEOLOGIST DATE

6-20-11  
PLANS APPROVAL DATE

Xing Zheng  
No. 2130  
Exp. 3-31-11  
CERTIFIED ENGINEERING GEOLOGIST  
STATE OF CALIFORNIA

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SACRAMENTO, CA 95827

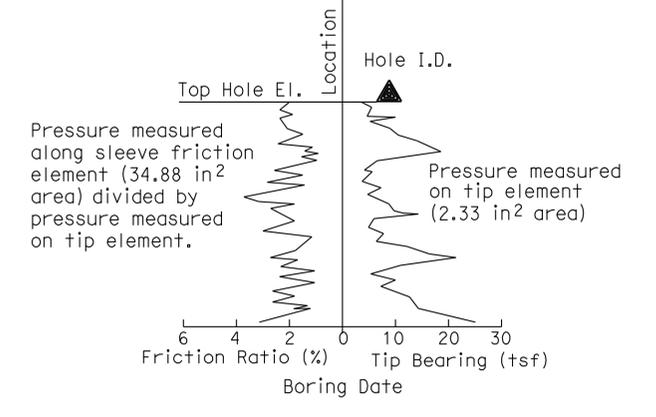
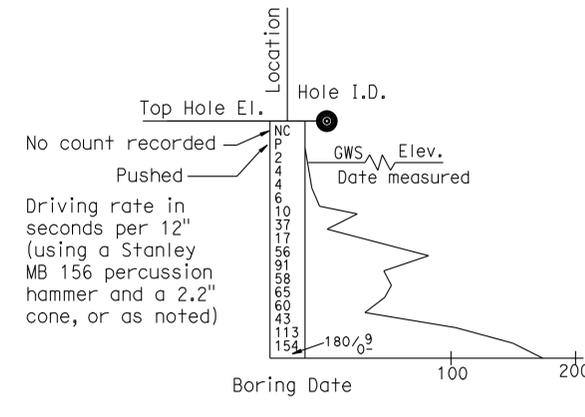
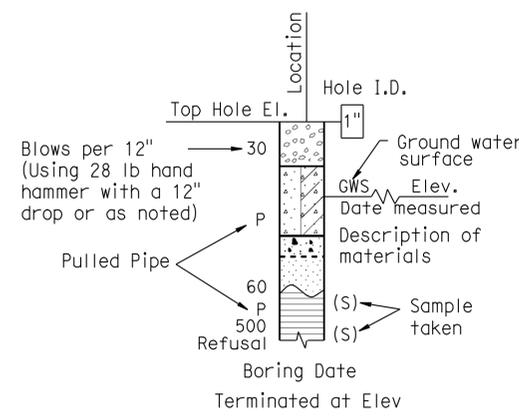
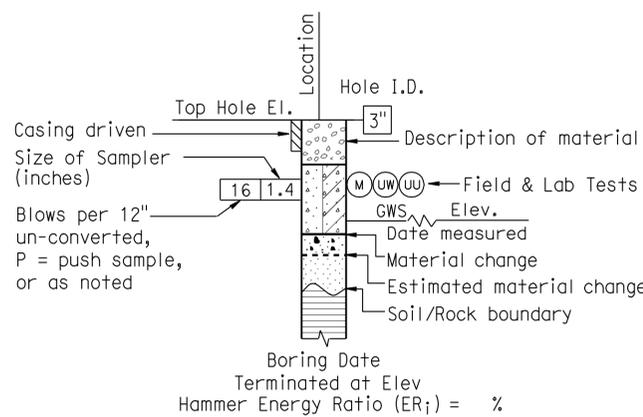
CEMENTATION	
Description	Criteria
Weak	Crumbles or breaks with handling or little finger pressure.
Moderate	Crumbles or breaks with considerable finger pressure.
Strong	Will not crumble or break with finger pressure.

