

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** TRAFFIC DESIGN  
 FUNCTIONAL SUPERVISOR: MOHAMMED OATAMI  
 CALCULATED/DESIGNED BY: CHECKED BY:  
 DAVID BLACK FAWZI YAGHMOUR  
 REVISED BY: DATE REVISED:

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	201	343

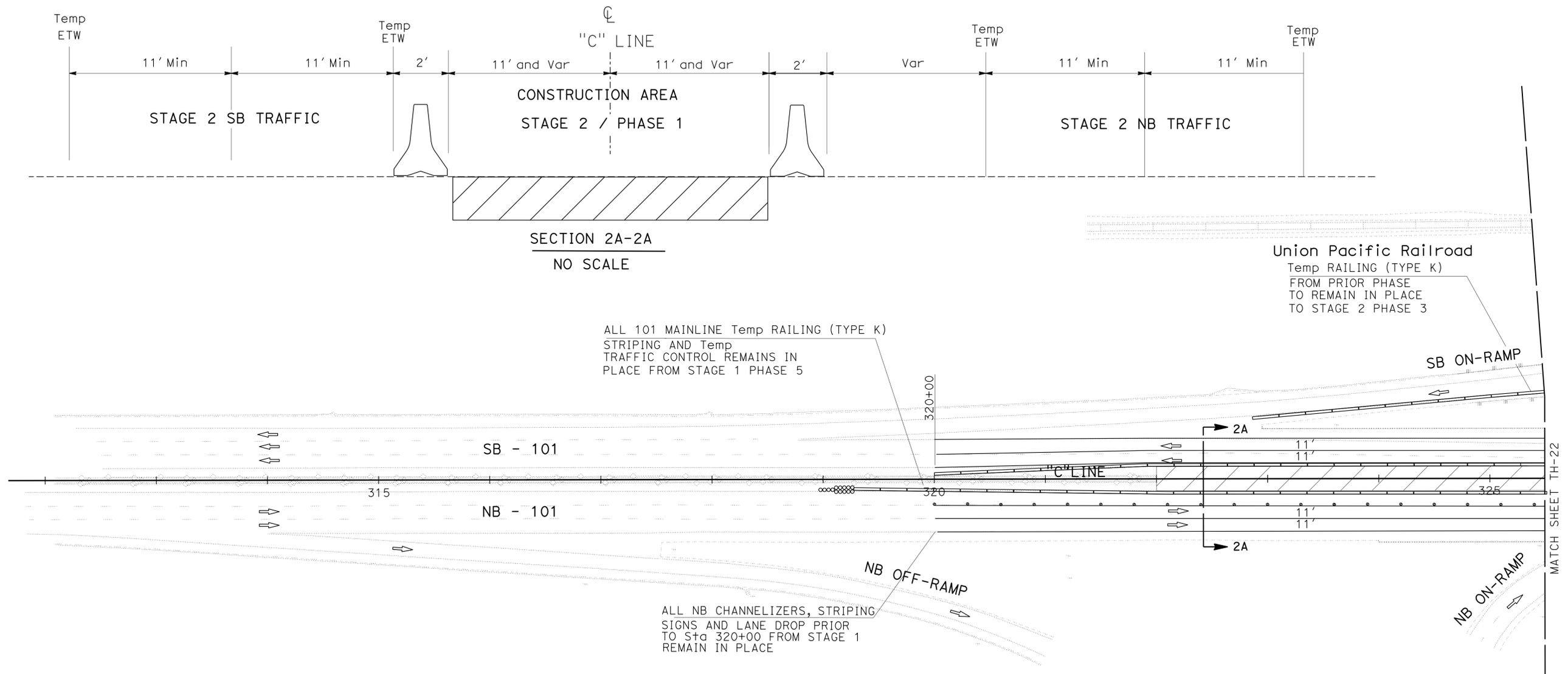
12/04/12  
 REGISTERED CIVIL ENGINEER DATE  
 4-29-13  
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER  
 FAWZI YAGHMOUR  
 No. C-54750  
 Exp. 12/31/13  
 CIVIL  
 STATE OF CALIFORNIA

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**TRAFFIC NOTES FOR STAGE 2 PHASE 1**

- NB TRAFFIC ON EXISTING LANES
- SB TRAFFIC ON EXISTING LANES
- NB ON-RAMP OPEN TO TRAFFIC
- CALLE REAL TRAFFIC ON CALLE REAL DETOUR "CRD1" ALIGNMENT

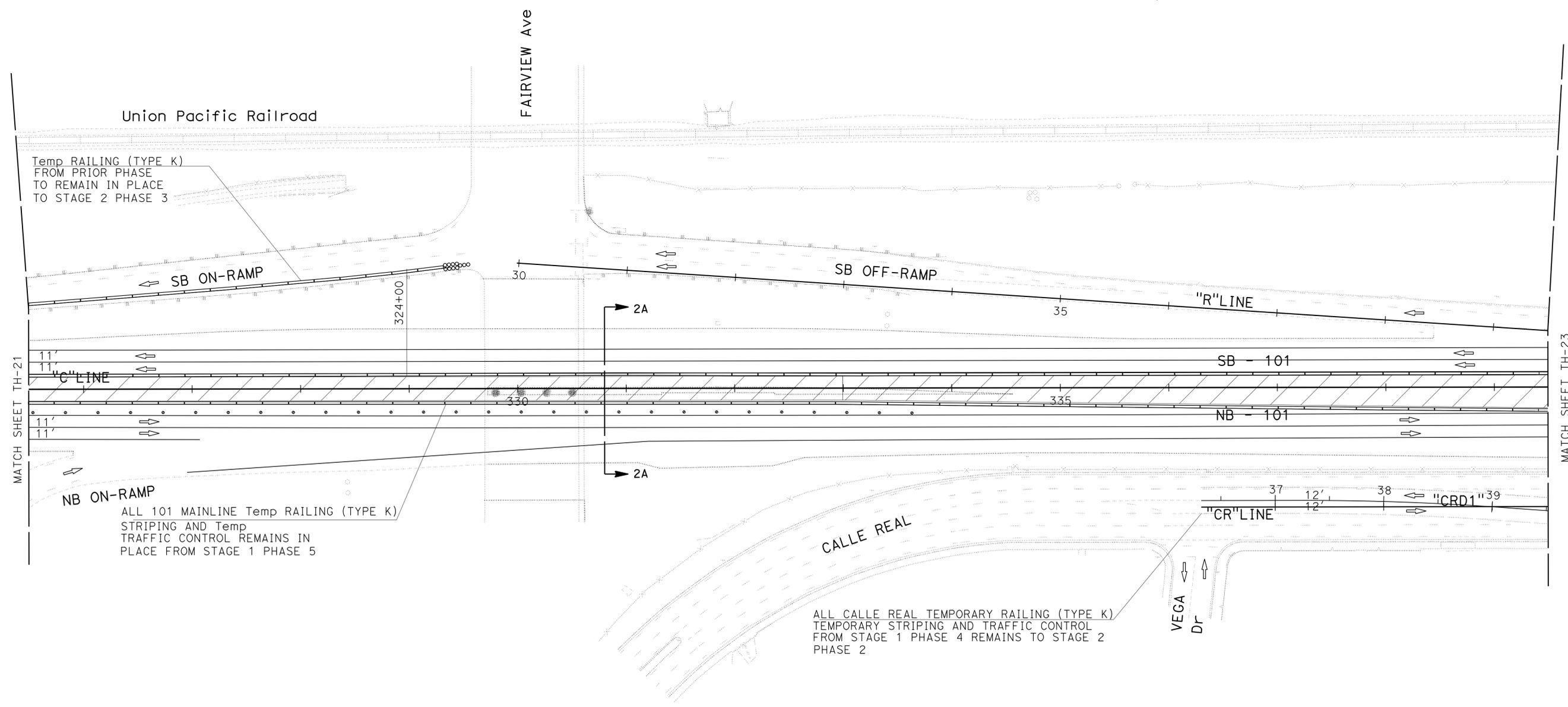


**TRAFFIC HANDLING PLAN**  
 (STAGE 2/PHASE 1)  
 SCALE: 1" = 50'  
**TH-21**

APPROVED FOR TRAFFIC HANDLING WORK ONLY

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	202	343
			12/04/12		
REGISTERED CIVIL ENGINEER			DATE		
4-29-13			PLANS APPROVAL DATE		
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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	REVISOR	DATE
<b>Caltrans</b> <b>TRAFFIC DESIGN</b>	MOHAMMED OATAMI	DAVID BLACK	
		FAWZI YAGHMOUR	
	CHECKED BY	DESIGNED BY	



**TRAFFIC HANDLING PLAN**  
**(STAGE 2/PHASE 1)**  
 SCALE: 1" = 50'  
**TH-22**

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LAST REVISION DATE PLOTTED => 03-MAY-2013 01-15-13 TIME PLOTTED => 1:31:32

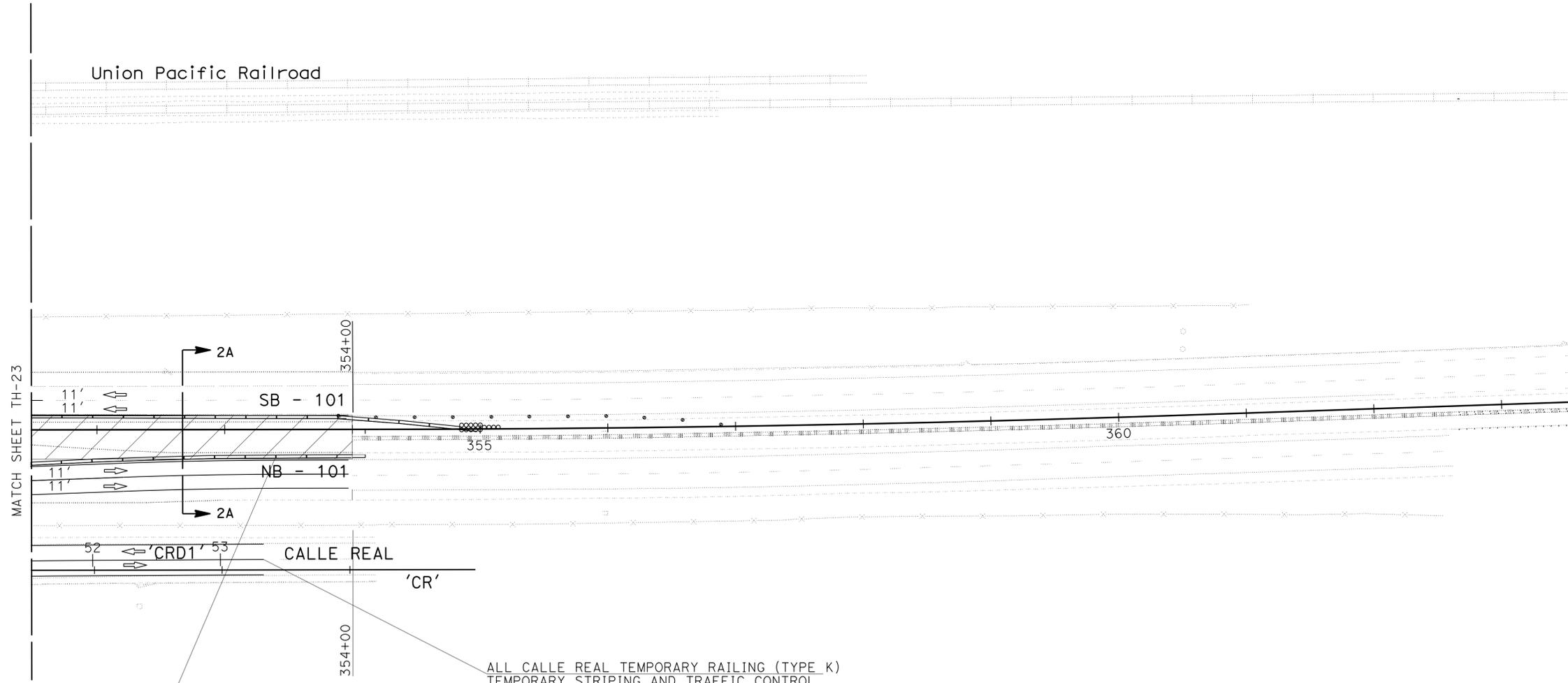


Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	204	343

 12/04/12  
 REGISTERED CIVIL ENGINEER DATE  
 4-29-13  
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER  
**FAWZI YAGHMOUR**  
 No. C-54750  
 Exp. 12/31/13  
 CIVIL  
 STATE OF CALIFORNIA

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ALL 101 MAINLINE Temp RAILING (TYPE K)  
 STRIPING AND Temp  
 TRAFFIC CONTROL REMAINS IN  
 PLACE FROM STAGE 1 PHASE 5

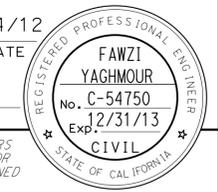
ALL CALLE REAL TEMPORARY RAILING (TYPE K)  
 TEMPORARY STRIPING AND TRAFFIC CONTROL  
 FROM STAGE 1 PHASE 4 REMAINS TO STAGE 2  
 PHASE 2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	REVISOR	DATE
TRAFFIC DESIGN	MOHAMMED OATAMI	DAVID BLACK	12/04/12
Caltrans		FAWZI YAGHMOUR	4-29-13
			PLANS APPROVAL DATE

**TRAFFIC HANDLING PLAN**  
 (STAGE 2/PHASE 1)  
 SCALE: 1" = 50'  
**TH-24**

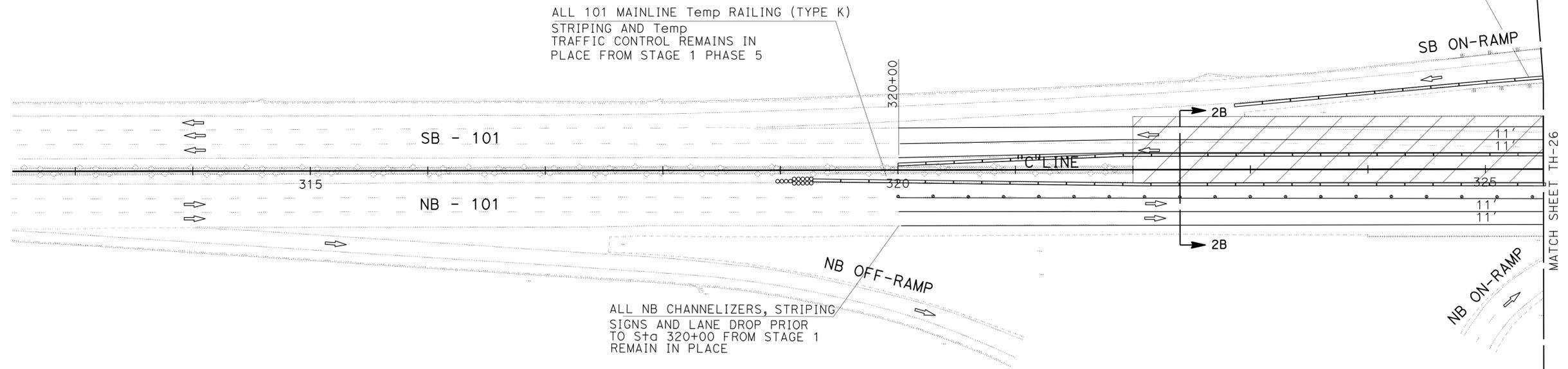
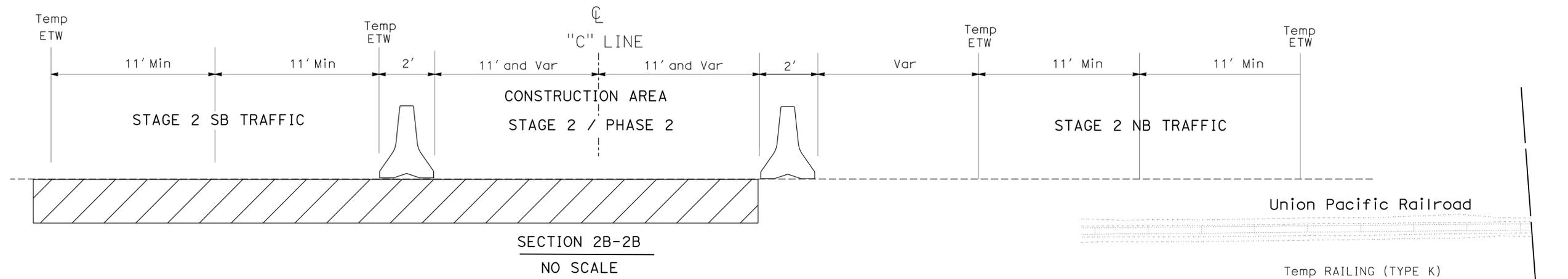
APPROVED FOR TRAFFIC HANDLING WORK ONLY

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	205	343
			12/04/12		
REGISTERED CIVIL ENGINEER			DATE		
4-29-13			PLANS APPROVAL DATE		
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**TRAFFIC NOTES FOR STAGE 2 PHASE 2**

- NB TRAFFIC ON EXISTING LANES
- SB TRAFFIC ON EXISTING LANES
- NB ON-RAMP OPEN TO TRAFFIC
- CALLE REAL TRAFFIC ON CALLE REAL DETOUR "CRD1" ALIGNMENT



ALL NB CHANNELIZERS, STRIPING SIGNS AND LANE DROP PRIOR TO Sta 320+00 FROM STAGE 1 REMAIN IN PLACE

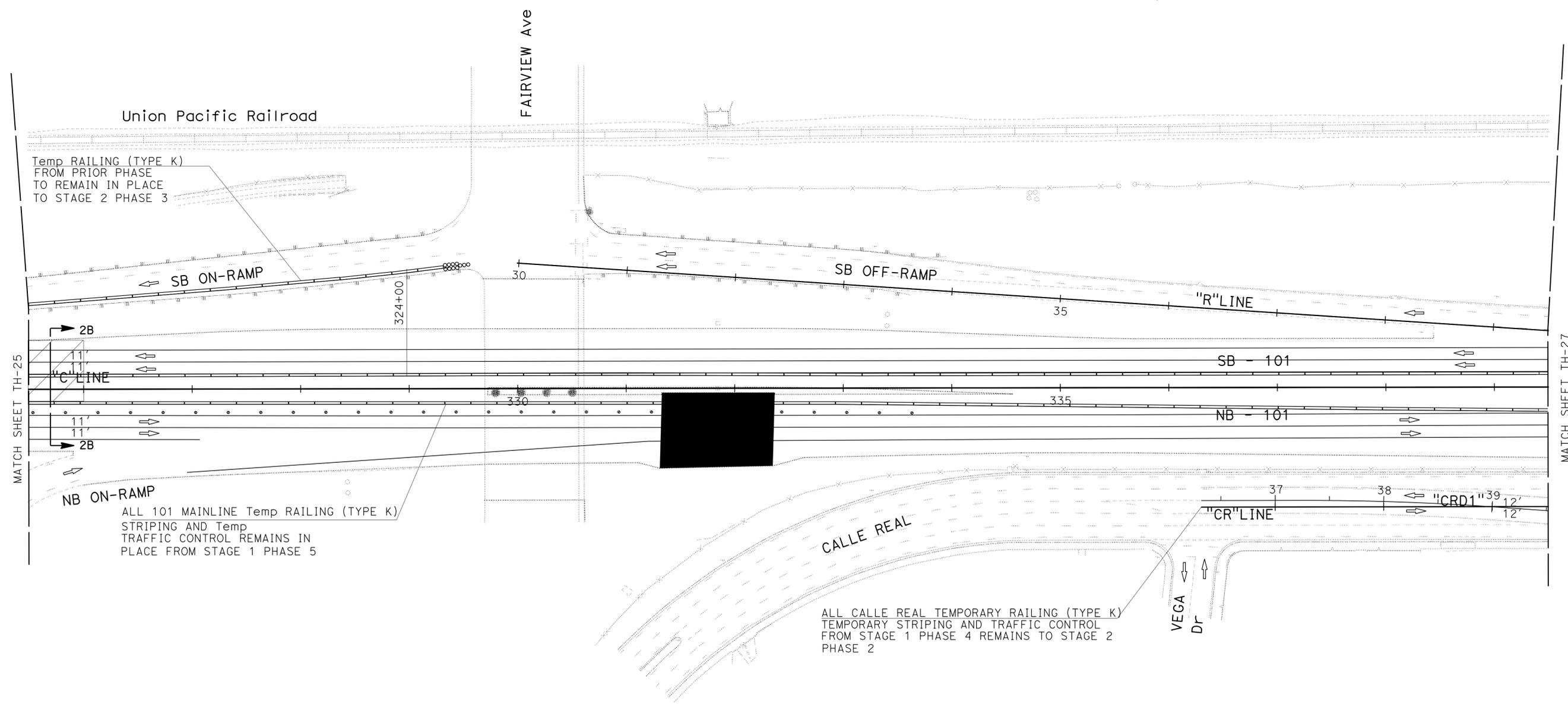
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** TRAFFIC DESIGN  
 FUNCTIONAL SUPERVISOR: MOHAMMED OATAMI  
 CALCULATED/DESIGNED BY: DAVID BLACK  
 CHECKED BY: FAWZI YAGHMOUR  
 REVISED BY: DATE  
 REVISIONS: (blank)

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**TRAFFIC HANDLING PLAN**  
 (STAGE 2/PHASE 2)  
 SCALE: 1" = 50'  
**TH-25**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	206	343
			12/04/12		
REGISTERED CIVIL ENGINEER			DATE		
4-29-13			PLANS APPROVAL DATE		
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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	REVISOR	DATE
<b>Caltrans</b> TRAFFIC DESIGN	MOHAMMED OATAMI	DAVID BLACK	
		FAWZI YAGHMOUR	
	CHECKED BY	DESIGNED BY	DATE



**TRAFFIC HANDLING PLAN**  
**(STAGE 2 / PHASE 2)**  
 SCALE: 1" = 50'

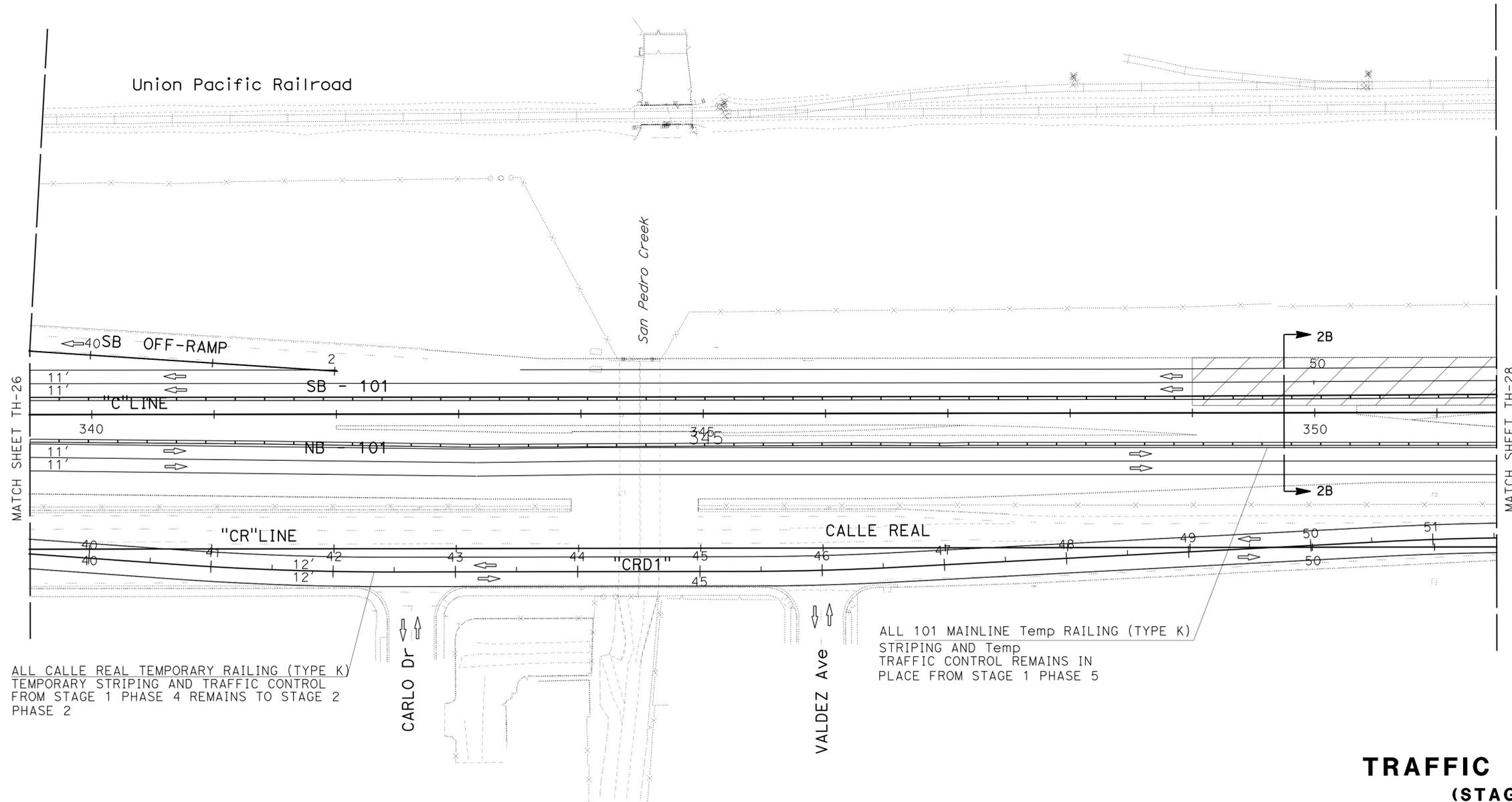
**TH-26**

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LAST REVISION DATE PLOTTED => 03-MAY-2013 01-15-13 TIME PLOTTED => 1:32

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	207	343
			12/04/12		
REGISTERED CIVIL ENGINEER			DATE		
4-29-13			PLANS APPROVAL DATE		
<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>					

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	REVISOR
<b>Caltrans</b> TRAFFIC DESIGN	MOHAMMED OATAMI	CHECKED BY	DAVID BLACK
			FAWZI YAGHMOUR
			DATE
			REVISED



ALL CALLE REAL TEMPORARY RAILING (TYPE K) TEMPORARY STRIPING AND TRAFFIC CONTROL FROM STAGE 1 PHASE 4 REMAINS TO STAGE 2 PHASE 2

ALL 101 MAINLINE Temp RAILING (TYPE K) STRIPING AND Temp TRAFFIC CONTROL REMAINS IN PLACE FROM STAGE 1 PHASE 5

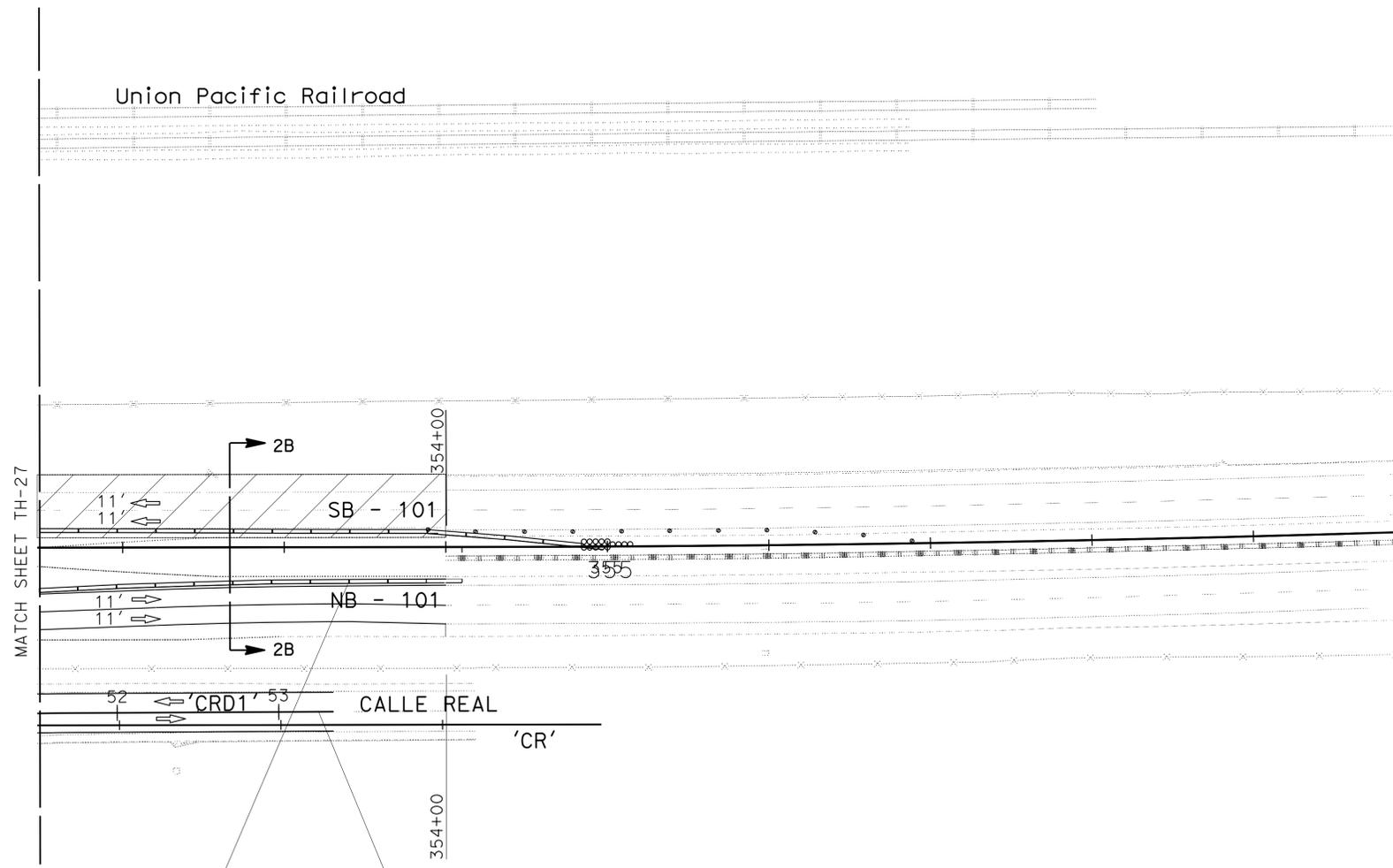
**TRAFFIC HANDLING PLAN**  
**(STAGE 2/PHASE 2)**  
 SCALE: 1" = 50'  
**TH-27**

APPROVED FOR TRAFFIC HANDLING WORK ONLY

LAST REVISION DATE PLOTTED => 03-MAY-2013 01-15-13 TIME PLOTTED => 1:3:32

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	208	343
			12/04/12		
REGISTERED CIVIL ENGINEER			DATE		
4-29-13			PLANS APPROVAL DATE		
<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>					

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	REVISOR
<b>Caltrans</b> TRAFFIC DESIGN	MOHAMMED QATAMI	DAVID BLACK FAWZI YAGHMOUR	DAVID BLACK FAWZI YAGHMOUR



ALL 101 MAINLINE Temp RAILING (TYPE K) STRIPING AND Temp TRAFFIC CONTROL REMAINS IN PLACE FROM STAGE 1 PHASE 5

ALL CALLE REAL TEMPORARY RAILING (TYPE K) TEMPORARY STRIPING AND TRAFFIC CONTROL FROM STAGE 1 PHASE 4 REMAINS TO STAGE 2 PHASE 2

**TRAFFIC HANDLING PLAN**  
**(STAGE 2/PHASE 2)**  
SCALE: 1" = 50'  
**TH-28**

APPROVED FOR TRAFFIC HANDLING WORK ONLY

LAST REVISION: 01-15-13 DATE PLOTTED => 03-MAY-2013 TIME PLOTTED => 1:31:32

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	209	343

12/04/12  
 REGISTERED CIVIL ENGINEER DATE  
 4-29-13  
 PLANS APPROVAL DATE

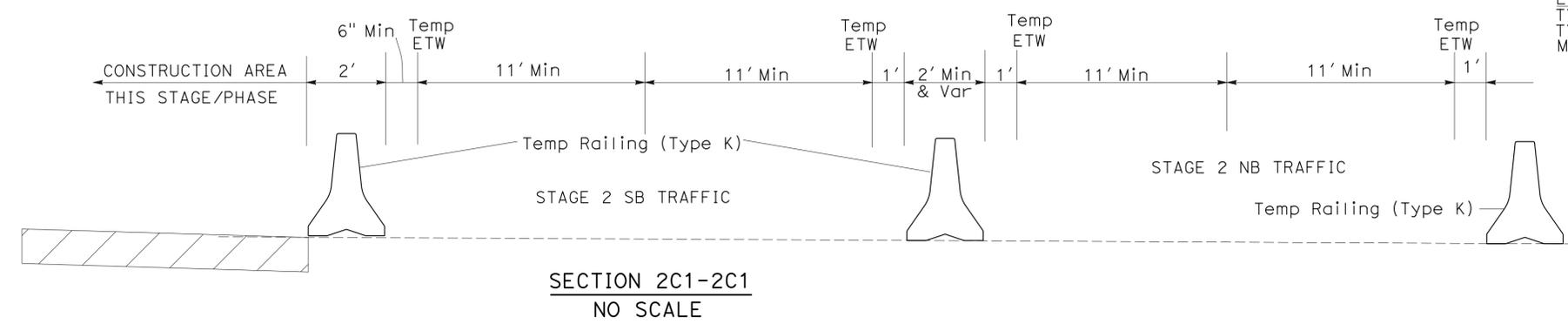
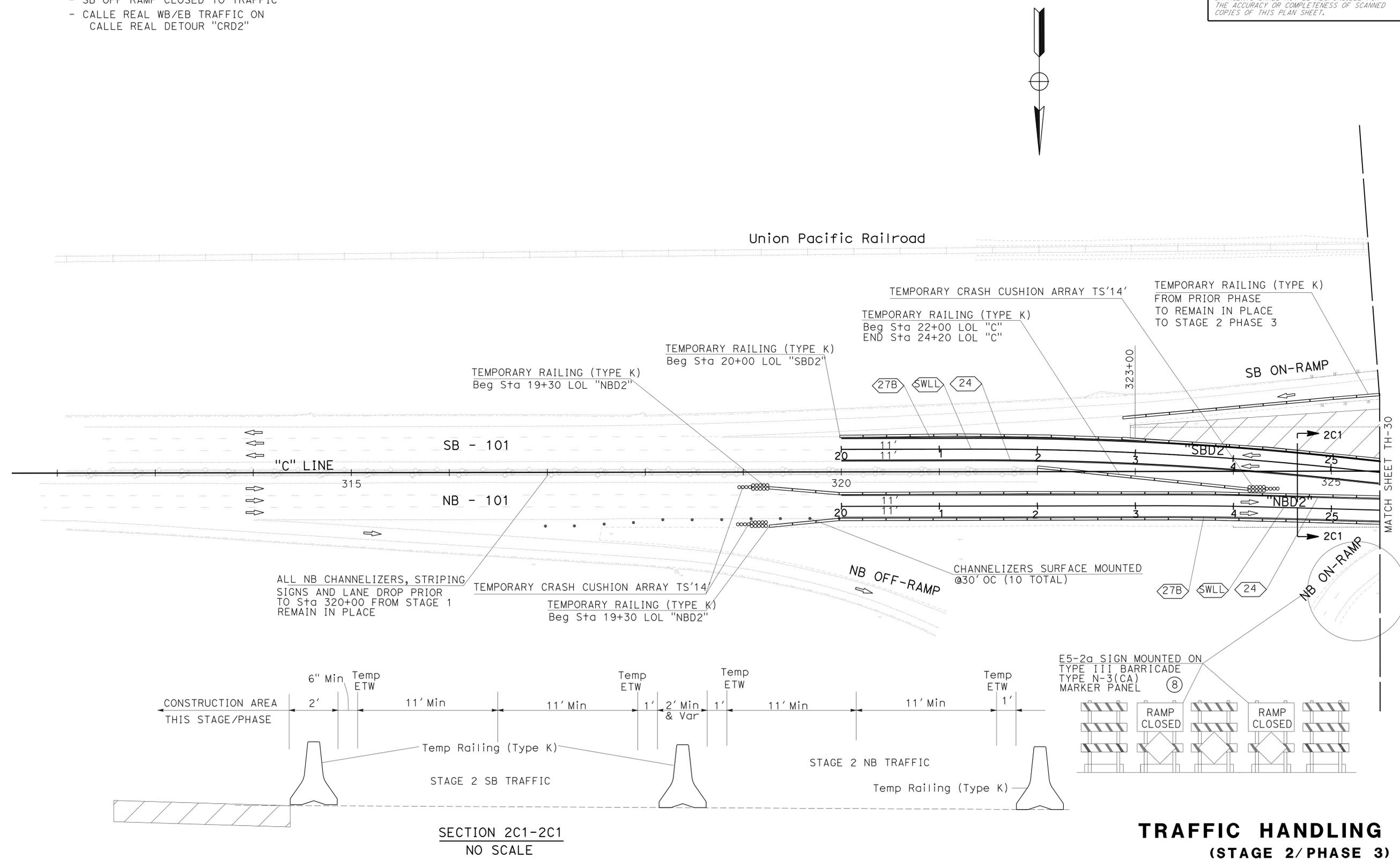
FAWZI YAGHMOUR  
 No. C-54750  
 Exp. 12/31/13  
 CIVIL

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- TRAFFIC NOTES FOR STAGE 2 PHASE 3**
- SB TRAFFIC ON SB DETOUR "SBD2"
  - NB TRAFFIC ON NB DETOUR "NBD2"
  - NB ON RAMP CLOSED TO TRAFFIC
  - SB OFF RAMP CLOSED TO TRAFFIC
  - CALLE REAL WB/EB TRAFFIC ON CALLE REAL DETOUR "CRD2"

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

REVISOR	DATE	REVISION
DAVID BLACK		
FAWZI YAGHMOUR		
CALCULATED/DESIGNED BY	CHECKED BY	
MOHAMMED OATAMI		
FUNCTIONAL SUPERVISOR		



**TRAFFIC HANDLING PLAN**  
**(STAGE 2/PHASE 3)**  
 SCALE: 1" = 50'  
**TH-29**

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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	210	343

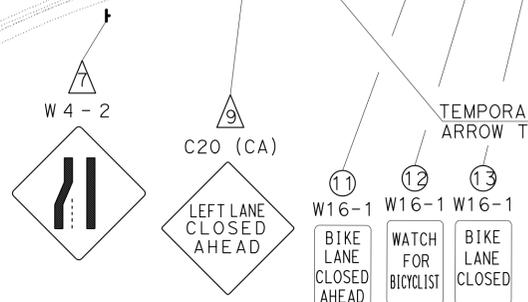
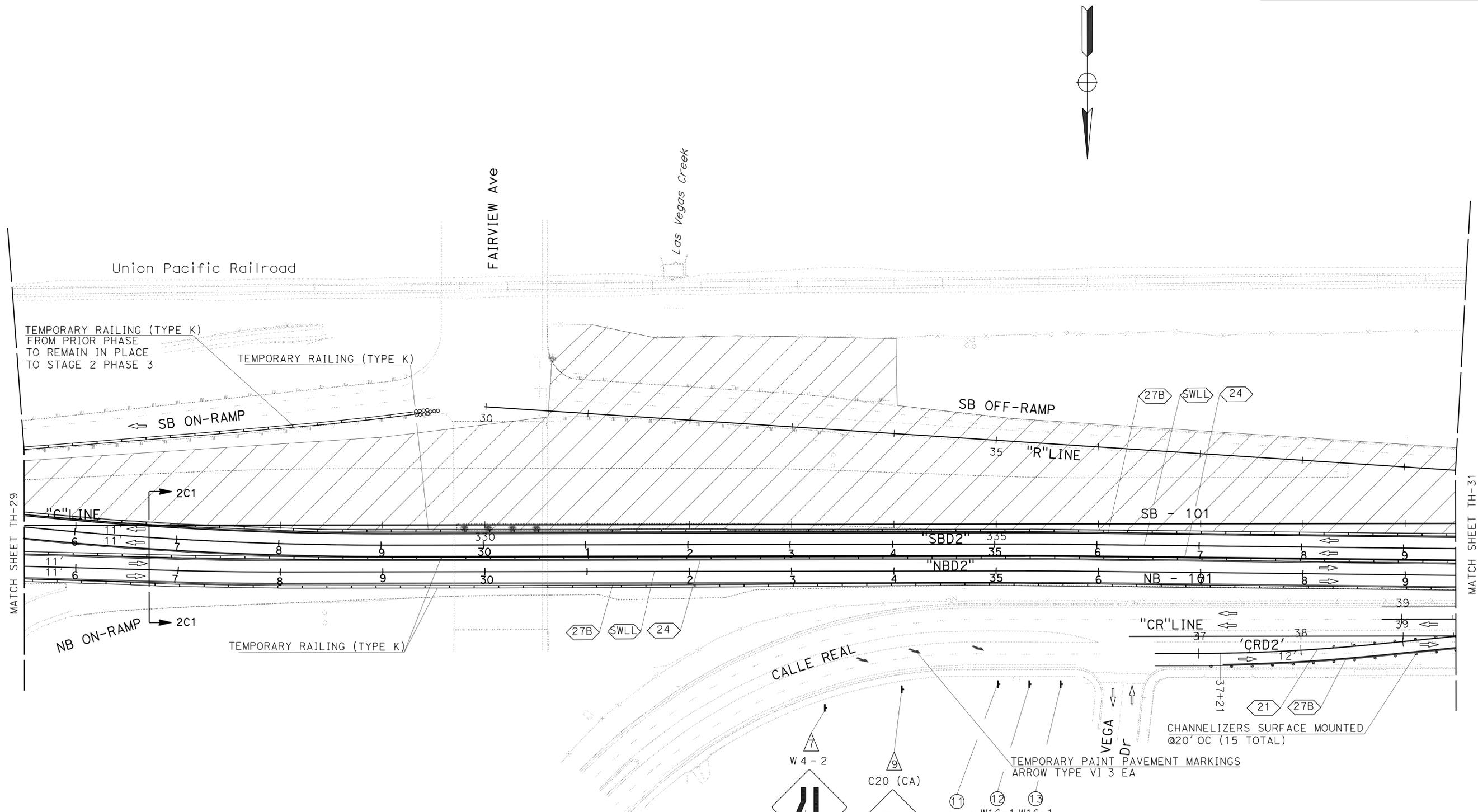
12/04/12  
REGISTERED CIVIL ENGINEER DATE

4-29-13  
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER  
**FAWZI YAGHMOUR**  
 No. C-54750  
 Exp. 12/31/13  
 CIVIL  
 STATE OF CALIFORNIA

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** TRAFFIC DESIGN  
 FUNCTIONAL SUPERVISOR: MOHAMMED OATAMI  
 REVISIONS: REVISOR, DATE, REVISION  
 DAVID BLACK, 12/04/12, 1  
 FAWZI YAGHMOUR, 4-29-13, 2  
 CHECKED BY: FAWZI YAGHMOUR  
 CALCULATED/DESIGNED BY: FAWZI YAGHMOUR  
 REVISOR: DAVID BLACK  
 DATE: 12/04/12



**TRAFFIC HANDLING PLAN**  
(STAGE 2/PHASE 3)  
SCALE: 1" = 50'  
**TH-30**

APPROVED FOR TRAFFIC HANDLING WORK ONLY

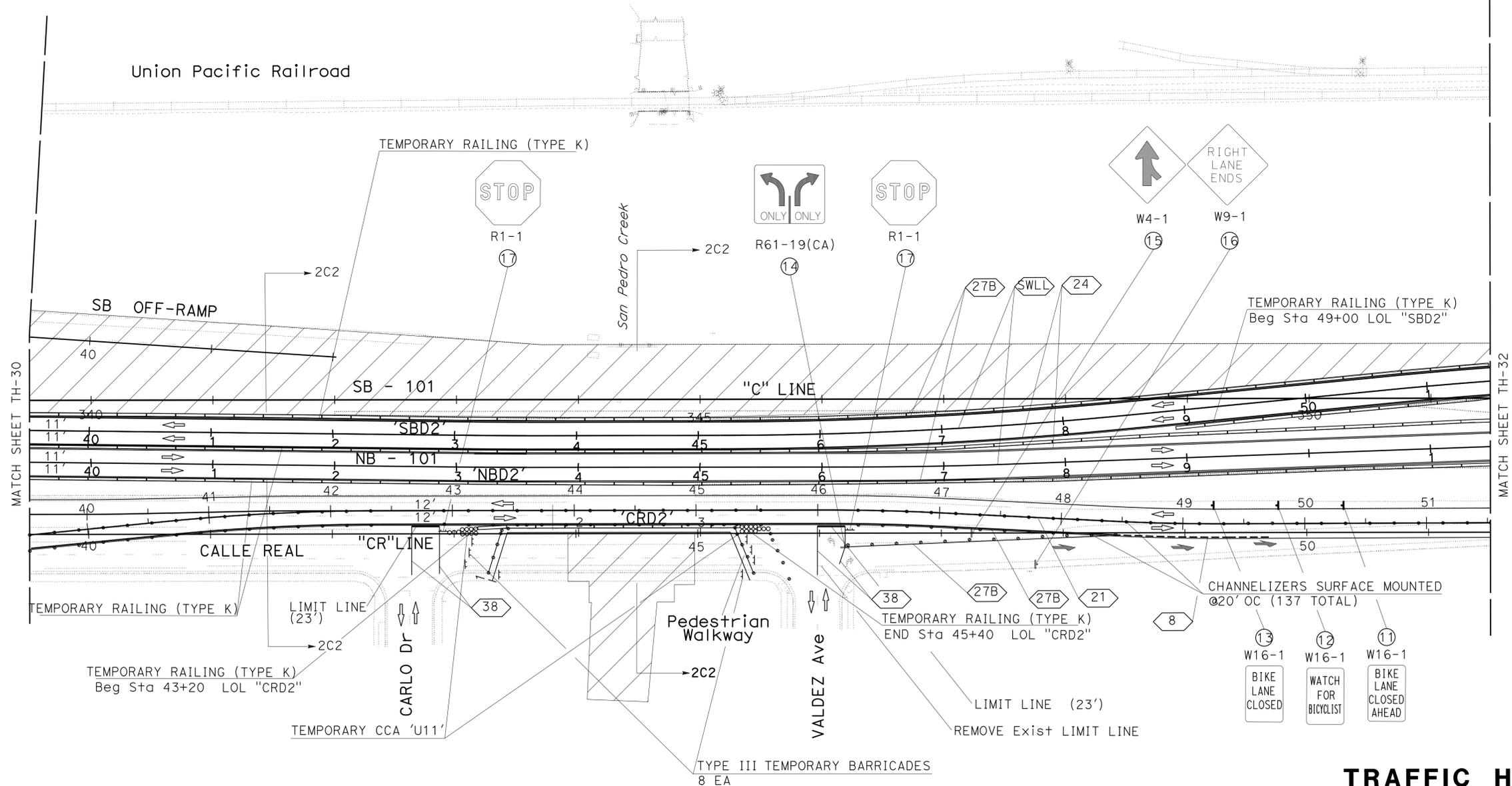
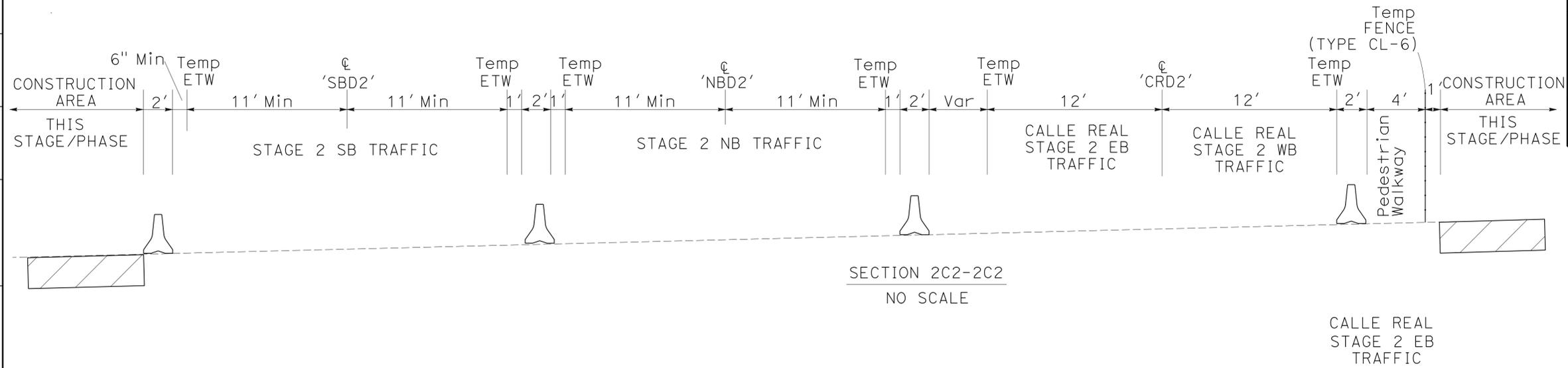
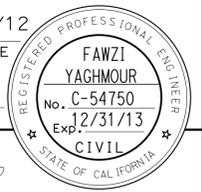
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	211	343

REGISTERED CIVIL ENGINEER	DATE
12/04/12	
4-29-13	PLANS APPROVAL DATE

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**TRAFFIC HANDLING PLAN**  
**(STAGE 2/PHASE 3)**  
 SCALE: 1" = 50'  
**TH-31**

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 FUNCTIONAL SUPERVISOR: MOHAMMED OATAMI  
 CALCULATED/DESIGNED BY: DAVID BLACK  
 CHECKED BY: FAWZI YAGHMOUR  
 REVISED BY: DATE REVISION

USERNAME => s124496  
 DGN FILE => 0500000055md031.dgn

RELATIVE BORDER SCALE 15" IN INCHES

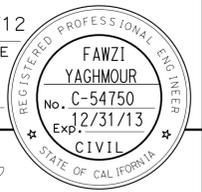
UNIT 1512

PROJECT NUMBER & PHASE

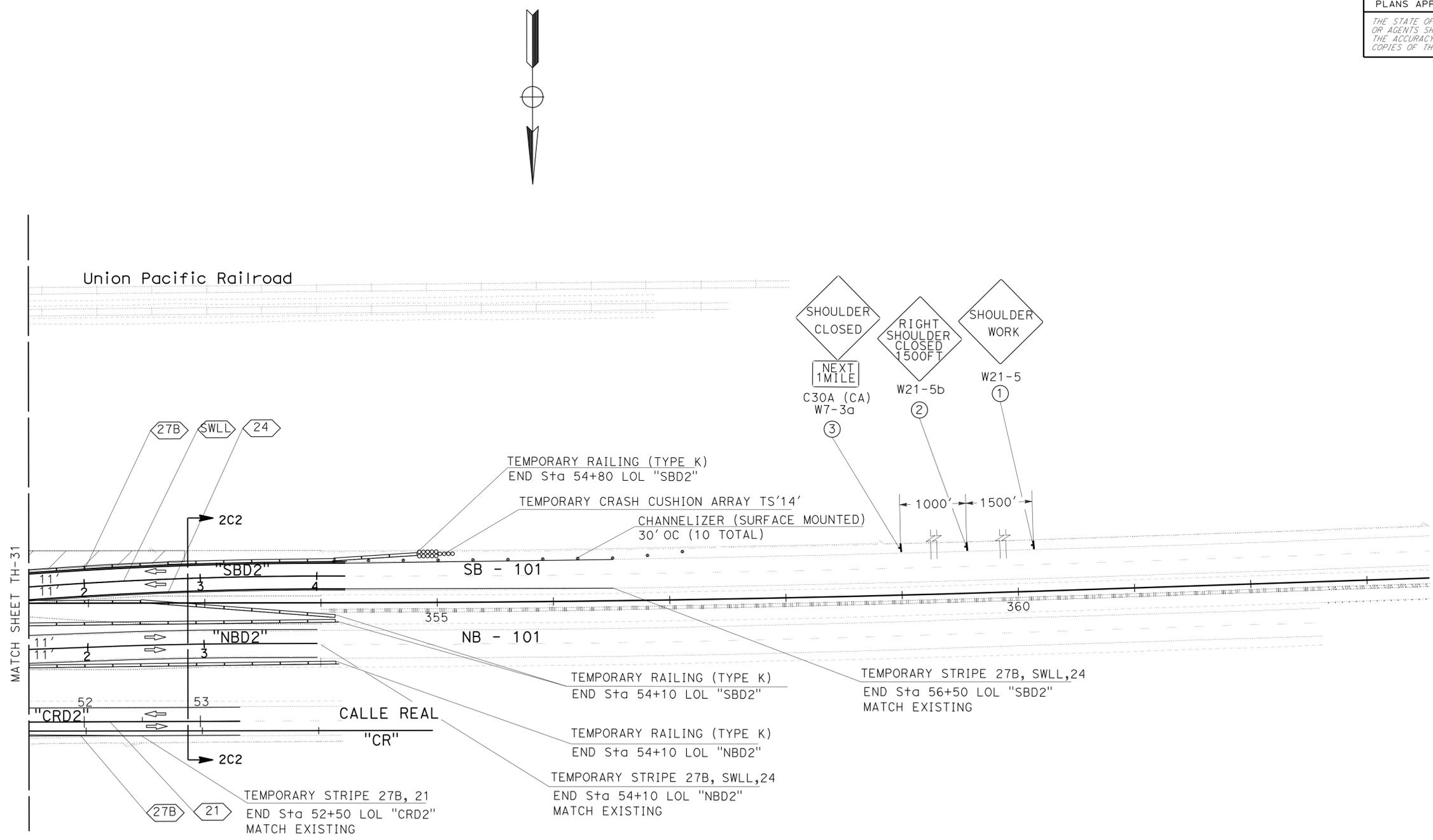
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LAST REVISION: DATE PLOTTED => 03-MAY-2013  
 TIME PLOTTED => 1:31:33

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	212	343
			12/04/12		
REGISTERED CIVIL ENGINEER			DATE		
4-29-13			PLANS APPROVAL DATE		
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<b>Caltrans</b> TRAFFIC DESIGN	MOHAMMED OATAMI	CHECKED BY	DAVID BLACK
			FAWZI YAGHMOUR



**TRAFFIC HANDLING PLAN**  
 (STAGE 2/PHASE 3)  
 SCALE: 1" = 50'  
**TH-32**

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LAST REVISION DATE PLOTTED => 03-MAY-2013 13:33  
 01-15-13 TIME PLOTTED => 13:33

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	213	343

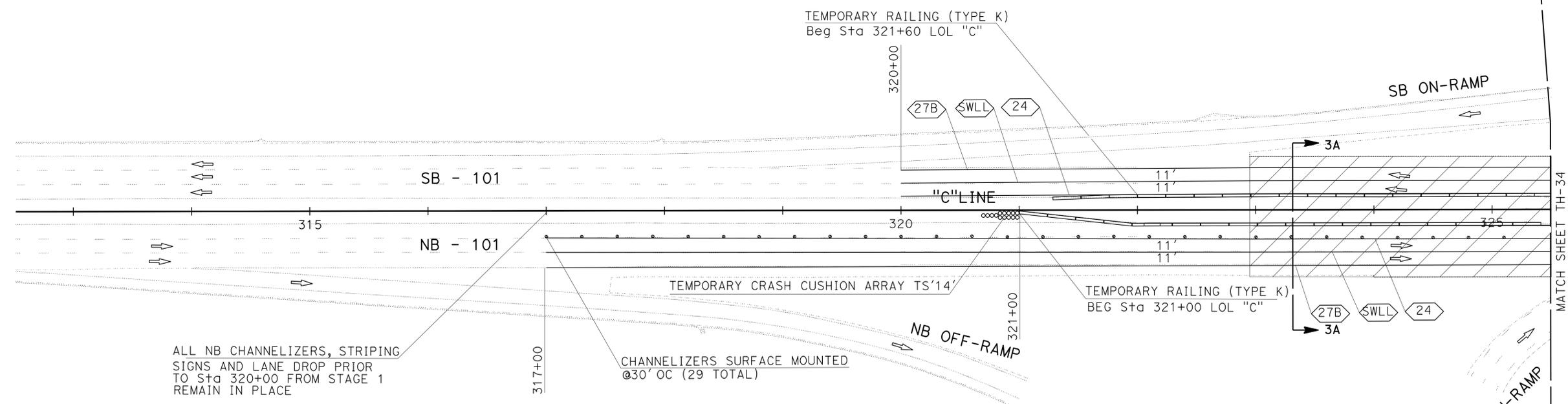
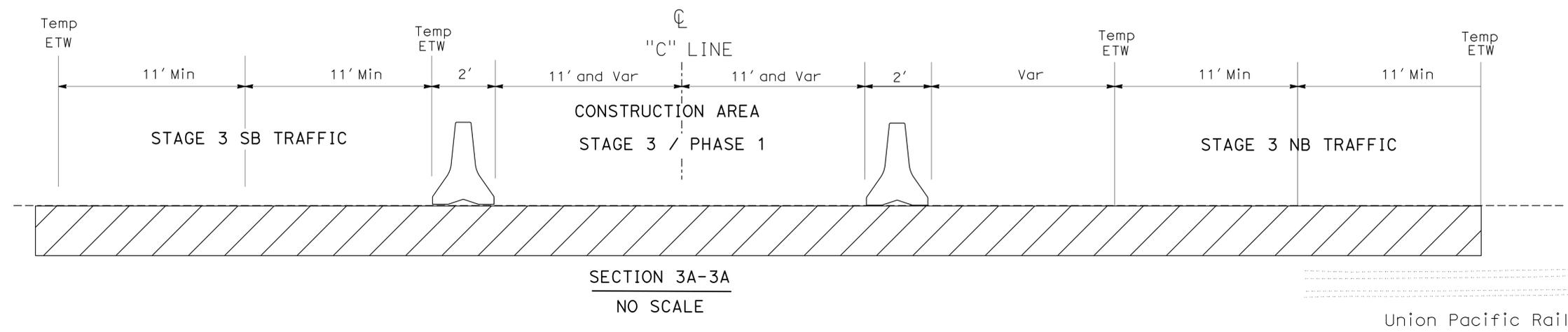
12/04/12  
REGISTERED CIVIL ENGINEER DATE  
4-29-13  
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER  
**FAWZI YAGHMOUR**  
No. C-54750  
Exp. 12/31/13  
CIVIL  
STATE OF CALIFORNIA

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**TRAFFIC NOTES FOR STAGE 3 PHASE 1**

- SB TRAFFIC ON SB LANES
- NB TRAFFIC ON NB LANES
- CALLE REAL TRAFFIC ON CALLE REAL LANES
- NB ON-RAMP OPEN TO TRAFFIC
- SB OFF-RAMP OPEN TO TRAFFIC



ALL NB CHANNELIZERS, STRIPING SIGNS AND LANE DROP PRIOR TO Sta 320+00 FROM STAGE 1 REMAIN IN PLACE

**TRAFFIC HANDLING PLAN**  
(STAGE 3/PHASE 1)  
SCALE: 1" = 50'  
**TH-33**

APPROVED FOR TRAFFIC HANDLING WORK ONLY



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** TRAFFIC DESIGN  
FUNCTIONAL SUPERVISOR: MOHAMMED OATAMI  
CALCULATED/DESIGNED BY: CHECKED BY:  
DAVID BLACK FAWZI YAGHMOUR  
REVISED BY: DATE REVISED:

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	214	343

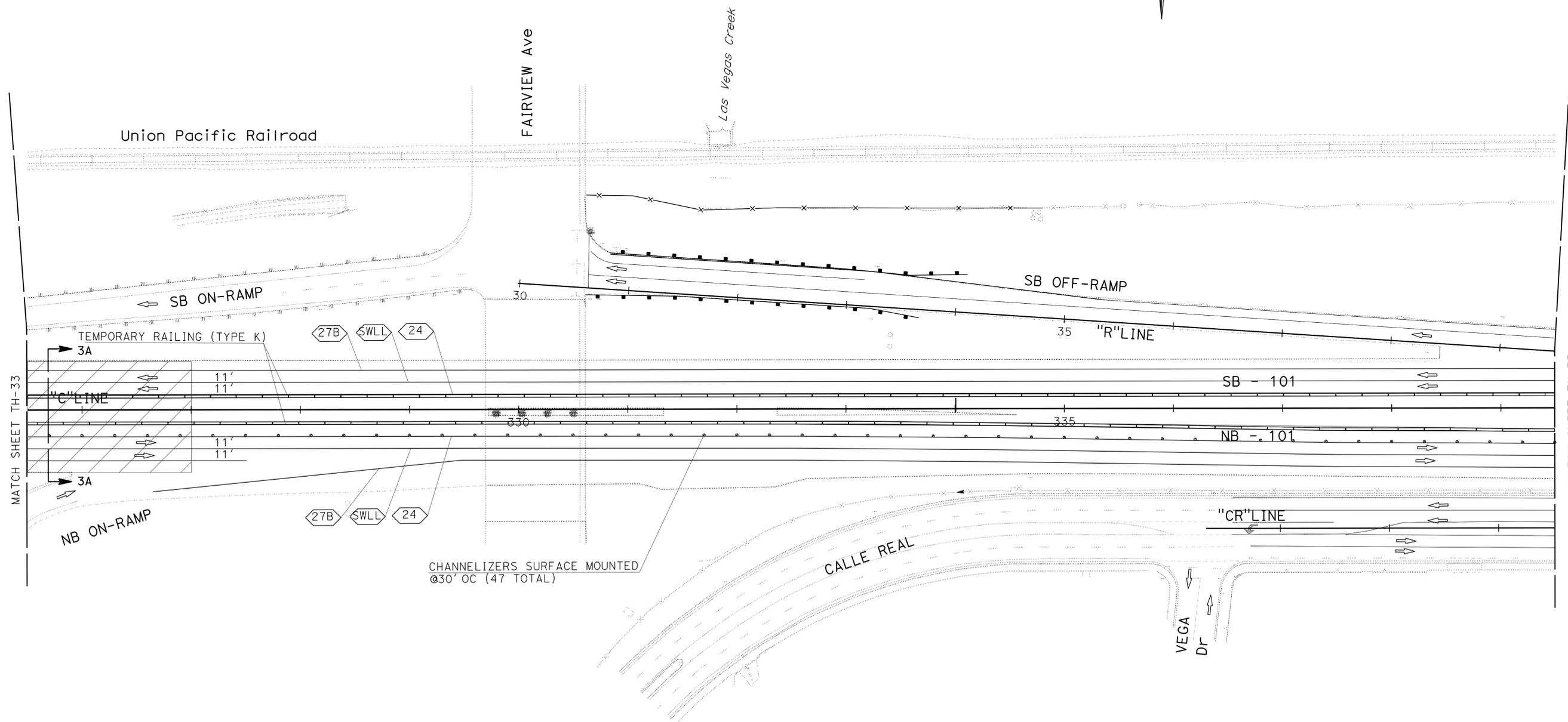
  

<i>[Signature]</i>	12/04/12
REGISTERED CIVIL ENGINEER	DATE
4-29-13	
PLANS APPROVAL DATE	

FAWZI YAGHMOUR No. C-54750 Exp. 12/31/13 CIVIL	
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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	REVISOR	DATE
<b>Caltrans</b> TRAFFIC DESIGN	MOHAMMED OATAMI	DAVID BLACK	
		FAWZI YAGHMOUR	



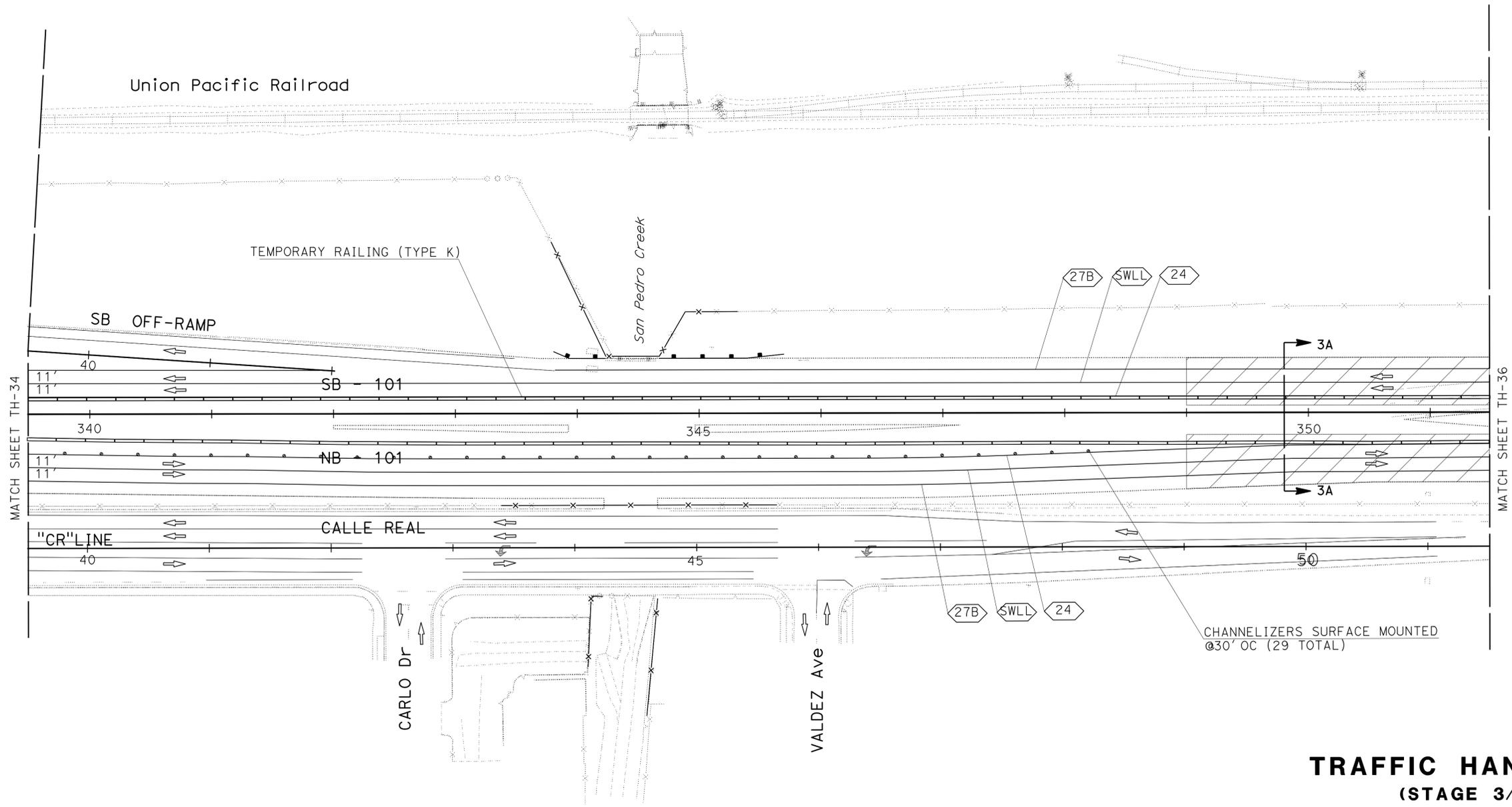
**TRAFFIC HANDLING PLAN**  
 (STAGE 3/PHASE 1)  
 SCALE: 1" = 50'  
**TH-34**

APPROVED FOR TRAFFIC HANDLING WORK ONLY

LAST REVISION DATE PLOTTED => 03-MAY-2013 01-15-13 TIME PLOTTED => 13:33

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	215	343
			12/04/12		
			REGISTERED CIVIL ENGINEER	DATE	
			4-29-13	PLANS APPROVAL DATE	
<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>					

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	REVISOR
<b>Caltrans</b> TRAFFIC DESIGN	MOHAMMED OATAMI	DAVID BLACK FAWZI YAGHMOUR	DAVID BLACK FAWZI YAGHMOUR



**TRAFFIC HANDLING PLAN**  
 (STAGE 3/PHASE 1)  
 SCALE: 1" = 50'  
**TH-35**

APPROVED FOR TRAFFIC HANDLING WORK ONLY

USERNAME => s124496  
 DGN FILE => 0500000055md035.dgn



UNIT 1512

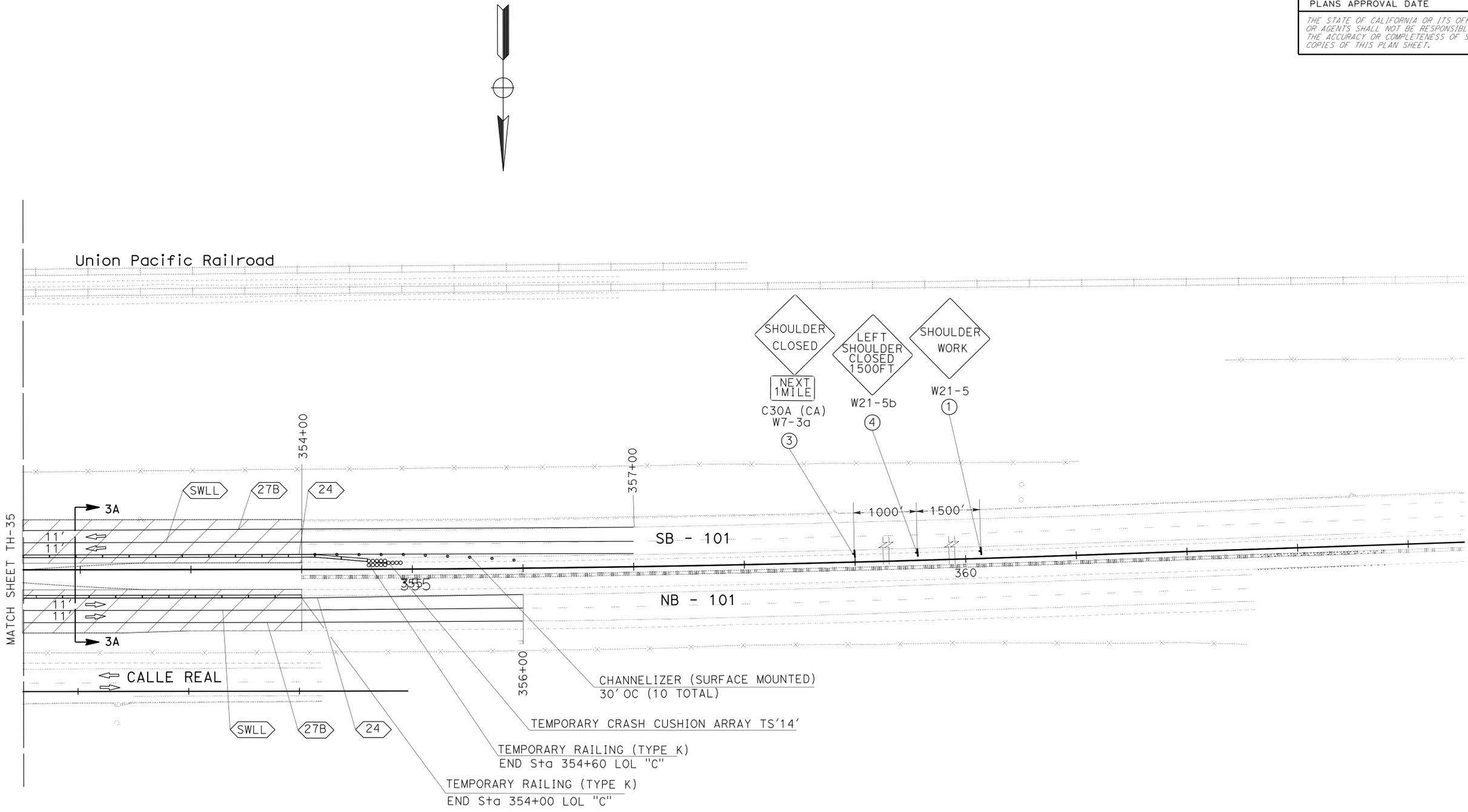
PROJECT NUMBER & PHASE

05000000551

LAST REVISION DATE PLOTTED => 03-MAY-2013  
 01-15-13 TIME PLOTTED => 1:31:33

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	216	343
			12/04/12	REGISTERED CIVIL ENGINEER DATE	
			4-29-13	PLANS APPROVAL DATE	
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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	REVISOR
<b>Caltrans</b> TRAFFIC DESIGN	MOHAMMED OATAMI	CHECKED BY	DAVID BLACK
			FAWZI YAGHMOUR
			DATE
			REVISED
			DATE
			REVISED
			DATE



**TRAFFIC HANDLING PLAN**  
**(STAGE 3/PHASE 1)**  
SCALE: 1" = 50'  
**TH-36**

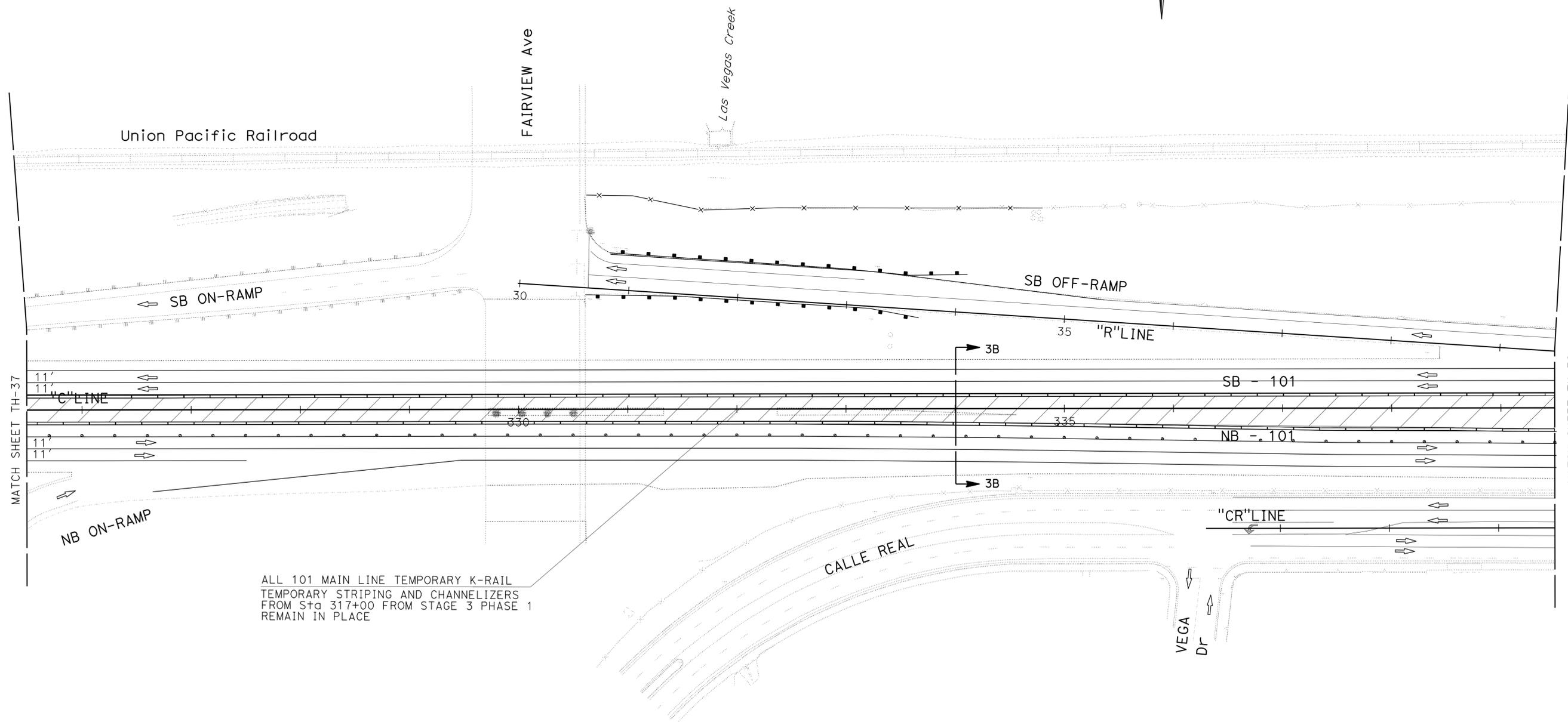
APPROVED FOR TRAFFIC HANDLING WORK ONLY

LAST REVISION DATE PLOTTED => 03-MAY-2013 01-15-13 TIME PLOTTED => 1:31:33



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	218	343
			12/04/12		
REGISTERED CIVIL ENGINEER			DATE		
4-29-13			PLANS APPROVAL DATE		
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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	DESIGNED BY	REVISOR
<b>Caltrans</b> TRAFFIC DESIGN	MOHAMMED OATAMI	DAVID BLACK	DAVID BLACK
		CHECKED BY	DATE
		FAWZI YAGHMOUR	



ALL 101 MAIN LINE TEMPORARY K-RAIL TEMPORARY STRIPING AND CHANNELIZERS FROM Sta 317+00 FROM STAGE 3 PHASE 1 REMAIN IN PLACE

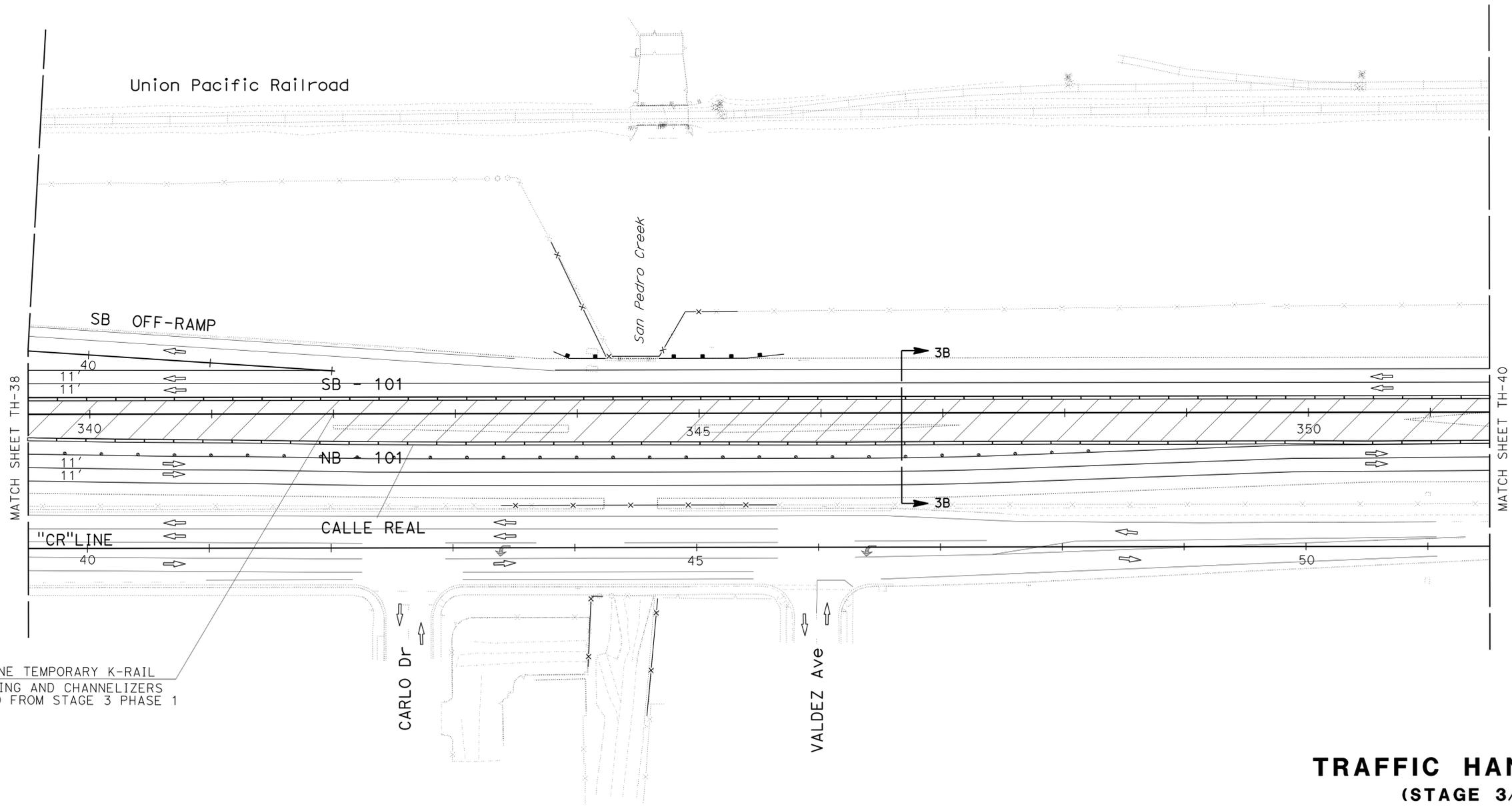
**TRAFFIC HANDLING PLAN**  
**(STAGE 3/PHASE 2)**  
 SCALE: 1" = 50'  
**TH-38**

APPROVED FOR TRAFFIC HANDLING WORK ONLY

LAST REVISION DATE PLOTTED => 03-MAY-2013 01-15-13 TIME PLOTTED => 1:31:33

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	219	343
			12/04/12		
REGISTERED CIVIL ENGINEER			DATE		
4-29-13			PLANS APPROVAL DATE		
<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>					

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	REVISOR
<b>Caltrans</b> TRAFFIC DESIGN	MOHAMMED OATAMI	DAVID BLACK FAWZI YAGHMOUR	DAVID BLACK FAWZI YAGHMOUR



ALL 101 MAIN LINE TEMPORARY K-RAIL  
TEMPORARY STRIPING AND CHANNELIZERS  
FROM Sta 317+00 FROM STAGE 3 PHASE 1  
REMAIN IN PLACE

**TRAFFIC HANDLING PLAN**  
**(STAGE 3/PHASE 2)**  
SCALE: 1" = 50'  
**TH-39**

APPROVED FOR TRAFFIC HANDLING WORK ONLY

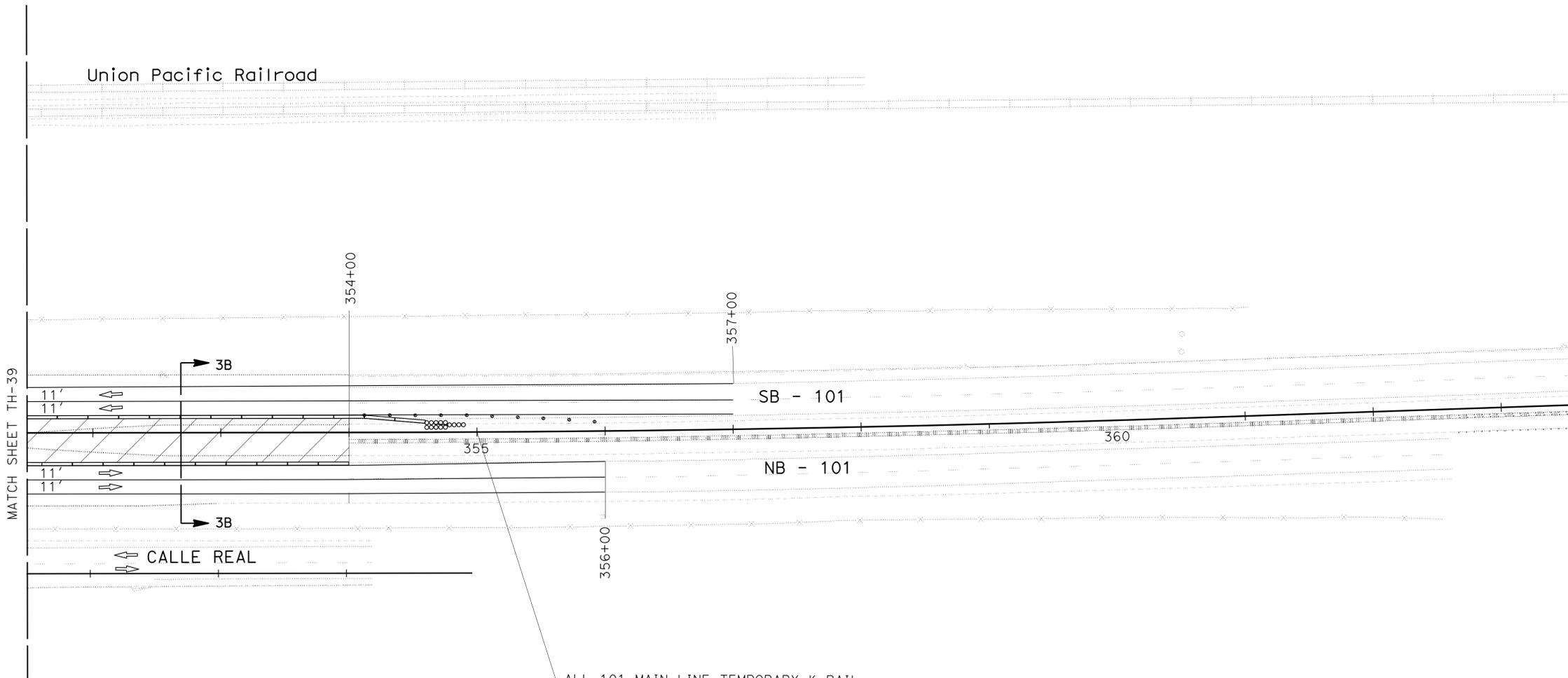
LAST REVISION DATE PLOTTED => 03-MAY-2013 01-15-13 TIME PLOTTED => 1:31:33

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	220	343

12/04/12  
 REGISTERED CIVIL ENGINEER DATE  
 4-29-13  
 PLANS APPROVAL DATE

FAWZI  
 YAGHMOUR  
 No. C-54750  
 Exp. 12/31/13  
 CIVIL  
 STATE OF CALIFORNIA

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



ALL 101 MAIN LINE TEMPORARY K-RAIL  
 TEMPORARY STRIPING AND CHANNELIZERS  
 FROM Sta 317+00 FROM STAGE 3 PHASE 1  
 REMAIN IN PLACE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	REVISOR	DATE
<b>Caltrans</b> TRAFFIC DESIGN	MOHAMMED QATAMI	DAVID BLACK	
		FAWZI YAGHMOUR	

APPROVED FOR TRAFFIC HANDLING WORK ONLY

**TRAFFIC HANDLING PLAN**  
 (STAGE 3/PHASE 2)  
 SCALE: 1" = 50'  
**TH-40**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	221	343

12/04/12  
REGISTERED CIVIL ENGINEER DATE  
4-29-13  
PLANS APPROVAL DATE

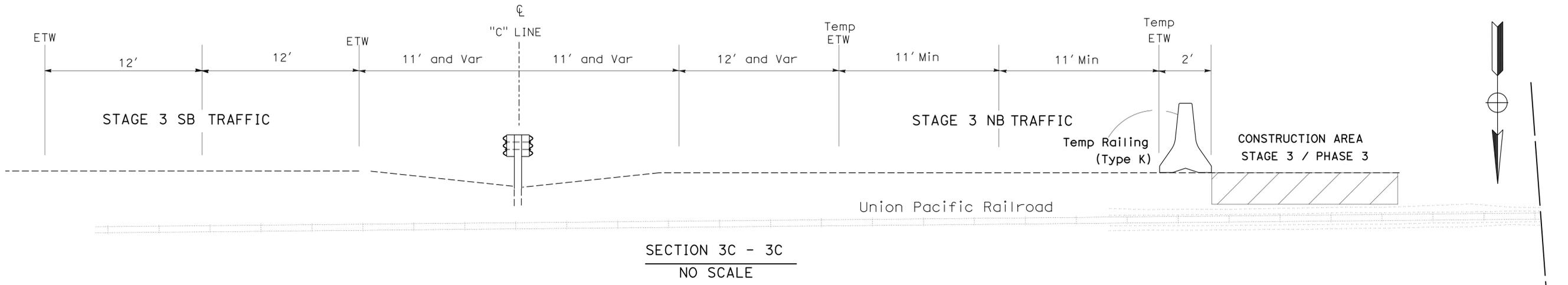
FAWZI YAGHMOUR  
No. C-54750  
Exp. 12/31/13  
CIVIL

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.

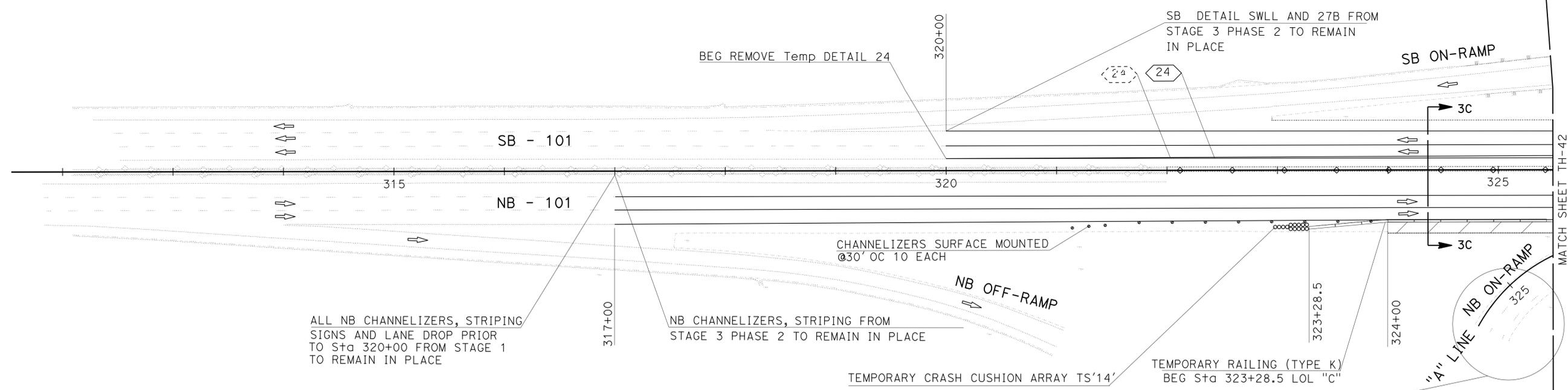
**TRAFFIC NOTES FOR STAGE 3 PHASE 3**

- SB TRAFFIC ON SB LANES
- NB TRAFFIC ON NB LANES
- WB CALLE REAL TRAFFIC ON CALLE REAL LANES
- EB CALLE REAL REDUCED TO ONE LANE OF TRAFFIC
- NB ON-RAMP CLOSED TO TRAFFIC

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** TRAFFIC DESIGN  
FUNCTIONAL SUPERVISOR: MOHAMMED OATAMI  
CALCULATED/DESIGNED BY: CHECKED BY:  
DAVID BLACK FAWZI YAGHMOUR  
REVISED BY: DATE REVISED:



SECTION 3C - 3C  
NO SCALE

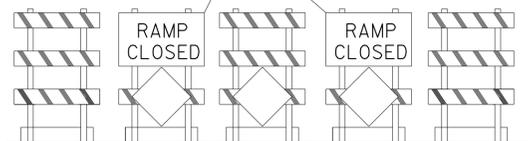


ALL NB CHANNELIZERS, STRIPING SIGNS AND LANE DROP PRIOR TO Sta 320+00 FROM STAGE 1 TO REMAIN IN PLACE

NB CHANNELIZERS, STRIPING FROM STAGE 3 PHASE 2 TO REMAIN IN PLACE

CHANNELIZERS SURFACE MOUNTED @30' OC 10 EACH

E5-2a SIGN MOUNTED ON TYPE III BARRICADE TYPE N-3(CA) MARKER PANEL



**TRAFFIC HANDLING PLAN**  
(Stage 3/Phase 3)

SCALE: 1" = 50'

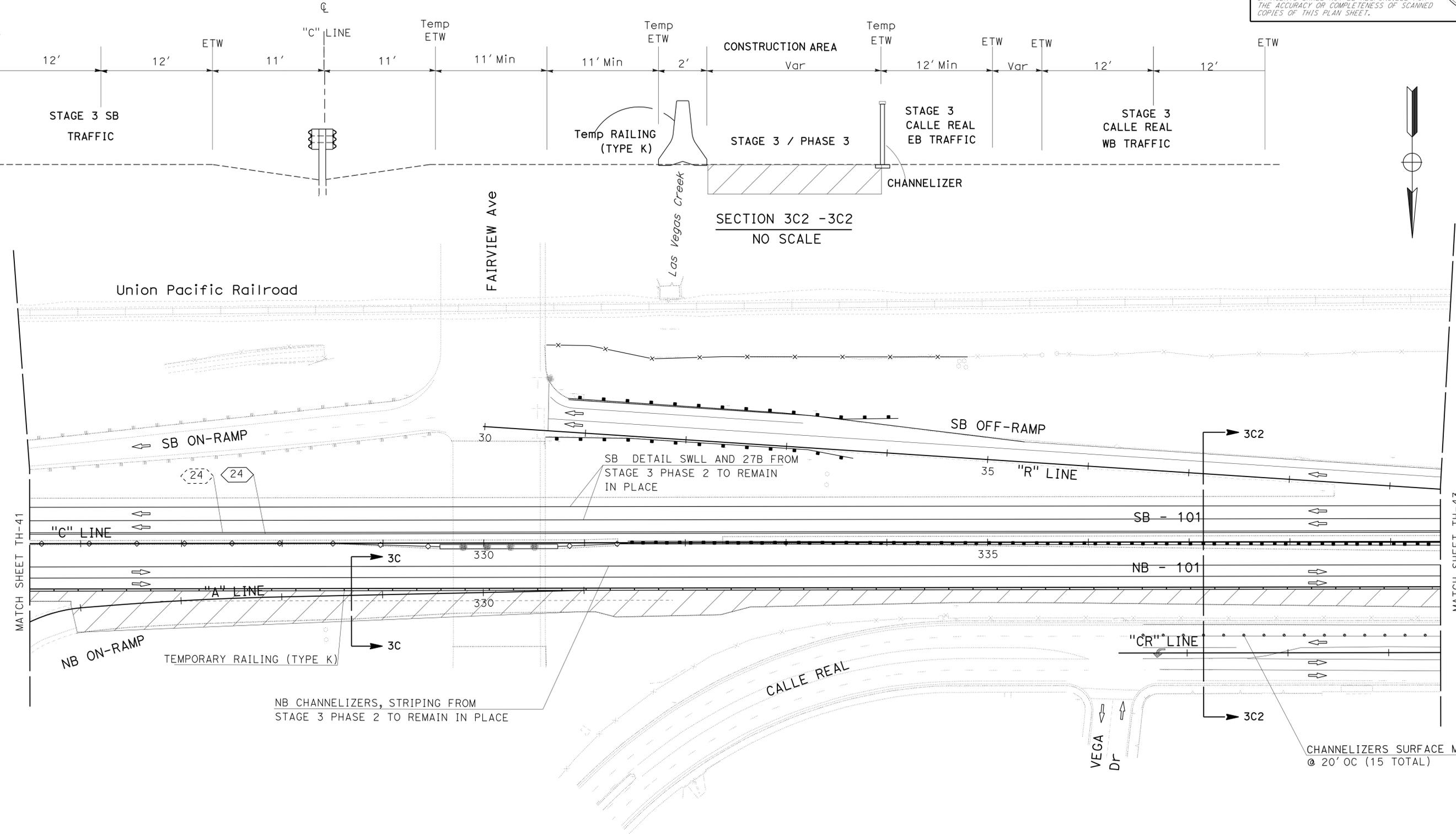
**TH-41**

APPROVED FOR TRAFFIC HANDLING WORK ONLY

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	222	343
			12/04/12		
REGISTERED CIVIL ENGINEER			DATE		
4-29-13			PLANS APPROVAL DATE		
<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>					

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

FUNCTIONAL SUPERVISOR: MOHAMMED OATAMI  
 CHECKED BY: [Blank]  
 DESIGNED BY: [Blank]  
 REVISIONS: [Blank]  
 REVISOR: DAVID BLACK  
 DATE: [Blank]  
 DESIGNER: FAWZI YAGHMOUR



SECTION 3C2 -3C2  
 NO SCALE

**TRAFFIC HANDLING PLAN**  
 (STAGE 3/PHASE 3)  
 SCALE: 1" = 50'  
**TH-42**

APPROVED FOR TRAFFIC HANDLING WORK ONLY

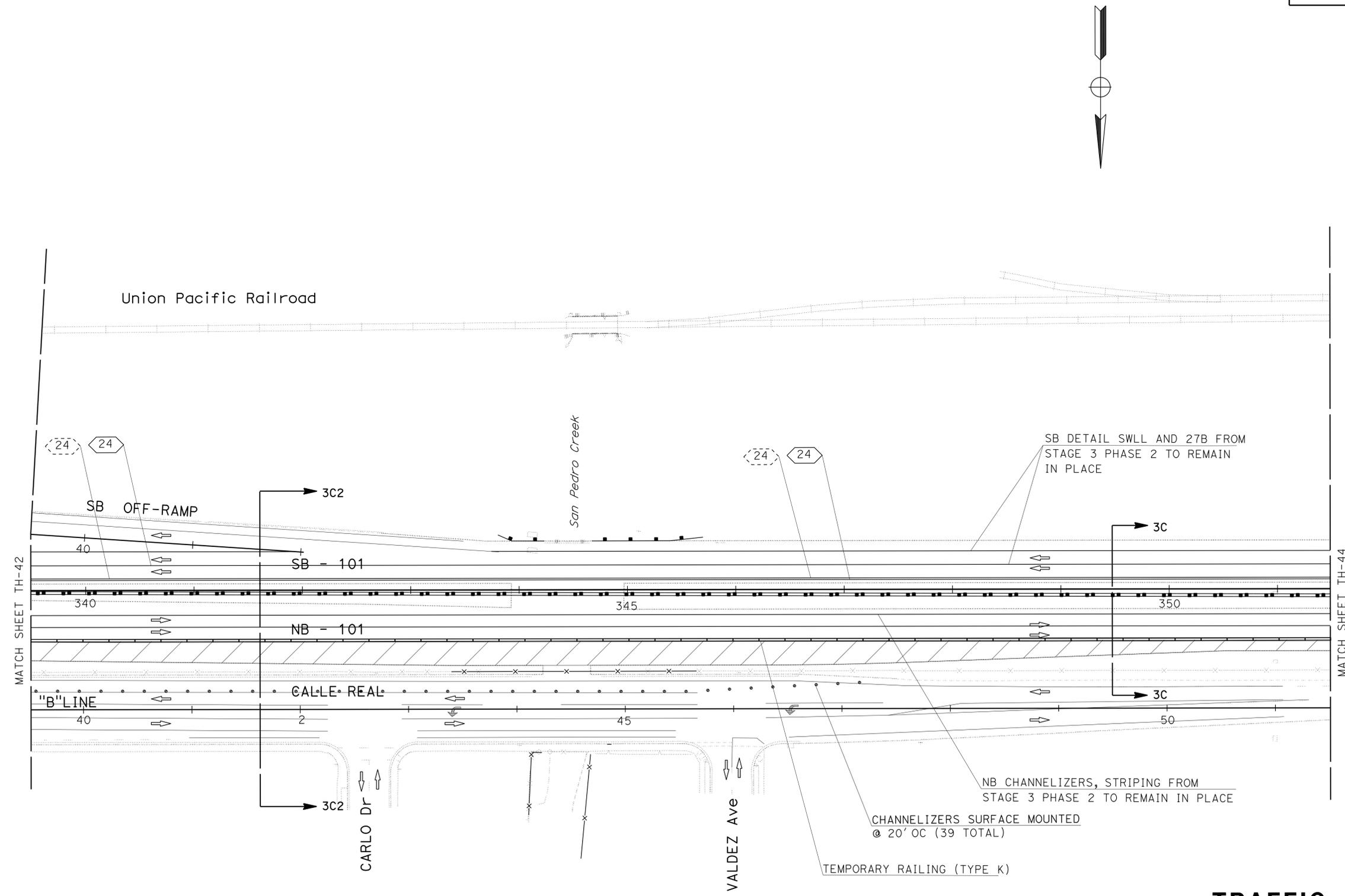
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	223	343

12/04/12  
 REGISTERED CIVIL ENGINEER DATE  
 4-29-13  
 PLANS APPROVAL DATE

FAWZI YAGHMOUR  
 No. C-54750  
 Exp. 12/31/11  
 CIVIL

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.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	REVISOR
<b>Caltrans</b> TRAFFIC DESIGN	MOHAMMED OATAMI	CHECKED BY	DAVID BLACK
			FAWZI YAGHMOUR
			DATE
			REVISOR
			DATE



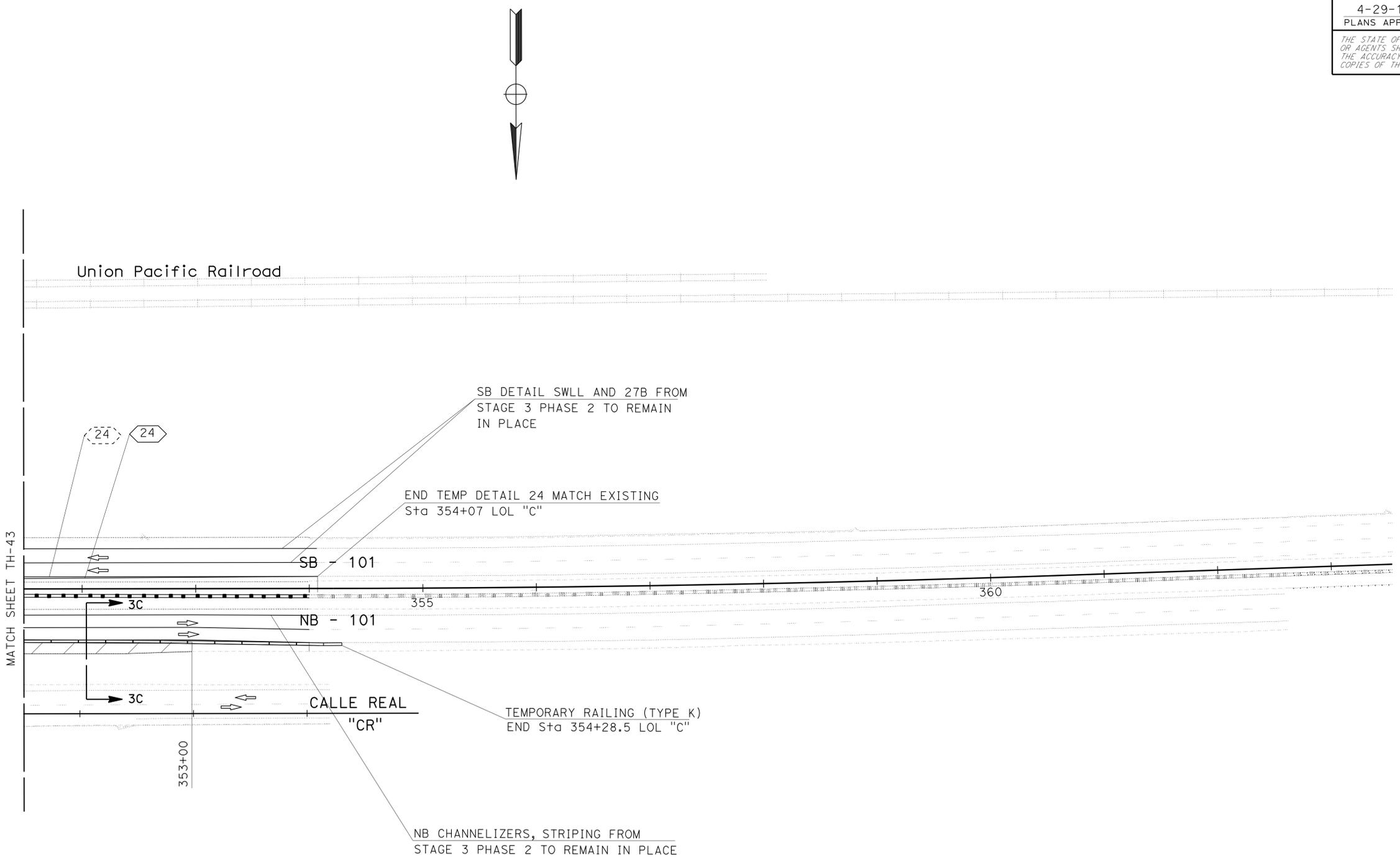
**TRAFFIC HANDLING PLAN**  
**(STAGE 3/PHASE 3)**  
 SCALE: 1" = 50'  
**TH-43**

APPROVED FOR TRAFFIC HANDLING WORK ONLY

LAST REVISION DATE PLOTTED => 03-MAY-2013  
 01-15-13 TIME PLOTTED => 14:07

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	224	343
			12/04/12		
REGISTERED CIVIL ENGINEER			DATE		
4-29-13			PLANS APPROVAL DATE		
<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>					

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	REVISOR
<b>Caltrans</b> TRAFFIC DESIGN	MOHAMMED OATAMI	DAVID BLACK FAWZI YAGHMOUR	DAVID BLACK FAWZI YAGHMOUR



**TRAFFIC HANDLING PLAN**  
**(STAGE 3/PHASE 3)**  
 SCALE: 1" = 50'  
**TH-44**

APPROVED FOR TRAFFIC HANDLING WORK ONLY

LAST REVISION DATE PLOTTED => 03-MAY-2013 01-15-13 TIME PLOTTED => 14:07

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	225	343

12/04/12  
REGISTERED CIVIL ENGINEER DATE

4-29-13  
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER  
**FAWZI YAGHMOUR**  
 No. C-54750  
 Exp. 12/31/13  
 CIVIL  
 STATE OF CALIFORNIA

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

### STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

SIGN No. ⊗	SIGN CODE		PANEL SIZE	SIGN MESSAGE	NUMBER OF POSTS AND SIZE	No. OF SIGNS
	FEDERAL	CALIFORNIA				
①	W20-5		48"x48"	SHOULDER WORK	1-4"x6"	8
②	W21-5b		48"x48"	RIGHT SHOULDER CLOSED 1500FT	1-4"x6"	3
③		C30A (CA)	48"x48"	SHOULDER CLOSED	1-6"x6"	8
	W7-3a		32"x18"	NEXT 1/2 MILE		
④	W21-5b		48"x48"	LEFT SHOULDER CLOSED 1500FT	1-4"x6"	3
⑤	W21-5b		48"x48"	NO SHOULDERS 1500FT	1-4"x6"	1
⑥	W9-1		48"x48"	LEFT LANE ENDS	1-4"x6"	1
⑦	W4-2		48"x48"	LANE REDUCTION AHEAD LEFT	1-4"x6"	3
⑧	E5-2a		48"x36"	RAMP CLOSED	BARRICADE MOUNTED	6
			24"x24"			9
⑨		TYPE N-3(CA) C20 (CA)	48"x48"	LEFT LANE CLOSED AHEAD	1-4"x6"	2
⑩	W21-5b		48"x48"	RIGHT SHOULDER CLOSED 700FT	1-4"x6"	1
⑪	W16-1		24"x30"	BIKE LANE CLOSED AHEAD	1-4"x4"	4
⑫	W16-1		24"x30"	WATCH FOR BICYCLIST	1-4"x4"	4
⑬	W16-1		24"x30"	BIKE LANE CLOSED	1-4"x4"	4
⑭		R61-19 (CA)	24"x30"	LEFT-RIGHT ONLY TURN SIGN	1-4"x4"	1
⑮	W4-1		36"x36"	LANE MERGE	1-4"x4"	1
⑯	W9-1		36"x36"	RIGHT LANE ENDS	1-4"x4"	1
⑰	R1-1		36"x36"	STOP	BARRICADE MOUNTED	2

### TEMPORARY RAILING (TYPE K)

LOCATION	SHEET	ROUTE	DIRECTION	STAGE	PHASE	TEMPORARY RAILING (TYPE K)
						LF
LOL "C" STA 322+80 to 329+40	TH-1, TH-2	ONRAMP	SB	1	1	660
LOL "C" STA 322+48 to 339+08	TH-1, TH-2	101	SB	1	1	1660
LOL "C" STA 343+00 TO 354+80	TH-3, TH-4	101	SB	1	1	1180
LOL "C" STA 322+00 TO 354+60	TH-5 TO TH-8	101	SB	1	2	3260
LOL "C" STA 321+32 TO 354+12	TH-5 TO TH-8	101	NB	1	2	3280
LOL "C" STA 329+70 TO 331+90	TH-10	101	SB	1	3	220
LOL "NBD1" STA 19+30 TO 54+30	TH-13 TO TH-16	101	NB	1	4	3500
LOL "NBD1" STA 19+60 TO 54+20	TH-13 TO TH-16	101	NB	1	4	3460
LOL "CRD1" STA 41+54 TO 47+34	TH-15	LOCAL	LOCAL	1	4	580
LOL "SBD1" STA 43+67.5 TO 50+67.5	TH-15	101	SB	1	4	700
LOL "C" STA 320+00 TO 354+80	TH-17 TO TH-20	101	SB	1	5	3480
LOL "C" STA 319+30 TO 354+10	TH-17 TO TH-20	101	NB	1	5	3480
LOL "CRD1" STA 43+37 TO 45+77	TH-15	LOCAL	LOCAL	1	5	240
LOL "SBD2" STA 22+00 TO 24+20	TH-29	101	SB	2	3	220
LOL "SBD2" STA 20+00 TO 54+80	TH-29 TO TH-32	101	SB	2	3	3480
LOL "NBD2" STA 19+30 TO 54+10	TH-29 TO TH-32	101	NB	2	3	3480
LOL "NBD2" STA 19+30 TO 54+10	TH-29 TO TH-32	101	NB	2	3	3480
LOL "CRD2" STA 43+20 TO 45+40	TH-31	LOCAL	LOCAL	2	3	220
LOL "SBD2" STA 49+00 TO 54+20	TH-31, TH-32	101	SB	2	3	520
LOL "C" STA 321+60 TO 354+60	TH-33 TO TH-36	101	SB	3	1	3300
LOL "C" STA 321+00 TO 354+00	TH-33 TO TH-36	101	NB	3	1	3300
LOL "C" STA 323+28.5 TO 354+28.5	TH-41 TO TH-44	101	NB	3	3	3100
TOTAL						46800

EXACT LOCATION OF TEMPORARY RAILING (TYPE K) TO BE DETERMINED BY THE ENGINEER

### TEMPORARY PAVEMENT MARKING (PAINT)

LOCATION	PAINT PAVEMENT MARKING		
	PLACE		
	LIMIT LINE	TYPE VI ARROW	TYPE IV ARROW
	SQFT		
TH-5		126	
TH-14		126	
TH-30		126	
TH-31	46	126	30
TOTAL		580	

## TRAFFIC HANDLING QUANTITIES THQ-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** TRAFFIC DESIGN  
 FUNCTIONAL SUPERVISOR: MOHAMMED OATAMI  
 CALCULATED/DESIGNED BY: CHECKED BY:  
 DAVID BLACK FAWZI YAGHMOUR  
 REVISED BY: DATE REVISOR:

LAST REVISION | DATE PLOTTED => 03-MAY-2013  
 01-28-13 | TIME PLOTTED => 14:07

REVISOR BY  
 DATE REVISED

DAVID BLACK  
 FAWZI YAGHMOUR

CALCULATED/DESIGNED BY  
 CHECKED BY

FUNCTIONAL SUPERVISOR  
 MOHAMMED QATAMI

### TEMPORARY PAVEMENT DELINEATION

STAGE	PHASE	SHEET	LOL	ROUTE	DIRECTION	DETAIL	TEMPORARY TRAFFIC STRIPE (PAINT)		REMOVE TEMPORARY TRAFFIC STRIPE (PAINT)	REMOVE THERMOPLASTIC TRAFFIC STRIPE	REMOVE PAVEMENT MARKERS	CHANNELIZER (SURFACE MOUNTED)	TEMPORARY CRASH CUSHION MODULE		BARRICADE TYPE III			
							4" WHITE	4" YELLOW					TYPE 'TS14'	TYPE 'TS11'				
							LF						LF	LF		EA	EA	EA
1	1	TH-1	"C"	101	SB	SWLL	360											
			"C"	101	SB	27B	360											
			"C"	101	SB	11/13					90	37						
		TH-2	"C"	101	SB	SWLL	1400											
			"C"	101	SB	27B	1400						5	14	11			
			"C"	101	SB	11/13					350	150						
		TH-3	"C"	101	SB	SWLL	1200											
			"C"	101	SB	27B	988											
			"C"	101	SB	11/13					300	125						
		TH-4	"C"	101	SB	SWLL	524											
			"C"	101	SB	27B	524											
			"C"	101	SB	11/13					131	55						
1	2	TH-5	"C"	101	SB	SWLL	480		480									
			"C"	101	SB	24			480									
			"C"	101	NB	SWLL	688								41	14		
			"C"	101	NB	24				1230								
		TH-6	"C"	101	SB	SWLL	1400			1400								
			"C"	101	SB	24			1400									
			"C"	101	NB	SWLL	1400							28				
			"C"	101	NB	24			1400									
		TH-7	"C"	101	NB	11/13												
			"C"	101	SB	SWLL	1200			1200								
			"C"	101	SB	24			1200									
			"C"	101	NB	SWLL	1200											
TH-8	"C"	101	NB	24														
	"C"	101	NB	11/13														
	"C"	101	SB	SWLL	550			550										
	"C"	101	SB	24			550											
1	3	TH-9	"C"	101	SB									14				
		TH-10	"C"	101	SB									14				
1	4	TH-13	"SBD1"	101	SB	SWLL	350		350									
			"SBD1"	101	SB	24			350									
			"SBD1"	101	SB	27B	350											
			"NBD1"	101	NB	SWLL	850			550								
		TH-14	"NBD1"	101	NB	27B	850											
			"SBD1"	101	SB	SWLL	1400			1400								
			"SBD1"	101	SB	24			1400									
			"SBD1"	101	SB	27B	1400											
			"NBD1"	101	NB	SWLL	1400			550								
			"NBD1"	101	NB	24			1400									
			"NBD1"	101	NB	27B	1400											
			"CRD1"	LOCAL	NB	21			150									
"CRD1"	LOCAL	NB	27B	150														
SUBTOTAL SHEET THQ-2							33490		6480	2536	1067	137	123		5			

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	226	343

12/04/12  
 REGISTERED CIVIL ENGINEER DATE  
 4-29-13  
 PLANS APPROVAL DATE

FAWZI YAGHMOUR  
 No. C-54750  
 Exp. 12/31/13  
 CIVIL

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.

