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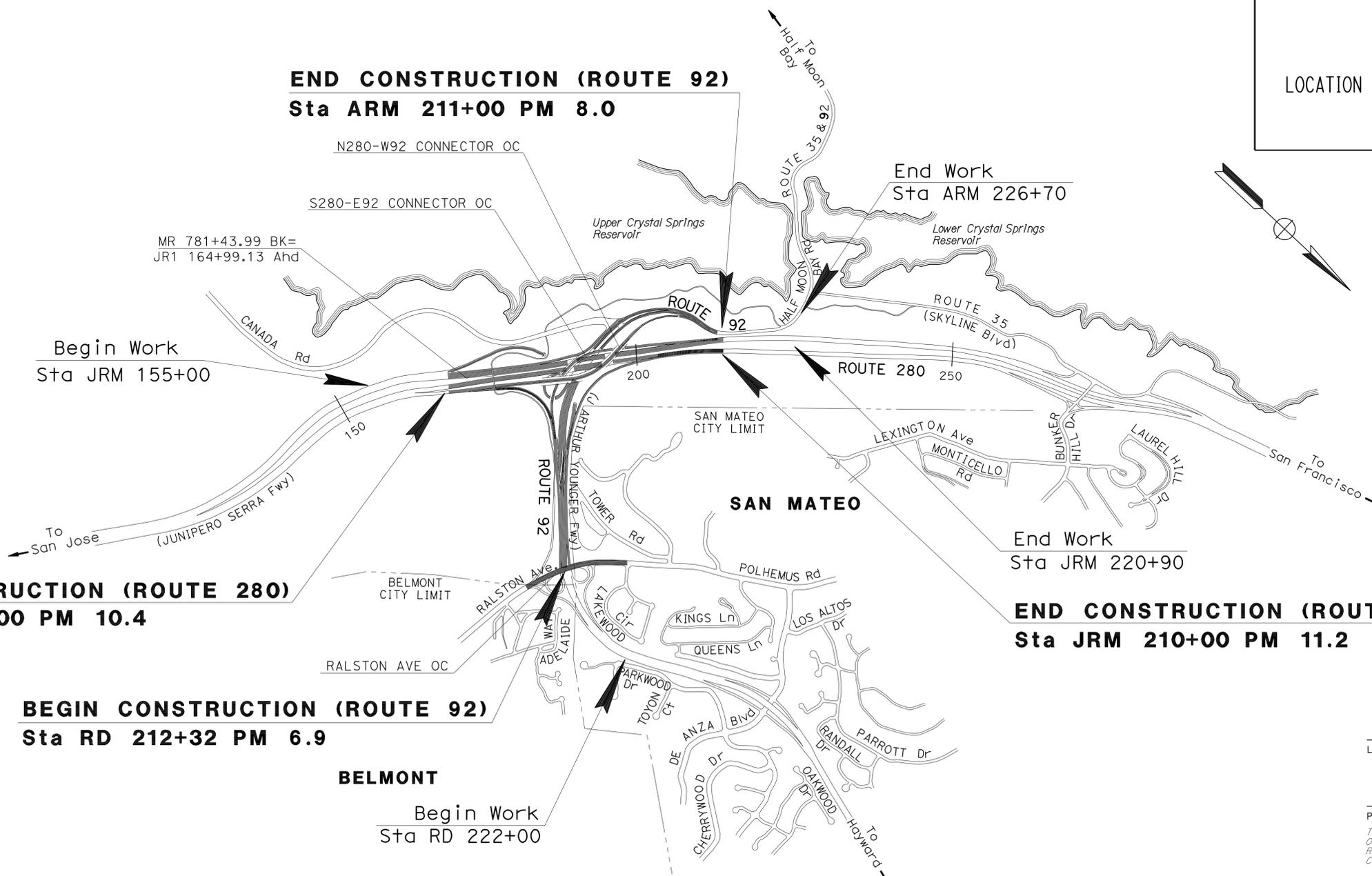
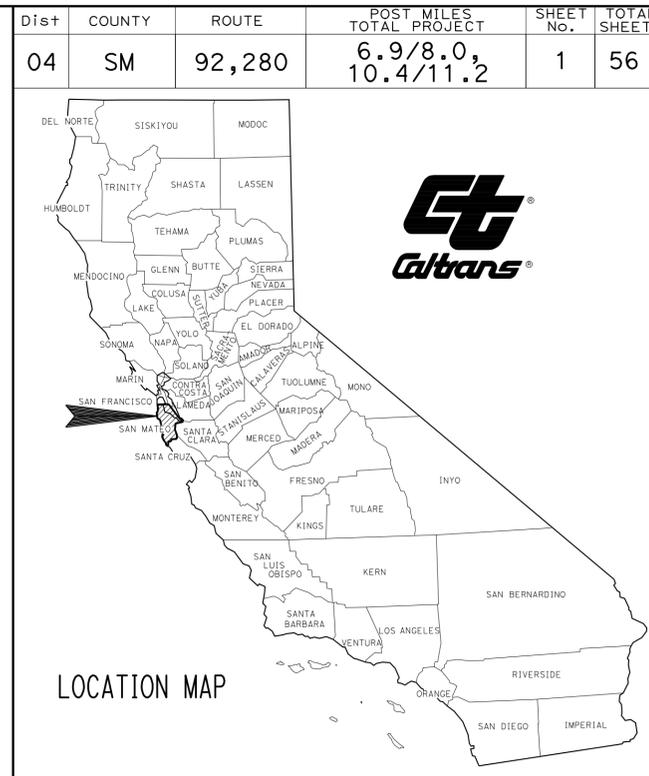
THE STANDARD PLANS LIST APPLICABLE TO THIS CONTRACT IS INCLUDED IN THE NOTICE TO BIDDERS AND SPECIAL PROVISIONS BOOK.

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

NH-X081(025)E

PROJECT PLANS FOR CONSTRUCTION ON  
STATE HIGHWAY  
IN SAN MATEO COUNTY  
NEAR SAN MATEO ON ROUTE 92  
FROM 0.4 MILE WEST OF ROUTE 280 SEPARATION  
TO RALSTON AVENUE AND ON ROUTE 280  
FROM 0.4 MILE SOUTH OF ROUTE 92 SEPARATION  
TO 0.4 MILE NORTH OF ROUTE 92 SEPARATION

TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006



PROJECT MANAGER  
RON MORTIGUCHI

SENIOR LANDSCAPE ARCHITECT  
LORENA WONG

*Lorena Wong*  
LICENSED LANDSCAPE ARCHITECT

March 21, 2011  
PLANS APPROVAL DATE



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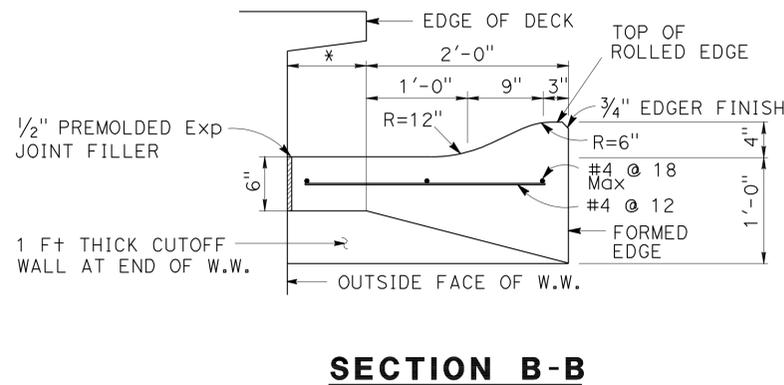
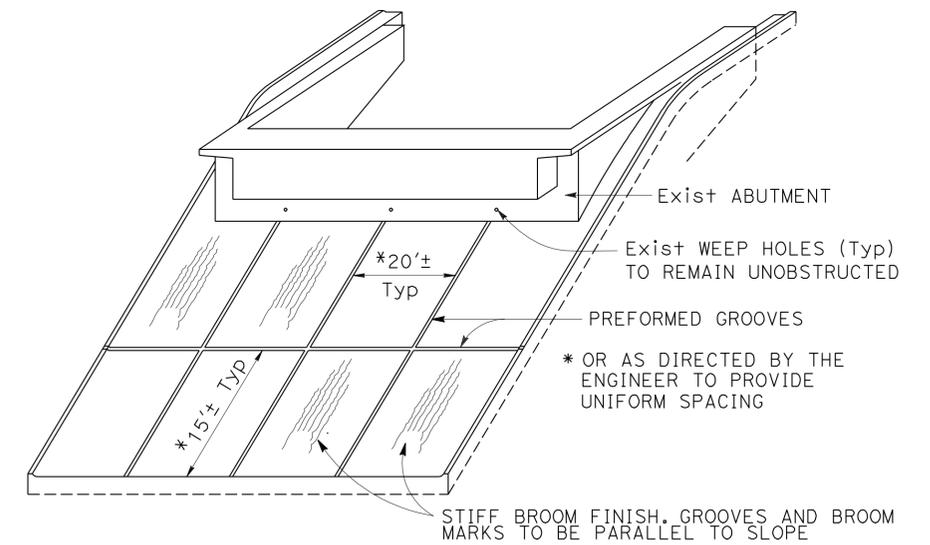
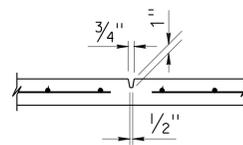
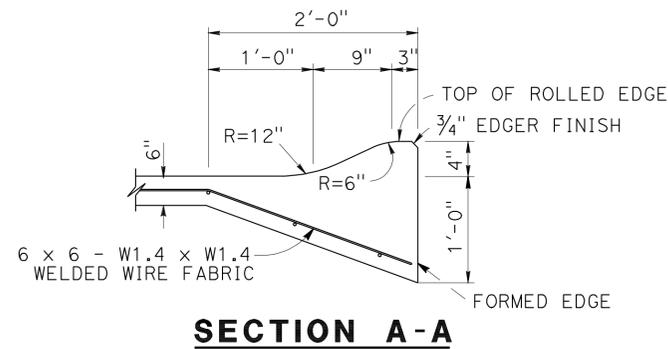
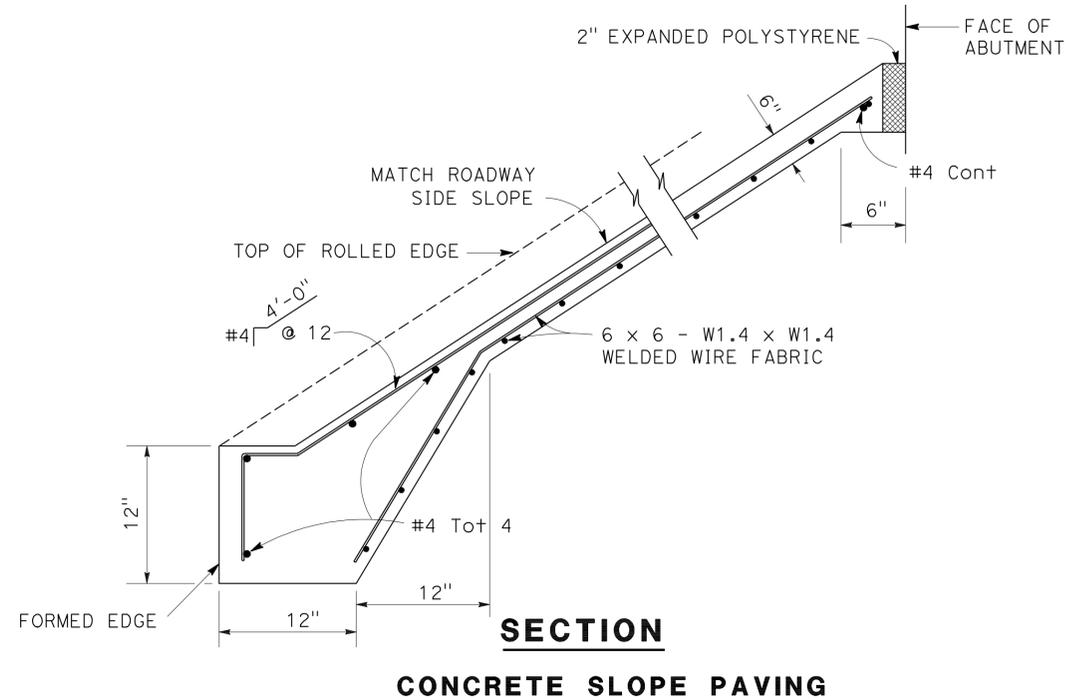
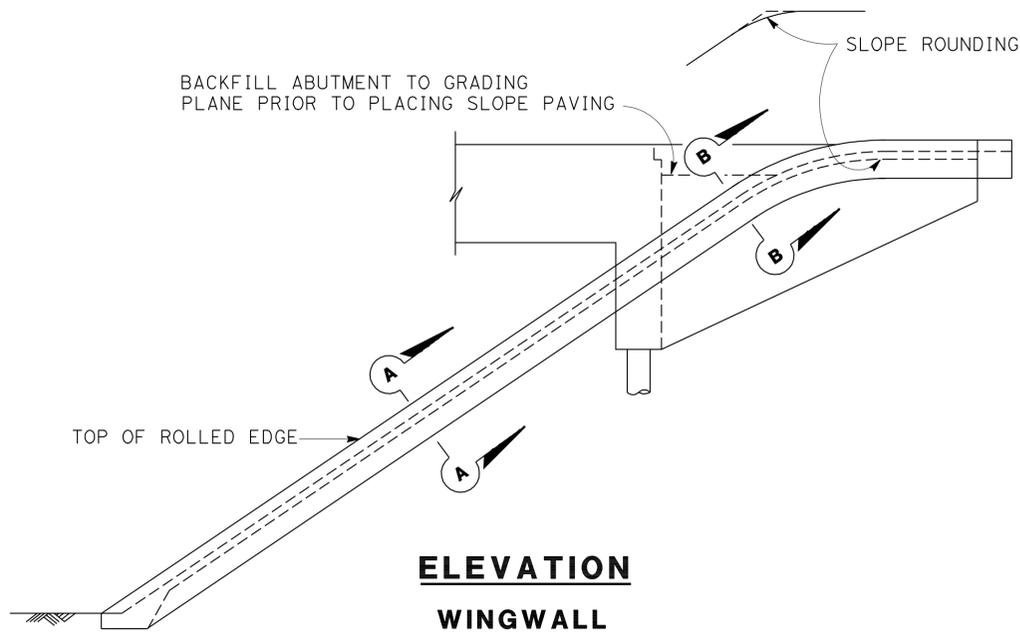
CONTRACT No.	<b>04-2708U4</b>
PROJECT ID	<b>0400020622</b>

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

NO SCALE



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	92,280	6.9/8.0, 10.4/11.2	3	56
 REGISTERED CIVIL ENGINEER DATE			10-26-10		
PLANS APPROVAL DATE			3-21-11		
<small>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.</small>					
					



**NOTE:**  
FOR LIMITS OF SLOPE PAVING, SEE SHEET C-1.

\* THIS DIMENSION BECOMES ZERO WHEN EDGE OF DECK IS AT OUTSIDE FACE OF W.W.

**CONSTRUCTION DETAILS SLOPE PAVING (FULL SLOPE)**  
NO SCALE

**C-2**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION DESIGN

FUNCTIONAL SUPERVISOR: G. Danke

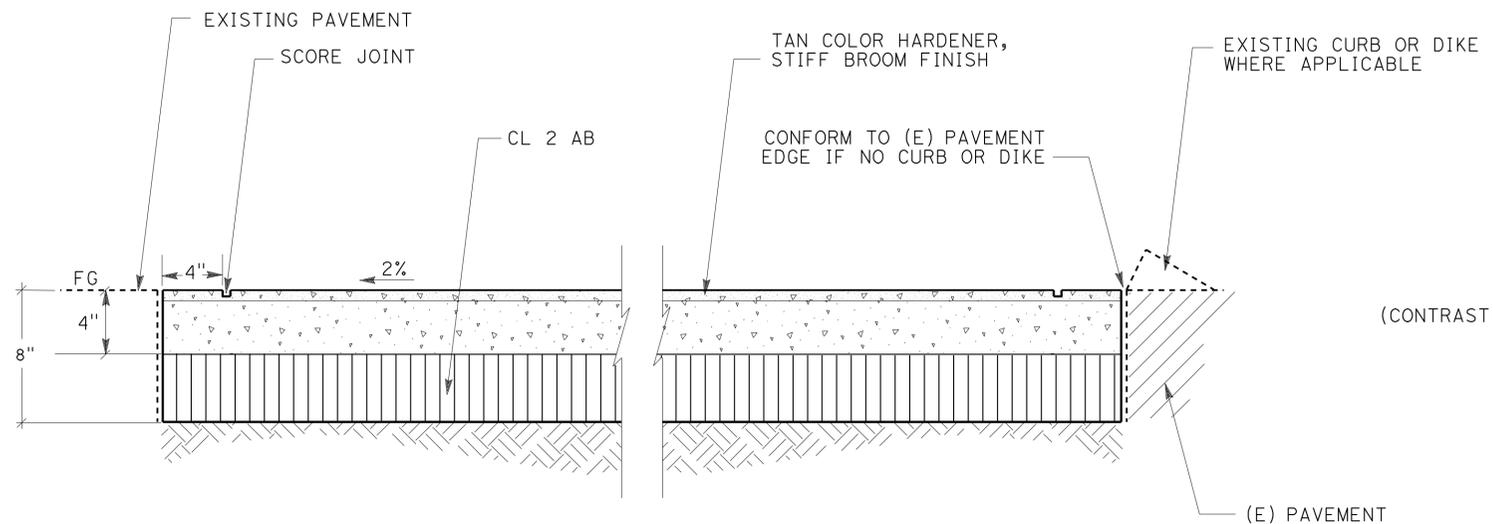
REVISOR: P. Lutz, I. Yalton

DATE: 11/23/10

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	92,280	6.9/8.0, 10.4/11.2	4	56

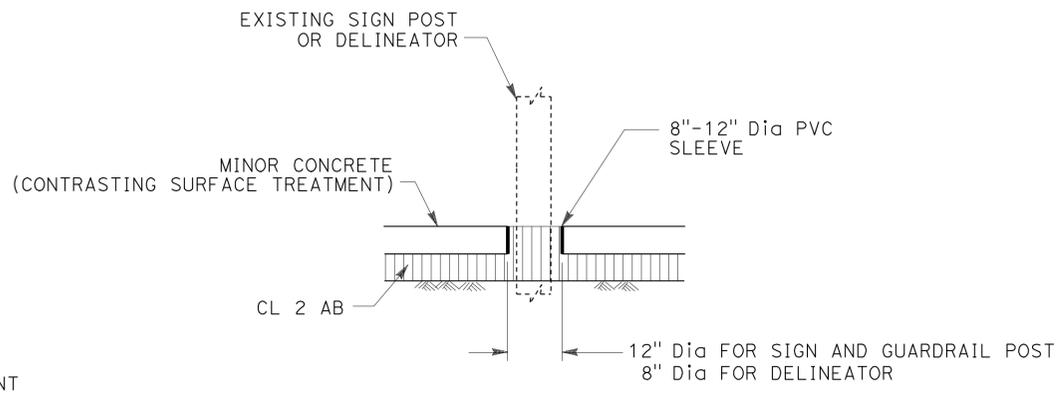
*Lorena Wong*  
 LICENSED LANDSCAPE ARCHITECT  
 3-21-11  
 PLANS APPROVAL DATE

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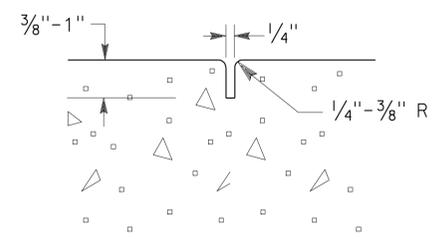


- NOTES:**
1. CONCRETE SHALL BE SAW CUT TO CREATE WEAKENED PLANE JOINTS STRAIGHT AND PROPORTIONATE.
  2. RELATIVE SLAB DIMENSION SHALL BE 1:1 TO 1:125, TRANSVERSE TO LONGITUDINAL, AND SHALL NOT EXCEED 10' BETWEEN JOINTS IN BOTH DIRECTIONS.

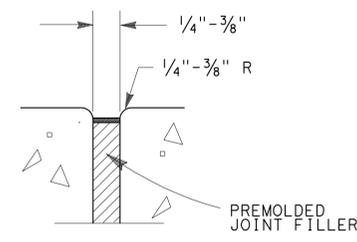
**SECTION  
MINOR CONCRETE AT GORE AREAS**



**SECTION  
MINOR CONCRETE AT SIGN OR GUARDRAIL POST  
AND DELINEATOR LOCATIONS**



**SECTION  
PREFORMED GROOVE**



**SECTION  
EXPANSION JOINT**

**CONSTRUCTION DETAILS  
MINOR CONCRETE CONTRASTING SURFACE TREATMENT  
NO SCALE  
C-3**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - LANDSCAPE ARCHITECTURE

LORENA WONG

LORENA WONG

LORENA WONG

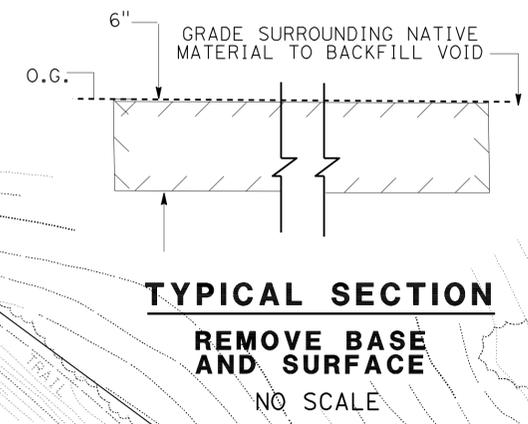
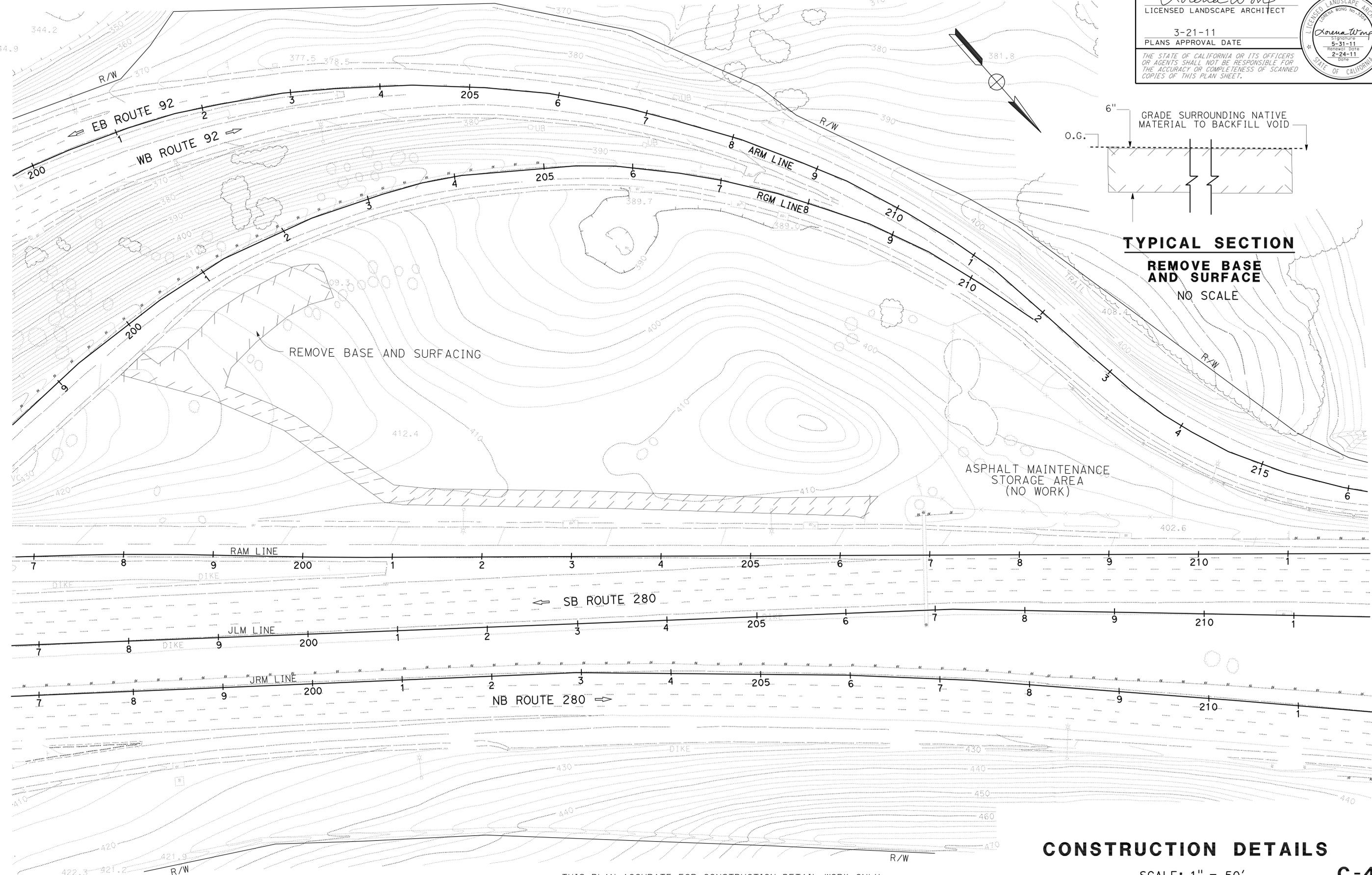
**NOTE:**  
FOR ACCURATE RIGHT OF WAY DATA, CONTACT  
RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	92, 280	6.9/8.0, 10.4/11.2	5	56

*Lorena Wong*  
LICENSED LANDSCAPE ARCHITECT

3-21-11  
PLANS APPROVAL DATE

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COPIES OF THIS PLAN SHEET.



**CONSTRUCTION DETAILS**  
SCALE: 1" = 50'  
**C-4**

THIS PLAN ACCURATE FOR CONSTRUCTION DETAIL WORK ONLY.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** LANDSCAPE ARCHITECTURE

SENIOR LANDSCAPE ARCHITECT: LORENA WONG  
LANDSCAPE ARCHITECT: LORENA WONG  
DESIGNED BY: LORENA WONG  
CHECKED BY: LORENA WONG  
REVISOR: OWEN WILLIAMS  
DATE: 7/2/2010

USERNAME => trminguye  
DGN FILE => 0400020622ga004.dgn

RELATIVE BORDER SCALE IS IN INCHES

UNIT 0789

PROJECT NUMBER & PHASE 0400020622 1

LAST REVISION: DATE PLOTTED => 19-APR-2011  
02-16-11 TIME PLOTTED => 08:10

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 WATER QUALITY

SENIOR LANDSCAPE ARCHITECT  
 DAVID W. YAM

CHECKED BY  
 VIRGIL FRANCISCO

DESIGNED BY  
 LAURIE J. SMITH

REVISOR  
 DATE

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

**LEGEND**

**EROSION CONTROL (TYPE 1):**  
 EROSION CONTROL (COMPOST BLANKET)  
 EROSION CONTROL (HYDROSEED)

**EROSION CONTROL (TYPE 2):**  
 COMPOST, INCORPORATE  
 EROSION CONTROL (HYDROSEED)

TFESA  
 TEMPORARY FENCE (ESA)

ESA  
 ESA AREAS

**NOTE:** 1. EROSION CONTROL WORK IS DIAGRAMMATIC  
 AND NO WORK WITHIN ESA IS ALLOWED  
 2. APPLY EROSION CONTROL TO IRRIGATION PIPE TRENCH  
 LOCATIONS AND OTHER DISTURBED SOIL AREAS

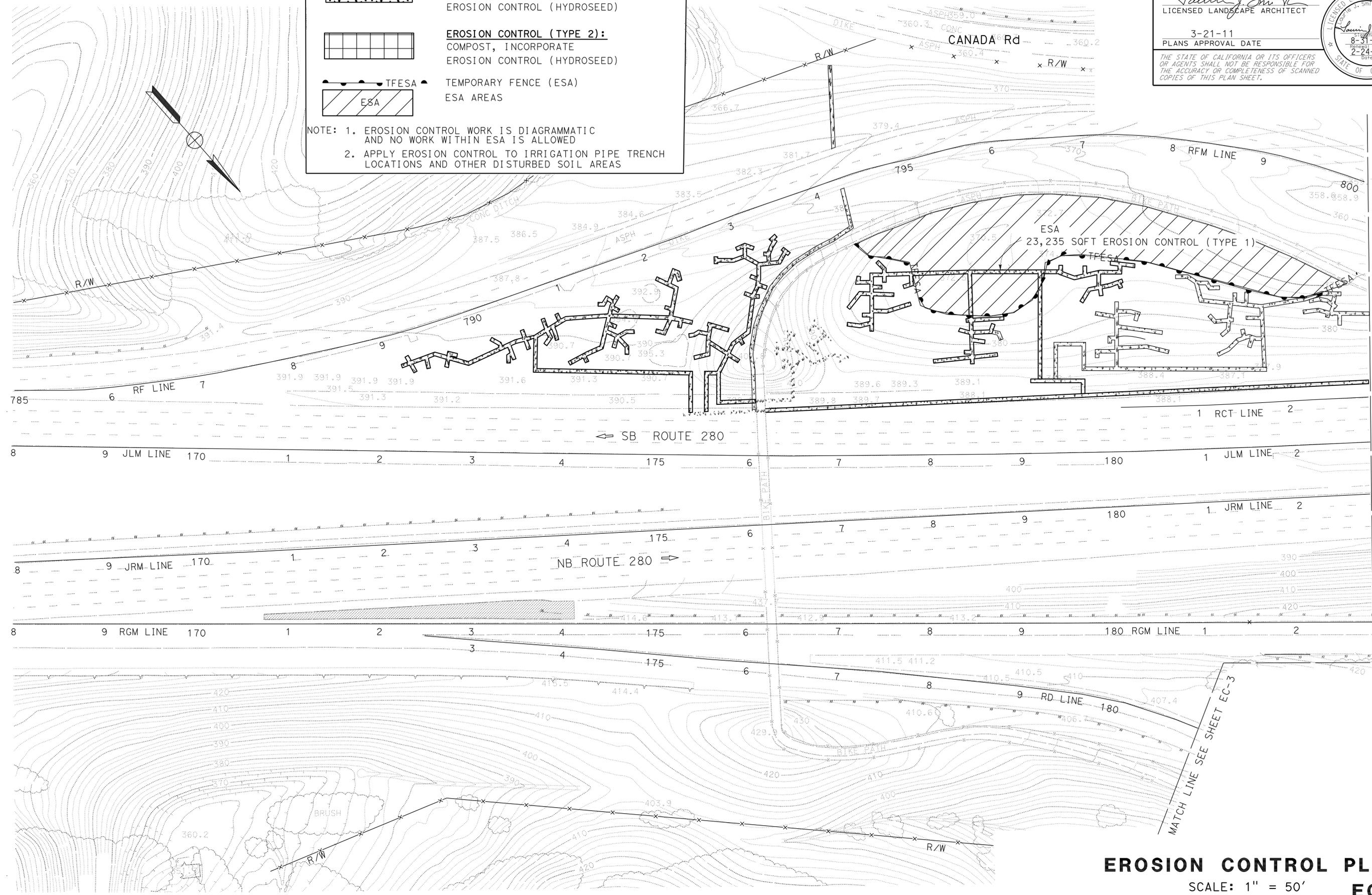
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	92,280	6.9/8.0, 10.4/11.2	6	56

*Laurie J. Smith*  
 LICENSED LANDSCAPE ARCHITECT

3-21-11  
 PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS  
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*Laurie J. Smith*  
 LICENSED LANDSCAPE ARCHITECT  
 8-31-12  
 Renewal Date  
 2-24-11  
 Date



**EROSION CONTROL PLAN**  
 SCALE: 1" = 50'  
**EC-1**

THIS PLAN ACCURATE FOR EROSION CONTROL WORK ONLY

**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
04	SM	92,280	6.9/8.0, 10.4/11.2	7	56

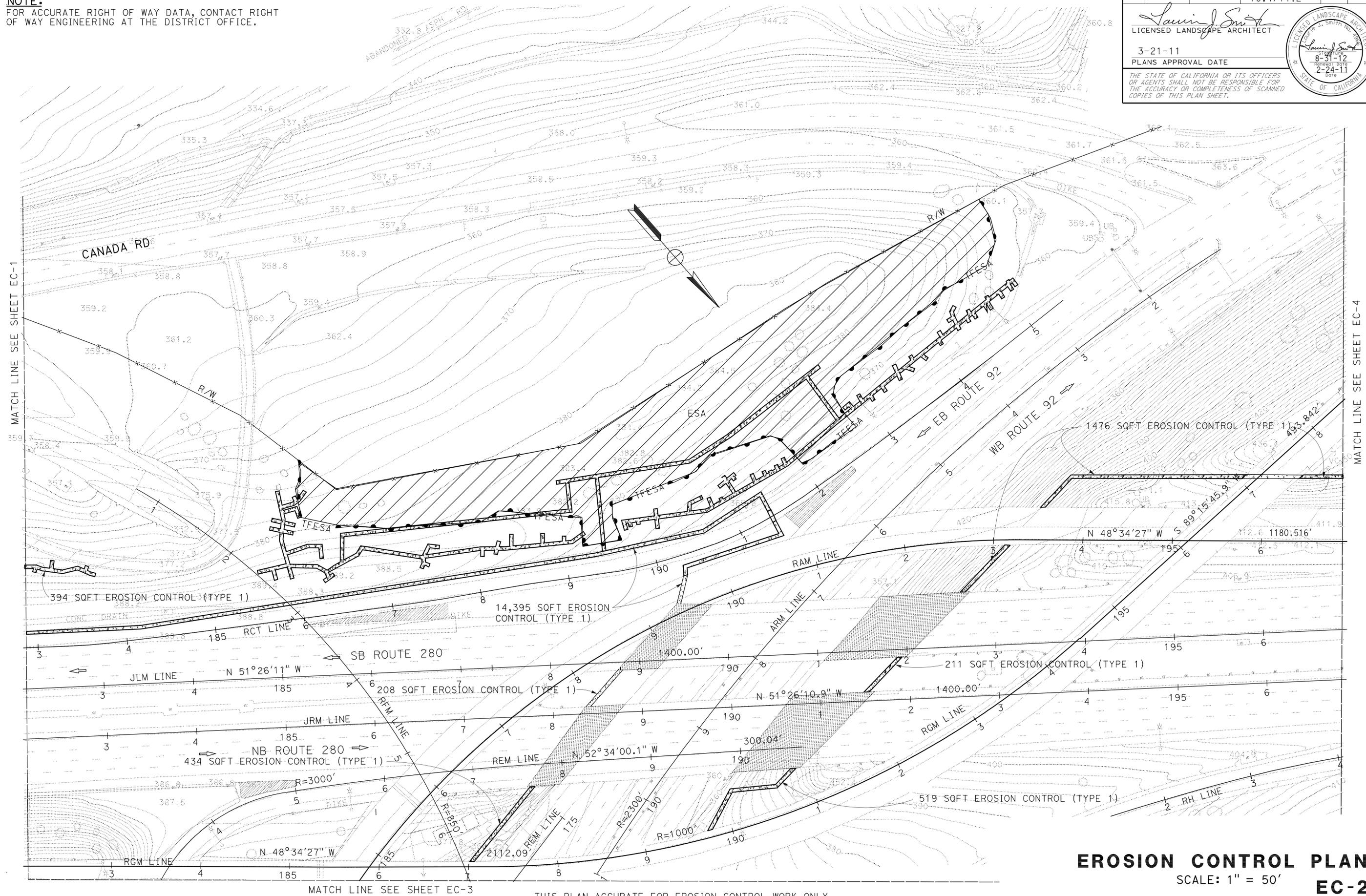
*Laurie J. Smith*  
LICENSED LANDSCAPE ARCHITECT

3-21-11  
PLANS APPROVAL DATE

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Water Quality**

SENIOR LANDSCAPE ARCHITECT: DAVID W. YAM  
CHECKED BY: VIRGIL FRANCISCO  
DESIGNED BY: LAURIE J. SMITH  
REVISOR: VIRGIL FRANCISCO  
DATE REVISOR: LAURIE J. SMITH



**EROSION CONTROL PLAN**  
SCALE: 1" = 50'  
**EC-2**

LAST REVISION: 01-21-11 DATE PLOTTED => 24-MAR-2011 TIME PLOTTED => 09:20

**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
04	SM	92,280	6.9/8.0, 10.4/11.2	8	56

*Laurie J. Smith*  
LICENSED LANDSCAPE ARCHITECT

3-21-11  
PLANS APPROVAL DATE

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** WATER QUALITY

SENIOR LANDSCAPE ARCHITECT: DAVID W. YAM

CALCULATED/DESIGNED BY: CHECKED BY:

VIRGIL FRANCISCO LAURIE J. SMITH

REVISED BY: DATE REVISED:

MATCH LINE SEE SHEET EC-5

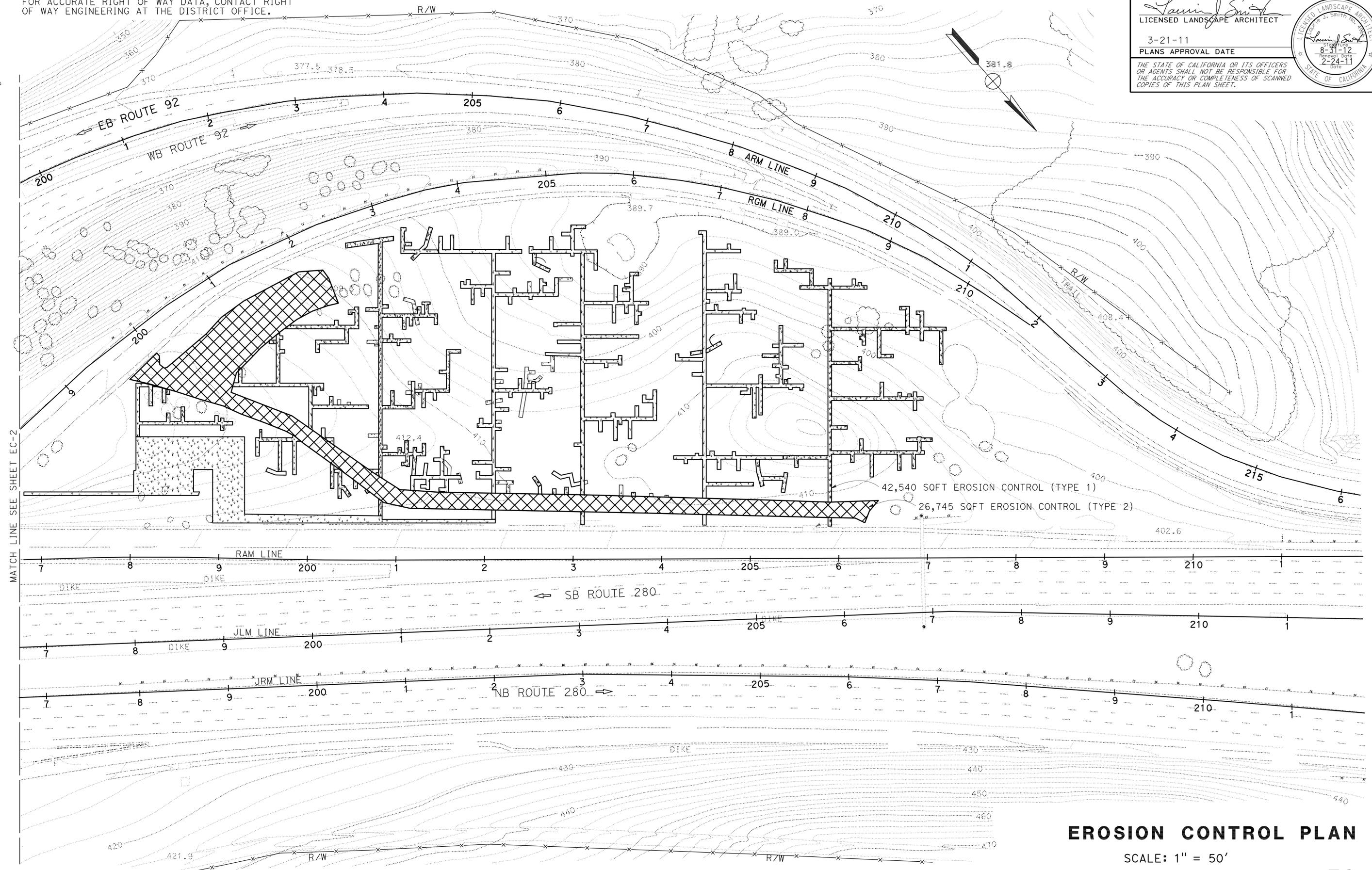
**EROSION CONTROL PLAN**  
SCALE: 1" = 50'  
**EC-3**

THIS PLAN ACCURATE FOR EROSION CONTROL WORK ONLY

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	92,280	6.9/8.0, 10.4/11.2	9	56

*Laurie J. Smith*  
 LICENSED LANDSCAPE ARCHITECT  
 3-21-11  
 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.