CONSISTENCY OF COHESIVE SOILS				
Description	Unconfined Compressive Strength (tsf)	Pocket Penetrometer Measurement (tsf)	Torvane Measurement (tsf)	Field Approximation
Very Soft	< 0.25	< 0.25	< 0.12	Easily penetrated several inches by fist
Soft	0.25 to 0.50	0.25 to 0.50	0.12 to 0.25	Easily penetrated several inches by thumb
Medium Stiff	0.50 to 1.0	0.50 to 1.0	0.25 to 0.50	Penetrated several inches by thumb with moderate effort
Stiff	1 to 2	1 to 2	0.50 to 1.0	Readily indented by thumb but penetrated only with great effort
Very Stiff	2 to 4	2 to 4	1.0 to 2.0	Readily indented by thumbnail
Hard	> 4.0	> 4.0	> 2.0	Indented by thumbnail with difficulty

BOREHOLE IDENTIFICATION		
Symbol	Hole Type	Description
	A	Auger Boring
	R	Rotary drilled boring
	P	Rotary percussion boring (air)
	R	Rotary drilled diamond core
	HD	Hand driven (1-inch soil tube)
	HA	Hand Auger
	D	Dynamic Cone Penetration Boring
	CPT	Cone Penetration Test (ASTM D 5778-95)
	O	Other

**Note: Size in inches.**

PLASTICITY OF FINE-GRAINED SOILS	
Description	Criteria
Nonplastic	A 1/8-inch thread cannot be rolled at any water content.
Low	The thread can barely be rolled and the lump cannot be formed when drier than the plastic limit.
Medium	The thread is easy to roll and not much time is required to reach the plastic limit. The thread cannot be rerolled after reaching the plastic limit. The lump crumbles when drier than the plastic limit.
High	It takes considerable time rolling and kneading to reach the plastic limit. The thread can be rerolled several times after reaching the plastic limit. The lump can be formed without crumbling when drier than the plastic limit.



GROUP SYMBOLS AND NAMES					
Graphic/Symbol	Group Names	Graphic/Symbol	Group Names	Graphic/Symbol	Group Names
	Well-graded GRAVEL		Lean CLAY		Lean CLAY with SAND
	Well-graded GRAVEL with SAND		Lean CLAY with GRAVEL		
	Poorly graded GRAVEL		SANDY lean CLAY		GRAVELLY lean CLAY
	Poorly graded GRAVEL with SAND		GRAVELLY lean CLAY with SAND		
	Well-graded GRAVEL with SILT		SILTY CLAY		SANDY SILTY CLAY
	Well-graded GRAVEL with SILT and SAND		GRAVELLY SILTY CLAY		
	Well-graded GRAVEL with CLAY (or SILTY CLAY)		SANDY SILTY CLAY		GRAVELLY SANDY SILTY CLAY
	Well-graded GRAVEL with CLAY and SAND (or SILTY CLAY and SAND)		GRAVELLY SILTY CLAY with SAND		
	Poorly graded GRAVEL with SILT		SILT		SANDY SILT
	Poorly graded GRAVEL with SILT and SAND		GRAVELLY SILT		
	Poorly graded GRAVEL with CLAY (or SILTY CLAY)		SANDY SILT		GRAVELLY SANDY SILT
	Poorly graded GRAVEL with CLAY and SAND (or SILTY CLAY and SAND)		GRAVELLY SANDY SILT with SAND		
	SILTY GRAVEL		ORGANIC lean CLAY		ORGANIC lean CLAY with SAND
	SILTY GRAVEL with SAND		ORGANIC lean CLAY with GRAVEL		
	CLAYEY GRAVEL		SANDY ORGANIC lean CLAY		GRAVELLY SANDY ORGANIC lean CLAY
	CLAYEY GRAVEL with SAND		GRAVELLY SANDY ORGANIC lean CLAY with SAND		
	SILTY, CLAYEY GRAVEL		ORGANIC SILT		ORGANIC SILT with SAND
	SILTY, CLAYEY GRAVEL with SAND		ORGANIC SILT with GRAVEL		
	Well-graded SAND		SANDY ORGANIC SILT		GRAVELLY SANDY ORGANIC SILT
	Well-graded SAND with GRAVEL		GRAVELLY SANDY ORGANIC SILT with SAND		
	Poorly graded SAND		Fat CLAY		Fat CLAY with SAND
	Poorly graded SAND with GRAVEL		Fat CLAY with GRAVEL		
	Well-graded SAND with SILT		SANDY fat CLAY		GRAVELLY SANDY fat CLAY
	Well-graded SAND with SILT and GRAVEL		GRAVELLY SANDY fat CLAY with SAND		
	Well-graded SAND with CLAY (or SILTY CLAY)		Elastic SILT		Elastic SILT with SAND
	Well-graded SAND with CLAY and GRAVEL (or SILTY CLAY and GRAVEL)		Elastic SILT with GRAVEL		
	Poorly graded SAND with SILT		SANDY elastic SILT		GRAVELLY SANDY elastic SILT
	Poorly graded SAND with SILT and GRAVEL		GRAVELLY SANDY elastic SILT with SAND		
	Poorly graded SAND with CLAY (or SILTY CLAY)		ORGANIC fat CLAY		ORGANIC fat CLAY with SAND
	Poorly graded SAND with CLAY and GRAVEL (or SILTY CLAY and GRAVEL)		ORGANIC fat CLAY with GRAVEL		
	SILTY SAND		SANDY ORGANIC fat CLAY		GRAVELLY SANDY ORGANIC fat CLAY
	SILTY SAND with GRAVEL		GRAVELLY SANDY ORGANIC fat CLAY with SAND		
	CLAYEY SAND		ORGANIC elastic SILT		ORGANIC elastic SILT with SAND
	CLAYEY SAND with GRAVEL		ORGANIC elastic SILT with GRAVEL		
	SILTY, CLAYEY SAND		SANDY ORGANIC elastic SILT		GRAVELLY SANDY ORGANIC elastic SILT
	SILTY, CLAYEY SAND with GRAVEL		GRAVELLY SANDY ORGANIC elastic SILT with SAND		
	PEAT		ORGANIC SOIL		ORGANIC SOIL with SAND
	COBBLES		ORGANIC SOIL with GRAVEL		
	COBBLES and BOULDERS		SANDY ORGANIC SOIL		GRAVELLY SANDY ORGANIC SOIL
	BOULDERS		GRAVELLY SANDY ORGANIC SOIL with SAND		