## TRAFFIC HANDLING QUANTITIES THQ-2

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	227	343

12/04/12  
 REGISTERED CIVIL ENGINEER DATE  
 4-29-13  
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER  
**FAWZI YAGHMOUR**  
 No. C-54750  
 Exp. 12/31/13  
 CIVIL  
 STATE OF CALIFORNIA

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

### TEMPORARY PAVEMENT DELINEATION

STAGE	PHASE	SHEET	LOL	ROUTE	DIRECTION	DETAIL	TEMPORARY TRAFFIC STRIPE (PAINT)		REMOVE TEMPORARY TRAFFIC STRIPE (PAINT)	REMOVE THERMOPLASTIC TRAFFIC STRIPE	REMOVE PAVEMENT MARKERS	CHANNELIZER (SURFACE MOUNTED)	TEMPORARY CRASH CUSHION MODULE		BARRICADE TYPE III			
							4" WHITE	4" YELLOW					TYPE 'TS14'	TYPE 'TS11'				
							LF									EA		
1	4	TH-15	"SBD1"	101	SB	SWLL	1200					62	14	22				
			"SBD1"	101	SB	24		1200										
			"SBD1"	101	SB	27B		1200										
			"SBD1"	101	SB	36				300	13							
			"NBD1"	101	NB	SWLL		1200										
			"NBD1"	101	NB	24			1200									
			"NBD1"	101	NB	27B		1200										
			"CRD1"	LOCAL	NB	21			1200									
			"CRD1"	LOCAL	NB	27B		1200										
			"CRD1"	LOCAL	NB	11				211								
			"CRD1"	LOCAL	NB	31				619								
			"CRD1"	LOCAL	NB	29				766	32							
		"CRD1"	LOCAL	NB	38				113									
		1	5	TH-16	"NBD1"	101	NB	SWLL	276									
					"NBD1"	101	NB	24			276							
					"NBD1"	101	NB	27B		276								
				TH-17	"C"	101	NB	SWLL	550		550				19	14		
					"C"	101	NB	24			550							
"C"	101				NB	27B		550		550								
"C"	101	SB	SWLL			550		550										
"C"	101	SB	24				550											
TH-18	"C"	101	SB	27B	550		550				28							
	"C"	101	NB	SWLL	1400													
	"C"	101	NB	24			1400											
	"C"	101	NB	27B		1400												
	"C"	101	SB	SWLL		1400												
TH-19	"C"	101	SB	24			1400											
	"C"	101	SB	27B		1400												
	"C"	101	NB	SWLL		1200												
	"C"	101	NB	24			1200											
	"C"	101	NB	27B		1200												
TH-20	"C"	101	SB	SWLL	1200		1200											
	"C"	101	SB	24			1200											
	"C"	101	SB	27B		1200												
	"C"	101	NB	SWLL		260												
	"C"	101	NB	24			260											
2	3	TH-29	"SBD2"	101	SB	SWLL	550					10	42		5			
			"SBD2"	101	SB	24			550									
			"SBD2"	101	SB	27B		550										
			"NBD2"	101	NB	SWLL		550										
			"NBD2"	101	NB	24			550									
			"NBD2"	101	NB	27B		550										
	TH-30	"SBD2"	101	SB	SWLL	1400						15						
		"SBD2"	101	SB	24			1400										
		"SBD2"	101	SB	27B		1400											
		"NBD2"	101	NB	SWLL		1400											
		"NBD2"	101	NB	24			1400										
		"NBD2"	101	NB	27B		1400											
SUBTOTAL SHEET THQ-3							43046		2200	2009	45	144	106	5				

## TRAFFIC HANDLING QUANTITIES THQ-3

REVISOR	REVISION	DATE	BY	DATE
DAVID BLACK	FAWZI YAGHMOUR			
CALCULATED/DESIGNED BY	CHECKED BY			
FUNCTIONAL SUPERVISOR				
MOHAMMED OATAMI				
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION				
<b>TRAFFIC DESIGN</b>				

### TEMPORARY PAVEMENT DELINEATION

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	228	343

12/04/12  
 REGISTERED CIVIL ENGINEER DATE

4-29-13  
 PLANS APPROVAL DATE

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STAGE	PHASE	SHEET	LOL	ROUTE	DIRECTION	DETAIL	TEMPORARY TRAFFIC STRIPE (PAINT)		REMOVE PAINTED TRAFFIC STRIPE	REMOVE THERMOPLASTIC TRAFFIC STRIPE	REMOVE PAVEMENT MARKERS	CHANNELIZER (SURFACE MOUNTED)	TEMPORARY CRASH CUSHION MODULE		BARRICADE TYPE III
							4" WHITE	4" YELLOW					TYPE 'U14'	TYPE 'U11'	
							LF								
2	3	TH-31	"SBD2"	101	SB	SWLL	1200					137	22	8	
			"SBD2"	101	SB	24		1200							
			"SBD2"	101	SB	27B		1200							
			"NBD2"	101	NB	SWLL		1200							
			"NBD2"	101	NB	24		1200							
			"NBD2"	101	NB	27B		1200							
			"CRD2"	LOCAL	LOCAL	21		1200							
			"CRD2"	LOCAL	LOCAL	27B		1420							
			"CRD2"	LOCAL	LOCAL	8		129							
		TH-32	"SBD2"	101	SB	SWLL	500						10	14	
			"SBD2"	101	SB	24		500							
			"SBD2"	101	SB	27B		500							
			"NBD2"	101	NB	SWLL		500							
			"NBD2"	101	NB	24		500							
			"NBD2"	101	NB	27B		500							
			"CRD2"	LOCAL	LOCAL	21		100							
			"CRD2"	LOCAL	LOCAL	27B		100							
			3	1	TH-33	"C"	101	SB	SWLL	550					
"C"	101	SB				24		550							
"C"	101	SB				27B		550							
"C"	101	NB				SWLL		850							
"C"	101	NB				24		850							
"C"	101	NB				27B		850							
TH-34	"C"	101			SB	SWLL	1400						47		
	"C"	101			SB	24		1400							
	"C"	101			SB	27B		1400							
	"C"	101			NB	SWLL		1400							
	"C"	101			NB	24		1400							
	"C"	101			NB	27B		1400							
TH-35	"C"	101			SB	SWLL	1200						29		
	"C"	101			SB	24		1200							
	"C"	101			SB	27B		1200							
	"C"	101			NB	SWLL		1200							
	"C"	101			NB	24		1200							
	"C"	101			NB	27B		1200							
TH-36	"C"	101	SB	SWLL	550						10	14			
	"C"	101	SB	24		550									
	"C"	101	SB	27B		550									
	"C"	101	NB	SWLL		450									
	"C"	101	NB	24		450									
	"C"	101	NB	27B		450									
3	3	TH-41	"C"	101	SB	24		550		550		10	14	5	
		TH-42	"C"	101	SB	24		1400		1400		15			
		TH-43	"C"	101	SB	24		1200		1200		39			
		TH-44	"C"	101	SB	24		257		257					
			SUBTOTAL SHEET THQ-4				39516		3407			326	78	13	
			SUBTOTAL SHEET THQ-2				33490		6480	2536	1067	137	123	5	
			SUBTOTAL SHEET THQ-3				43046		2200	2009	45	144	106	5	
			TOTAL				116052		12087	4545	1112	607	307	23	

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
FUNCTIONAL SUPERVISOR
REVISOR

**Caltrans**
MOHAMMED OATAMI
DAVID BLACK

**TRAFFIC DESIGN**
CHECKED BY
DATE REVISOR

REVISOR

## TRAFFIC HANDLING QUANTITIES THQ-4

LAST REVISION DATE PLOTTED => 03-MAY-2013  
 01-28-13 TIME PLOTTED => 13:44

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** 05 - TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR  
**MOHAMMED QATAMI**

CALCULATED/DESIGNED BY  
 CHECKED BY

DAVID BLACK  
 FAWZI YAGHMOUR

REVISED BY  
 DATE REVISED

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	229	343

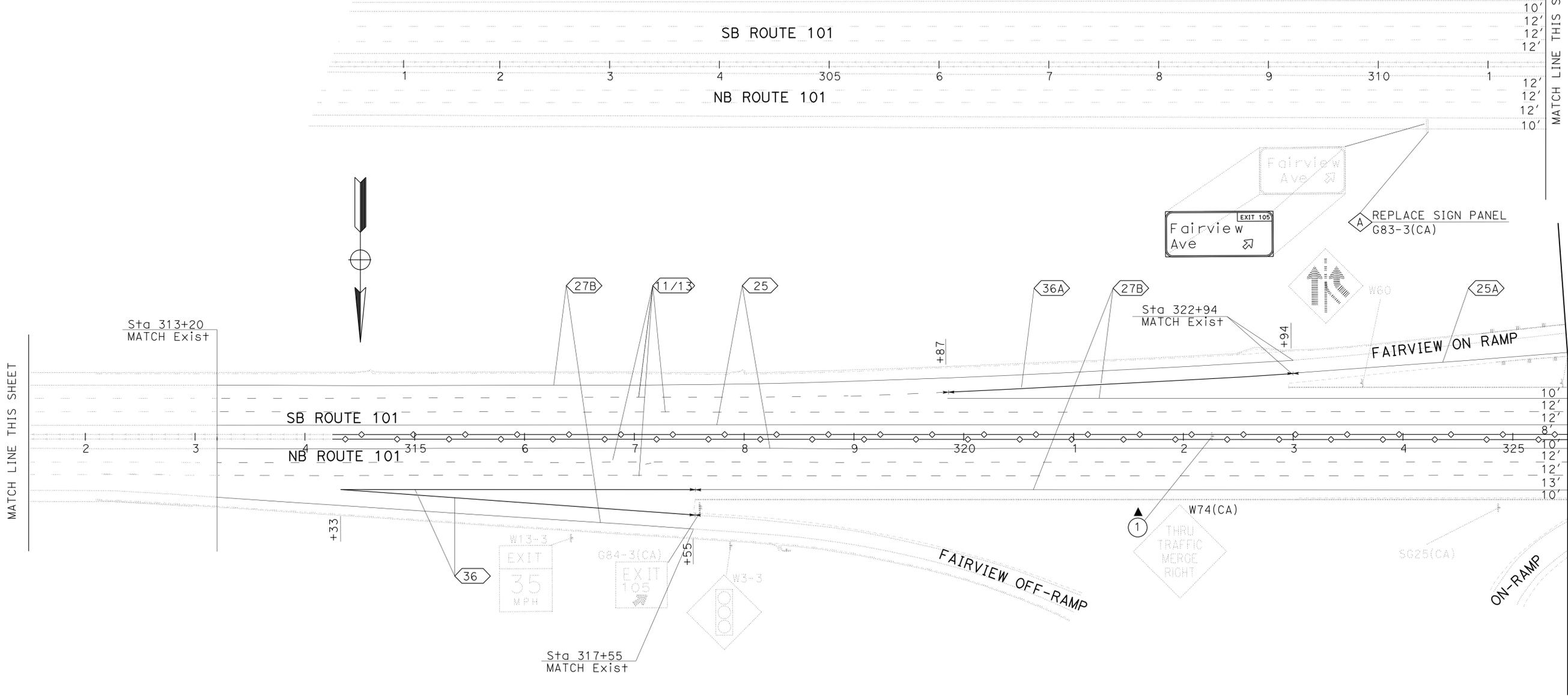
12/04/12  
 REGISTERED CIVIL ENGINEER DATE

4-29-13  
 PLANS APPROVAL DATE

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

REGISTERED PROFESSIONAL ENGINEER  
**FAWZI YAGHMOUR**  
 No. C-54750  
 Exp. 12/31/13  
 CIVIL  
 STATE OF CALIFORNIA

- LEGEND**
- ⬡ XX TRAFFIC STRIPE DETAIL No.
  - ⚡ LIMITS OF DESIGNATED TRAFFIC STRIPING DETAIL
  - ↔ PAVEMENT MARKING TYPE IV ARROW
  - ↔ PAVEMENT MARKING TYPE VI ARROW
  - ⊗ XX ROADSIDE SIGN No.
  - ⚡ ROADSIDE SIGN ONE-POST
  - ▲ RESET ROADSIDE SIGN
  - ⊗ X OVERHEAD SIGN No.
  - ↔ PAVEMENT MARKING TYPE III ARROW
  - ↔ PAVEMENT MARKING TYPE II ARROW



**PAVEMENT DELINEATION AND SIGN PLAN**  
 SCALE: 1" = 50"  
**PD-1**

APPROVED FOR PAVEMENT DELINEATION AND SIGN WORK ONLY

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	230	343

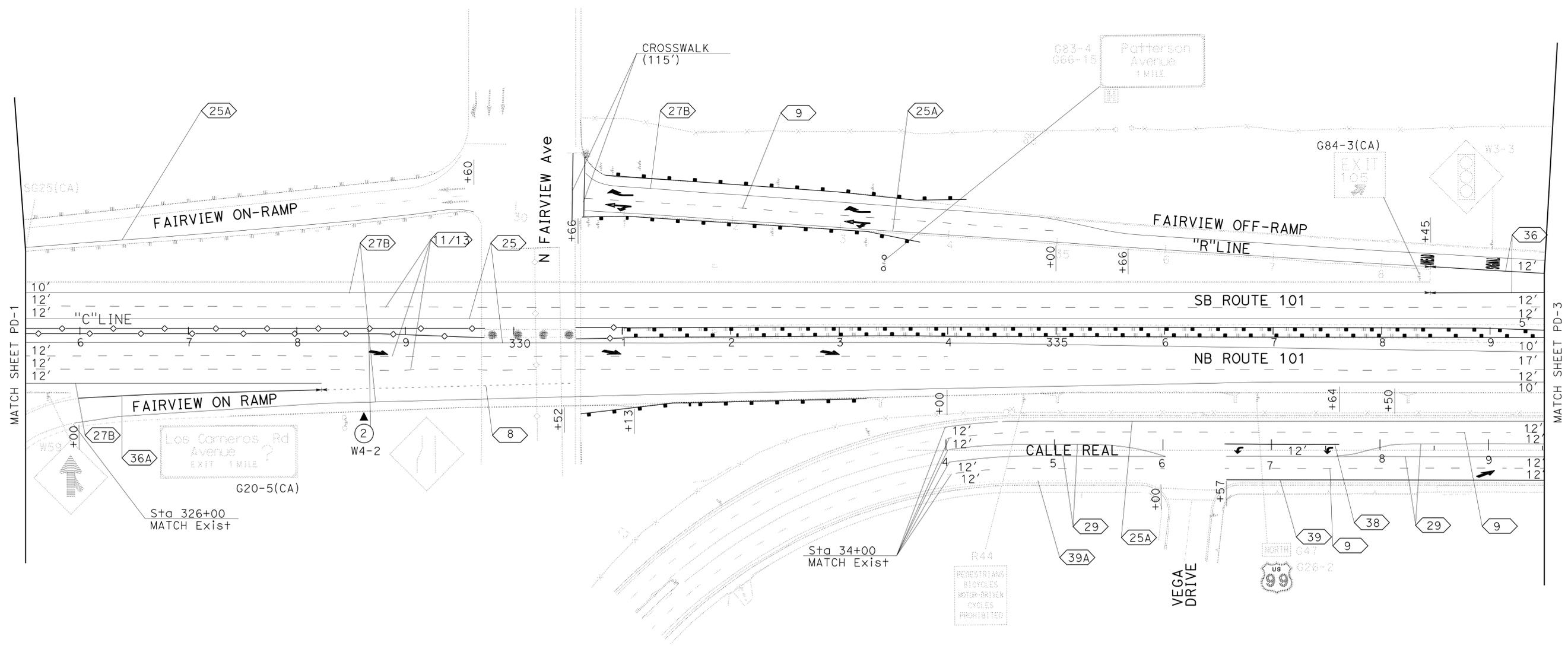
12/04/12  
 REGISTERED CIVIL ENGINEER DATE  
 4-29-13  
 PLANS APPROVAL DATE

FAWZI YAGHMOUR  
 No. C-54750  
 Exp. 12/31/13  
 CIVIL

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	REVISOR	DATE
Caltrans® 05 - TRAFFIC DESIGN	MOHAMMED QATAMI	DAVID BLACK	
		FAWZI YAGHMOUR	
	CHECKED BY	DESIGNED BY	



**PAVEMENT DELINEATION AND SIGN PLAN**

SCALE: 1" = 50" PD-2

APPROVED FOR PAVEMENT DELINEATION AND SIGN WORK ONLY

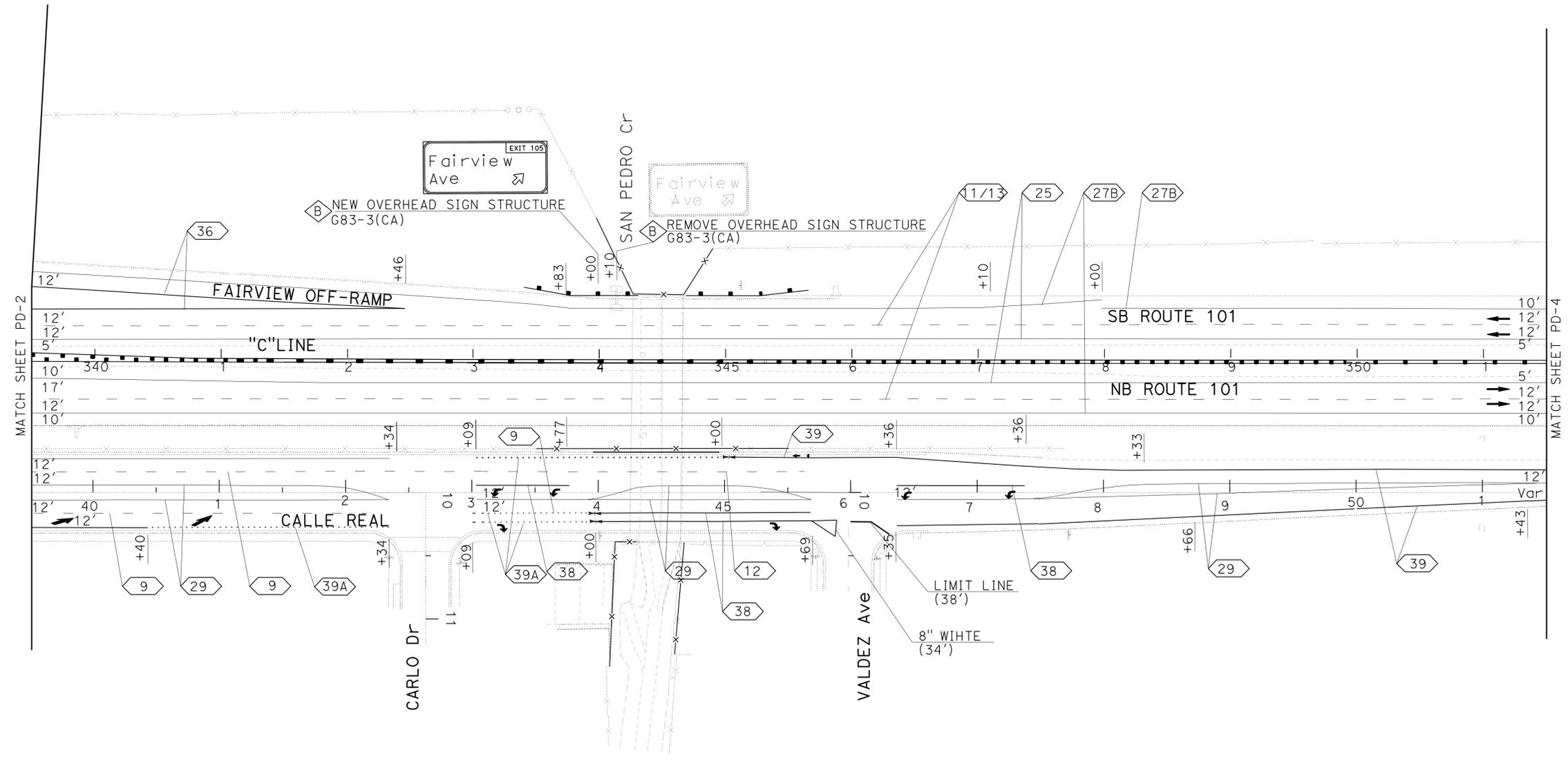
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	231	343

12/04/12  
REGISTERED CIVIL ENGINEER DATE

4-29-13  
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER  
**FAWZI YAGHMOUR**  
 No. C-54750  
 Exp. 12/31/13  
 CIVIL  
 STATE OF CALIFORNIA

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DAVID BLACK	REVISOR	REVISOR	REVISOR
<b>Caltrans</b> 05 - TRAFFIC DESIGN	FAWZI YAGHMOUR	DATE	DATE	DATE
FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	CHECKED BY		
MOHAMMED QATAMI				

## PAVEMENT DELINEATION AND SIGN PLAN

SCALE: 1" = 50" **PD-3**

APPROVED FOR PAVEMENT DELINEATION AND SIGN WORK ONLY

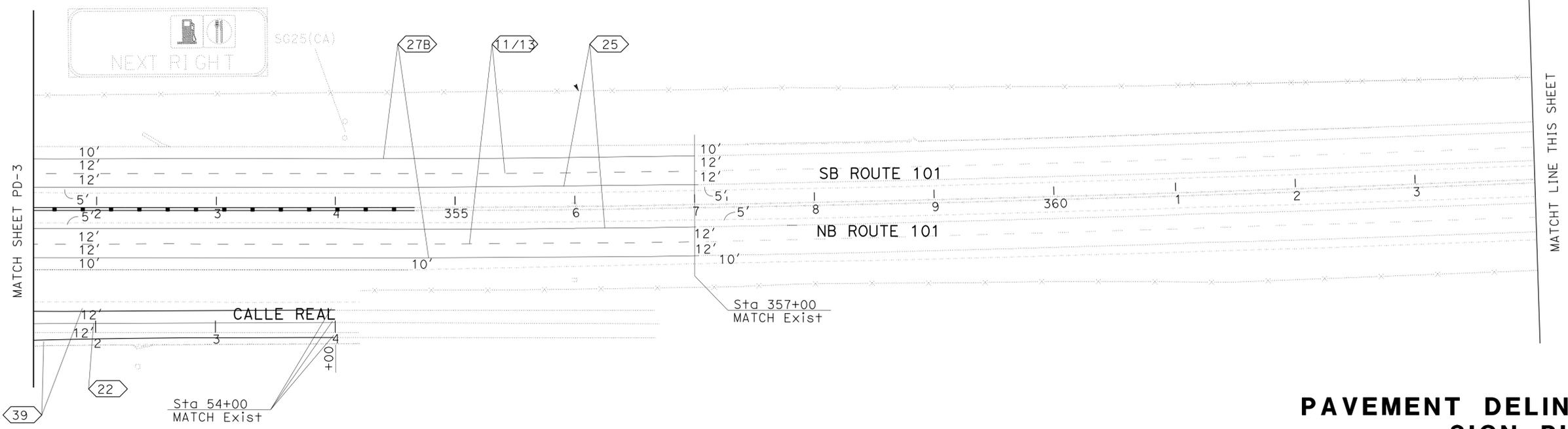
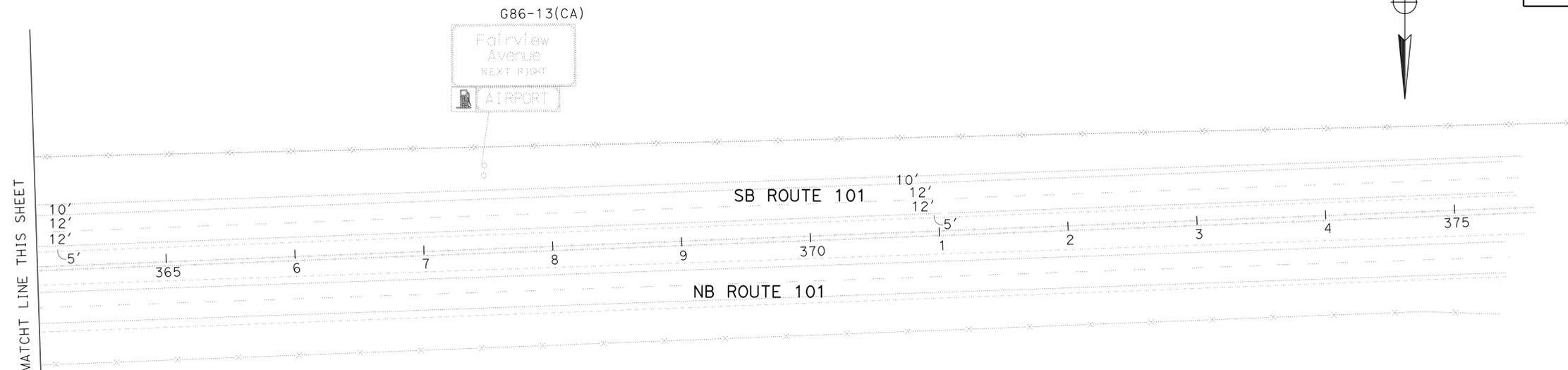
LAST REVISION DATE PLOTTED => 03-MAY-2013  
01-15-13 TIME PLOTTED => 1:3:44

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	232	343

12/04/12  
 REGISTERED CIVIL ENGINEER DATE  
 4-29-13  
 PLANS APPROVAL DATE

FAWZI YAGHMOUR  
 No. C-54750  
 Exp. 12/31/13  
 CIVIL

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**PAVEMENT DELINEATION AND SIGN PLAN**  
 SCALE: 1" = 50"  
**PD-4**

APPROVED FOR PAVEMENT DELINEATION AND SIGN WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	REVISOR	DATE
<b>Caltrans</b> 05 - TRAFFIC DESIGN	<b>MOHAMMED QATAMI</b>	DAVID BLACK	
		FAWZI YAGHMOUR	

USERNAME => s124496  
 DGN FILE => 0500000055na004.dgn



UNIT 1512

PROJECT NUMBER & PHASE

0500000055

LAST REVISION DATE PLOTTED => 03-MAY-2013  
 01-15-13 TIME PLOTTED => 13:44



**OVERHEAD SIGN QUANTITIES**

SHEET No.	SIGN No.	SIGN CODE	PANEL SIZE IN x IN	OVERHEAD SIGN PANEL							GRAFFITI FLOW	REMOVE OVERHEAD SIGN PANEL (N)	REMOVE SIGN STRUCTURE EA	INSTALL SIGN STRUCTURE (TRUSS) LBS	FURNISH SIGN STRUCTURE (TRUSS) LBS	60" DIA. CIDH CONCRETE PILE (SIGN FOUNDATION) LF	INSTALL SIGN PANEL ON EXISTING FRAME SQFT
				BACKGROUND SHEETING COLOR	Retroreflectivity ASTM TYPE	LEGEND SHEETING COLOR	Retroreflectivity ASTM TYPE	STANDARD	PREMIUM	FURNISH LAMINATED PANEL SIGN (1"-TYPE A) SQFT							
PD-1	⬠	G83-3(CA)	264" x 70"	GREEN	IV	WHITE	IV	X	128.33	1					128.33		
PD-3	⬠	G83-3(CA)	264" x 70"	GREEN	IV	WHITE	IV	X	128.33		1	16215	16215	22	128.33		
TOTAL									256.66	1	1	16215	16215	22	256.66		

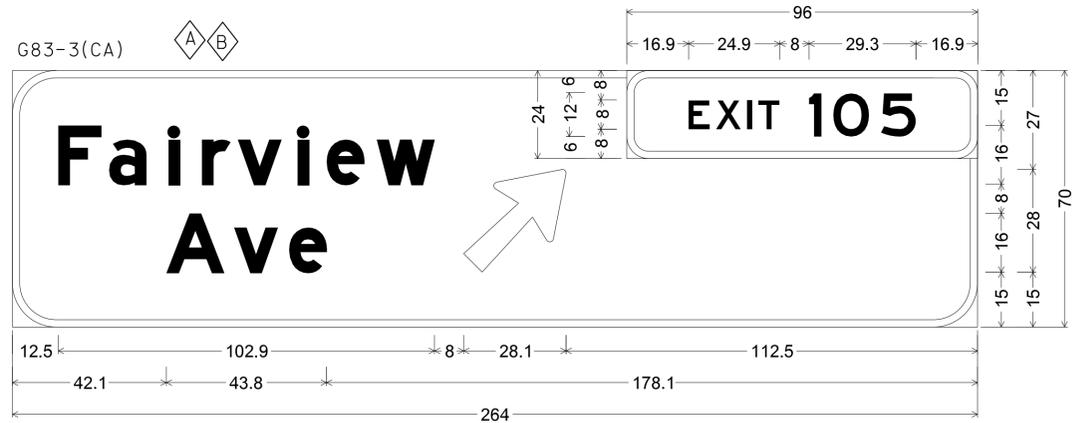
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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	234	343

12/04/12  
 REGISTERED CIVIL ENGINEER DATE  
 4-29-13  
 PLANS APPROVAL DATE

FAWZI YAGHMOUR  
 No. C-54750  
 Exp. 12/31/13  
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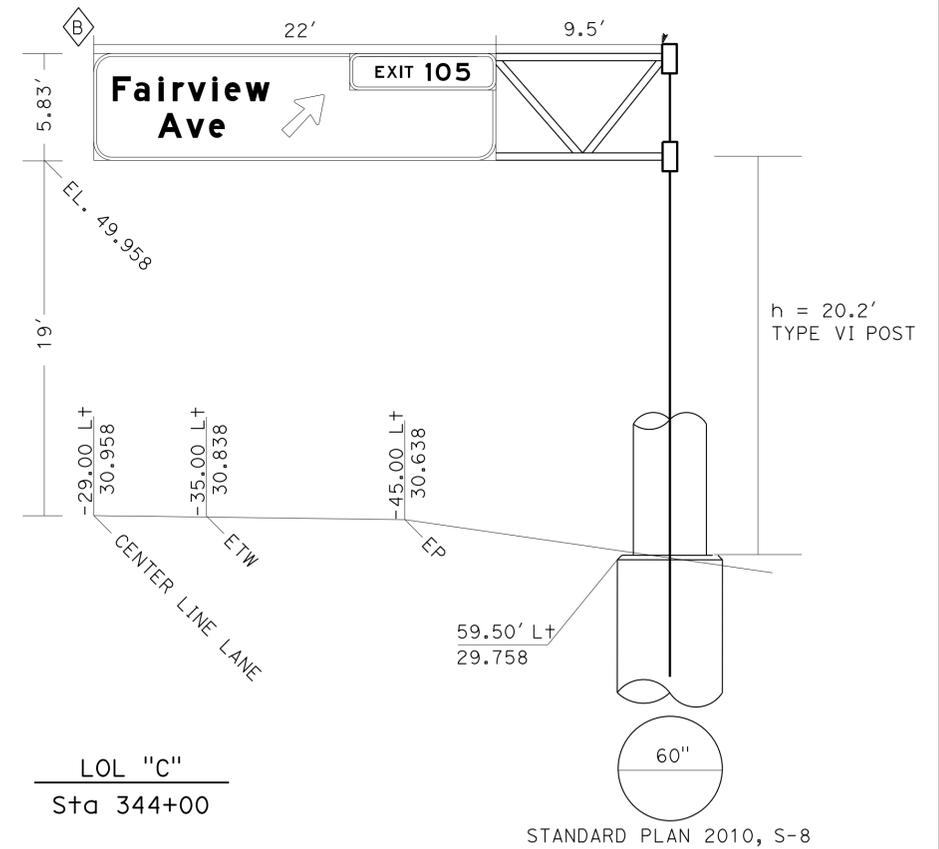
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12.0" Radius, 2.0" Border, White on Green;  
 [Fairview] E Mod; [Ave] E Mod; Arrow 16CAP-2LV - 35.6" 45°;  
 [EXIT] E; [105] E;  
 6.0" Radius, 2.0" Border, White on Green;

**SIGN QUANTITIES**

SHEET No.	SIGN No.	SIGN CODE	RESET ROADSIDE SIGN (ONE POST) EA
PD-1	①	W74(CA)	1
PD-2	②	W4-2	1
TOTAL			2



**SIGN QUANTITIES AND DETAIL**  
 NO SCALE  
**SQ-1**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	235	343

12/21/12  
 REGISTERED CIVIL ENGINEER DATE  
 4-29-13  
 PLANS APPROVAL DATE

No. 66162  
 Exp. 6/30/14  
 CIVIL

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NOTES: EXPANSION FACTOR OF 15% UTILIZED  
 (1) SEE ROADWAY EXCAVATION AERIAL DEPOSITED LEAD (TYPE Z-2) TABLE IN CONSTRUCTION DETAILS SHEETS FOR EXACT LIMITS AND QUANTITIES.  
 ADL = AERIALY DEPOSITED LEAD

### EARTHWORK

STAGE	PHASE	LOCATION	WORK DESCRIPTION	ROADWAY EXCAVATION		EMBANKMENT (N)	STRUCTURE EXCAVATION (TYPE D)	STOCKPILED MATERIAL (N)	COMMENTS
				TYPE (Z-2) (ADL) (1)	ROADWAY Exc				
STAGE 1	PHASE 1	Sta 25+50.00 TO Sta 48+00.00 "NBD1"	CONSTRUCT SB OUTSIDE SHOULDER	848.4	2,356.7	240.0			
		Sta 322+98.00 TO Sta 325+55.00 "C" LINE	CONSTRUCT SB OUTSIDE SHOULDER	173.8	486.3	95.2			
		Sta 348+00.00 TO Sta 354+00.00 "C" LINE	CONSTRUCT SB OUTSIDE SHOULDER						
			PHASE 1 SUBTOTAL						
				1,022.2	2,843.0	335.2	0.0	0.0	
	PHASE 2	Sta 23+00.00 TO Sta 54+00.00 "NBD1"	CONSTRUCT NB DETOUR/MEDIAN	2,622.8	1,126.2	71.0			
			PHASE 2 SUBTOTAL	2,622.8	1,126.2	71.0	0.0	0.0	
	PHASE 3				0.0	0.0			
			PHASE 3 SUBTOTAL		0.0	0.0	0.0	0.0	
	PHASE 4	Sta 323+65.00 TO Sta 353+00.00 "C" LINE	CONSTRUCT RTE 101 NB LANES	1,699.7	6,008.1	183.8			
		Sta 14+10.10 TO Sta 15+00.00 "LV" LINE	EXCAVATE Exist CULVERT		703.4				LAS VEGAS CREEK
		Sta 14+10.10 TO Sta 15+00.00 "LV" LINE	EXCAVATE FOR RSP				1,700.0	903.2	LAS VEGAS CREEK
		Sta 14+10.10 TO Sta 15+00.00 "LV" LINE	REBUILD CREEK BED		903.2	785.4			LAS VEGAS CREEK USE STOCKPILED CREEK BED Exc MATERIAL
		Sta 84+13.40 TO Sta 85+08.70 "SP" LINE	EXCAVATE Exist CULVERT		273.5				SAN PEDRO CREEK
		Sta 84+13.40 TO Sta 85+08.70 "SP" LINE	REBUILD CREEK BED			782.7	680.6		SAN PEDRO CREEK USE STOCKPILED CREEK BED Exc MATERIAL
		Sta 84+13.40 TO Sta 85+08.70 "SP" LINE	REBUILD CREEK BED			782.7	680.6		SAN PEDRO CREEK USE STOCKPILED CREEK BED Exc MATERIAL
Sta 43+65.00 TO Sta 45+25.00 "CR" LINE		CONSTRUCT CALLE REAL		296.2	10.0				
		PHASE 4 SUBTOTAL	1,699.7	8,967.1	1,659.8	3,215.2	1,685.9		
		STAGE 1 TOTAL	5,344.7	12,936.3	2,066.0	3,215.2	1,685.9		

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

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
 06 - DESIGN  
 Foad N AL-HAMDANI  
 JASON CASTILLO  
 JONATHAN D. GLEDHILL  
 REVISOR BY DATE  
 CALCULATED/DESIGNED BY  
 CHECKED BY

## SUMMARY OF QUANTITIES

### Q-1

LAST REVISION DATE PLOTTED => 03-MAY-2013  
 08-31-12 TIME PLOTTED => 13:44

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	236	343

12/21/12  
 REGISTERED CIVIL ENGINEER DATE  
 4-29-13  
 PLANS APPROVAL DATE

No. 66162  
 Exp. 6/30/14  
 CIVIL

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NOTES: EXPANSION FACTOR OF 15% UTILIZED  
 (1) SEE ROADWAY EXCAVATION AERIALY DEPOSITED LEAD (TYPE Z-2) TABLE IN SUMMARY OF QUANTITIES SHEETS FOR EXACT LIMITS AND QUANTITIES.  
 ADL = AERIALY DEPOSITED LEAD

### EARTHWORK

	LOCATION	WORK DESCRIPTION	ROADWAY EXCAVATION		EMBANKMENT (N)	STRUCTURE EXCAVATION (TYPE D)	STOCKPILED MATERIAL (N)	COMMENTS
			TYPE (Z-2) (ADL) (1)	ROADWAY Exc				
			CY	CY	CY	CY	CY	
PHASE 1	Sta 22+00.00 TO Sta 54+00.00 "SBD2"	CONSTRUCT MEDIAN		618.6	21.9			CONSTRUCT MEDIAN PORTION OF STAGE 2 DETOUR
		PHASE 1 SUBTOTAL		618.6	21.9	0.0	0.0	
PHASE 2				0.0	0.0			
		PHASE 2 SUBTOTAL		0.0	0.0	0.0	0.0	
PHASE 3	Sta 325+40.00 TO Sta 338+40.00 "C" LINE	CONSTRUCT MEDIAN		780.5				REMOVAL OF DETOUR STRUCTURAL SECTION
	Sta 325+40.00 TO Sta 338+40.00 "C" LINE	CONSTRUCT MEDIAN			678.7			BACKFILL REMOVED DETOUR STRUCTURAL SECTION WITH EMBANKMENT
	Sta 323+00.00 TO Sta 354+00.00 "C" LINE			230.0	6,812.1			CONSTRUCT OUTSIDE SHOULDER EMBANKMENT ALONG SB LANES
	Sta 331+10.00 TO Sta 332+60.00 "C" LINE Sta 343+65.00 TO Sta 345+25.00 "C" LINE				860.2			REMOVE Exist MAINLINE STRUCTURAL SECTION
	Sta 30+80.00 TO STA32+80.00 "R" LINE				1,040.0			SB OFF-RAMP EMBANKMENT EXCAVATION
	Sta 12+23.80 TO Sta 14+10.10 "LV" LINE	EXCAVATE Exist CULVERT			12,629.4			LAS VEGAS CREEK
	Sta 12+23.80 TO Sta 14+10.10 "LV" LINE	EXCAVATE FOR RSP				2,880.6	1,480.9	LAS VEGAS CREEK
	Sta 12+23.80 TO Sta 14+10.10 "LV" LINE	REBUILD CREEK BED			1,480.9	1,287.7		LAS VEGAS CREEK USE STOCKPILED CREEK BED Exc MATERIAL
	Sta 83+28.50 TO Sta 84+13.40 "SP" LINE Sta 85+08.70 TO Sta 85+48.70 "SP" LINE	EXCAVATE Exist CULVERT			282.5			SAN PEDRO CREEK
	Sta 83+28.50 TO Sta 84+13.40 "SP" LINE Sta 85+08.70 TO Sta 85+48.70 "SP" LINE	EXCAVATE FOR RSP				2,112.1	986.9	SAN PEDRO CREEK
	Sta 83+28.50 TO Sta 84+13.40 "SP" LINE Sta 85+08.70 TO Sta 85+48.70 "SP" LINE	REBUILD CREEK BED			986.9	858.1		SAN PEDRO CREEK USE STOCKPILED CREEK BED Exc MATERIAL
	Sta 43+65.00 TO Sta 45+25.00 "CR" LINE	CONSTRUCT CALLE REAL			296.2	10.0		
	PHASE 3 SUBTOTAL			18,586.6	9,646.6	4,992.7	2,467.8	
	STAGE 2 TOTAL			19,205.1	9,668.5	4,992.7	2,467.8	

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
 06 - DESIGN  
 Foad N AL-HAMDANI  
 FUNCTIONAL SUPERVISOR  
 JASON CASTILLO  
 JONATHAN D. GLEDHILL  
 REVISOR BY  
 DATE REVISED

## SUMMARY OF QUANTITIES

### Q-2

LAST REVISION DATE PLOTTED => 03-MAY-2013  
 08-31-12 TIME PLOTTED => 13:44

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	237	343

12/21/12  
 REGISTERED CIVIL ENGINEER DATE  
 4-29-13  
 PLANS APPROVAL DATE

JONATHAN D. GLEDHILL  
 No. 66162  
 Exp. 6/30/14  
 CIVIL  
 STATE OF CALIFORNIA

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NOTES: EXPANSION FACTOR OF 15% UTILIZED  
 (1) SEE ROADWAY EXCAVATION AERIAL DEPOSITED LEAD (TYPE Z-2) TABLE IN CONSTRUCTION DETAILS SHEETS FOR EXACT LIMITS AND QUANTITIES.  
 ADL = AERIALY DEPOSITED LEAD

### EARTHWORK

	LOCATION	WORK DESCRIPTION	ROADWAY EXCAVATION		EMBANKMENT (N)	STRUCTURE EXCAVATION (TYPE D)	STOCKPILED MATERIAL (N)	COMMENTS	
			TYPE (Z-2) (ADL) (1)	ROADWAY Exc					
			CY	CY	CY	CY	CY		
STAGE 3	PHASE 1			0.0	0.0				
		PHASE 1 SUBTOTAL		0.0	0.0	0.0	0.0		
	PHASE 2	Sta 324+00.00 TO Sta 351+00.00 "C" LINE	CONSTRUCT MEDIAN		2,900.9				REMOVE DETOUR STRUCTURAL SECTION IN MEDIAN
		Sta 324+00.00 TO Sta 354+00.00 "C" LINE	CONSTRUCT MEDIAN		2,610.8	2,270.3			PLACE EMBANKMENT IN MEDIAN/ CONSTRUCT MEDIAN
		PHASE 2 SUBTOTAL		5,511.7	2,270.3	0.0	0.0		
	PHASE 3	Sta 331+00.00 TO Sta 354+00.00 "C" LINE	CONSTRUCT OUTSIDE NB EMBANKMENT		1,502.9	870.0			REMOVE DETOUR STRUCTURAL SECTION; CONSTRUCT OUTSIDE NB EMBANKMENTS
		PHASE 3 SUBTOTAL		1,502.9	870.0	0.0	0.0		
		STAGE 3 TOTAL		7,014.6	3,140.3	0.0	0.0		
		FROM Q-1	STAGE 1 TOTAL	5,344.7	12,936.3	2,066.0	3,215.3	1,685.9	
		FROM Q-2	STAGE 2 TOTAL		19,205.2	9668.5	4,992.7	2,467.8	
		STAGE 1, 2, & 3 TOTAL	5,344.7	39,156.1	14,874.8	8,208.0	4,153.7		

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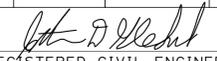
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 06 - DESIGN  
 FUNCTIONAL SUPERVISOR  
 FOAD N AL-HAMDANI  
 CALCULATED/DESIGNED BY  
 CHECKED BY  
 JASON CASTILLO  
 JONATHAN D. GLEDHILL  
 REVISED BY  
 DATE REVISED

## SUMMARY OF QUANTITIES

### Q-3

LAST REVISION DATE PLOTTED => 03-MAY-2013  
 08-31-12 TIME PLOTTED => 13:44

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	238	343

 12/21/12  
 REGISTERED CIVIL ENGINEER DATE

4-29-13  
 PLANS APPROVAL DATE

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### ROADWAY QUANTITIES

	LOCATION	WORK DESCRIPTION	TACK COAT	HMA (TYPE A)	CLASS 2 AB	LCB	CLASS 1 AS	COLD PLANE AC Pvm†	
			TON	TON	CY	CY	CY	SQYD	
<b>STAGE 1</b>	PHASE 1	Sta 322+98.00 TO Sta 325+55.00 "C" LINE	CONSTRUCT SB OUTSIDE SHOULDER	0.4	395.7	485.0			
		Sta 345+00.00 TO Sta 354+00.00 "C" LINE							
		Sta 25+50.00 TO Sta 48+00.00 "NBD1" LINE							
		PHASE 1 SUBTOTAL		0.9	1,845.2	1,868.8			
	PHASE 2	Sta 23+00.00 TO Sta 54+00.00 "NBD1" LINE	CONSTRUCT MEDIAN/NB DETOUR	4.6	2,871.5	2,741.6			
		PHASE 2 SUBTOTAL		4.6	2,871.5	2,741.6			
	PHASE 3	Sta 25+50.00 TO Sta 54+00.00 "NBD1" LINE	CONSTRUCT TRAVELLED WAY PORTION OF NB DETOUR	1.8	1,604.0			6,673.3	
		Sta 322+00.00 TO Sta 325+50.00 "C" LINE Sta 348+00.00 TO Sta 354+00.00 "C" LINE	CONSTRUCT TRAVELLED WAY PORTION OF NB DETOUR	0.6	342.0			2,533.3	
		PHASE 3 SUBTOTAL		2.4	1,946.0			9,206.6	
	PHASE 4	Sta 323+00.00 TO Sta 354+00.00 "C" LINE	CONSTRUCT NB LANES & STRUCTURES	1.9	5,740.5	2,969.9	300.0	949.0	6,505.0
		Sta 43+65.00 TO Sta 45+25.00 "CR" LINE	CONSTRUCT CALLE REAL	0.3	369.8	188.9			
		PHASE 4 SUBTOTAL		2.2	6,110.3	3,158.8	300.0	949.0	6,505.0
	PHASE 5	Sta 322+00.00 TO Sta 327+00.00 "C" LINE	REMOVE/ADJUST DETOUR TRANSITIONS	0.8	292.5				3,000.0
		Sta 349+00.00 TO Sta 354+00.00 "C" LINE	REMOVE/ADJUST DETOUR TRANSITIONS	0.5	405.0				2,166.7
		PHASE 5 SUBTOTAL		1.3	697.5				5,166.7
	STAGE 1 TOTALS		11.4	13,470.5	7,769.2	300.0	949.0	20,878.3	
<b>STAGE 2</b>	PHASE 1	Sta 23+00.00 TO Sta 54+00.00 "SBD2" LINE	CONSTRUCT MEDIAN PORTION OF DETOUR	0.6	897.0	418.4		2,385.6	
		PHASE 1 SUBTOTAL		0.6	897.0	418.4		2,385.6	
	PHASE 2	Sta 322+00.00 TO Sta 326+00.00 "C" LINE	CONSTRUCT DETOUR TRANSITIONS	0.4	192.0			1,422.2	
		Sta 349+00.00 TO Sta 354+00.00 "C" LINE	CONSTRUCT DETOUR TRANSITIONS	0.4	240.0			1,777.8	
		PHASE 2 SUBTOTAL		0.8	432.0			3,200.0	
	PHASE 3	Sta 323+00.00 TO Sta 354+00.00 "C" LINE	CONSTRUCT SB LANES & STRUCTURES	0.7	1,557.2	242.4	51.4	178.1	2,844.4
		Sta 323+30.00 TO Sta 329+60.00 "C" LINE	CONSTRUCT SB ON-RAMP SHOULDER	0.1	49.2	43.8			
		Sta 30+85.00 TO Sta 38+40.00 "R" LINE	CONSTRUCT SB OFF-RAMP	0.7	393.5	402.6			
		Sta 43+65.00 TO Sta 45+25.00 "CR" LINE	CONSTRUCT CALLE REAL	0.3	369.8	188.9			
		PHASE 3 SUBTOTAL		1.8	2,369.7	877.7	51.4	178.1	2,844.4
	STAGE 2 TOTALS		3.2	3,698.6	1,296.1	51.4	178.1	8,429.6	
	SHEET TOTALS		14.6	17,169.2	9,065.3	351.4	1,127.1	29,307.9	

## SUMMARY OF QUANTITIES Q-4

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  


FUNCTIONAL SUPERVISOR: FOAD N AL-HAMDANI  
 CALCULATED/DESIGNED BY: JASON CASTILLO  
 CHECKED BY: JONATHAN D. GLEDHILL  
 REVISED BY: [ ] DATE REVISED: [ ]

x  
x  
x  
x  
x

LAST REVISION: DATE PLOTTED => 03-MAY-2013  
 08-31-12 TIME PLOTTED => 13:44

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	239	343

12/21/12  
 REGISTERED CIVIL ENGINEER DATE  
 4-29-13  
 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.

### ROADWAY QUANTITIES

	LOCATION	WORK DESCRIPTION	TACK COAT TON	HMA (TYPE A) TON	CLASS 2 AB CY	LCB CY	CLASS 1 AS CY	COLD PLANE AC Pvmf SQYD	
<b>STAGE 3</b>	<b>PHASE 1</b>	S+a 322+00.00 TO S+a 327+00.00 "C" LINE	0.8	420.0				3,111.1	
		S+a 349+00.00 TO S+a 354+00.00 "C" LINE	0.5	292.5				2,166.7	
		PHASE 1 SUBTOTAL	1.3	712.5				5,277.8	
	<b>PHASE 2</b>	S+a 322+00.00 TO S+a 354+00.00 "C" LINE	CONSTRUCT MEDIAN	1.5	719.4	211.0			3,611.1
		PHASE 2 SUBTOTAL		1.5	719.4	211.0			3,611.1
	<b>PHASE 3</b>	S+a 323+65.00 TO S+a 354+00.00 "C" LINE	CONSTRUCT OUTER SLOPES & SHOULDERS	0.8	263.0				2,037.8
		PHASE 3 SUBTOTAL		0.8	263.0				2,037.8
	STAGE 3 TOTALS			3.6	1,694.9	211.0			10,926.7
	STAGE 1 AND 2 TOTALS (SHEET Q-4)			14.6	17,169.2	9,065.3	351.4	1,127.1	29,307.9
	FROM HMA DIKE TABLE (SHEET Q-6)				67.8				
FROM PLACE HMA (MISC AREA) TABLE (SHEET Q-7)				31.4					
FROM MINOR CONCRETE (EXPOSED AGGREGATE CONCRETE) TABLE (SHEET Q-8)					41.1				
FROM SAFETY EDGE TABLE (SHEET Q-10)				75.5					
FROM STAGE CONSTRUCTION QUANTITY TABLE (SHEET SCQ-3)				114.3				0.6	
<b>GRAND TOTALS</b>			<b>18.2</b>	<b>19,153.1</b>	<b>9,317.4</b>	<b>351.4</b>	<b>1,127.1</b>	<b>40,235.2</b>	

### CONCRETE BARRIER (TYPE 60 MODIFIED)

LOCATION		CONCRETE BARRIER (TYPE 60 Mod)	IMPORTED TOPSOIL	CLASS 2 PERMEABLE MATERIAL (BLANKET)	(N) FILTER FABRIC	3" SLOTTED PLASTIC PIPE UNDERDRAIN	PLAN SHEET No.
FROM	TO	LF	CY	CY	SQYD	LF	
"C" 322+00	"C" 329+36	1,472	115.7	47	257.6	738	L-1,2
<b>TOTAL</b>		<b>1,472</b>	<b>115.7</b>	<b>47</b>	<b>257.6</b>	<b>738</b>	

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

### MINOR CONCRETE (MINOR STRUCTURE)

LOCATION		MINOR CONCRETE (MINOR STRUCTURE)	PLAN SHEET No.	COMMENTS
FROM	TO	CY		
"SP" 85+48.67	"SP" 85+78.72	32.8	L-3	Mod WARPED WINGWALL
"R" 30+81.12	30+84.62 Lt	0.4	L-2	BRIDGE CONNECTION (SEE C-17)
FROM DRAINAGE QUANTITIES		82.44		
<b>TOTAL</b>		<b>115.64</b>		

## SUMMARY OF QUANTITIES

### Q-5

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 06-DESIGN  
 Foad N Al-Hamdani  
 Gerardo Gomez  
 Jonathan D. Gledhill  
 Revised By: \_\_\_\_\_ Date Revised: \_\_\_\_\_  
 Calculated/Designed By: \_\_\_\_\_ Checked By: \_\_\_\_\_  
 Functional Supervisor: \_\_\_\_\_

LAST REVISION | DATE PLOTTED => 03-MAY-2013  
 08-31-12 | TIME PLOTTED => 13:44

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	240	343

12/21/12  
 REGISTERED CIVIL ENGINEER DATE  
 4-29-13  
 PLANS APPROVAL DATE

JONATHAN D. GLEDHILL  
 No. 66162  
 Exp. 6/30/14  
 CIVIL  
 STATE OF CALIFORNIA

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### PLACE HMA DIKE

LOCATION	DIRECTION	R+/L+	PLACE HMA DIKE				* HMA (TYPE A) TON	NOTES
			(TYPE A) LF	(TYPE C) LF	(TYPE E) LF	(TYPE F) LF		
"R" 30+84.62 TO 33+56.31	SB OFF RAMP	L+				275.2	3.7	
"R" 33+56.31 TO 34+21.52	SB OFF RAMP	L+		65.2			0.5	
"R" 34+21.52 TO 38+50.00	SB OFF RAMP	L+			428.5		11.3	
"C" 323+00.00 TO 331+31.47	SB	L+	831.5				22.7	
"C" 332+38.49 TO 338+44.66	SB	L+	606.2				16.6	
"C" 344+97.50 TO 345+47.50	SB	L+				50.0	0.7	
"C" 345+47.50 TO 346+10.00	SB	L+		62.5			0.5	
"C" 330+77.90 TO 331+07.50	NB	R+		29.6			0.1	
"C" 331+09.50 TO 331+29.40	NB	R+				19.9	1.3	
"C" 332+86.51 TO 340+90.00	NB	R+			803.5		10.4	
FROM SCQ TABLES			1,087.0					
<b>TOTAL</b>			<b>2,524.7</b>	<b>157.3</b>	<b>1,232.0</b>	<b>345.1</b>	<b>*67.8</b>	

\* QUANTITY INCLUDED IN HMA, ROADWAY QUANTITIES TABLE.

### ROCK SLOPE PROTECTION

LOCATION	FROM	TO	RSP (No. 1, METHOD B) CY	RSP (1/2 TON, METHOD A) CY	RSP FABRIC (CLASS 8) SQYD
LAS VEGAS CREEK	14+10.10	14+78.90	293.7	476.4	399.0
SAN PEDRO CREEK	84+13.40	85+08.70	256.0	418.6	552.7
STAGE 2					
LAS VEGAS CREEK	12+23.80	14+10.10	496.0	811.1	1,080.5
SAN PEDRO CREEK	83+15.60	84+13.40	307.1	470.9	567.2
SAN PEDRO CREEK	85+08.70	85+48.70	106.7	214.2	231.9
CONCRETE SPILLWAY	"C" Sta 332+50.00		10.9		27.2
FROM DRAINAGE QUANTITIES TABLE			43.9		121.8
FROM HMA OVERSIDE DRAINS QUANTITIES TABLE			28.0		91.7
FROM STAGE CONSTRUCTION QUANTITIES TABLE			4.9		14.6
<b>TOTAL</b>			<b>1,547.2</b>	<b>2,391.2</b>	<b>3,086.6</b>

### REMOVE ASPHALT CONCRETE PAVEMENT

LOCATION	REMOVE ASPHALT CONCRETE PAVEMENT SQFT
FROM STAGE CONSTRUCTION QUANTITIES TABLE	96
<b>TOTAL</b>	<b>96</b>

### REMOVE ASPHALT CONCRETE DIKE

LOCATION		REMOVE ASPHALT CONCRETE DIKE LF	PLAN SHEET No.
FROM	TO	LF	PLAN SHEET No.
"R" 32+75 L+	"C" 343+65 L+	1,090	L-2,3
FROM STAGE CONSTRUCTION QUANTITIES TABLE		36	
<b>TOTAL</b>		<b>1,126</b>	

### REMOVE CONCRETE BARRIER

LOCATION		REMOVE CONCRETE BARRIER LF	PLAN SHEET No.
FROM	TO	LF	PLAN SHEET No.
"C" 322+00.00	"C" 331+00.00	900.0	L-1,2
<b>TOTAL</b>		<b>900.0</b>	

### CONCRETE BARRIER (TYPE 60R MODIFIED)

LOCATION		CONCRETE BARRIER TYPE 60R MODIFIED LF	PLAN SHEET No.
FROM	TO	LF	PLAN SHEET No.
"C" 329+36	"C" 331+31.47	195.47	L-2
<b>TOTAL</b>		<b>195.47</b>	

## SUMMARY OF QUANTITIES

Q-6

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	241	343

12/21/12  
 REGISTERED CIVIL ENGINEER DATE  
 4-29-13  
 PLANS APPROVAL DATE

JONATHAN D. GLEDHILL  
 No. 66162  
 Exp. 6/30/14  
 CIVIL  
 STATE OF CALIFORNIA

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### METAL BEAM GUARD RAILING

LOCATION	METAL BEAM GUARD RAILING (STEEL POST)	REMOVE METAL BEAM GUARD RAILING	TRANSITION RAILING (TYPE WB)	TRANSITION RAILING (TYPE DTB)	DOUBLE THRIE BEAM BARRIER (STEEL POST)	REMOVE SINGLE THRIE BEAM BARRIER	REMOVE DOUBLE THRIE BEAM BARRIER	ALTERNATIVE FLARED TERMINAL SYSTEM	END ANCHOR ASSEMBLY (TYPE SFT)	VEGETATION CONTROL (MINOR CONCRETE)	TREATED WOOD WASTE	(N)	MBGR LAYOUT	PLAN SHEET No.
	LF	LF	EA	EA	LF	LF	LF	EA	EA	SQYD	LB	EA	TYPE	
"C" Sta 324+84.10 TO 329+54.43 Lt		475.0									6,400			L-1,2
"C" Sta 330+66.77 TO 331+29.40 Rt	37.5		1							23.5		1	12C	L-2
"C" Sta 330+66.77 TO 332+86.84 Rt		225.0									3,000			
"C" Sta 332+38.60 TO 343+91.40 Lt/Rt				1	1,162.5					612.3				L-2,3
"C" Sta 344+98.40 TO 355+00.00 Rt				2	1,012.5					534.0				L-3,4
"C" Sta 331+00.00 TO 340+75.00 Rt						975					14,000			
"C" Sta 331+00.00 TO 340+75.00 Lt						975					14,000			
"C" Sta 340+75.00 TO 355+00.00 Rt							1,425				20,400			
"C" Sta 324+84.10 TO 329+57.30 Lt	475.0							1	184.3				12DD	L-1,2
"R" Sta 30+60.70 TO 34+48.14 Rt	350.0							1	148.3				11B	L-2
"R" Sta 30+60.70 TO 33+62.00 Rt		300.0									4,000			
"R" Sta 30+84.62 TO 33+93.81 Lt	250.0		1						123.9				12B	L-2
"R" Sta 30+81.12 TO 33+92.00 Lt		312.5									4,200			
"C" Sta 344+97.50 TO 345+85.00 Lt	25.0		1					1	50.9				12B	L-3
"C" Sta 343+94.10 TO 345+57.50 Lt		162.5									2,200			
<b>TOTAL</b>	<b>1,137.5</b>	<b>1,475</b>	<b>3</b>	<b>3</b>	<b>2,175</b>	<b>1,950</b>	<b>1,425</b>	<b>3</b>	<b>2</b>	<b>1,677.2</b>	<b>68,200</b>	<b>1</b>		

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

### PLACE HOT MIX ASPHALT (MISCELLANEOUS AREA)

LOCATION	SHEET No.	PLACE HMA (Misc AREA)	HMA * (TYPE A)	DESCRIPTION
		SQYD	TON	
FROM HMA OVERSIDE DRAINS TABLE	Q-9	57.8	11.8	OVERSIDE DRAINS
"C" 332+08.49 TO 335+40	C-6	138.0	23.3	NARROW DEPRESSED PAVED MEDIAN
FROM STAGE CONSTRUCTION QUANTITIES TABLE	SCQ-3	436.3		TEMPORARY PAVING FOR DRAINAGE FEATURES
<b>TOTAL</b>		<b>632.1</b>	<b>*31.4</b>	

\* QUANTITY INCLUDED IN HMA, ROADWAY QUANTITIES TABLE.

### SHOULDER RUMBLE STRIP

STATION		SHOULDER LOCATION	SHOULDER RUMBLE STRIP (HMA, GROUND-IN INDENTATIONS)
FROM	TO		Sta
"C" 322+00	326+10	NORTHBOUND OUTSIDE	4.10
"C" 328+00	331+31.5	NORTHBOUND OUTSIDE	5.32
"C" 332+36.9	343+90.7	NORTHBOUND OUTSIDE	11.54
"C" 344+97.7	353+00	NORTHBOUND OUTSIDE	8.02
"C" 322+00	331+31.5	NORTHBOUND INSIDE	9.32
"C" 332+39	343+91	NORTHBOUND INSIDE	11.52
"C" 344+98.1	353+00	NORTHBOUND INSIDE	8.02
"C" 322+00	331+31.5	SOUTHBOUND INSIDE	9.32
"C" 332+38.8	343+91.4	SOUTHBOUND INSIDE	11.53
"C" 344+98.4	354+00	SOUTHBOUND INSIDE	9.02
"C" 323+00	331+31.5	SOUTHBOUND OUTSIDE	8.32
"C" 332+39.5	338+44.7	SOUTHBOUND OUTSIDE	6.05
"C" 344+98.8	354+00	SOUTHBOUND OUTSIDE	9.01
<b>TOTAL</b>			<b>111.09</b>

## SUMMARY OF QUANTITIES

### Q-7

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
 06 - DESIGN  
 Foad N Al-Hamdani  
 Gerardo Gomez  
 Jonathan D. Gledhill  
 Calculated/Designed By  
 Checked By  
 Revised By  
 Date Revised

**MINOR CONCRETE (MISCELLANEOUS CONSTRUCTION)**

LOCATION		SIDE WALK CY	CURB				Misc AREA CY	PLAN SHEET No.
			TYPE A1-6 CY	TYPE A2-6 CY	TYPE A3-6 CY	TYPE D-6 CY		
FROM	TO							
"CR" 43+65.00	"CR" 45+25.00 Rt	337.92					L-3	
"CR" 43+65.00	"CR" 44+12.02 Rt			2.78			L-3	
"CR" 43+65.00	"CR" 44+12.02 Lt			2.78			L-3	
"CR" 44+12.02	"CR" 44+22.02 Rt		0.26				L-3	
"CR" 44+12.02	"CR" 44+22.02 Lt		0.26				L-3	
"CR" 44+22.02	"CR" 44+69.02 Rt				0.49		L-3	
"CR" 44+22.02	"CR" 44+69.02 Lt				0.49		L-3	
"CR" 44+69.02	"CR" 44+79.02 Rt		0.26				L-3	
"CR" 44+69.02	"CR" 44+79.02 Lt		0.26				L-3	
"CR" 44+79.02	"CR" 45+25.00 Rt			2.71			L-3	
"CR" 44+79.02	"CR" 45+25.00 Lt			2.71			L-3	
"C" 322+95.33	"C" 324+95.56 Lt				13.62		L-2	
"C" 331+31.47	"C" 331+61.47 Lt		0.78				L-2	
"C" 331+61.47	"C" 332+08.49 Lt			0.49			L-2	
"C" 332+08.49	"C" 332+38.49 Lt		0.78				L-2	
"C" 336+62.49	"C" 338+44.61 Lt				12.39		L-2	
"C" 332+36.35	"C" 332+86.65 Rt				4.9	76.49	L-2	
SUBTOTAL		337.92		460.37		76.49		
FROM STAGE CONSTRUCTION QUANTITIES				38.09				
TOTAL				912.87				

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	242	343

*Jonathan D. Gledhill* 12/21/12  
 REGISTERED CIVIL ENGINEER DATE

4-29-13  
 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.

**MINOR CONCRETE (EXPOSED AGGREGATE CONCRETE)**

DESCRIPTION	LOCATION		MINOR CONCRETE (EXPOSED AGGREGATE CONCRETE)	* CLASS 2 AB
	FROM	TO	SQFT	CY
SB OFF RAMP	"C" 336+62.49	"C" 338+44.61	3,261.6	20.2
SB ON RAMP	"C" 322+95.33	"C" 324+95.56	2,767.5	17.1
NB ON RAMP	"C" 325+38.79	"C" 325+90.38	617.4	3.8
	TOTAL		6,646.5	*41.1

\* QUANTITY INCLUDED IN ROADWAY QUANTITIES TABLE

**REMOVE RCB CULVERT**

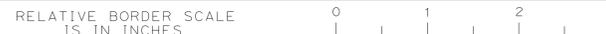
LOCATION	REMOVE RCB CULVERT		
	FROM	TO	CY
STAGE 1			
LAS VEGAS CREEK	"LV" 14+10.10	"LV" 14+78.51	175.8
SAN PEDRO CREEK	"SP" 84+13.40	"SP" 85+08.70	300.0
STAGE 2			
LAS VEGAS CREEK	"LV" 12+23.80	"LV" 14+10.10	476.1
SAN PEDRO CREEK	"SP" 83+54.30	"SP" 84+13.40	186.1
SAN PEDRO CREEK	"SP" 85+08.70	"SP" 85+48.67	125.9
	TOTAL		1,263.9

**REMOVE HEADWALL**

LOCATION	REMOVE HEADWALL CY
"LV" 14+78.51	1
"LV" 12+23.80	1
"SP" 83+54.30	1
"SP" 85+48.67	1
TOTAL	4

**SUMMARY OF QUANTITIES**  
**Q-8**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 06-DESIGN  
 FUNCTIONAL SUPERVISOR  
 FOAD N AL-HAMDANI  
 GERARDO GOMEZ  
 JONATHAN D. GLEDHILL  
 REVISIONS BY  
 DATE  
 REVISIONS BY  
 DATE  
 CALCULATED/DESIGNED BY  
 CHECKED BY  
 USERNAME => s124496  
 DGN FILE => 0500000055pa008.dgn



UNIT 1472

PROJECT NUMBER & PHASE

05000000551

LAST REVISION DATE PLOTTED => 03-MAY-2013  
 08-31-12 TIME PLOTTED => 1:3:58

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	243	343

*Jonathan D. Gledhill* 12/21/12  
 REGISTERED CIVIL ENGINEER DATE  
 4-29-13  
 PLANS APPROVAL DATE

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### FENCE

LOCATION	REMOVE			CHAIN LINK GATES				CHAIN LINK FENCE (TYPE CL-6)	CHAIN LINK FENCE (TYPE CL-8, SLATTED, Mod)	Temp FENCE (TYPE CL-6)	Temp FENCE (TYPE CL-6, SLATTED)	WOOD FENCE	MASONRY BLOCK WALL	PLAN SHEET No.
	CHAIN LINK FENCE	WOOD FENCE	MASONRY BLOCK WALL	4' (TYPE CL-6)	4' (TYPE CL-8, SLATTED, Mod)	8' (TYPE CL-6)	16' (TYPE CL-6)							
FROM	TO	LF	LF	LF	EA	EA	EA	EA	LF	LF	LF	LF	SQFT	
"C" 331+59.2	"C" 353+00.0 Rt	2,175												L-2,3,4
"C" 331+72.1	"C" 333+00.0 Rt								142					L-2
"C" 331+59.2	"C" 331+72.1 Rt							1						L-2
"C" 333+00.0	"C" 353+00.0 Rt									1,980				L-2,3,4
"C" 334+61.0	"C" 334+65.0 Rt							1						L-2
"C" 339+00.0	"C" 339+04.0 Rt							1						L-2
"C" 343+68.5	"C" 343+72.5 Rt							1						L-3
"C" 345+00.0	"C" 345+04.0 Rt							1						L-3
"C" 350+80.0	"C" 350+84.0 Rt							1						L-3
"C" 344+10.7	"C" 344+18.0 Rt	25												L-3
"C" 344+10.7	"C" 344+11.3 Rt								17					L-3
"C" 344+11.3	"C" 344+18.0 Rt							1						L-3
"C" 331+60.4	"C" 332+40.3 Lt	80												L-2
"C" 331+60.4	"C" 331+64.6 Lt								7					L-2
"C" 332+15.0	"C" 332+40.3 Lt								30					L-2
"C" 332+38.1	"C" 332+40.3 Lt				1									L-2
"C" 343+97.9	"C" 344+83.1 Lt	137												L-3
"C" 343+97.9	"C" 344+23.2 Lt								68					L-3
"C" 344+65.3	"C" 344+83.1 Lt								42					L-3
"C" 344+83.1	"C" 344+89.3 Lt							1						L-3
"C" 344+64.6	"C" 344+65.7 Rt		16									16		L-3
"C" 344+64.6	"C" 344+65.7 Rt													L-3
"C" 344+65.7	"C" 344+77.9 Rt			12										L-3
"C" 344+65.7	"C" 344+77.9 Rt												96	L-3
"C" 344+64.6	"C" 344+77.9 Rt										28			L-3
"CRD2" 44+12.19	"CRD2" 45+38.81 Rt									360				L-3
<b>TOTAL</b>		2,417	16	12	1	5	2	1	306	1,980	360	28	16	96

### HMA OVERSIDE DRAINS

DRAINAGE PLAN SHEET No.	LOCATION	Place HMA (Misc Area)**	HMA (TYPE A)**	RSP (No. 1, METHOD B)*	RSP FABRIC (CLASS 8)*
		SQYD	TON	CY	SQYD
L-2	"R" Sta 38+50.00 Lt	11.7	2.0	4.0	13.1
L-3	"C" Sta 343+76.75 Lt	16.5	2.8	4.0	13.1
L-3	"C" Sta 346+12.50 Lt	9.8	1.7	4.0	13.1
L-4	"C" Sta 354+00.00 Lt	9.1	1.6	4.0	13.1
L-2	"C" Sta 331+08.50 Rt	1.2	0.2		
L-2	"C" Sta 334+35.00 Rt	3.1	1.1	4.0	13.1
L-2	"C" Sta 336+50.00 Rt	3.2	1.2	4.0	13.1
L-2	"C" Sta 338+50.00 Rt	3.2	1.2	4.0	13.1
<b>TOTAL</b>		**57.8	**11.8	*28.0	*91.7

\* QUANTITY INCLUDED IN ROCK SLOPE PROTECTION QUANTITIES TABLE.  
 \*\* QUANTITY INCLUDED IN PLACE HMA (MISC AREA) QUANTITIES TABLE.