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



# EROSION CONTROL PLAN

SCALE: 1" = 50'

## EC-4

THIS PLAN IS ACCURATE FOR EROSION CONTROL WORK ONLY



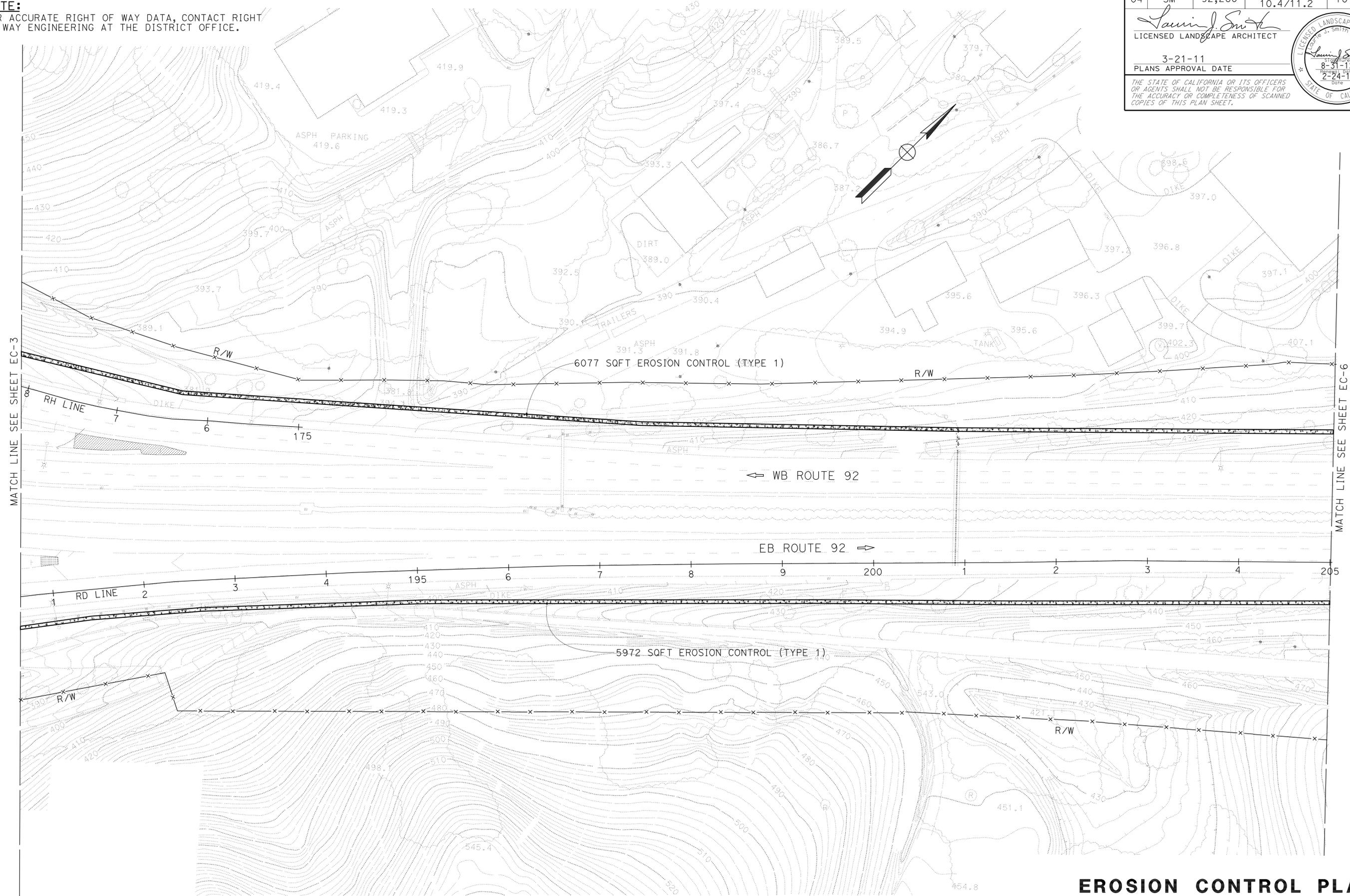
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
 WATER QUALITY  
 SENIOR LANDSCAPE ARCHITECT  
 DAVID W YAM  
 CALCULATED/DESIGNED BY  
 CHECKED BY  
 VIRGIL FRANCISCO  
 LAURIE J SMITH  
 REVISED BY  
 DATE REVISED

LAST REVISION DATE PLOTTED => 19-APR-2011  
 01-21-11 TIME PLOTTED => 08:10

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	92,280	6.9/8.0, 10.4/11.2	10	56

*Laurie J. Smith*  
 LICENSED LANDSCAPE ARCHITECT  
 3-21-11  
 PLANS APPROVAL DATE  
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**NOTE:**  
 FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Water Quality**  
 SENIOR LANDSCAPE ARCHITECT  
 DAVID W. YAM  
 CALCULATED/DESIGNED BY  
 CHECKED BY  
 VIRGIL FRANCISCO  
 LAURIE J. SMITH  
 REVISED BY  
 DATE REVISED

THIS PLAN ACCURATE FOR EROSION CONTROL WORK ONLY

**EROSION CONTROL PLAN**  
**EC-5**

SCALE: 1" = 50'

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 WATER QUALITY

SENIOR LANDSCAPE ARCHITECT  
 DAVID W. YAM

CALCULATED-DESIGNED BY  
 CHECKED BY

VIRGIL FRANCISCO  
 LAURIE J. SMITH

REVISED BY  
 DATE REVISED

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

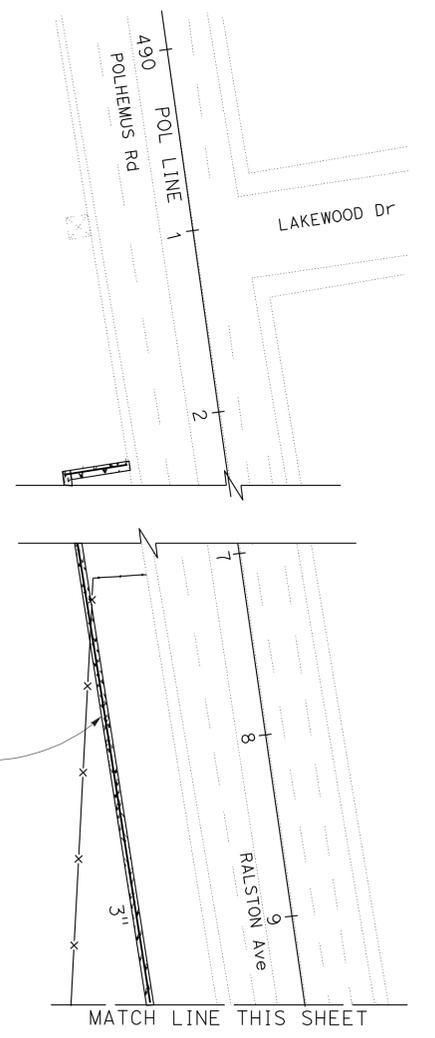
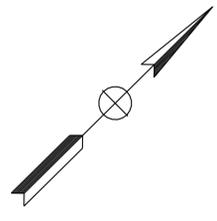


DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	92,280	6.9/8.0, 10.4/11.2	11	56

*Laurie J. Smith*  
 LICENSED LANDSCAPE ARCHITECT

3-21-11  
 PLANS APPROVAL DATE

STAMP: 8-31-12, 2-24-11  
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THIS PLAN ACCURATE FOR EROSION CONTROL WORK ONLY

**EROSION CONTROL PLAN**  
 SCALE: 1" = 50'  
**EC-6**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 WATER QUALITY  
 SENIOR LANDSCAPE ARCHITECT  
 DAVID W. YAM  
 CALCULATED/DESIGNED BY  
 CHECKED BY  
 VIRGIL FRANCISCO  
 LAURIE J. SMITH  
 REVISED BY  
 DATE REVISED

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	92,280	6.9/8.0, 10.4/11.2	12	56

*Laurie J. Smith*  
 LICENSED LANDSCAPE ARCHITECT

3-21-11  
 PLANS APPROVAL DATE

8-31-12  
 Renewal Date  
 2-24-11  
 Date

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**EROSION CONTROL QUANTITIES**

SHEET No.	EROSION CONTROL TYPE	AREA SQFT (N)	EROSION CONTROL (HYDROSEED)	EROSION CONTROL (COMPOST BLANKET)	COMPOST, INCORPORATE
			SQFT	CY	SQYD
EC-1	1	23,235	23,235	18	--
EC-2	1	17,637	17,637	13.3	--
EC-3	1	21,625	21,625	17.8	--
EC-4	1	42,540	42,540	30	--
EC-4	2	26,745	26,745	--	2,972
EC-5	1	12,049	12,049	9.3	--
EC-6	1	8,389	8,389	6.6	--
TOTAL		152,220	152,220	95	2,972

(N) = NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY.

THIS PLAN ACCURATE FOR EROSION CONTROL WORK ONLY

**EROSION CONTROL QUANTITIES  
 ECQ-1**

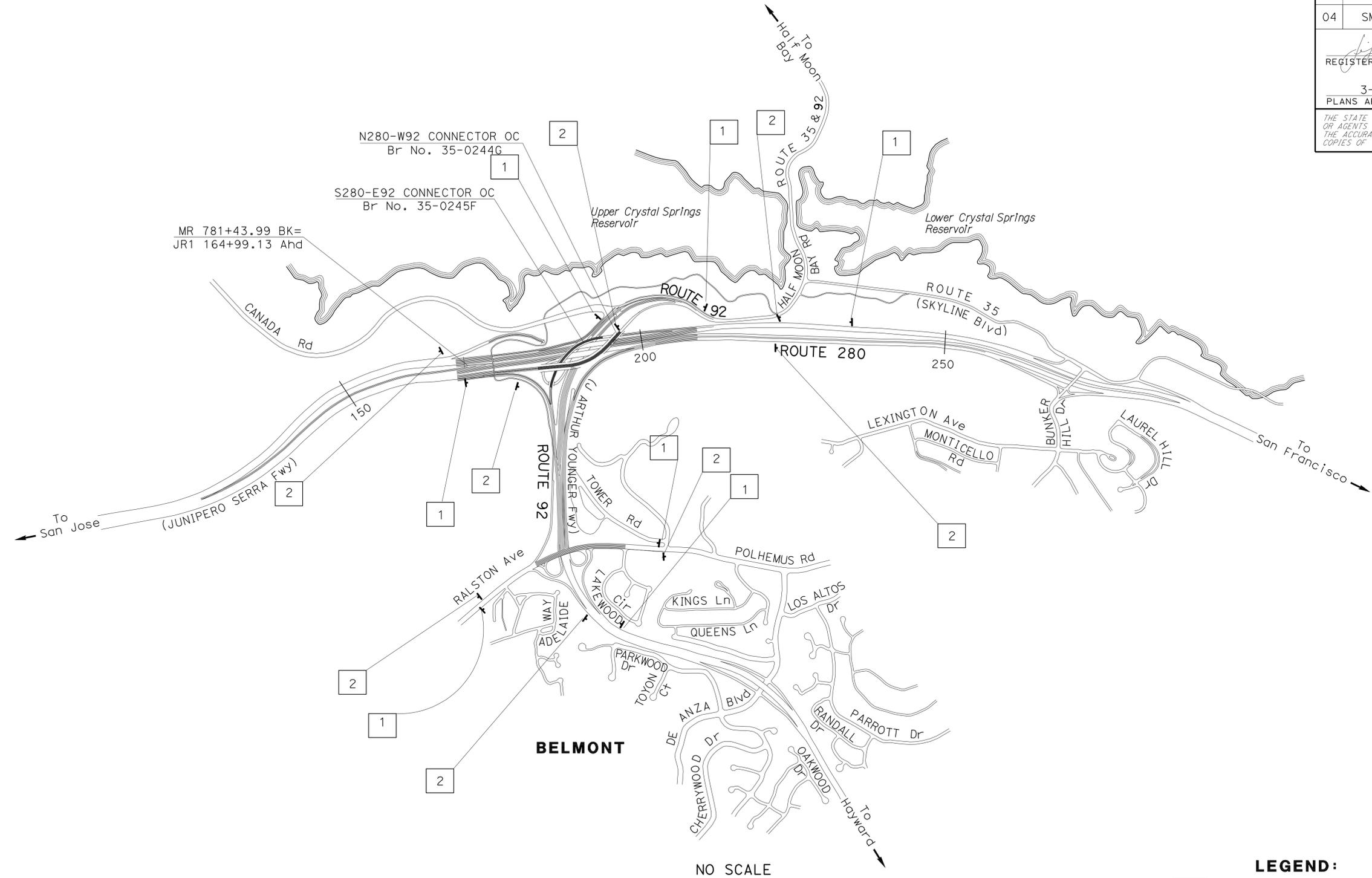


Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	92,280	6.9/8.0, 10.4/11.2	13	56

*J.L. Struven* 2/17/11  
 REGISTERED CIVIL ENGINEER DATE  
 3-21-11  
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER  
 J.L. Struven  
 No. 49964  
 Exp 12-31-12  
 CIVIL  
 STATE OF CALIFORNIA

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NO SCALE

**STATIONARY MOUNTED CONSTRUCTION AREA SIGNS**

SIGN	CODE	PANEL SIZE (INCH x INCH)	SIGN MESSAGE	POST SIZE (EA - INCH x INCH)	QUANTITIES
1	W20-1	48 x 48	ROAD WORK AHEAD	1 - 4 x 4	7
2	G20-2	48 x 24	END ROAD WORK	1 - 4 x 4	8

- LEGEND:**
- No. CONSTRUCTION AREA SIGN DESIGNATION
  - DIRECTION OF TRAFFIC
- NOTES:**
1. EXACT LOCATION AND POSITION OF CONSTRUCTION AREA SIGNS TO BE DETERMINED BY ENGINEER.
  2. DIMENSIONS FOR SIGN PANEL, LETTERING AND POST ARE IN INCHES.
  3. CONSTRUCTION AREA SIGNS TO BE STATIONARY MOUNTED.

**CONSTRUCTION AREA SIGNS**  
NO SCALE

**CS-1**

THIS PLAN ACCURATE FOR CONSTRUCTION AREA SIGN WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

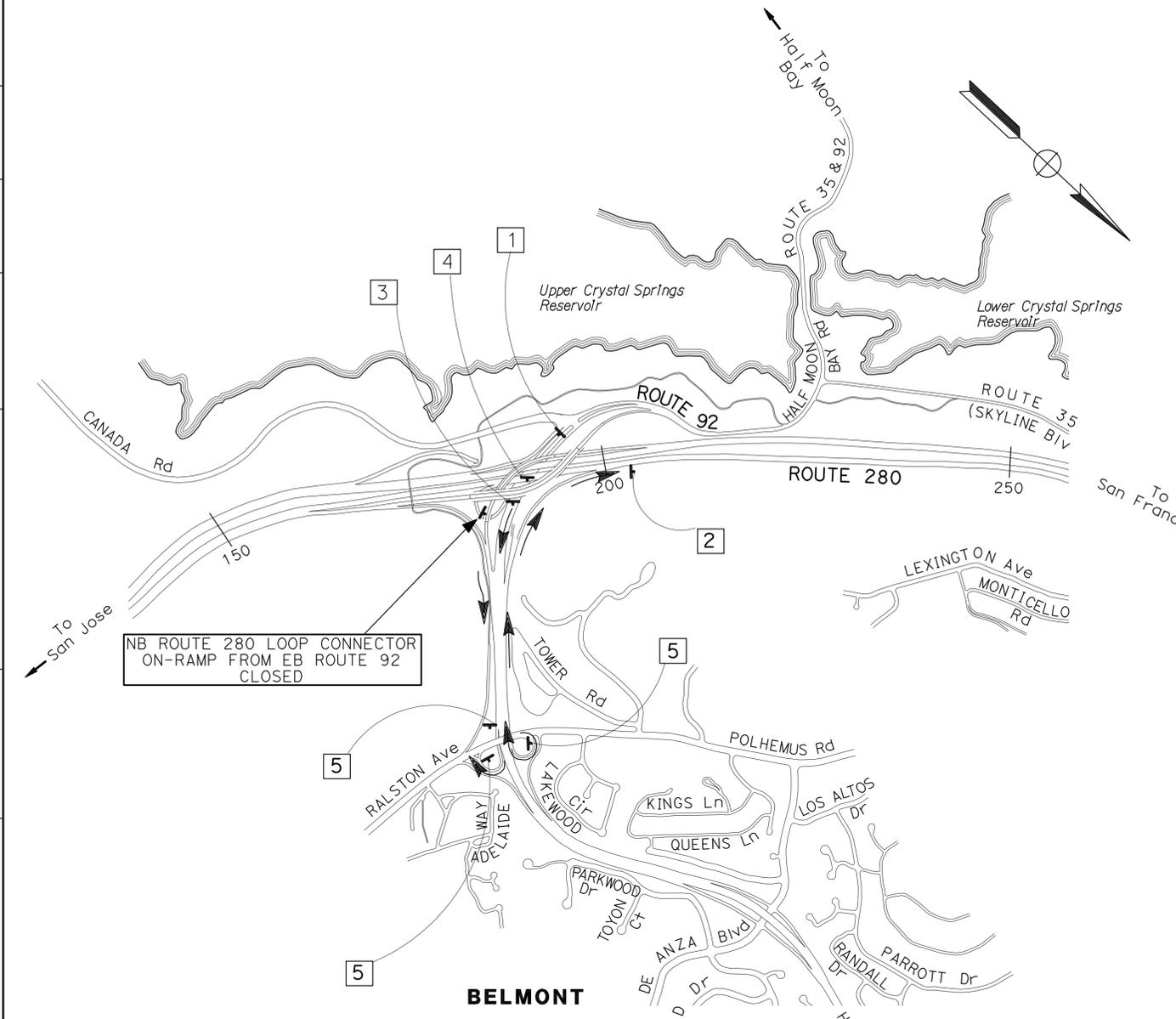
**Caltrans**

FUNCTIONAL RESPONSIBILITY: ROLAND AU-YEUNG

REVISIONS:

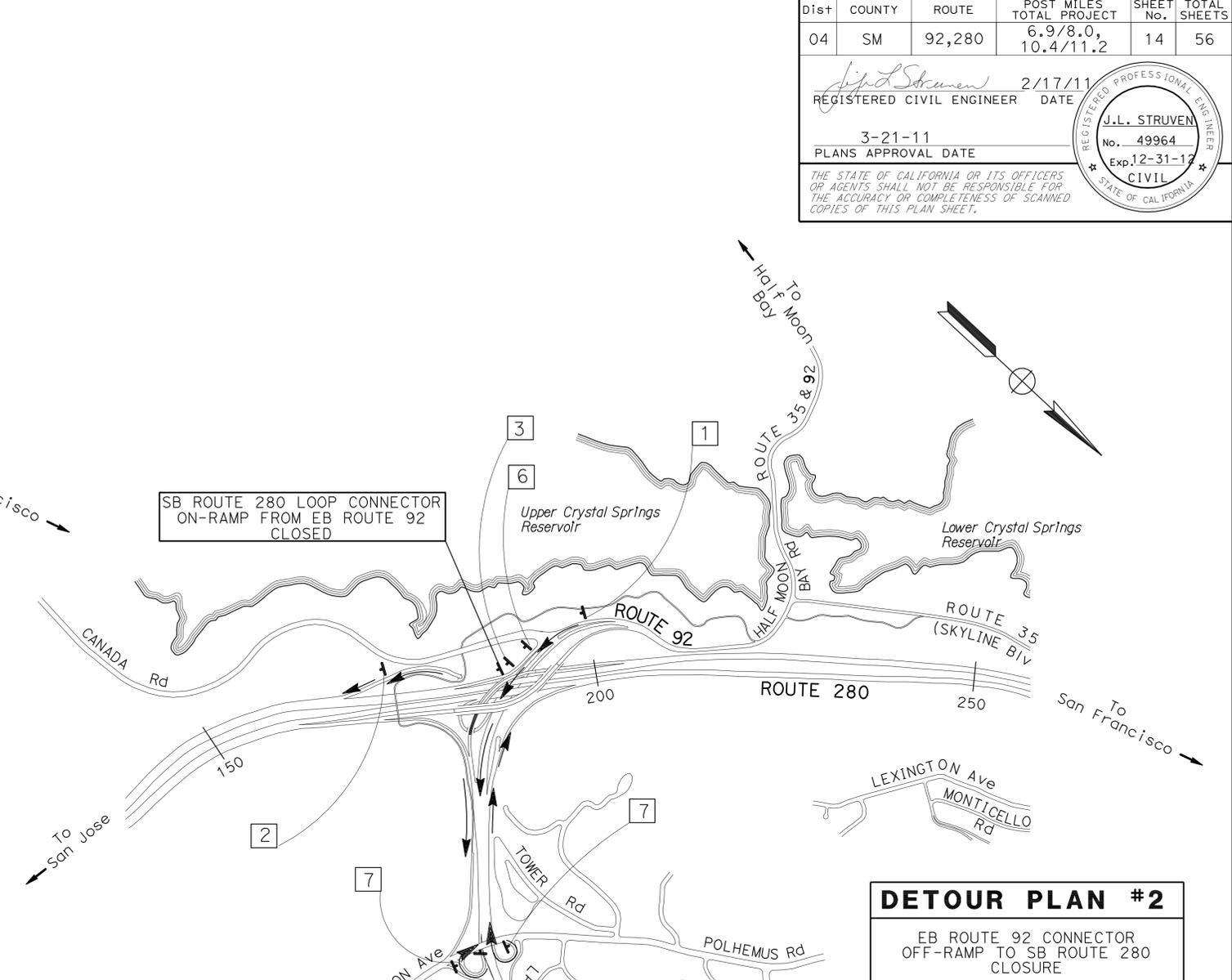
REVISOR	DATE	REVISION
SL	JL	
CALCULATED/DESIGNED BY	CHECKED BY	
REVISOR	DATE	REVISION

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 FUNCTIONAL AREA SUPERVISOR: ROLAND AU-YEUNG  
 TRAFFIC



**DETOUR**  
 → VIA EB ROUTE 92; OFF-RAMP TO RALSTON AVE; NB RALSTON AVE; LOOP ON-RAMP TO WB ROUTE 92; CONNECTOR OFF-RAMP TO NB ROUTE 280

**DETOUR PLAN #1**  
 NB ROUTE 280 LOOP CONNECTOR ON-RAMP FROM EB ROUTE 92 CLOSURE



**DETOUR**  
 → VIA EB ROUTE 92; OFF-RAMP TO RALSTON AVE; NB RALSTON AVE; LOOP ON-RAMP TO WB ROUTE 92; CONNECTOR OFF-RAMP TO SB ROUTE 280

**DETOUR PLAN #2**  
 EB ROUTE 92 CONNECTOR OFF-RAMP TO SB ROUTE 280 CLOSURE

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	92,280	6.9/8.0, 10.4/11.2	14	56

J.L. STRUVEN  
 REGISTERED CIVIL ENGINEER  
 No. 49964  
 Exp. 12-31-12  
 CIVIL  
 STATE OF CALIFORNIA

2/17/11 DATE  
 3-21-11 PLANS APPROVAL DATE

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**CONSTRUCTION AREA SIGNS  
 DETOUR PLAN**

THIS PLAN ACCURATE FOR DETOUR CONSTRUCTION WORK ONLY

NO SCALE **CS-2**



### CHAIN LINK FENCE (VINYL-CLAD CL-6)

STATION	Chain Link Fence (Type CL-6, Vinyl Clad)
	LF
RFM 811+80 (Rt) to RFM 811+70 (Lt)	370
TOTAL	370

### MINOR CONCRETE (CONTRASTING SURFACE TREATMENT)

Location No.	STATION	PCC	AB (N)	PVC SLEEVE (N)
		SQFT	CY	EA
1	RGM 170+73 to 174+14 (Lt)	4569	52	2
2	RD 176+68 to 179+26 (Lt)	4807	53	1
3	RCT 191+48 to 192+45 (Rt)	1286	15	-
4	REM 184+50 to 185+00 (Lt)	745	9	-
5	RD 186+40 to 186+62 (Lt)	175	2	-
6	RH 176+21 to 177+34 (Lt)	1257	44	1
7	RD 190+85 to 191+15 (Lt)	185	2	-
TOTAL		13,024	177	4

(N) - NOT A SEPARATE PAY ITEM. FOR INFORMATION ONLY.

### IRRIGATION CROSSOVERS

LOCATION	SIDE	CONDUIT TYPE			(N)	(N)
		⑤	③	⑤		
		SIZE (INCH)				
		8	10	10		
		LENGTH (LF)			SIZE (INCH)	SIZE (INCH)
RFM 794+29	X X	37		35	—	2
RCT 191+35	X X				3	2
ARM 186+65	X		116		3	2
ARM 188+15	X		104		3	2
ARM 187+80		X	107		3	2
ARM 189+40		X	92		3	2
ARM 192+40	X		20		3	2
ARM 192+40	X		18		3	—
ARM 193+68	X		15		3	—
RD 184+70	X X			33	3	2
RH 178+70	X X			40	3	2
REM 180+70	X X			67	3	2
RAL 307+40	X X			95	3	2
POL 492+20	X X		93 (EP)		3	2
TOTAL		37	565	270		

(N) - NOT A SEPARATE PAY ITEM FOR INFORMATION ONLY  
 X - DENOTES REQUIREMENT  
 EP - OPEN TRENCH IN EXISTING PAVEMENT

#### CONDUIT TYPE:

- (Applicable when circled below and shown under the 'CONDUIT TYPE' column heading)
- BITUMINOUS COATED CORRUGATED STEEL PIPE (0.064 INCH THICK)
  - CORRUGATED STEEL PIPE (0.064 INCH THICK)
  - CORRUGATED HIGH DENSITY POLYETHYLENE PIPE
  - ALTERNATIVE CONDUIT
  - WELDED STEEL PIPE

### TEMPORARY WATER POLLUTION CONTROL

LOCATION (SHEET NO.)	TEMPORARY SILT FENCE	TEMPORARY FIBER ROLLS	TEMPORARY CHECK DAM	TEMPORARY DRAINAGE INLET PROTECTION	TEMPORARY CONSTRUCTION ENTRANCE
	LF	LF	LF	EA	EA
JRM 168+00 to 182+80 PP-1	200	860	90	12	-
JRM 182+80 to 197+60 PP-2	130	870	60	13	-
ARM 178+00 to 187+20 PP-3	-	620	-	16	-
JRM 168+00 to 182+80 PP-4	650	1,650	300	11	1
TOTAL	980	4,000	450	52	1

### SLOPE PAVING (CONCRETE)

STATION	CY
ARM 185+84 to 187+53 (Lt)	63
ARM 187+75 to 188+88 (Rt)	44
ARM 187+45 to 189+22 (Lt)	73
ARM 189+19 to 190+52 (Rt)	39
TOTAL	219

### REMOVE BASE & SURFACING

STATION	CY
RAM 198+00 to 206+40 (Lt)	330
TOTAL	330

### TEMPORARY FENCE (TYPE ESA)

STATION	LF
JL 177+15 to 182+41 (Lt)	618
RCT 186+05 to 195+38 (Lt)	1184
AR 187+30 to 189+33 (Rt)	219
JL 190+74 to 197+53 (Rt)	687
RH 186+53 to 194+06 (Lt)	952
RH 179+03 to 186+46 (Rt)	775
TOTAL	4435

### EXISTING HIGHWAY FACILITIES

STATION	Remove Chain Link Fence	Reset Roadside Sign
	LF	EA
RFM 811+80 (Rt) to RFM 811+70 (Lt)	370	—
RGM 171+85 (Lt)	—	1
RGM 174+00 (Lt)	—	1
RD 177+75 (Lt)	—	1
RH 176+40 (Lt)	—	1
TOTAL	370	4

### EARTHWORK

STATION	ROADWAY EXCAVATION (HAZARDOUS WASTE)	EMBANKMENT (N)	STRUCTURE EXCAVATION (HAZARDOUS WASTE)
	CY	CY	CY
RGM 170+73 to 174+14 (Lt)	104	-	-
RD 176+68 to 179+26 (Lt)	106	-	-
RCT 191+48 to 192+45 (Rt)	30	-	-
REM 184+50 to 185+00 (Lt)	18	-	-
RD 186+40 to 186+62 (Lt)	4	-	-
RH 176+21 to 177+34 (Lt)	88	-	-
RD 190+85 to 191+15 (Lt)	4	-	-
ARM 185+84 to 187+53 (Lt)	1218	0	6
ARM 187+75 to 188+88 (Rt)	1	230	6
ARM 187+45 to 189+22 (Lt)	620	42	7
ARM 189+18 to 190+53 (Rt)	3	215	7
TOTAL	2196	487	26

(N) - NOT A SEPARATE PAY ITEM. FOR INFORMATION ONLY.

## SUMMARY OF QUANTITIES

Q-1



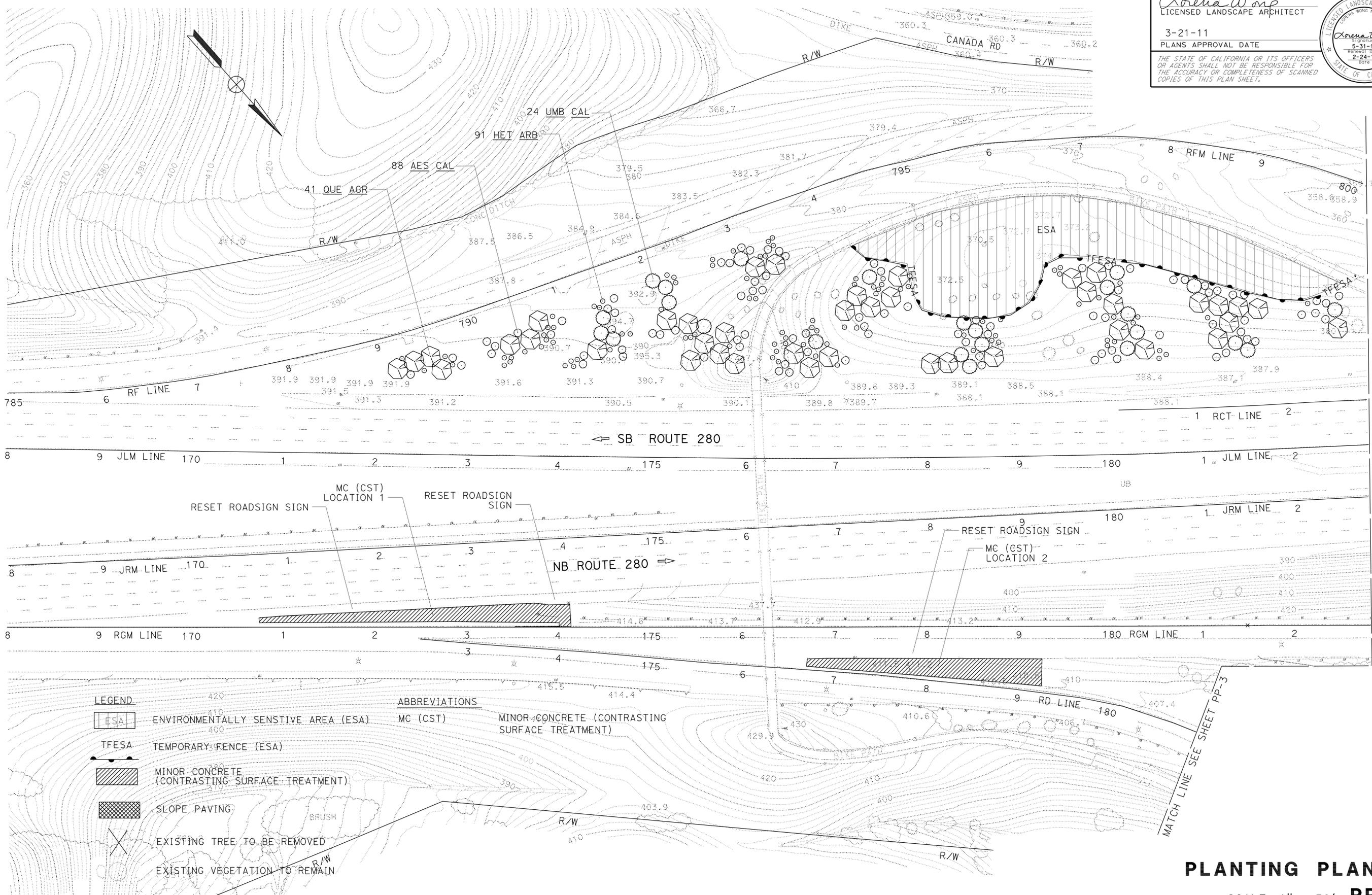
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	92,280	6.9/8.0, 10.4/11.2	18	56

*Lorena Wong*  
LICENSED LANDSCAPE ARCHITECT

3-21-11  
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.