FIELD AND LABORATORY TESTING	
(C)	Consolidation (ASTM D 2435)
(CL)	Collapse Potential (ASTM D 5333)
(CP)	Compaction Curve (CTM 216)
(CR)	Corrosivity Testing (CTM 643, CTM 422, CTM 417)
(CU)	Consolidated Undrained Triaxial (ASTM D 4767)
(DS)	Direct Shear (ASTM D 3080)
(EI)	Expansion Index (ASTM D 4829)
(M)	Moisture Content (ASTM D 2216)
(OC)	Organic Content-% (ASTM D 2974)
(P)	Permeability (CTM 220)
(PA)	Particle Size Analysis (ASTM D 422)
(PI)	Plasticity Index (AASHTO T 90) Liquid Limit (AASHTO T 89)
(PL)	Point Load Index (ASTM D 5731)
(PM)	Pressure Meter
(PP)	Pocket Penetrometer
(R)	R-Value (CTM 301)
(SE)	Sand Equivalent (CTM 217)
(SG)	Specific Gravity (AASHTO T 100)
(SL)	Shrinkage Limit (ASTM D 427)
(SW)	Swell Potential (ASTM D 4546)
(TV)	Pocket Torvane
(UC)	Unconfined Compression-Soil (ASTM D 2166) Unconfined Compression-Rock (ASTM D 2938)
(UU)	Unconsolidated Undrained Triaxial (ASTM D 2850)
(UW)	Unit Weight (ASTM D 4767)
(VS)	Vane Shear (AASHTO T 223)

8-23-10  
DATE

*Xing Zheng*  
CERTIFIED ENGINEERING GEOLOGIST

6-20-11  
PLANS APPROVAL DATE

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No. 2130  
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APPARENT DENSITY OF COHESIONLESS SOILS	
Description	SPT N <sub>60</sub> (Blows / 12 inches)
Very loose	0 - 4
Loose	5 - 10
Medium Dense	11 - 30
Dense	31 - 50
Very Dense	> 50