## SUMMARY OF QUANTITIES

### Q-9

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
 Gerardo Gomez  
 Jonathan D. Gledhill  
 Foad N Al-Hamdani  
 06-DESIGN

LAST REVISION DATE PLOTTED => 03-MAY-2013  
 08-31-12 TIME PLOTTED => 1:31:58

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	244	343

*Jonathan D. Gledhill* 12/21/12  
 REGISTERED CIVIL ENGINEER DATE

4-29-13  
 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.

### TEMPORARY DRAINAGE INLET PROTECTION

DRAINAGE SYSTEM No.	DRAINAGE UNIT No.	DRAINAGE PLAN SHEET No.	Temp DI PROTECTION EA	LOCATION
T1	b	SC-61	1	"C" 326+01.30, 47.77' Lt
T1	d		1	"C" 342+49.98, 70.95' Rt
T1	g		1	"C" 331+49.65, 58.58' Lt
T2	c		1	"C" 332+99.64, 54.84' Lt
T2	e		1	"C" 334+49.54, 49.48' Lt
T2	g		1	"C" 336+49.48, 42.33' Lt
T5	c	SC-61	1	"C" 331+84.60, 5.70' Rt
T3	d	SC-62	1	"C" 340+99.99, 69.07' Rt
T3	f		1	"C" 342+49.98, 70.95' Rt
T4	b		1	"C" 344+90.29, 71.54' Rt
T4	d	SC-62	1	"C" 346+59.75, 71.44' Rt
1	a	D-2	1	"C" 329+20.00, 45.0' Lt
1	c		1	"C" 330+30.00, 45.0' Lt
1	e		1	"C" 331+20.00, 45.0' Lt
10	a		1	"C" 333+49.01, 71.82' Rt
10	c		1	"C" 336+20.00, 68.1' Rt
2	b		1	"C" 332+50.00, 44.47' Lt
	d		1	"C" 333+00.00, 3.03' Lt
	f		1	"C" 334+00.00, 3.03' Lt
	h		1	"C" 335+00.00, 3.03' Lt
	j		1	"C" 336+00.00, 3.03' Lt
	m		1	"C" 337+00.00, 3.03' Lt
	o		1	"C" 338+00.00, 3.03' Lt
	q		1	"C" 339+00.00, 3.03' Lt
	s		1	"C" 332+50.00, 44.5' Lt
	u		1	"C" 332+70.00, 45.0' Lt
	w		1	"C" 334+00.00, 45.0' Lt
	y		1	"C" 335+85.00, 45.0' Lt
	aa		1	"C" 336+00.00, 45.0' Lt
	ac		1	"C" 336+15.00, 45.0' Lt
2	ae	D-2	1	"C" 338+00.00, 45.0' Lt
3	a	D-3	1	"C" 342+98.5, 0.87' Rt
3	c		1	"C" 342+98.5, 66.0' Rt
3	e		1	"C" 343+98.5, 66.0' Rt
4	a		1	"C" 346+01.5, 0.78' Rt
4	c		1	"C" 346+01.5, 59.64' Rt
5	c		1	"CR" 44+95.00, 22.12' Rt
5	e		1	"CR" 44+95.00, 32.52' Rt
6	c		1	"C" 344+88.8, 66.0' Rt
7	a		1	"CR" 43+91.76, 33.81' Lt
8	c		1	"CR" 44+97.75, 33.73' Lt
9	a		1	"CR" 43+95.00, 32.46' Rt
9	c	D-3	1	"CR" 43+95.00, 24.0' Rt
TOTAL			43	

### SAFETY EDGE

LOCATION		CASE (N)		* HMA (TYPE A) TON	SHEET No.
FROM	TO	A LF	K LF		
"C" 323+65.00	"C" 325+38.79 Rt		173.8	4.9	X-1
"C" 340+90.00	"C" 343+91.36 Rt		301.4	20.5	X-5,6
"C" 344+98.36	"C" 353+00.00 Rt		801.6	22.5	X-7
"C" 338+44.61	"C" 343+65.00 Lt	520.4		1.5	X-6
"C" 343+65.00	"C" 343+91.36 Lt		26.4	0.7	X-6
"C" 344+98.36	"C" 354+00.00 Lt		901.6	25.4	X-7
TOTALS		520.4	2,204.8	*75.5	

(N) NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY.  
 \* QUANTITY INCLUDED IN HMA, ROADWAY QUANTITIES TABLE.

### TEMPORARY GRAVEL BAG BERM

STATION	LF
"C" 322+00.00 TO 354+00.00	958
TOTAL	958

### TEMPORARY HYDRAULIC MULCH (BONDED FIBER MATRIX)

STATION	SQYD
"C" 322+00.00 TO 354+00.00	27,000
TOTAL	27,000

### TEMPORARY FIBER ROLL

STATION	LF
"C" 322+00.00 TO 354+00.00	10,000
TOTAL	10,000

NOTE: TEMPORARY FIBER ROLL INSTALLATION SHALL BE TYPE II

### TEMPORARY LARGE SEDIMENT BARRIER

STATION	LF
"C" 322+00.00 TO 354+00.00	3,500
TOTAL	3,500

NOTE: TEMPORARY LARGE SEDIMENT BARRIER INSTALLATION SHALL BE TYPE II

### TEMPORARY CHECK DAMS

STATION	LF
"C" 322+00.00 TO 354+00.00	30
TOTAL	30

### TEMPORARY CONSTRUCTION ENTRANCE

STATION	EA
"C" 322+00.00 TO 354+00.00	6
TOTAL	6

NOTE: TEMPORARY CONSTRUCTION ENTRANCE INSTALLATION SHALL BE TYPE II

### TEMPORARY SILT FENCE

STATION	LF
LAS VEGAS CREEK	50
SAN PEDRO CREEK	50
TOTAL	100

## SUMMARY OF QUANTITIES

### Q-10

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

**Caltrans**

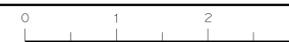
06-DESIGN

FUNCTIONAL SUPERVISOR: FOAD N AL-HAMDANI

CHECKED BY: JONATHAN D. GLEDHILL

REVISOR: GERARDO GOMEZ

DATE REVISION: 7/2/2010



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	245	343

*Katherine Brown*  
 LICENSED LANDSCAPE ARCHITECT

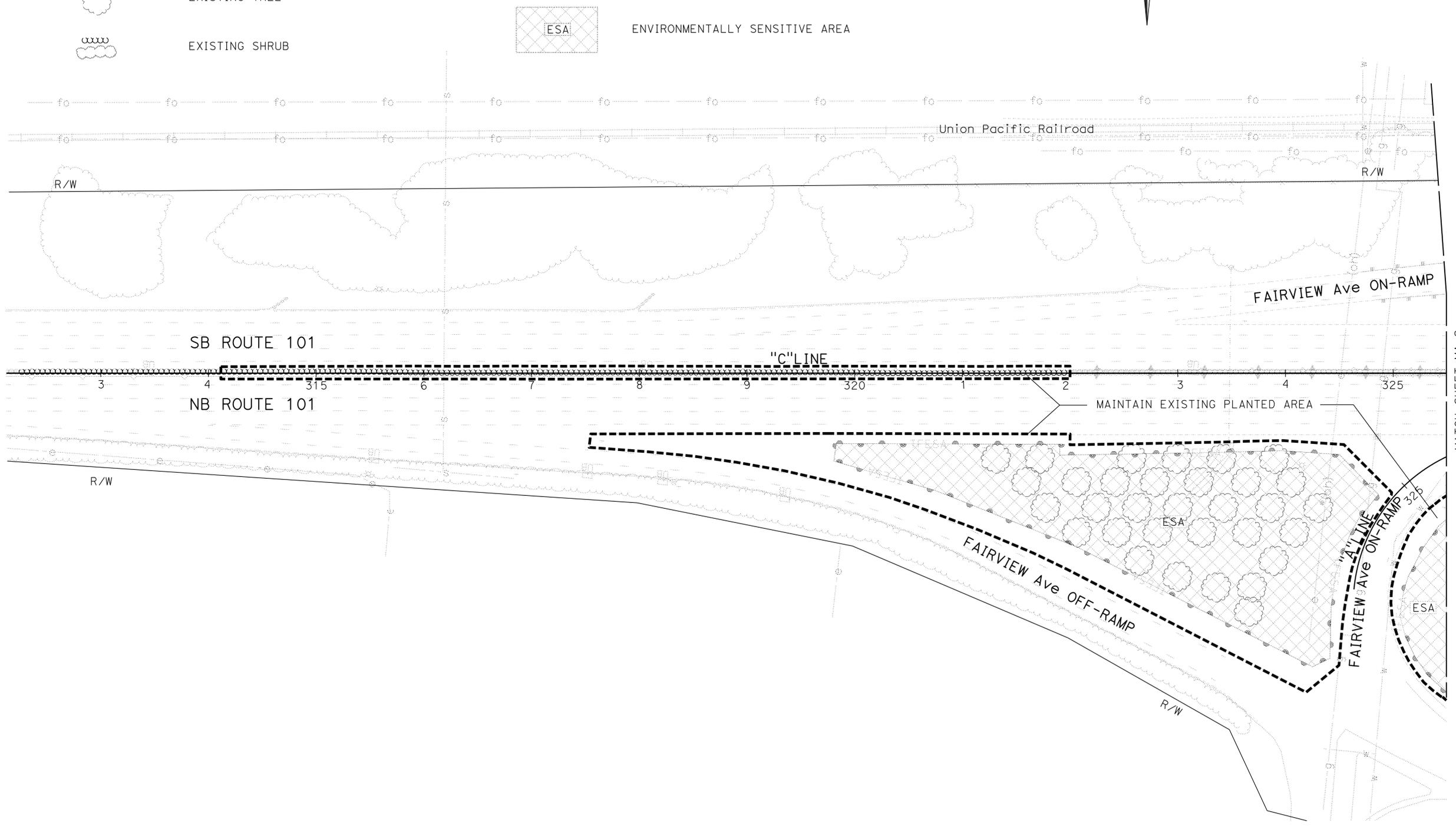
4-29-13  
 PLANS APPROVAL DATE

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

**LEGEND**

- EXISTING TREE
- EXISTING SHRUB
- ENVIRONMENTALLY SENSITIVE AREA



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	SENIOR LANDSCAPE ARCHITECT	CALCULATED/DESIGNED BY	REVISED BY
<b>Caltrans</b> LANDSCAPE ARCHITECTURE	DENNIS REEVES	CHECKED BY	DATE REVISED
		KATHERINE BROWN	
		JOSEPH ARNOLD	

**MAINTAIN EXISTING PLANTS PLAN**  
 SCALE: 1" = 50'  
**MA-1**

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	246	343

*Katherine Brown*  
 LICENSED LANDSCAPE ARCHITECT

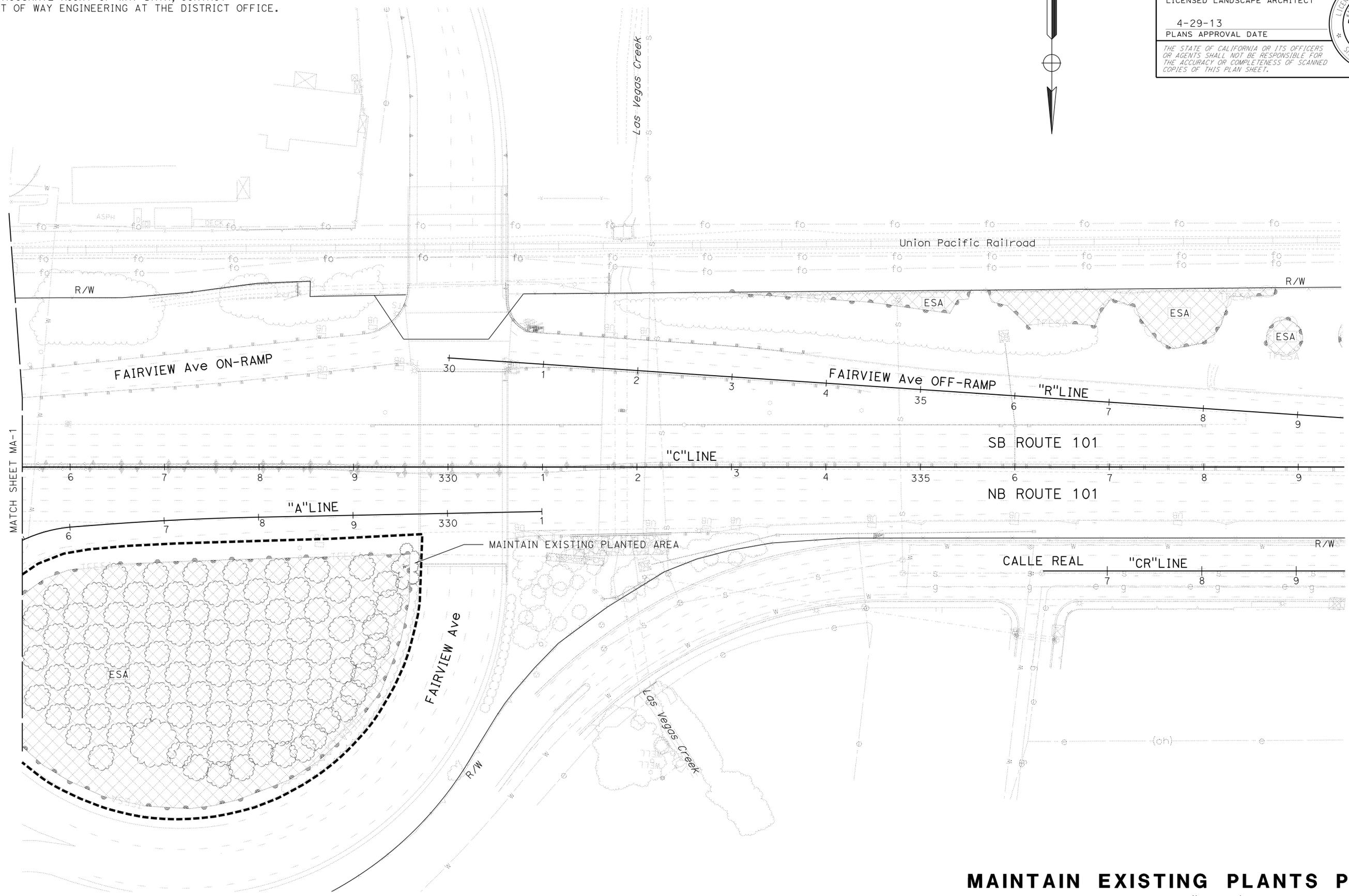
4-29-13  
 PLANS APPROVAL DATE

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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	SENIOR LANDSCAPE ARCHITECT	CALCULATED/DESIGNED BY	REVISOR
<b>Caltrans</b> LANDSCAPE ARCHITECTURE	DENNIS REEVES	CHECKED BY	DATE
			REVISED BY
			DATE
			REVISOR
			DATE
			REVISED BY
			DATE
			REVISOR
			DATE



**MAINTAIN EXISTING PLANTS PLAN**  
 SCALE: 1" = 50'  
**MA-2**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	247	343

*Katherine Brown*  
 LICENSED LANDSCAPE ARCHITECT

4-29-13  
 PLANS APPROVAL DATE

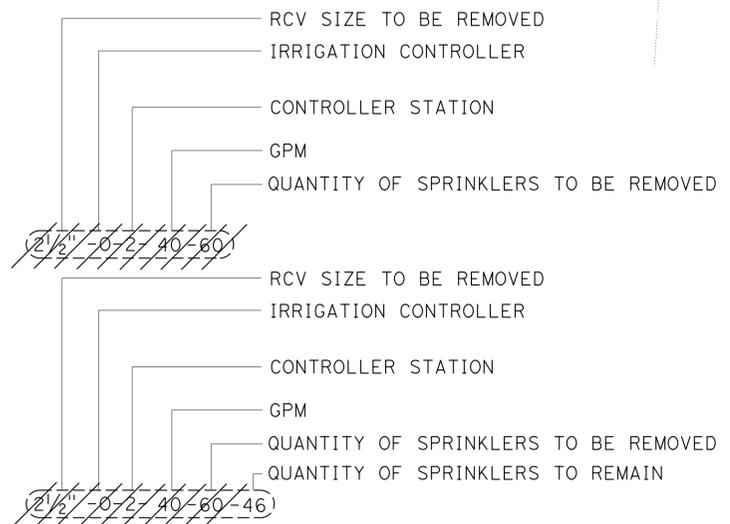
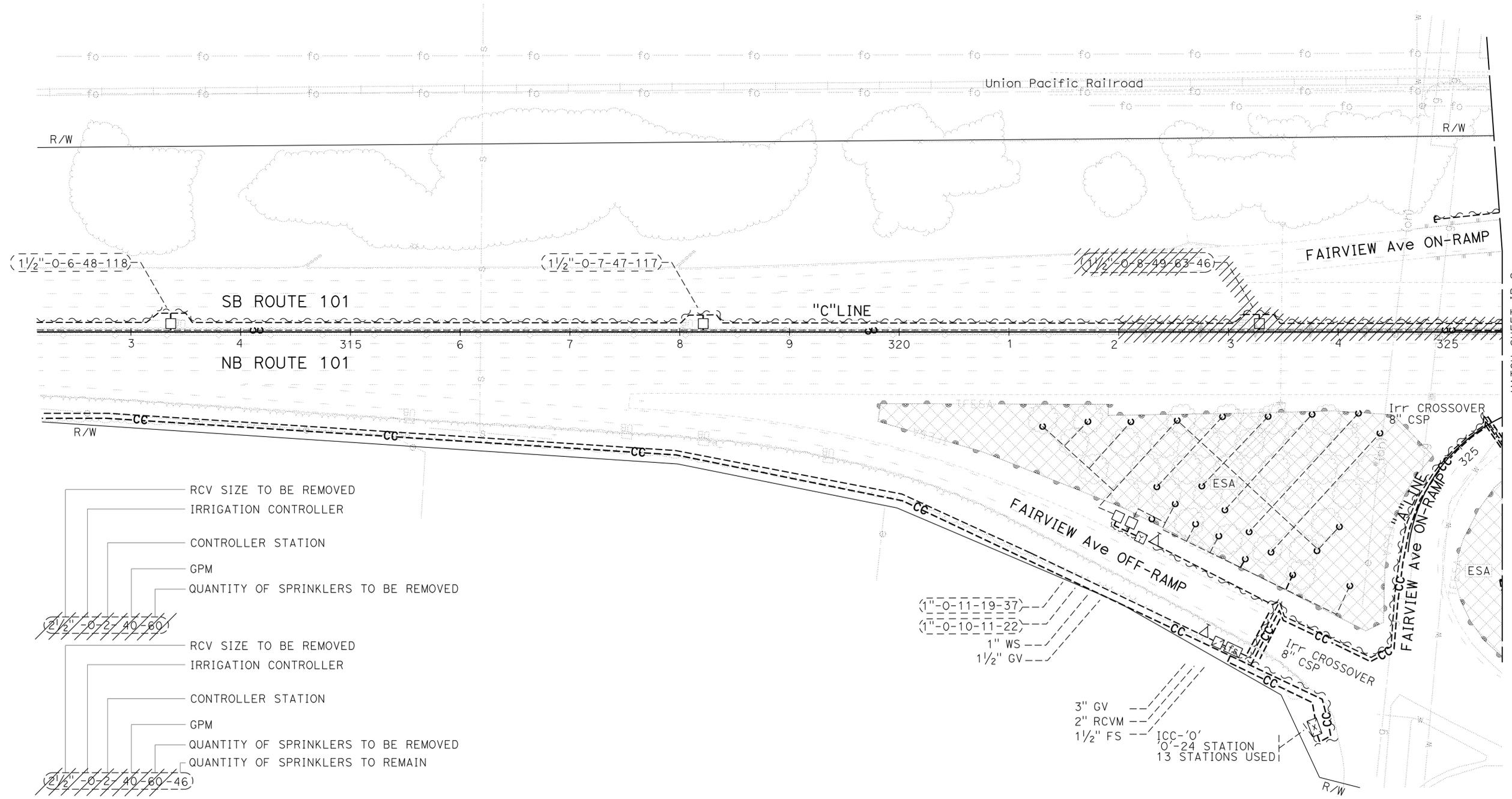
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

**NOTES:**

- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- CHECK AND TEST EXISTING IRRIGATION FACILITIES MUST INCLUDE;
  - MANUALLY OPERATING EXISTING CONTROLLER STATIONS '0'-1 THROUGH '0'-13 TO CHECK REMOTE CONTROL VALVE AND ASSOCIATED CONTROL AND NEUTRAL CONDUCTORS ARE FUNCTIONING. RCV '0'-1 THROUGH '0'-5 ARE NOT SHOWN ON PLANS AND ARE LOCATED IN THE MEDIAN FROM APPROXIMATELY 287+50 TO 307+50.
  - MANUALLY OPERATING EXISTING CONTROLLER STATIONS '0'-7, '0'-8, AND '0'-10 THROUGH '0'-13 TO CHECK SPRINKLERS FOR PROPER OPERATION.

**LEGEND**

- REMOVE IRRIGATION FACILITY
- EXISTING COMMUNICATION CABLE
- ENVIRONMENTALLY SENSITIVE AREA



**EXISTING VALVE CODE**

**IRRIGATION REMOVAL PLAN**

SCALE: 1" = 50'

**IR-1**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
 KATHERINE BROWN  
 KATHERINE BROWN ARCHITECT  
 SENIOR LANDSCAPE ARCHITECT  
 DENNIS REEVES  
 LANDSCAPE ARCHITECTURE

REVISOR BY  
 DATE

REVISOR BY  
 DATE

DESIGNED BY  
 CHECKED BY

DESIGNED BY  
 CHECKED BY

DESIGNED BY  
 CHECKED BY

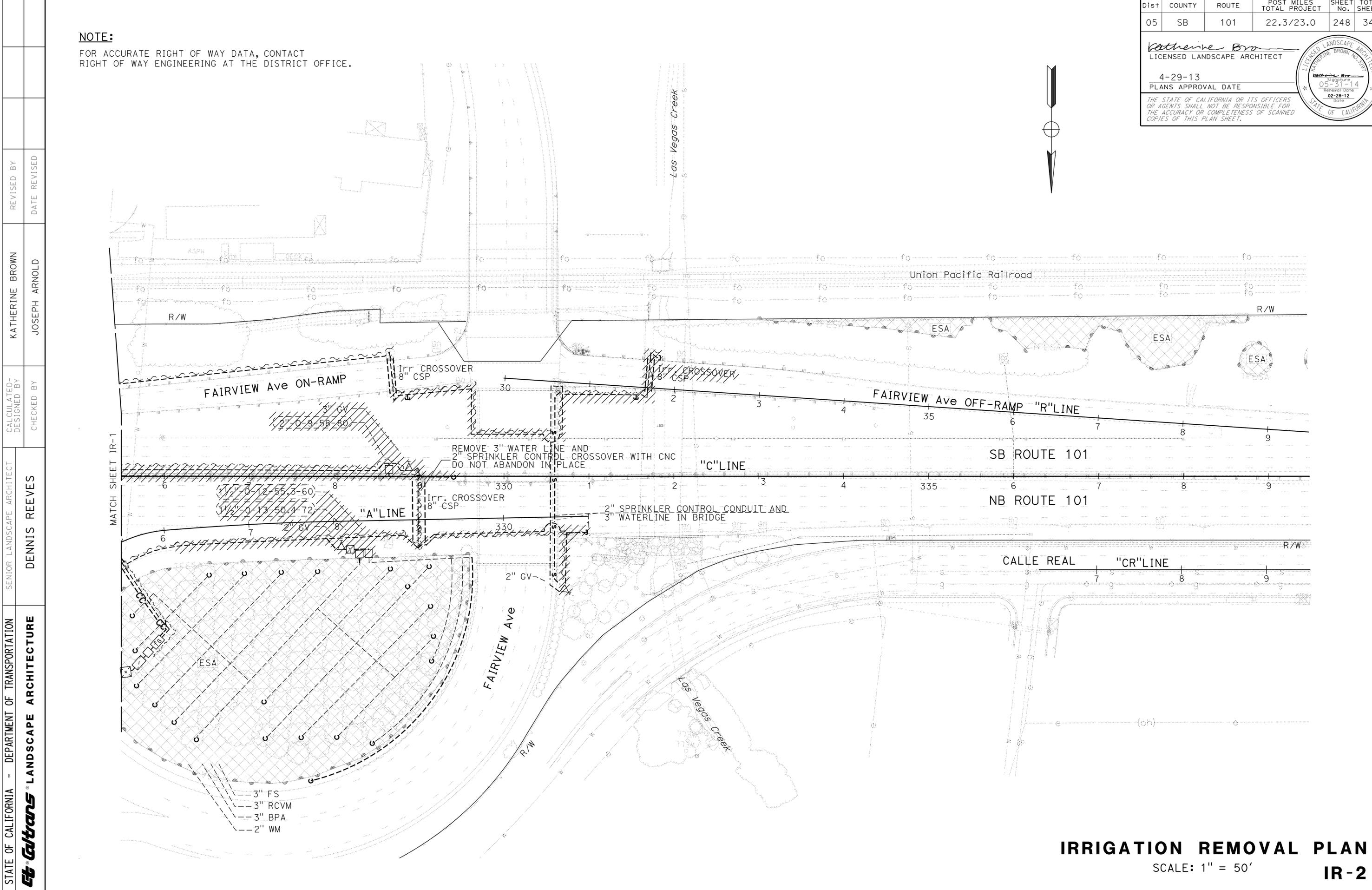
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	248	343

*Katherine Brown*  
 LICENSED LANDSCAPE ARCHITECT

4-29-13  
 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  
**Caltrans** LANDSCAPE ARCHITECTURE

SENIOR LANDSCAPE ARCHITECT  
 DENNIS REEVES

CALCULATED/DESIGNED BY  
 KATHERINE BROWN

CHECKED BY  
 JOSEPH ARNOLD

REVISED BY  
 DATE

REVISED BY  
 DATE

**IRRIGATION REMOVAL PLAN**  
 SCALE: 1" = 50'  
**IR-2**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	249	343

<i>Katherine Brown</i> LICENSED LANDSCAPE ARCHITECT	
4-29-13	PLANS APPROVAL DATE
<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>	

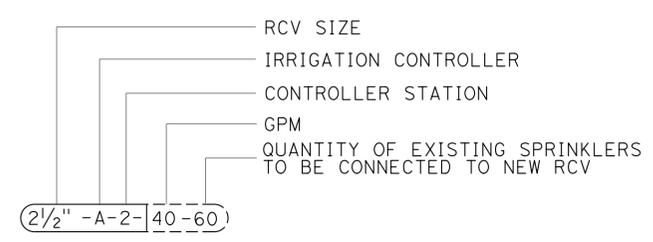
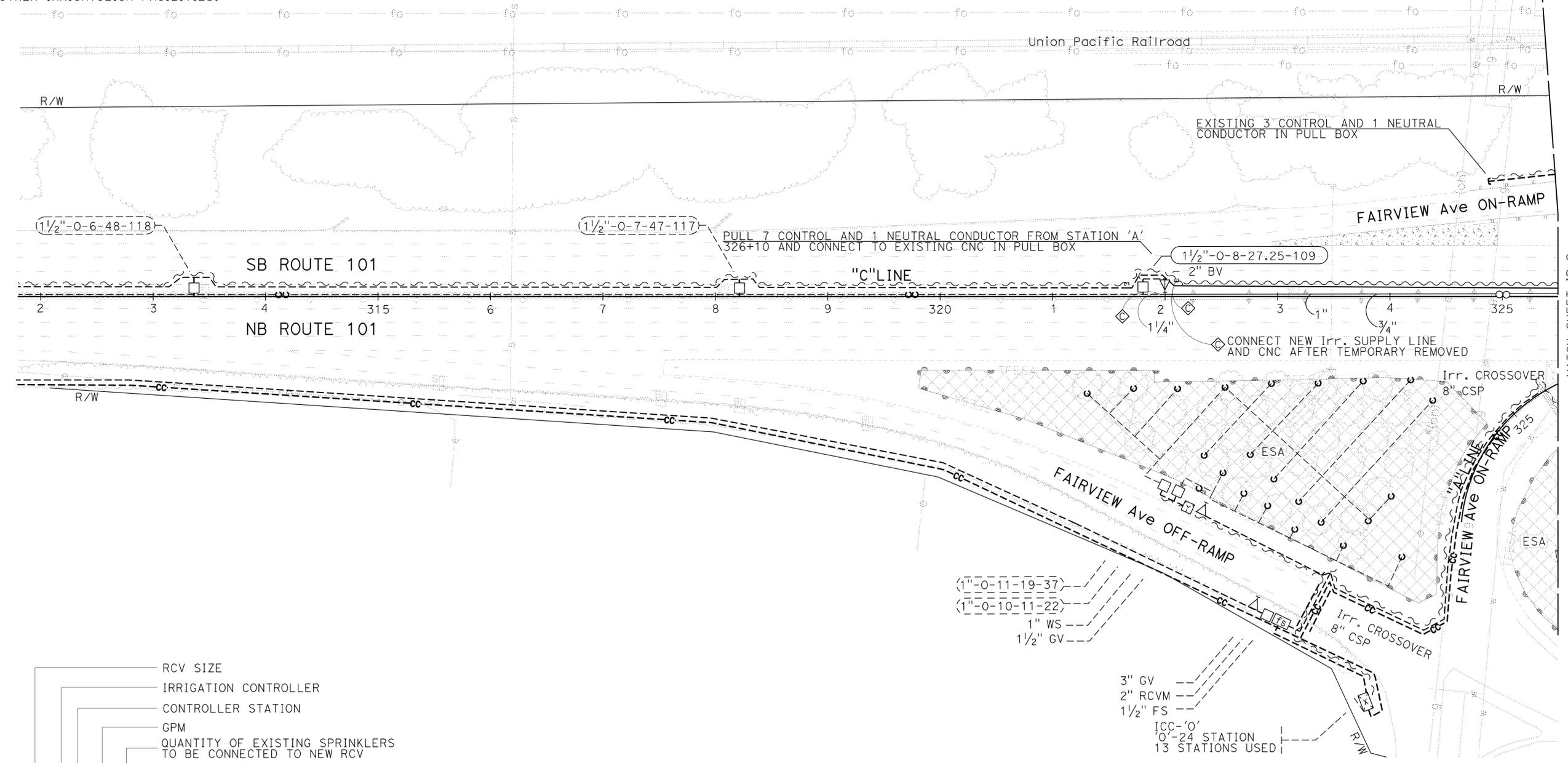


**NOTES:**

- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- CONTRACTOR TO MAINTAIN CONTINUOUS WATER SUPPLY THROUGHOUT PROJECT TO EXISTING MEDIAN PLANTING SOUTH OF FAIRVIEW Ave OVER CROSSING (VALVE 'O'-8 TO VALVE 'O'-1).
- PLASTIC PIPE (SUPPLY LINE)(MAIN) TO BE 3".
- INSTALL RCV 'O'-8 AND ASSOCIATED BALL VALVE AT SAME TIME TEMPORARY IRRIGATION LINE IS INSTALLED. RCV AND BALL VALVE ARE TO REMAIN AFTER TEMPORARY IRRIGATION LINE IS REMOVED
- MAINTAIN EXISTING IRRIGATION FACILITIES MUST INCLUDE RCV'S 'O'-7, 'O'-10 TO 'O'-13 AND ASSOCIATED SPRINKLERS.
- THE IRRIGATION SYSTEM FUNCTION TEST MUST INCLUDE:
  - FACILITIES THAT WERE INCLUDED IN THE CHECK AND TEST EXISTING IRRIGATION FACILITIES.
  - NEW FACILITIES.
- USE ARMOR-CLAD CONDUCTORS IN DIRECT BURIAL APPLICATIONS FROM PULL BOXES ADJACENT TO IRRIGATION CONTROLLER TO REMOTE CONTROL VALVES AND OTHER IRRIGATION FACILITIES.

**LEGEND**

- EXISTING COMMUNICATION CABLE
- ENVIRONMENTALLY SENSITIVE AREA
- ROCK SLOPE PROTECTION  
SEE DRAINAGE SHEETS
- MINOR CONCRETE (EXPOSED AGGREGATE CONCRETE)  
SEE CONSTRUCTION DETAIL SHEETS



**VALVE CODE**

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

APPROVED FOR IRRIGATION WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** LANDSCAPE ARCHITECTURE  
 SENIOR LANDSCAPE ARCHITECT DENNIS REEVES  
 CALCULATED/DESIGNED BY  
 CHECKED BY  
 KATHERINE BROWN JOSEPH ARNOLD  
 REVISED BY DATE REVISED  
 KATHERINE BROWN

LAST REVISION DATE PLOTTED => 06-MAY-2013  
 01-31-13 TIME PLOTTED => 07:15

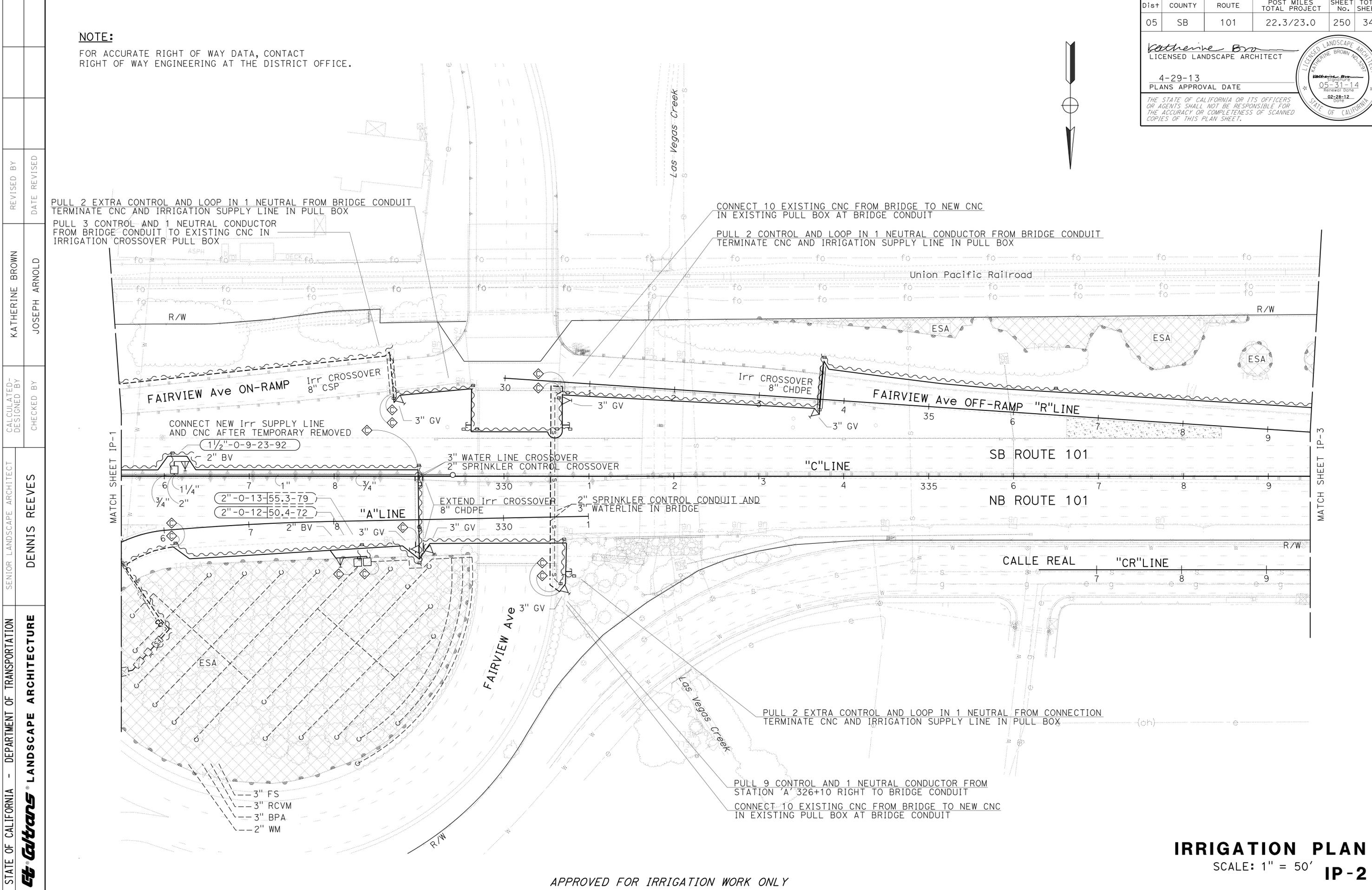
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	250	343

*Katherine Brown*  
 LICENSED LANDSCAPE ARCHITECT

4-29-13  
 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.



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

SENIOR LANDSCAPE ARCHITECT  
 DENNIS REEVES

CALCULATED/DESIGNED BY  
 KATHERINE BROWN

CHECKED BY  
 JOSEPH ARNOLD

REVISED BY  
 DATE

REVISED BY  
 DATE

PULL 2 EXTRA CONTROL AND LOOP IN 1 NEUTRAL FROM BRIDGE CONDUIT  
 TERMINATE CNC AND IRRIGATION SUPPLY LINE IN PULL BOX

PULL 3 CONTROL AND 1 NEUTRAL CONDUCTOR  
 FROM BRIDGE CONDUIT TO EXISTING CNC IN  
 IRRIGATION CROSSOVER PULL BOX

CONNECT 10 EXISTING CNC FROM BRIDGE TO NEW CNC  
 IN EXISTING PULL BOX AT BRIDGE CONDUIT

PULL 2 CONTROL AND LOOP IN 1 NEUTRAL CONDUCTOR FROM BRIDGE CONDUIT  
 TERMINATE CNC AND IRRIGATION SUPPLY LINE IN PULL BOX

PULL 2 EXTRA CONTROL AND LOOP IN 1 NEUTRAL FROM CONNECTION  
 TERMINATE CNC AND IRRIGATION SUPPLY LINE IN PULL BOX

PULL 9 CONTROL AND 1 NEUTRAL CONDUCTOR FROM  
 STATION 'A' 326+10 RIGHT TO BRIDGE CONDUIT

CONNECT 10 EXISTING CNC FROM BRIDGE TO NEW CNC  
 IN EXISTING PULL BOX AT BRIDGE CONDUIT

APPROVED FOR IRRIGATION WORK ONLY

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



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** LANDSCAPE ARCHITECTURE  
 SENIOR LANDSCAPE ARCHITECT DENNIS REEVES  
 CALCULATED/DESIGNED BY KATHERINE BROWN  
 CHECKED BY JOSEPH ARNOLD  
 REVISED BY DATE REVISED

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	252	343

*Katherine Brown*  
 LICENSED LANDSCAPE ARCHITECT

4-29-13  
 PLANS APPROVAL DATE

05-31-14  
 Renewal Date  
 02-28-12  
 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.

**SPRINKLER SCHEDULE**

SYMBOL	TYPE	DESCRIPTION	SPRAY PATTERN	OPERATING PRESSURE (psi)	PRESSURE COMPENSATING	PLUS/MINUS 5% ②		RADIUS (ft)	WIDTH x LENGTH (ft)	MATERIAL	INLET CONNECTION (NPT INCH)	POSITIVE-LOCKING Adj ARC STOP	BACKSPLASH PREVENTER	DIFFUSER PIN	DISTANCE CONTROL FLAP	Adj DISCHARGE	RISER			SWING JOINT (TYPE) ⑤	RISER SUPPORT	SPRINKLER PROTECTOR (TYPE)	REMARKS		
						GALLONS PER MINUTE (GPM)	GALLONS PER HOUR (GPH)										MATERIAL	SIZE (IPS INCH)	HEIGHT (INCH)					FLOW SHUTOFF DEVICE	
O	C-2	BUBBLER	F	30	-	1.6	-	-	-	PL	1/2	-	-	-	-	X	V	-	-	1/2	-	-	-	-	LOCATE 5' ON CENTER

**X IN BOX DENOTES REQUIREMENT**

- 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.

**IRRIGATION SPRINKLER SCHEDULE**  
**ISS-1**

LAST REVISION | DATE PLOTTED => 06-MAY-2013  
 01-31-13 | TIME PLOTTED => 07:05

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	253	343

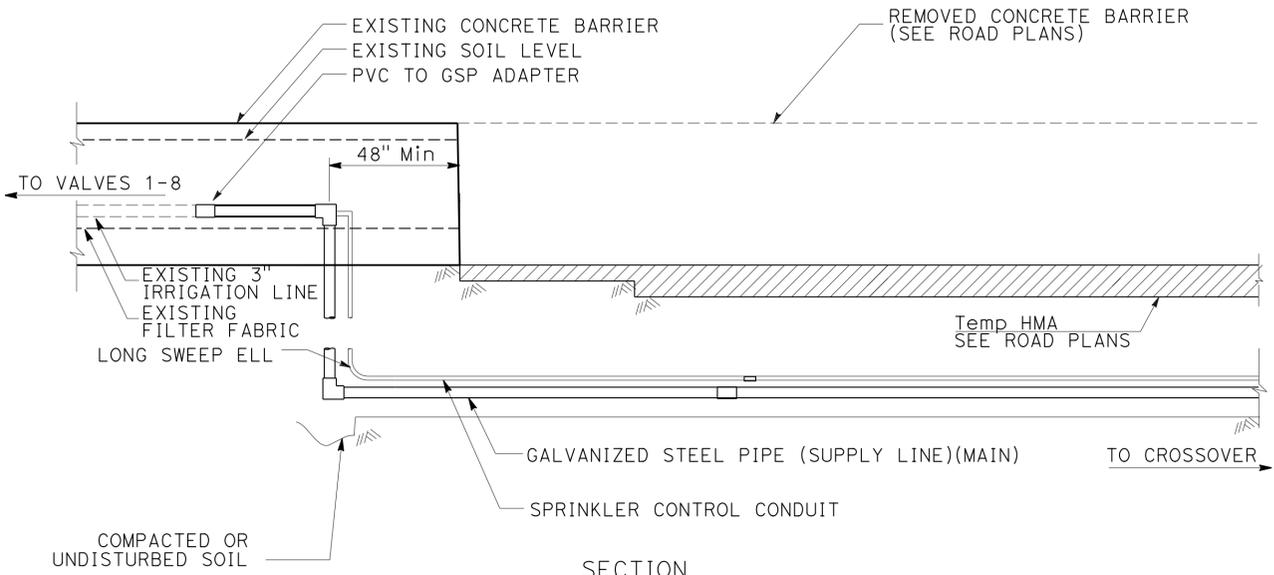
*Katherine Brown*  
 LICENSED LANDSCAPE ARCHITECT

4-29-13  
 PLANS APPROVAL DATE

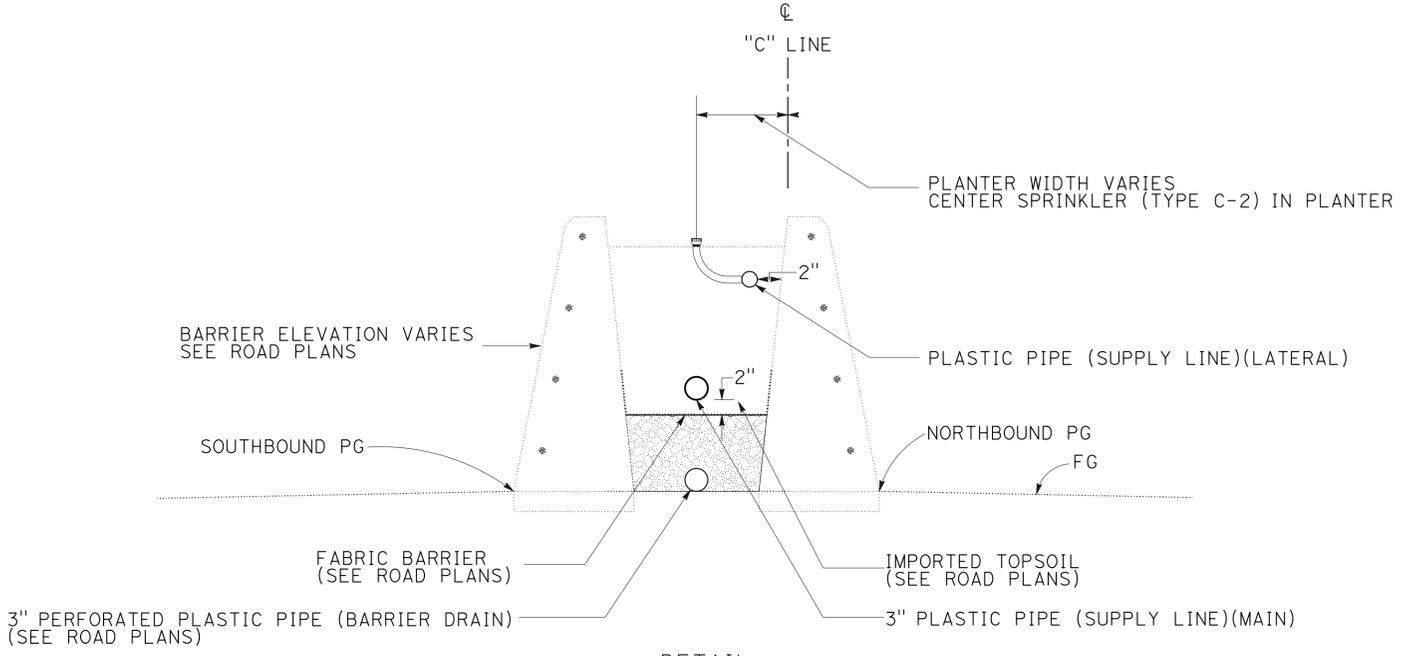
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**NOTES:**

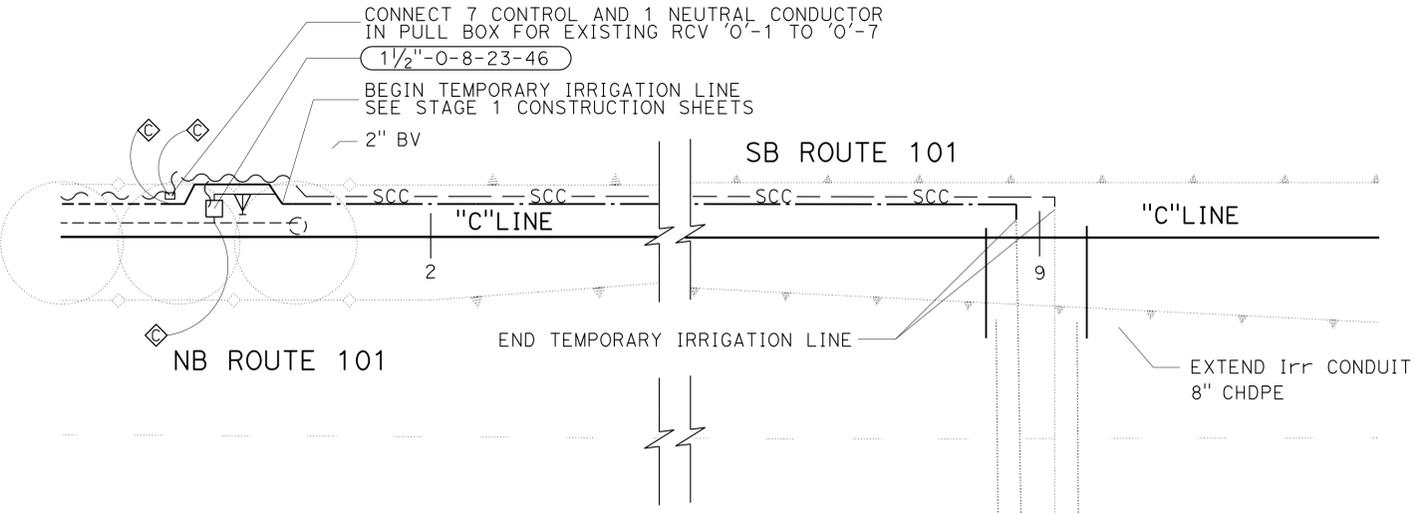
1. TEMPORARY IRRIGATION LINE TO BE REMOVED.
2. TEMPORARY IRRIGATION LINE INCLUDES MAIN, SCC AND CNC.
3. INSTALL RCV '0'-8 AND ASSOCIATED BALL VALVE AT SAME TIME TEMPORARY IRRIGATION LINE IS INSTALLED. RCV AND BALL VALVE ARE TO REMAIN AFTER TEMPORARY IRRIGATION LINE IS REMOVED.



**TEMPORARY IRRIGATION LINE**  
 "C" 322+10 TO "C" 329+00



**MAIN AND LATERAL LINE IN MEDIAN**



**TEMPORARY IRRIGATION LINE**  
 "C" 322+10 TO "C" 329+00

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
 KATHERINE BROWN  
 KATHERINE BROWN  
 DENNIS REEVES  
 LANDSCAPE ARCHITECTURE  
 LANDSCAPE ARCHITECT

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	254	343

*Katherine Brown*  
 LICENSED LANDSCAPE ARCHITECT

4-29-13  
 PLANS APPROVAL DATE

05-31-14  
 Renewal Date  
 02-28-12  
 Date

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**SUBTOTALS PER VALVE ON LATERAL SUPPLY SIDE OF CONTROL VALVE**

DESCRIPTION	UNIT	VALVE OR ASSEMBLY NUMBER						SUBTOTALS	UNIT	DESCRIPTION
		0-8	0-9	0-10	0-11	0-12	0-13			
PLASTIC PIPE SUPPLY LINE SCH 40	3/4"	LF	109	214				323	LF	3/4"
	1"	LF	58	102				160	LF	1"
	1 1/4"	LF	145	121				266	LF	1 1/4"
	1 1/2"	LF	15	8				23	LF	1 1/2"
	2"	LF	5	5		10	10	30	LF	2"
SPRINKLER TYPE	C-2	EA	63	92				155	EA	C-2

**SUBTOTALS PER PLAN SHEET ON MAIN SUPPLY SIDE OF CONTROL VALVE**

DESCRIPTION	UNIT	SHEET NUMBER			SUBTOTALS	
		IP-1	IP-2	IP-3		
VALVES AND ASSEMBLIES	2" RCV	EA	2		2	
	1 1/2" BV	EA	1	1	2	
	2" BV	EA	1	2	3	
PLASTIC PIPE SUPPLY LINE SCH 40	3" GV	EA		6	6	
	2" LF	LF	8	24	32	
	3" LF	LF	362	2148	200	2710

**TOTAL QUANTITIES**

TOTALS	UNIT	DESCRIPTION
2	EA	2"
2	EA	1 1/2"
3	EA	2"
6	EA	3"
323	LF	3/4"
160	LF	1"
266	LF	1 1/4"
23	LF	1 1/2"
62	LF	2"
2710	LF	3"
155	EA	C-2

**IRRIGATION QUANTITIES  
 IQ-1**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	255	343

*Katherine Brown*  
 LICENSED LANDSCAPE ARCHITECT

4-29-13  
 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.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
 KATHERINE BROWN  
 KATHERINE BROWN  
 KATHERINE BROWN  
 SENIOR LANDSCAPE ARCHITECT  
 LANDSCAPE ARCHITECTURE  
 DENNIS REEVES  
 LANDSCAPE ARCHITECT

**TEMPORARY IRRIGATION LINE**

SHEET	TEMPORARY IRRIGATION SUPPLY LINE	3" GALVANIZED STEEL PIPE (SUPPLY LINE)(MAIN)	SPRINKLER CONTROL CONDUIT WITH CNC
IP-1	LF 711	(N) LF 711	(N) LF 711

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

**IRRIGATION CROSSOVERS**

LOCATION	SIDE	CONDUIT TYPE		(N) WATER LINE CROSSOVER SIZE (INCH)	(N) SPRINKLER CONTROL CROSSOVER SIZE (INCH)
		③ SIZE (INCH)	8 LENGTH (LF)		
LOL "R"	33+70	X	X	3	2
TOTAL		30			

(N) - NOT A SEPARATE PAY ITEM FOR INFORMATION ONLY  
 X - DENOTES REQUIREMENT

**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)
- ③ CORRUGATED HIGH DENSITY POLYETHYLENE PIPE
- ALTERNATIVE CONDUIT
- WELDED STEEL PIPE

**EXTEND IRRIGATION CROSSOVERS**

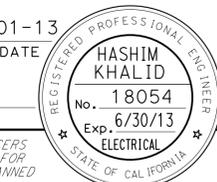
LOCATION	SIDE	EXTEND CONDUIT		CB	OL	(N) WATER LINE CROSSOVER SIZE (INCH)	(N) SPRINKLER CONTROL CROSSOVER SIZE (INCH)
		SIZE (INCH)	LENGTH (LF)				
LOL "A"	329+00	X	X	X		3	2
TOTAL		18					

(N) - NOT A SEPARATE PAY ITEM FOR INFORMATION ONLY  
 X - DENOTES REQUIREMENT

**ABBREVIATIONS:**  
 CB - COUPLING BAND  
 OL - OVERLAP

**IRRIGATION QUANTITIES**  
**IQ-2**

LAST REVISION | DATE PLOTTED => 06-MAY-2013  
 01-31-13 | TIME PLOTTED => 06:00

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	256	343
 REGISTERED ELECTRICAL ENGINEER DATE 02-01-13					
4-29-13 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.		