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



**LEGEND**

- ESAs ENVIRONMENTALLY SENSITIVE AREA (ESA)
- TFESA TEMPORARY FENCE (ESA)
- MINOR CONCRETE (CONTRASTING SURFACE TREATMENT)
- SLOPE PAVING
- EXISTING TREE TO BE REMOVED
- EXISTING VEGETATION TO REMAIN

**ABBREVIATIONS**

- MC (CST) MINOR CONCRETE (CONTRASTING SURFACE TREATMENT)

THIS PLAN ACCURATE FOR LANDSCAPE WORK ONLY

**PLANTING PLAN**  
SCALE: 1" = 50' **PP-1**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** LANDSCAPE ARCHITECTURE

SENIOR LANDSCAPE ARCHITECT  
LORENA WONG

CHECKED BY  
LORENA WONG

DESIGNED BY  
LORENA WONG

REVISOR BY  
LORENA WONG

DATE REVISOR  
DATE REVISOR

MATCH LINE SEE SHEET PP-2

MATCH LINE SEE SHEET PP-3

DATE PLOTTED => 24-MAR-2011  
TIME PLOTTED => 09:28

LAST REVISION  
02-16-11

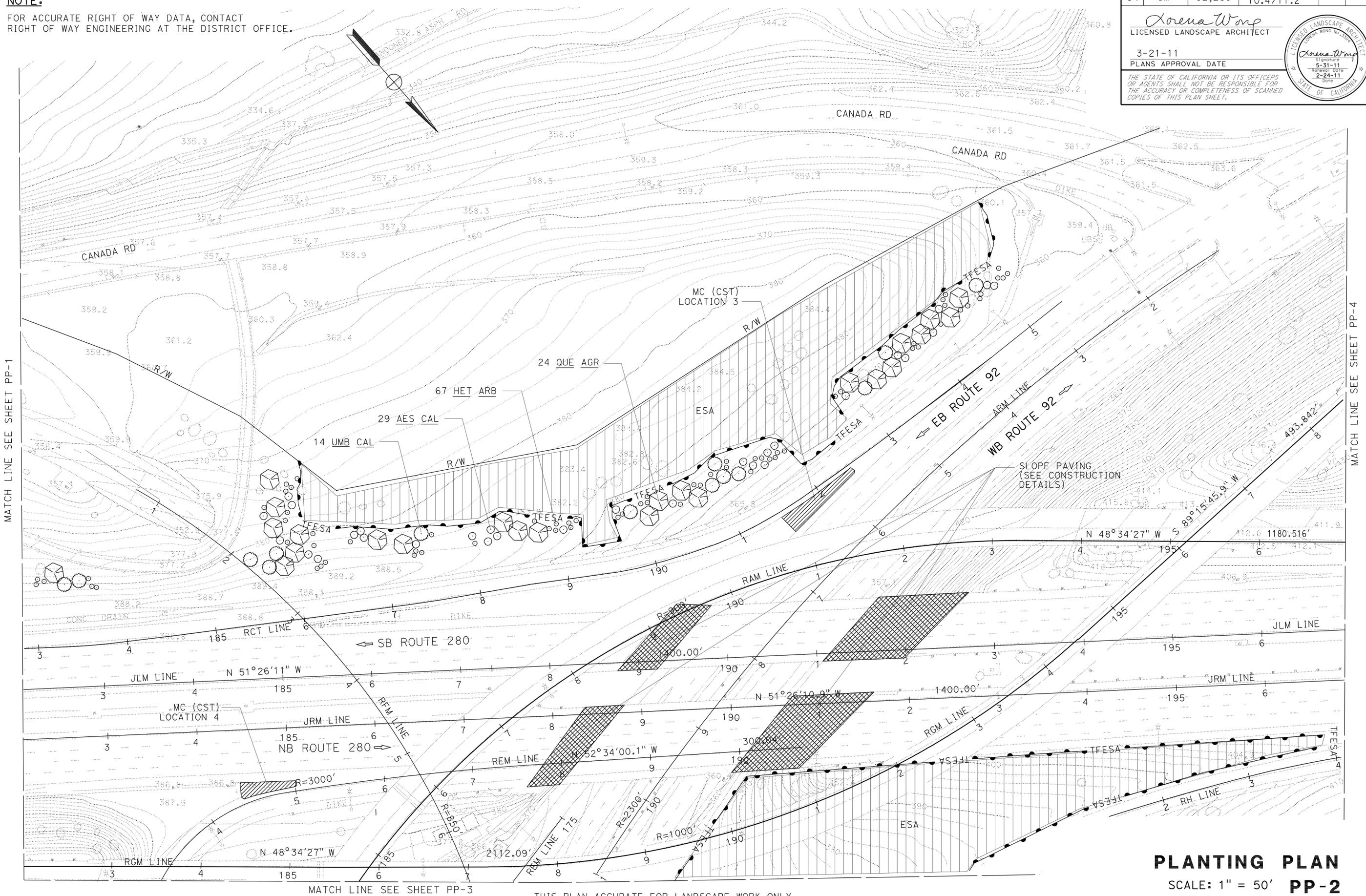
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	92,280	6.9/8.0, 10.4/11.2	19	56

*Lorena Wong*  
LICENSED LANDSCAPE ARCHITECT

3-21-11  
PLANS APPROVAL DATE

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



**PLANTING PLAN**  
SCALE: 1" = 50' **PP-2**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** LANDSCAPE ARCHITECTURE  
SENIOR LANDSCAPE ARCHITECT  
LORENA WONG  
CHECKED BY  
LORENA WONG  
DESIGNED BY  
LORENA WONG  
REVISOR  
LORENA WONG  
DATE REVISION

USERNAME => trmikesl  
DGN FILE => 0400020622+1002.dgn

RELATIVE BORDER SCALE IS IN INCHES  
0 1 2 3

UNIT 0789

PROJECT NUMBER & PHASE 0400020622 1

DATE PLOTTED => 24-MAR-2011  
TIME PLOTTED => 09:32

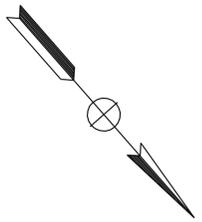
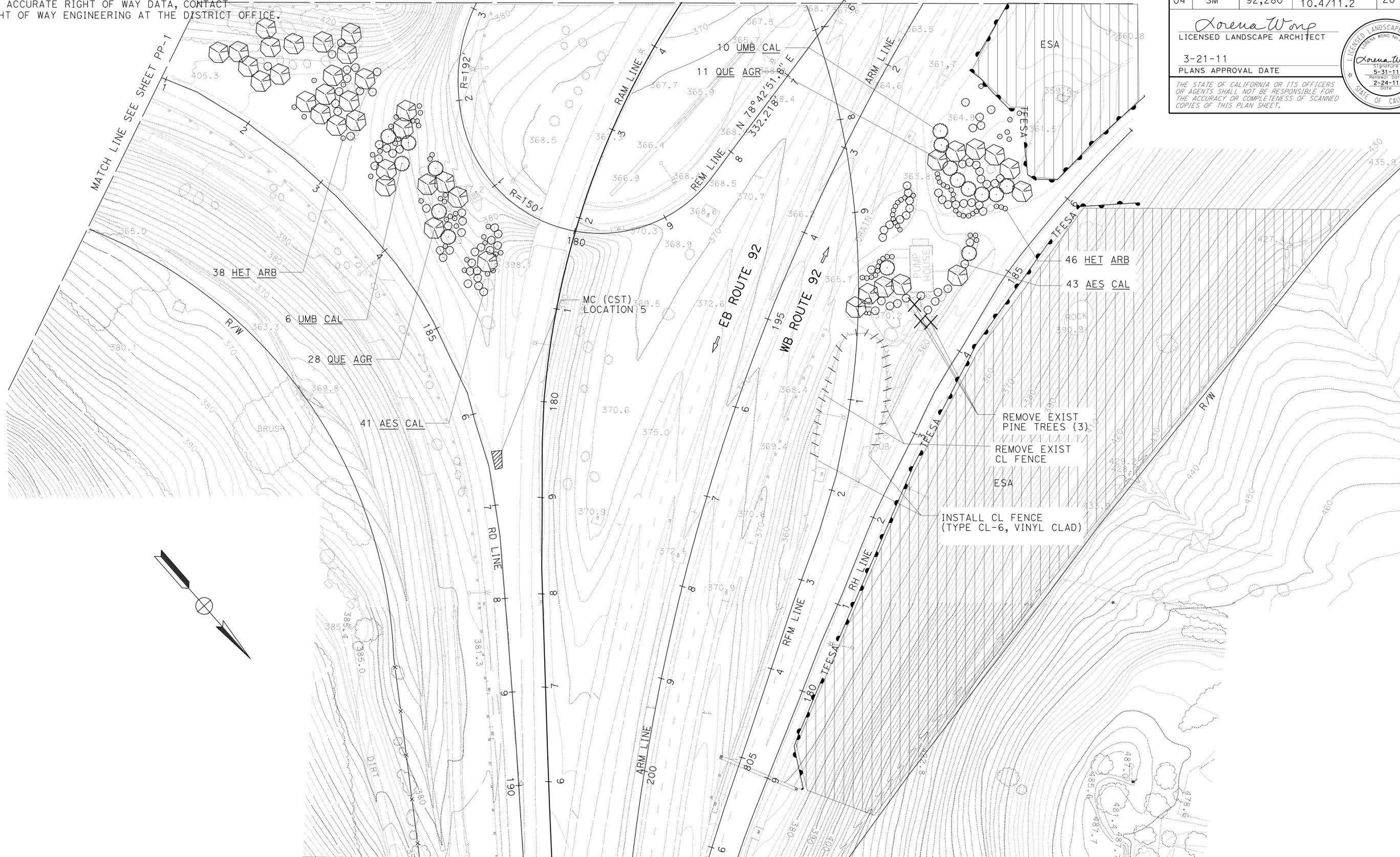
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** LANDSCAPE ARCHITECTURE  
 SENIOR LANDSCAPE ARCHITECT  
 LORENA WONG  
 CHECKED BY  
 LORENA WONG  
 DESIGNED BY  
 LORENA WONG  
 REVISIONS:  
 DATE REVISIONS  
 DATE REVISIONS

**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
04	SM	92,280	6.9/8.0, 10.4/11.2	20	56

*Lorena Wong*  
 LICENSED LANDSCAPE ARCHITECT  
 3-21-11  
 PLANS APPROVAL DATE

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 OR AGENTS SHALL NOT BE RESPONSIBLE FOR  
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THIS PLAN ACCURATE FOR LANDSCAPE WORK ONLY

**PLANTING PLAN**  
 SCALE: 1" = 50'  
**PP-3**

LAST REVISION: 12-02-10  
 DATE PLOTTED => 19-APR-2011  
 TIME PLOTTED => 08:13

**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
04	SM	92,280	6.9/8.0, 10.4/11.2	21	56

*Lorena Wong*  
LICENSED LANDSCAPE ARCHITECT

3-21-11  
PLANS APPROVAL DATE

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THE ACCURACY OR COMPLETENESS OF SCANNED  
COPIES OF THIS PLAN SHEET.



MATCH LINE SEE SHEET PP-2

THIS PLAN ACCURATE FOR LANDSCAPE WORK ONLY

**PLANTING PLAN**  
SCALE: 1" = 50'  
**PP-4**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	LANDSCAPE ARCHITECTURE
SENIOR LANDSCAPE ARCHITECT	LORENA WONG
CALCULATED-DESIGNED BY	CHECKED BY
LORENA WONG	LORENA WONG
REVISOR	DATE
LORENA WONG	

USERNAME => lrminguye  
DGN FILE => 0400020622+1004.dgn



UNIT 0789

PROJECT NUMBER & PHASE 0400020622 1

BORDER LAST REVISED 7/2/2010

LAST REVISION: DATE PLOTTED => 19-APR-2011  
10-14-10 TIME PLOTTED => 08:14

**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
04	SM	92,280	6.9/8.0, 10.4/11.2	22	56

*Lorena Wong*  
LICENSED LANDSCAPE ARCHITECT

3-21-11  
PLANS APPROVAL DATE

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** LANDSCAPE ARCHITECTURE

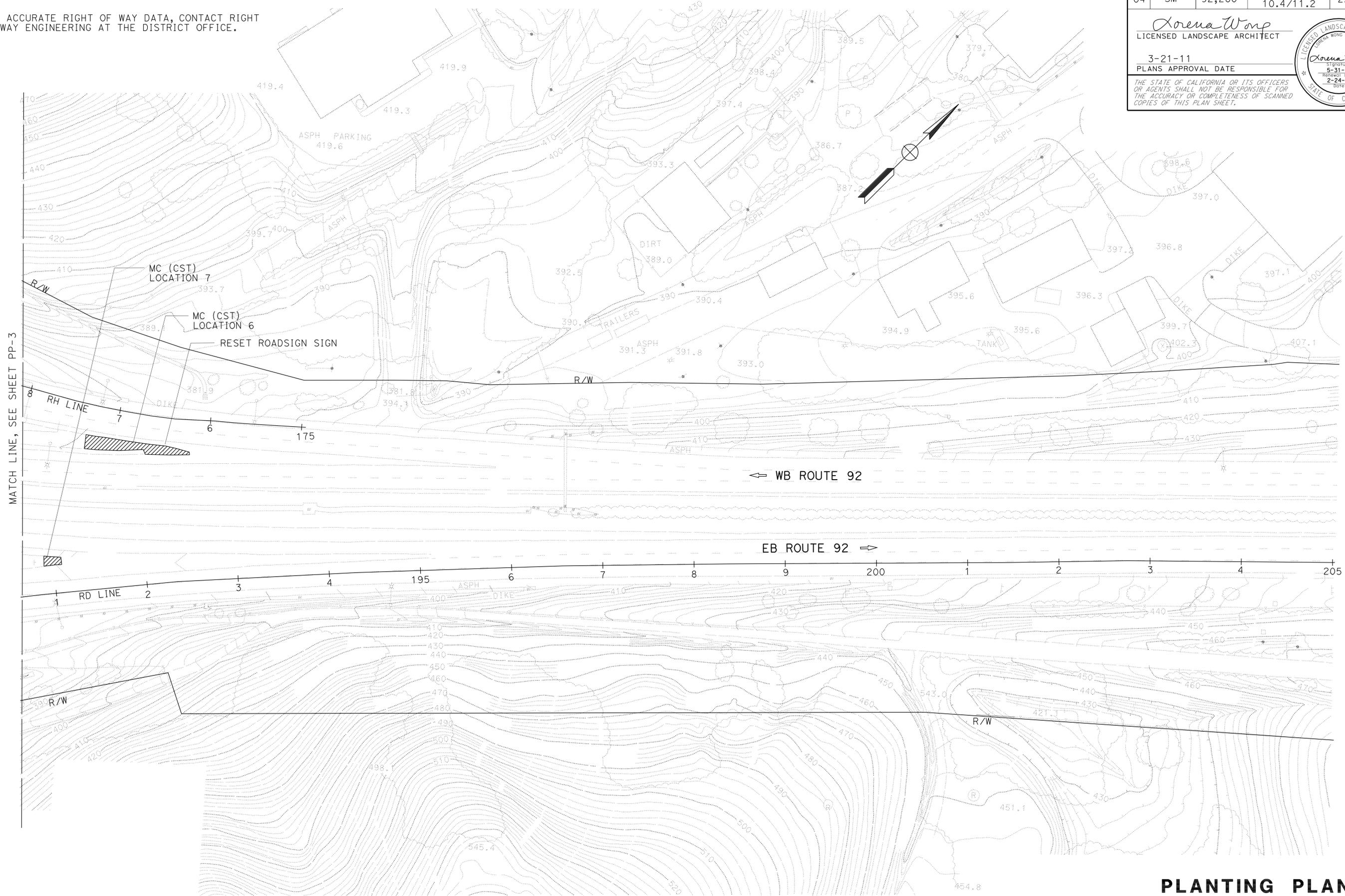
SENIOR LANDSCAPE ARCHITECT  
LORENA WONG

CALCULATED/DESIGNED BY  
LORENA WONG

CHECKED BY  
LORENA WONG

REVISOR BY  
LORENA WONG

DATE REVISOR  
DATE REVISOR



THIS PLAN ACCURATE FOR LANDSCAPE WORK ONLY.

**PLANTING PLAN**  
SCALE: 1" = 50' **PP-5**



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	92,280	6.9/8.0, 10.4/11.2	23	56

*Loarena Wong*  
LICENSED LANDSCAPE ARCHITECT

3-21-11  
PLANS APPROVAL DATE

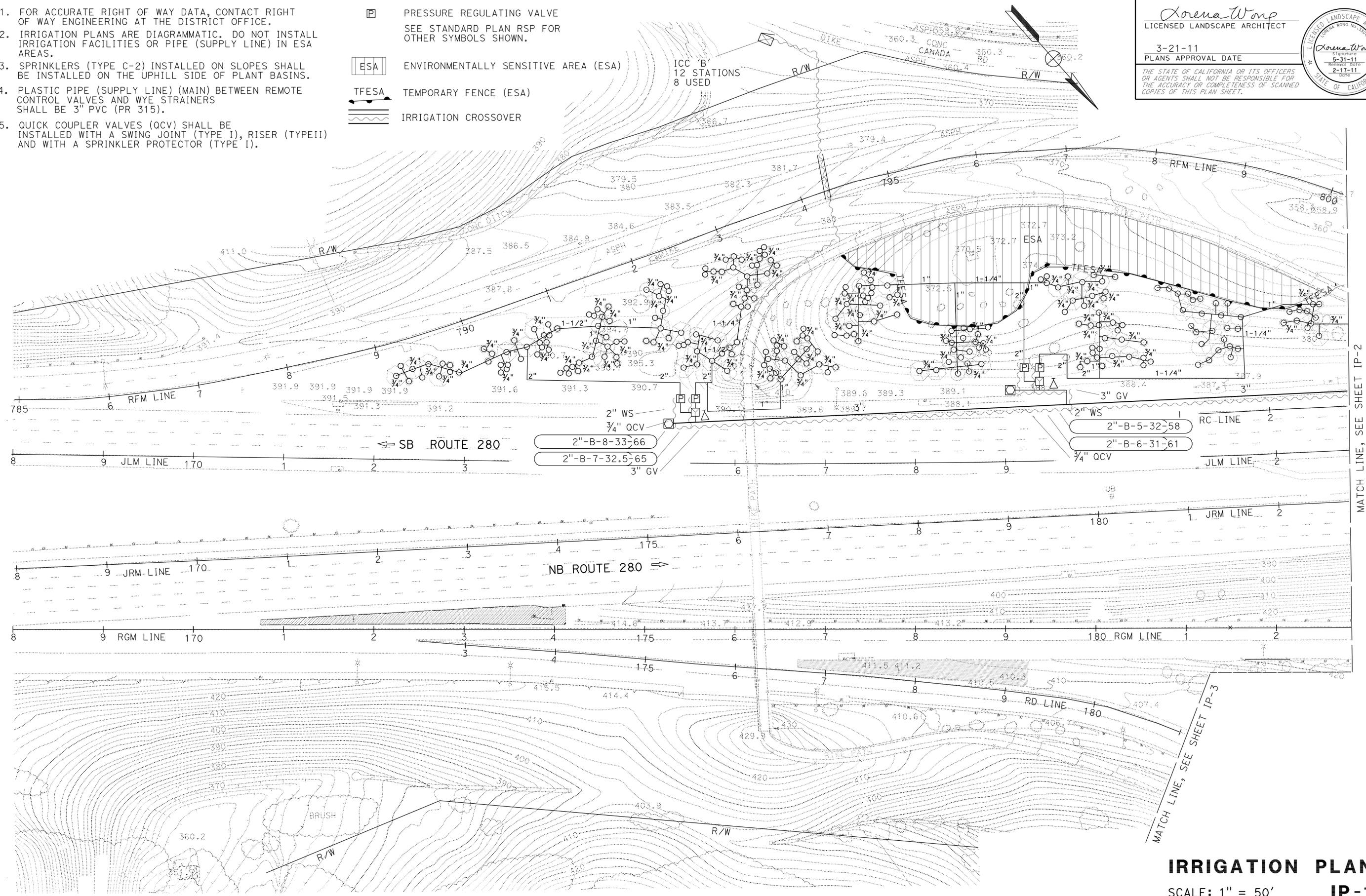
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

**NOTES:**

- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- IRRIGATION PLANS ARE DIAGRAMMATIC. DO NOT INSTALL IRRIGATION FACILITIES OR PIPE (SUPPLY LINE) IN ESA AREAS.
- SPRINKLERS (TYPE C-2) INSTALLED ON SLOPES SHALL BE INSTALLED ON THE UPHILL SIDE OF PLANT BASINS.
- PLASTIC PIPE (SUPPLY LINE) (MAIN) BETWEEN REMOTE CONTROL VALVES AND WYE STRAINERS SHALL BE 3" PVC (PR 315).
- QUICK COUPLER VALVES (QCV) SHALL BE INSTALLED WITH A SWING JOINT (TYPE I), RISER (TYPE II) AND WITH A SPRINKLER PROTECTOR (TYPE I).

**LEGEND:**

- PRESSURE REGULATING VALVE  
SEE STANDARD PLAN RSP FOR OTHER SYMBOLS SHOWN.
- ENVIRONMENTALLY SENSITIVE AREA (ESA)
- TEMPORARY FENCE (ESA)
- IRRIGATION CROSSOVER



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** LANDSCAPE ARCHITECTURE  
 SENIOR LANDSCAPE ARCHITECT LORENA WONG  
 CHECKED BY LORENA WONG  
 CALCULATED/DESIGNED BY LORENA WONG  
 OWEN WILLIAMS  
 REVISOR BY LORENA WONG  
 DATE REVISION

THIS PLAN ACCURATE FOR IRRIGATION WORK ONLY

**IRRIGATION PLAN**  
**IP-1**

SCALE: 1" = 50'

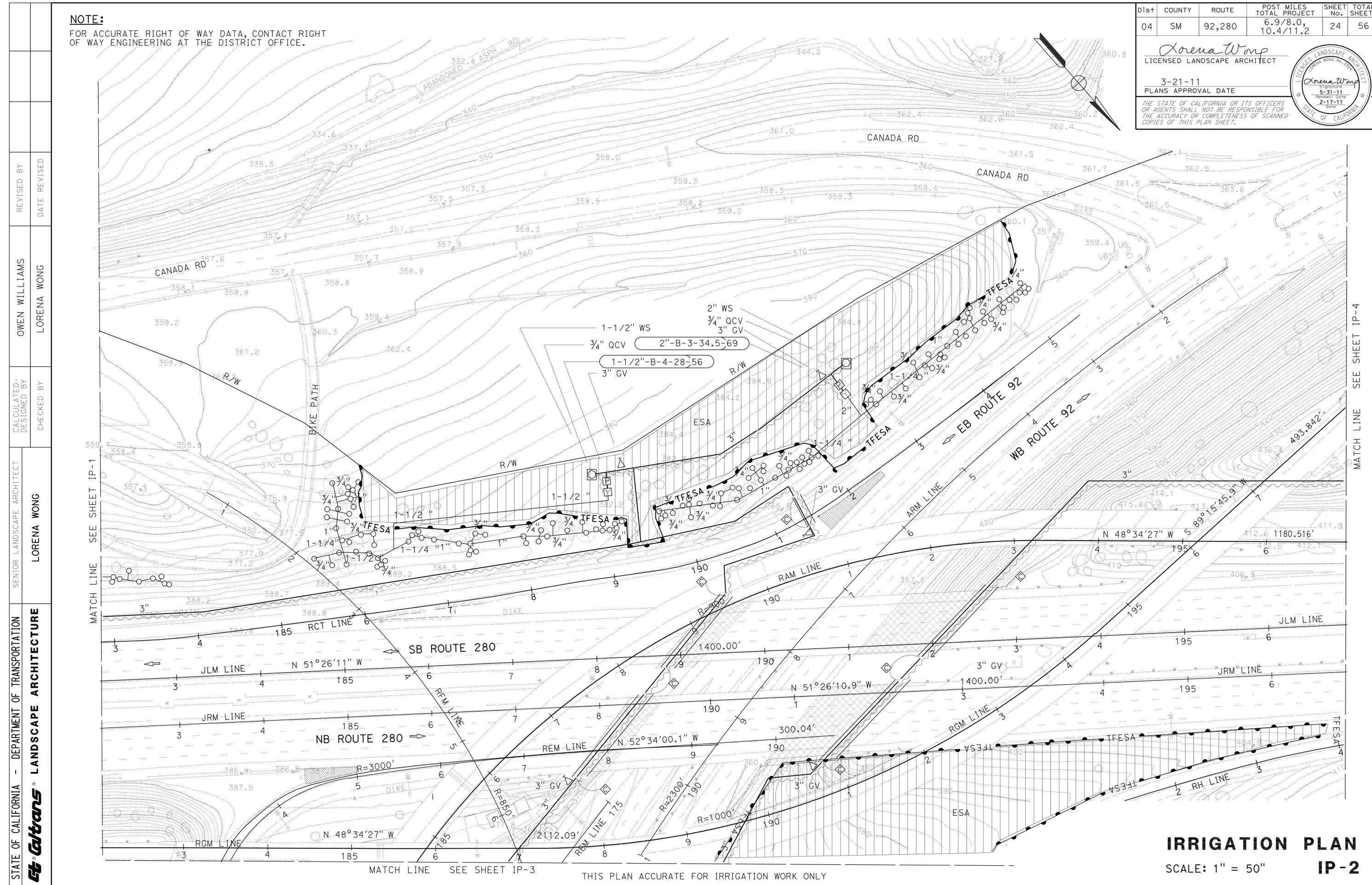
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	92,280	6.9/8.0, 10.4/11.2	24	56

*Lorena Wong*  
LICENSED LANDSCAPE ARCHITECT

3-21-11  
PLANS APPROVAL DATE

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**IRRIGATION PLAN**  
SCALE: 1" = 50"  
**IP-2**

LAST REVISION DATE PLOTTED => 23-MAR-2011  
12-02-10 TIME PLOTTED => 14:50

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** LANDSCAPE ARCHITECTURE  
 SENIOR LANDSCAPE ARCHITECT: LORENA WONG  
 CHECKED BY: LORENA WONG  
 DESIGNED BY: OWEN WILLIAMS  
 REVISIONS: LORENA WONG

**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
04	SM	92,280	6.9/8.0, 10.4/11.2	25	56

*Lorena Wong*  
 LICENSED LANDSCAPE ARCHITECT  
 3-21-11  
 PLANS APPROVAL DATE

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THIS PLAN ACCURATE FOR IRRIGATION WORK ONLY

**IRRIGATION PLAN**  
**IP-3**

SCALE: 1" = 50'

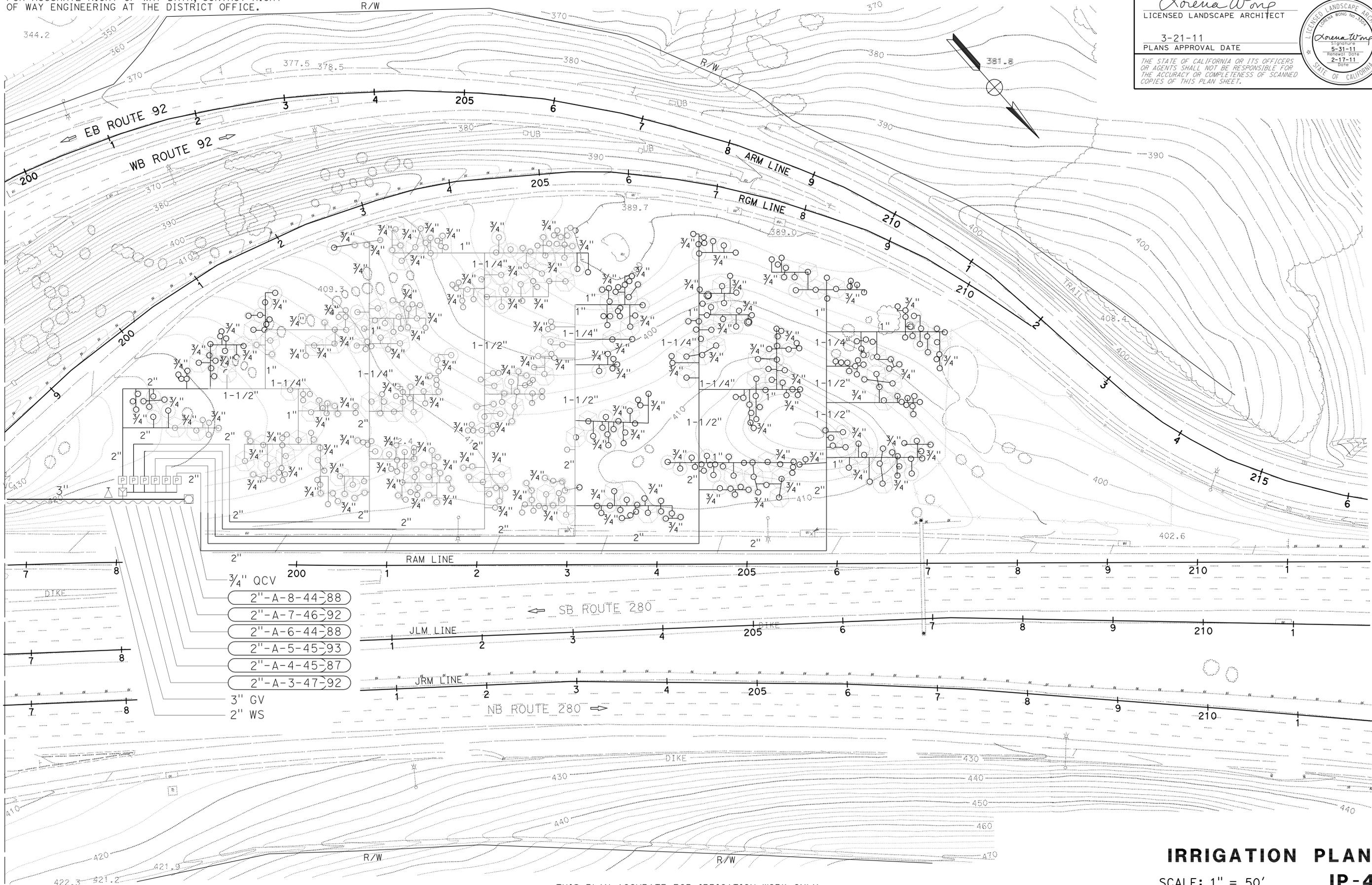
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SM	92,280	6.9/8.0, 10.4/11.2	26	56

*Lorena Wong*  
 LICENSED LANDSCAPE ARCHITECT

3-21-11  
 PLANS APPROVAL DATE

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



MATCH LINE SEE SHEET IP-2

- 2"-A-8-44-88
- 2"-A-7-46-92
- 2"-A-6-44-88
- 2"-A-5-45-93
- 2"-A-4-45-87
- 2"-A-3-47-92
- 3" GV
- 2" WS

THIS PLAN ACCURATE FOR IRRIGATION WORK ONLY

**IRRIGATION PLAN**  
**SCALE: 1" = 50'**  
**IP-4**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** LANDSCAPE ARCHITECTURE  
 SENIOR LANDSCAPE ARCHITECT  
 LORENA WONG  
 CHECKED BY  
 LORENA WONG  
 OWEN WILLIAMS  
 LORENA WONG  
 REVISOR BY  
 DATE REVISOR  
 DATE REVISOR

LAST REVISION: DATE PLOTTED => 19-APR-2011  
 TIME PLOTTED => 08:15

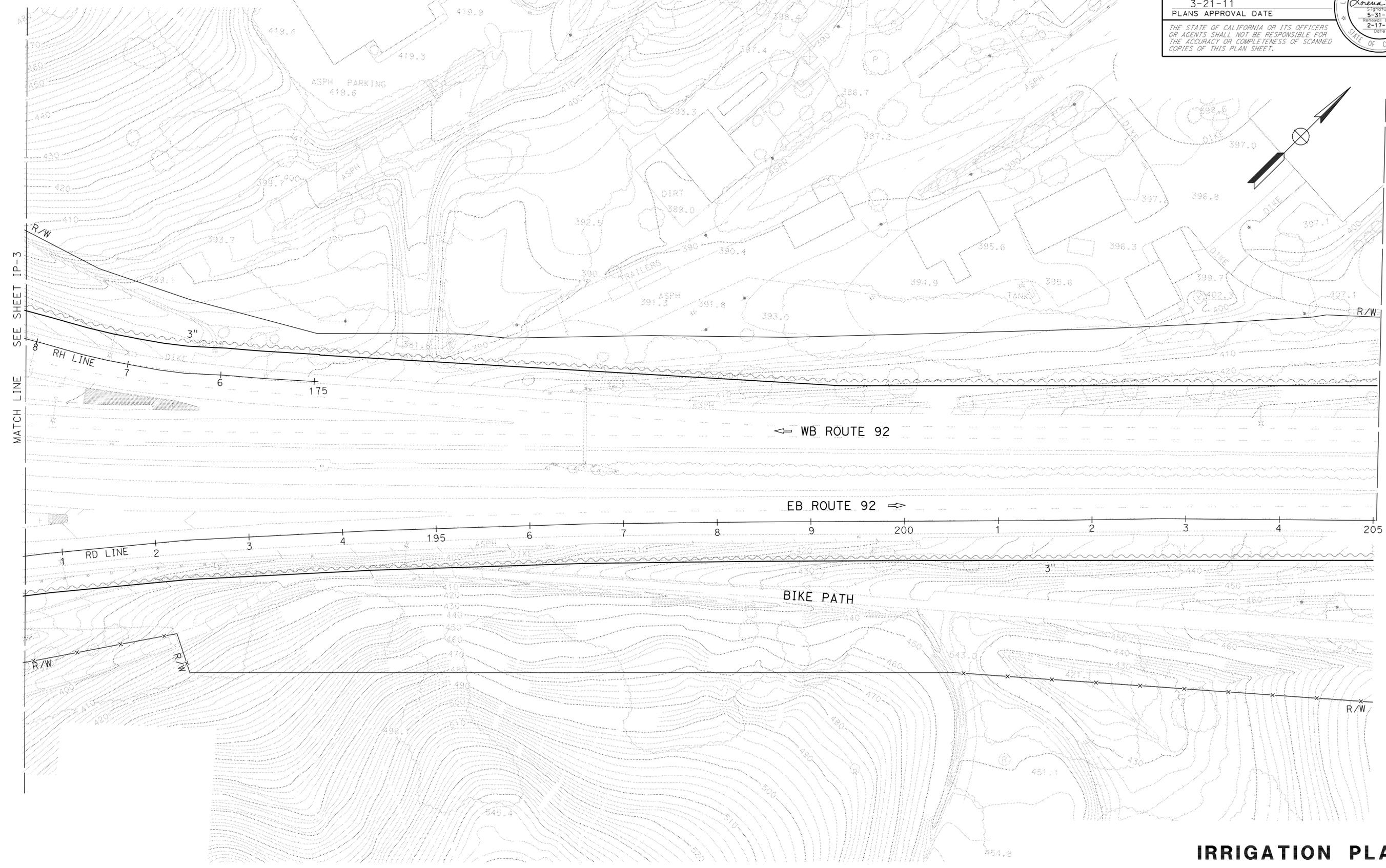
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	92,280	6.9/8.0, 10.4/11.2	27	56

*Lorena Wong*  
LICENSED LANDSCAPE ARCHITECT

3-21-11  
PLANS APPROVAL DATE

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**IRRIGATION PLAN**  
**SCALE: 1" = 50'**  
**IP-5**

THIS PLAN ACCURATE FOR IRRIGATION WORK ONLY



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** LANDSCAPE ARCHITECTURE

SENIOR LANDSCAPE ARCHITECT  
**LORENA WONG**

CALCULATED/DESIGNED BY  
**LORENA WONG**

CHECKED BY  
**LORENA WONG**

REVISOR BY  
**OWEN WILLIAMS**

DATE REVISED  
**DATE REVISED**

BORDER LAST REVISED 7/2/2010

USERNAME => trpierce  
DGN FILE => 0400020622+1005.dgn

UNIT 0789

PROJECT NUMBER & PHASE 0400020622 1

LAST REVISION DATE PLOTTED => 23-MAR-2011  
12-02-10 TIME PLOTTED => 14:38

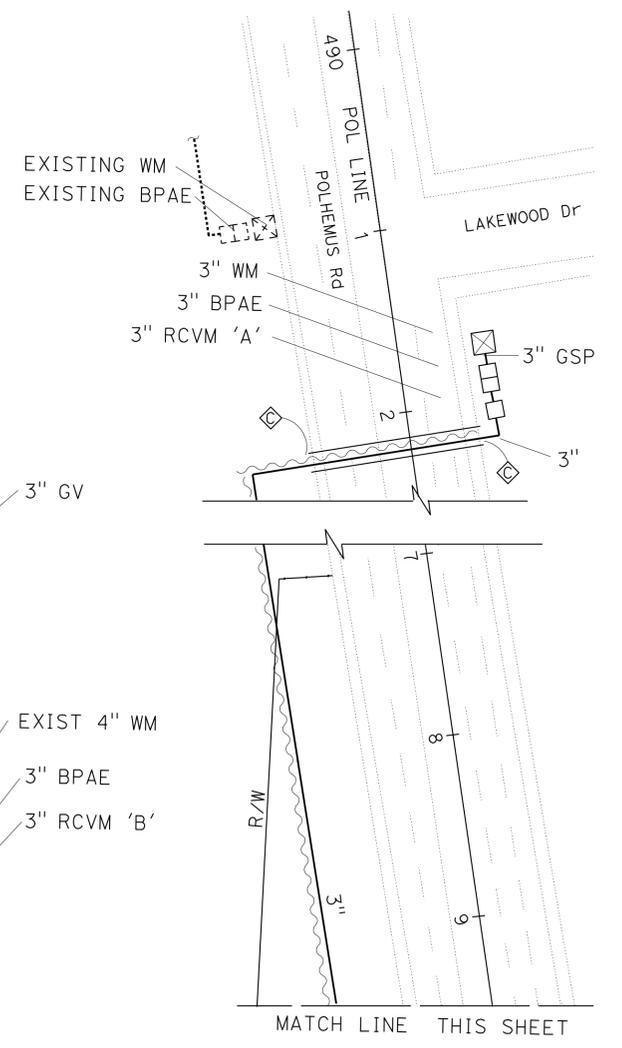
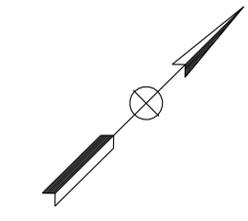
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** LANDSCAPE ARCHITECTURE  
 SENIOR LANDSCAPE ARCHITECT  
 OWEN WILLIAMS  
 LORENA WONG  
 REVISOR BY  
 OWEN WILLIAMS  
 LORENA WONG  
 DATE REVISOR  
 DATE REVISOR

**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
04	SM	92,280	6.9/8.0, 10.4/11.2	28	56

*Lorena Wong*  
 LICENSED LANDSCAPE ARCHITECT  
 3-21-11  
 PLANS APPROVAL DATE

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**IRRIGATION PLAN**  
**SCALE: 1" = 50'**  
**IP-6**

### SPRINKLER SCHEDULE

SYMBOL	TYPE	DESCRIPTION	SPRAY PATTERN	OPERATING PRESSURE (PSI)	PRESSURE COMPENSATING	PLUS/MINUS 5% ②			MATERIAL	INLET CONNECTION (NPT INCH)	POSITIVE-LOCKING ADJ ARC STOP	BACKSLASH PREVENTER	DIFFUSER PIN	DISTANCE CONTROL FLAP	ADJ DISCHARGE	RISER				SWING JOINT (TYPE)	RISER SUPPORT	SPRINKLER PROTECTOR (TYPE)	REMARKS		
						GALLONS PER MINUTE (GPM)	GALLONS PER HOUR (GPH)	RADIUS (FT)								WIDTH x LENGTH (FT)	TYPE	PLASTIC	GALVANIZED					SIZE (IPS INCH)	HEIGHT (INCH)
O	C-2	FLOOD BUBBLER	F	20-90	X	0.5	—	—	—	PL	1/2	—	—	—	—	v	X	—	1/2	—	—	—	—	—	

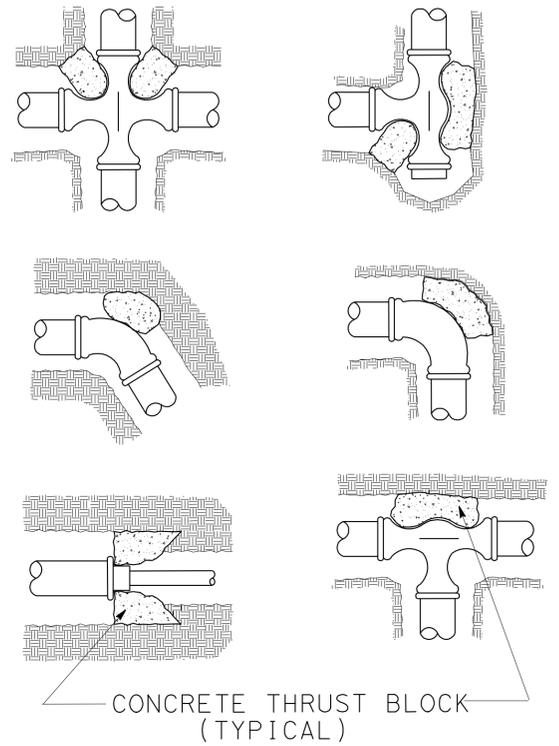
**APPLICABLE WHEN CIRCLED BELOW:**

- 1 - See Special Provisions.
- ② - If a pressure compensating device is specified, the discharge and radii shown reflect its use.
- 3 - Arc Stop shall be fitted with a nut and bolt.
- 4 - Vinyl-coated cast iron housing.
- 5 - Swing Joints required adjacent to shoulders, curbs, sidewalks, and dikes.
- 6 - Unless otherwise shown on plans.