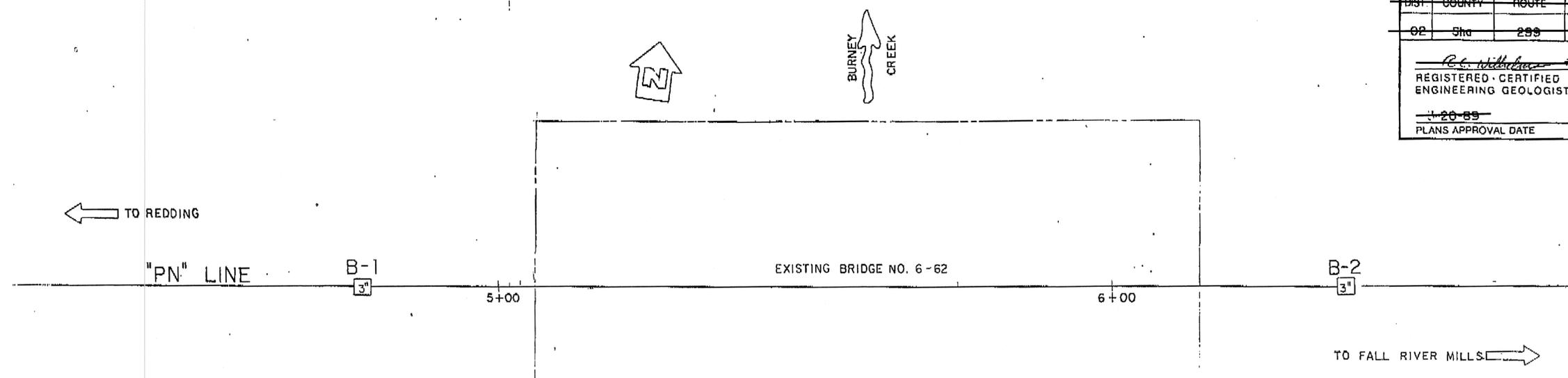
MOISTURE	
Description	Criteria
Dry	Absence of moisture, dusty, dry to the touch
Moist	Damp but no visible water
Wet	Visible free water, usually soil is below water table

PERCENT OR PROPORTION OF SOILS	
Description	Criteria
Trace	Particles are present but estimated to be less than 5%
Few	5 to 10%
Little	15 to 25%
Some	30 to 45%
Mostly	50 to 100%

PARTICLE SIZE		
Description	Size	
Boulder	> 12"	
Cobble	3" to 12"	
Gravel	Coarse	3/4" to 3"
	Fine	No. 4 to 3/4"
Sand	Coarse	No. 10 to No. 4
	Medium	No. 40 to No. 10
	Fine	No. 200 to No. 40

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Sho	299	23.91751	30	40

*R.C. Wilhelm*  
 REGISTERED - CERTIFIED  
 ENGINEERING GEOLOGIST  
 No. 1119  
 Exp. 6-20-90  
 PLANS APPROVAL DATE



**BENCH MARK**  
 BM CITY (TRIANGULATION MONUMENT)  
 FND. STD. USC & GS DISK STD. 1948 - CITY  
 75' SE OF L RTE 299, 37' S OF L ORCHARD  
 AVE. AND 25' SE OF FIRE HYDRANT. EL. 3167.11'  
 BM 6-299-74A - SET ON FND. BRASS DISK UN-  
 MARKED IN TOP SIDEWALK AT THEATER  
 ELEV. 3129.68'

DIVISION OF ENGINEERING SERVICES - GEOTECHNICAL SERVICES  
 As-Built Log of Test Borings sheet is considered an informational document only. As such, the State of California registration seal with signature, license number and registration certificate expiration date confirm that this is a true and accurate copy of the original document. This drawing is available and presented only for the convenience of any bidder, contractor or other interested party.

DIST.	COUNTY	ROUTE	POST MILE	TOTAL PROJECT	Sheet No.	Total Sheets
02	Sho	299	74.8		65	65

*Cheng Xing* 8/23/2010  
 CERTIFIED ENGINEERING GEOLOGIST DATE

**BURNIEY CREEK BRIDGE (SCOUR RETROFIT)**  
**LOG OF TEST BORINGS 11 OF 11**

NOTE: A COPY OF THIS LOG OF TEST BORINGS IS AVAILABLE AT OFFICE OF STRUCTURE MAINTENANCE AND INVESTIGATION, SACRAMENTO, CALIFORNIA

CU: 02	BRIDGE No.
EA: 2C2221	06-0062
Sheet of	32 32



**PLAN**  
 1" = 10'  
**AS BUILT**  
 CORRECTIONS BY *W. Boeck*  
 CONTRACT NO. 02-134934  
 DATE 10-30-90  
 P. 6-12-28-90