**LEGEND: (FOR SHEETS E-1 AND E-2)**

1 Exist 120/240 V, 1Ø, 3-WIRE, TYPE III-AF SERVICE EQUIPMENT ENCLOSURE WITH THE FOLLOWING CIRCUIT BREAKERS:

CTID No. 05511010022590

AMPERES	VOLTS	POLES	NAMEPLATE	METER	PHOTOELECTRIC CONTROL TYPE
30	240	2	LIGHTING	NO	V
20	240	2	SIGN	YES	LC3
15	120	1	CONTROL	NO	---
20	120	1	MVDS	YES	---
15	120	1	SPARE	YES	---

**ABBREVIATIONS:**

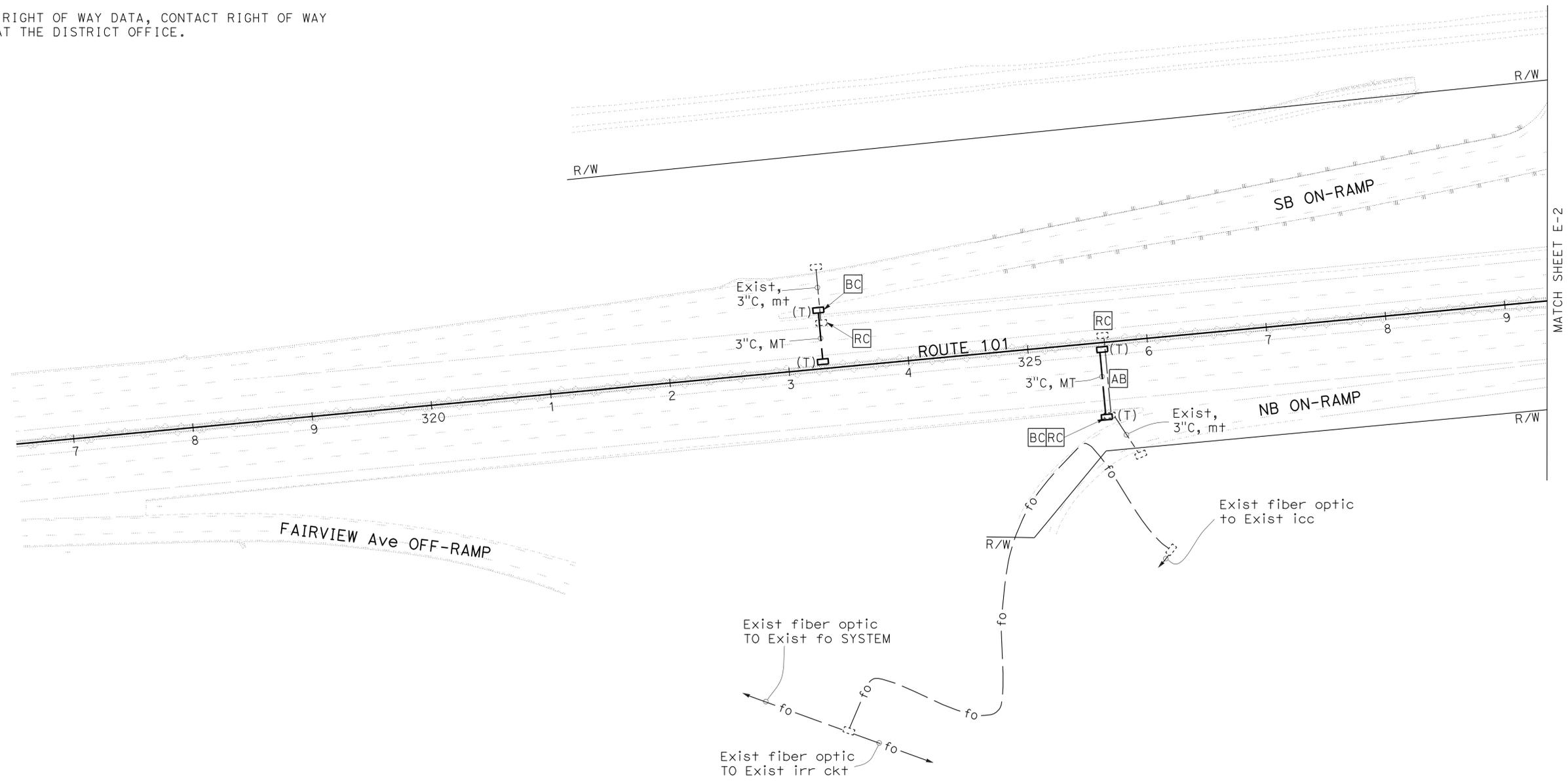
WVDS WIRELESS VEHICLE DETECTION SYSTEM  
 VSN VEHICLE SENSOR NODE  
 AP ACCESS POINT FOR VSN

**SYMBOLS:**

-  Exist WIRELESS MODEM WITH DIRECTIONAL ANTENNA
-  Exist ACCESS POINT WITH INTERNAL GPRS MODEM AND ETHERNET ROUTER
-  Exist VEHICLE SENSOR NODE

**NOTE:**

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



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** 06-ELECTRICAL DESIGN  
 FUNCTIONAL SUPERVISOR: ALI BAKHDOUD  
 CALCULATED/DESIGNED BY: [Blank]  
 CHECKED BY: [Blank]  
 REVISIONS: [Blank]  
 REVISOR: [Blank]  
 DATE: [Blank]  
 DESIGNED BY: [Blank]  
 CHECKED BY: [Blank]  
 REVISIONS: [Blank]  
 REVISOR: [Blank]  
 DATE: [Blank]  
 DESIGNED BY: [Blank]  
 CHECKED BY: [Blank]  
 REVISIONS: [Blank]  
 REVISOR: [Blank]  
 DATE: [Blank]  
 DESIGNED BY: [Blank]  
 CHECKED BY: [Blank]

APPROVED FOR ELECTRICAL WORK ONLY

**MODIFY LIGHTING AND SIGN ILLUMINATION**  
**E-1**

SCALE: 1" = 50'





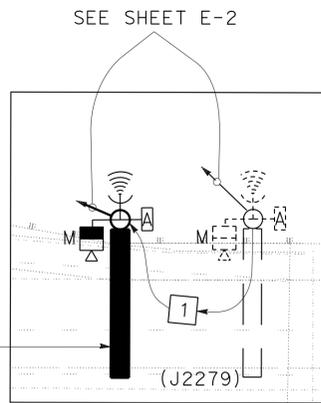
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	259	343
		REGISTERED ELECTRICAL ENGINEER DATE		02-01-13	
		PLANS APPROVAL DATE		4-29-13	
REGISTERED PROFESSIONAL ENGINEER <b>HASHIM KHALID</b> No. 18054 Exp. 6/30/13 ELECTRICAL STATE OF CALIFORNIA					
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

**LEGEND: (FOR THIS SHEET ONLY)**

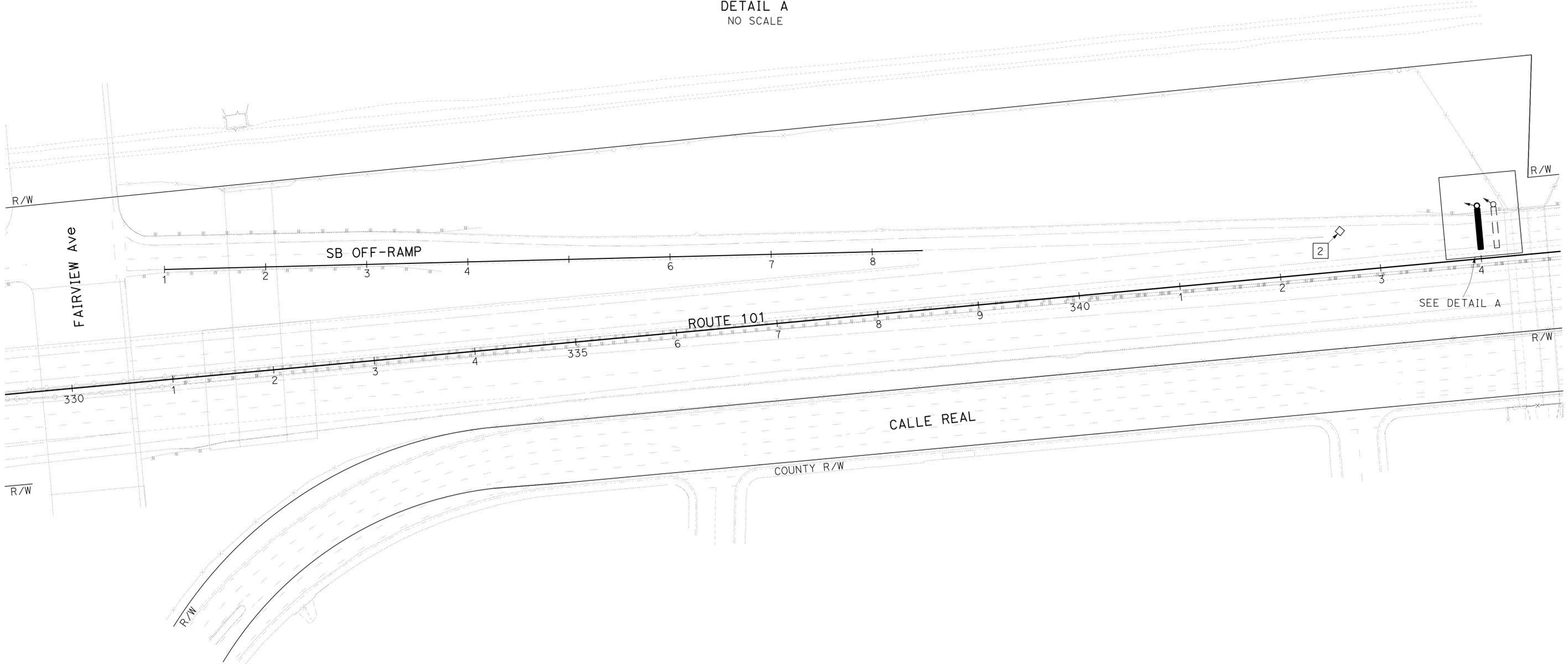
- 1 **RL** Exist MVDS SENSOR, ACCESS POINT, WIRELESS MODEM, AND NEMA 3R ENCLOSURE FROM Exist SIGN STRUCTURE AT STATION 344+10 TO THE NEW SIGN STRUCTURE AT STATION 344+00.
- 2 **RS** Exist VSN.  
INSTALL NEW VSN AT A LOCATION DETERMINED BY THE ENGINEER. SEE VSN INSTALLATION DETAILS ON SHEET E-5.

**NOTE:**

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



**DETAIL A**  
NO SCALE



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** 06-ELECTRICAL DESIGN

FUNCTIONAL SUPERVISOR  
 ALI BAKHDOUD

CALCULATED/DESIGNED BY  
 CHECKED BY

HASHIM KHALID  
 OMAR MENDOZA

REVISED BY  
 DATE REVISED

APPROVED FOR ELECTRICAL WORK ONLY



UNIT 1515

SCALE: 1" = 50'

PROJECT NUMBER & PHASE

05000000551

BORDER LAST REVISED 7/2/2010

USERNAME => s124496  
DGN FILE => 0500000055uad004.dgn

LAST REVISION DATE PLOTTED => 03-MAY-2013  
 02-01-13 TIME PLOTTED => 1:3:50

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** 06-ELECTRICAL DESIGN

FUNCTIONAL SUPERVISOR  
 ALI BAKHDOUD

DESIGNED BY  
 HASHIM KHALID

CHECKED BY  
 OMAR MENDOZA

REVISOR  
 REVISIONS

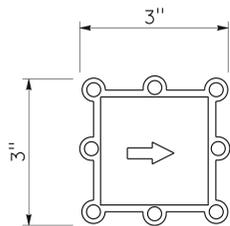
REVISIONS

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	260	343

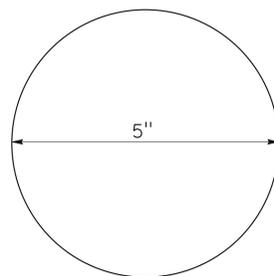
*Hashim Khalid* 02-01-13  
 REGISTERED ELECTRICAL ENGINEER DATE  
 4-29-13  
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER  
 HASHIM KHALID  
 No. 18054  
 Exp. 6/30/13  
 ELECTRICAL  
 STATE OF CALIFORNIA

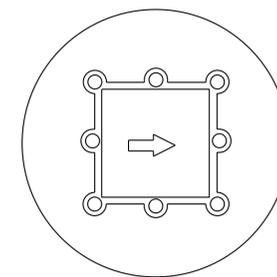
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



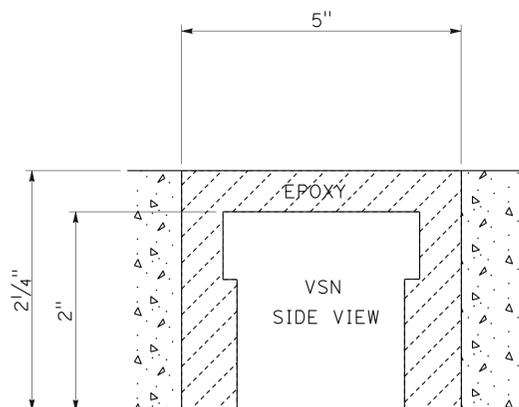
VEHICLE SENSOR NODE



CORED HOLE



VSN IN CORED HOLE



VSN IN CORED HOLE WITH EPOXY ELEVATION

**DETAIL A**

VEHICLE SENSOR NODE INSTALLATION DETAIL

APPROVED FOR ELECTRICAL WORK ONLY

**ELECTRICAL DETAILS**  
 NO SCALE  
**E-5**



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	261	343

REGISTERED ELECTRICAL ENGINEER DATE 02-01-13  
 4-29-13  
 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:**

THE QUANTITIES ON THIS SHEET ARE NOT SEPARATE PAY ITEMS AND ARE FOR INFORMATION ONLY.

**MODIFY LIGHTING AND SIGN ILLUMINATION**

SHEET No.	No. 12 CONDUCTOR	No. 10 CONDUCTOR	No. 8 CONDUCTOR (G)	3" C, TYPE 3	2" C, TYPE 3	No. 5(T) PB	No. 5 PB	TYPE 31 ELECTROLIER [NS]	TYPE 31 POLE CIDH PILE
	LF	LF	LF	LF	LF	EA	EA	EA	EA
E-1				100		4			
E-2	2,200	4,600	1,200	200	1,100	5	4	1	1

**MODIFY SIGNAL**

SHEET No.	2" C, TYPE 3	No. 5(E) PB	No. 6(E) PB	TYPE A DETECTOR LOOP	TYPE D DETECTOR LOOP	DLC
	LF	EA	EA	EA	EA	LF
E-3	150	1	1	8	2	350

**MODIFY WIRELESS VEHICLE DETECTION SYSTEM**

SHEET No.	VSN	RELOCATE MVDS SENSOR	RELOCATE AP	RELOCATE WIRELESS MODEM	RELOCATE NEMA 3R	85 W ISL
	EA	EA	EA	EA	EA	EA
E-4	1	1	1	1	1	1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** 06-ELECTRICAL DESIGN  
 FUNCTIONAL SUPERVISOR: ALI BAKHDOUD  
 CALCULATED/DESIGNED BY: [Blank]  
 CHECKED BY: [Blank]  
 REVISOR: HASHIM KHALID  
 DATE REVISOR: OMAR MENDOZA

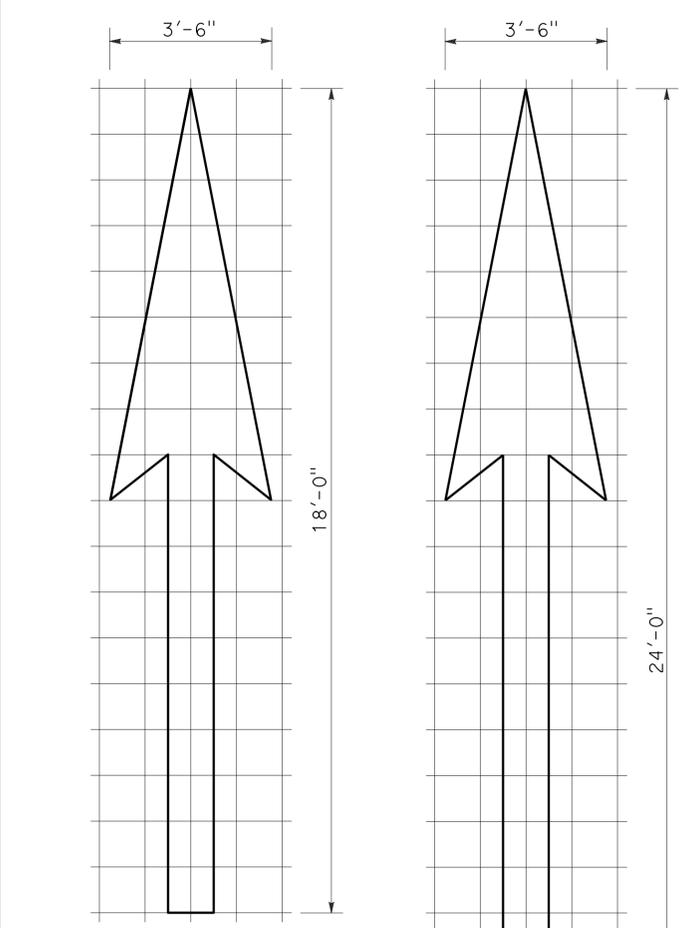
**ELECTRICAL QUANTITIES**  
**E-6**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	262	343

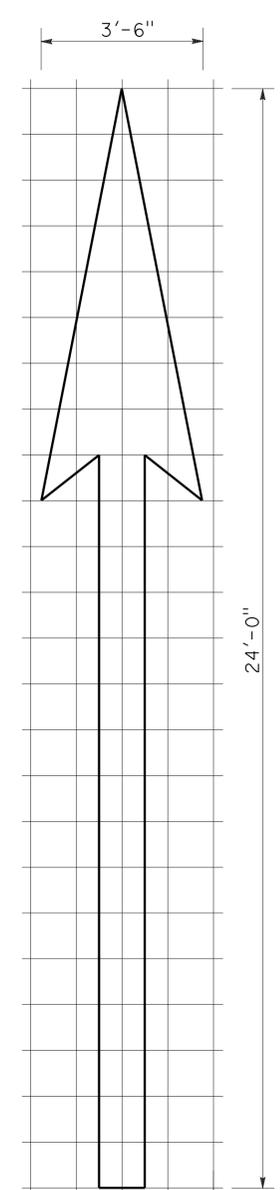
Roberto L. McLaughlin  
 REGISTERED CIVIL ENGINEER  
 April 20, 2012  
 PLANS APPROVAL DATE  
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER  
 Roberto L. McLaughlin  
 No. C40375  
 Exp. 3-31-13  
 CIVIL  
 STATE OF CALIFORNIA

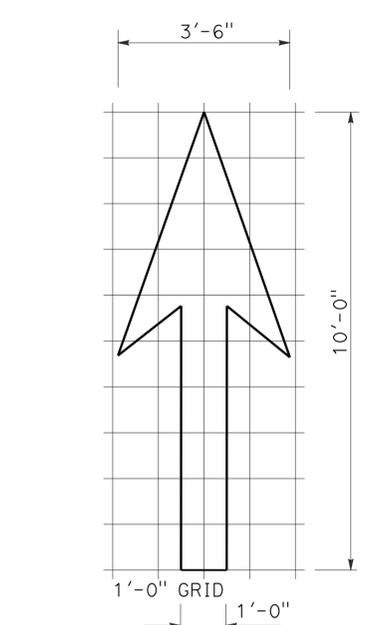
TO ACCOMPANY PLANS DATED 4-29-13



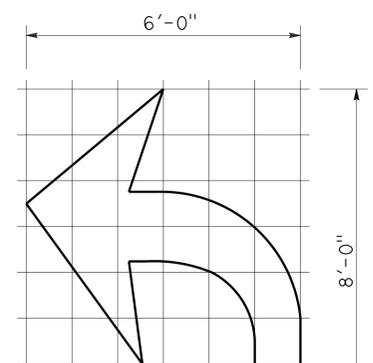
A=25 ft<sup>2</sup>  
**TYPE I 18'-0" ARROW**



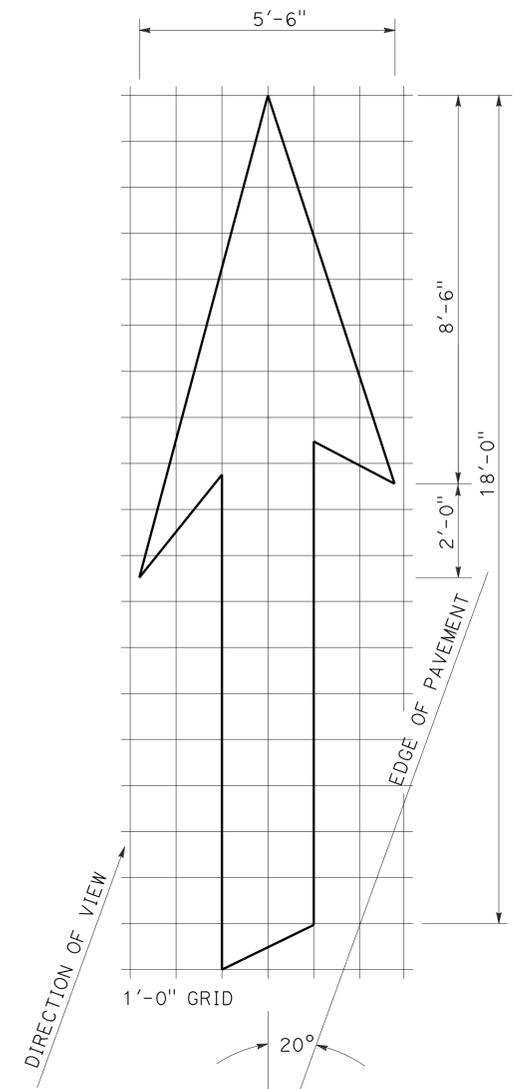
A=31 ft<sup>2</sup>  
**TYPE I 24'-0" ARROW**



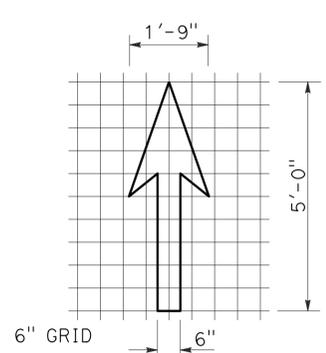
A=14 ft<sup>2</sup>  
**TYPE I 10'-0" ARROW**



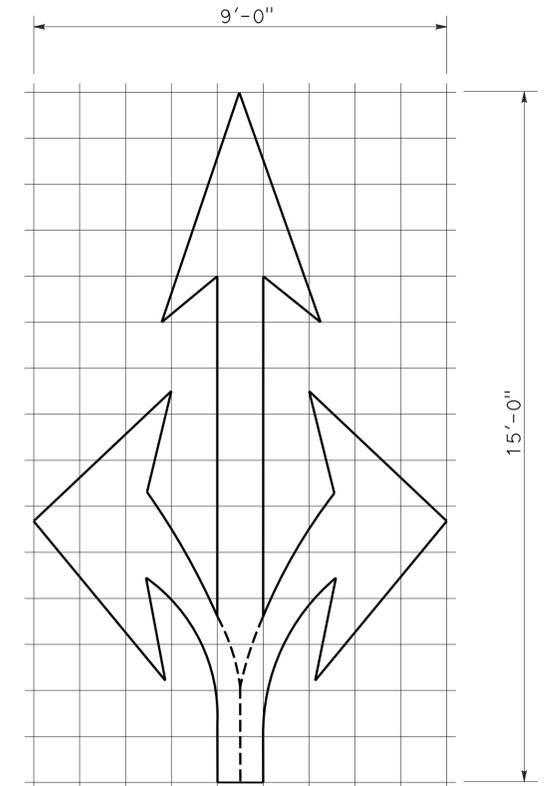
A=15 ft<sup>2</sup>  
**TYPE IV (L) ARROW**  
(For Type IV (R) arrow, use mirror image)



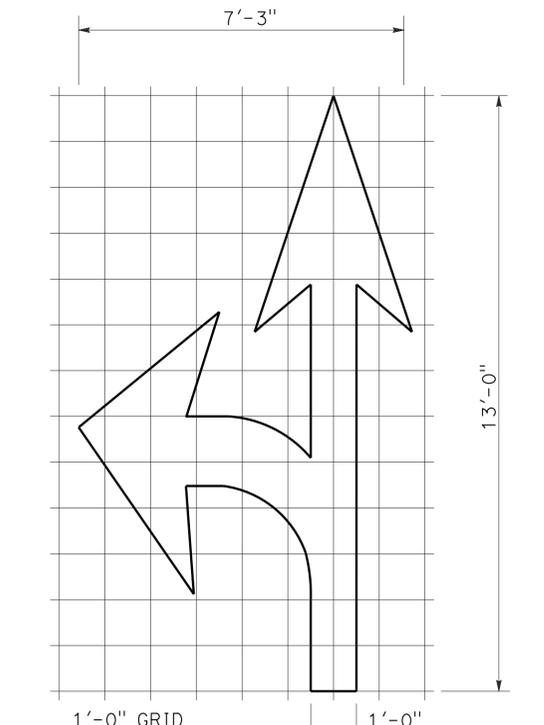
A=42 ft<sup>2</sup>  
**TYPE VI ARROW**  
Right lane drop arrow  
(For left lane, use mirror image)



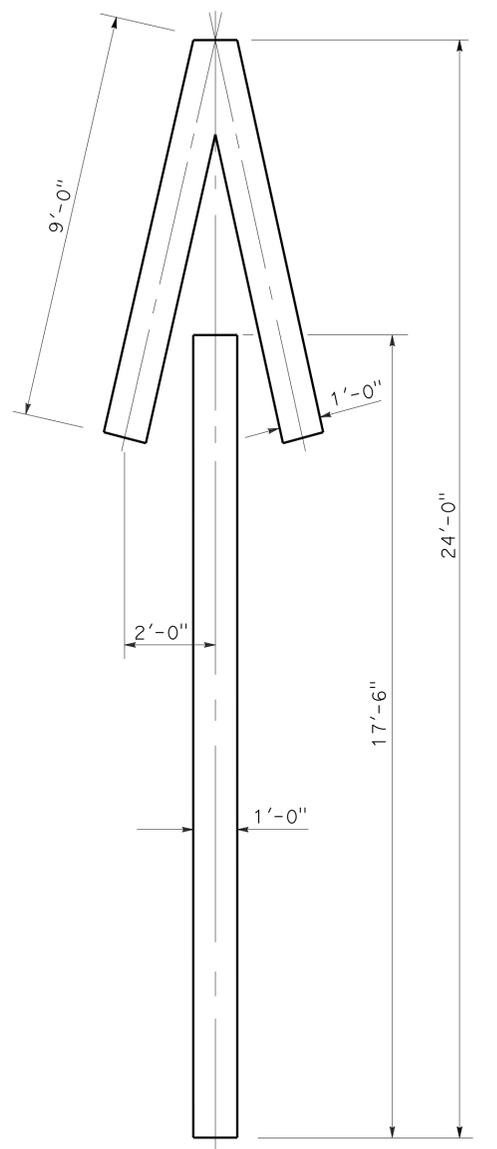
A=3.5 ft<sup>2</sup>  
**BIKE LANE ARROW**



A=36 ft<sup>2</sup>  
**TYPE VIII ARROW**



A=27 ft<sup>2</sup>  
**TYPE VII (L) ARROW**  
(For Type VII (R) arrow, use mirror image)



A=33 ft<sup>2</sup>  
**TYPE V ARROW**

**NOTE:**  
Minor variations in dimensions may be accepted by the Engineer.

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**PAVEMENT MARKINGS  
ARROWS**  
NO SCALE

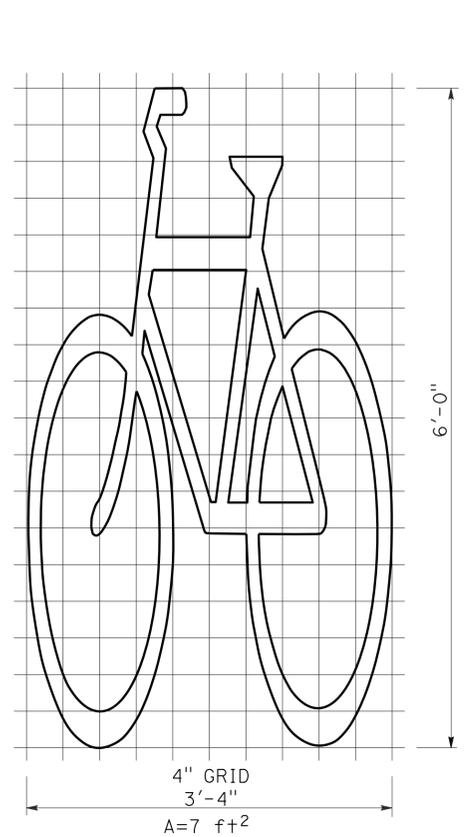
RSP A24A DATED APRIL 20, 2012 SUPERSEDES STANDARD PLAN A24A DATED MAY 20, 2011 - PAGE 13 OF THE STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP A24A

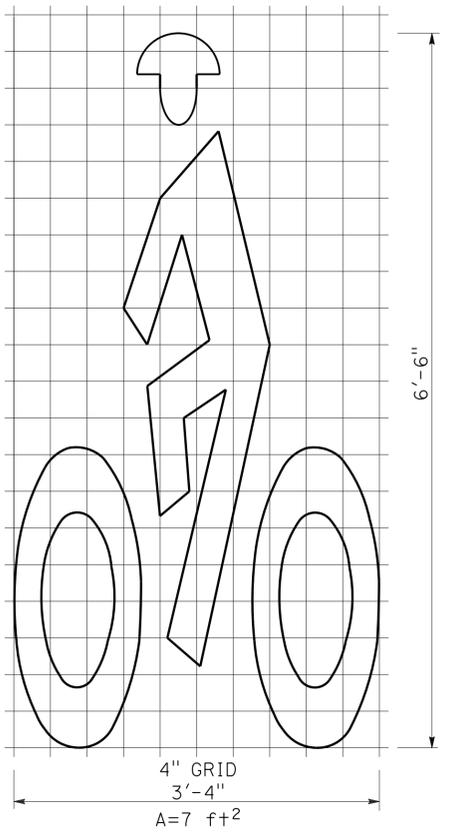
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	263	343

*Roberta L. McLaughlin*  
 REGISTERED CIVIL ENGINEER  
 October 19, 2012  
 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.

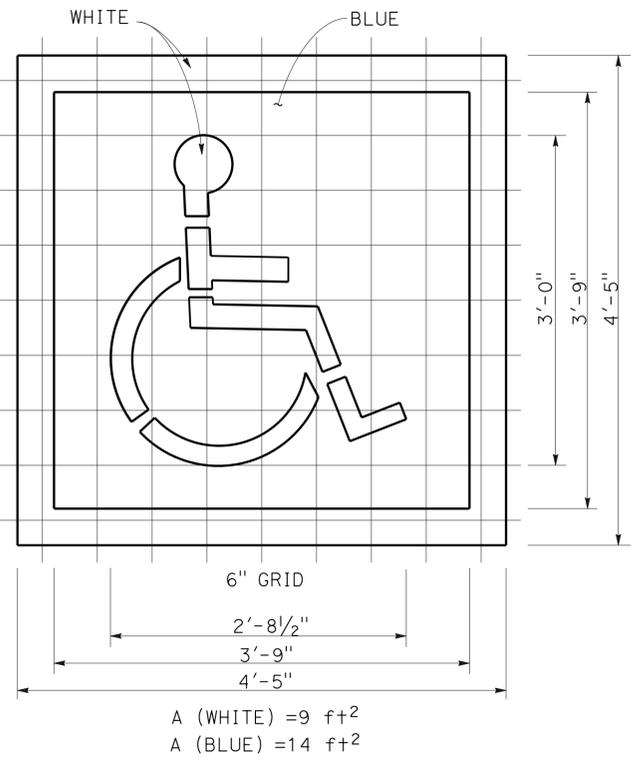
**NOTE:** TO ACCOMPANY PLANS DATED 4-29-13  
 Minor variations in dimensions may be accepted by the Engineer.



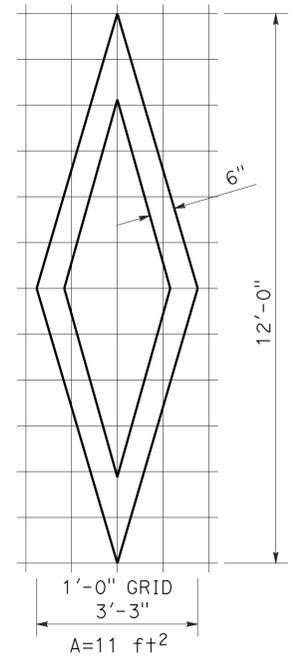
**BIKE LANE SYMBOL  
WITHOUT PERSON**



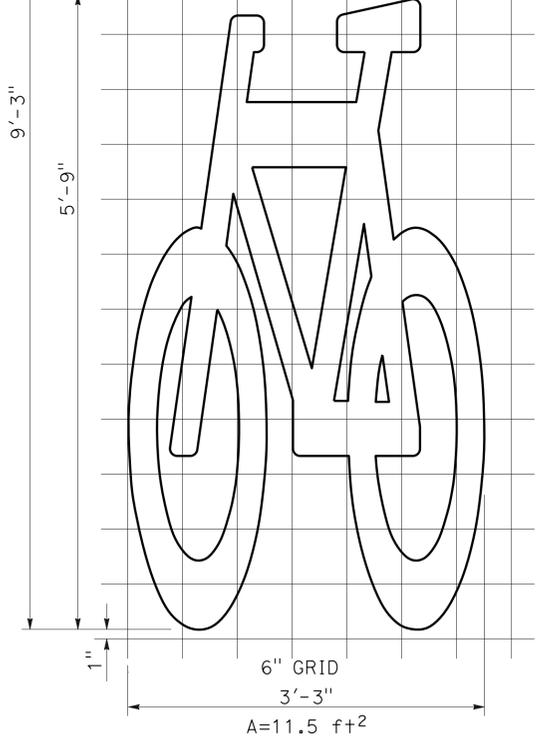
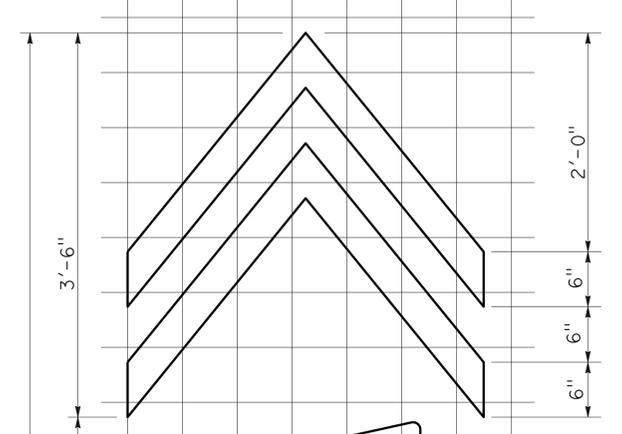
**BIKE LANE SYMBOL  
WITH PERSON**



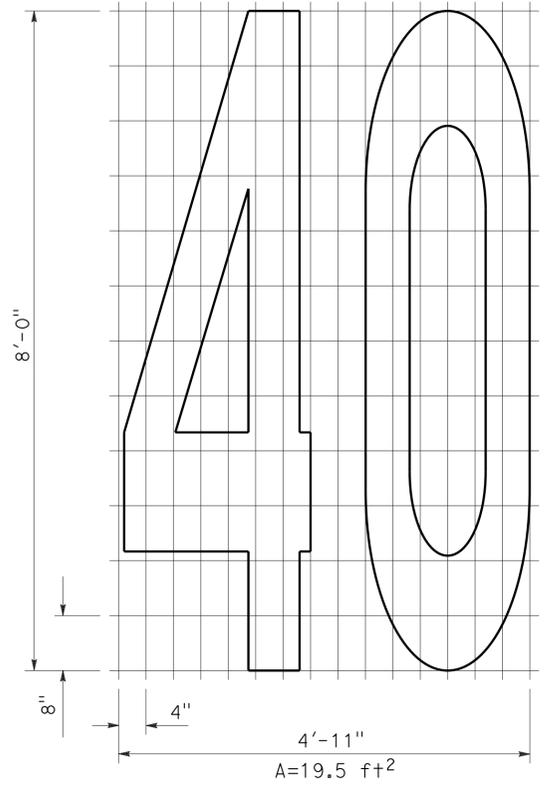
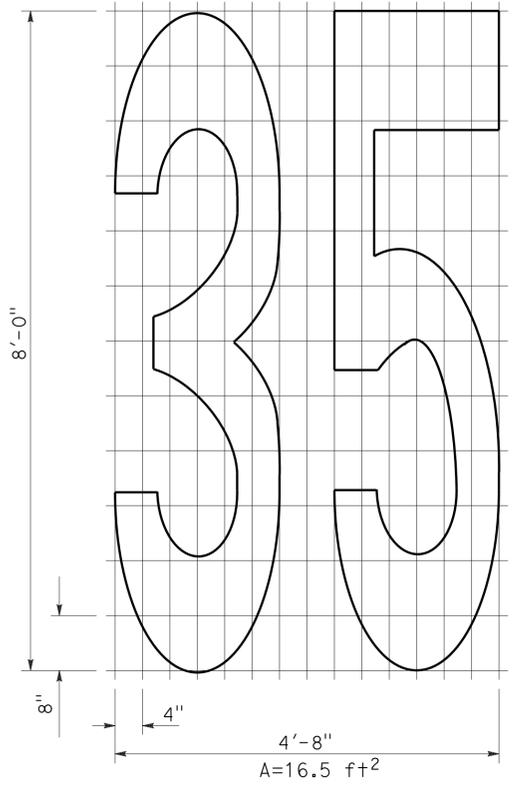
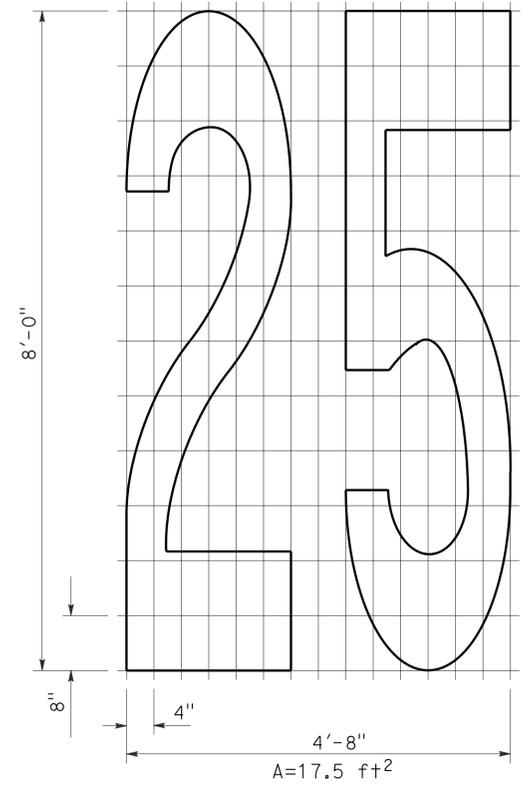
**INTERNATIONAL SYMBOL  
OF ACCESSIBILITY (ISA) MARKING**



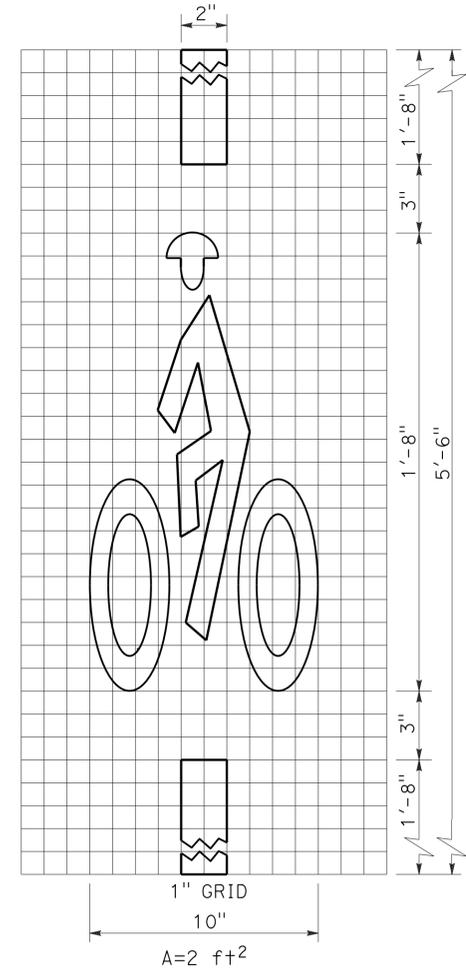
**DIAMOND SYMBOL**



**SHARED ROADWAY BICYCLE MARKING**



**NUMERALS**

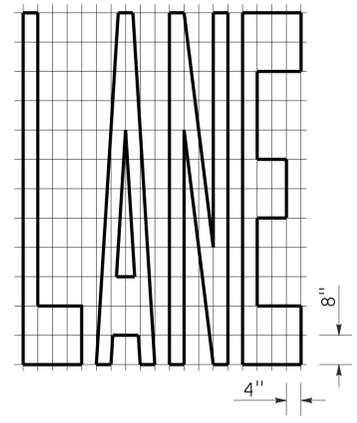


**BICYCLE LOOP  
DETECTOR SYMBOL**

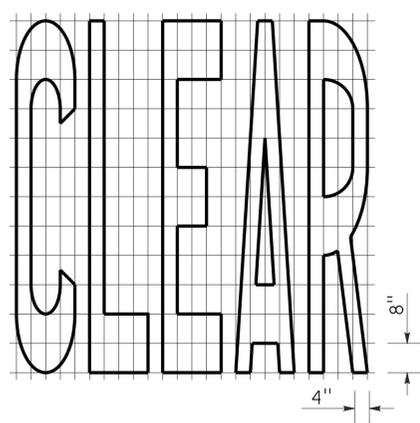
STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**PAVEMENT MARKINGS  
 SYMBOLS AND NUMERALS**  
 NO SCALE  
 RSP A24C DATED OCTOBER 19, 2012 SUPERSEDES STANDARD PLAN A24C  
 DATED MAY 20, 2011 - PAGE 15 OF THE STANDARD PLANS BOOK DATED 2010.

**2010 REVISED STANDARD PLAN RSP A24C**

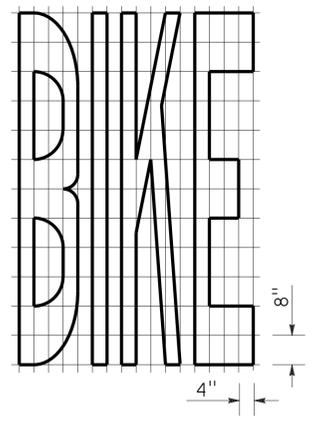
TO ACCOMPANY PLANS DATED 4-29-13



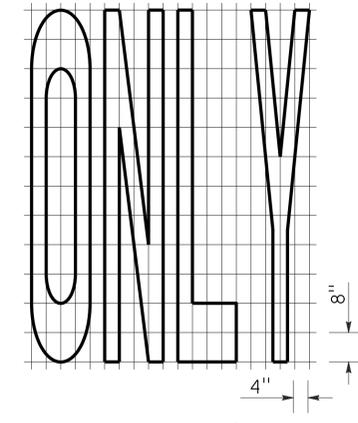
A=24 ft<sup>2</sup>



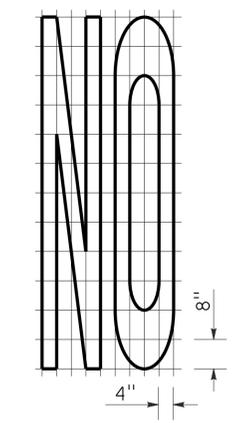
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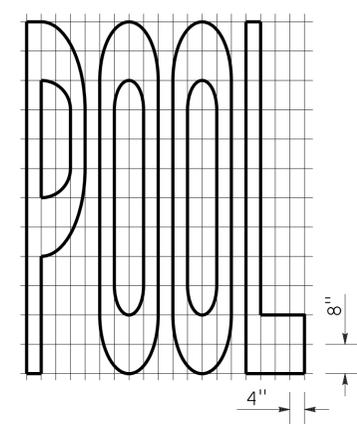
A=21 ft<sup>2</sup>



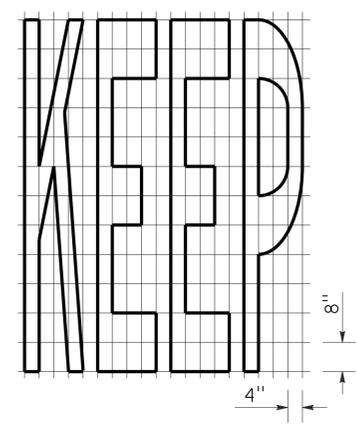
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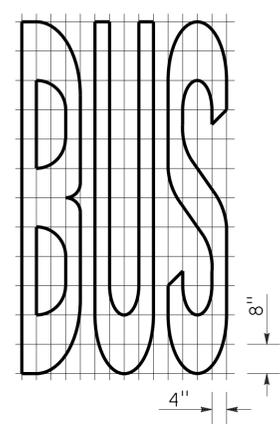
A=14 ft<sup>2</sup>



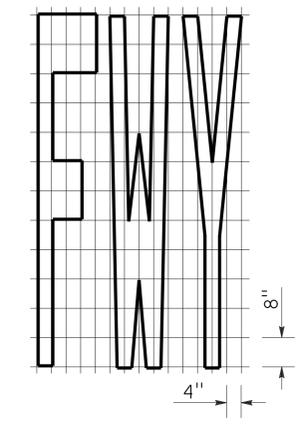
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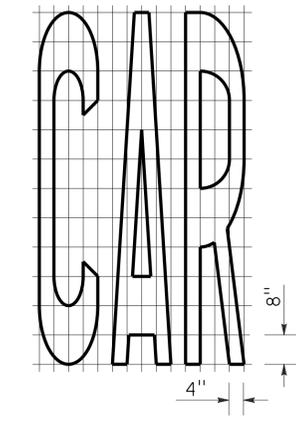
A=24 ft<sup>2</sup>



A=20 ft<sup>2</sup>

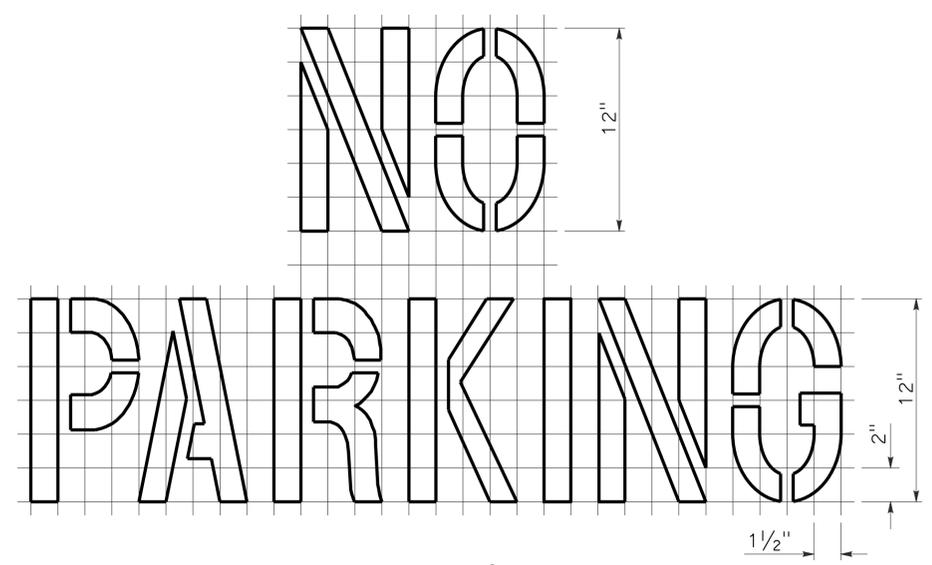


A=16 ft<sup>2</sup>

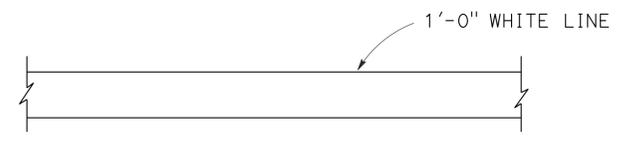


A=17 ft<sup>2</sup>

WORD MARKINGS			
ITEM	ft <sup>2</sup>	ITEM	ft <sup>2</sup>
LANE	24	NO	14
POOL	23	BIKE	21
CAR	17	BUS	20
CLEAR	27	ONLY	22
KEEP	24	FWY	16



A=2 ft<sup>2</sup>  
See Notes 6 and 7



LIMIT LINE (STOP LINE)



DIRECTION OF TRAVEL  
YIELD LINE

**NOTES:**

1. If a message consists of more than one word, it should read "UP", i.e., the first word should be nearest the driver.
2. The space between words should be at least four times the height of the characters for low speed roads, but not more than ten times the height of the characters. The space may be reduced appropriately where there is limited space because of local conditions.
3. Minor variations in dimensions may be accepted by the Engineer.
4. Portions of a letter, number or symbol may be separated by connecting segments not to exceed 2" in width.
5. The words "NO PARKING" pavement marking is to be used for parking facilities. For typical locations of markings, see Standard Plans A90A and A90B.
6. The words "NO PARKING", shall be painted in white letters no less than 1'-0" high on a contrasting background and located so that it is visible to traffic enforcement officials.

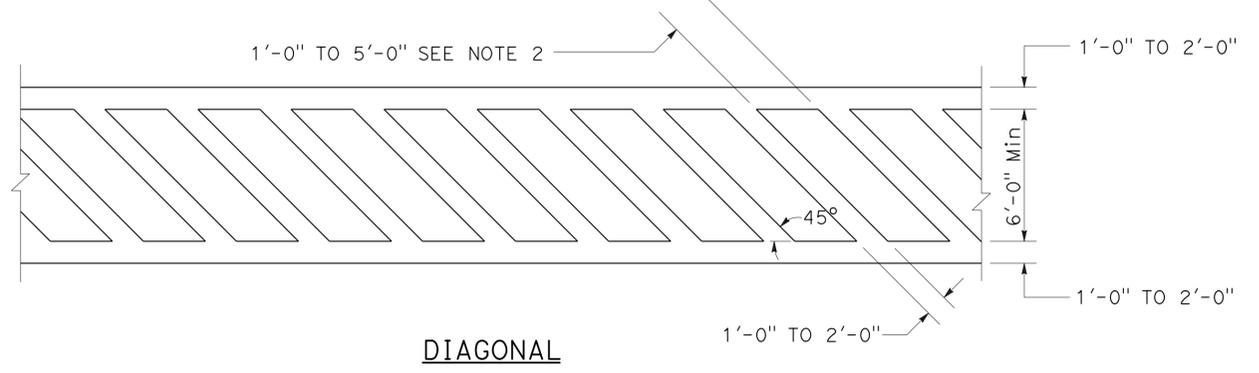
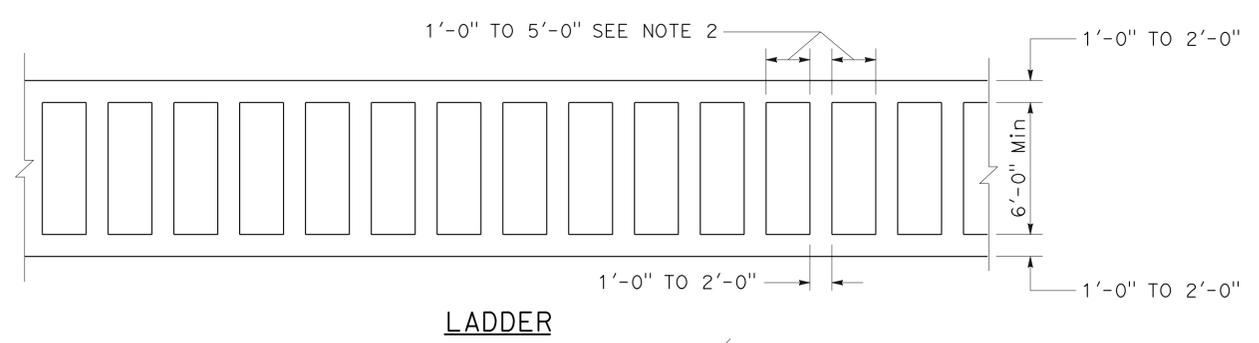
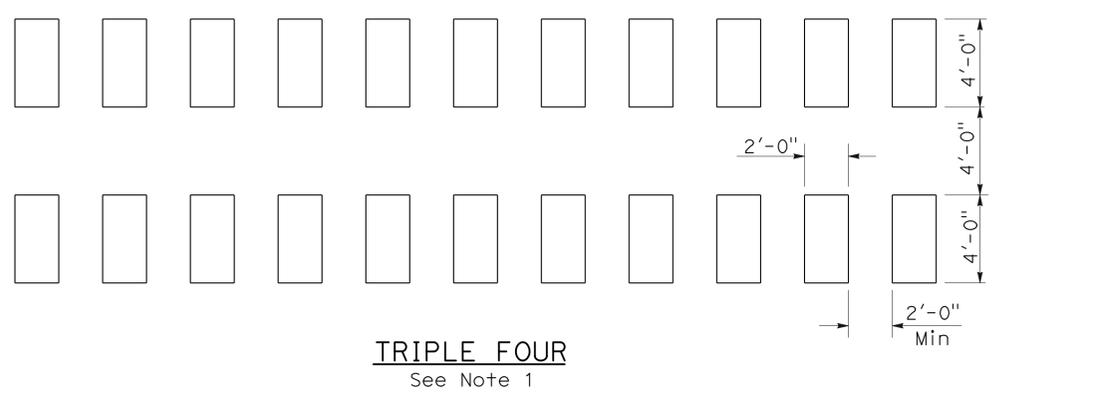
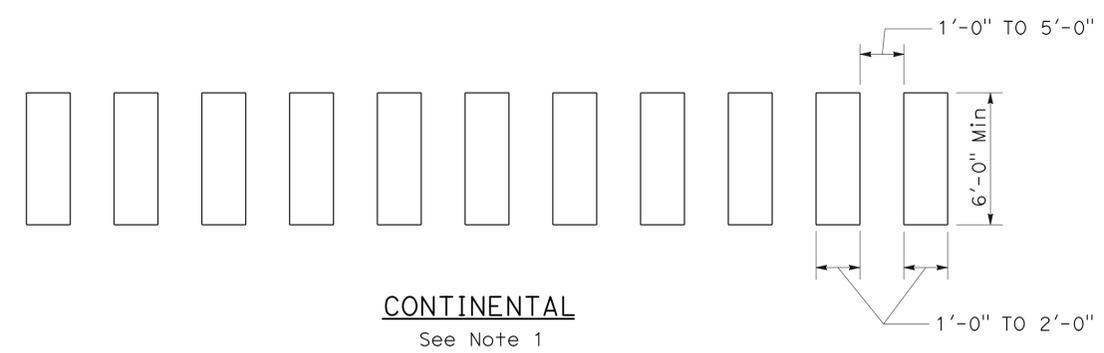
STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**PAVEMENT MARKINGS  
WORDS, LIMIT AND YIELD LINES**  
NO SCALE

RSP A24E DATED JULY 20, 2012 SUPERSEDES STANDARD PLAN A24E  
DATED MAY 20, 2011 - PAGE 17 OF THE STANDARD PLANS BOOK DATED 2010.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	265	343

*Roberta L. McLaughlin*  
 REGISTERED CIVIL ENGINEER  
 July 20, 2012  
 PLANS APPROVAL DATE  
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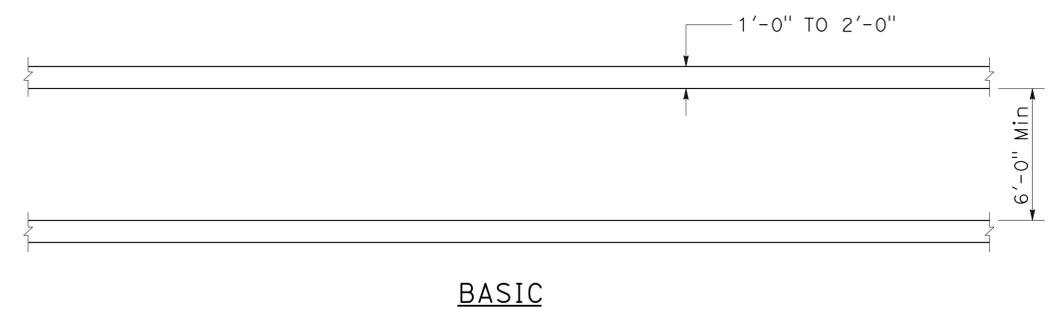
TO ACCOMPANY PLANS DATED 4-29-13



**HIGHER VISIBILITY CROSSWALKS**

**NOTES:**

1. Spaces between markings should be placed in wheel tracks of each lane.
2. Spacings not to exceed 2.5 times width of longitudinal line.
3. All crosswalk markings must be white except for those near schools must be yellow.



STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**PAVEMENT MARKINGS  
 CROSSWALKS**  
 NO SCALE

RSP A24F DATED JULY 20, 2012 SUPPLEMENTS THE  
 STANDARD PLANS BOOK DATED 2010.

**2010 REVISED STANDARD PLAN RSP A24F**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	266	343

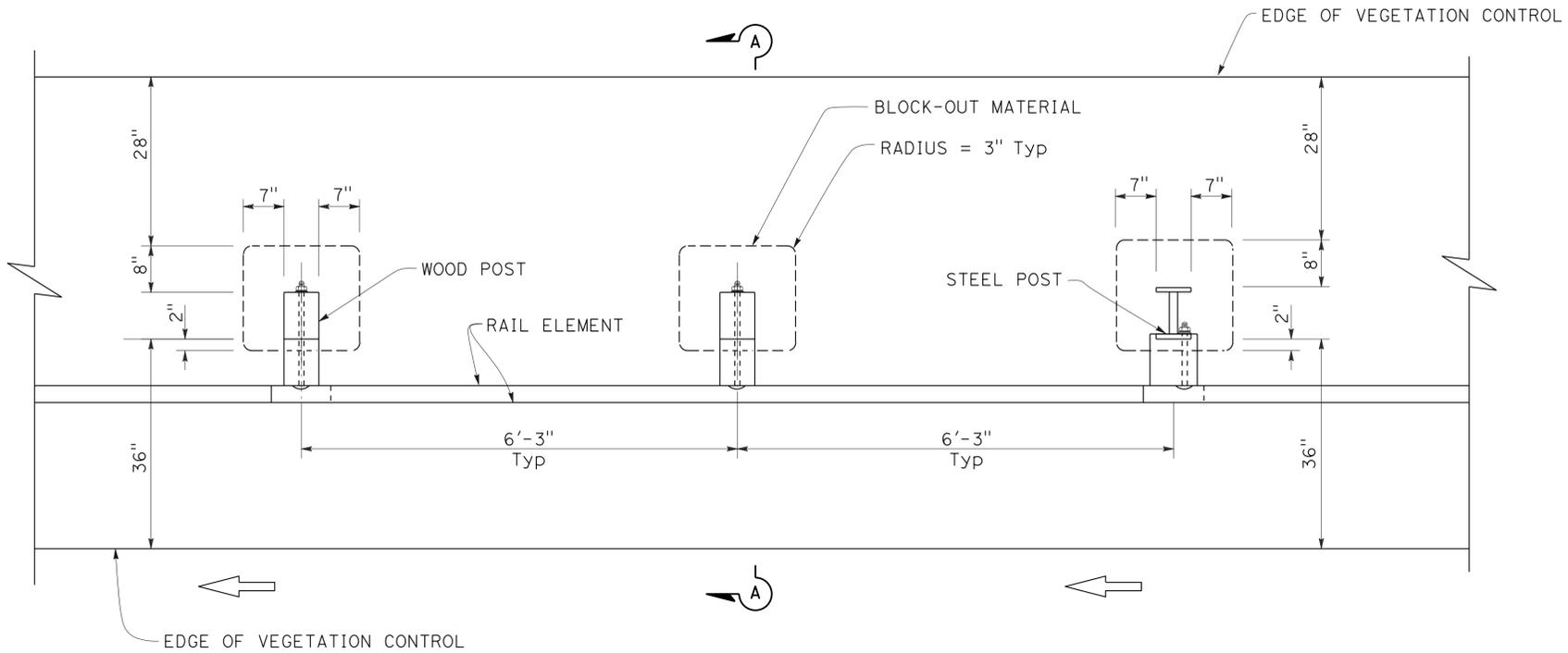
*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

October 19, 2012  
PLANS APPROVAL DATE

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REGISTERED PROFESSIONAL ENGINEER  
*Randell D. Hiatt*  
No. C50200  
Exp. 6-30-13  
CIVIL  
STATE OF CALIFORNIA

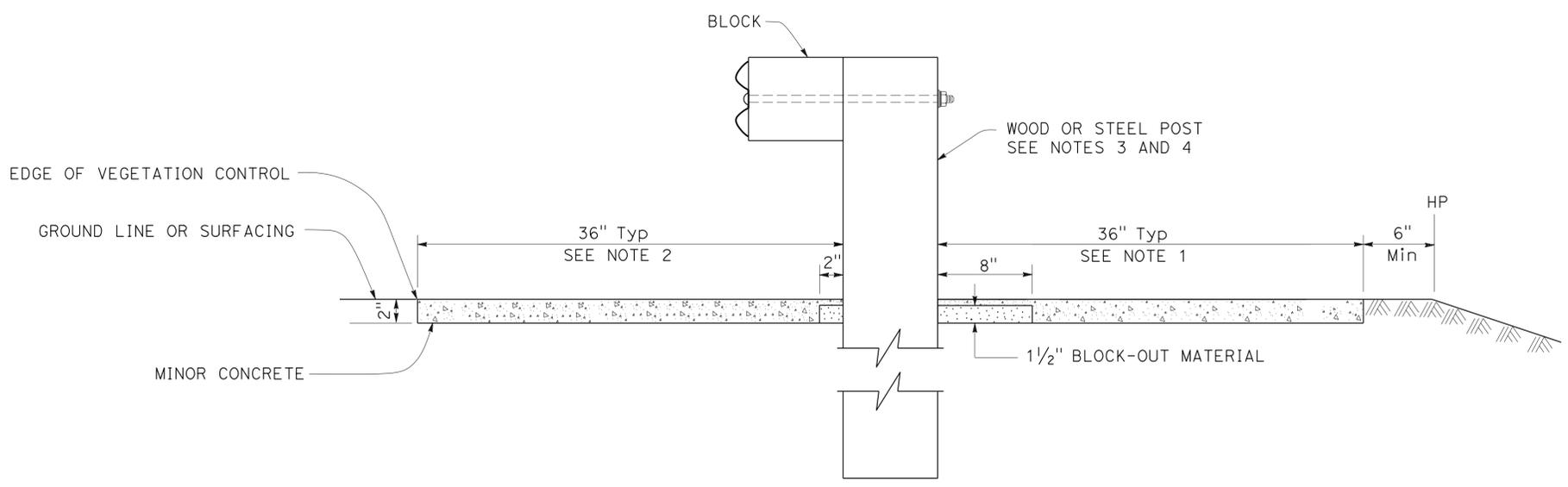
TO ACCOMPANY PLANS DATED 4-29-13



PLAN

NOTES:

1. Where the distance between back of post and hinge point is less than 42", construct vegetation control to 6" from hinge point while maintaining the 8" block-out at back of post. If the 8" block-out at back of post can not be maintained, construct vegetation control flush with the back edge of post.
2. Where dike is constructed under railing, construct vegetation control to back edge of dike. Where paved shoulder is constructed within 36" in front of the post, construct vegetation control to the edge of paved shoulder.
3. For wood post sizes, see Standard Plan A77C1.
4. For steel post sizes, see Standard Plan A77C2.
5. For details not shown, see Standard Plans A77A1 and A77A2.



SECTION A-A

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**METAL BEAM GUARD RAILING  
TYPICAL VEGETATION CONTROL  
STANDARD RAILING SECTION**

NO SCALE

RSP A77C5 DATED OCTOBER 19, 2012 SUPERSEDES STANDARD PLAN A77C5  
DATED MAY 20, 2011 - PAGE 53 OF THE STANDARD PLANS BOOK DATED 2010.