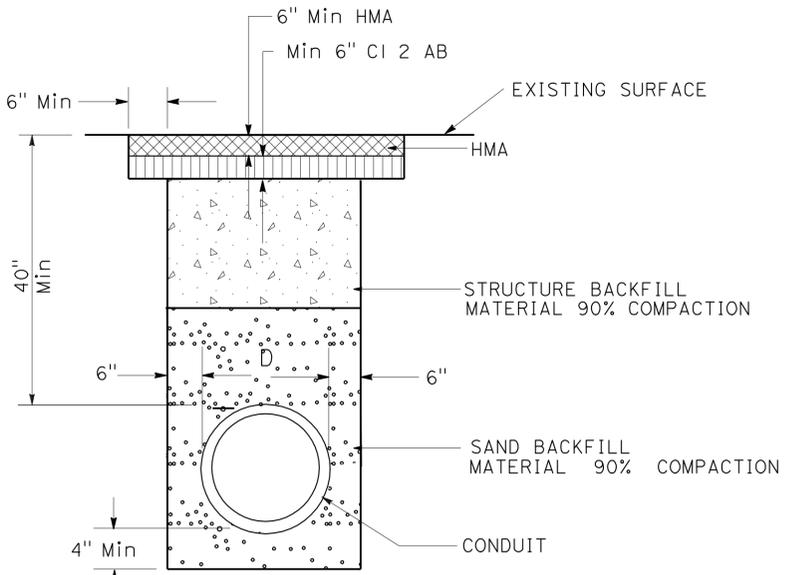
**ABBREVIATIONS**

F	full circle	F+	feet/foot
P	part circle	GPM	gallons per minute
F/P	full/part circle	GPH	gallons per hour
Q	quarter circle	Adj	adjustable
T	third circle	PL	plastic
H	half circle	B/B	brass/bronze
TT	two third circle	B/PL	brass/plastic
TQ	three quarter circle	B/B/PL	brass/bronze/plastic
CST	center strip	NPT	national pipe thread
SST	side strip	IPS	iron pipe size
EST	end strip	PSI	pounds per square inch

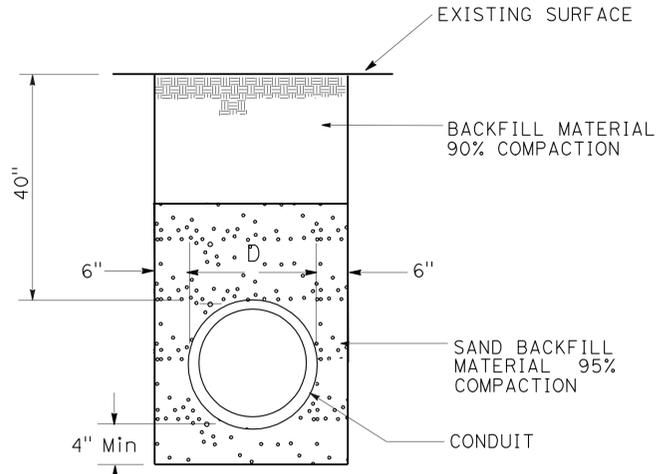
X IN BOX DENOTES REQUIREMENT



#### THRUST BLOCKS



**UNDER ROADWAY**



**BEYOND ROADWAY**

### IRRIGATION CROSSOVER (OPEN TRENCH) FOR WATERLINE INSTALLATIONS FOR LOCATION POLHEMUS ROAD

- NOTES:**
1. SAND BACK FILL SHALL BE MATERIAL FREE FROM ORGANIC MATTER AND CLAY WITH A SIEVE GRADATION BY WEIGHT AS FOLLOWS:

SIEVE SIZE	% PASSING SIEVE
No. 4	100
No. 200	0-5
  2. BACKFILL MATERIAL FROM EXCAVATION SHALL BE, FREE FROM STONES OR LUMPS EXCEEDING 3 INCHES GREATEST DIMENSION, ORGANIC MATTER, OR UNSATISFACTORY MATERIAL.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - LANDSCAPE ARCHITECTURE  
 SENIOR LANDSCAPE ARCHITECT  
 OWEN WILLIAMS  
 LORENA WONG  
 CALCULATED/DESIGNED BY  
 CHECKED BY  
 REVISOR BY  
 DATE REVISED

THIS PLAN ACCURATE FOR IRRIGATION WORK ONLY





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

FUNCTIONAL SUPERVISOR  
 KENNETH Y. XU

CALCULATED/DESIGNED BY  
 KENNETH Y. XU

CHECKED BY  
 HENRY Q. GU

REVISOR  
 KENNETH Y. XU

DATE  
 3-21-11

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	92,280	6.9/8.0, 10.4/11.2	32	56

REGISTERED ELECTRICAL ENGINEER  
 Kenneth Y. Xu  
 No. 15219  
 Exp. 6-30-12  
 ELECT

3-21-11  
 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.

**GENERAL NOTES**

1. NO ABOVE GROUND ELECTRICAL WORK SHALL BE PERFORMED ON ANY SYSTEM WITHIN THE PROJECT SITE UNTIL ALL CONTRACTOR-FURNISHED ELECTRICAL MATERIALS FOR THAT INDIVIDUAL SYSTEM HAVE BEEN TESTED AND DELIVERED TO THE CONTRACTOR.
2. THE NEUTRAL CONDUCTOR SHALL RUN FROM THE SERVICE EQUIPMENT ENCLOSURE TO THE CONTROLLER CABINET WITHOUT SPLICING TO ANY OTHER NEUTRAL CONDUCTOR.
3. THE CLEARANCE BETWEEN THE BOTTOM OF THE LOWEST CIRCUIT BREAKER AND THE BOTTOM OF THE SERVICE EQUIPMENT ENCLOSURE FOR A TYPE III-A SERIES SHALL BE 24 INCHES MINIMUM.
4. AT LEAST THREE WORKING DAYS PRIOR TO PERFORMING ANY WORK ON EACH EXISTING SYSTEM, THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF TRANSPORTATION, ELECTRICAL AND SIGNAL MAINTENANCE SUPERINTENDENT, PHONE (415) 330-6500.
5. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES AND VERIFY ALL CONDITION ON THE JOB SITE. HAND DIG FOUNDATION UNTIL ALL CLEAR OF OBSTRUCTIONS.
6. ANY ABOVE GROUND ELECTRICAL EQUIPMENT SHALL BE INSTALLED AT THE LOCATION WHICH MAINTAINS AN UNOBSTRUCTED PATH OF TRAVEL, WITH A MINIMUM CLEARANCE WIDTH OF 4 FEET, EXCEPT NEAR STANDARDS, A MINIMUM LATERAL CLEARANCE OF 2'-8" MUST BE PROVIDED.

**PROJECT NOTES**

- 1 3/4"C, 2#10
- 2 1 1/2"C, 2#10

**INDEX OF ELECTRICAL PLANS**

DRAWING No.	TITLE
E-1	ELECTRICAL NOTES, INDEX, ABBREVIATION AND SYMBOLS
E-2	ELECTRIC SERVICE (IRRIGATION), LOCATION 1
E-3	ELECTRIC SERVICE (IRRIGATION), LOCATION 2

**ABBREVIATIONS**

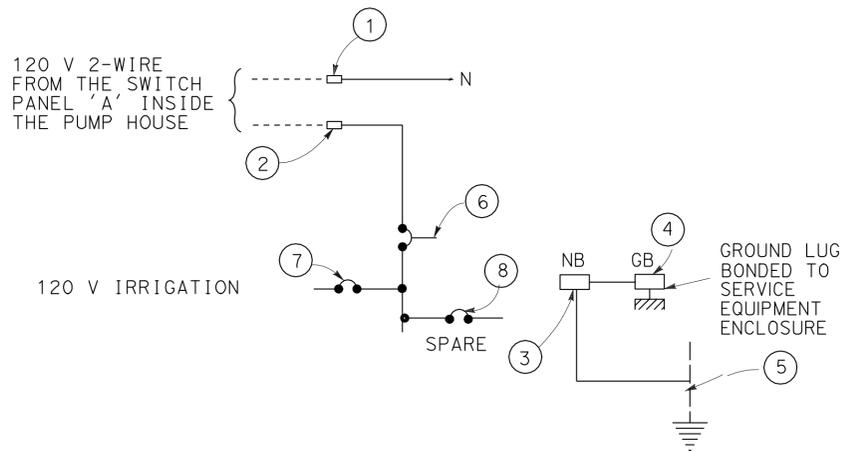
PG&E	PACIFIC GAS AND ELECTRIC COMPANY
CTID	CALTRANS IDENTIFICATION NUMBER

**ELECTRICAL NOTES, INDEX,  
 ABBREVIATION AND SYMBOLS**

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

**NOTES:** (FOR SERVICE EQUIPMENT)

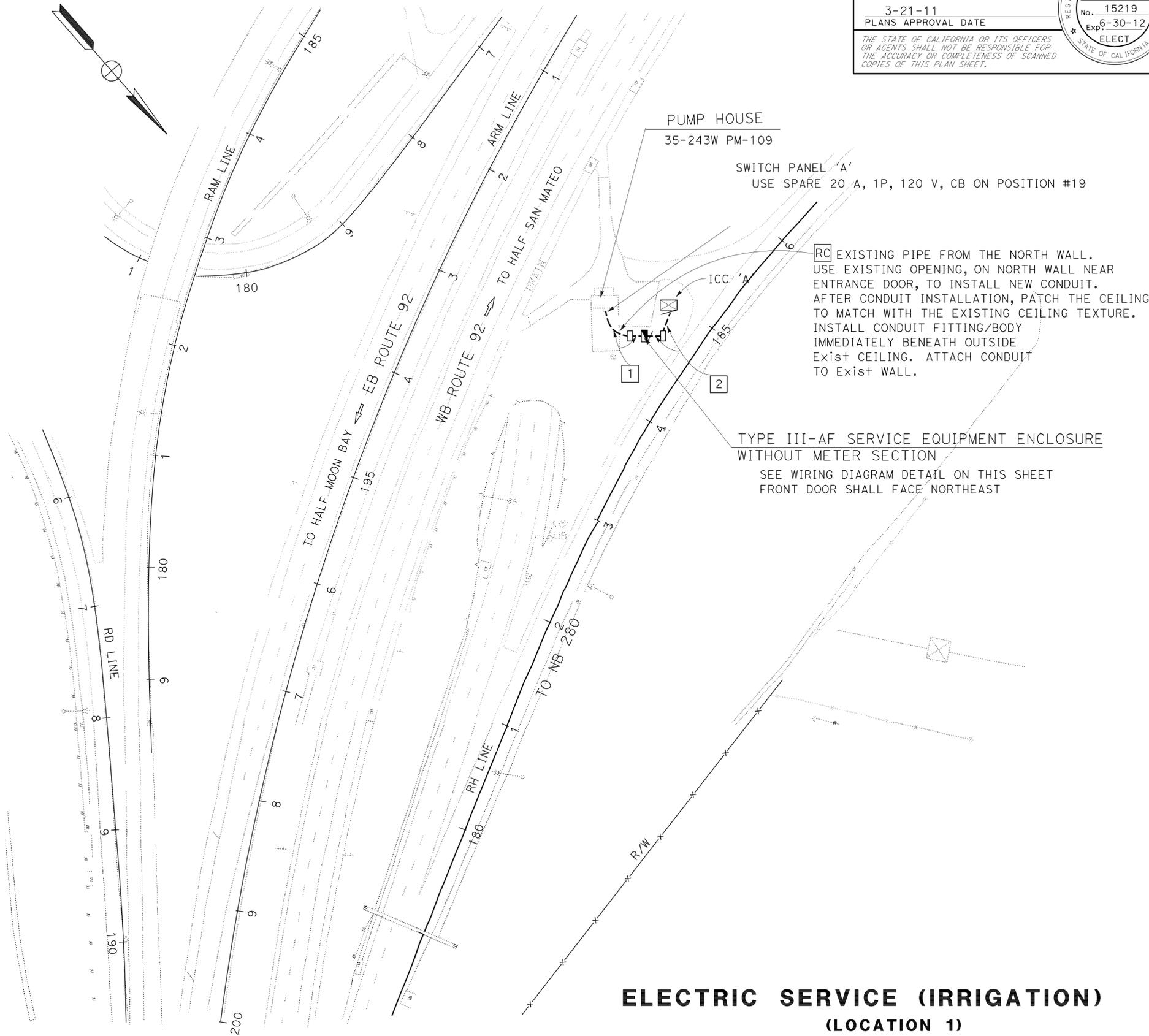
- VOLTAGE RATINGS OF SERVICE EQUIPMENT SHALL CONFORM TO THE SERVICE VOLTAGES INDICATED ON THE PLANS.
- ITEM No. ① AND ③ SHALL BE ISOLATED FROM THE CABINET.



**120/240 V SERVICE WIRING DIAGRAM**

ITEM No.	COMPONENT	NAMEPLATE DESCRIPTION
①	NEUTRAL LUG	
②	LANDING LUG	
③	NEUTRAL BUS	
④	GROUND BUS	
⑤	GROUNDING ELECTRODE	
⑥	20 A, 120 V, 1P, CB	MAIN BREAKER
⑦	20 A, 120 V, 1P, CB	IRRIGATION
⑧	20 A, 120 V, 1P, CB	SPARE

**TYPE III-A SERVICE (120/240 V) EQUIPMENT LEGEND**



**ELECTRIC SERVICE (IRRIGATION)  
(LOCATION 1)**

NO SCALE

**E-2**

THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY

FOR NOTES, ABBREVIATIONS AND LEGEND, SEE SHEET E-1

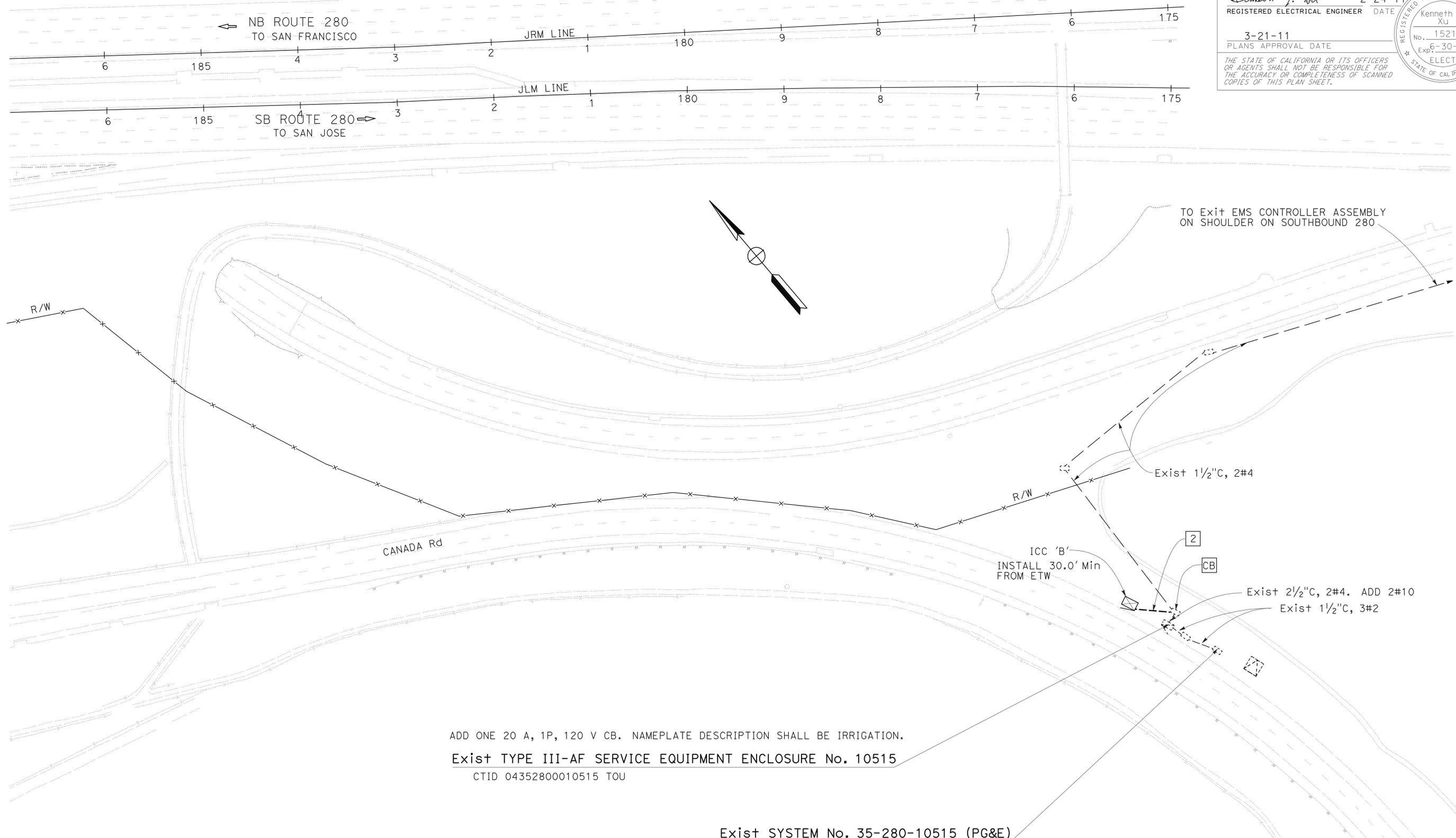
FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	92,280	6.9/8.0, 10.4/11.2	34	56

<i>Kenneth Y. Xu</i>	2-24-11
REGISTERED ELECTRICAL ENGINEER	DATE
3-21-11	
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.



ADD ONE 20 A, 1P, 120 V CB. NAMEPLATE DESCRIPTION SHALL BE IRRIGATION.  
**Exist TYPE III-AF SERVICE EQUIPMENT ENCLOSURE No. 10515**  
 CTID 04352800010515 TOU

**Exist SYSTEM No. 35-280-10515 (PG&E)**  
 UNDERGROUND SERVICE(120/240 V)

Exist load: 1200 W    ems  
 New load: 200 W    irr

**ELECTRIC SERVICE (IRRIGATION)**  
**(LOCATION 2)**

SCALE: 1" = 50'

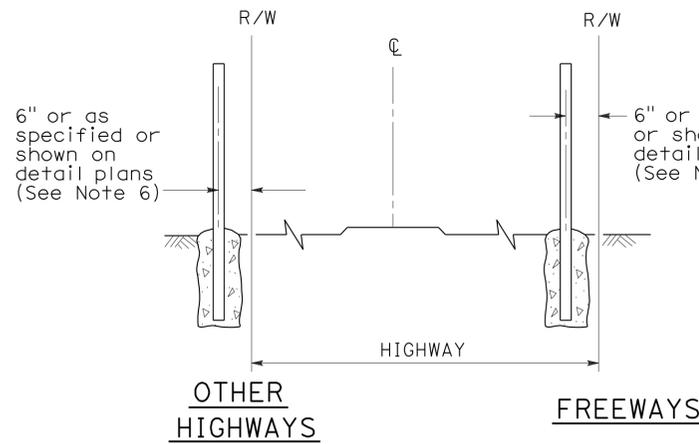
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
 Kenneth Y. Xu  
 Functional Supervisor  
 Kenneth Y. Xu  
 Calculated/Designed By  
 Henry Q. Gu  
 Checked By  
 Kenneth Y. Xu  
 Revised By  
 Kenneth Y. Xu  
 Date Revised  
 Henry Q. Gu

THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY

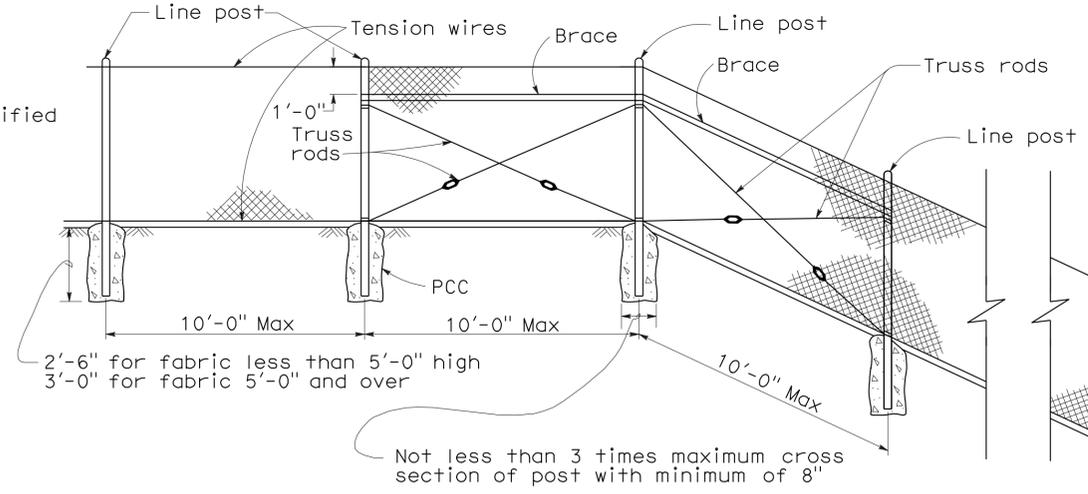
FOR NOTES, ABBREVIATIONS AND LEGEND, SEE SHEET E-1



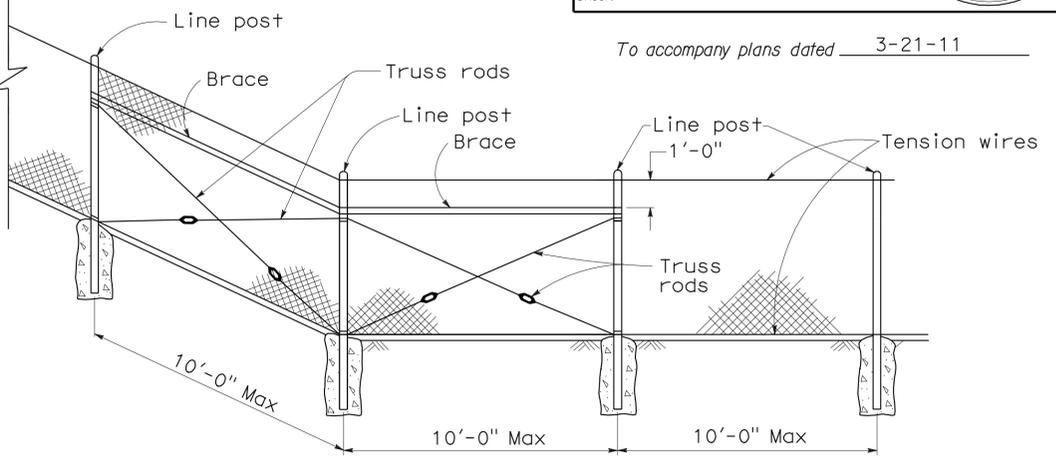
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 02-24-11 TIME PLOTTED => 08:17



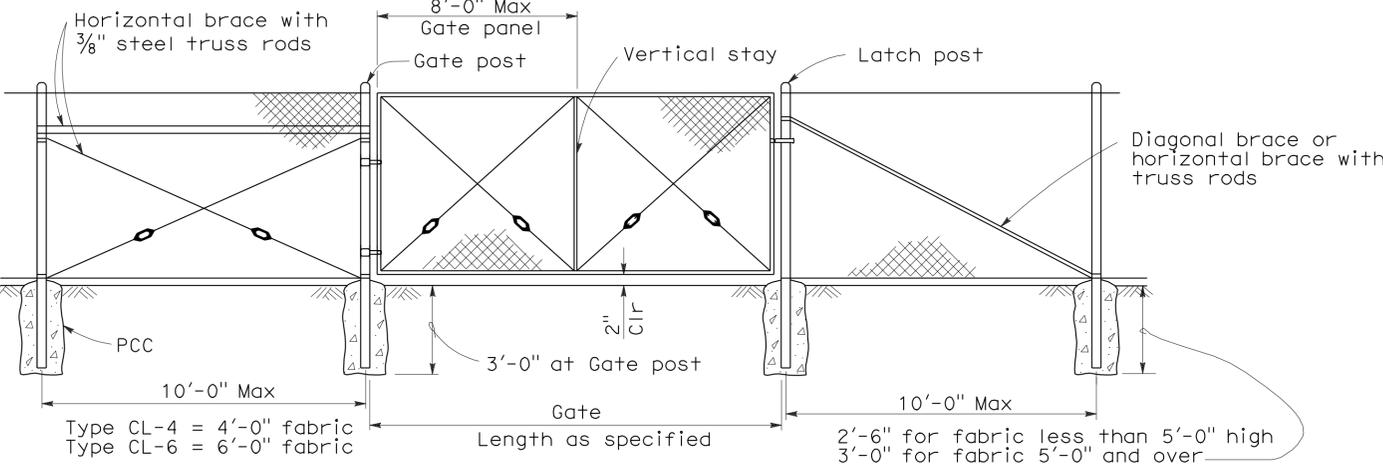
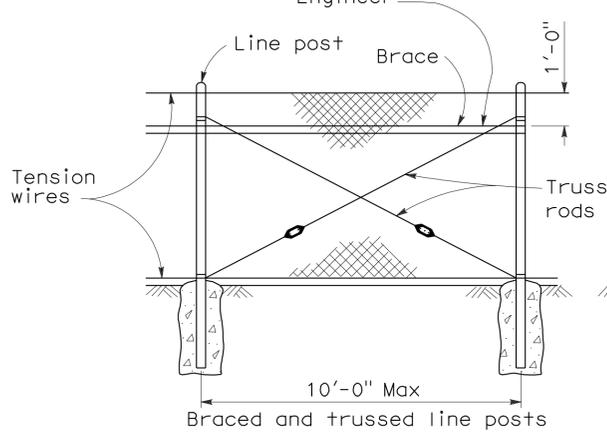
**FENCE LOCATION**



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



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



**CHAIN LINK GATE INSTALLATION**

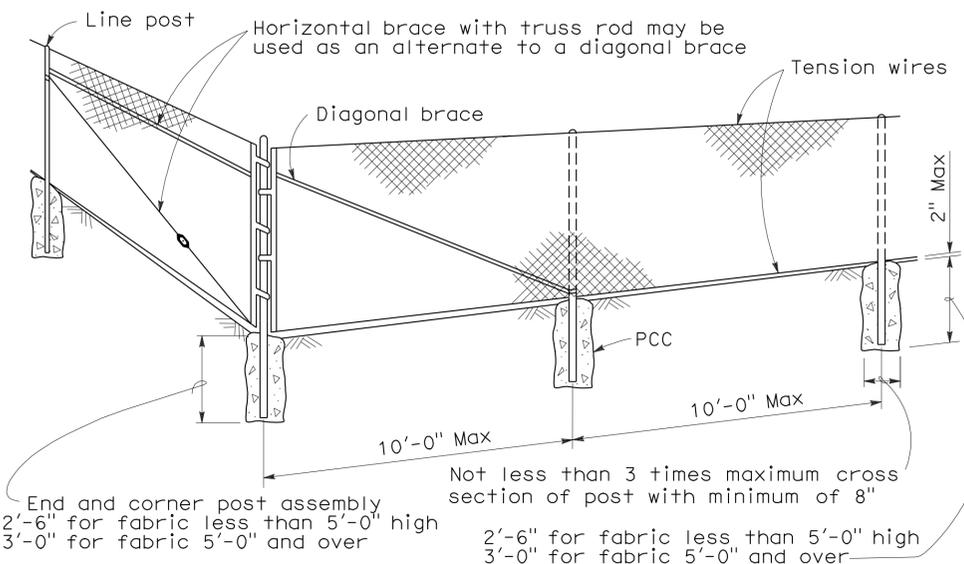
GATE POST			
FENCE HEIGHT	GATE WIDTHS	NOMINAL ID	WEIGHT PER FOOT
6'-0" and Less	Up thru 6'-0"	2 1/2"	4.95 LB
	Over 6'-0" thru 12'-0"	4"	10.79 LB
	Over 12'-0" thru 18'-0"	5"	14.62 LB
	Over 18'-0" to 24'-0" Max	6"	18.97 LB
Over 6'-0"	Up thru 6'-0"	3"	7.58 LB
	Over 6'-0" thru 12'-0"	5"	14.62 LB
	Over 12'-0"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

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SM	92,280	6.9/8.0, 10.4/11.2	36	56

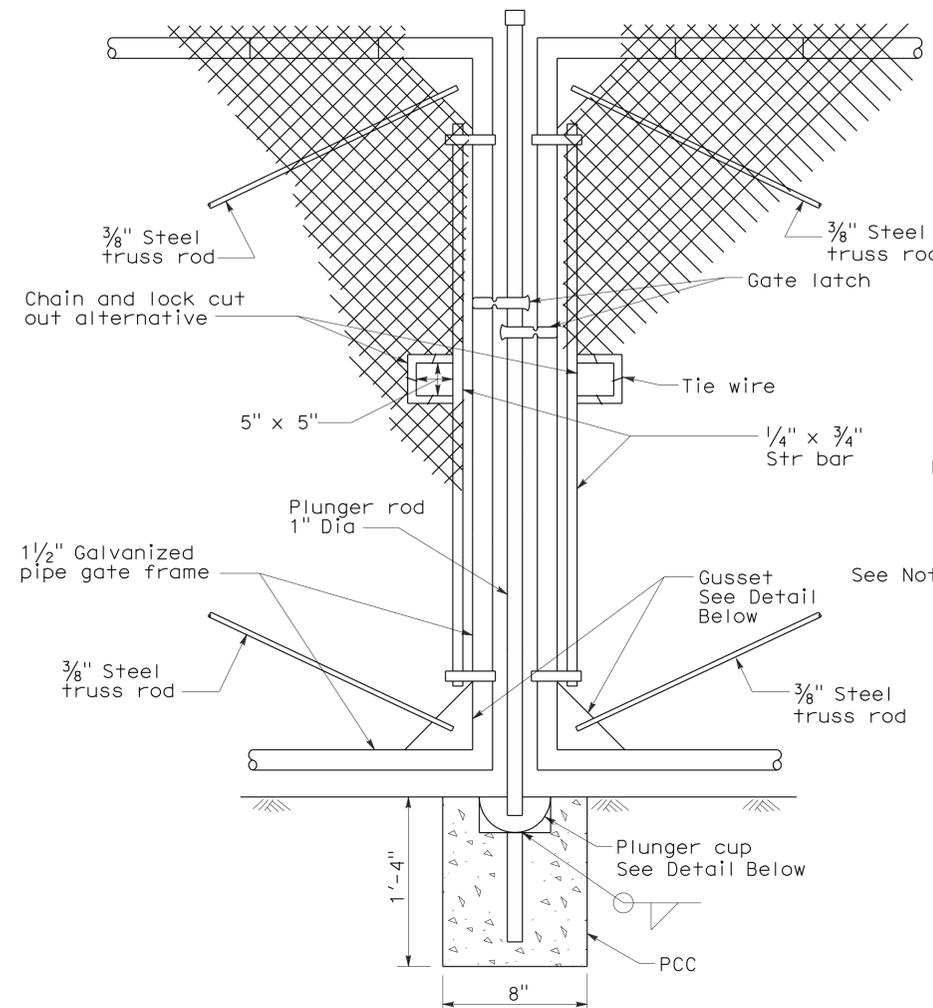
Glenn DeCou  
 REGISTERED CIVIL ENGINEER  
 No. C34547  
 Exp. 9-30-09  
 CIVIL  
 STATE OF CALIFORNIA

June 5, 2009  
 PLANS APPROVAL DATE

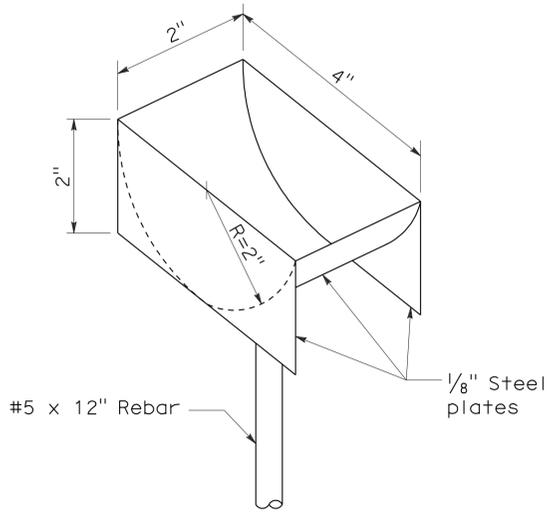
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

To accompany plans dated 3-21-11

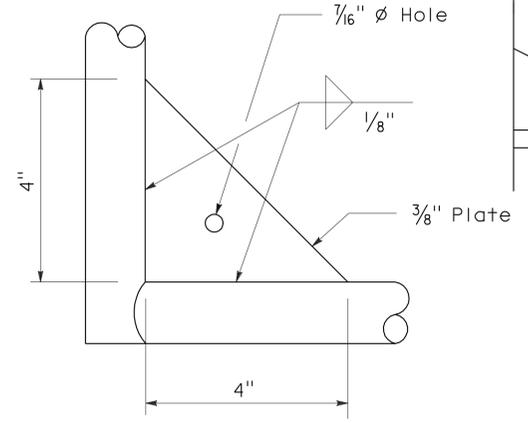
- NOTES:**
- H is 2'-6" for fabric less than 5'-0" high.  
H is 3'-0" for fabric 5'-0" and over.
  - T is not less than 3 times maximum cross section of post with minimum of 8".
  - Arms with barbed wire to be used where shown on plans.
  - See Revised Standard Plan RSP A85 for Chain Link Fencing dimensions.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



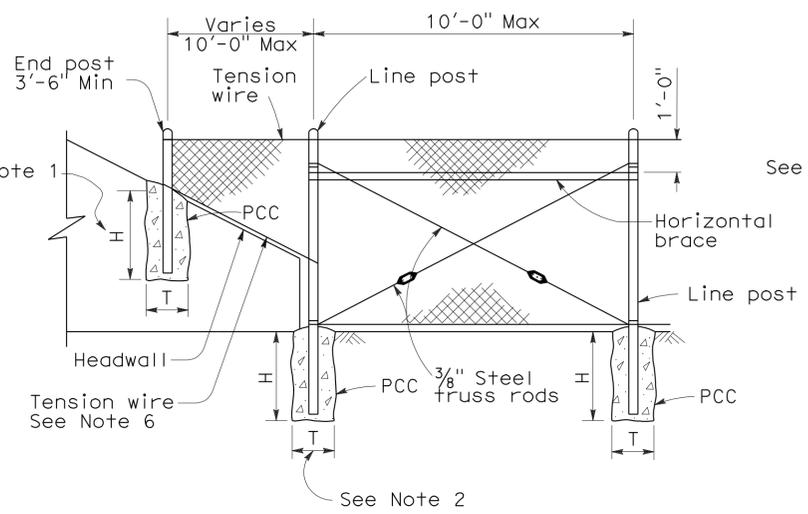
**TYPICAL DOUBLE GATE  
REMOVABLE CENTER POST**



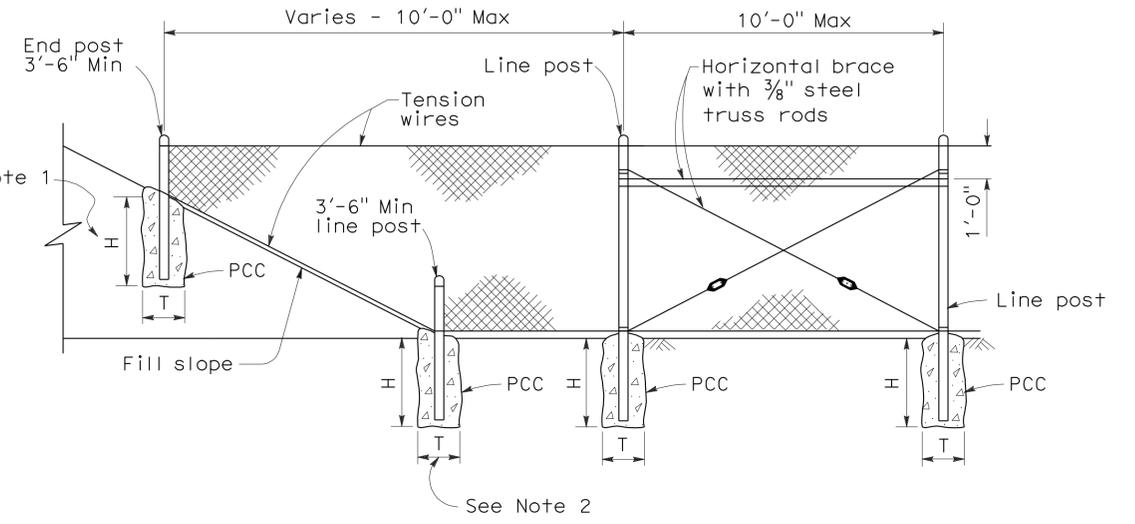
**PLUNGER CUP DETAIL**



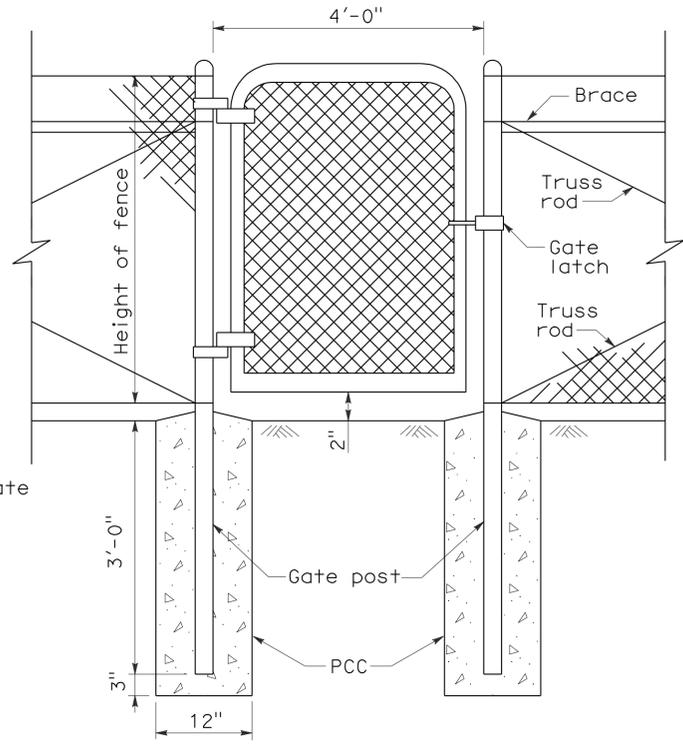
**GUSSET DETAIL**



**METHOD OF TYING FENCE TO HEADWALL**



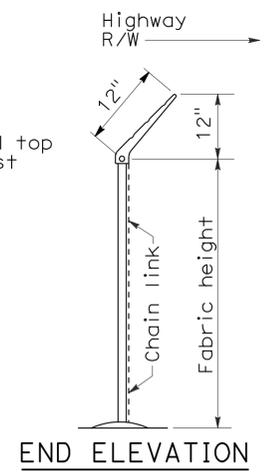
**METHOD OF ERECTING FENCE FOR FILL SLOPE**



**WALK GATE**



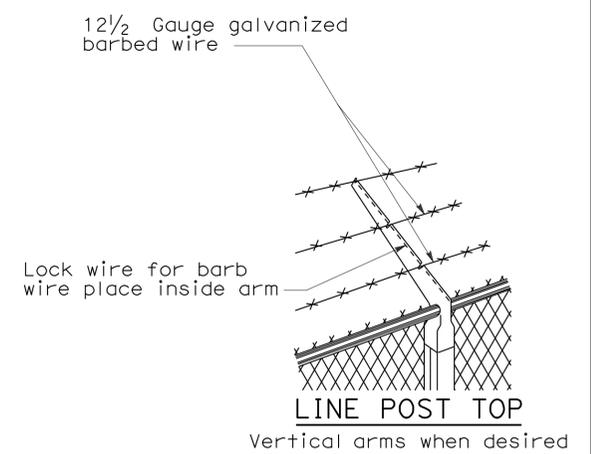
**POST TOP END**



**END ELEVATION**

**BARBED WIRE POST TOP**

See Note 3



**LINE POST TOP**

Vertical arms when desired

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

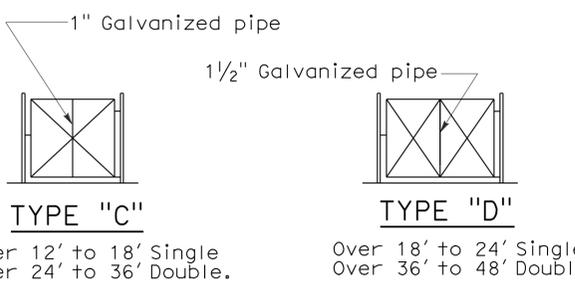
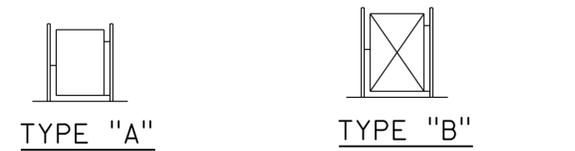
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SM	92,280	6.9/8.0, 10.4/11.2	37	56

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

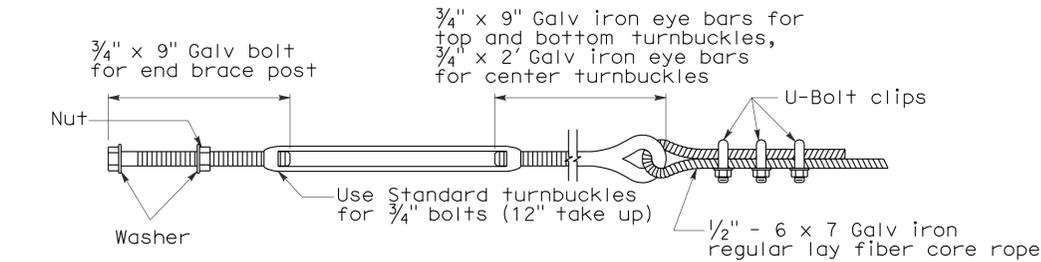
June 5, 2009  
 PLANS APPROVAL DATE

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.