**LEGEND OF BORING OPERATIONS**

**TEST BORING**  
 1" SOIL TUBE  
 2 1/2" CONE PENETROMETER  
 SAMPLER BORING (DS\*)

**ROTARY BORING**  
 4" DIAMETER BORING (DS\*)  
 6" DIAMETER BORING (DS\*)

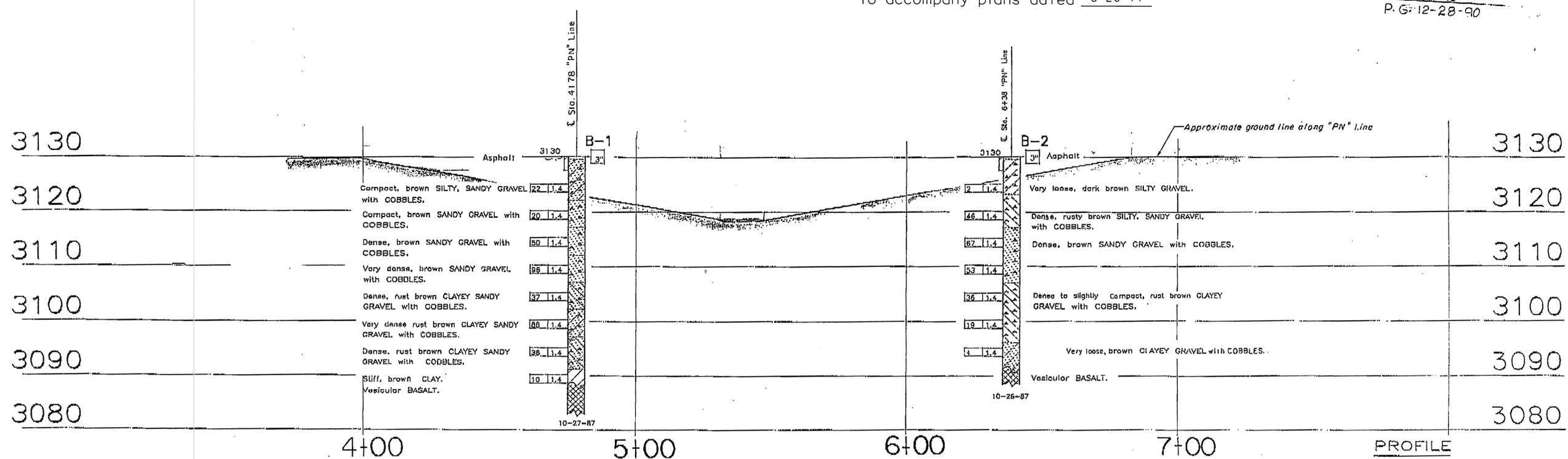
**CONE BORING**  
 4" DIAMETER BORING (DS\*)  
 6" DIAMETER BORING (DS\*)

**LEGEND OF EARTH MATERIALS**

**CONSISTENCY CLASSIFICATION FOR SOILS**  
 according to the Standard Penetration Test

**UNIFIED SOIL CLASSIFICATION SYSTEM**

**LEGEND OF BORING OPERATIONS** (continued):  
 Top Hole El., Bottom Hole El., Depth, Description of material, Unit weight (lbs/cu ft), SPT blow count (15' to 30' depth), Penetration test results, etc.



**GEOTECHNICAL BRANCH - TRANSPORTATION LABORATORY**

State of CALIFORNIA DEPARTMENT OF TRANSPORTATION

STRUCTURES - DESIGN

BRIDGE NO. 6-62  
 POST MILE 74.85

BURNIEY CREEK BRIDGE (WIDEN)  
 LOG OF TEST BORINGS

DRAWN BY: Leony L. Lopez 2/88  
 CHECKED BY: *David V...*

CHARGE UNIT: EXPEND. AUTHORITY: SPEC. DESIGN.

CU 02206  
 EA 134931

Disregard prints bearing earlier revision dates.

REVISION DATE (PRELIMINARY STAGE ONLY)

FILENAME => 06-0062-2-11b11.tif

**AS BUILT DI ANO**