**REVISED STANDARD PLAN RSP A77C5**

2010 REVISED STANDARD PLAN RSP A77C5

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	267	343

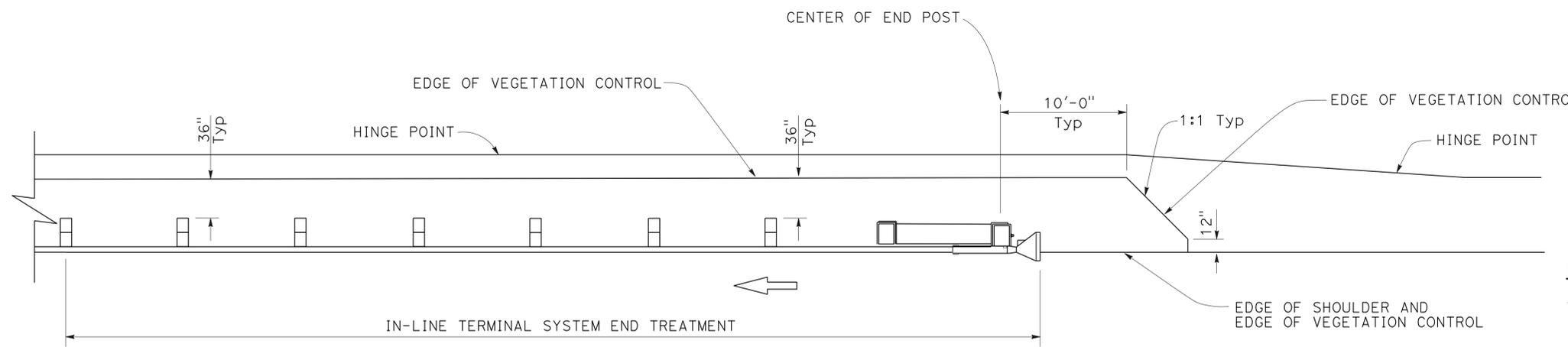
*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

October 19, 2012  
PLANS APPROVAL DATE

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REGISTERED PROFESSIONAL ENGINEER  
No. C50200  
Exp. 6-30-13  
CIVIL  
STATE OF CALIFORNIA

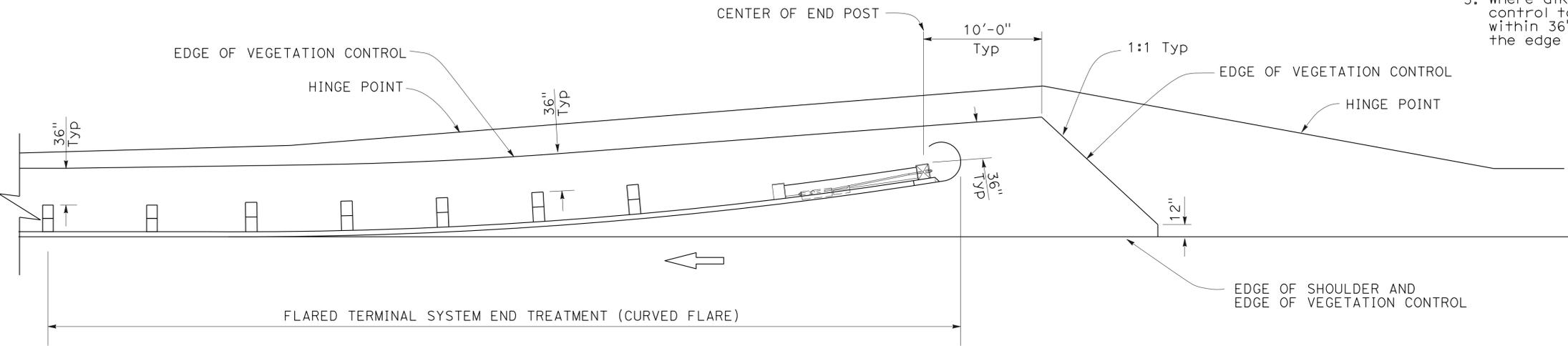
TO ACCOMPANY PLANS DATED 4-29-13



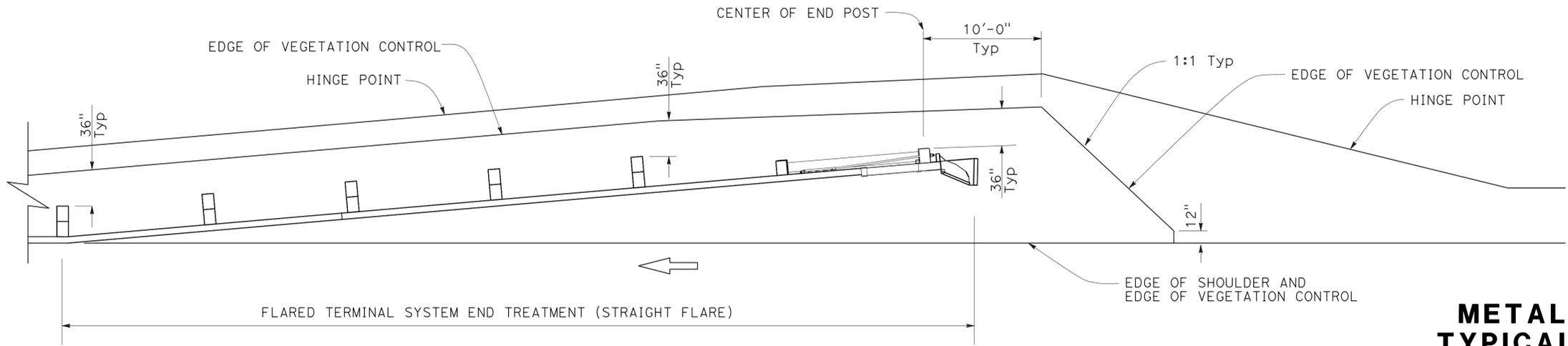
PLAN

**NOTES:**

1. See Revised Standard Plan RSP A77C5 for additional vegetation control details.
2. Where the distance between back of post and hinge point is less than 42", construct vegetation control to 6" from hinge point while maintaining the 8" block-out at back of post. If the 8" block-out at back of post can not be maintained, construct vegetation control flush with the back edge of post.
3. Where dike is constructed under railing, construct vegetation control to back edge of dike. Where paved shoulder is constructed within 36" in front of the post, construct vegetation control to the edge of paved shoulder.



PLAN



PLAN

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**METAL BEAM GUARD RAILING  
TYPICAL VEGETATION CONTROL  
FOR TERMINAL SYSTEM END TREATMENTS**

NO SCALE  
RSP A77C6 DATED OCTOBER 19, 2012 SUPERSEDES STANDARD PLAN A77C6  
DATED MAY 20, 2011 - PAGE 54 OF THE STANDARD PLANS BOOK DATED 2010.

**REVISED STANDARD PLAN RSP A77C6**

2010 REVISED STANDARD PLAN RSP A77C6

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	268	343

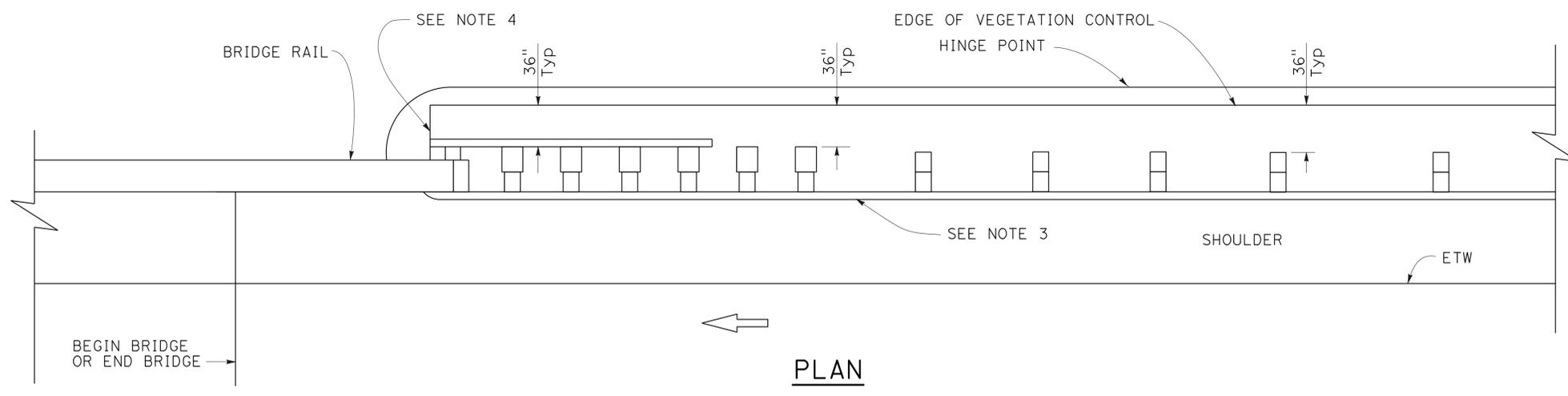
*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

October 19, 2012  
PLANS APPROVAL DATE

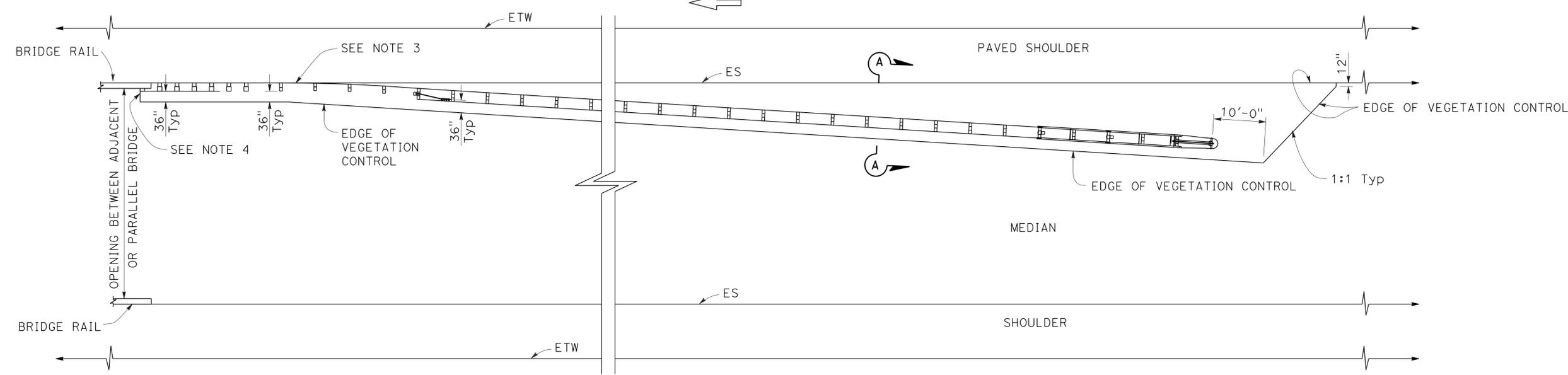
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TO ACCOMPANY PLANS DATED 4-29-13

2010 REVISED STANDARD PLAN RSP A77C7



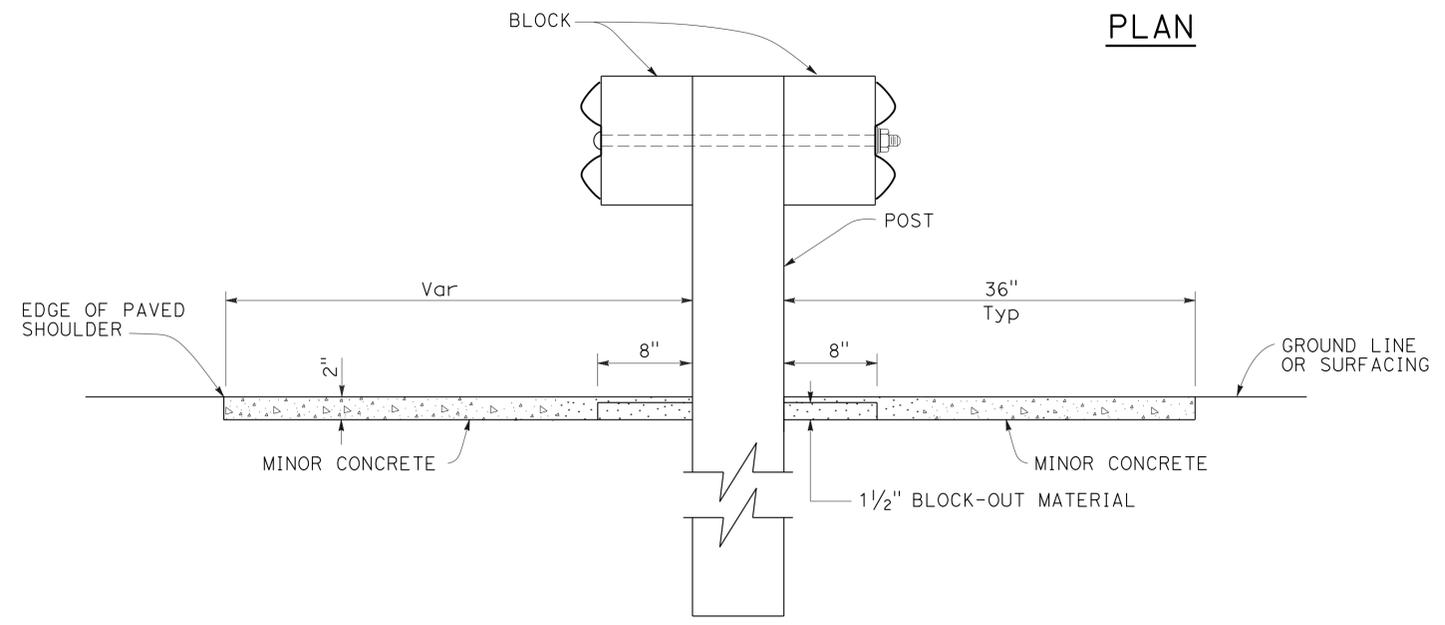
PLAN



PLAN

**NOTES:**

1. See Revised Standard Plan RSP A77C5 for additional vegetation control details.
2. Where the distance between back of post and hinge point is less than 42", construct vegetation control to 6" from hinge point while maintaining the 8" block-out at back of post. If the 8" block-out at back of post can not be maintained, construct vegetation control flush with the back edge of post.
3. Where dike is constructed under railing, construct vegetation control to back edge of dike. Where paved shoulder is constructed within 36" in front of the post, construct vegetation control to the edge of paved shoulder.
4. End vegetation control at end of backside rail element.



SECTION A-A

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**METAL BEAM GUARD RAILING  
TYPICAL VEGETATION CONTROL  
AT STRUCTURE APPROACH**

NO SCALE

RSP A77C7 DATED OCTOBER 19, 2012 SUPERSEDES STANDARD PLAN A77C7  
DATED MAY 20, 2011 - PAGE 55 OF THE STANDARD PLANS BOOK DATED 2010.

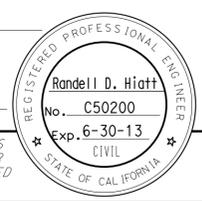
**REVISED STANDARD PLAN RSP A77C7**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	269	343

*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

October 19, 2012  
PLANS APPROVAL DATE

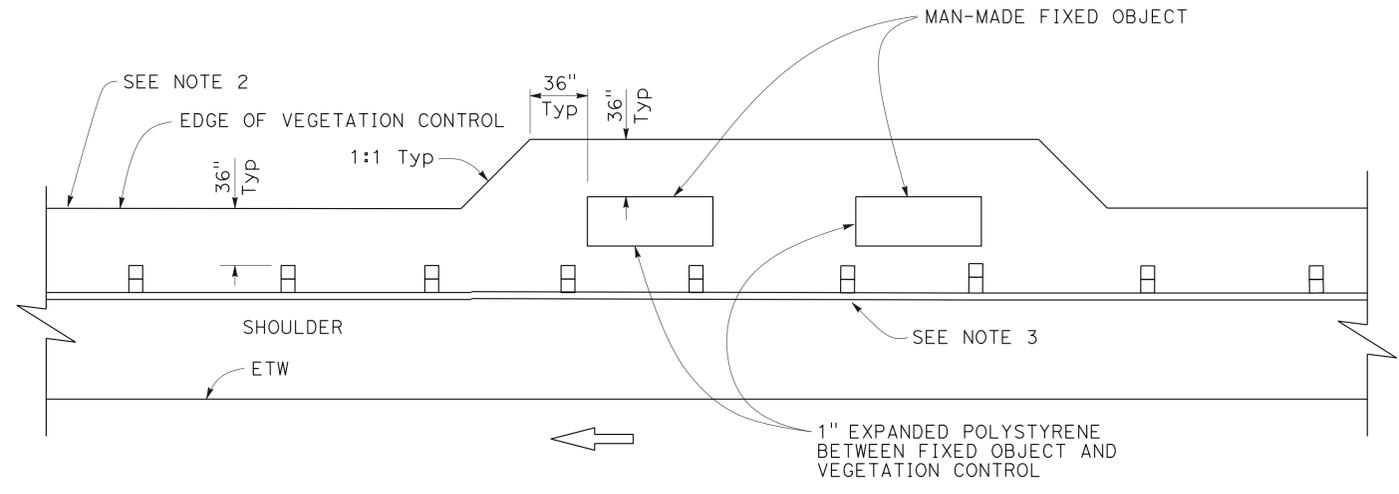
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TO ACCOMPANY PLANS DATED 4-29-13

**NOTES:**

1. See Revised Standard Plan RSP A77C5 for additional vegetation control details.
2. Where the distance between back of post and hinge point is less than 42", construct vegetation control to 6" from hinge point while maintaining the 8" block-out at back of post. If the 8" block-out at back of post can not be maintained, construct vegetation control flush with the back edge of post.
3. Where dike is constructed under railing, construct vegetation control to back edge of dike. Where paved shoulder is constructed within 36" in front of the post, construct vegetation control to the edge of paved shoulder.



**PLAN**  
Fixed object(s) on shoulder

2010 REVISED STANDARD PLAN RSP A77C8

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**METAL BEAM GUARD RAILING  
TYPICAL VEGETATION CONTROL  
AT FIXED OBJECT**

NO SCALE

RSP A77C8 DATED OCTOBER 19, 2012 SUPERSEDES STANDARD PLAN A77C8  
DATED MAY 20, 2011 - PAGE 56 OF THE STANDARD PLANS BOOK DATED 2010.

**REVISED STANDARD PLAN RSP A77C8**

**NOTES:**

1. See Revised Standard Plan RSP A77C5 for additional vegetation control details.
2. Where dike is constructed under railing, construct vegetation control to back edge of dike. Where paved shoulder is constructed within 36" in front of the post, construct vegetation control to the edge of paved shoulder.

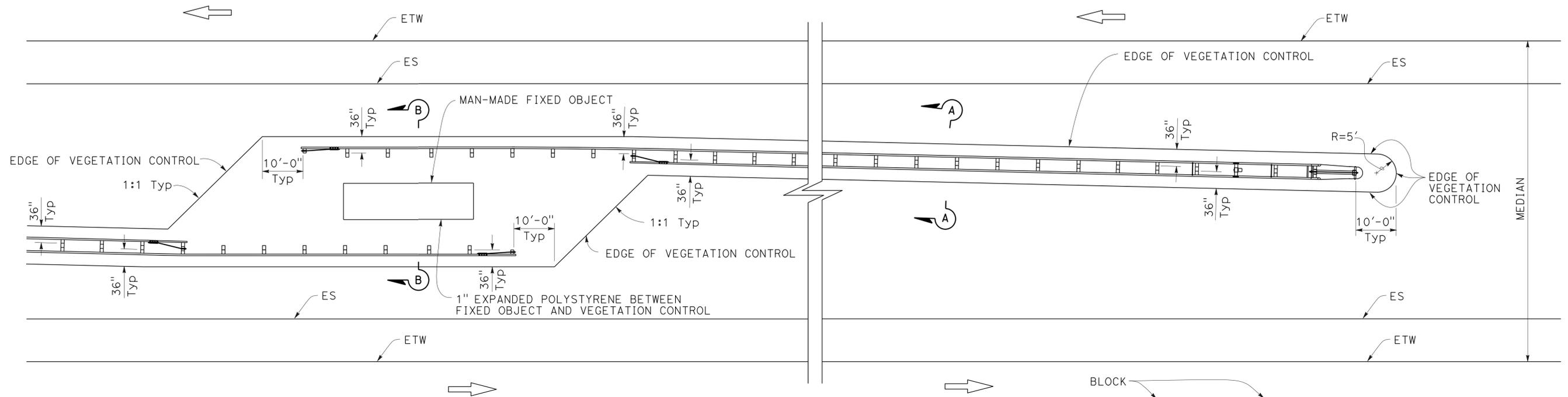
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	270	343

*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

October 19, 2012  
PLANS APPROVAL DATE

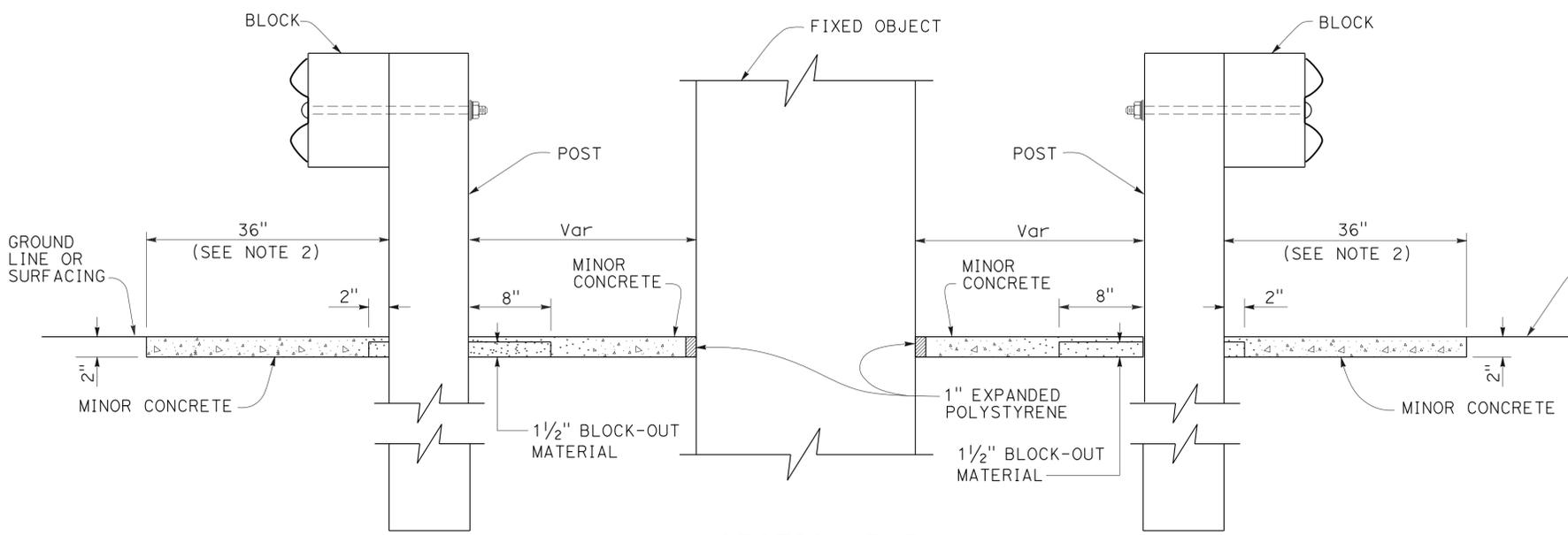
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TO ACCOMPANY PLANS DATED 4-29-13

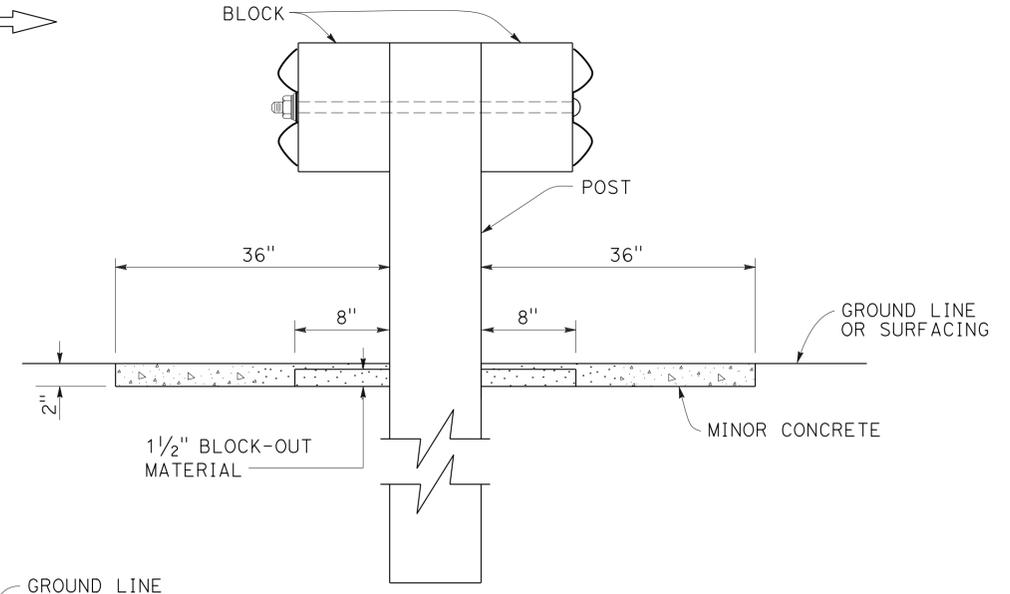


**PLAN**

Fixed object(s) in median



**SECTION B-B**



**SECTION A-A**

**METAL BEAM GUARD RAILING  
TYPICAL VEGETATION CONTROL  
AT FIXED OBJECT**

NO SCALE

RSP A77C9 DATED OCTOBER 19, 2012 SUPERSEDES STANDARD PLAN A77C9 DATED MAY 20, 2011 - PAGE 57 OF THE STANDARD PLANS BOOK DATED 2010.

**REVISED STANDARD PLAN RSP A77C9**

2010 REVISED STANDARD PLAN RSP A77C9

**NOTES:**

1. See Revised Standard Plan RSP A77C5 for additional vegetation control details.
2. Where dike is constructed under railing, construct vegetation control to back edge of dike. Where paved shoulder is constructed within 36" in front of the post, construct vegetation control to the edge of paved shoulder.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	271	343

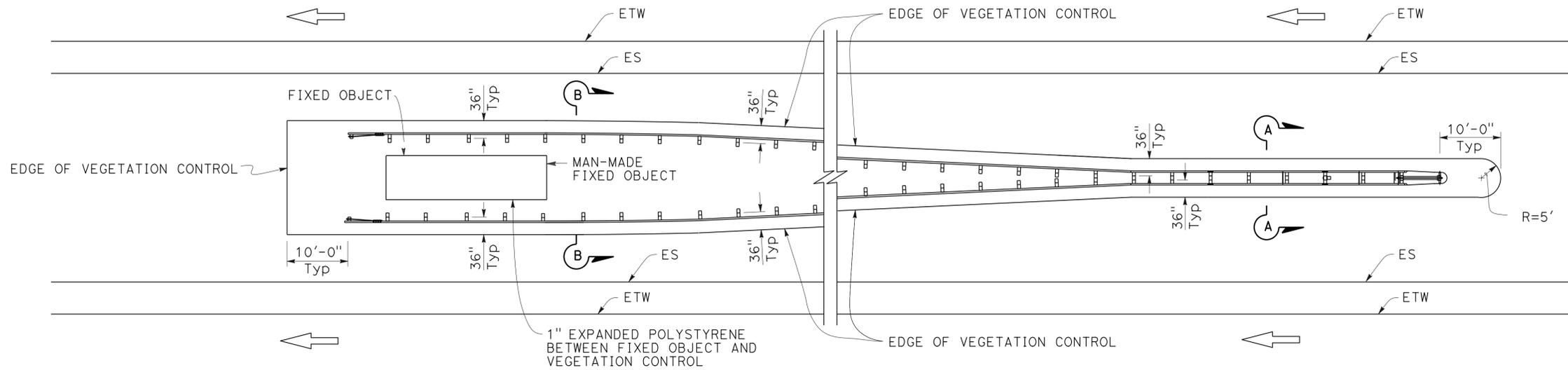
*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

October 19, 2012  
PLANS APPROVAL DATE

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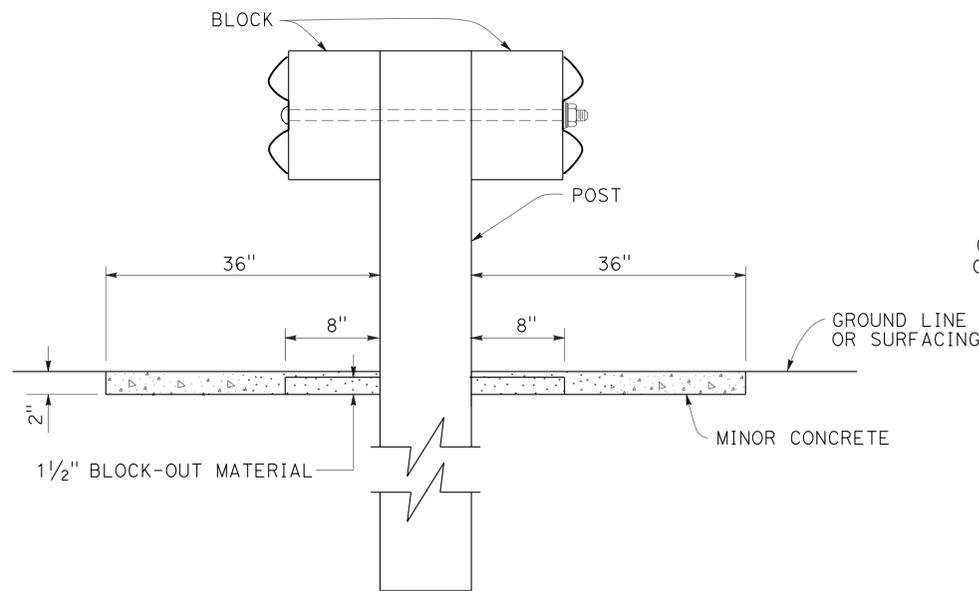


TO ACCOMPANY PLANS DATED 4-29-13

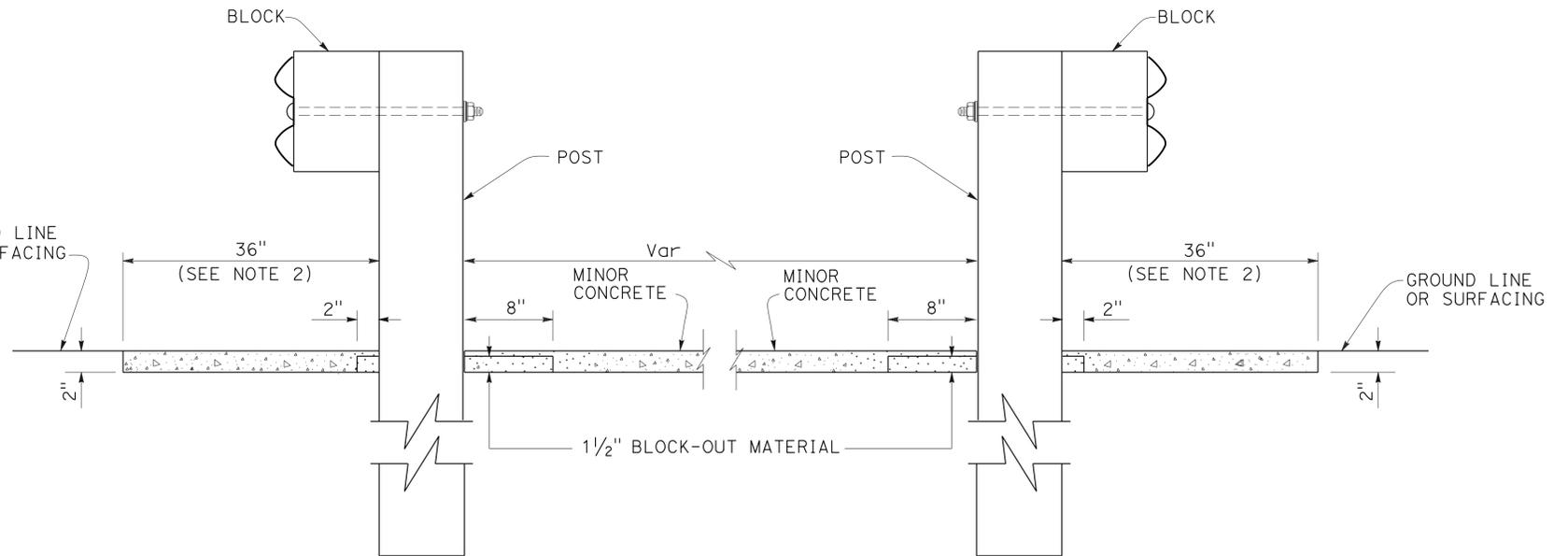


**PLAN**

Fixed object(s) between separate roadbeds  
(One-Way Traffic)



**SECTION A-A**



**SECTION B-B**

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**METAL BEAM GUARD RAILING  
TYPICAL VEGETATION CONTROL  
AT FIXED OBJECT**

NO SCALE

RSP A77C10 DATED OCTOBER 19, 2012 SUPERSEDES STANDARD PLAN A77C10  
DATED MAY 20, 2011 - PAGE 58 OF THE STANDARD PLANS BOOK DATED 2010.

**REVISED STANDARD PLAN RSP A77C10**

2010 REVISED STANDARD PLAN RSP A77C10

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	272	343

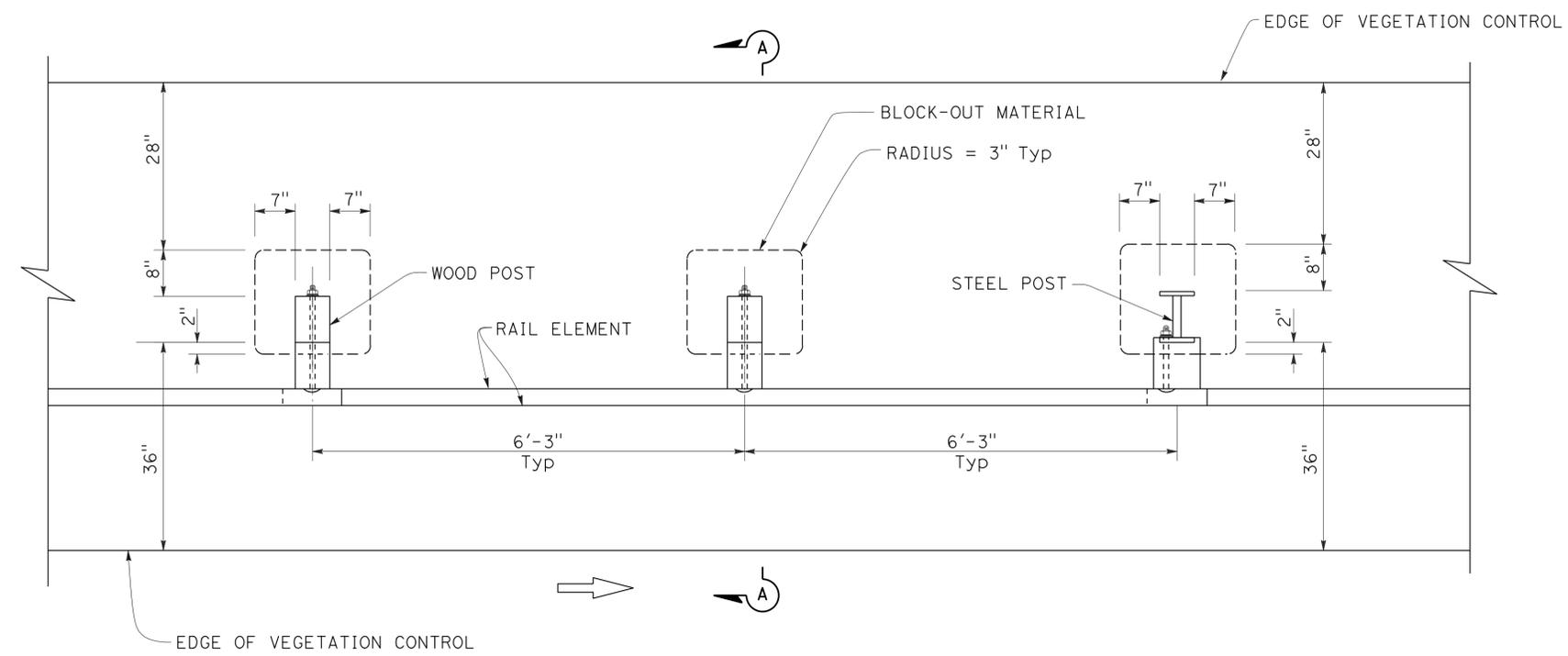
*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

October 19, 2012  
PLANS APPROVAL DATE

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REGISTERED PROFESSIONAL ENGINEER  
No. C50200  
Exp. 6-30-13  
CIVIL  
STATE OF CALIFORNIA

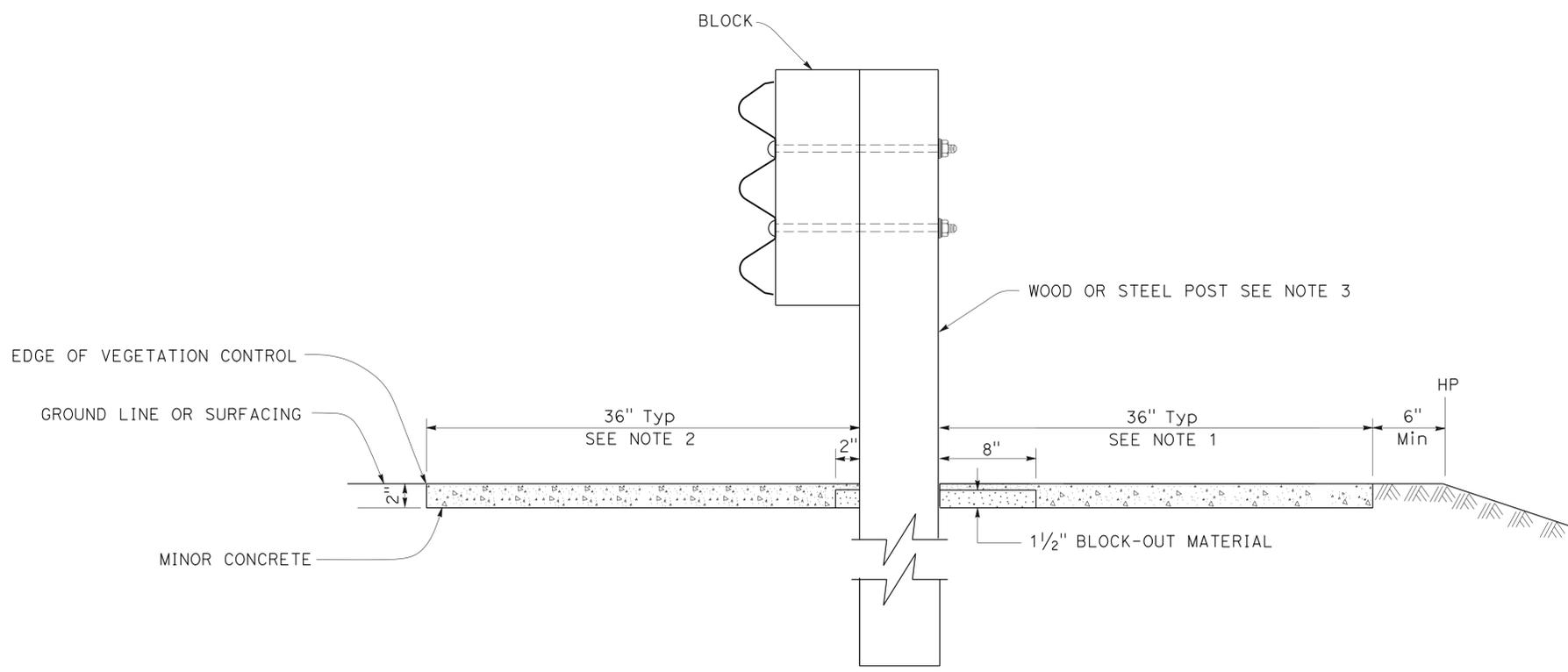
TO ACCOMPANY PLANS DATED 4-29-13



**PLAN**

**NOTES:**

1. Where the distance between back of post and hinge point is less than 42", construct vegetation control to 6" from hinge point while maintaining the 8" block-out at back of post. If the 8" block-out at back of post can not be maintained, construct vegetation control flush with the back edge of post.
2. Where dike is constructed under barrier, construct vegetation control to back edge of dike. Where paved shoulder is constructed within 36" in front of the post, construct vegetation control to the edge of paved shoulder.
3. For wood and steel post sizes, see Standard Plan A77C2.
4. For details not shown, see Standard Plans A78A and A78B.



**SECTION A-A**

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**SINGLE THRIE BEAM BARRIER  
TYPICAL VEGETATION CONTROL  
STANDARD BARRIER RAILING SECTION**

NO SCALE

RSP A78C3 DATED OCTOBER 19, 2012 SUPERSEDES STANDARD PLAN A78C3  
DATED MAY 20, 2011 - PAGE 93 OF THE STANDARD PLANS BOOK DATED 2010.

**REVISED STANDARD PLAN RSP A78C3**

2010 REVISED STANDARD PLAN RSP A78C3

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	273	343

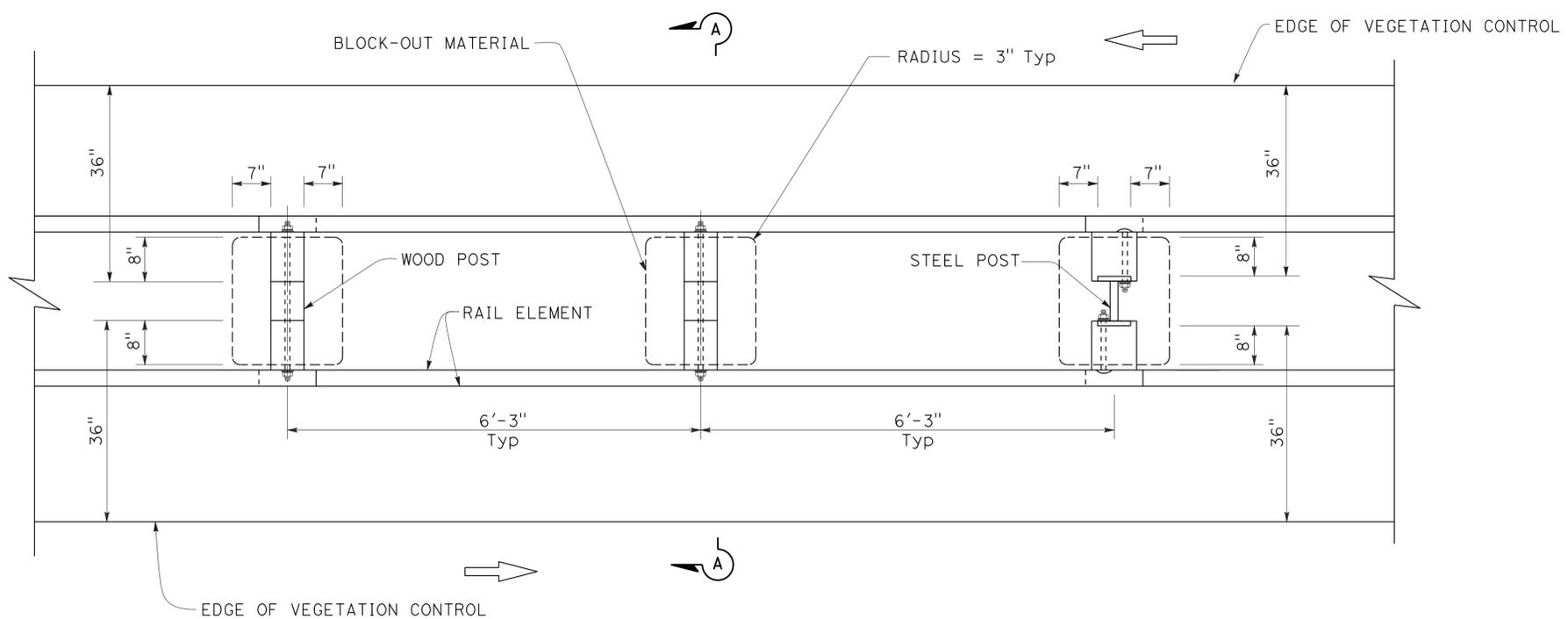
*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

October 19, 2012  
PLANS APPROVAL DATE

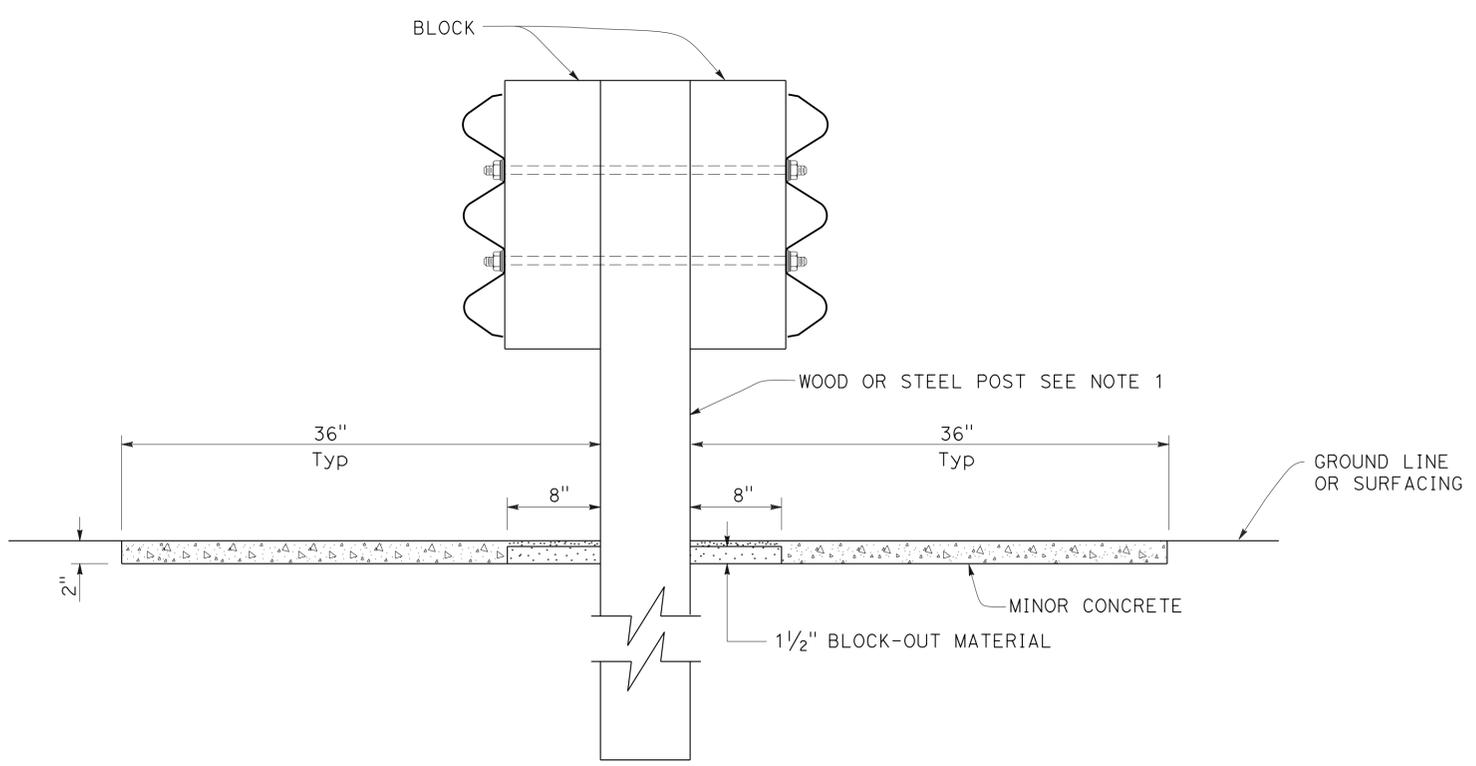
*Randell D. Hiatt*  
No. C50200  
Exp. 6-30-13  
CIVIL  
STATE OF CALIFORNIA

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TO ACCOMPANY PLANS DATED 4-29-13



PLAN



SECTION A-A

NOTES:

1. For wood and steel post sizes, see Standard Plan A78C2.
2. For details not shown, see Standard Plans A78A and A78B.

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**DOUBLE THRIE BEAM BARRIER  
TYPICAL VEGETATION CONTROL  
STANDARD BARRIER RAILING SECTION**

NO SCALE

RSP A78C4 DATED OCTOBER 19, 2012 SUPERSEDES STANDARD PLAN A78C4  
DATED MAY 20, 2011 - PAGE 94 OF THE STANDARD PLANS BOOK DATED 2010.

**REVISED STANDARD PLAN RSP A78C4**

2010 REVISED STANDARD PLAN RSP A78C4

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	274	343

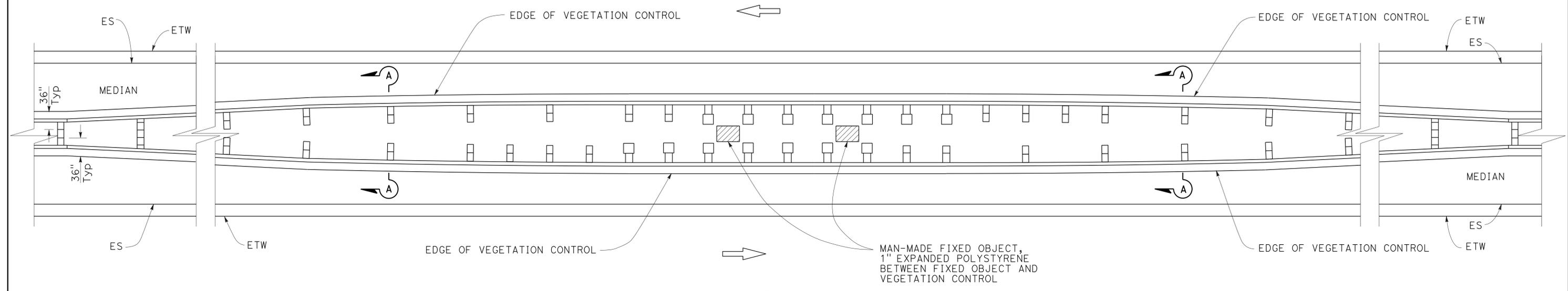
*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

October 19, 2012  
PLANS APPROVAL DATE

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REGISTERED PROFESSIONAL ENGINEER  
*Randell D. Hiatt*  
No. C50200  
Exp. 6-30-13  
CIVIL  
STATE OF CALIFORNIA

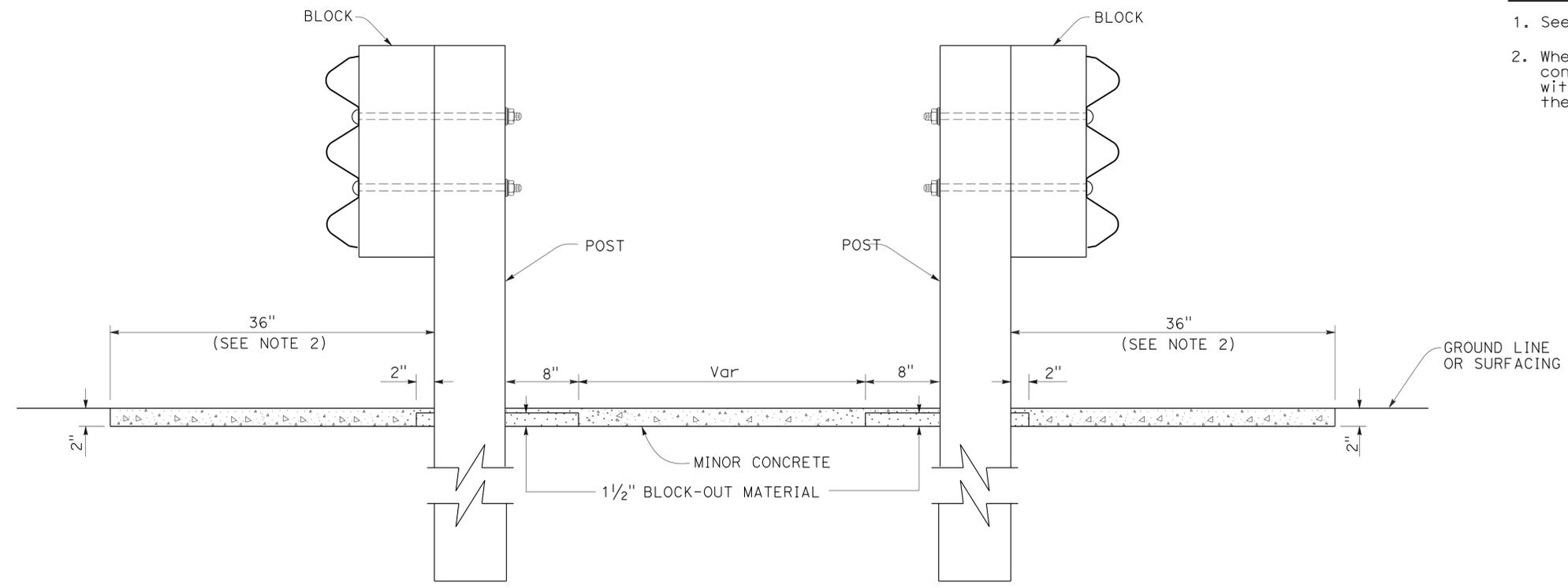
TO ACCOMPANY PLANS DATED 4-29-13



PLAN

NOTES:

1. See Revised Standard Plan RSP A78C3 for additional vegetation control.
2. Where dike is constructed under barrier, construct vegetation control to back edge of dike. Where paved shoulder is constructed within 36" in front of the post, construct vegetation control to the edge of paved shoulder.



SECTION A-A

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**THRIE BEAM BARRIER  
TYPICAL VEGETATION CONTROL  
AT FIXED OBJECTS  
IN MEDIAN**

NO SCALE

RSP A78C5 DATED OCTOBER 19, 2012 SUPERSEDES STANDARD PLAN A78C5  
DATED MAY 20, 2011 - PAGE 95 OF THE STANDARD PLANS BOOK DATED 2010.

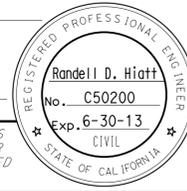
2010 REVISED STANDARD PLAN RSP A78C5

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	275	343

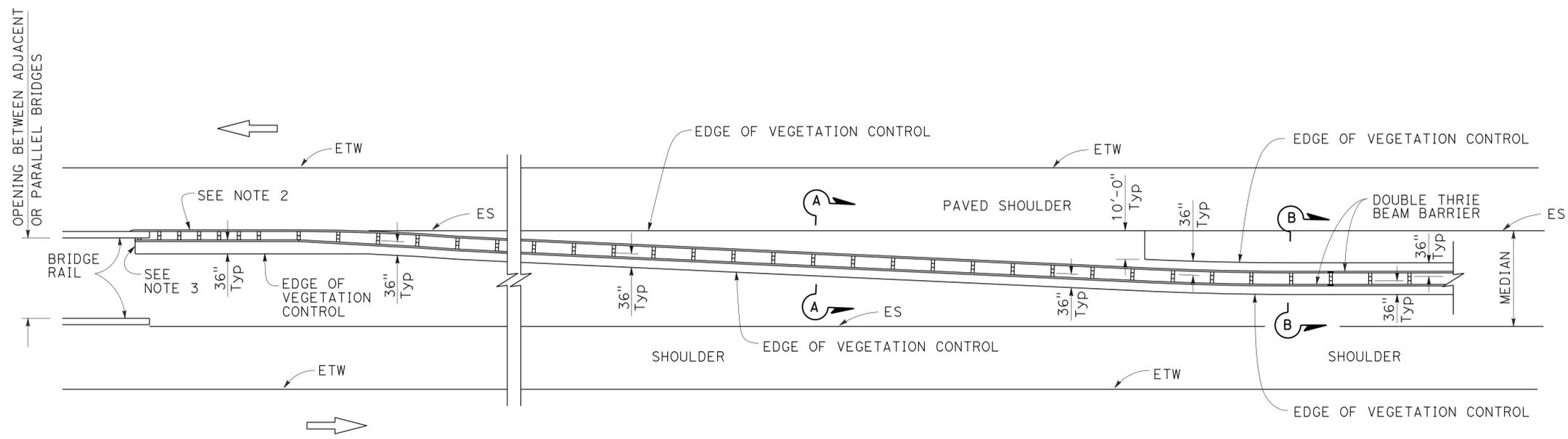
**Randell D. Hiatt**  
REGISTERED CIVIL ENGINEER

October 19, 2012  
PLANS APPROVAL DATE

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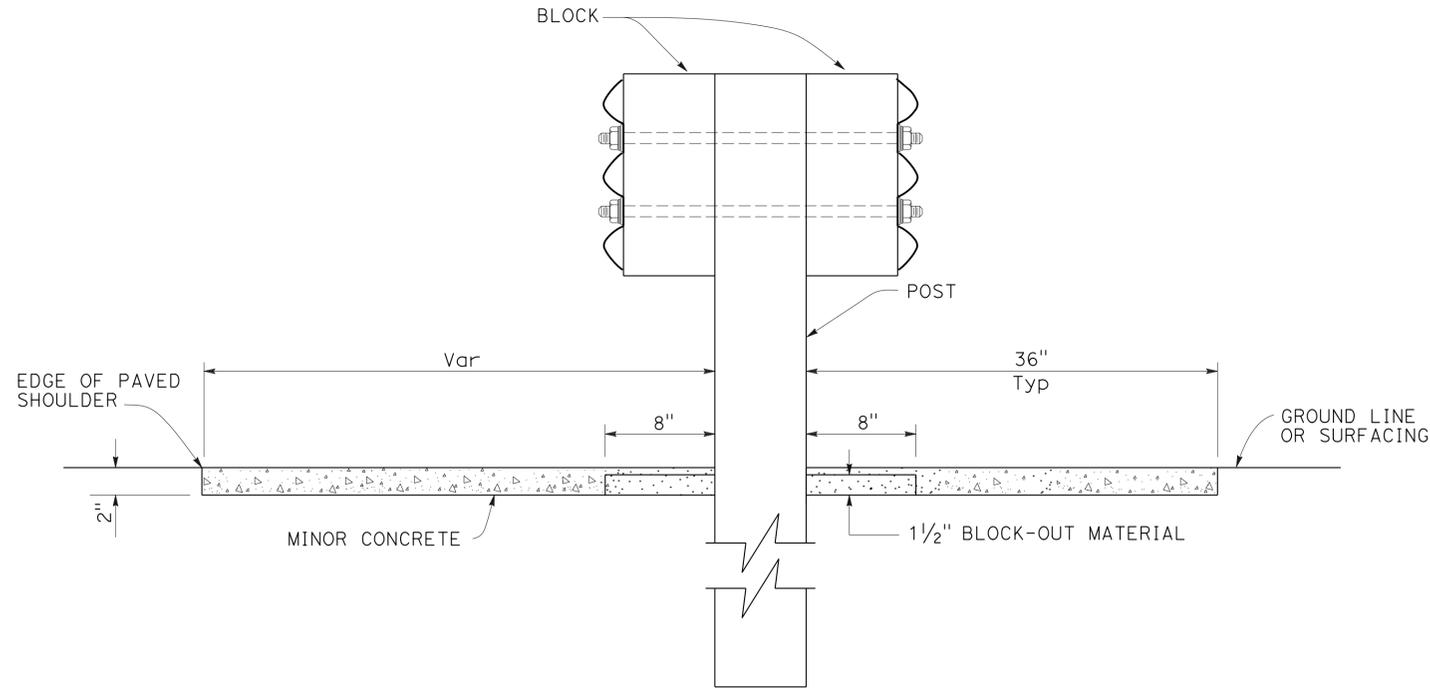
TO ACCOMPANY PLANS DATED 4-29-13



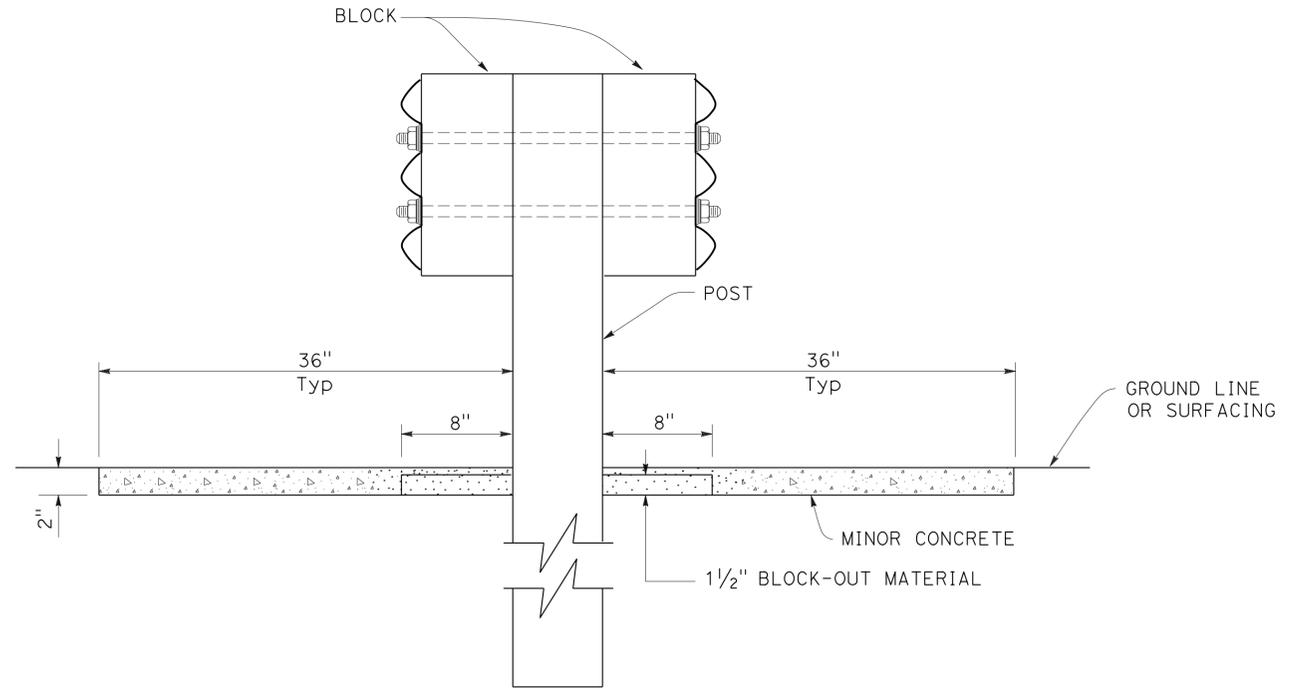
**PLAN**

**NOTES:**

1. See Revised Standard Plan RSP A78C4 for additional vegetation control details.
2. Where dike is constructed under barrier, construct vegetation control to back edge of dike. Where paved shoulder is constructed within 36" in front of the post, construct vegetation control to the edge of paved shoulder.
3. End vegetation control at end of backside rail element attached to bridge railing.