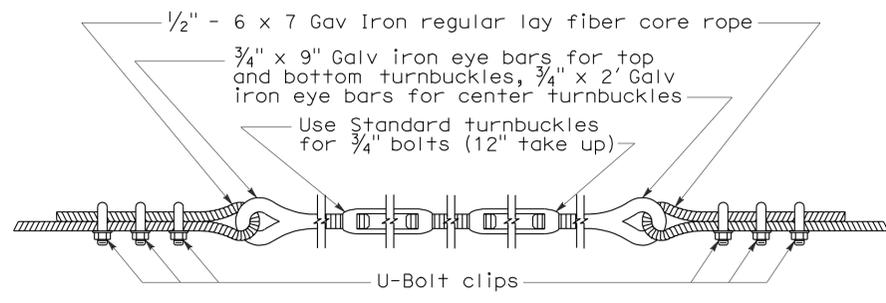
To accompany plans dated 3-21-11



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



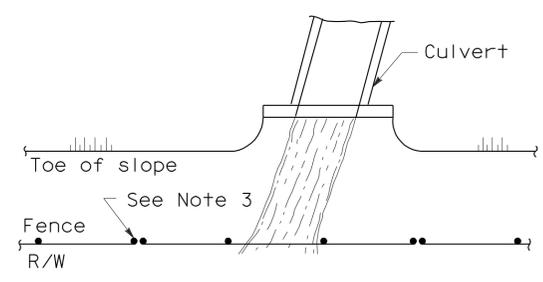
**TURNBUCKLE A**



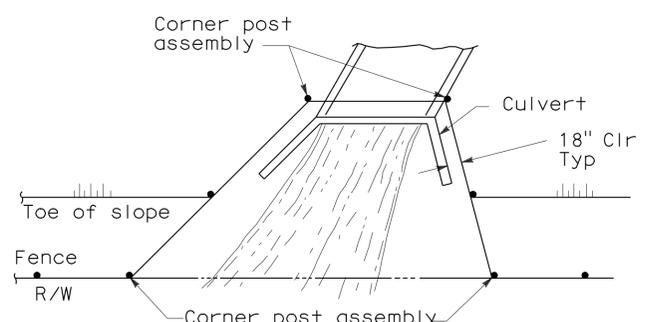
**TURNBUCKLE B**

**NOTES:**

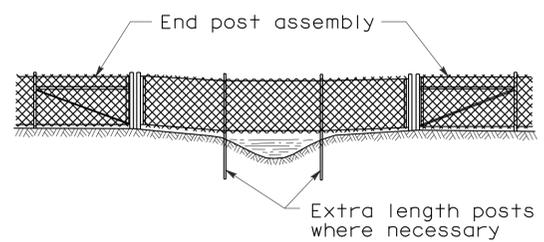
- All material for abutment connection to be galvanized.
- The chain link fabric shall be replaced by barbed wire strands at 12" maximum centers between the double posts.
- When the width of the culvert makes it necessary to anchor a post to the top of the culvert, a cast iron shoe or other device approved by the Engineer shall be used.
- Fencing over stream and around headwall may also use Barbed Wire or Wire Mesh fencing with either wood post or steel post installation.
- 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**

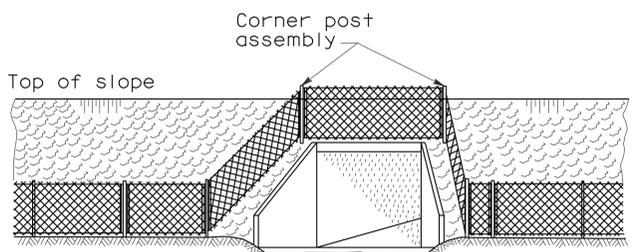


**PLAN**



**ELEVATION**

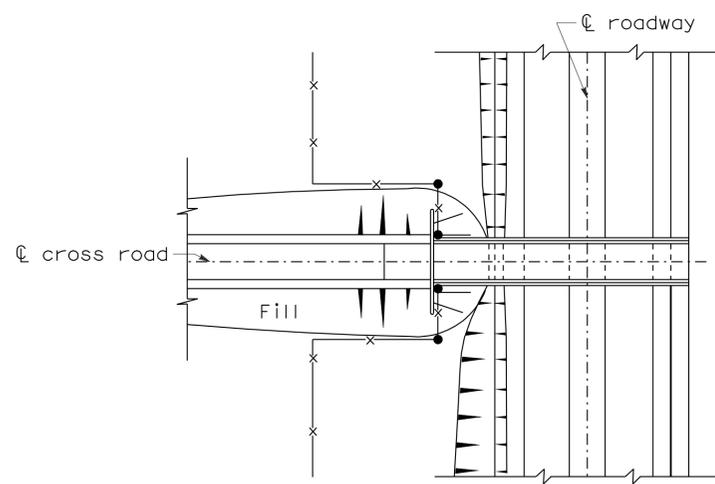
**INSTALLATION OVER STREAM**



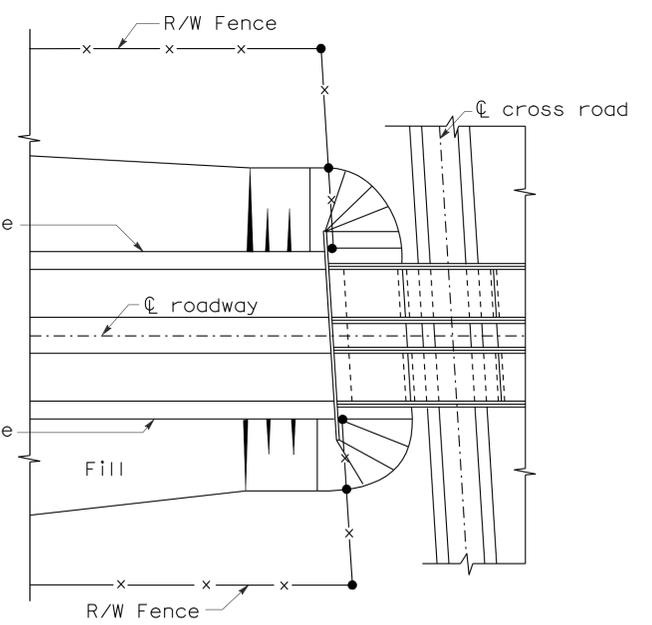
**ELEVATION**

**INSTALLATION AROUND HEADWALL**

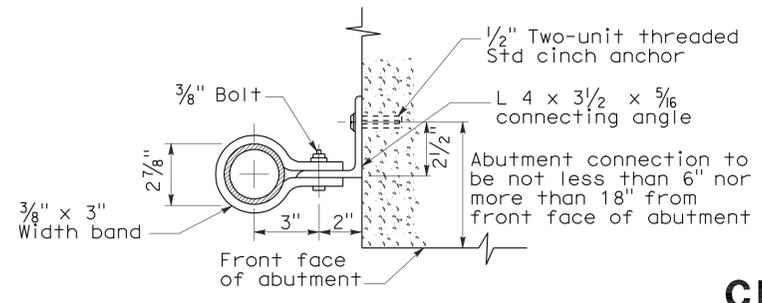
See Note 4



**PLAN OF ROADWAY - UNDERPASS**



**PLAN OF ROADWAY - OVERPASS**



**ABUTMENT CONNECTION**

**TYPICAL INSTALLATION AT BRIDGES**

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

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

2006 NEW STANDARD PLAN NSP A85B

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SM	92,280	6.9/8.0, 10.4/11.2	38	56

*Gregory A. Balzer*  
 LICENSED LANDSCAPE ARCHITECT  
 June 5, 2009  
 PLANS APPROVAL DATE  
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To accompany plans dated 3-21-11

2006 REVISED STANDARD PLAN RSP H1

**A**

AB aggregate base  
 ABS acrylonitrile-butadiene-styrene  
 AC asphalt concrete  
 Adj adjacent/adjustable  
 AIC auxiliary irrigation controller  
 Alt alternative  
 AMEND amendment  
 ARV air release valve  
 AUTO automatic  
 AUX auxiliary  
 AVB atmospheric vacuum breaker

**B**

B&B balled and burlapped  
 B/B brass/bronze  
 B/B/PL brass/bronze/plastic  
 B/PL brass/plastic  
 BFM bonded fiber matrix  
 Bit Ctd bituminous coated  
 BP booster pump  
 BPA backflow preventer assembly  
 BPAE backflow preventer assembly in enclosure  
 BPE backflow preventer enclosure  
 BV ball valve

**C**

CAP corrugated aluminum pipe  
 CARV combination air release valve  
 CCA cam coupler assembly  
 CEC controller enclosure cabinet  
 CHDPE corrugated high density polyethylene  
 CL chain link  
 CNC control and neutral conductors  
 Conc concrete  
 Cond conduit  
 CSP corrugated steel pipe  
 CST center strip  
 CV check valve

**D**

Dia diameter  
 DIP ductile iron pipe  
 DN diameter nominal

**E**

EA each  
 Elect electric/electrical  
 Elev elevation  
 ENCL enclosure  
 EP edge of pavement  
 ES edge of shoulder  
 EST end strip  
 ESTB establishment  
 ETW edge of traveled way

**F**

F full circle  
 F/P full/part circle  
 FAU filter assembly unit  
 FCV flow control valve  
 FERT fertilizer  
 FG finished grade  
 FIPT female iron pipe thread  
 FIS fertilizer injector system  
 FL flow line  
 FM flow monitor  
 FS flow sensor  
 Ft foot/feet  
 FV flush valve

**G**

GAL Gallon(s)  
 Galv galvanized  
 GARV garden valve  
 GPH gallons per hour  
 GPM gallons per minute  
 GSP galvanized steel pipe  
 GV gate valve

**H**

H half circle  
 HB hose bib  
 HDPE high density polyethylene  
 HP horsepower/hinge point  
 HPL high pressure line  
 Hwy highway

**I**

IC irrigation controller  
 ICC irrigation controller(s) in controller enclosure cabinet  
 ID inside diameter  
 In inches  
 IFS irrigation filtration system  
 IPS iron pipe size  
 IPT iron pipe thread  
 Irr irrigation

**L**

L length  
 LF linear foot

**M**

Max maximum  
 MBGR metal beam guard railing  
 MCV manual control valve  
 MIC master irrigation controller  
 Min minimum  
 MIPT male iron pipe thread  
 Misc miscellaneous  
 Mtl material  
 MVP maintenance vehicle pullout

**N**

NCN no common name  
 NL nozzle line  
 No. number  
 NPT national pipe thread

**O**

O/C on center  
 OD outside diameter  
 Oz ounce

**P**

P part circle  
 PB pull box  
 PCC portland cement concrete  
 PE polyethylene  
 Pkt packet  
 PL plastic  
 PLT plant/planting  
 PLT ESTB plant establishment  
 PM post mile  
 PR pressure rated  
 PRLV pressure relief valve  
 PSFM polymer stabilized fiber matrix  
 PSI pounds per square inch  
 PRV pressure reducing valve  
 PVC polyvinyl chloride  
 Pvmnt pavement

**Q**

Q quarter circle  
 QCV quick coupling valve

**R**

R radius  
 RCP reinforced concrete pipe  
 RCV remote control valve  
 RCVM remote control valve (master)  
 RCVMF remote control valve (master) w/ flow meter  
 RCW recycled/reclaimed water  
 RECP rolled erosion control product  
 REQ required  
 R/W right of way

**S**

S slip  
 SCC sprinkler control conduit  
 SCH schedule  
 SF state-furnished  
 Shld shoulder  
 SQFT square foot/feet  
 SQYD square yard(s)  
 SST side strip  
 Sta station  
 Std standard  
 SW sidewalk/sound wall

**T**

T third circle/thread  
 TLS truck loading standpipe  
 TQ three quarter circle  
 TRM turf reinforcement mat  
 TRVD traveled  
 TT two third circle  
 Typ typical

**U**

UG underground

**V**

VAU valve assembly unit

**W**

W width  
 W/ with  
 WM water meter  
 WS wye strainer  
 WSP welded steel pipe  
 WWM welded wire mesh

**NOTE:**  
 FOR ADDITIONAL ABBREVIATIONS,  
 SEE STANDARD PLANS A10A AND A10B.

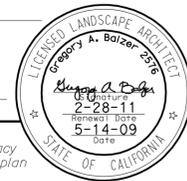
STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**PLANTING AND IRRIGATION  
 ABBREVIATIONS**

NO SCALE  
 RSP H1 DATED JUNE 5, 2009 SUPERSEDES STANDARD PLAN H1  
 DATED MAY 1, 2006 - PAGE 201 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP H1**

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SM	92,280	6.9/8.0, 10.4/11.2	39	56

*Gregory A. Balzer*  
 LICENSED LANDSCAPE ARCHITECT  
 June 5, 2009  
 PLANS APPROVAL DATE  
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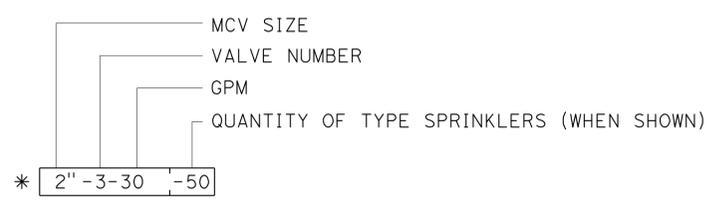
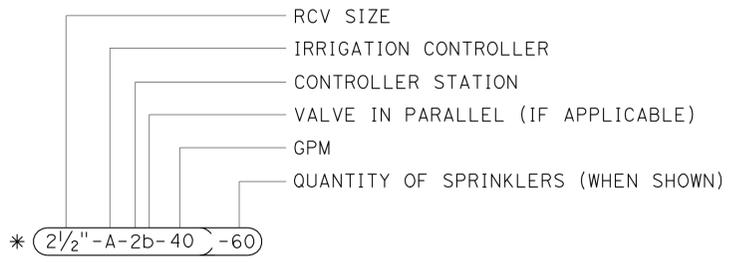


To accompany plans dated 3-21-11

EXISTING	PROPOSED	ITEM DESCRIPTION
		WATER METER (WM)
		BACKFLOW PREVENTER ASSEMBLY (BPA)
		BACKFLOW PREVENTER ASSEMBLY IN ENCLOSURE (BPAE)
		BACKFLOW PREVENTER ENCLOSURE (BPE)
		BOOSTER PUMP (BP)
		TRUCK LOADING STANDPIPE (TLS)
		FLOW SENSOR (FS)
		MASTER IRRIGATION CONTROLLER (MIC)
		AUXILIARY IRRIGATION CONTROLLER (AIC)
		IRRIGATION CONTROLLER (IC)/ IRRIGATION CONTROLLER (IC) (BATTERY) IRRIGATION CONTROLLER (IC) (SOLAR)
		IRRIGATION CONTROLLER(S) IN CONTROLLER ENCLOSURE CABINET (ICC)
		CONTROL AND NEUTRAL CONDUCTORS (CNC)
		SPRINKLER CONTROL CONDUIT (SCC)
		IRRIGATION CROSSOVER
		EXTEND IRRIGATION CROSSOVER
		IRRIGATION SLEEVE
		DUCTILE IRON PIPE (SUPPLY LINE) (MAIN) (DIP)
		GALVANIZED STEEL PIPE (SUPPLY LINE) (MAIN) (GSP)
		GALVANIZED STEEL PIPE (SUPPLY LINE) (LATERAL) (GSP)
		PLASTIC PIPE (PR 200) (SUPPLY LINE) (MAIN)
		PLASTIC PIPE (PR 200) (SUPPLY LINE) (LATERAL)
		PLASTIC PIPE (IRRIGATION LINE)
		REMOTE CONTROL VALVE (RCV) REMOTE CONTROL VALVE (MASTER) (RCVM) REMOTE CONTROL VALVE (MASTER) W/FLOW METER (RCVMF)
		MANUAL CONTROL VALVE (MCV)
		VALVE ASSEMBLY UNIT (VAU)
		WYE STRAINER (WS)
		FILTER ASSEMBLY UNIT (FAU)
		GATE VALVE (GV)
		BALL VALVE (BV)

EXISTING	PROPOSED	ITEM DESCRIPTION
		QUICK COUPLING VALVE (QCV)
		CAM COUPLER ASSEMBLY (CCA)
		PRESSURE REDUCING VALVE (PRV)
		PRESSURE RELIEF VALVE (PRLV)
		FLOW CONTROL VALVE (FCV)
		COMBINATION AIR RELEASE VALVE (CARV)
		CHECK VALVE (CV)
		FLUSH VALVE (FV)
		NOZZLE LINE W/TURNING UNION
		IRRIGATION SYSTEM
		IRRIGATION SYSTEM TO BE REMOVED
		CHAIN LINK GATE
		QUICK COUPLING VALVE W/SPRINKLER PROTECTOR
		SPRINKLER W/SPRINKLER PROTECTOR
		CONNECT TO EXISTING SYSTEM
		CAP
		CAP EXISTING

**VALVE CODE**



\* VALVE CODES FOR EXISTING VALVES ARE SHOWN IN A DASHED ENCLOSURE.

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**PLANTING AND IRRIGATION SYMBOLS**  
NO SCALE

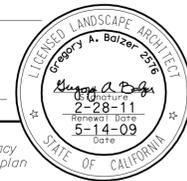
RSP H2 DATED JUNE 5, 2009 SUPERSEDES RSP H2 DATED MARCH 7, 2008 AND STANDARD PLAN H2 DATED MAY 1, 2006 - PAGE 202 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP H2**

2006 REVISED STANDARD PLAN RSP H2

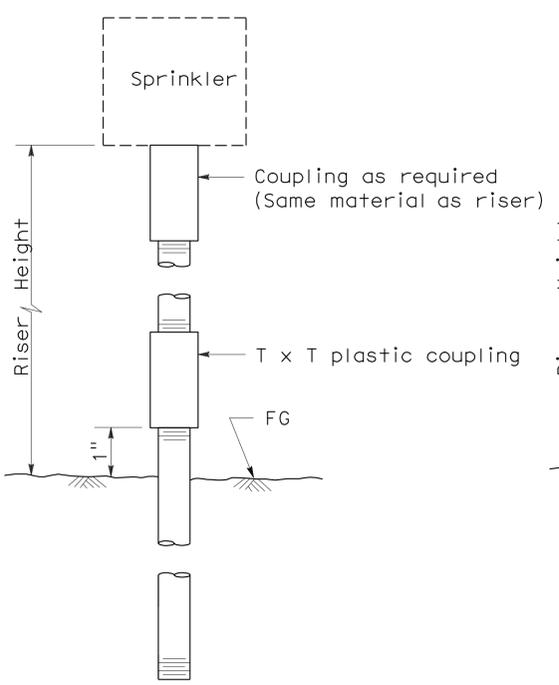
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SM	92,280	6.9/8.0, 10.4/11.2	40	56

*Gregory A. Balzer*  
 LICENSED LANDSCAPE ARCHITECT  
 June 5, 2009  
 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.

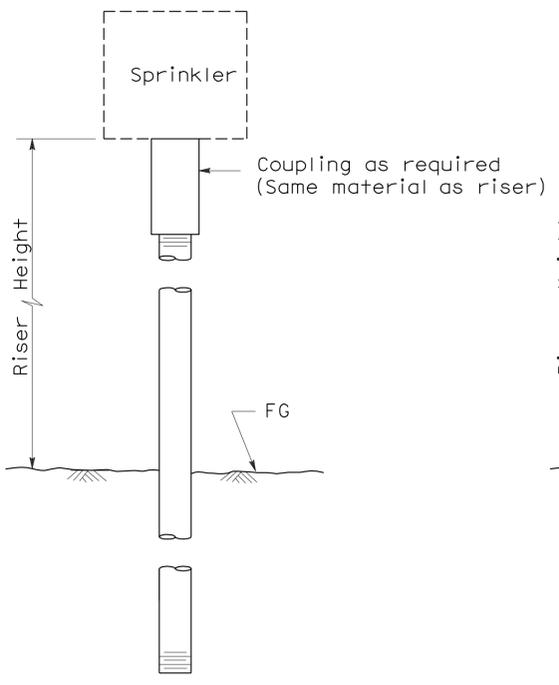


To accompany plans dated 3-21-11

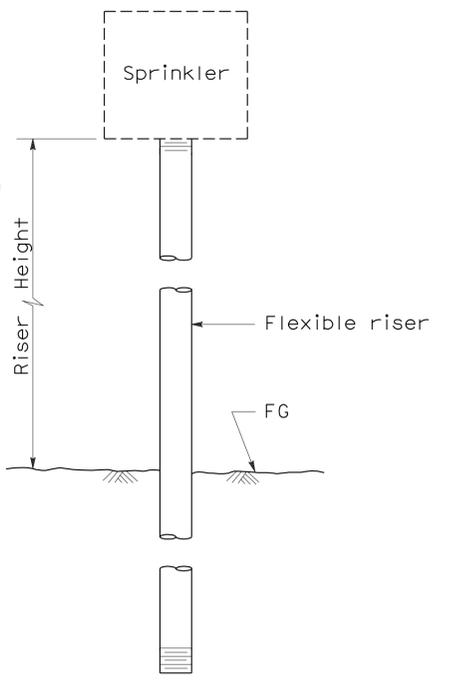
2006 REVISED STANDARD PLAN RSP H5



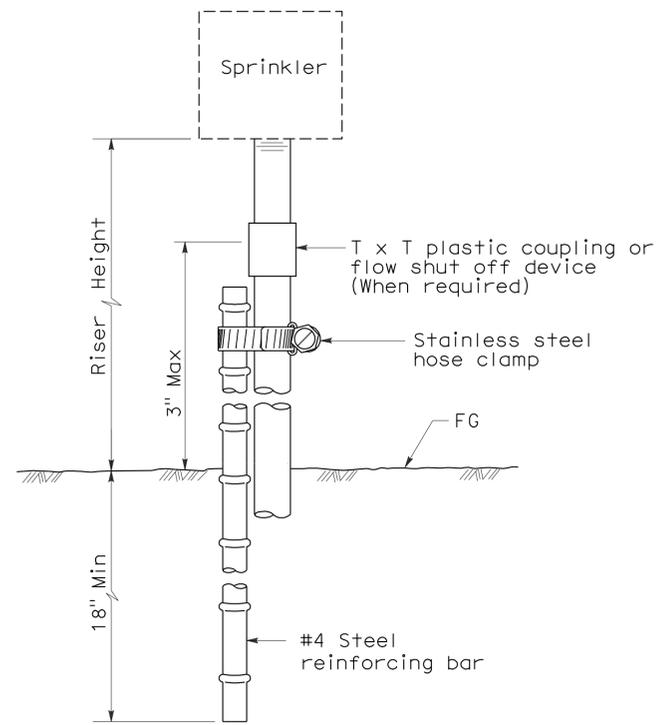
ELEVATION  
RISER TYPE I



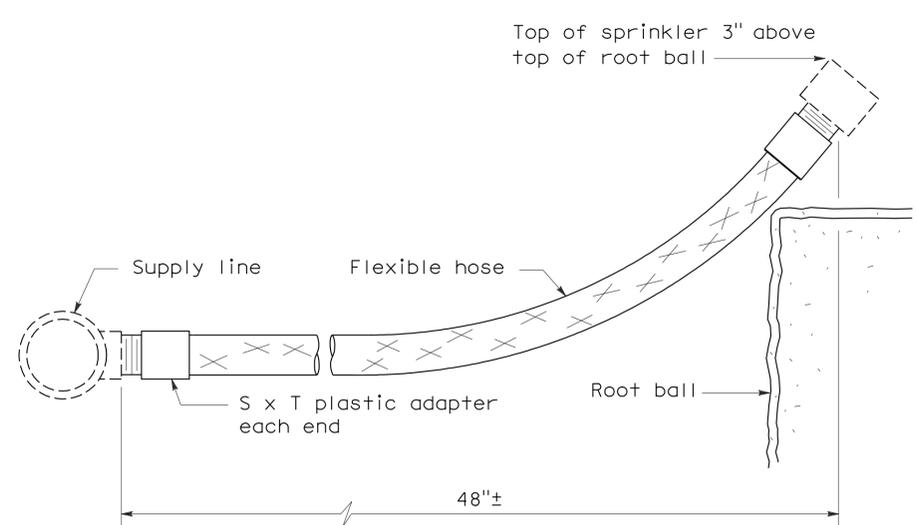
ELEVATION  
RISER TYPE II



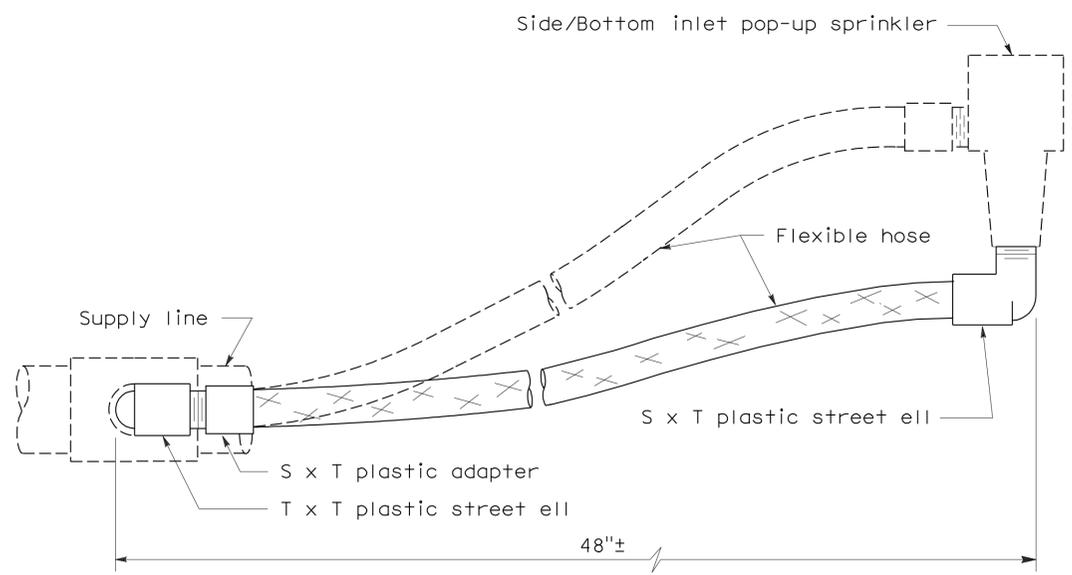
ELEVATION  
RISER TYPE III



ELEVATION  
RISER TYPE IV



ELEVATION  
RISER TYPE V



ELEVATION  
RISER TYPE VI

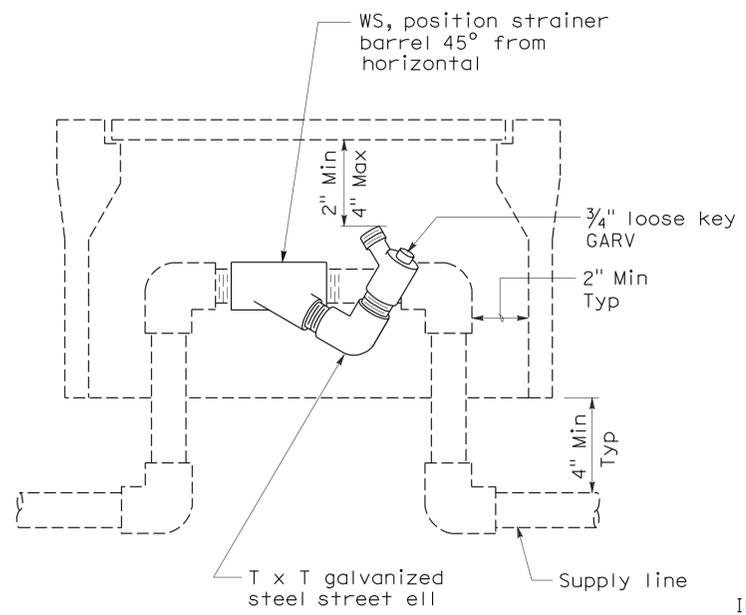
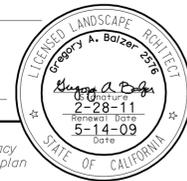
STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**PLANTING AND IRRIGATION  
DETAILS**  
NO SCALE

RSP H5 DATED JUNE 5, 2009 SUPERSEDES STANDARD PLAN H5  
DATED MAY 1, 2006 - PAGE 205 OF THE STANDARD PLANS BOOK DATED MAY 2006.

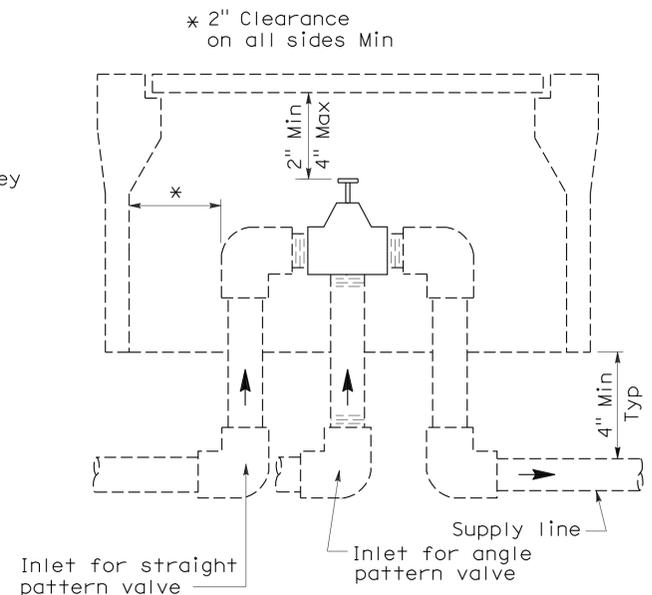
**REVISED STANDARD PLAN RSP H5**

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SM	92,280	6.9/8.0, 10.4/11.2	41	56

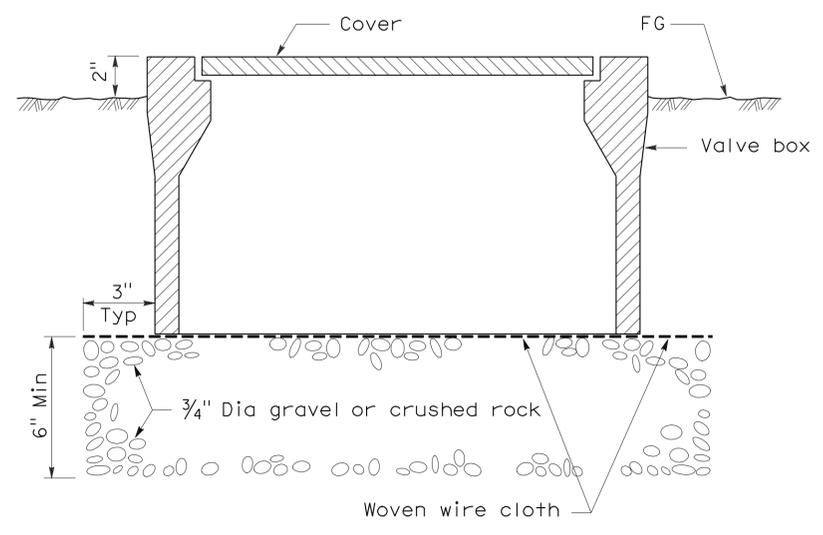
*Gregory A. Balzer*  
 LICENSED LANDSCAPE ARCHITECT  
 June 5, 2009  
 PLANS APPROVAL DATE  
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



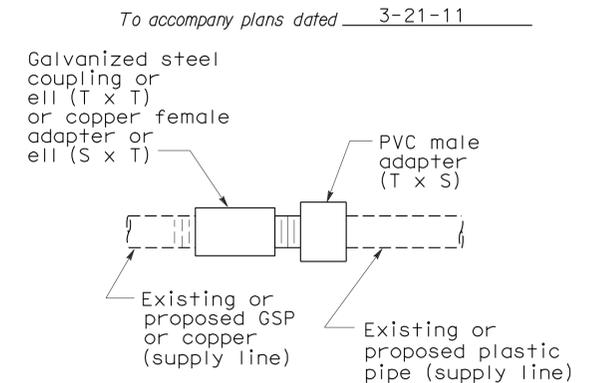
**ELEVATION  
WYE STRAINER**



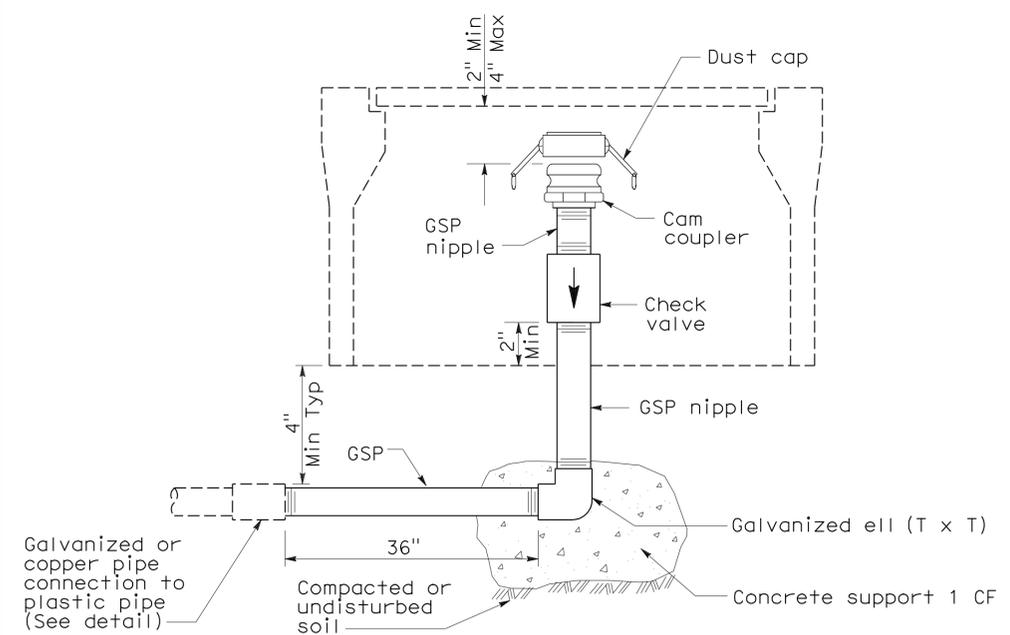
**ELEVATION  
VALVE**



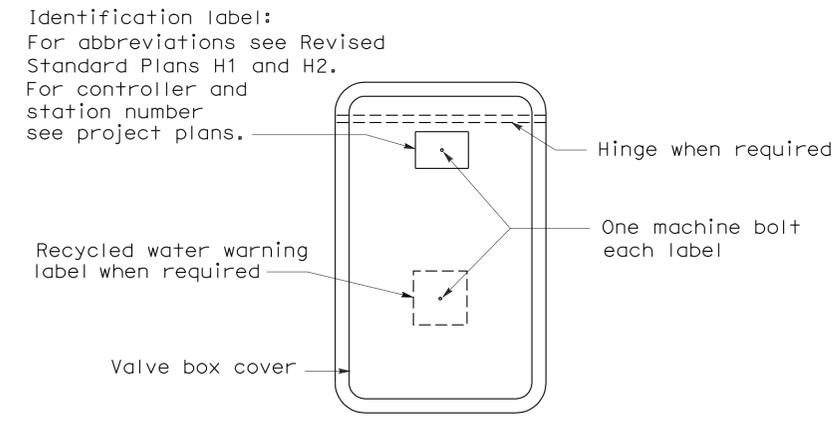
**SECTION  
VALVE BOX**



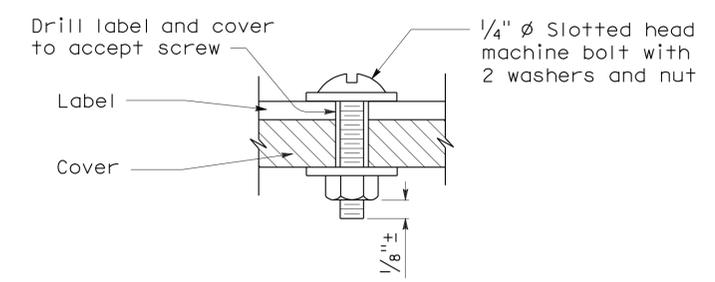
**PLAN  
GALVANIZED OR COPPER PIPE  
CONNECTION TO PLASTIC PIPE**



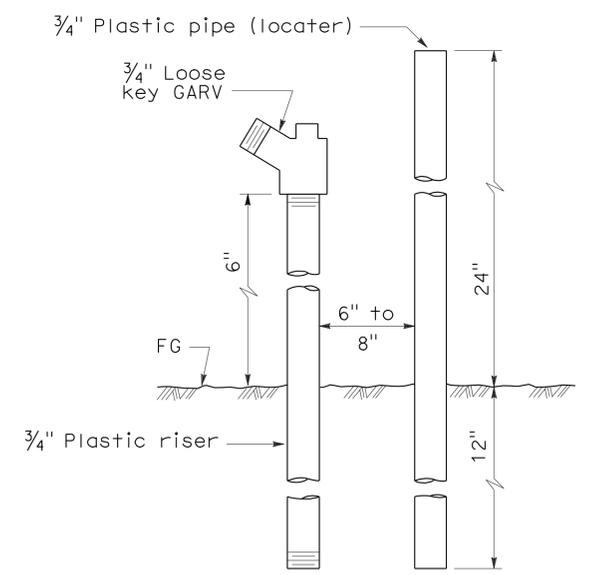
**ELEVATION  
CAM COUPLER ASSEMBLY**



**PLAN**



**SECTION  
VALVE BOX IDENTIFICATION**



**ELEVATION  
FLUSH VALVE**

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**PLANTING AND IRRIGATION  
DETAILS**

NO SCALE

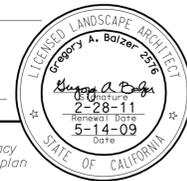
RSP H7 DATED JUNE 5, 2009 SUPERSEDES STANDARD PLAN H7  
DATED MAY 1, 2006 - PAGE 207 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP H7**

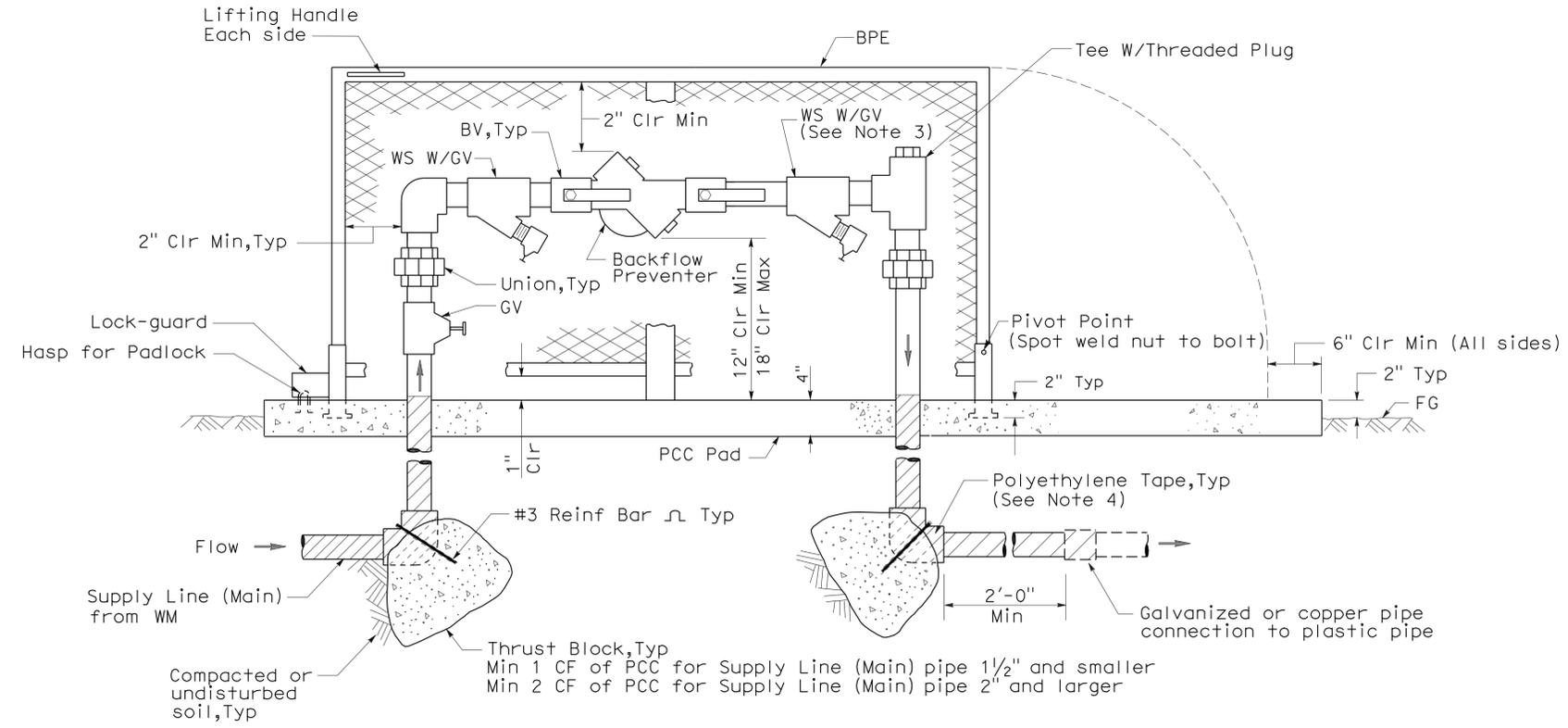
2006 REVISED STANDARD PLAN RSP H7

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SM	92,280	6.9/8.0, 10.4/11.2	42	56

George A. Balzer  
 LICENSED LANDSCAPE ARCHITECT  
 June 5, 2009  
 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.



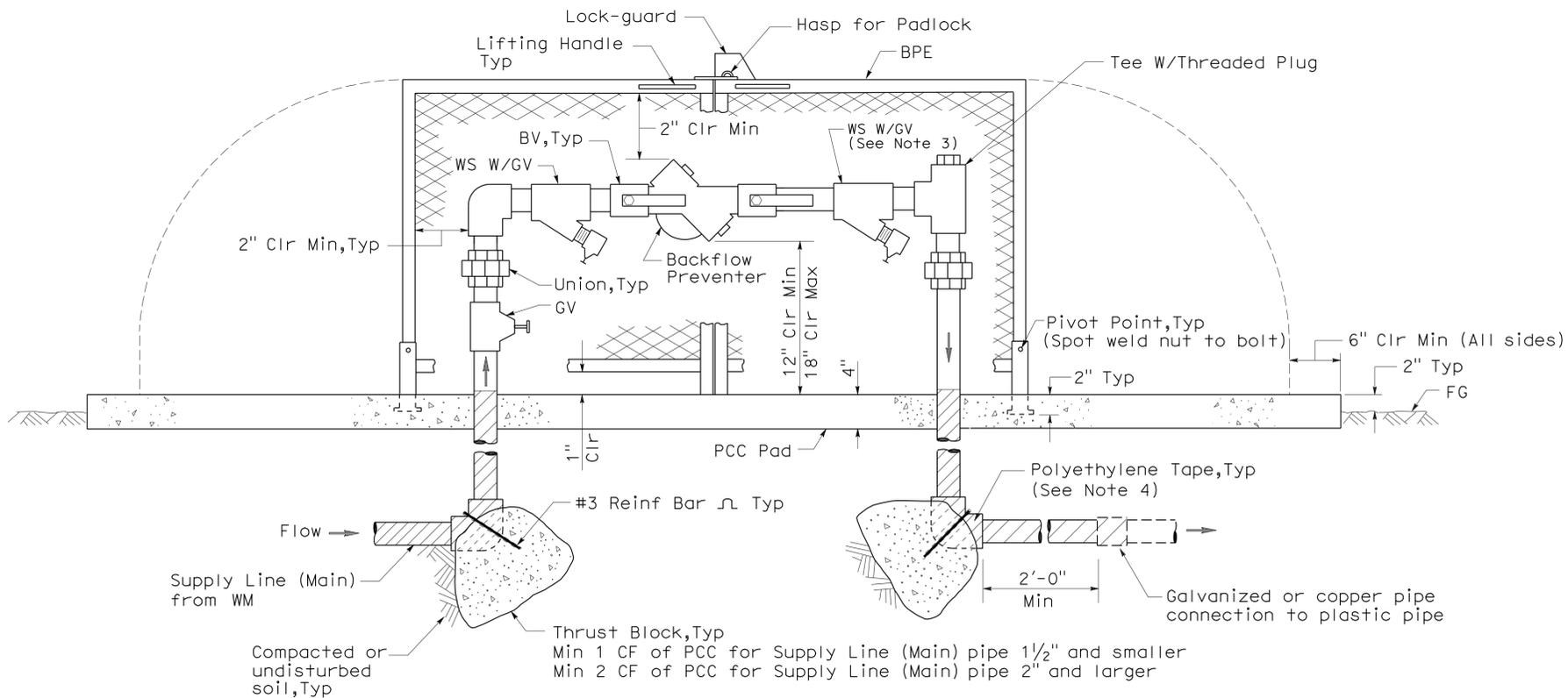
To accompany plans dated 3-21-11



**ELEVATION**  
**BACKFLOW PREVENTER ASSEMBLY IN ENCLOSURE (ONE PIECE)**

**NOTES:**

1. Wye strainer and fittings must be the same size as the backflow preventer shown on the plans.
2. Backflow preventer assembly manifold pipe must be the same pipe as the supply line (main) pipe to be installed from the water meter to the backflow preventer assembly.
3. Wye strainer location shown downstream of the backflow preventer is for District 11 projects only.
4. All metal in contact with soil and Portland Cement Concrete must be polyethylene wrapped using 2" wide plastic backed adhesive tape 20 mil thick with 1/2" overlap.



**ELEVATION**  
**BACKFLOW PREVENTER ASSEMBLY IN ENCLOSURE (TWO PIECE)**

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**PLANTING AND IRRIGATION  
 DETAILS**

NO SCALE

RSP H8 DATED JUNE 5, 2009 SUPERSEDES STANDARD PLAN H8  
 DATED MAY 1, 2006 - PAGE 208 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP H8**

2006 REVISED STANDARD PLAN RSP H8

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SM	92,280	6.9/8.0, 10.4/11.2	43	56

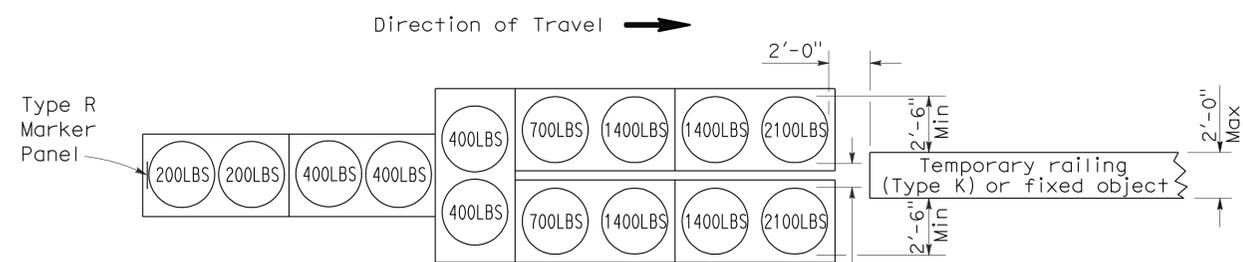
*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

June 6, 2008  
PLANS APPROVAL DATE

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

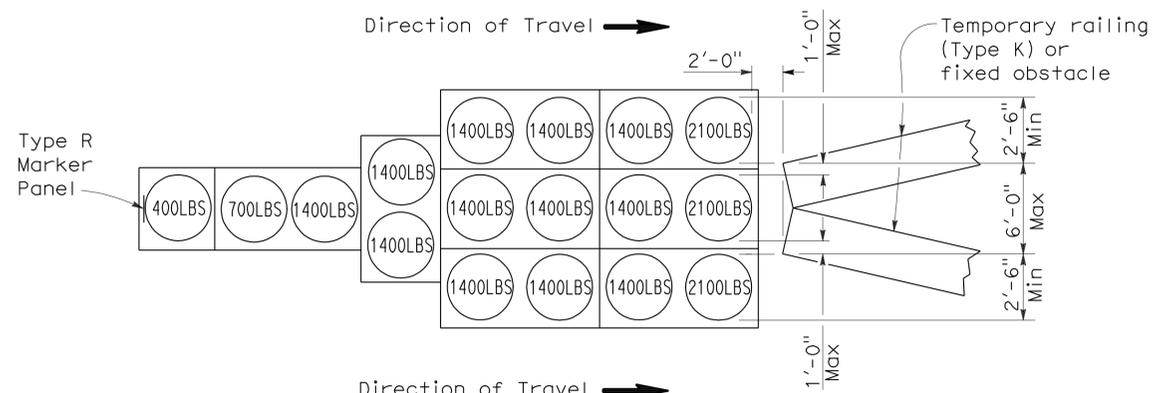
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

To accompany plans dated 3-21-11



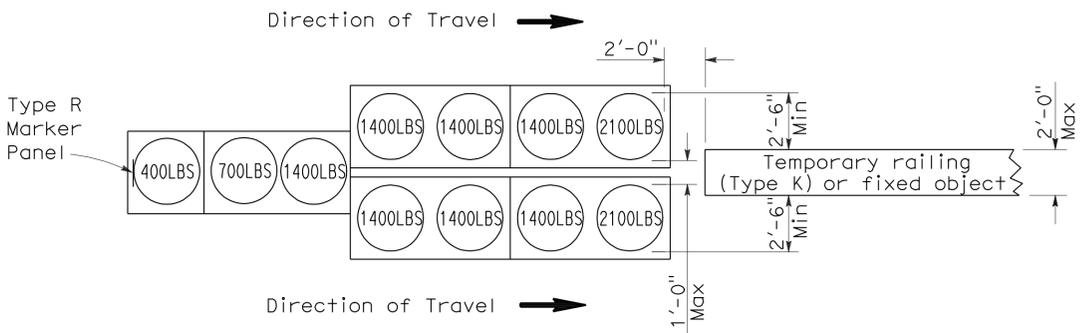
**ARRAY 'TU14'**

Approach speed 45 mph or more



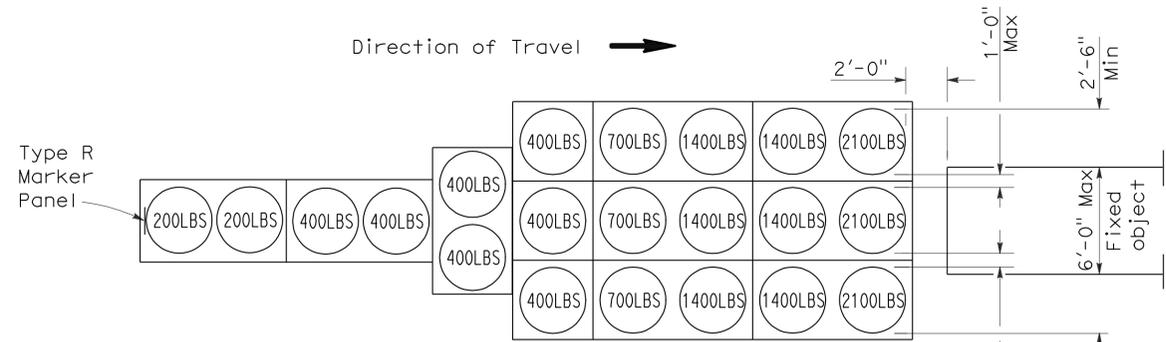
**ARRAY 'TU17'**

Approach speed less than 45 mph



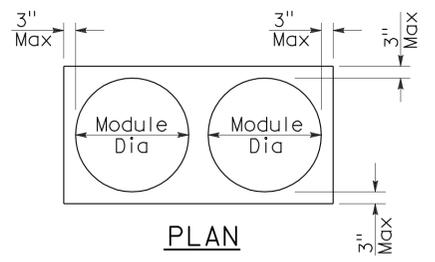
**ARRAY 'TU11'**

Approach speed less than 45 mph

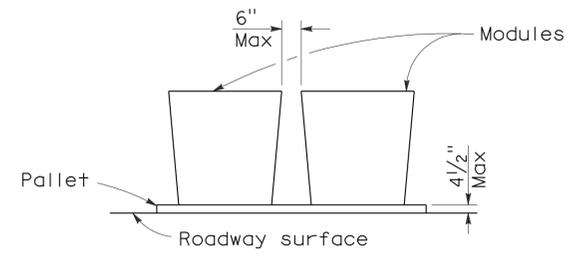


**ARRAY 'TU21'**

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

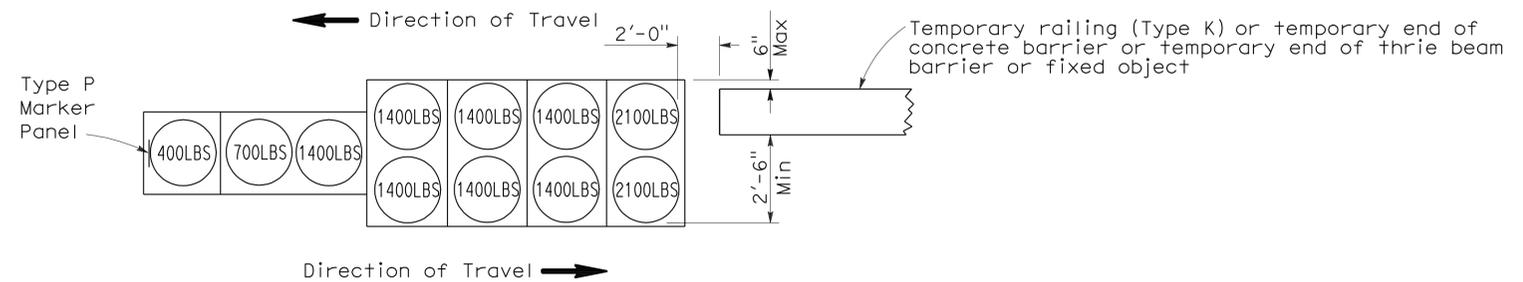
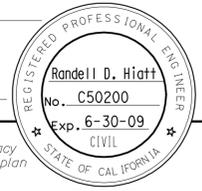
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SM	92,280	6.9/8.0, 10.4/11.2	44	56

*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

June 6, 2008  
PLANS APPROVAL DATE

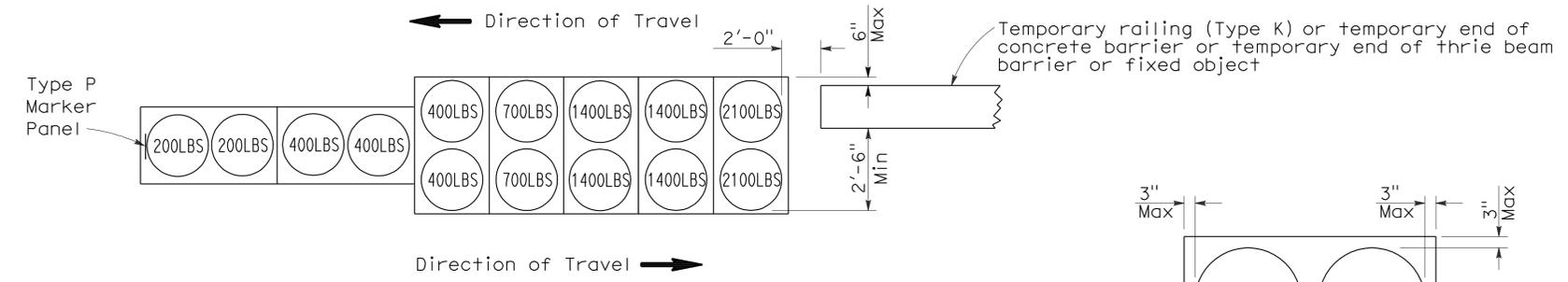
*The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.*

To accompany plans dated 3-21-11



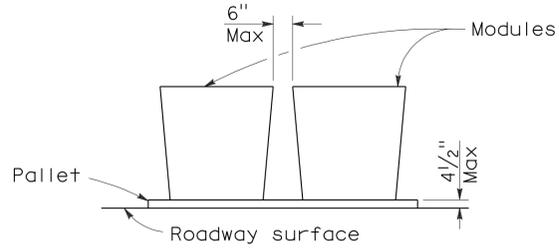
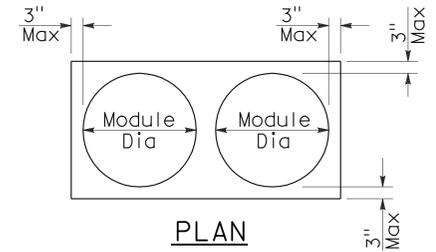
**ARRAY 'TB11'**

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

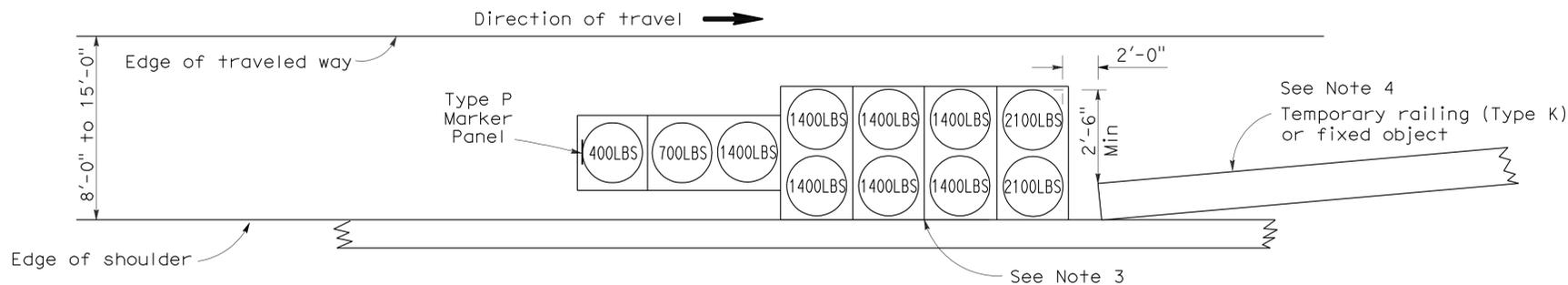
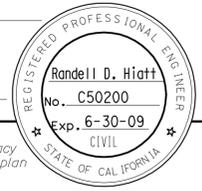
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SM	92,280	6.9/8.0, 10.4/11.2	45	56

*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

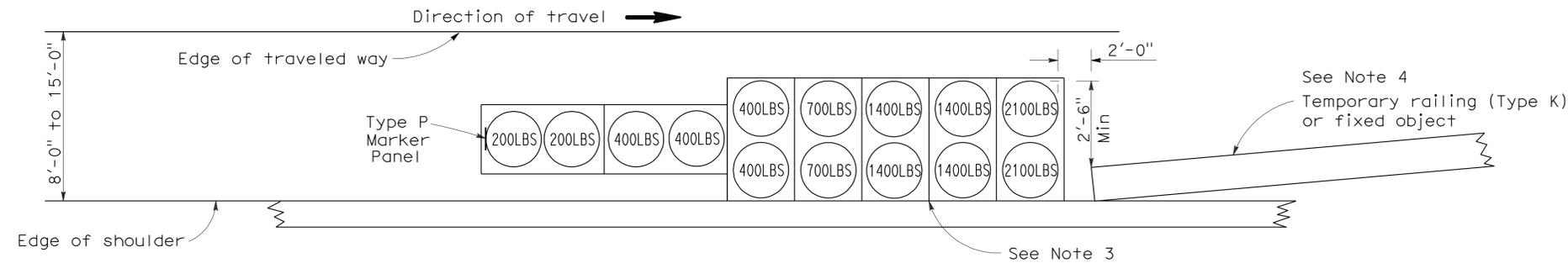
June 6, 2008  
PLANS APPROVAL DATE

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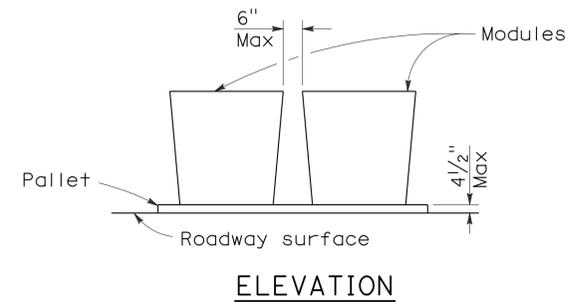
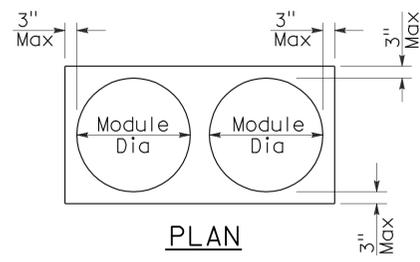
To accompany plans dated 3-21-11



**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.

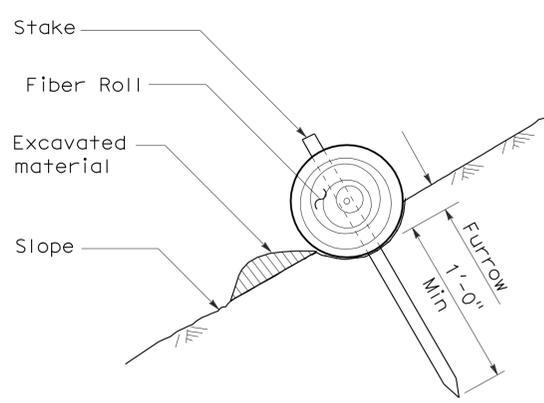
**REVISED STANDARD PLAN RSP T2**

2006 REVISED STANDARD PLAN RSP T2

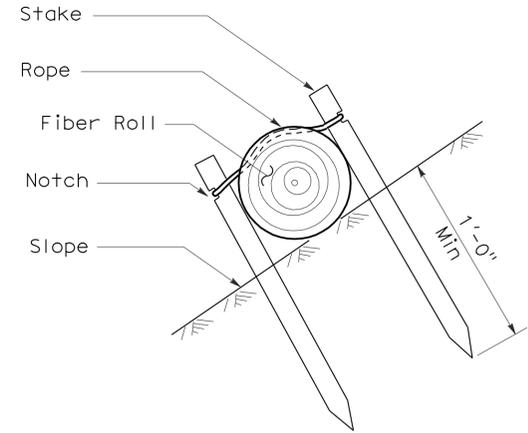
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SM	92,280	6.9/8.0, 10.4/11.2	46	56

*Robert B. Schott*  
 LICENSED LANDSCAPE ARCHITECT  
 April 3, 2009  
 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.

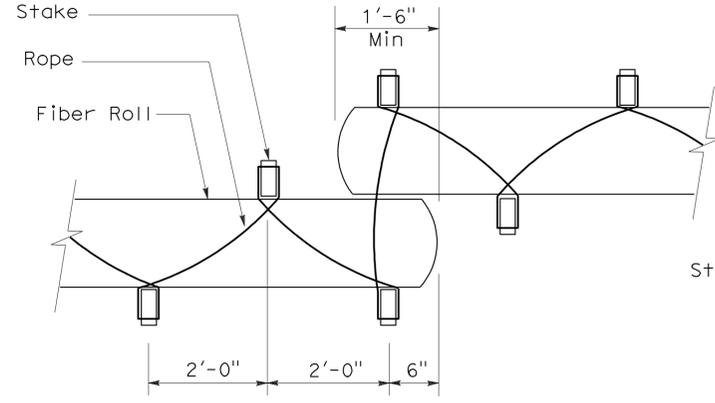
To accompany plans dated 3-21-11



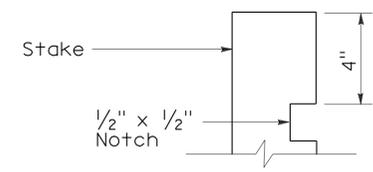
**SECTION**  
**TEMPORARY FIBER ROLL (TYPE 1)**



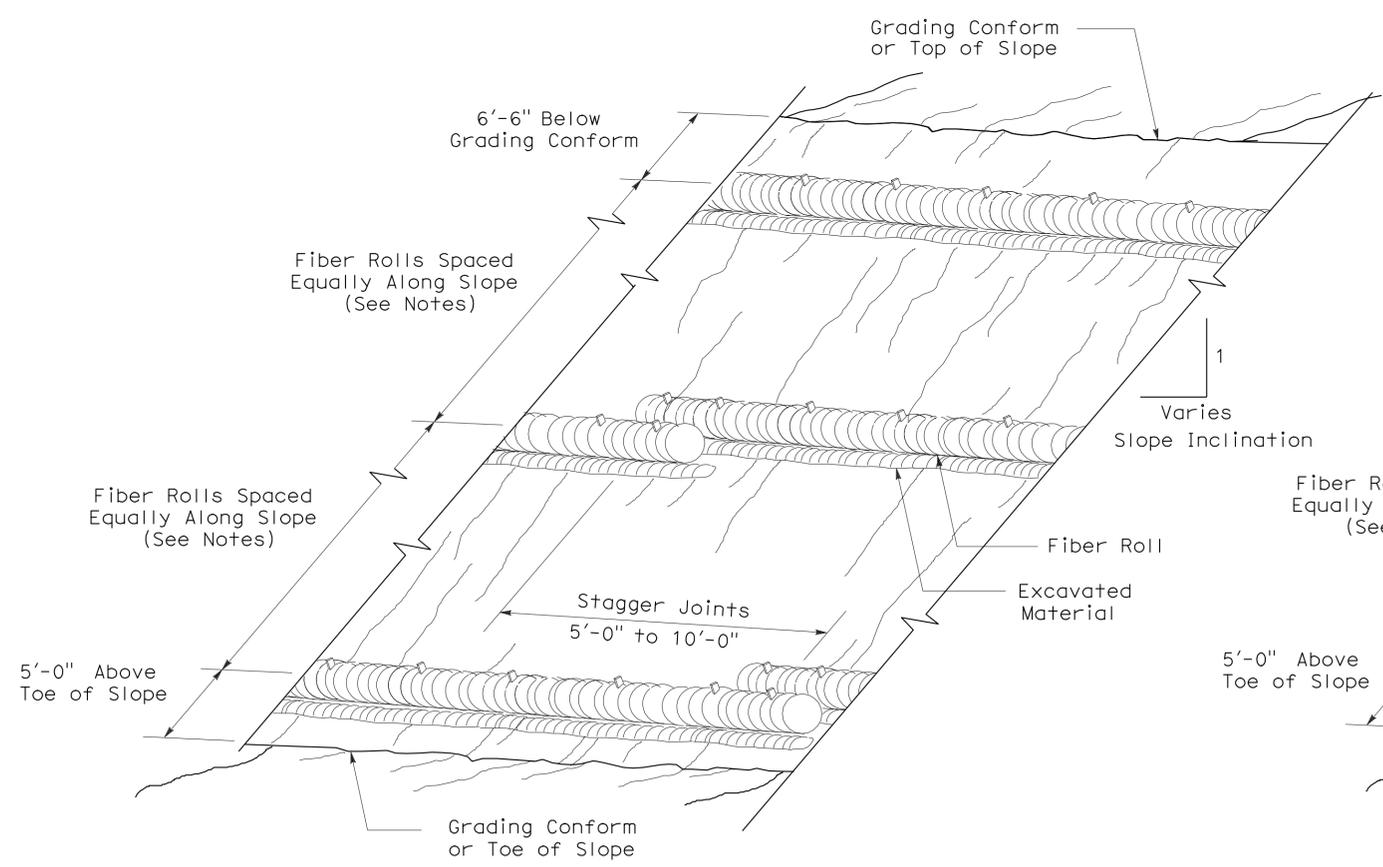
**SECTION**  
**TEMPORARY FIBER ROLL (TYPE 2)**



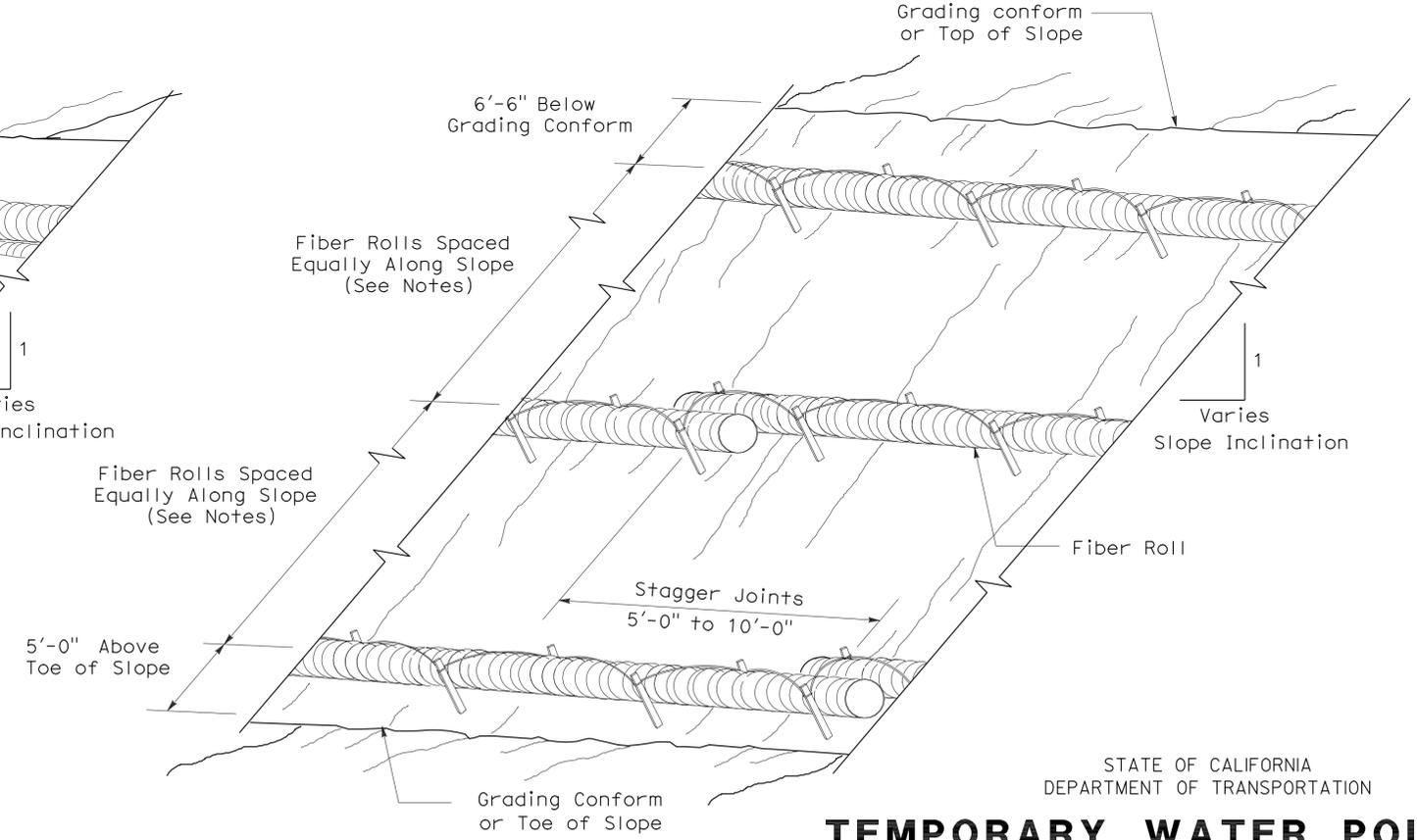
**PLAN**  
**ELEVATION**  
**STAKE NOTCH DETAIL**



- 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**

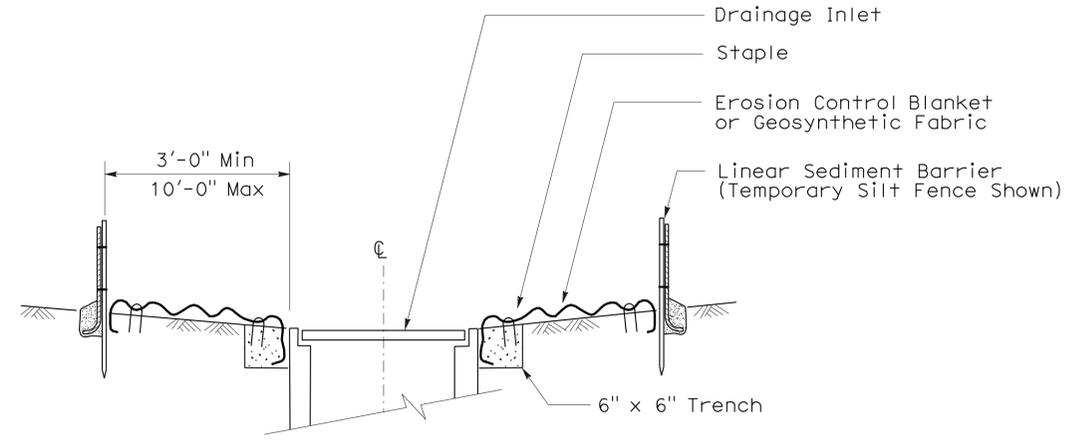
2006 REVISED STANDARD PLAN RSP T56

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SM	92,280	6.9/8.0, 10.4/11.2	47	56

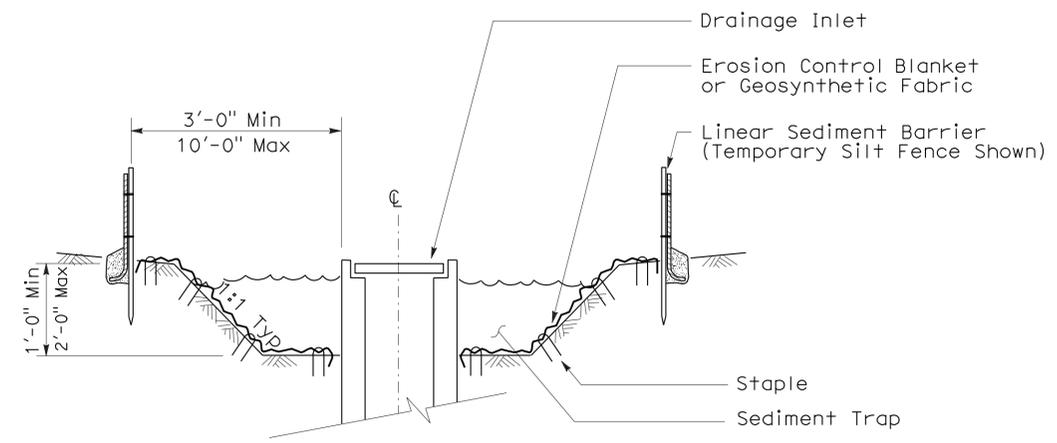
Robert B. Schott  
 LICENSED LANDSCAPE ARCHITECT  
 August 15, 2008  
 PLANS Approval DATE  
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

To accompany plans dated 3-21-11

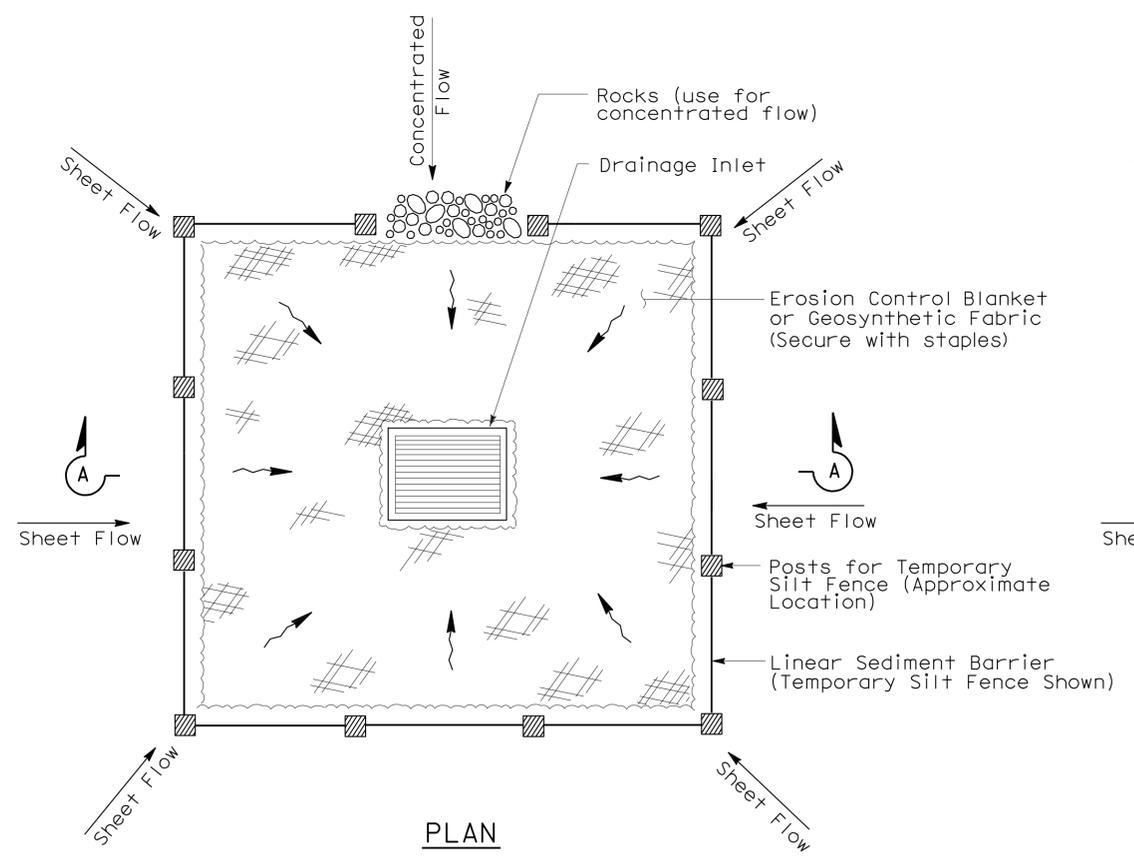
- NOTES:**
- See Standard Plan T51 for Temporary Silt Fence.
  - Dimensions may vary to fit field conditions.