**SECTION A-A**



**SECTION B-B**

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**THRIE BEAM BARRIER  
TYPICAL VEGETATION CONTROL  
AT STRUCTURE APPROACH**

NO SCALE

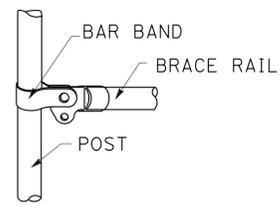
RSP A78C6 DATED OCTOBER 19, 2012 SUPERSEDES STANDARD PLAN A78C6 DATED MAY 20, 2011 - PAGE 96 OF THE STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP A78C6

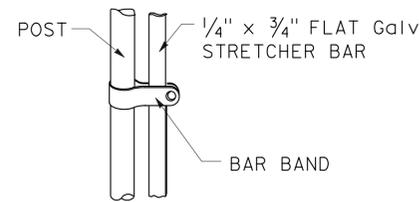
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	276	343

Glenn DeCou  
 REGISTERED CIVIL ENGINEER  
 October 19, 2012  
 PLANS APPROVAL DATE  
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

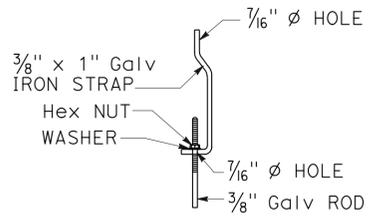
REGISTERED PROFESSIONAL ENGINEER  
 Glenn DeCou  
 No. C34547  
 Exp. 9-30-13  
 CIVIL  
 STATE OF CALIFORNIA



**BRACE RAIL**



**STRETCHER BAR**

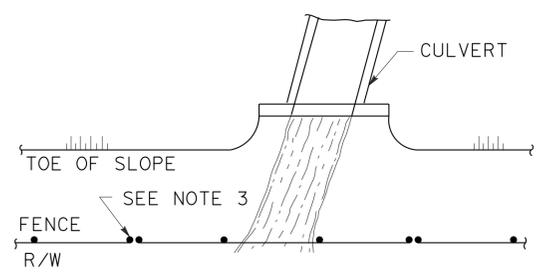


**TRUSS TIGHTENER**

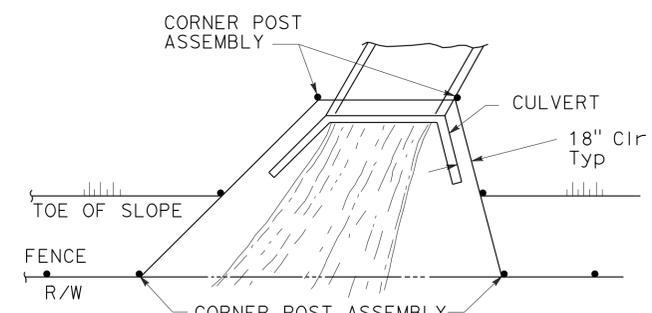
**NOTES:**

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

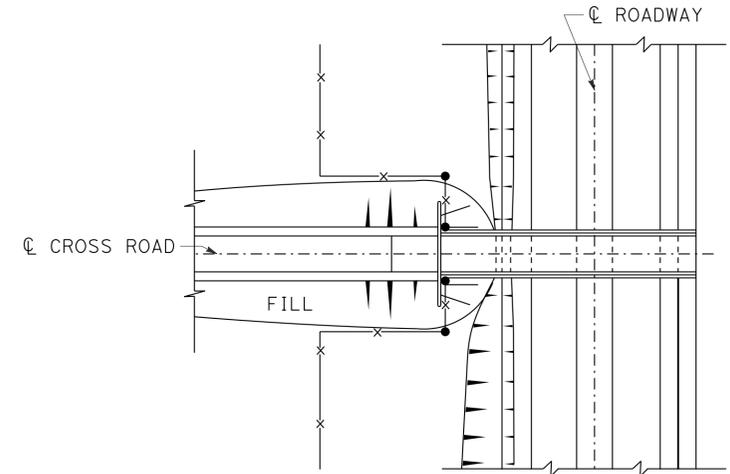
TO ACCOMPANY PLANS DATED 4-29-13



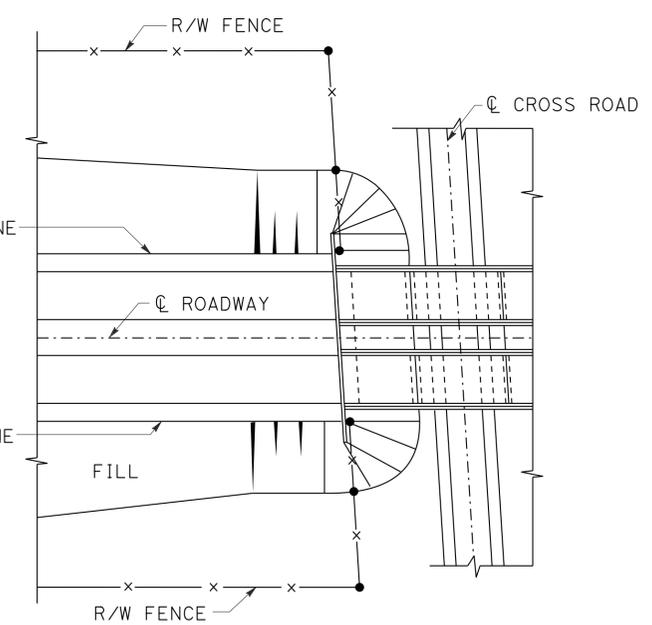
**PLAN**



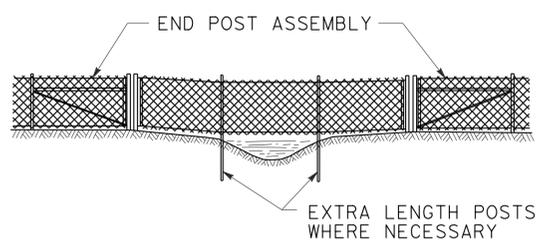
**PLAN**



**PLAN OF ROADWAY - OVERCROSSING**

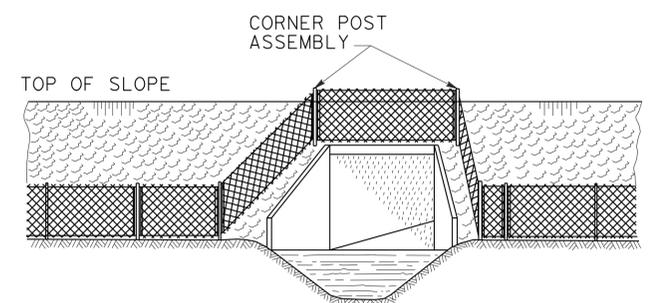


**PLAN OF ROADWAY - UNDERCROSSING**



**ELEVATION**

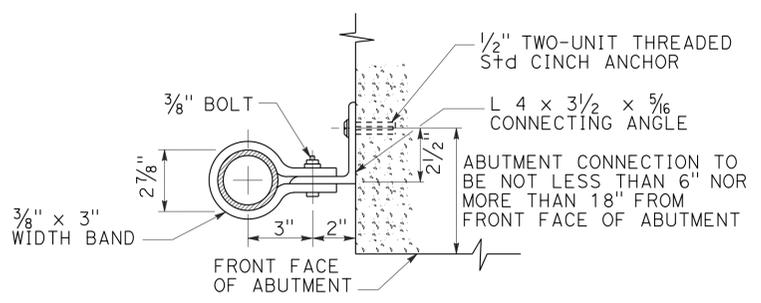
**INSTALLATION OVER STREAM**



**ELEVATION**

**INSTALLATION AROUND HEADWALL**

See Note 4



**ABUTMENT CONNECTION**

**TYPICAL INSTALLATION AT BRIDGES**

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

RSP A85B DATED OCTOBER 19, 2012 SUPERSEDES STANDARD PLAN A85B DATED MAY 20, 2011 - PAGE 114 OF THE STANDARD PLANS BOOK DATED 2010.

**REVISED STANDARD PLAN RSP A85B**

2010 REVISED STANDARD PLAN RSP A85B

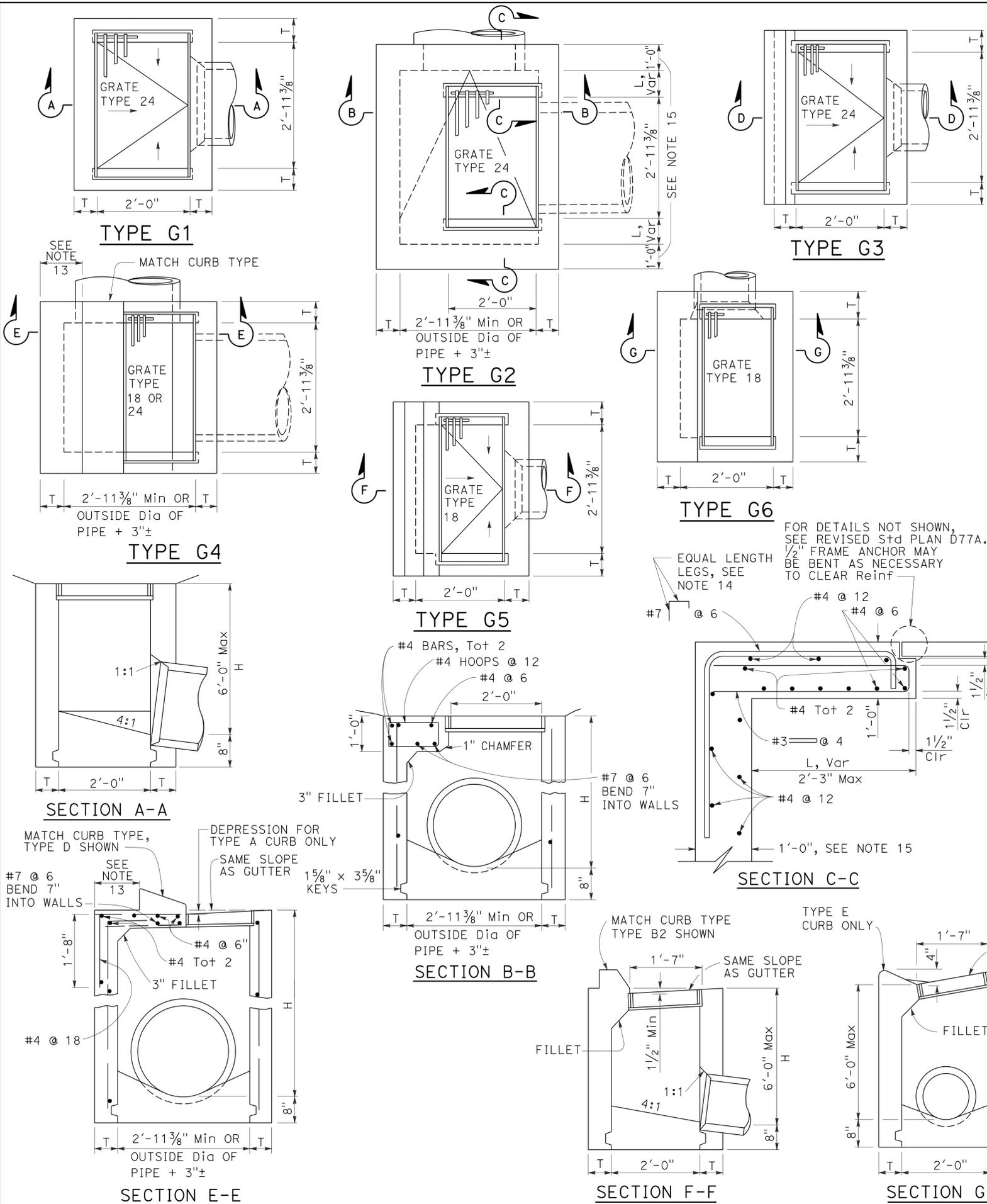
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	277	343

Glenn DeCou  
REGISTERED CIVIL ENGINEER

October 19, 2012  
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.

Glenn DeCou  
No. C34547  
Exp. 9-30-13  
CIVIL  
STATE OF CALIFORNIA



- NOTES:**
- "H" is the difference in elevation between the outlet pipe flow line and the normal gutter grade line undepressed.
  - For "T" wall thickness, see Table A below.
  - Wall reinforcing not required when "H" is 8'-0" or less and the unsupported width or length is 7'-0" or less. Walls exceeding these limits shall be reinforced with #4 bars @ 1'-6" ± centers placed 1 1/2" clear to inside of box unless otherwise shown.
  - Inlet bottom reinforcing not required. See Standard Plan D74C for alternative reinforced bottom and alternative half round bottom.
  - Steps-None required where "H" is less than 2'-6". Where "H" is 2'-6" or more, install steps with lowest rung 1'-0" above the floor and highest rung not more than 6" below top of inlet. The distance between steps shall not exceed 1'-0" and shall be uniform throughout the length of the wall. Place steps in the wall without an opening. Steps inserts may be substituted for the bar steps. Step inserts shall comply with State Industrial Safety requirements. See Standard Plan D74C for step details.
  - Details shown apply to both metal and concrete pipe.
  - Pipe(s) can be placed in any wall.
  - Curb section shall match adjacent curb.
  - Basin floors shall have wood trowel finish and a minimum slope of 12:3 from all directions toward outlet pipe.
  - Set inlet so that grate bars are parallel to direction of principal surface flow.
  - See Revised Standard Plans D77A and D77B for grate and frame details and weights of miscellaneous iron and steel.
  - See Standard Plan D78A for gutter depression details.
  - This dimension will vary with different grates, curbs types, box width and wall thickness.
  - Bar may be rotated as necessary to clear opening. Where "L" is 6" or less, bar may be omitted.
  - Where "L" is 6" or less, wall thickness shall be as shown in Table A.
  - Cast-in-place inlets to be formed around all pipes/stubs intersecting the inlet, and concrete poured in one continuous operation. Precast inlets shall have mortared connections conforming to details for Type GCP Inlet shown on Standard Plan D75B. See Standard Specifications for mortar composition.

**TABLE A**

**CONCRETE QUANTITIES**

TYPE	H=3'-0" TO 8'-0" (T=6")		H=8'-1" TO 20'-0" (T=8")	
	H=3'-0" (CY)	ADDITIONAL PCC PER FOOT (CY)	H=8'-1" (CY)	ADDITIONAL PCC PER FOOT (CY)
G-1	0.95	0.220	See Note A	SEE NOTE A
G-2*	1.31	0.255	3.50	0.357
G-3	1.03	0.220	See Note A	SEE NOTE A
G-4* (TYPE 24)	1.27	0.255	3.48	0.357
G-4* (TYPE 18)	1.30	0.255	3.50	0.357
G-5	1.02	0.220	SEE NOTE A	SEE NOTE A
G-6	1.04	0.220	SEE NOTE A	SEE NOTE A

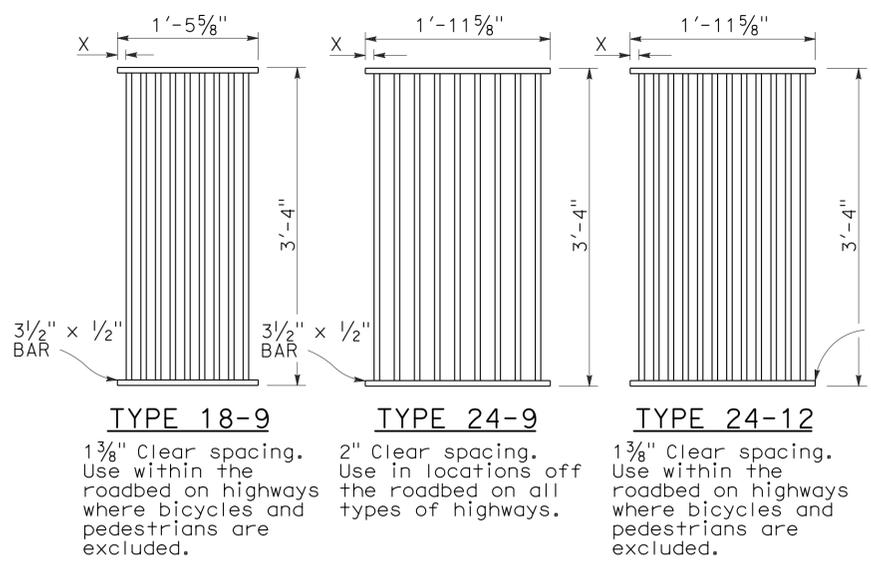
TABLE BASED ON 8" FLOOR SLAB. NO DEDUCTIONS ARE TO BE MADE TO THESE QUANTITIES BECAUSE OF PIPE OPENINGS, DIFFERENT FLOOR ALTERNATIVES OR DIFFERENT CURB TYPES. \* QUANTITIES FOR TYPE G-2 AND G-4 INLETS BASED ON THE MINIMUM INTERIOR DIMENSIONS.

**NOTE A:**  
Maximum allowable height 6'-0".

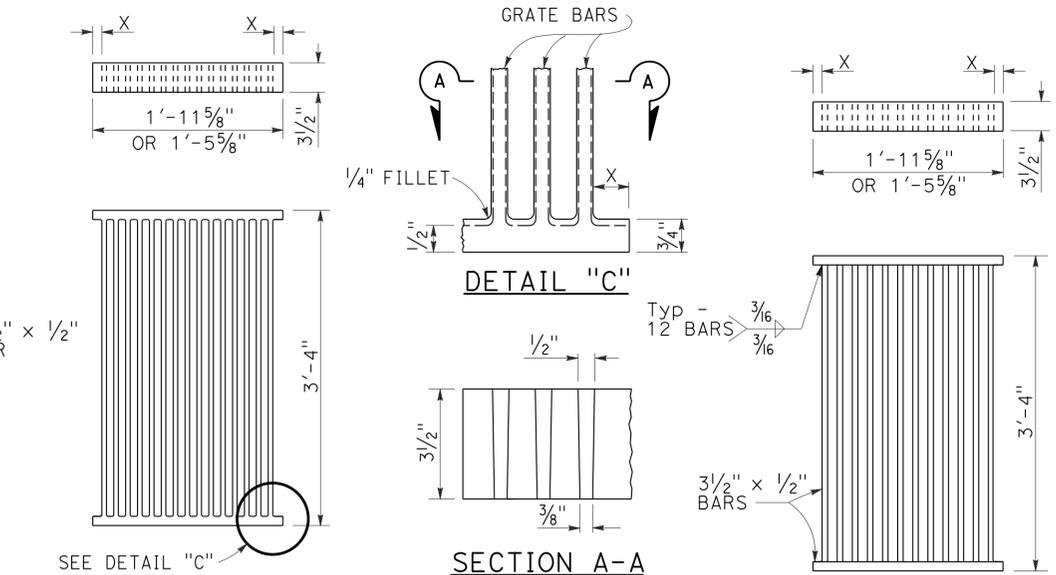
STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**DRAINAGE INLETS**  
NO SCALE

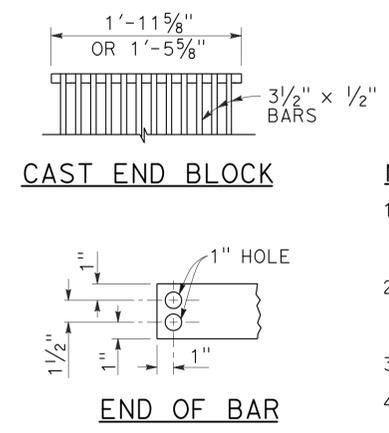
2010 REVISED STANDARD PLAN RSP D73



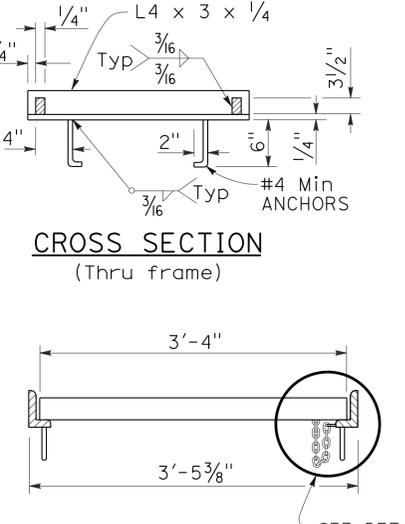
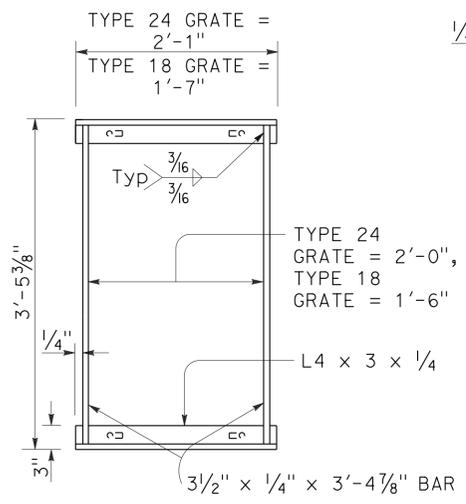
**RECTANGULAR GRATE DETAILS**  
(See table below)



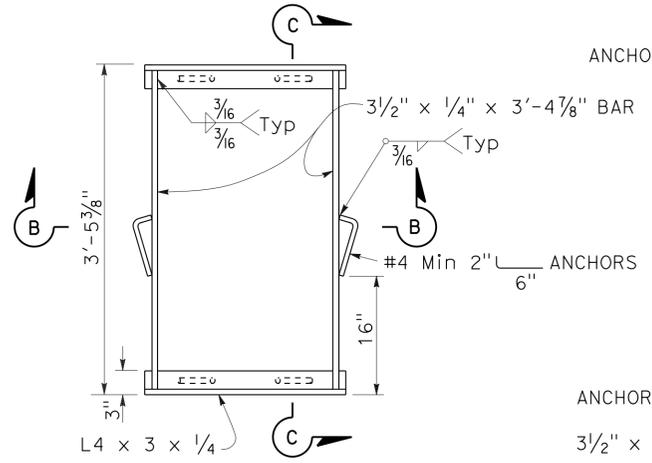
**ALTERNATIVE CAST DUCTILE IRON GRATE OR CAST CARBON STEEL GRATE**  
**ALTERNATIVE WELDED GRATE**



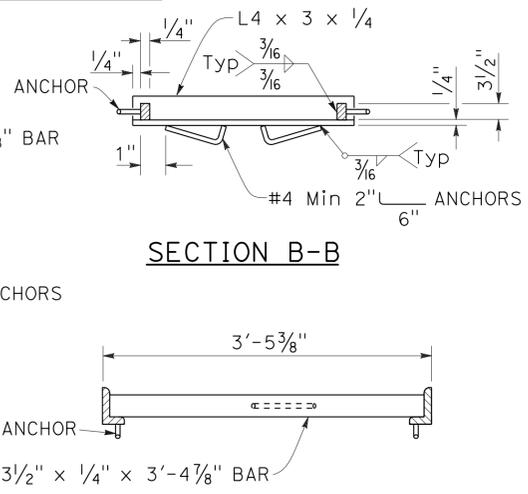
**CAST END BLOCK**  
**END OF BAR**



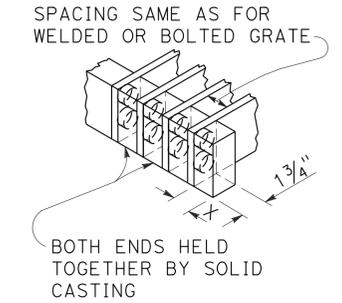
**CROSS SECTION**  
(Thru frame)  
**LONGITUDINAL SECTION**  
(Thru frame and grate)



**TYPICAL FRAME**  
**ALTERNATIVE ANCHOR FOR RECTANGULAR FRAME**  
(For details not shown, See Rectangular Frame Details)



**SECTION B-B**  
**SECTION C-C**



**ALTERNATIVE CAST DUCTILE IRON OR CAST CARBON STEEL END BLOCK GRATE**

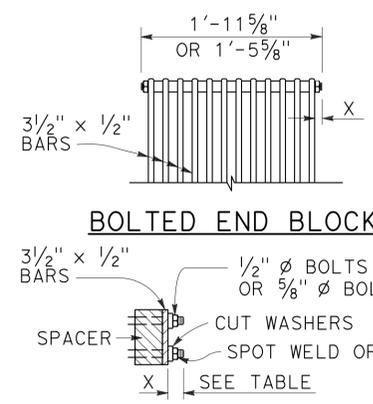
**RECTANGULAR FRAME DETAILS**  
(For all rectangular grates)

**GRATE BAR SPACING TABLE**

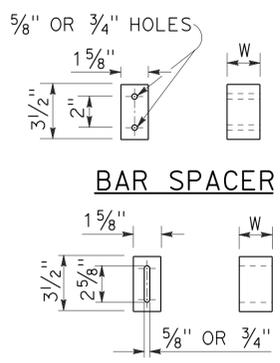
TYPE	NO. OF BARS	CLEAR BAR SPACING	X
18-9	9	1 3/8"	1 1/16"
24-9	9	2"	1 9/16"
24-12	12	1 3/8"	1 1/4"

INLET TYPE	COVER TYPE	WEIGHT LB
OS	PLATE	174
OL-7	PLATE	170
OL-10	PLATE	170
OL-14	PLATE	170
OL-21	PLATE	170
OCPI	PLATE	112
OCPI	PLATE	112
OMP	PLATE	177
OMPI	PLATE	177

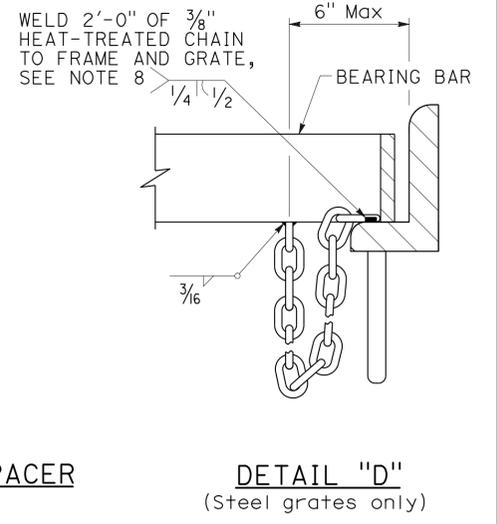
INLET TYPE	GRATE TYPE	NO. OF GRATES	WEIGHT LB
GDO	24-12	2	634
GOL-7	24-12	1	326
GOL-10	24-12	1	326
G0,G1,G2,G3,G4 (TYPE 24)	24-9	1	263
	24-12	1	326
G4 (TYPE 18),G5,G6	18-9	1	249
GT1	18-9	2	498
GT2	18-9	2	498
GT3	24-12	2	652
GT4	24-12	2	652
TRASH RACK			22
GRATE CHAIN			3



**BOLTED END BLOCK**  
**BOLTING DETAIL**  
**ALTERNATIVE BOLTED GRATE**



**ALTERNATIVE SPACER**  
W = 1 3/8" or 2"



**DETAIL "D"**  
(Steel grates only)

- NOTES:**
- Grate type numbers refer to approximate width of grate in inches and number of bars, respectively.
  - Contractor has the option of using cast ductile iron, cast carbon steel, welded, bolted, or cast end block grate.
  - Rounded top of bars optional on all grates.
  - Pipe inlets with a grate shall be placed so that bars parallel direction of principle surface flow.
  - Complete joint penetration butt welds may be substituted for the fillet welds on all anchors.
  - Standard square, hexagon, round or equivalent headed anchors may be substituted for the right angle hooks on the anchors shown on this plan.
  - Grate and frame weights are based on welded grates (weights of face angles, steps, protection bars, etc. are not included).
  - Connect chain to grate and frame only at locations shown on the plans. When chain is required, do not use cast ductile iron grates.

**GRATE DETAILS No. 1**  
NO SCALE

**BASIS FOR MISC IRON & STEEL FINAL PAY WEIGHTS FOR DRAINAGE INLETS**  
(See Note 7)

RSP D77A DATED APRIL 19, 2013 SUPERSEDES RSP D77A DATED JULY 20, 2012 AND STANDARD PLAN D77A DATED MAY 20, 2011 - PAGE 164 OF THE STANDARD PLANS BOOK DATED 2010.

**REVISED STANDARD PLAN RSP D77A**

2010 REVISED STANDARD PLAN RSP D77A

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	279	343

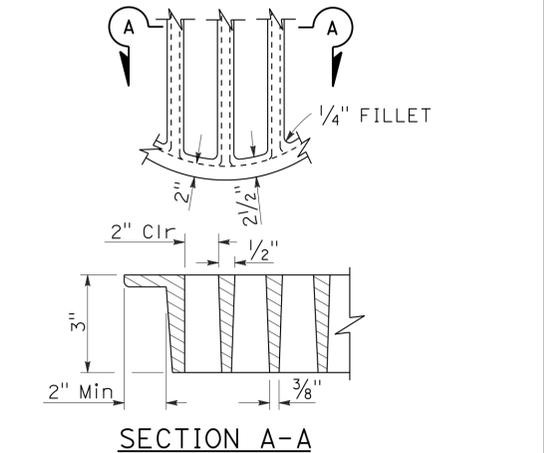
Raymond Don Tsztou  
REGISTERED CIVIL ENGINEER

April 19, 2013  
PLANS APPROVAL DATE

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REGISTERED PROFESSIONAL ENGINEER  
Raymond Don Tsztou  
No. C37332  
Exp. 6-30-14  
CIVIL  
STATE OF CALIFORNIA

TO ACCOMPANY PLANS DATED 4-29-13



**ALTERNATIVE CAST DUCTILE IRON GRATE OR CAST CARBON STEEL GRATE TYPE 36R AND 36RX**

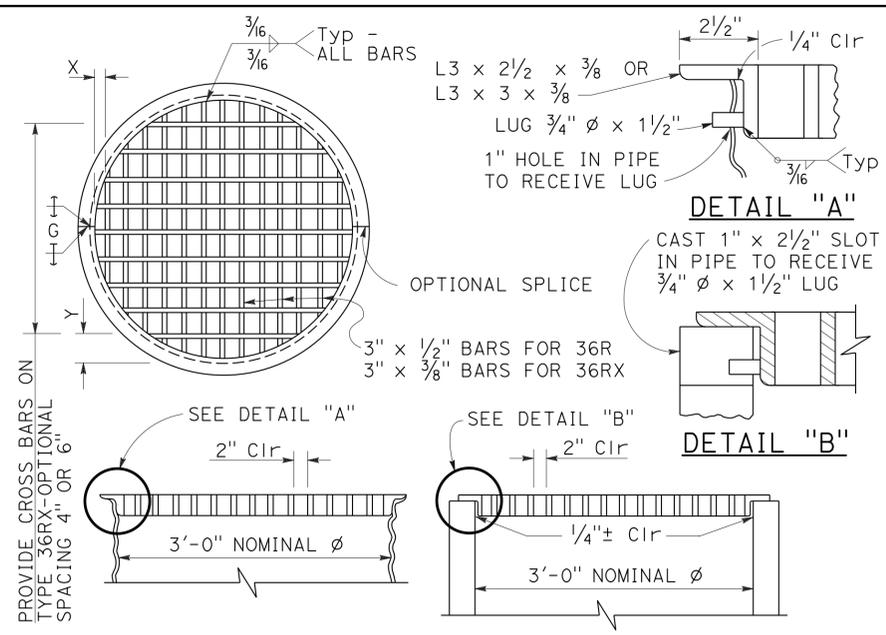
BASIS FOR Misc IRON AND STEEL FINAL PAY WEIGHTS FOR DRAINAGE INLETS

INLET TYPE	GRATE TYPE	No. OF GRATES	WEIGHT LB
GDO (SEE NOTE 4)	24-10C	2	391
	24-10S	2	456
	24-12X	2	473
	24-13	2	374
G0,G0L,G1,G2,G3,G4 (TYPE 24)	24-10C	1	202
	24-10S	1	229
	24-12X	1	239
	24-13	1	188
G4 (TYPE 18) G5,G6	18-8S	1	187
	18-9X	1	187
GT1,GT2	18-8S	2	374
	18-9X	2	374
	18-10	2	298
GT3,GT4	24-10C	2	404
	24-10S	2	458
	24-12X	2	478
ODI	24-13	2	376
	36RX (Mod)	1	196
GMP,GCP,GCPI	36RX	1	215
	36R (Mod)	1	220
GMP,GCP,GCPI	36R	1	236
TRASH RACK			22
GRATE CHAIN			3

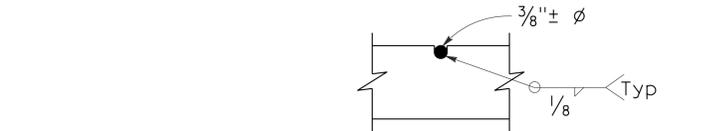
STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**GRATE DETAILS No. 2**  
NO SCALE

RSP D77B DATED APRIL 19, 2013 SUPERSEDES RSP D77B DATED JULY 20, 2012 AND STANDARD PLAN D77B DATED MAY 20, 2011 - PAGE 165 OF THE STANDARD PLANS BOOK DATED 2010.

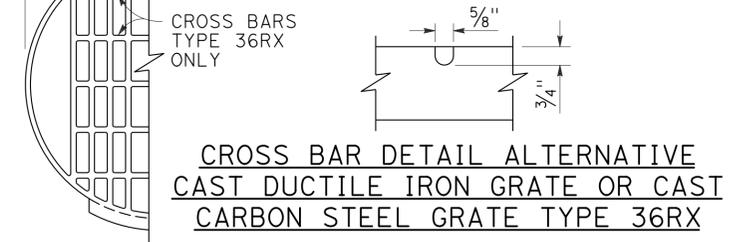
**REVISED STANDARD PLAN RSP D77B**



**TYPE 36R AND 36RX GRATE DETAILS**



**CROSS BAR DETAIL TYPE 36RX GRATE (WELDED STEEL)**

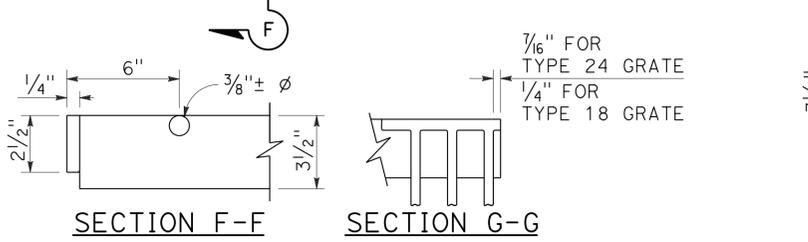
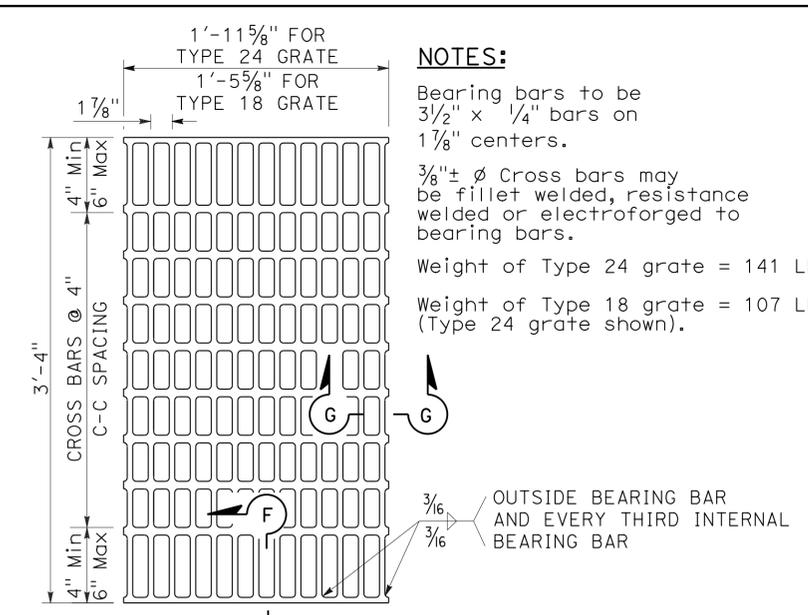


**CROSS BAR DETAIL ALTERNATIVE CAST DUCTILE IRON GRATE OR CAST CARBON STEEL GRATE TYPE 36RX MODIFIED TYPE 36R AND 36RX GRATE FOR ODI INLET**

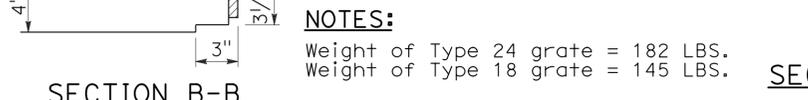
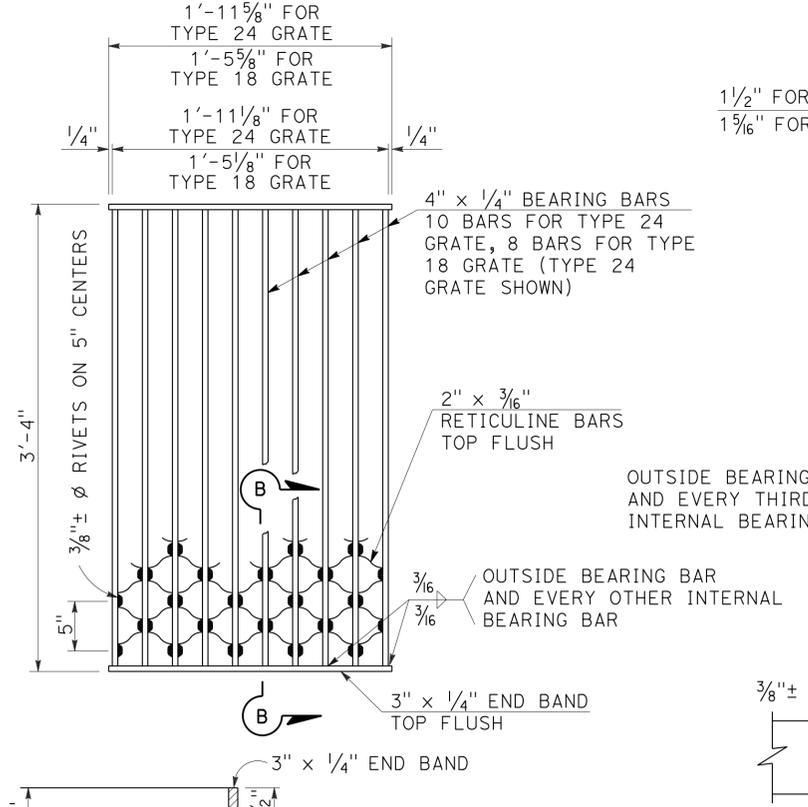
- NOTES:**
- When alternative grates are allowed - Final pay based on alternative with the lesser weight.
  - Use frame shown on Standard Plan D74A, D74B or RSP D77A as appropriate.
  - When Type 24-10S, 24-12X or 24-13 grates are used with GDO Inlets, a 1/4" x 3/2" x 3'-4 7/8" steel bar shall be welded across the center of inlet frame to separate the individual grates.
  - See Revised Standard Plan RSP D77A for connecting chain to welded grate and frame. When chain is required, do not use cast ductile iron grate.

**GRATE BAR SPACING TABLE**

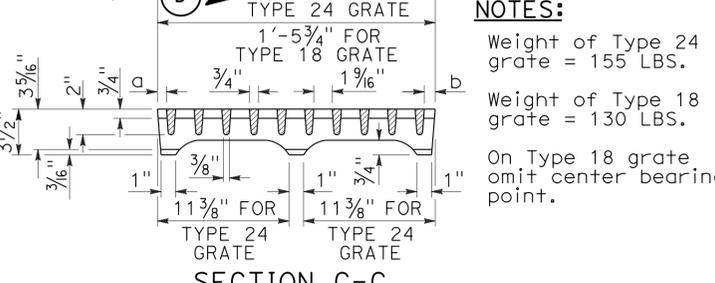
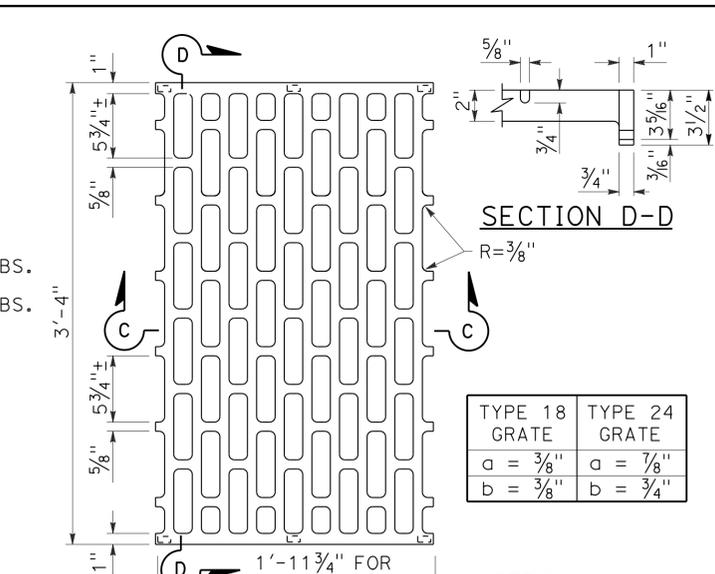
TYPE	No. OF BARS	CLEAR BAR SPACING	X	Y		Z
				4" SPACING	6" SPACING	
36R	13	2"	2 1/8"	-	-	-
36RX (STEEL)	15	2"	9/16"	3 3/4"	5 3/4"	-
36RX (CAST)	13	2"	2 1/8"	3 3/4"	5 3/4"	-
36R Mod	12	2"	2 1/8"	-	-	5"
36RX Mod (STEEL)	13	2"	9/16"	3 3/4"	5 3/4"	5 1/16"
36RX Mod (CAST)	12	2"	2 1/8"	3 3/4"	5 3/4"	5"



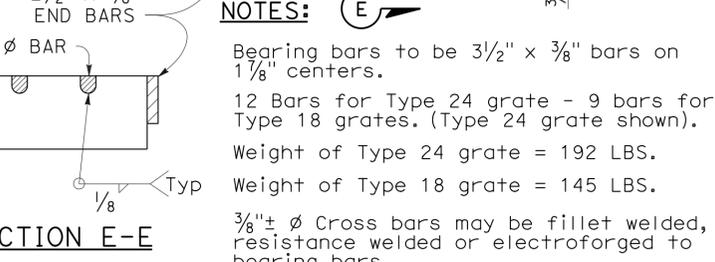
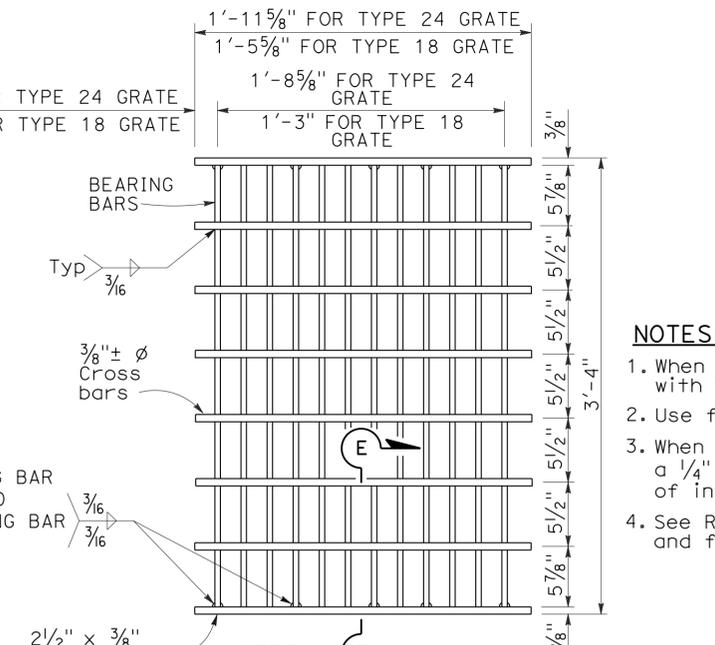
**TYPE 18-10 AND 24-13 GRATE (Welded Steel)**



**TYPE 18-8S AND 24-10S GRATE (Welded Steel) Reticuline type**



**TYPE 18-8C AND 24-10C GRATE (Cast ductile iron)**



**TYPE 18-9X AND 24-12X GRATE (Welded Steel)**

**NOTES:**

Bearing bars to be 3/2" x 1/4" bars on 1 7/8" centers.  
3/8"± ∅ Cross bars may be fillet welded, resistance welded or electroforged to bearing bars.  
Weight of Type 24 grate = 141 LBS.  
Weight of Type 18 grate = 107 LBS. (Type 24 grate shown).

**NOTES:**

Weight of Type 24 grate = 155 LBS.  
Weight of Type 18 grate = 130 LBS.  
On Type 18 grate omit center bearing point.

**NOTES:**

Bearing bars to be 3/2" x 3/8" bars on 1 7/8" centers.  
12 Bars for Type 24 grate - 9 bars for Type 18 grates. (Type 24 grate shown).  
Weight of Type 24 grate = 192 LBS.  
Weight of Type 18 grate = 145 LBS.  
3/8"± ∅ Cross bars may be fillet welded, resistance welded or electroforged to bearing bars.

2010 REVISED STANDARD PLAN RSP D77B

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	280	343

*Gurinderpal Bhullar*  
REGISTERED CIVIL ENGINEER

April 19, 2013  
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.

TO ACCOMPANY PLANS DATED 4-29-13

TABLE 1

TAPER LENGTH CRITERIA AND CHANNELIZING DEVICE SPACING							
SPEED (S)	MINIMUM TAPER LENGTH * FOR WIDTH OF OFFSET 12 FEET (W)				MAXIMUM CHANNELIZING DEVICE SPACING		
	TANGENT 2L	MERGING L	SHIFTING L/2	SHOULDER L/3	X	Y	Z **
					TAPER	TANGENT	CONFLICT
mph	ft	ft	ft	ft	ft	ft	ft
20	160	80	40	27	20	40	10
25	250	125	63	42	25	50	12
30	360	180	90	60	30	60	15
35	490	245	123	82	35	70	17
40	640	320	160	107	40	80	20
45	1080	540	270	180	45	90	22
50	1200	600	300	200	50	100	25
55	1320	660	330	220	55	110	27
60	1440	720	360	240	60	120	30
65	1560	780	390	260	65	130	32
70	1680	840	420	280	70	140	35

\* - For other offsets, use the following merging taper length formula for L:  
For speed of 40 mph or less,  $L = WS^2/60$   
For speed of 45 mph or more,  $L = WS$

Where: L = Taper length in feet  
W = Width of offset in feet  
S = Posted speed limit, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph

\*\* - Use for taper and tangent sections where there are no pavement markings or where there is a conflict between existing pavement markings and channelizers (CA).

TABLE 2

LONGITUDINAL BUFFER SPACE AND FLAGGER STATION SPACING				
SPEED *	Min D **	DOWNGRADE Min D ***		
		-3%	-6%	-9%
		ft	ft	ft
mph	ft	ft	ft	ft
20	115	116	120	126
25	155	158	165	173
30	200	205	215	227
35	250	257	271	287
40	305	315	333	354
45	360	378	400	427
50	425	446	474	507
55	495	520	553	593
60	570	598	638	686
65	645	682	728	785
70	730	771	825	891

\* - Speed is posted speed limit, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph  
\*\* - Longitudinal buffer space or flagger station spacing  
\*\*\* - Use on sustained downgrade steeper than -3 percent and longer than 1 mile.

TABLE 3

ADVANCE WARNING SIGN SPACING			
ROAD TYPE	DISTANCE BETWEEN SIGNS *		
	A	B	C
	ft	ft	ft
URBAN - 25 mph OR LESS	100	100	100
URBAN - MORE THAN 25 mph TO 40 mph	250	250	250
URBAN - MORE THAN 40 mph	350	350	350
RURAL	500	500	500
EXPRESSWAY / FREEWAY	1000	1500	2640

\* - The distances are approximate, are intended for guidance purposes only, and should be applied with engineering judgment. These distances should be adjusted by the Engineer for field conditions, if necessary, by increasing or decreasing the recommended distances.

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**TRAFFIC CONTROL SYSTEM  
FOR LANE CLOSURE ON  
FREEWAYS AND EXPRESSWAYS**

NO SCALE

RSP T9 DATED APRIL 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

**REVISED STANDARD PLAN RSP T9**

2010 REVISED STANDARD PLAN RSP T9

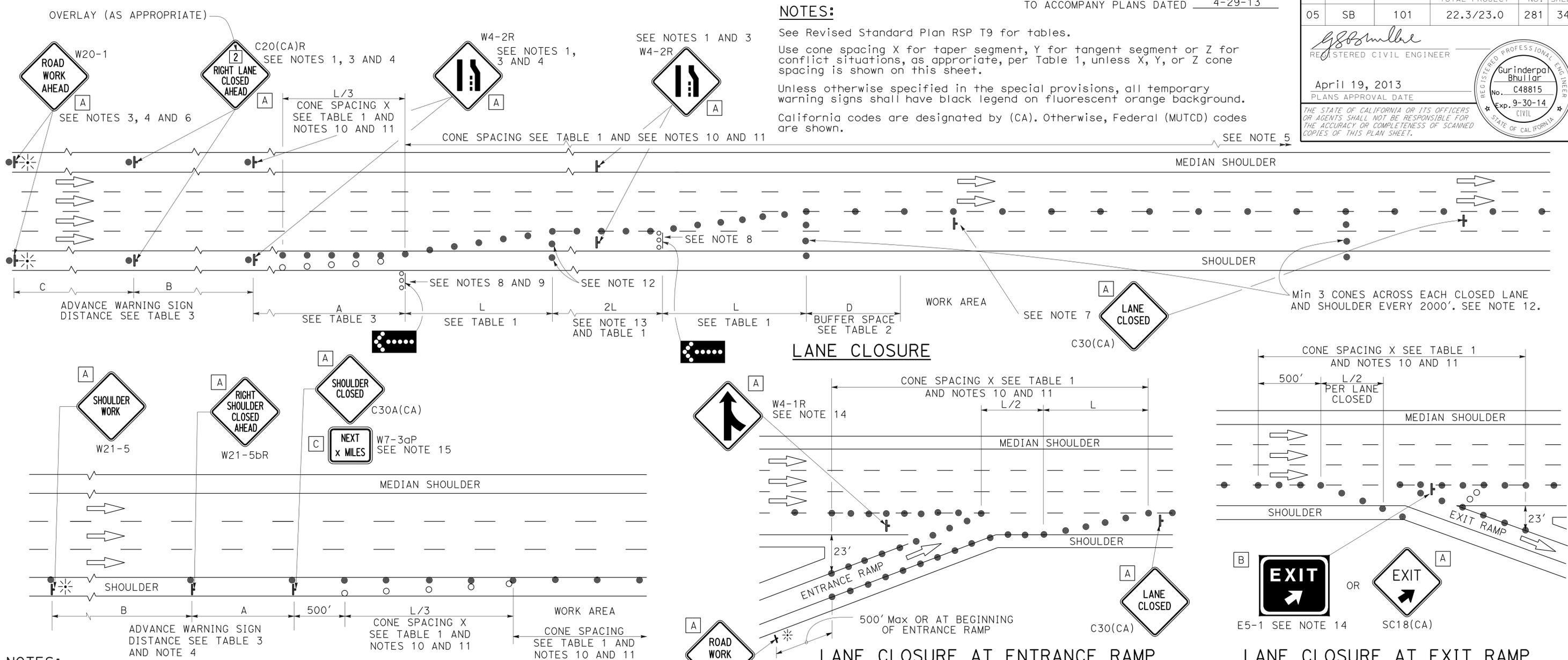
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	281	343

TO ACCOMPANY PLANS DATED 4-29-13

REGISTERED CIVIL ENGINEER  
Gurinderpal Bhullar  
No. C48815  
Exp. 9-30-14  
CIVIL  
STATE OF CALIFORNIA

April 19, 2013  
PLANS APPROVAL DATE

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**NOTES:**

See Revised Standard Plan RSP T9 for tables.

Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.

Unless otherwise specified in the special provisions, all temporary warning signs shall have black legend on fluorescent orange background.

California codes are designated by (CA). Otherwise, Federal (MUTCD) codes are shown.

- NOTES:**
1. Median lane closures shall conform to the details as shown except that C20(CA)L and W4-2L signs shall be used.
  2. At least one person shall be assigned to provide full time maintenance of traffic control devices for lane closures.
  3. Duplicate sign installations are not required:
    - a) On opposite shoulder if at least one-half of the available lanes remain open to traffic.
    - b) In the median if the width of the median shoulder is less than 8' and the outside lanes are to be closed.
  4. Each advance warning sign on each side of the roadway shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
  5. A G20-2 "END ROAD WORK" sign, with minimum size of 48" x 24" as appropriate, shall be placed at the end of the lane closure unless the end of work area is obvious or ends within a larger project's limits.

- SHOULDER CLOSURE**
6. If the W20-1 sign would follow within 2000' of a stationary W20-1 or G20-1 "ROAD WORK NEXT \_\_\_\_\_ MILES", use a C20(CA)L and W4-2L signs shall be used.
  7. Place a C30(CA) sign every 2000' throughout length of lane closure.
  8. One flashing arrow sign for each lane closed. The flashing arrow signs shall be Type I.
  9. A minimum 1500' of sight distance shall be provided where possible for vehicles approaching the first flashing arrow sign. Lane closures shall not begin at top of crest vertical curve or on a horizontal curve.
  10. All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
  11. Portable delineators, placed at one-half the spacing indicated for traffic cones may be used instead of cones for daytime closures only.

12. Unless otherwise specified in the special provisions, a minimum of 3 cones shall be placed transversely across each closed lane and shoulder at each location where a taper across a traffic lane ends and every 2000' as shown on the "Lane Closure" detail. Two Type II barricades may be used instead of the 3 cones. The transverse alignment of the cones or barricades on the closed shoulder may be shifted from the transverse alignment to provide access to the work.
13. Unless otherwise specified in the special provisions, the 2L tangent shown along lane lines shall be used between the L tapers required for each closed traffic lane.
14. Unless otherwise specified in the special provisions, the E5-1 or SC18(CA) and W4-1 signs shall be used as shown.
15. A W7-3aP "NEXT \_\_\_\_\_ MILES" plaque must be used if the shoulder closure extends beyond the distance that can be perceived by road users.

**LEGEND**

- TRAFFIC CONE
- TRAFFIC CONE (OPTIONAL TAPER)
- † TEMPORARY TRAFFIC CONTROL SIGN
- FLASHING ARROW SIGN (FAS)
- FAS SUPPORT OR TRAILER
- ⚡ PORTABLE FLASHING BEACON

**SIGN PANEL SIZE (Min)**

A	48" x 48"
B	72" x 60"
C	36" x 30"

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**TRAFFIC CONTROL SYSTEM  
FOR LANE CLOSURE ON  
FREEWAYS AND EXPRESSWAYS**

NO SCALE

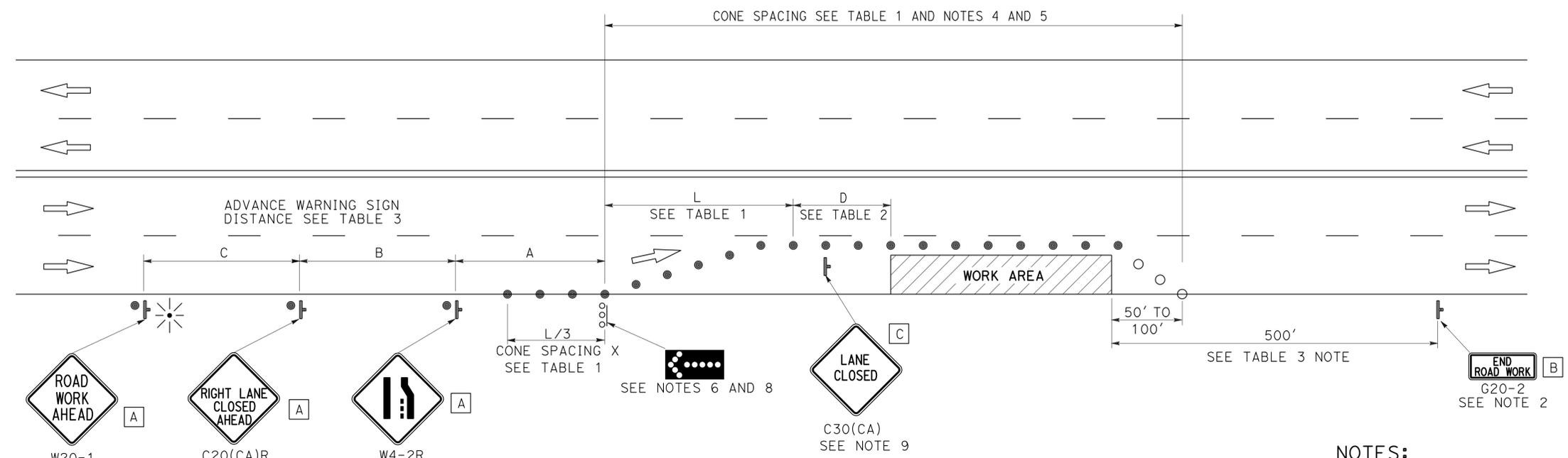
RSP T10 DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T10 DATED MAY 20, 2011 - PAGE 237 OF THE STANDARD PLANS BOOK DATED 2010.

**REVISED STANDARD PLAN RSP T10**

2010 REVISED STANDARD PLAN RSP T10



TO ACCOMPANY PLANS DATED 4-29-13



**TYPICAL LANE CLOSURE**

**NOTES:**

See Revised Standard Plan RSP T9 for tables.  
 Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.  
 Unless otherwise specified in the special provisions, all temporary warning signs shall have black legend on fluorescent orange background.  
 California codes are designated by (CA). Otherwise, Federal (MUTCD) codes are shown.

**NOTES:**

- Each advance warning sign shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
- A G20-2 "END ROAD WORK" sign, as appropriate, shall be placed at the end of the lane closure unless the end of work area is obvious, or ends within a larger project's limits.
- If the W20-1 sign would follow within 2000' of a stationary W20-1 or G20-1 "ROAD WORK NEXT \_\_\_\_\_ MILES", use a C20(CA) sign for the first advance warning sign.
- All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
- Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used instead of cones for daytime closures only.
- Flashing arrow sign shall be either Type I or Type II.
- For approach speeds over 50 mph, use the "Traffic Control System for Lane Closure On Freeways And Expressways" plan for lane closure details and requirements.
- A minimum 1500' of sight distance shall be provided where possible for vehicles approaching the first flashing arrow sign. Lane closures shall not begin at the top of crest vertical curve or on a horizontal curve.
- Place a C30(CA) sign every 2000' throughout length of lane closure.
- Median lane closures shall conform to the details as shown except that C20(CA)L and W4-2L signs shall be used.
- At least one person shall be assigned to provide full time maintenance of traffic control devices for lane closure unless, otherwise directed by the Engineer.