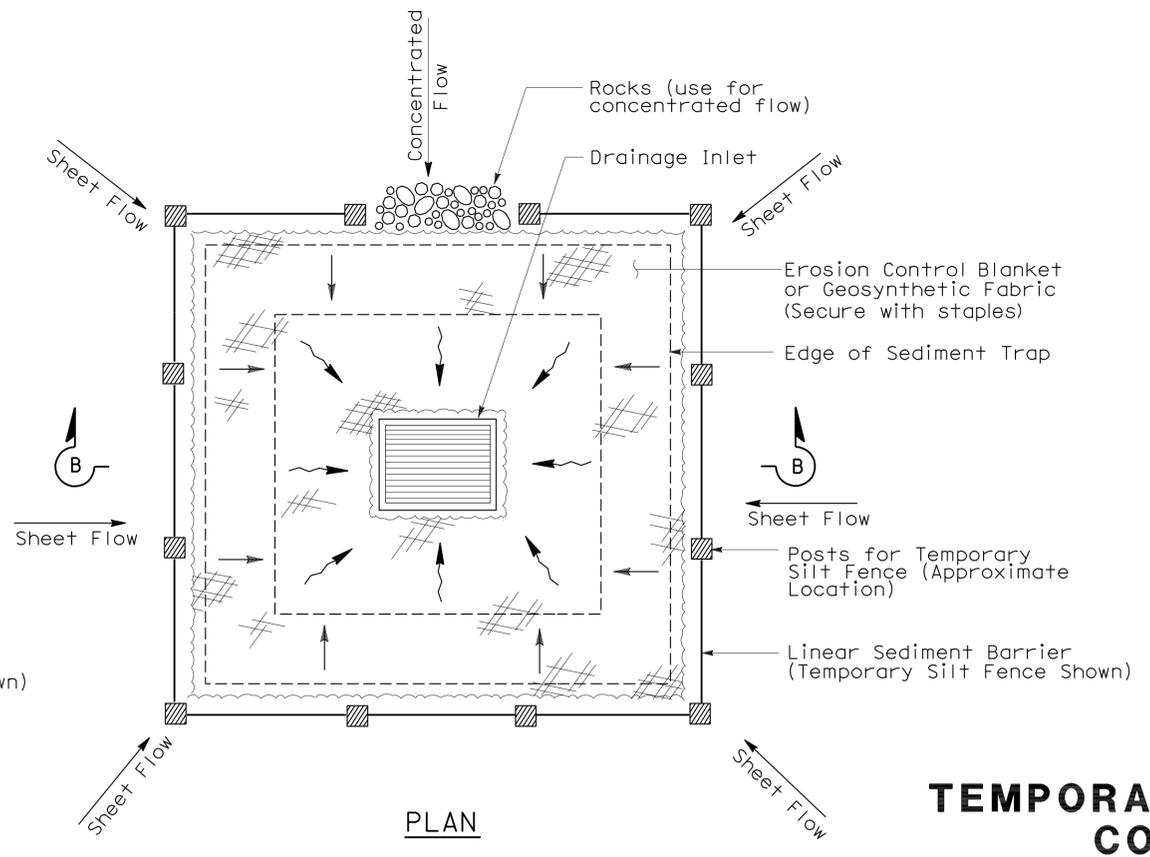
SECTION A-A



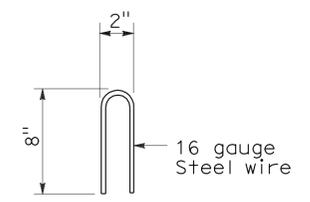
SECTION B-B



TEMPORARY DRAINAGE INLET PROTECTION (TYPE 1)



TEMPORARY DRAINAGE INLET PROTECTION (TYPE 2) (EXCAVATED SEDIMENT TRAP)



STAPLE DETAIL

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

## TEMPORARY WATER POLLUTION CONTROL DETAILS (TEMPORARY DRAINAGE INLET PROTECTION)

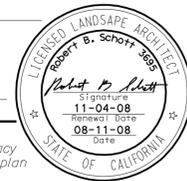
NO SCALE

NSP T61 DATED AUGUST 15, 2008 SUPPLEMENTS THE STANDARD PLANS BOOK DATED MAY 2006.

2006 NEW STANDARD PLAN NSP T61

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SM	92,280	6.9/8.0, 10.4/11.2	48	56

Robert B. Schott  
 LICENSED LANDSCAPE ARCHITECT  
 August 15, 2008  
 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.

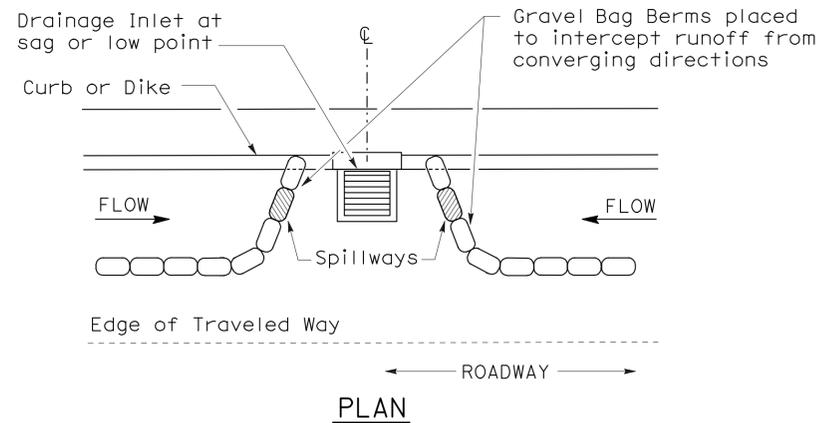


To accompany plans dated 3-21-11

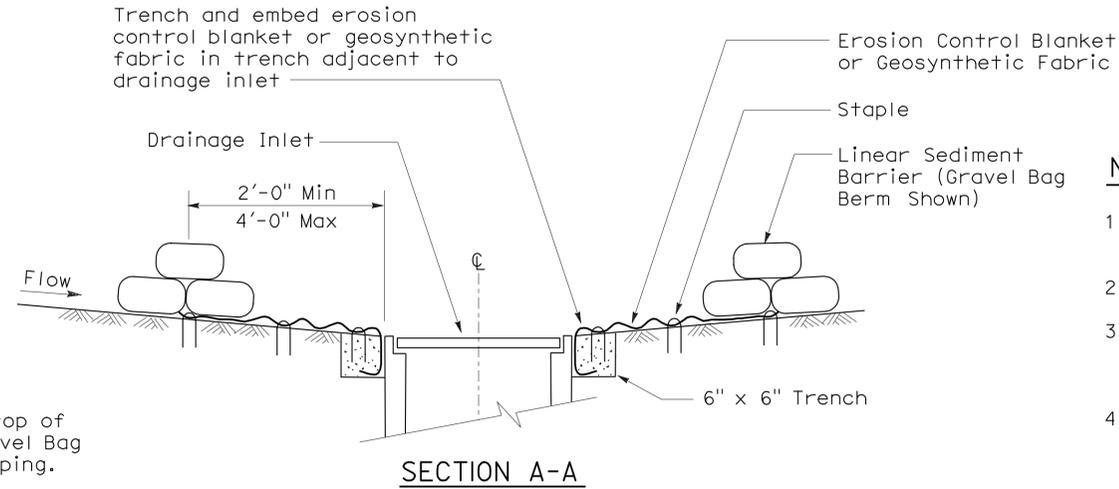
### GRAVEL BAG BERM (TYPE 3A) SPACING TABLE

SLOPE OF ROADWAY (PERCENT)	1 to 3.9	4 to 5.9	6 to 7.9	8 to 10	10+
INTERVAL BETWEEN BERM	100'	75'	50'	25'	12'

For slope of less than 1%, install barriers only if erosion/sediment is prevalent



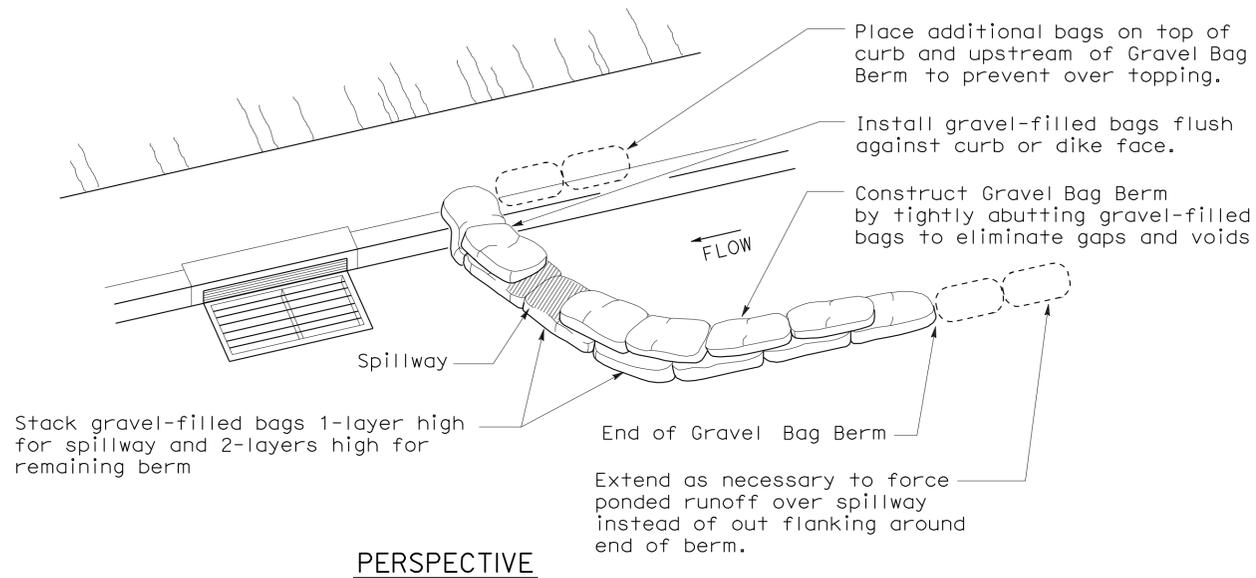
**PLAN**  
**CONFIGURATION FOR SAG POINT INLET (GRAVEL BAG BERM)**



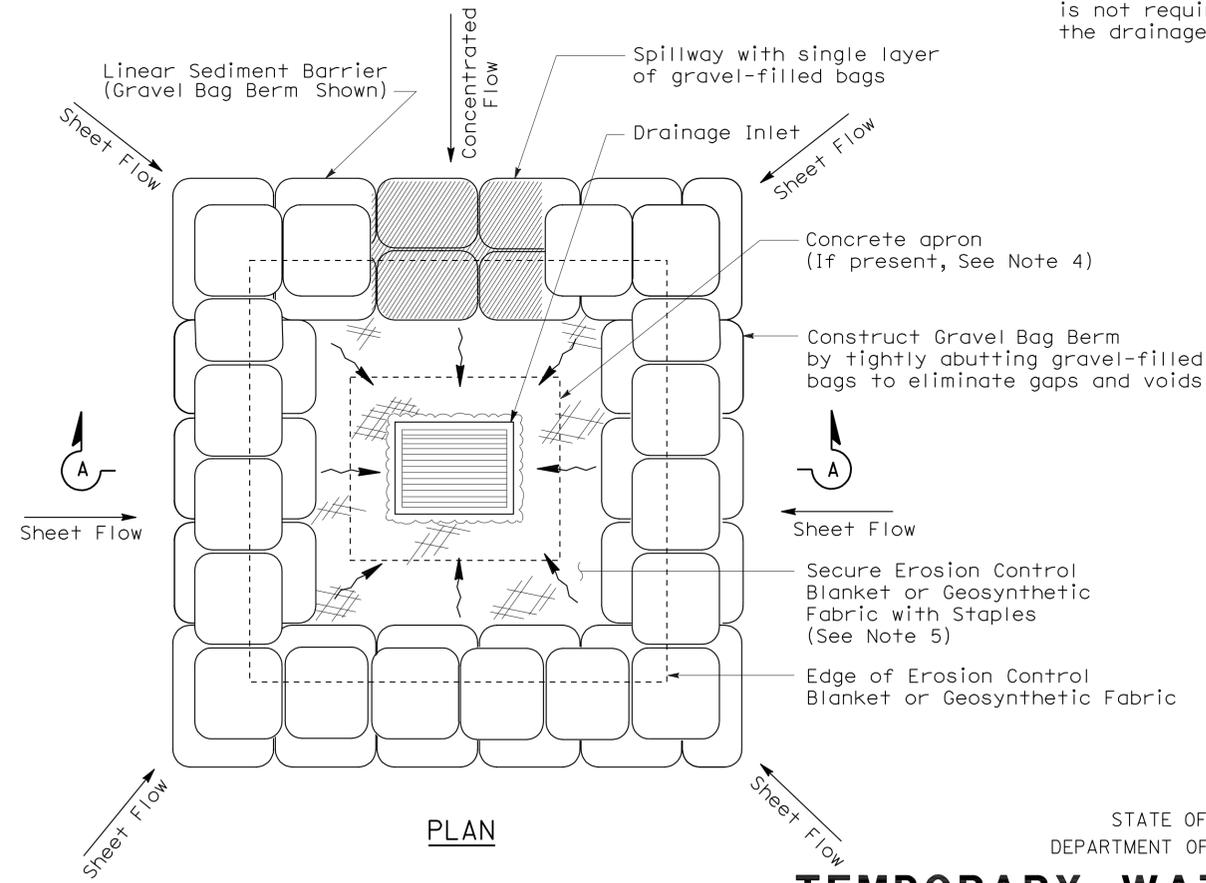
**SECTION A-A**

**NOTES:**

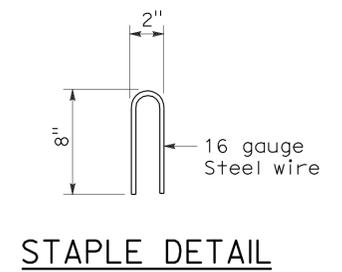
1. Place safety cones adjacent to drainage inlet protection.
2. Dimensions may vary to fit field conditions.
3. Install a minimum of 3 gravel bag berms upstream of each drainage inlet to be protected.
4. Position erosion control blanket or geosynthetic fabric at edge of concrete apron and secure in trench.
5. Erosion control blanket or geosynthetic fabric is not required if the area adjacent to the drainage inlet is vegetated or paved.



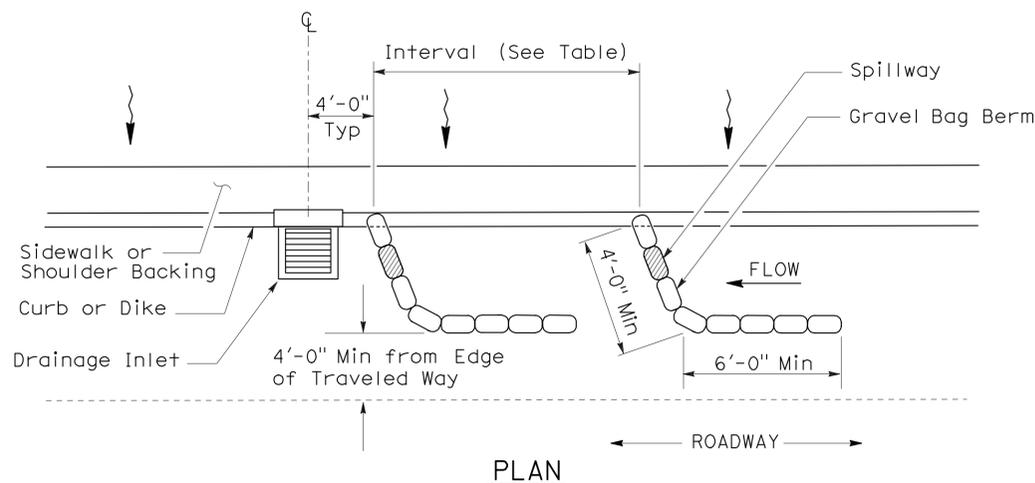
**PERSPECTIVE**



**PLAN**  
**TEMPORARY DRAINAGE INLET PROTECTION (TYPE 3B)**



**STAPLE DETAIL**



**PLAN**  
**TEMPORARY DRAINAGE INLET PROTECTION (TYPE 3A) (GRAVEL BAG BERM)**

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**TEMPORARY WATER POLLUTION CONTROL DETAILS (TEMPORARY DRAINAGE INLET PROTECTION)**

NO SCALE  
NSP T62 DATED AUGUST 15, 2008 SUPPLEMENTS THE STANDARD PLANS BOOK DATED MAY 2006.

2006 NEW STANDARD PLAN NSP T62

FLEXIBLE SEDIMENT BARRIER SPACING TABLE

SLOPE OF ROADWAY (PERCENT)	0 to 0.9	1 to 1.9	2 to 2.9	3 to 4	5+
INTERVAL BETWEEN BARRIERS	50'	35'	30'	25'	20'
ANGLE FROM FACE OF CURB	70°	70°	70°	45°	45°
SUGGESTED BARRIER LENGTH	6'	6'	6'	6'	6'

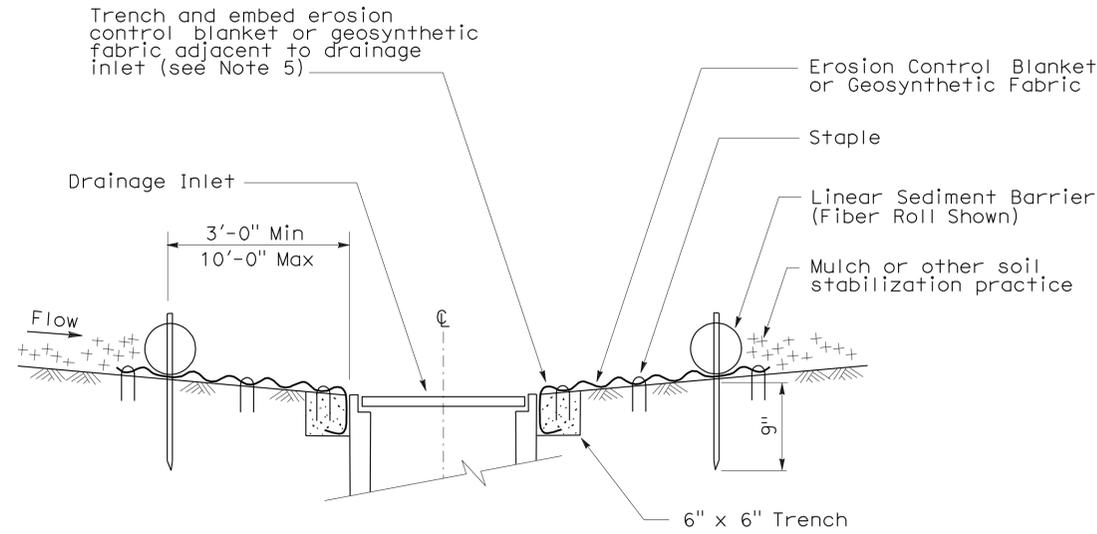
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SM	92,280	6.9/8.0, 10.4/11.2	49	56

Robert B. Schott  
LICENSED LANDSCAPE ARCHITECT

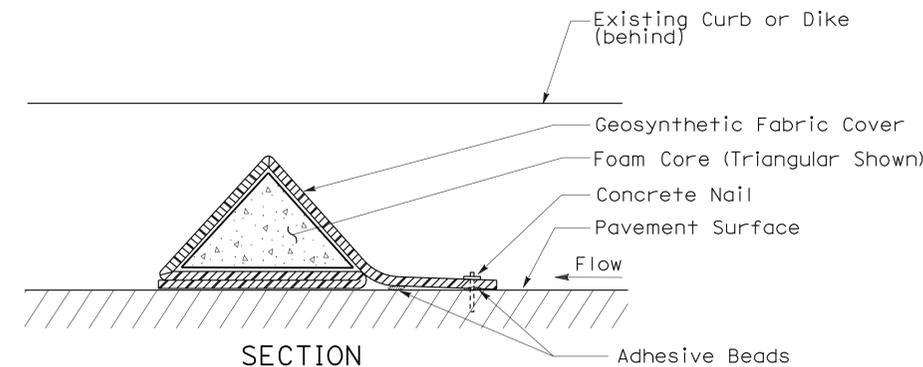
August 15, 2008  
PLANS APPROVAL DATE

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.

To accompany plans dated 3-21-11



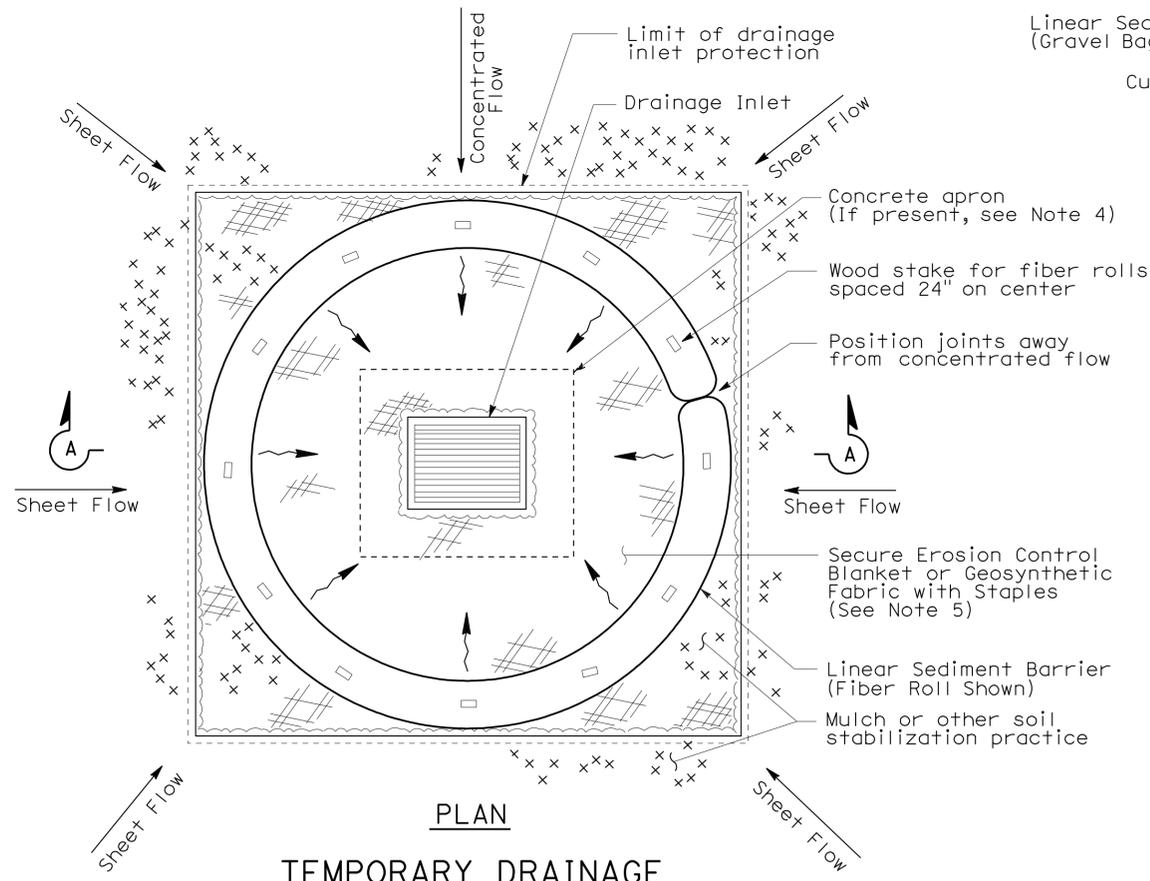
SECTION A-A



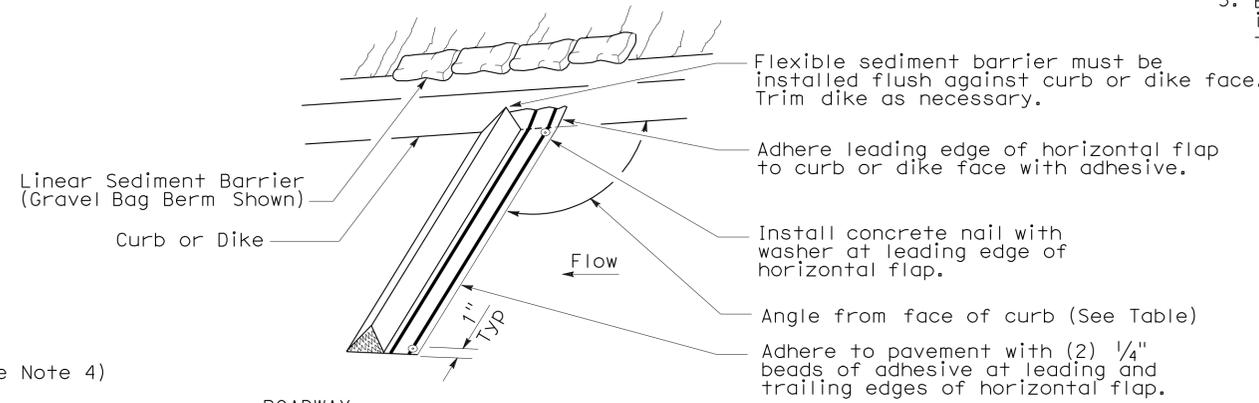
SECTION  
FLEXIBLE SEDIMENT BARRIER DETAIL  
(FOAM BARRIER SHOWN)

NOTES:

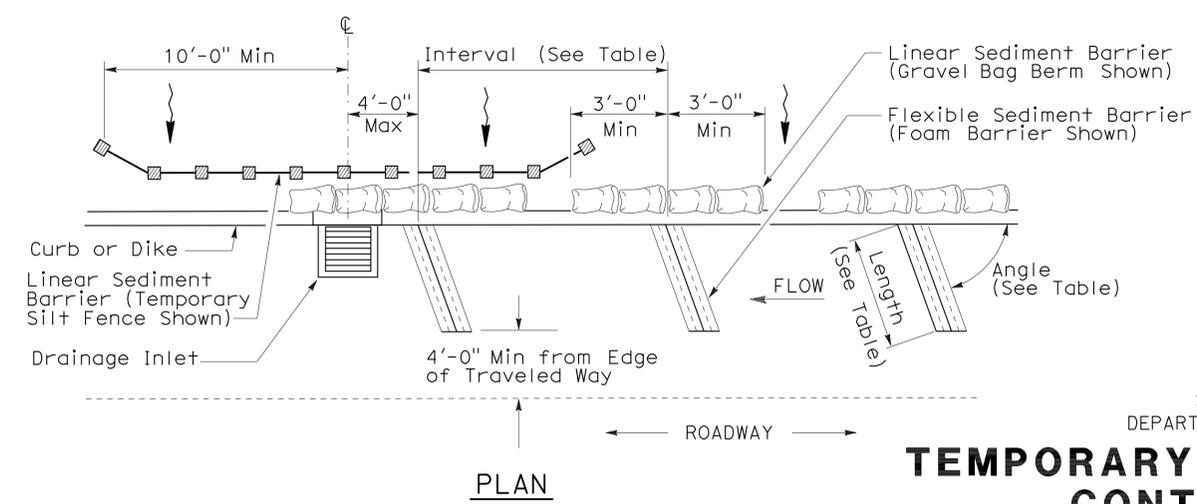
1. See Standard Plan T51 for Temporary Silt Fence.
2. Dimensions may vary to fit field conditions.
3. Install a minimum of 3 flexible sediment barriers upstream of each drainage inlet to be protected.
4. Position erosion control blanket or geosynthetic fabric at edge of concrete apron and secure in trench.
5. Erosion control blanket or geosynthetic fabric is not required if the area adjacent to the drainage inlet is vegetated.



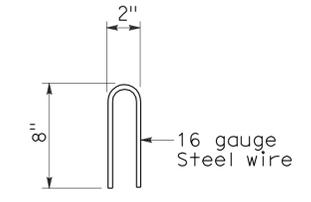
PLAN  
TEMPORARY DRAINAGE  
INLET PROTECTION (TYPE 4A)



PERSPECTIVE



PLAN  
TEMPORARY DRAINAGE  
INLET PROTECTION (TYPE 4B)  
FLEXIBLE SEDIMENT BARRIER



STAPLE DETAIL

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**TEMPORARY WATER POLLUTION  
CONTROL DETAILS  
(TEMPORARY DRAINAGE  
INLET PROTECTION)**

NO SCALE  
NSP T63 DATED AUGUST 15, 2008 SUPPLEMENTS  
THE STANDARD PLANS BOOK DATED MAY 2006.

2006 NEW STANDARD PLAN NSP T63

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SM	92,280	6.9/8.0, 10.4/11.2	50	56

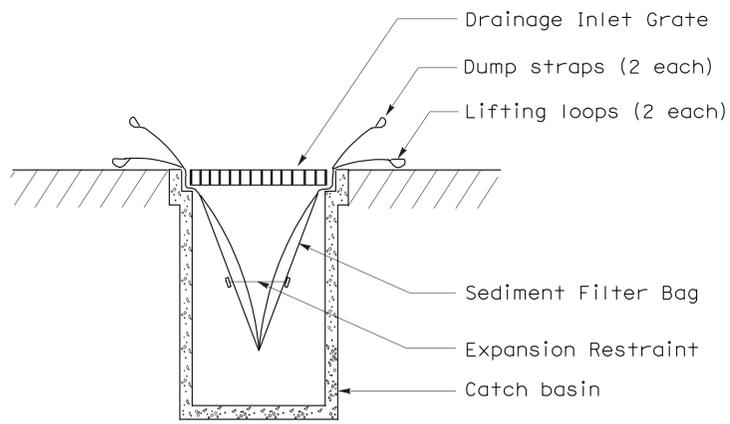
*Robert B. Schott*  
 LICENSED LANDSCAPE ARCHITECT

August 15, 2008  
 PLANS APPROVAL DATE

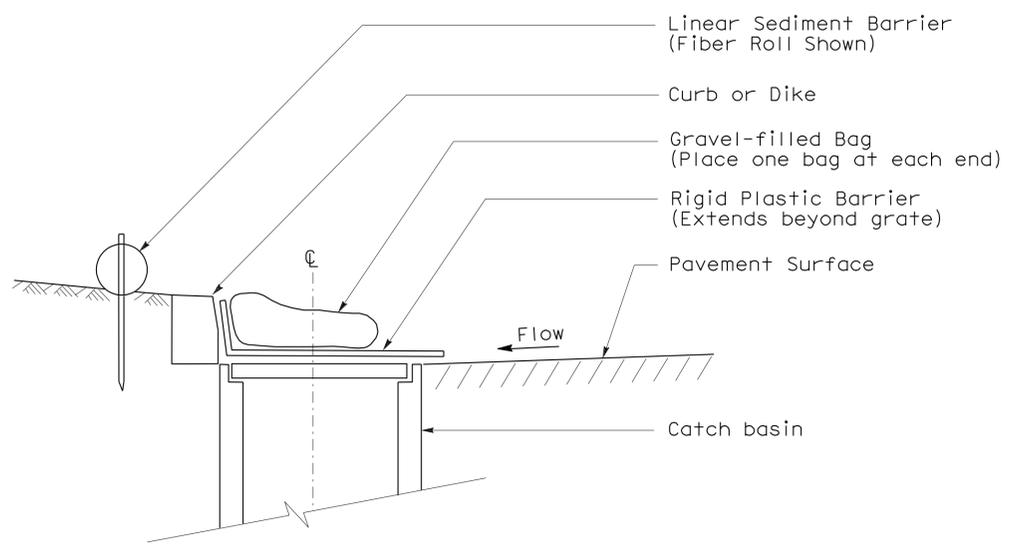
*Robert B. Schott*  
 LICENSED LANDSCAPE ARCHITECT  
 Signature  
 11-04-08  
 Renewal Date  
 08-11-08  
 Date

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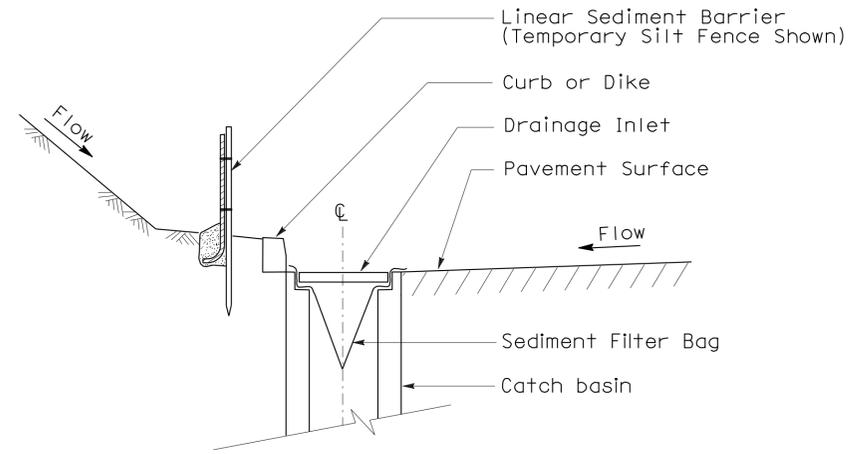
To accompany plans dated 3-21-11



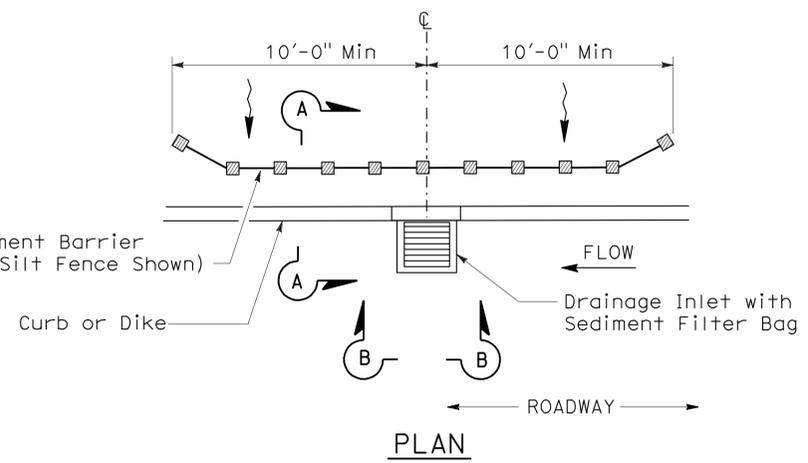
**SECTION B-B**  
**SEDIMENT FILTER BAG DETAIL**



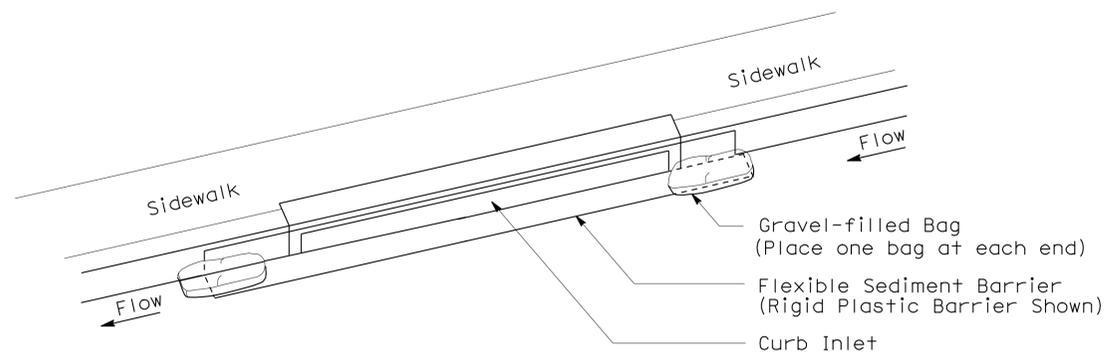
**SECTION**  
**TEMPORARY DRAINAGE**  
**INLET PROTECTION (TYPE 6A)**  
**(CATCH BASIN WITH GRATE)**



**SECTION A-A**



**PLAN**  
**TEMPORARY DRAINAGE**  
**INLET PROTECTION (TYPE 5)**  
**(SEDIMENT FILTER BAG)**



**PERSPECTIVE**  
**TEMPORARY DRAINAGE**  
**INLET PROTECTION (TYPE 6B)**  
**(CURB INLET WITHOUT GRATE)**

**NOTES:**

1. See Standard Plan T51 for Temporary Silt Fence.
2. Dimensions may vary to fit field conditions.

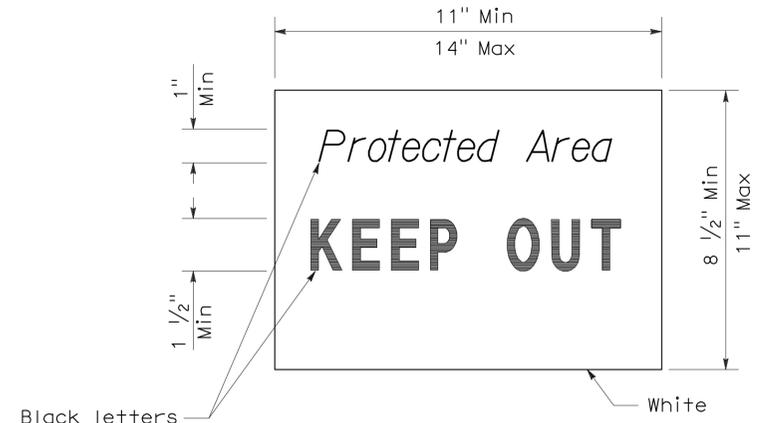
STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**TEMPORARY WATER POLLUTION CONTROL DETAILS (TEMPORARY DRAINAGE INLET PROTECTION)**

NO SCALE  
NSP T64 DATED AUGUST 15, 2008 SUPPLEMENTS THE STANDARD PLANS BOOK DATED MAY 2006.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SM	92,280	6.9/8.0, 10.4/11.2	51	56

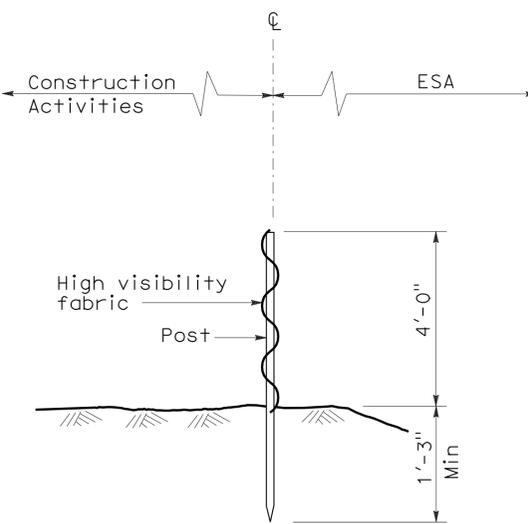
*Robert B. Schott*  
 LICENSED LANDSCAPE ARCHITECT  
 April 3, 2009  
 PLANS APPROVAL DATE  
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



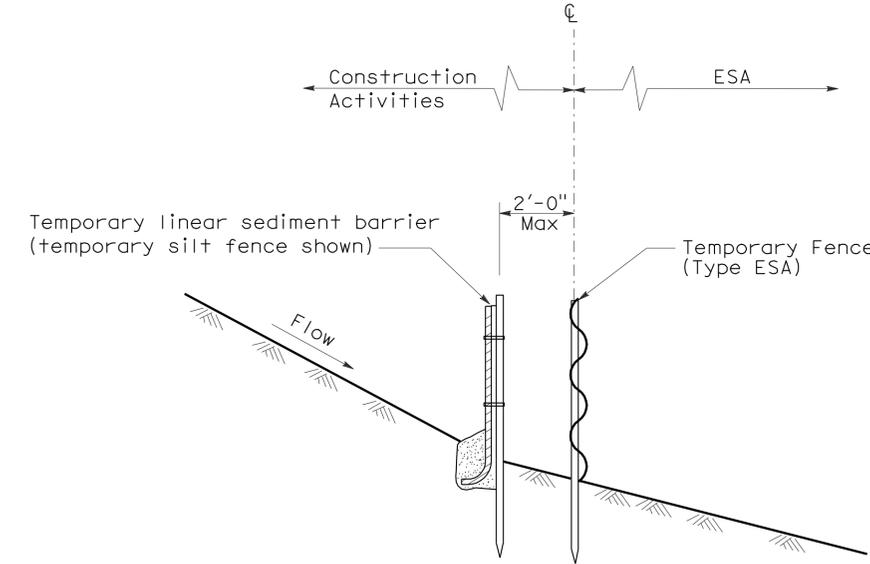
**SIGN DETAIL**

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

To accompany plans dated 3-21-11

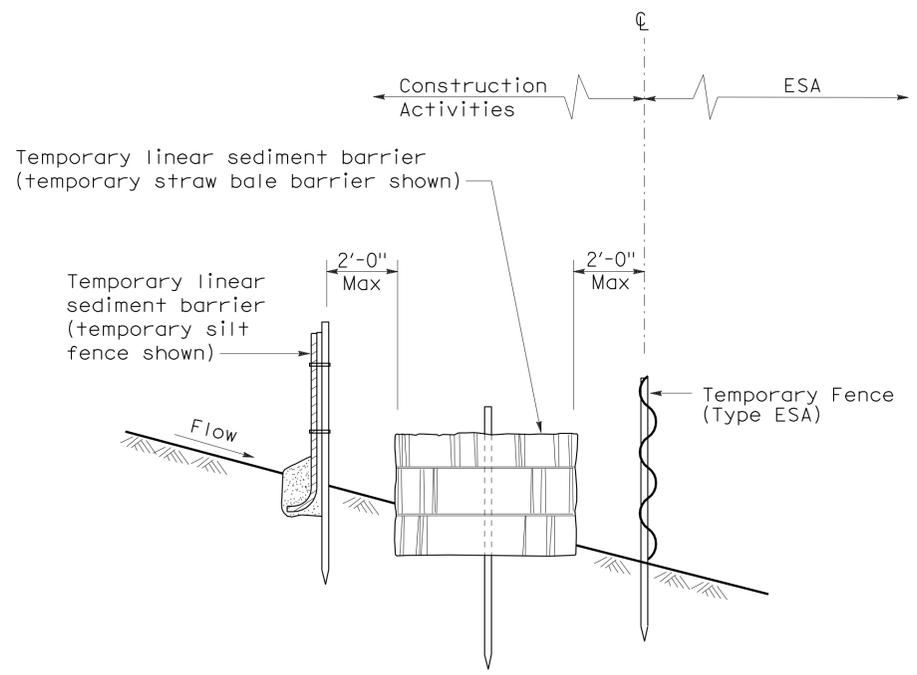


**SECTION TEMPORARY FENCE (TYPE ESA)**



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

(See Note 1)



**SECTION PLACEMENT DETAIL FOR TEMPORARY LINEAR SEDIMENT BARRIER 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.

**NEW STANDARD PLAN NSP T65**

2006 NEW STANDARD PLAN NSP T65

# ELECTROLIERS

STANDARD TYPES	Symbol	Description
15, 15D		High mast light pole
15 STRUCTURE		Double Arm lighting standard
21, 21D STRUCTURE		Existing electrolier
30		Electrolier foundation (Future installation)
31		
32		
35		
36-20A		

**NOTES:**

- Luminaires shall be 310 W HPS when installed on Type 21, 21D, 30, 31, 32, 35 and 36-20A Standards, unless otherwise specified. Luminaires shall be 200 W HPS when installed on other type standards or poles, unless otherwise specified.
- Luminaires shall be the cutoff type, ANSI Type III medium cutoff lighting distribution, unless otherwise specified.
- Variations noted adjacent to symbol on project plans.

- Electrolier (see project notes or project plans)
- Luminaire on wood pole

## STANDARD NOTES:

- AB** Abandon. If applied to conduit, remove conductors.
- BC** Install pull box in existing conduit run.
- BP** Pedestrian barricade, type as indicated on plan.
- CB** Install conduit into existing pull box.
- CC** Connect new and existing conduit. Remove existing conductors and install conductors as indicated.
- CF** Conduit to remain for future use. Remove conductors. Install pull wire or rope.
- DH** Detector handhole.
- FA** Foundation to be abandoned.
- IS** Install sign on signal mast arm.
- NS** No slip base on standard.
- PEC** Photoelectric control.
- PEU** Photoelectric unit.
- RC** Equipment or material to be removed and become the property of the Contractor.
- RE** Remove electrolier, fuses and ballast. Tape ends of conductors.
- RL** Relocate equipment.
- RR** Remove and reuse equipment.
- RS** Remove and salvage equipment.
- SC** Splice new to existing conductors.
- SD** Service disconnect.
- SF** Standard to remain for future use. Remove luminaire, pole conductors, fuses and ballast.
- TSP** Telephone service point.

# ABBREVIATIONS AND EQUIPMENT DESIGNATIONS

## PROPOSED EXISTING

BBS	bbs	Battery backup system
BC	bc	Bolt circle
C	C	Conduit
CCTV	cctv	Closed circuit television
CKT	ckt	Circuit
CMS	cms	Changeable message sign
DLC	dlc	Loop detector lead-in cable
EMS	ems	Extinguishable message sign
EVC	evc	Emergency vehicle cable
EVD	evd	Emergency vehicle detector
FB	fb	Flashing beacon
FBCA	fbca	Flashing beacon control assembly
FBS	fbs	Flashing beacon with slip base
FO	fo	Fiber optic
G	G	Ground (Equipment Grounding Conductor)
GFCI	GFCI	Ground fault circuit interrupt
HAR	har	Highway advisory radio
HEX	hex	Hexagonal
HPS	hps	High pressure sodium
IISNS	iisns	Internally illuminated street name sign
ISL	isl	Induction sign lighting
LED	led	Light emitting diode
LMA	lma	Luminaire mast arm
LPS	lps	Low pressure sodium
LTG	ltg	Lighting
LUM	lum	Luminaire
MAT	mat	Mast arm mounting vehicle signal faces, top attachment
MAS	mas	Mast arm mounting vehicle signal faces, side attachment
MAS-4A	mas-4A	Mast arm mounting vehicle signal faces, side attachment - 4 signal section
MAS-4B	mas-4B	
MAS-4C	mas-4C	
MAS-5A	mas-5A	Mast arm mounting vehicle signal faces, side attachment - 5 signal section
MAS-5B	mas-5B	
MC	mc	Mercury contactor
M/M	m/m	Multiple to multiple transformer
MT	mt	Conduit with pull wire or rope only
MTG	mtg	Mounting
	mv	Mercury vapor lighting fixture
N	N	Neutral (Grounded Conductor)
NC	NC	Normally closed
NO	NO	Normally open
PB	pb	Pull box
PEC	pec	Photoelectric control (Type I, II, III, IV or V as shown)
PED	ped	Pedestrian
PEU	peu	Photoelectric unit
PPB	ppb	Pedestrian push button
RL		Relocated equipment
RM	rm	Ramp metering
SB	sb	Slip base
SIC	sic	Signal interconnect cable
SIG	sig	Signal
SMA	sma	Signal mast arm
SNS	sns	Street name sign
SP	sp	Service point
TDC	tdc	Telephone demarcation cabinet
TMS	tms	Traffic monitoring station
TOS	tos	Traffic Operations System
VEH	veh	Vehicle
XFMR	xfmr	Transformer
COMM	comm	Communication
RWIS	rwis	Roadway weather information system

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SM	92,280	6.9/8.0, 10.4/11.2	52	56

*Jeffery G. McRae*  
REGISTERED ELECTRICAL ENGINEER

October 5, 2007  
PLANS APPROVAL DATE

Jeffery G. McRae  
No. E14512  
Exp. 6-30-08  
ELECTRICAL  
STATE OF CALIFORNIA

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To accompany plans dated 3-21-11

## SOFFIT AND WALL MOUNTED LUMINAIRES

- Pendant, 70 W HPS unless otherwise specified.
- Flush, 70 W HPS unless otherwise specified.
- Wall surface, 70 W HPS unless otherwise specified.
- Existing soffit or wall luminaire to remain unmodified.
- Existing soffit or wall luminaire to be modified as specified.

### NOTE:

Arrow indicates "street side" of luminaire.

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

## ELECTRICAL SYSTEMS (SYMBOLS AND ABBREVIATIONS)

NO SCALE

RSP ES-1A DATED OCTOBER 5, 2007 SUPERSEDES STANDARD PLAN ES-1A DATED MAY 1, 2006 - PAGE 400 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP ES-1A**

2006 REVISED STANDARD PLAN RSP ES-1A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SM	92,280	6.9/8.0, 10.4/11.2	53	56

*Jeffery G. McRae*  
 REGISTERED ELECTRICAL ENGINEER  
 October 5, 2007  
 PLANS APPROVAL DATE  
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REGISTERED PROFESSIONAL ENGINEER  
 Jeffrey G. McRae  
 No. E14512  
 Exp. 6-30-08  
 ELECTRICAL  
 STATE OF CALIFORNIA

### CONDUIT

PROPOSED	EXISTING	
		Lighting Conduit, unless otherwise indicated or noted
		Traffic signal conduit
		Communication conduit
		Telephone conduit
		Fire alarm conduit
		Fiber optic conduit
		Conduit termination
		Conduit riser in/on structure or service pole

### SIGNAL EQUIPMENT

PROPOSED	EXISTING	
		Pedestrian signal face
		Pedestrian push button post
		Pedestrian barricade
		Vehicle signal face (with backplate, 3-Section: red, yellow and green)
		Vehicle signal face with angle visors
		Modifications of basic symbols: "L" indicates all non-arrow sections lowered "LG" indicates lowered green section only "PV" indicates 12" programmed visibility sections "8" indicates all 8" sections (only when specified)
		Type 15TS and Vehicle signal face
		Vehicle signal face with red, yellow and green left arrow sections
		Vehicle signal face with red and yellow sections and up green arrow
		Vehicle signal face (5 Section) with red, yellow and green sections and yellow and green right arrows
		Type 1 Standard and attached vehicle signal faces
		Standard with signal mast arm only and attached vehicle signal faces and internally illuminated street name sign
		Type 33 Standard, Left-turn vehicle signal face and sign
		Standard with luminaire and signal mast arms and attached vehicle signal faces
		Cantilever flashing beacon Type 9 Frame, with a sign unless otherwise specified or indicated
		Type 15-FBS Standard with two vehicle signal face sections with lens, backplate and visor with a sign
		Flashing beacon. One vehicle signal face section with lens, backplate and visor. "R" indicates red indication, "Y" indicates yellow indication
		Controller assembly. Door indicates front of cabinet

### SERVICE EQUIPMENT

PROPOSED	EXISTING	
		Overhead lines
		Wood pole "U" indicates utility owned
		Pole guy with anchor
		Utility transformer - ground mounted
		Service equipment enclosure type
		Service equipment enclosure door indicates front of enclosure
		Telephone demarcation cabinet

### POLE-MOUNTED SERVICE DESIGNATION



### ILLUMINATED OVERHEAD SIGN

PROPOSED	EXISTING	
		Overhead sign - Single post
		Overhead sign - Two post
		Overhead sign - Mounted on structure
		Overhead sign with electrolier

### SIGNAL EQUIPMENT Cont

PROPOSED	EXISTING	
		Guard post
		Type 1 Standard with "Meter On" sign
		Emergency Vehicle detector

### NOTES:

- All signal sections shall be 12" unless shown otherwise.
- Signal heads shall be provided with backplates unless shown otherwise.
- Signal indication shall be LED.

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**ELECTRICAL SYSTEMS  
 (SYMBOLS AND ABBREVIATIONS)**  
 NO SCALE

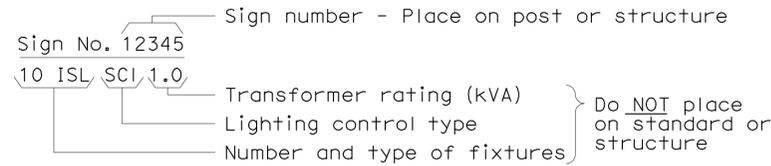
RSP ES-1B DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-1B  
 DATED MAY 1, 2006 - PAGE 401 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP ES-1B**

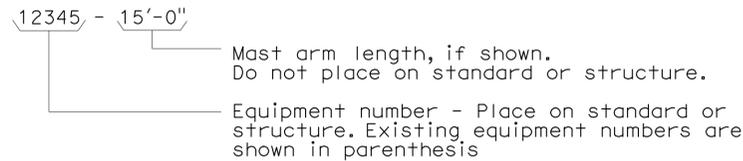
2006 REVISED STANDARD PLAN RSP ES-1B

### EQUIPMENT IDENTIFICATION

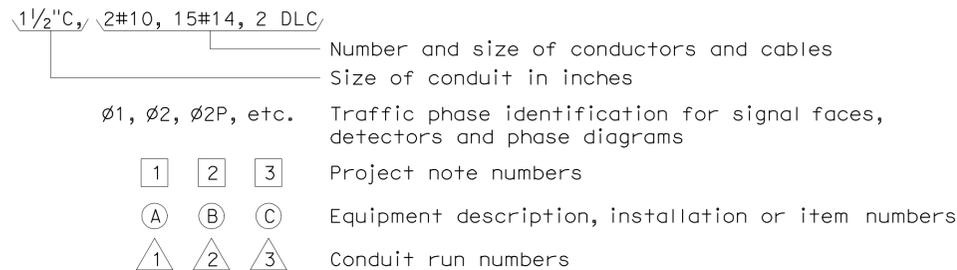
#### ILLUMINATED SIGN IDENTIFICATION NUMBER:



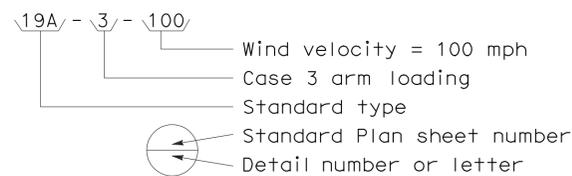
#### ELECTROLIER OR EQUIPMENT IDENTIFICATION NUMBER:



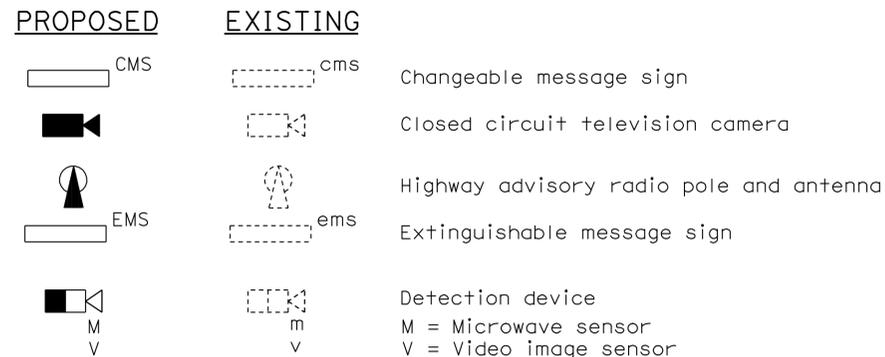
#### CONDUIT AND CONDUCTOR IDENTIFICATION:



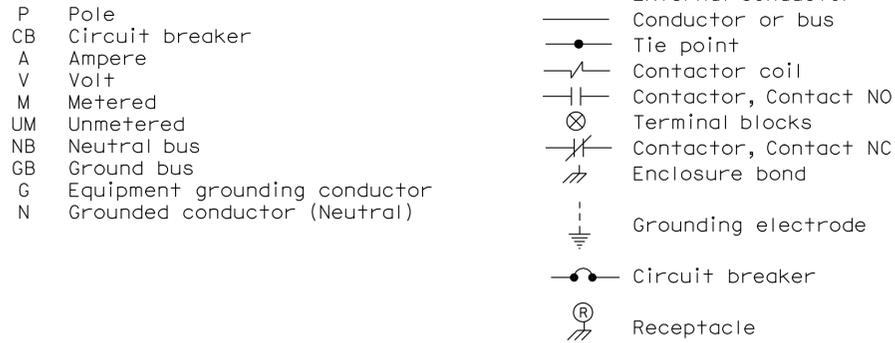
#### SIGNAL AND LIGHTING STANDARD (TYPICAL DESIGNATION):



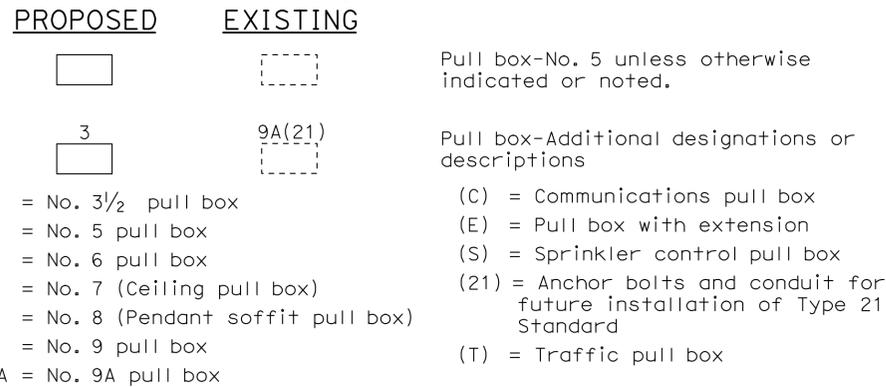
### MISCELLANEOUS EQUIPMENT



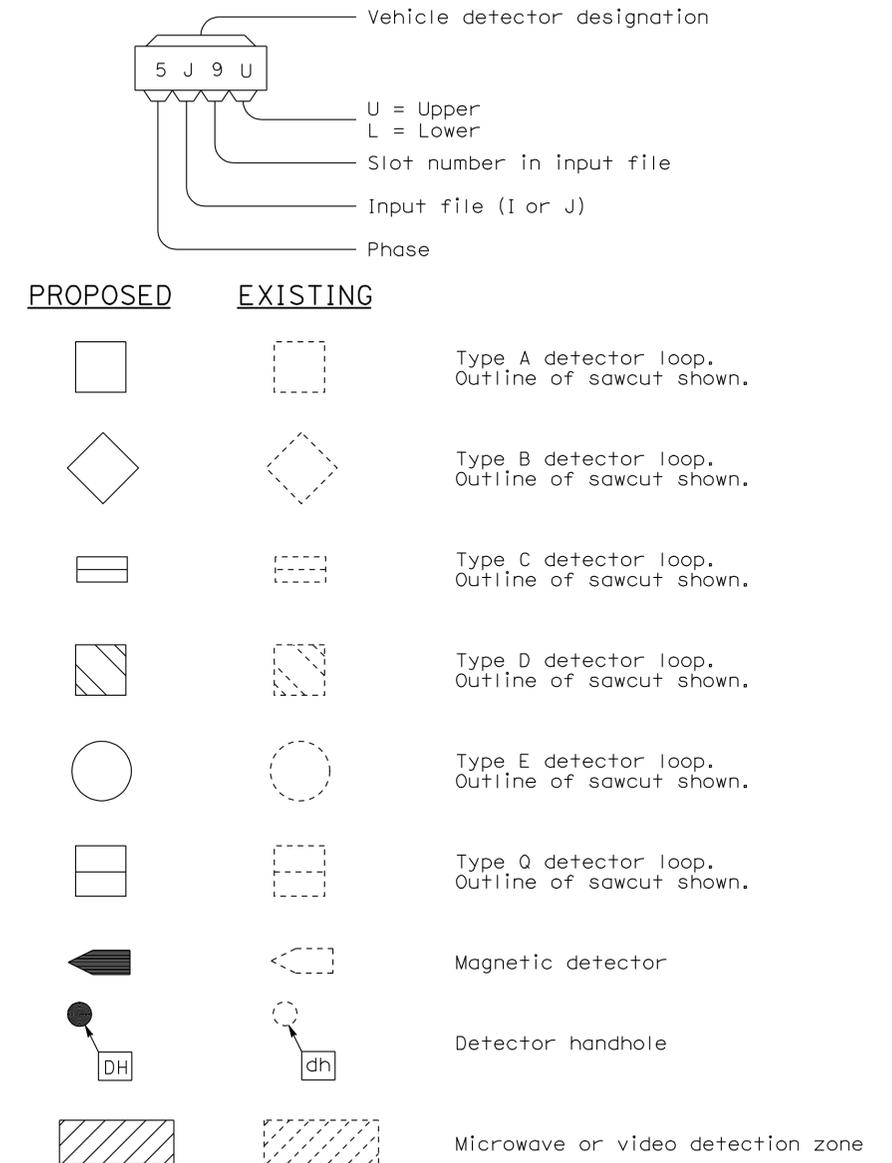
### WIRING DIAGRAM LEGEND



### PULL BOXES



### VEHICLE DETECTORS



STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION

## ELECTRICAL SYSTEMS (SYMBOLS AND ABBREVIATIONS)

NO SCALE

RSP ES-1C DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-1C  
 DATED MAY 1, 2006 - PAGE 402 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP ES-1C**

2006 REVISED STANDARD PLAN RSP ES-1C

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SM	92,280	6.9/8.0, 10.4/11.2	55	56

*Jeffery G. McRae*  
REGISTERED ELECTRICAL ENGINEER

October 5, 2007  
PLANS APPROVAL DATE

*Jeffery G. McRae*  
REGISTERED PROFESSIONAL ENGINEER  
No. E14512  
Exp. 6-30-08  
ELECTRICAL  
STATE OF CALIFORNIA

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**NOTES-TYPE III SERVICE EQUIPMENT ENCLOSURES:**

1. Service equipment enclosure and metering equipment shall meet the requirements of the service utility. The meter area shall have a sealable, lockable, weathertight cover that can be removed without the use of tools.
2. Service equipment enclosures shall be factory wired and conform to NEMA standards.
3. Dimensions of service equipment enclosures shall meet the requirements of the service utility.
4. The dead front panels on Type III service equipment enclosures shall have a continuous stainless steel or aluminum piano hinge. The panel in front of the breakers shall be secured with a latch or captive screws. No live parts shall be mounted on the dead front panel.
5. The exterior door shall have provisions for padlocking. The padlock hole shall be a minimum diameter of  $\frac{7}{16}$ ".
6. Enclosures housing transformers of more than one kVA shall have effective screened ventilation louver of not less than 50 square inches. Screen shall be stainless steel No. 304, with a No. 10 size mesh. Framed screen shall be secured with at least four bolts.
7. Fasteners on the exterior of the enclosure shall be vandal-resistant and shall not be removable from the exterior. Exterior screws, nuts, bolts and washers shall be stainless steel.
8. Landing lugs for incoming service conductors shall be compatible with either copper or aluminum conductors sized to suit the conductors shown on the plan. Landing lugs shall be copper or tin-plated aluminum. Neutral bus shall be rated for 125 A and be suitable for copper or aluminum conductors unless otherwise specified. The terminal shall include but not be limited to:
  - a) Incoming terminals (landing lugs)
  - b) Neutral lugs
  - c) Solid neutral terminal strip
9. At least 6 standard single pole circuit breaker spaces,  $\frac{3}{4}$ " nominal, shall be provided for branch circuits. Circuit breaker interiors shall be copper. Interiors of enclosure shall accept plug-in or cable-in/cable-out circuit breakers.
10. Control wiring shall be 600 V, 14 stranded machine tool wire. Where subject to flexing, 19 strand wire shall be used.
11. Main bus shall be rated for 125 A and shall be tin-plated copper.
12. A plastic laminated wiring diagram shall be provided with brass mounting eyelets and attached to the inside of the enclosure and the wiring diagram shall be affixed to the interior with a UL or ETL approved method.

13. An engraved phenolic nameplate on the dead front panel indicating the function of each circuit or device shall be installed with stainless steel rivets or stainless steel screws:
  - a) Adjacent to the breaker or device with character size a minimum of  $\frac{1}{8}$ ".
  - b) At the top of the exterior door panel indicating State system number, voltage level and number of phases with character size a minimum of  $\frac{3}{16}$ ".
14. The plan shows the approximate location of devices within the enclosure. Components may be rearranged, however, the "working" clearances within the service equipment enclosure shall be maintained.
15. In unpaved areas a raised portland cement concrete pad 2'-0" x 4" x width of foundation shall be constructed in front of new service equipment enclosure installation. Pad shall be set to elevation of foundation.
16. Foundation shall extend 2" minimum beyond edge of service equipment enclosure.
17. Internal bus, where shown, is typical only. Alternative design of proposed service equipment enclosure shall be submitted to the Engineer for approval.
18. Plug-in circuit breakers may be mounted in the vertical or horizontal position. Cable-in/cable-out circuit breakers shall be mounted in the vertical position.
19. Type III-AF and Type III-BF service equipment enclosures shall have the meter viewing windows located on the front side of the service equipment enclosures.
20. Type III-AR and Type III-BR service equipment enclosures shall be similarly constructed as Type III-AF and Type III-BF respectively, except the meter viewing windows shall be located on the back side of the service equipment enclosures.
21. Minimum clearance shall be required for front and back of service equipment enclosure per National Electrical Code, Article 110.26, "Spaces About Electric Equipment (600 Volts, Nominal, or Less)."

To accompany plans dated 3-21-11

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

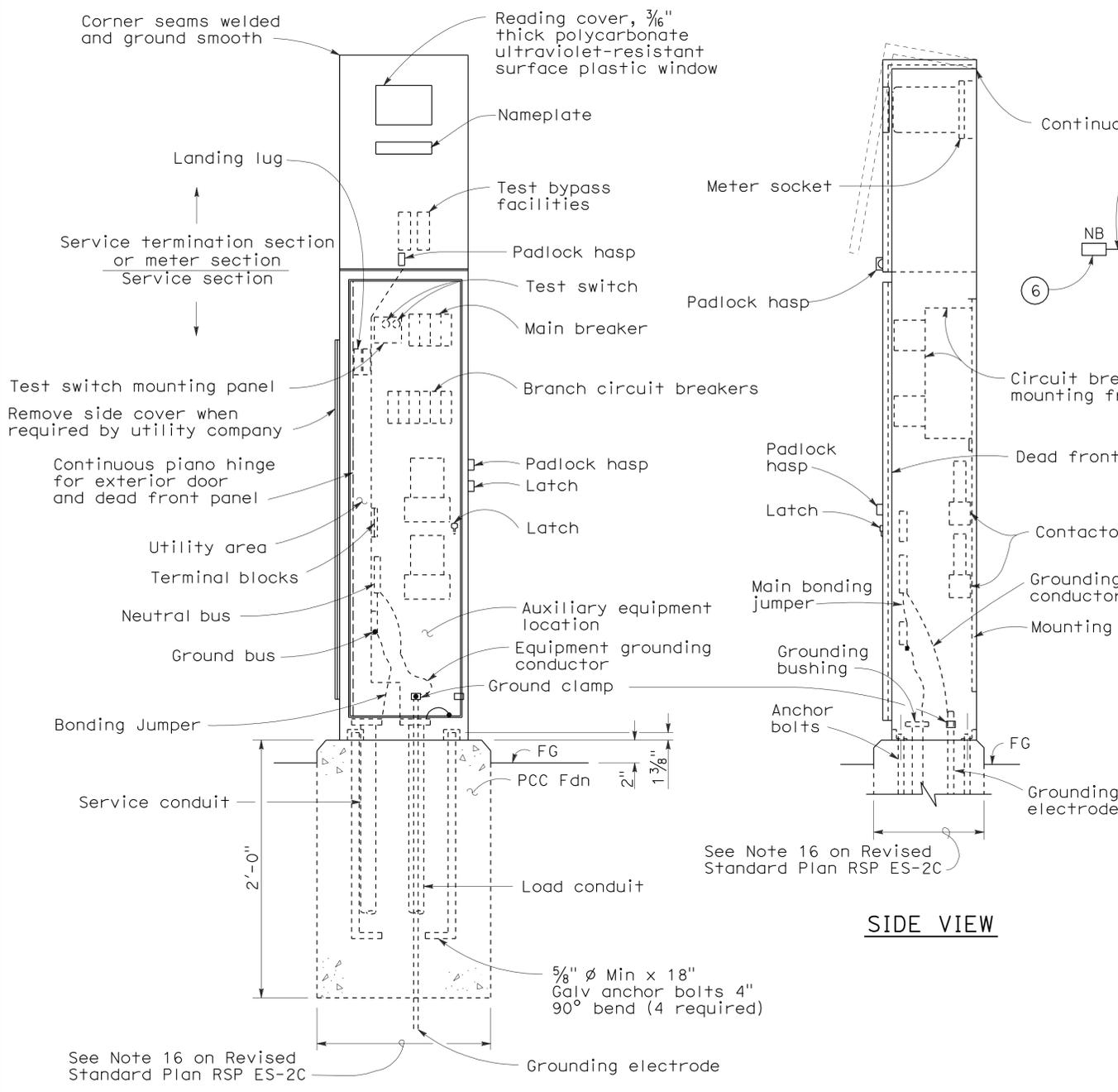
**ELECTRICAL SYSTEMS  
(SERVICE EQUIPMENT NOTES  
TYPE III SERIES)**

NO SCALE

RSP ES-2C DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-2C  
DATED MAY 1, 2006 - PAGE 405 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP ES-2C**

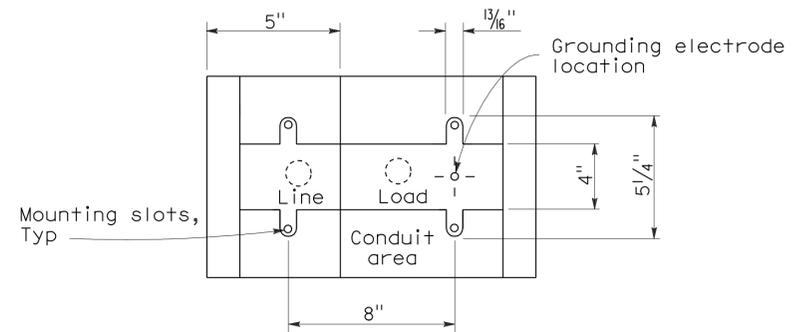
2006 REVISED STANDARD PLAN RSP ES-2C



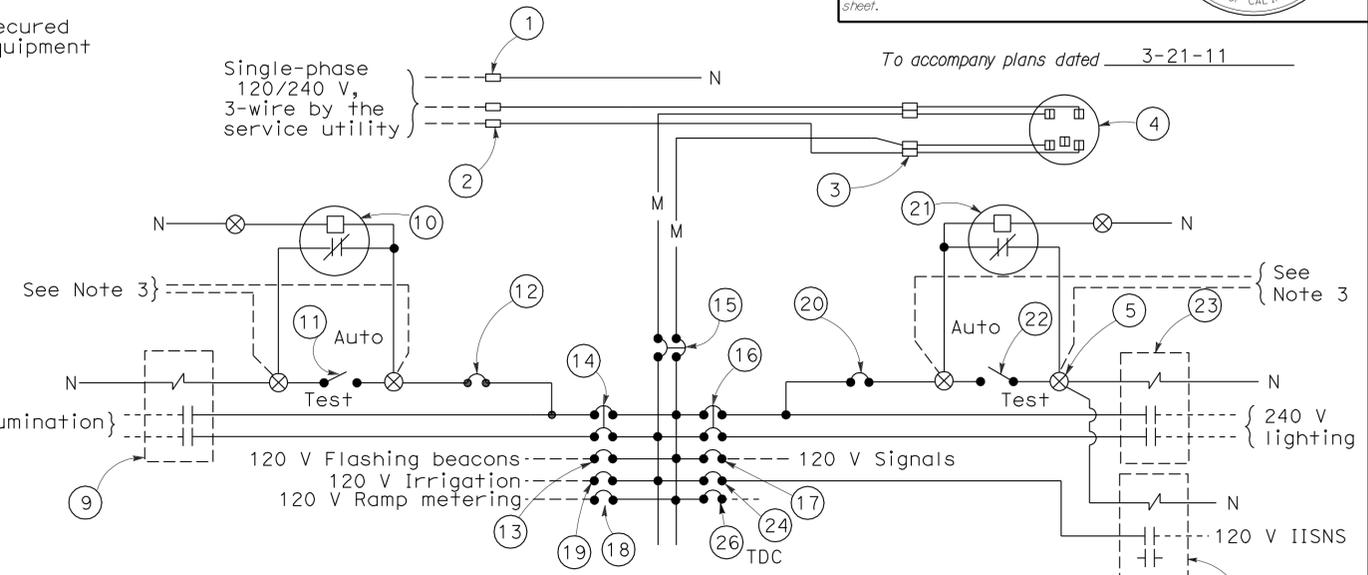
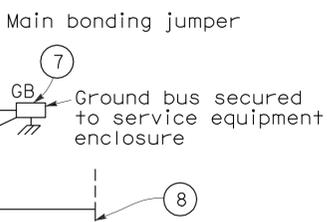
**TYPE III-AF SERVICE EQUIPMENT ENCLOSURE (TYPICAL)**

**FRONT VIEW**

**SIDE VIEW**



**BASE FOR TYPE III-A SERVICE EQUIPMENT ENCLOSURE**



**120/240 V SERVICE WIRING DIAGRAM (TYPICAL)**

TYPE III-A SERVICE (120/240 V) EQUIPMENT LEGEND					
ITEM No.	COMPONENT	NAME PLATE DESCRIPTION	ITEM No.	COMPONENT	NAME PLATE DESCRIPTION
1	Neutral lug		14	30 A, 240 V, 2P, CB	Sign Illumination
2	Landing lug (Note 6)		15	100 A, 240 V, 2P, CB	Main Breaker
3	Test bypass facility		16	30 A, 240 V, 2P, CB	Lighting
4	Meter socket and support		17	50 A, 120 V, 1P, CB	Signals
5	Terminal blocks		18	30 A, 120 V, 1P, CB	Ramp Metering
6	Neutral bus		19	20 A, 120 V, 1P, CB	Irrigation
7	Ground bus		20	15 A, 120 V, 1P, CB	Lighting Control
8	Grounding electrode		21	Photoelectric unit (Note 7)	
9	30 A, 2PNO Contactor	Sign Illumination	22	15 A, 1P, Test switch	Lighting Test Switch
10	Photoelectric unit (Note 7)		23	60 A, 2PNO Contactor	Lighting
11	15 A, 1P, Test switch	Sign Illumination Test Switch	24	15 A, 120 V, 1P, CB	IISNS
12	15 A, 120 V, 1P, CB	Sign Illumination Control	25	30 A, 2PNO Contactor	IISNS
13	15 A, 120 V, 1P, CB	Flashing Beacon	26	20 A, 120 V, 1P, CB	Telephone Demarcation Cabinet

**NOTES: (FOR SERVICE EQUIPMENT ENCLOSURE)**

- Voltage ratings of service equipment shall conform to the service voltages indicated on the plans.
- Unless otherwise indicated on the plans, service equipment items shall be provided for each service equipment enclosure as shown.
- Connect to remote test switch mounted on lighting standards, sign post or structure when required.
- Items No. 1 and 6 shall be isolated from the service equipment enclosure.
- Meter sockets shall be 5 clip type.
- The landing lug shall be suitable for multiple conductors.
- Type I photoelectric control shall be used unless otherwise indicated on the plans.

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**ELECTRICAL SYSTEMS (SERVICE EQUIPMENT AND TYPICAL WIRING DIAGRAM, TYPE III - A SERIES)**

NO SCALE

RSP ES-2D DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-2D DATED MAY 1, 2006 - PAGE 406 OF THE STANDARD PLANS BOOK DATED MAY 2006.

2006 REVISED STANDARD PLAN RSP ES-2D