**LEGEND**

- TRAFFIC CONE
- TRAFFIC CONE (OPTIONAL TAPER)
- ⌋ TEMPORARY TRAFFIC CONTROL SIGN
- FLASHING ARROW SIGN (FAS)
- FAS SUPPORT OR TRAILER
- ☀ PORTABLE FLASHING BEACON

**SIGN PANEL SIZE (Min)**

- A 48" x 48"
- B 36" x 18"
- C 30" x 30"

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**TRAFFIC CONTROL SYSTEM  
 FOR LANE CLOSURE ON  
 MULTILANE CONVENTIONAL  
 HIGHWAYS**

NO SCALE

RSP T11 DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T11 DATED MAY 20, 2011 - PAGE 239 OF THE STANDARD PLANS BOOK DATED 2010.

**REVISED STANDARD PLAN RSP T11**

2010 REVISED STANDARD PLAN RSP T11



# TYPICAL RAMP CLOSURES

## SIGN PANEL SIZE (Min)

- A 48" x 48"
- B 48" x 30"
- C 36" x 36"
- D 48" x 36"

## LEGEND

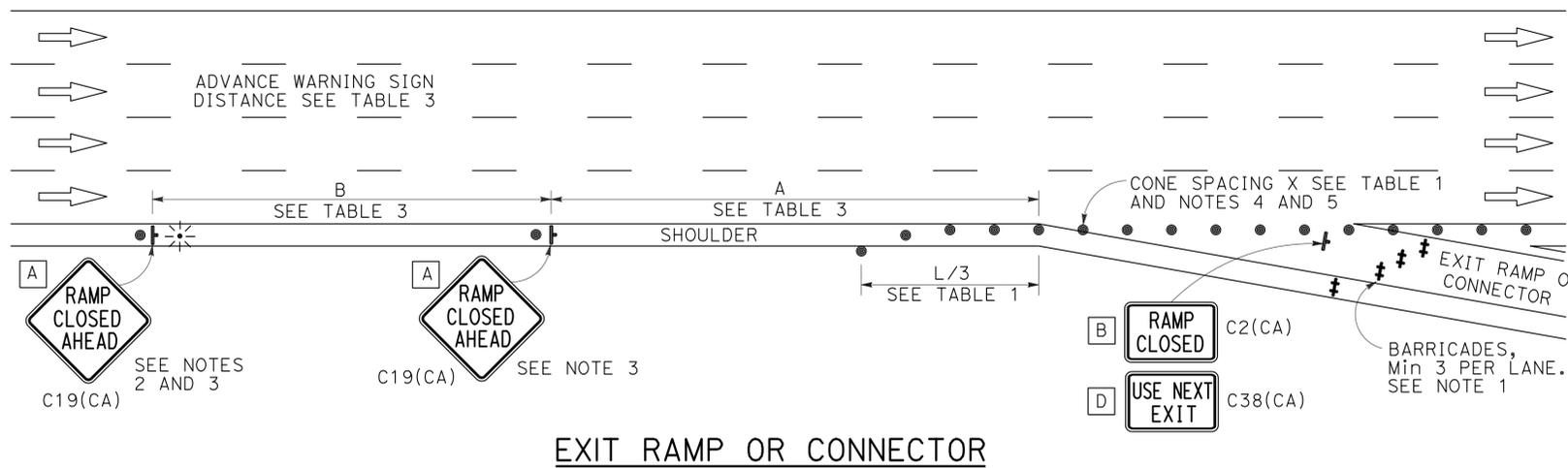
- TRAFFIC CONE
- † TEMPORARY TRAFFIC CONTROL SIGN
- ‡ BARRICADES
- ⊛ PORTABLE FLASHING BEACON

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	284	343

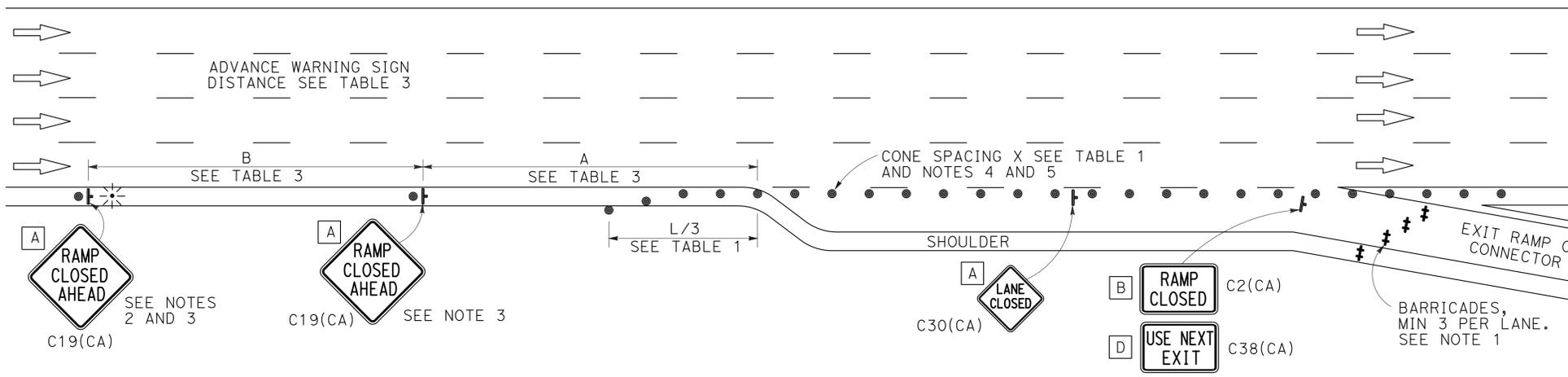
*Gurinderpal Bhullar*  
 REGISTERED CIVIL ENGINEER  
 April 19, 2013  
 PLANS APPROVAL DATE  
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER  
 Gurinderpal Bhullar  
 No. C48815  
 Exp. 9-30-14  
 CIVIL  
 STATE OF CALIFORNIA

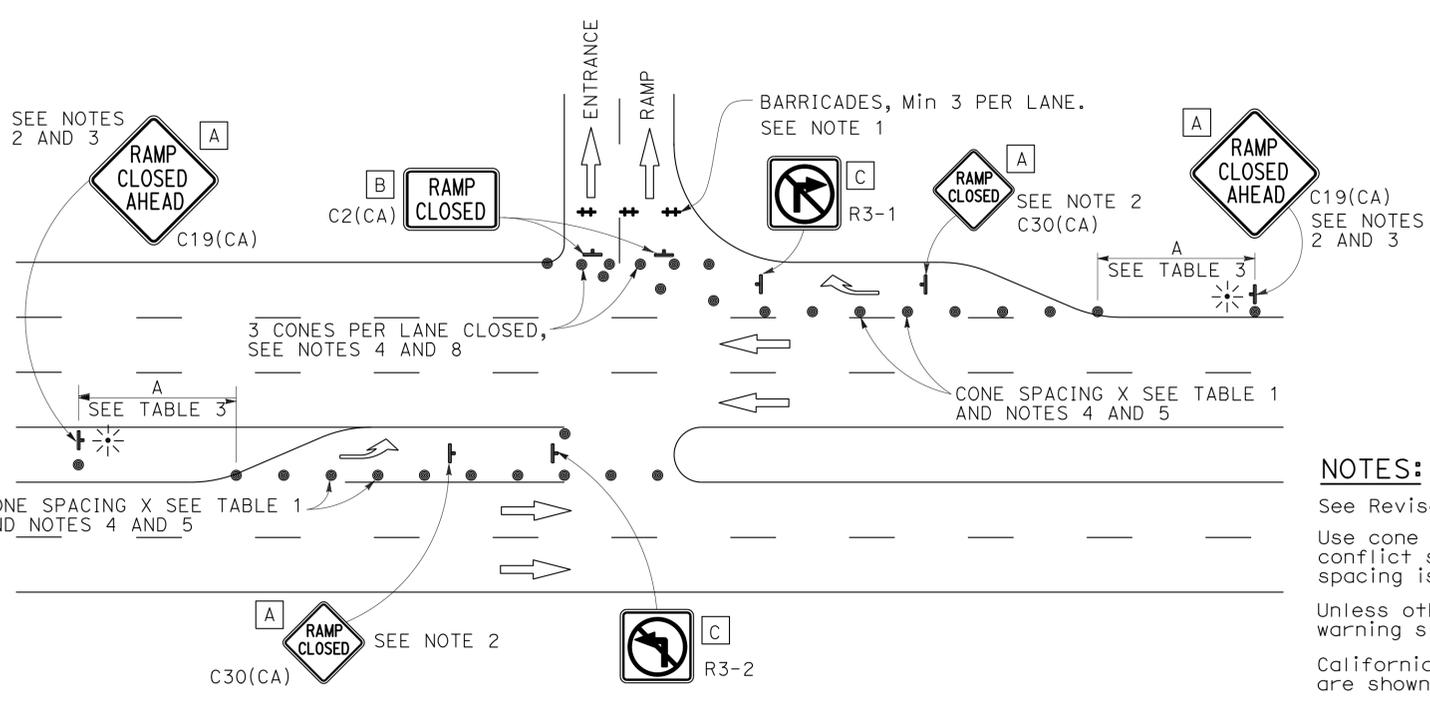
TO ACCOMPANY PLANS DATED 4-29-13



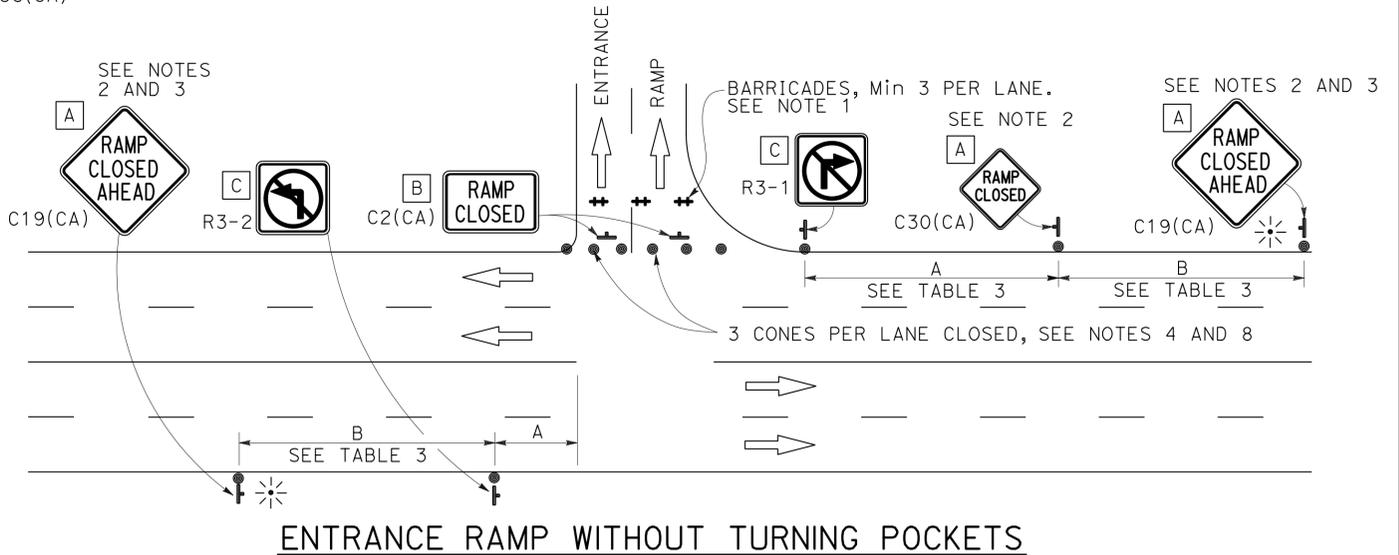
EXIT RAMP OR CONNECTOR



EXIT RAMP OR CONNECTOR WITH ADDITIONAL LANE



ENTRANCE RAMP WITH TURNING POCKETS



ENTRANCE RAMP WITHOUT TURNING POCKETS

## NOTES:

1. See Revised Standard Plan RSP T9 for tables.
2. Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.
3. Unless otherwise specified in the special provisions, all temporary warning signs shall have black legend on fluorescent orange background.
4. California codes are designated by (CA). Otherwise, Federal (MUTCD) codes are shown.

## NOTES:

1. Barricades shall be Type I, II, or III for closures lasting one week or less and Type III for closures lasting longer than one week.
2. In addition to placing the C19(CA) "RAMP CLOSED AHEAD" and C30(CA) "LANE CLOSED" signs, black on orange overlay plates with the word "CLOSED" may be mounted, as directed by the Engineer, on all guide signs that refer to the closed ramp. The letter size on the overlay shall be the same as the guide sign.
3. Each advance C19(CA) "RAMP CLOSED AHEAD" sign shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. A flashing beacon shall be placed on top of the first C19(CA) sign during hours of darkness.
4. All cones used for ramp closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
5. Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used instead of cones for daytime ramp closures only.
6. At least one person shall be assigned to provide full time maintenance of traffic control devices, unless otherwise directed by the Engineer.
7. The existing "EXIT" signs shall be covered during ramp closures.
8. A minimum of 3 cones shall be placed transversely across each closed lane and shoulder.

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

## TRAFFIC CONTROL SYSTEM FOR RAMP CLOSURE

NO SCALE

RSP T14 DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T14  
DATED MAY 20, 2011 - PAGE 242 OF THE STANDARD PLANS BOOK DATED 2010.

## REVISED STANDARD PLAN RSP T14

2010 REVISED STANDARD PLAN RSP T14



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	SB	101	22.3/23.0	286	343

*Jeffery G. McRae*  
 REGISTERED ELECTRICAL ENGINEER  
 No. E14512  
 Exp. 6-30-12  
 ELECTRICAL  
 STATE OF CALIFORNIA

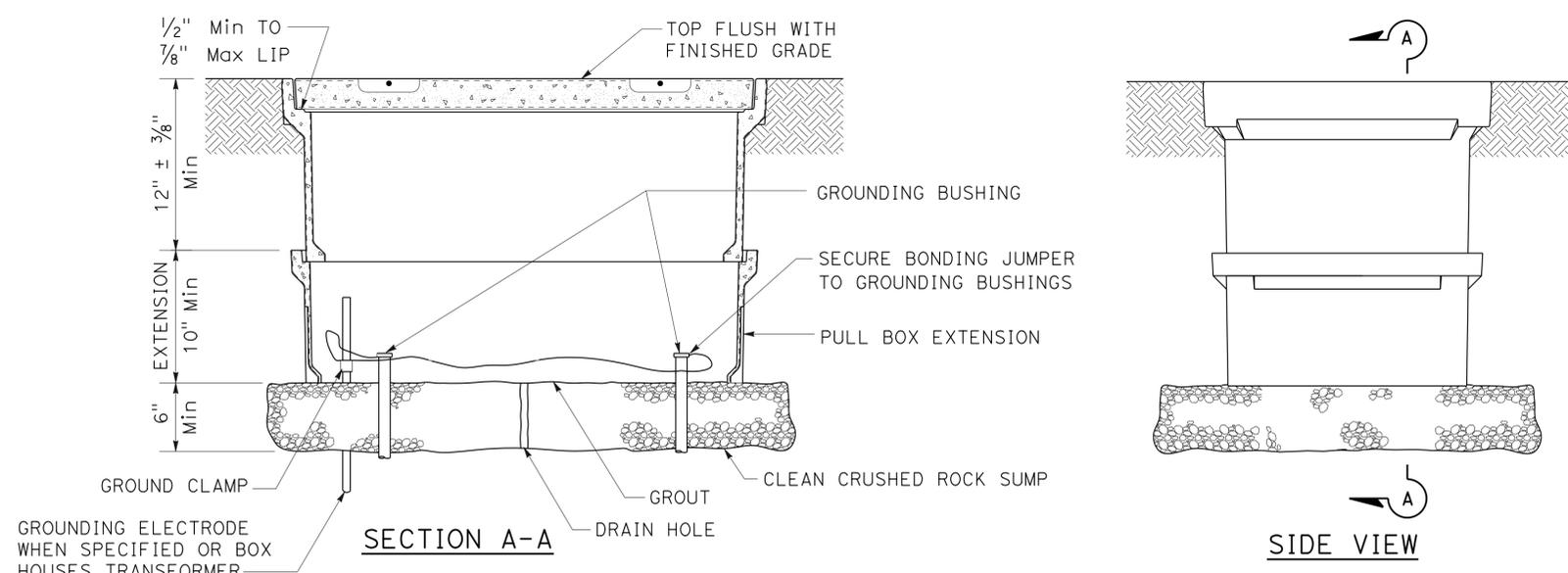
January 20, 2012  
 PLANS APPROVAL DATE

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.

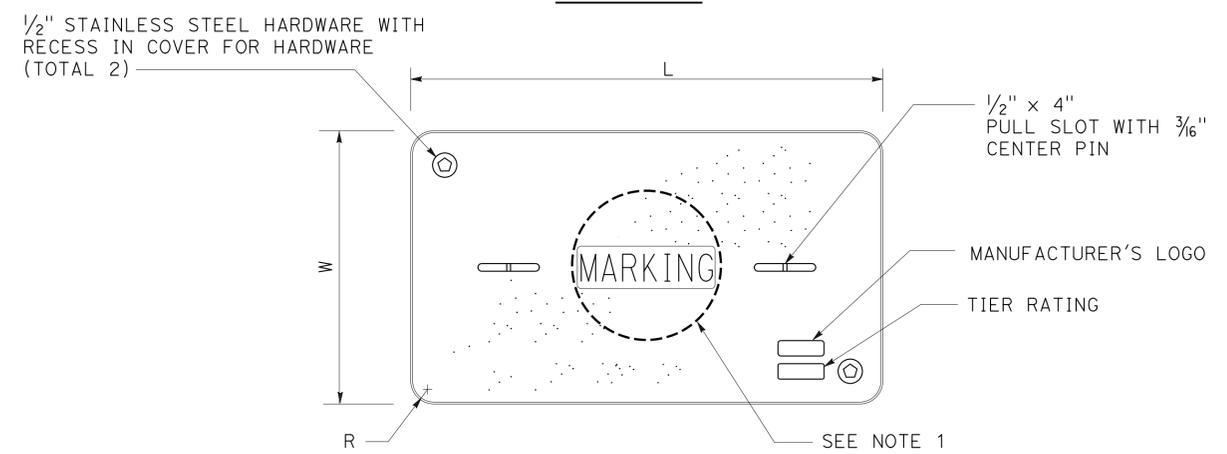
TO ACCOMPANY PLANS DATED 4-29-13

**NOTES ON PULL BOXES:**

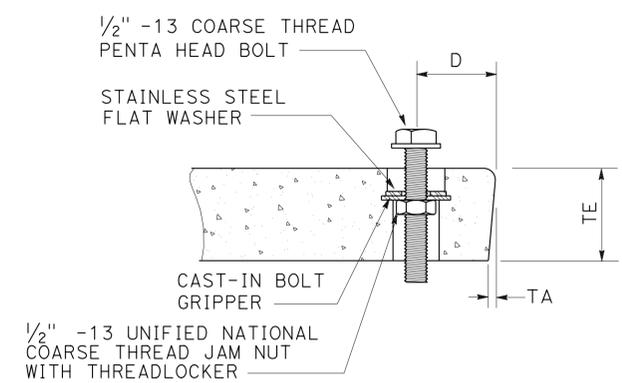
- Pull box covers must be marked as follows: "SERVICE" Service circuits between service point and service disconnect; "SPRINKLER-CONTROL" sprinkler control circuits, 50 V or less; "CALTRANS" on all pull boxes, except pull boxes marked "SPRINKLER-CONTROL"; and "TELEPHONE" Telephone service;
  - No. 3/2 pull box.
    - "SIGNAL" - Traffic signal circuits with or without street or sign lighting circuits.
    - "ST LIGHTING" - Street or sign lighting circuits where voltage is under 600 V.
  - No. 5, 6, 9 or 9A pull box.
    - "TRAFFIC SIGNAL" - Traffic signal circuits with or without street or sign lighting circuits.
    - "STREET LIGHTING" - Street or sign lighting circuits where voltage is under 600 V.
    - "STREET LIGHTING-HIGH VOLTAGE" - Street or sign lighting circuits where voltage is above 600 V.
    - "IRRIGATION" - Circuits to irrigation controller 120 V or more.
    - "RAMP METER" - Ramp meter circuits.
    - "COUNT STATION" - Count or speed monitor circuits.
    - "COMMUNICATIONS" - Communication circuits.
    - "TOS COMMUNICATIONS" - TOS communication line.
    - "TOS POWER" - TOS power.
    - "TDC POWER" - Telephone demarcation cabinet power.
    - "CCTV" - Closed circuit television circuits.
    - "TMS" - Traffic monitoring station circuits.
    - "CMS" - Changeable message sign circuits.
    - "HAR" - Highway advisory radio circuits.
- The nominal dimensions of the opening in which the cover sets must be the same as the cover dimensions (L and W) plus 1/8" or greater.
- Covers and boxes must be interchangeable with California Standard. When interchanged with a standard, the top surfaces must be flush within 1/8". Top outside radius of covers and pull boxes must have a 1/8" radius.
- Pull box extension may be another pull box as long as the bottom edge of the pull box can fit into the cover opening.



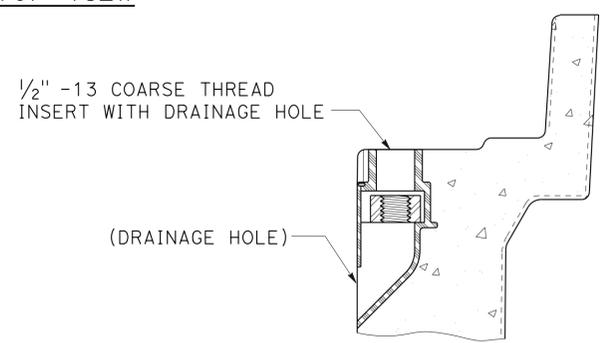
**INSTALLATION DETAILS  
DETAIL A**



**COVER TOP VIEW**



**TYPICAL COVER CAPTIVE BOLT  
OR SIMILAR**



**TYPICAL THREADED INSERT  
OR SIMILAR**

DIMENSION TABLE										
PULL BOX	PULL BOX			COVER						
	MINIMUM DEPTH BOX	MINIMUM DEPTH EXTENSION	MAXIMUM WEIGHT	L	W	R	TE	TA	D	MAXIMUM WEIGHT
No. 3/2	12"	N/A	40 lb	1' - 3 3/8"	10 1/8"	1 3/8"	2"	1/8"	1 3/4"	30 lb
No. 5	12"	10"	55 lb	1' - 11 1/4"	1' - 1 3/4"	1 3/8"	2"	1/8"	1 3/4"	60 lb
No. 6	12"	10"	70 lb	2' - 6 1/2"	1' - 5 1/2"	1 3/8"	2"	1/8"	2"	85 lb

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**ELECTRICAL SYSTEMS  
(PULL BOX)**  
 NO SCALE

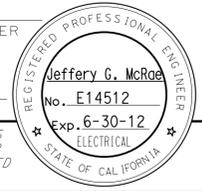
RSP ES-8A DATED JANUARY 20, 2012 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP ES-8A

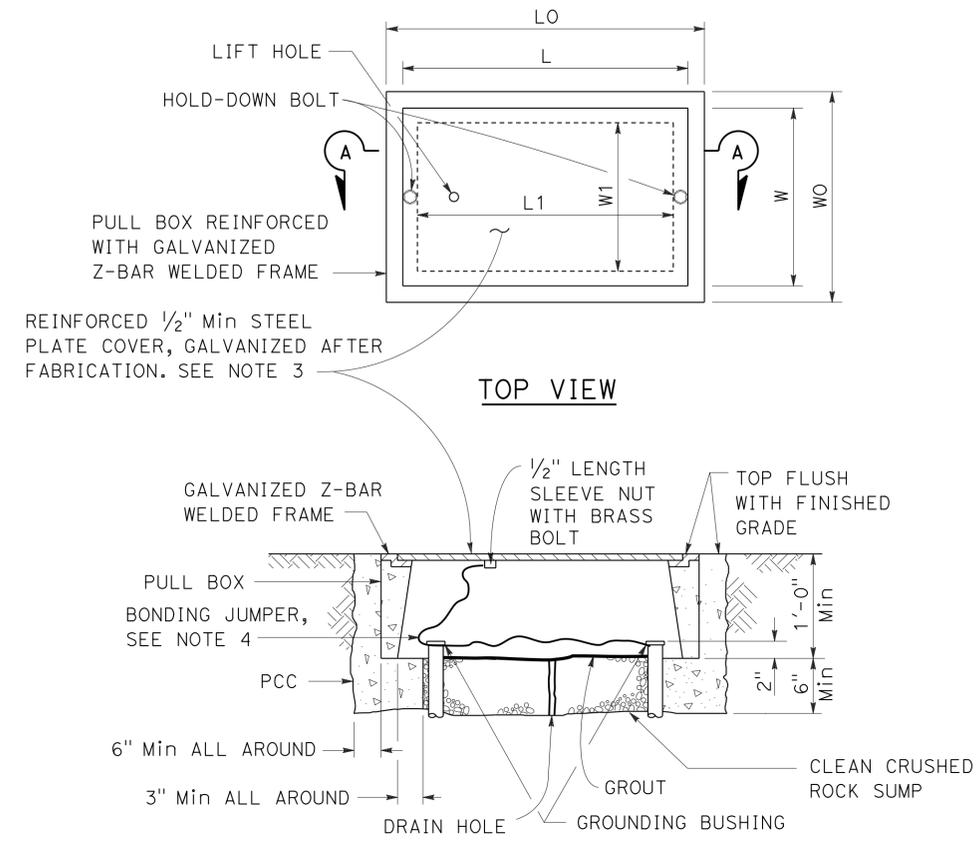
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	SB	101	22.3/23.0	287	343

*Jeffery G. McRae*  
 REGISTERED ELECTRICAL ENGINEER  
 January 20, 2012  
 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.



TO ACCOMPANY PLANS DATED 4-29-13



**No. 3 1/2(T), No. 5(T) AND No. 6(T) TRAFFIC PULL BOX**

**NOTES ON PULL BOXES:**

- Traffic pull box shall be provided with steel cover and special concrete footing. Steel cover shall have embossed non-skid pattern.
- Steel reinforcing shall be as regularly used in the standard products of the respective manufacturer.
- Pull box covers must be marked as follows: "SERVICE" Service circuits between service point and service disconnect; "SPRINKLER-CONTROL" Sprinkler control circuits, 50 V or less; "CALTRANS" On all pull boxes, except pull boxes marked "SPRINKLER-CONTROL"; and "TELEPHONE" Telephone service.
  - No. 3 1/2(T) pull box.
    - "SIGNAL" - Traffic signal circuits with or without street or sign lighting circuits.
    - "ST LIGHTING" - Street or sign lighting circuits where voltage is under 600 V.
  - No. 5(T) or 6(T) pull box.
    - "TRAFFIC SIGNAL" - Traffic signal circuits with or without street or sign lighting circuits.
    - "STREET LIGHTING" - Street or sign lighting circuits where voltage is under 600 V.
    - "STREET LIGHTING-HIGH VOLTAGE" - Street or sign lighting circuits where voltage is above 600 V.
    - "IRRIGATION" - Circuits to irrigation controller 120 V or more.
    - "RAMP METER" - Ramp meter circuits.
    - "COUNT STATION" - Count or speed monitor circuits.
    - "COMMUNICATION" - Communication circuits.
    - "TOS COMMUNICATIONS" - TOS communications line.
    - "TOS POWER" - TOS power.
    - "TDC POWER" - Telephone demarcation cabinet power.
    - "CCTV" - Closed circuit television circuits.
    - "TMS" - Traffic monitoring station circuits.
    - "CMS" - Changeable message sign circuits.
    - "HAR" - Highway advisory radio circuits.
- Bonding jumper for metal covers shall be 3' long, minimum.
- The nominal dimensions of the opening in which the cover sets must be the same as the cover dimensions except the length and width dimensions shall be 1/8" greater.
- Covers and boxes must be interchangeable with California standard male and female gages. When interchanged with a standard male or female gage, the top surfaces must be flush within 1/8".

PULL BOX	BOX						COVER					
	MINIMUM * THICKNESS	MINIMUM DEPTH BOX AND EXTENSION	W0	L0	L1	W1	L **	W **	R	EDGE THICKNESS	EDGE TAPER	
No. 3 1/2(T)	1 1/2"	1'-0"	1'-5"± 1"	1'-8 7/8"±	1'-2 1/2"±	10 5/8"± 1"	1'-8"±	1'-1 3/4"±	0"	1/2"	NONE	
No. 5(T)	1 3/4"	1'-0"	1'-11 1/2"± 1"	2'-5 1/2"±	1'-7"±	1'-1"± 1"	2'-3"±	1'-4"±	0"	1/2"	NONE	
No. 6(T)	2"	1'-0"	2'-6"± 1"	2'-11 1/2"±	1'-11 1/2"±	1'-5"± 1"	2'-9"±	1'-8"±	0"	1/2"	NONE	

\* EXCLUDING CONDUIT WEB      \*\* TOP DIMENSION

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**ELECTRICAL SYSTEMS  
(TRAFFIC RATED PULL BOX)**  
NO SCALE

RSP ES-8B DATED JANUARY 20, 2012 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

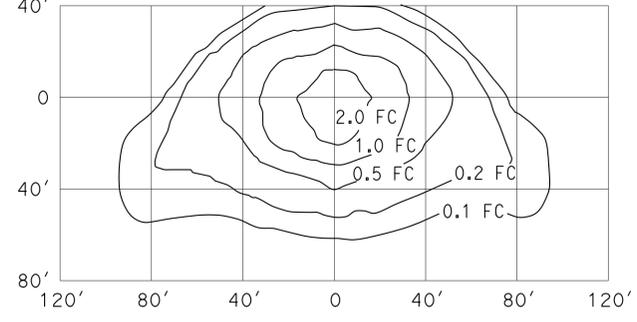
2010 REVISED STANDARD PLAN RSP ES-8B

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	288	343

*Jeffrey B. McRae*  
 REGISTERED ELECTRICAL ENGINEER  
 July 20, 2012  
 PLANS APPROVAL DATE  
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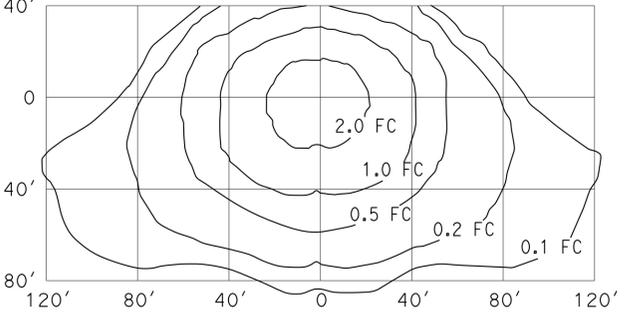
TO ACCOMPANY PLANS DATED 4-29-13

**ISOFOOTCANDLE CURVE - MINIMUM**



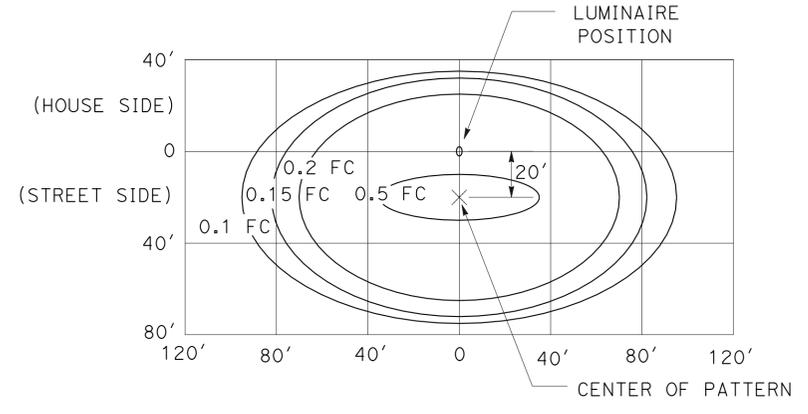
**TYPE III MEDIUM CUTOFF**  
 Cutoff Luminaire  
 34' Mounting Height  
 Lamp operated at 22,000 lm  
 200-W high pressure sodium lamp  
 ANSI Designation S66

**ISOFOOTCANDLE CURVE - MINIMUM**



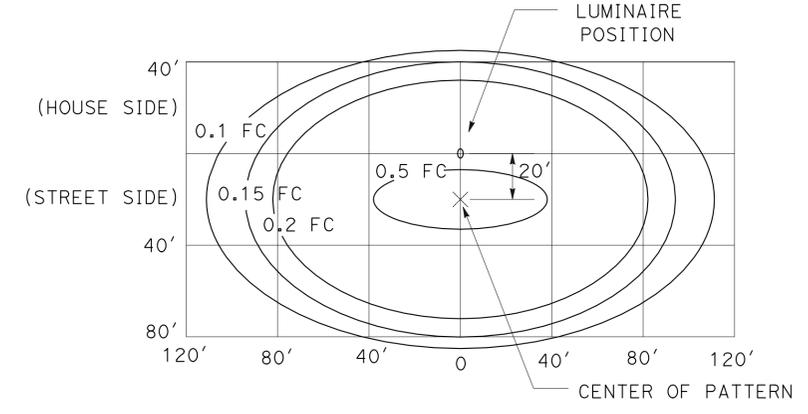
**TYPE III MEDIUM CUTOFF**  
 Cutoff Luminaire  
 40' Mounting Height  
 Lamp operated at 37,000 lm  
 310-W high pressure sodium lamp  
 ANSI Designation S67

**ISOFOOTCANDLE CURVE - MINIMUM**



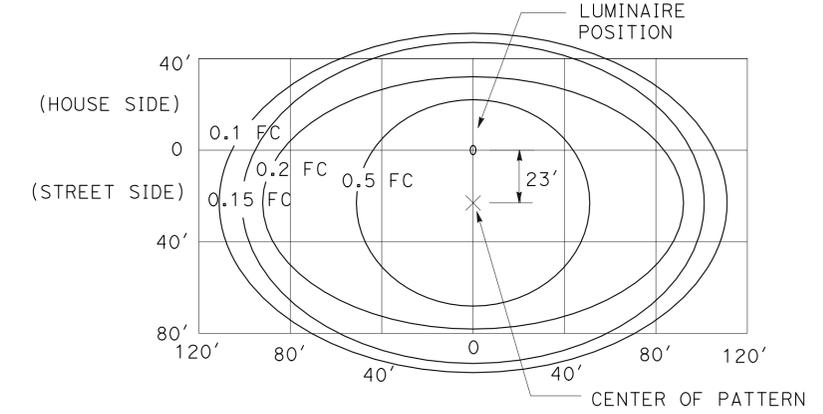
**LED LUMINAIRE ROADWAY 1**  
 200-W HPS Equivalent at 34' Mounting Height

**ISOFOOTCANDLE CURVE - MINIMUM**



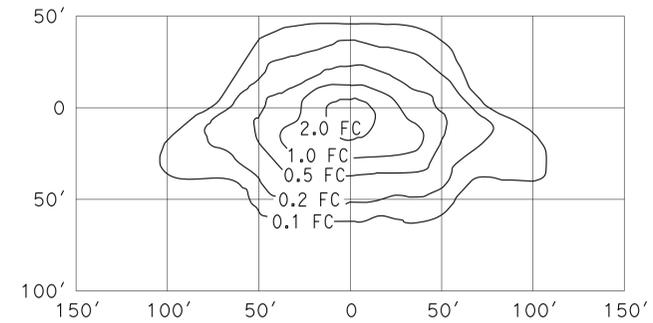
**LED LUMINAIRE ROADWAY 2**  
 310-W HPS Equivalent at 40' Mounting Height

**ISOFOOTCANDLE CURVE - MINIMUM**



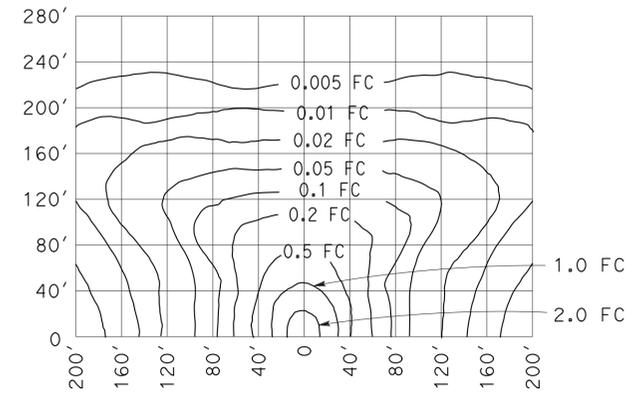
**LED LUMINAIRE ROADWAY 4**  
 400-W HPS Equivalent at 40' Mounting Height

**ISOFOOTCANDLE CURVE - MINIMUM**



**TYPE III MEDIUM CUTOFF**  
 Cutoff Luminaire  
 30' Mounting Height  
 Lamp operated at 16,000 lm  
 150-W high pressure sodium lamp  
 ANSI Designation S55

**ISOFOOTCANDLE CURVE - MINIMUM**



**LOW PRESSURE SODIUM LUMINAIRE**  
 40' Mounting Height  
 Lamp operated at 33,000 lm  
 180-W low pressure sodium lamp

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION

**ELECTRICAL SYSTEMS  
 (ISOFOOTCANDLE DIAGRAMS)**

NO SCALE

RSP ES-10A DATED JULY 20, 2012 SUPPLEMENTS THE  
 STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP ES-10A

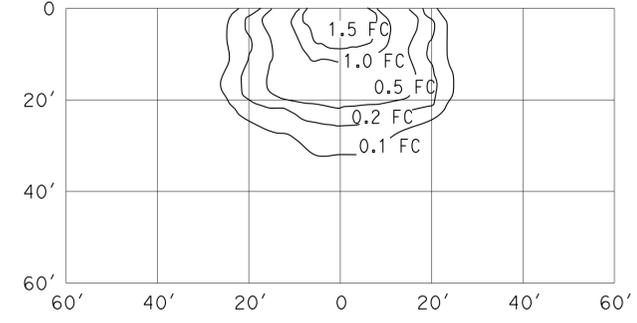
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	289	343

*Jeffery G. McRae*  
 REGISTERED ELECTRICAL ENGINEER  
 July 20, 2012  
 PLANS APPROVAL DATE  
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER  
**Jeffery G. McRae**  
No. E14512  
Exp. 6-30-14  
ELECTRICAL  
STATE OF CALIFORNIA

TO ACCOMPANY PLANS DATED 4-29-13

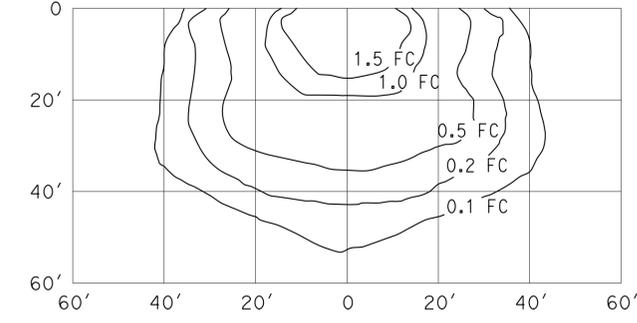
**ISOFOOTCANDLE CURVE - MINIMUM**



**WALL LUMINAIRE**

15' Mounting Height  
 Lamp operated at 5,800 lm  
 70-W high pressure sodium lamp  
 ANSI Designation S62

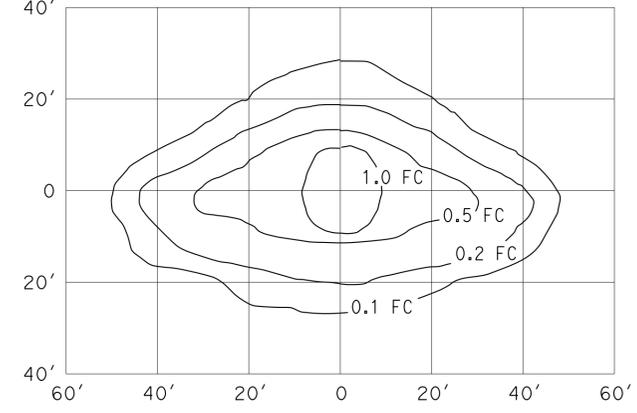
**ISOFOOTCANDLE CURVE - MINIMUM**



**WALL LUMINAIRE**

15' Mounting Height  
 Lamp operated at 9,500 lm  
 100-W high pressure sodium lamp  
 ANSI Designation S54

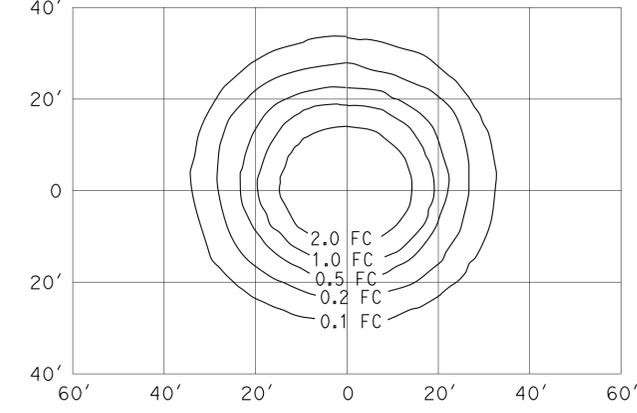
**ISOFOOTCANDLE CURVE - MINIMUM**



**PENDANT SOFFIT LUMINAIRE  
 TYPE III SHORT**

17' Mounting Height  
 Lamp operated at 5,800 lm  
 70-W high pressure sodium lamp  
 ANSI Designation S62

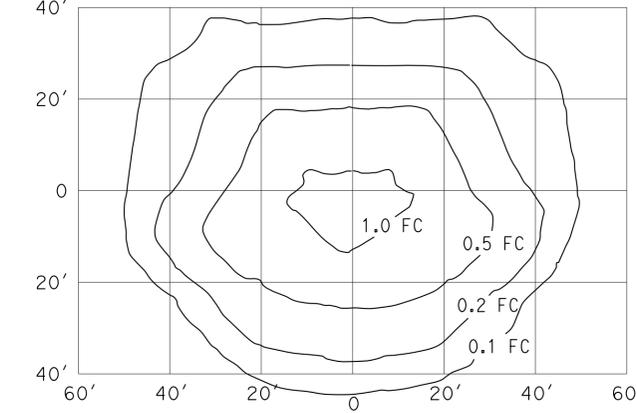
**ISOFOOTCANDLE CURVE - MINIMUM**



**PENDANT SOFFIT LUMINAIRE**

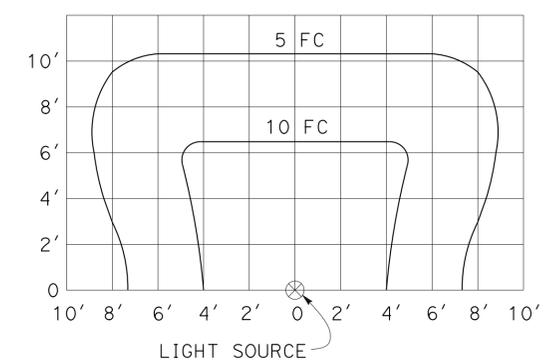
17' Mounting Height  
 Lamp operated at 5,800 lm  
 70-W high pressure sodium lamp  
 ANSI Designation S62

**ISOFOOTCANDLE CURVE - MINIMUM**



**FLUSH SOFFIT LUMINAIRE**

17' Mounting Height  
 Lamp operated at 5,800 lm  
 70-W high pressure sodium lamp  
 ANSI Designation S62



**SIGN LIGHTING FIXTURE  
 ISOFOOTCANDLE DIAGRAM**

**NOTES:**

- Curves represent the minimum footcandle (FC) of initial illumination on a 10'-0" x 20'-0" panel.
- The FC shown are with the fixture attached to the light fixture mounting channel which places the center of the source 4'-8" in front of panel and 1'-0" below the bottom edge.
- Applicable lamp: 85-W fluorescent phosphor coated induction lamp.

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION

**ELECTRICAL SYSTEMS  
 (ISOFOOTCANDLE DIAGRAMS)**

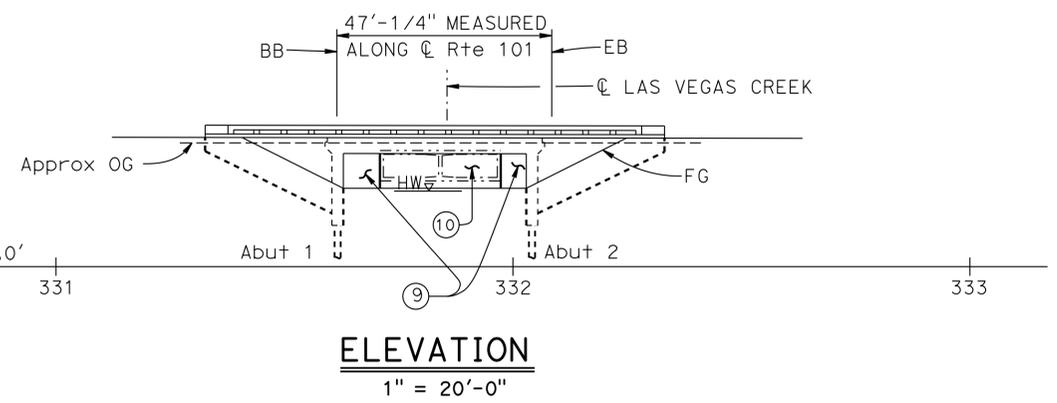
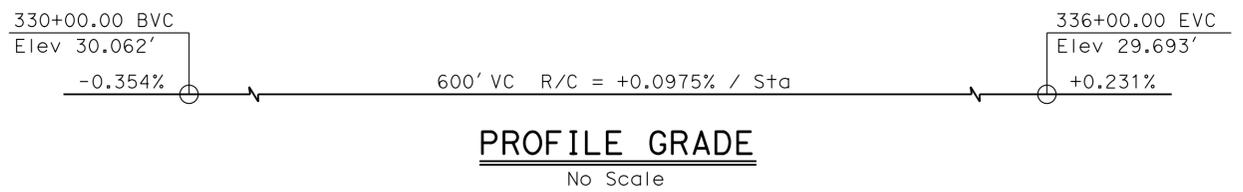
NO SCALE

RSP ES-10B DATED JULY 20, 2012 SUPPLEMENTS THE  
 STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP ES-10B

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	290	343

M.J. Cullen 1-17-13  
 REGISTERED CIVIL ENGINEER DATE  
 4-29-13  
 PLANS APPROVAL DATE  
 M. J. CULLEN  
 No. C 40620  
 Exp. 03-31-13  
 CIVIL  
 STATE OF CALIFORNIA  
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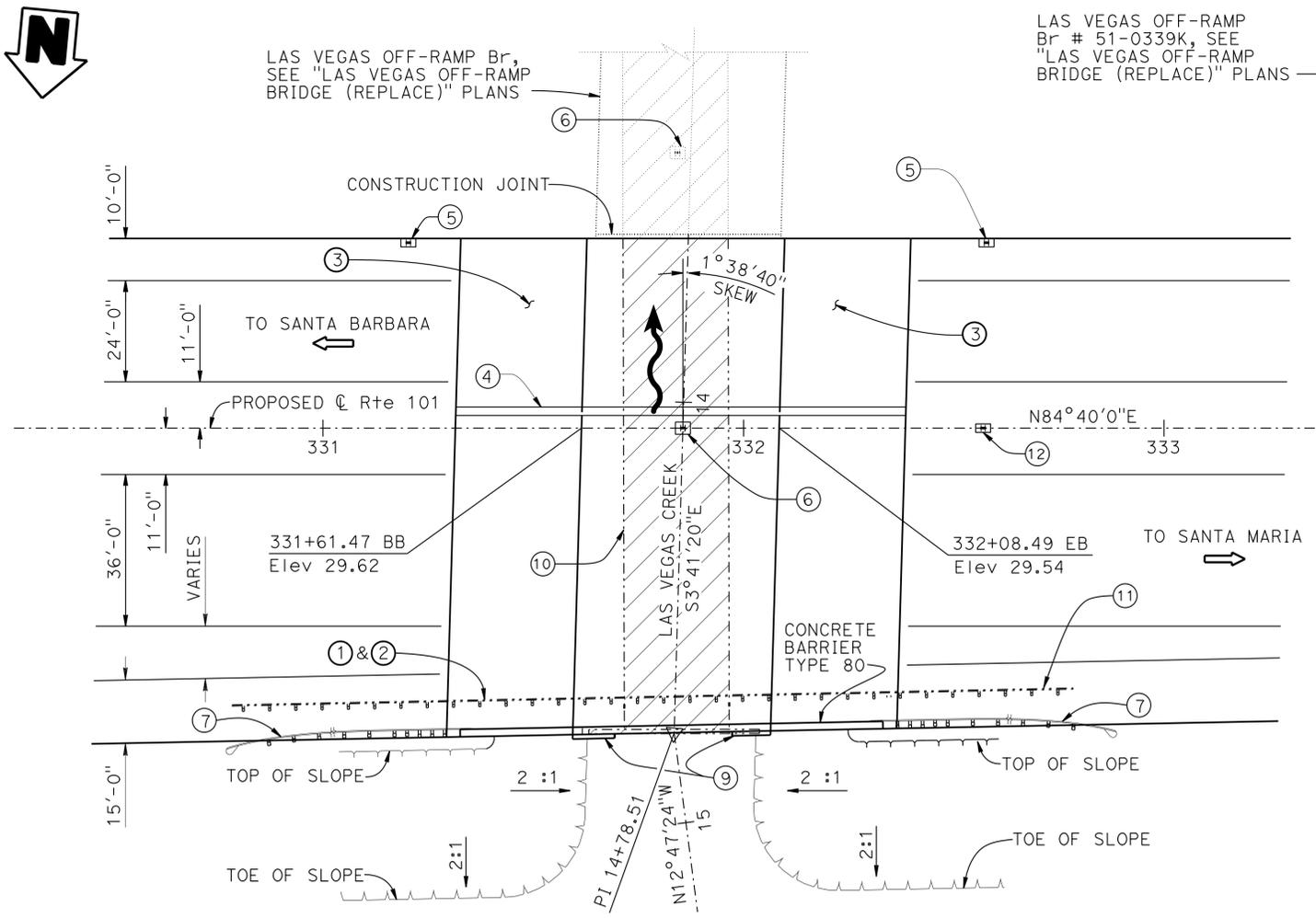
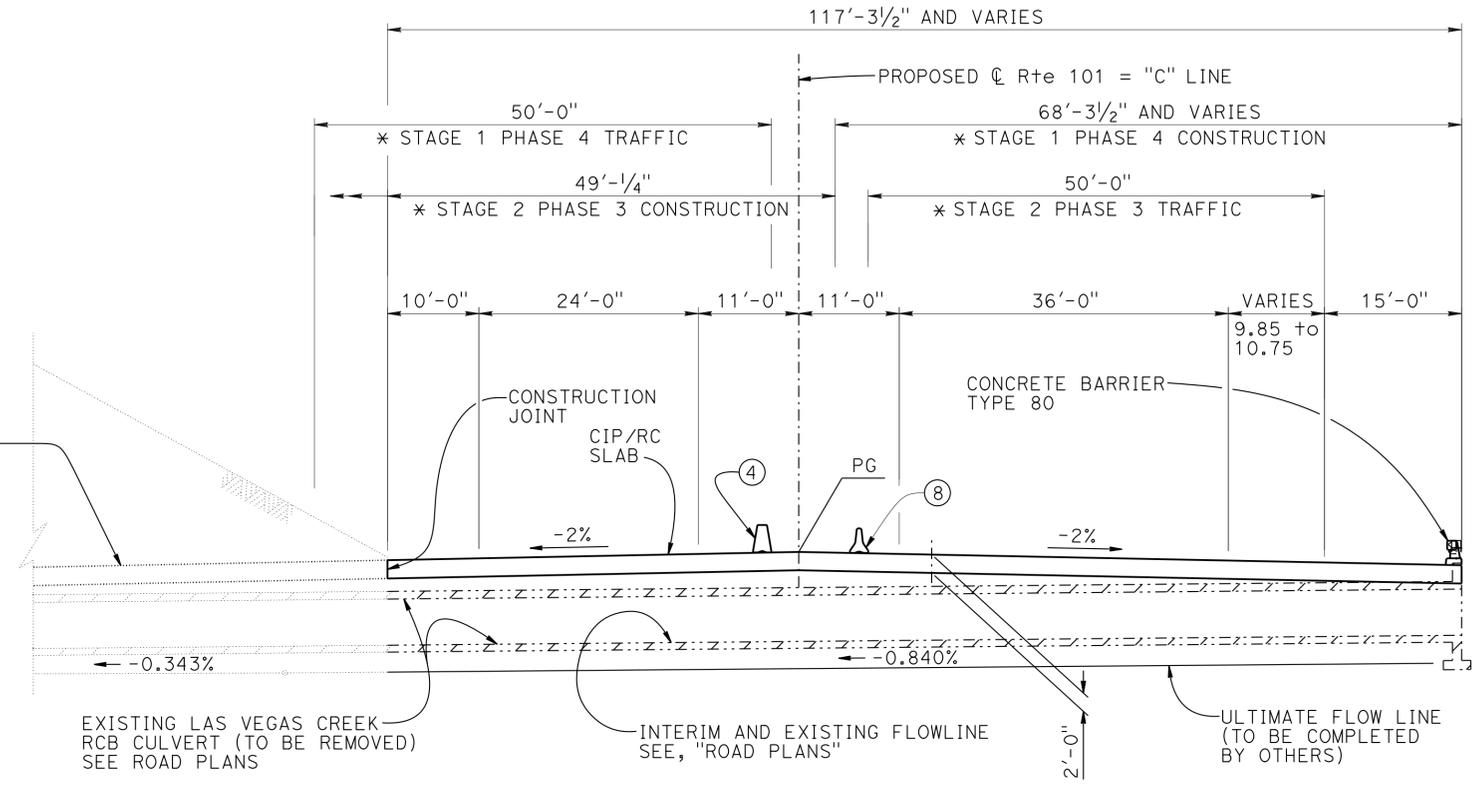
**LEGEND:**

Limits of Reinforced Concrete Box Culvert (Br No. 51-167) removal, see "Road Plans"

Indicates existing structure

Indicates new structure

\* For Stage Construction, see "TYPICAL SECTION" sheet



- Notes:**
- Paint "LAS VEGAS CREEK BRIDGE"
  - Paint "Br. No. 51-0339" and year constructed
  - Structure Approach Type N(300)
  - Concrete Barrier Type 60A (Mod) with scuppers located on bridge deck and approach slab
  - Drainage Inlets (Type G2), see "Road Plans"
  - Remove Existing Drainage Inlets, see "Road Plans"
  - MBGR, see "Road Plans"
  - Temporary Railing (Type K), see "Road Plans". For stage construction limits, see "TYPICAL SECTION" sheet
  - Construct a closure wall that is to be removed in the future for 25-year storm event
  - Remove Existing Las Vegas Creek RCB Culvert, see "Road Plans"
  - Remove Existing Exist MBGR, see "Road Plans"
  - Drainage Inlets, see "Road Plans"

**QUANTITIES**

STRUCTURE EXCAVATION (TYPE A)	1,030	CY
STRUCTURE BACKFILL (BRIDGE)	378	CY
FURNISH 24" STEEL PIPE PILING	2,331	LF
DRIVE 24" STEEL PIPE PILE	42	EA
SEAL COURSE CONCRETE	156	CY
STRUCTURAL CONCRETE, BRIDGE FOOTING	140	CY
STRUCTURAL CONCRETE, BRIDGE	794	CY
STRUCTURAL CONCRETE, APPROACH SLAB (TYPE N)	260	CY
JOINT SEAL (MR1/2")	235	LF
BAR REINFORCING STEEL (BRIDGE)	159,348	LB
HEADED BAR REINFORCEMENT	1,180	EA
CONCRETE BARRIER (TYPE 60A MODIFIED)	107	LF
CONCRETE BARRIER (TYPE 80)	101	LF

FRITZ HOFFMAN DESIGN ENGINEER	DESIGN	BY X. CHEN	CHECKED M. CULLEN / PEREZ	LOAD & RESISTANCE FACTOR DESIGN	LIVE LOADING: HL93 W/"LOW-BOY"; PERMIT DESIGN VEHICLE
	DETAILS	BY D. PATO/S. NG/K. CHONKRIA	CHECKED MIKE CULLEN	LAYOUT	BY X. CHEN
	QUANTITIES	BY HILARIO TUAZON	CHECKED GLORIA REYES-GUTIERREZ	SPECIFICATIONS	BY V. RENGANATHAN

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 6

BRIDGE NO. 51-0339 POST MILE 22.3-23.0

**LAS VEGAS CREEK BRIDGE (REPLACE) GENERAL PLAN**

UNIT: 3591 PROJECT NUMBER & PHASE: 0500000055 & 1 CONTRACT NO.: 0G0701

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET 1	OF 17
09-07-10	11-01-12	

FILE => 51\_0339-a-gp01.dgn

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	291	343

<i>MJ Cullen</i> 1-17-13	
REGISTERED CIVIL ENGINEER	DATE
4-29-13	
PLANS APPROVAL DATE	

M. J. CULLEN	
No. C 40620	Exp. 03-31-13
CIVIL	

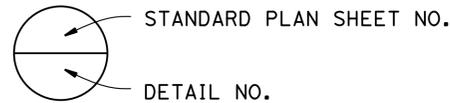
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## INDEX TO PLANS

SHEET NO.	SHEET TITLE
1	GENERAL PLAN
2	INDEX TO PLANS
3	DECK CONTOURS
4	FOUNDATION PLAN
5	ABUTMENT 1 LAYOUT
6	ABUTMENT 2 LAYOUT
7	ABUTMENT DETAILS NO. 1
8	ABUTMENT DETAILS NO. 2
9	TYPICAL SECTION NO.1
10	TYPICAL SECTION NO.2
11	MAIN SLAB REINFORCEMENT
12	SLAB REINFORCEMENT DETAILS
13	STRUCTURE APPROACH DRAINAGE DETAILS
14	STRUCTURE APPROACH TYPE N(30D)
15	LOG OF TEST BORINGS 1 OF 3
16	LOG OF TEST BORINGS 2 OF 3
17	LOG OF TEST BORINGS 3 OF 3

## STANDARD PLANS DATED 2010

A10A	ACRONYMS AND ABBREVIATIONS (SHEET 1 OF 2)
A10B	ACRONYMS AND ABBREVIATIONS (SHEET 2 OF 2)
A10C	LINES AND SYMBOLS (SHEET 1 OF 3)
A10D	LINES AND SYMBOLS (SHEET 2 OF 3)
A10E	LINES AND SYMBOLS (SHEET 3 OF 3)
A10F	LEGEND - SOIL (SHEET 1 OF 2)
A10G	LEGEND - SOIL (SHEET 2 OF 2)
A10H	LEGEND - ROCK
A62C	LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL - BRIDGE
A76A	CONCRETE BARRIER TYPE 60A
B0-1	BRIDGE DETAILS
B0-3	BRIDGE DETAILS
B0-5	BRIDGE DETAILS
B0-13	BRIDGE DETAILS
B2-8	PILE DETAILS CLASS 200
B11-60	CONCRETE BARRIER TYPE 80 SHEET (1 OF 2)



## GENERAL NOTES LOAD AND RESISTANCE FACTOR DESIGN

### DESIGN:

AASHTO LRFD Bridge Design Specifications,  
Fourth Edition with Caltrans Amendments 12-07-2011

### SEISMIC DESIGN:

Caltrans Seismic Design Criteria SDC Version 1.6, December, 2010

### DEAD LOAD:

Includes 35 psf for future wearing surface.

### LIVE LOADING:

HL93 and permit design load.

### SEISMIC LOADING:

Site Specific See ARS Curve.

### REINFORCED CONCRETE:

$f_y = 60$  ksi  
 $f_c = 4.0$  ksi  
 $n = 8$

### STRUCTURAL STEEL:

$f_y =$  ASTM A709 Grade 50

### SOIL PARAMETERS:

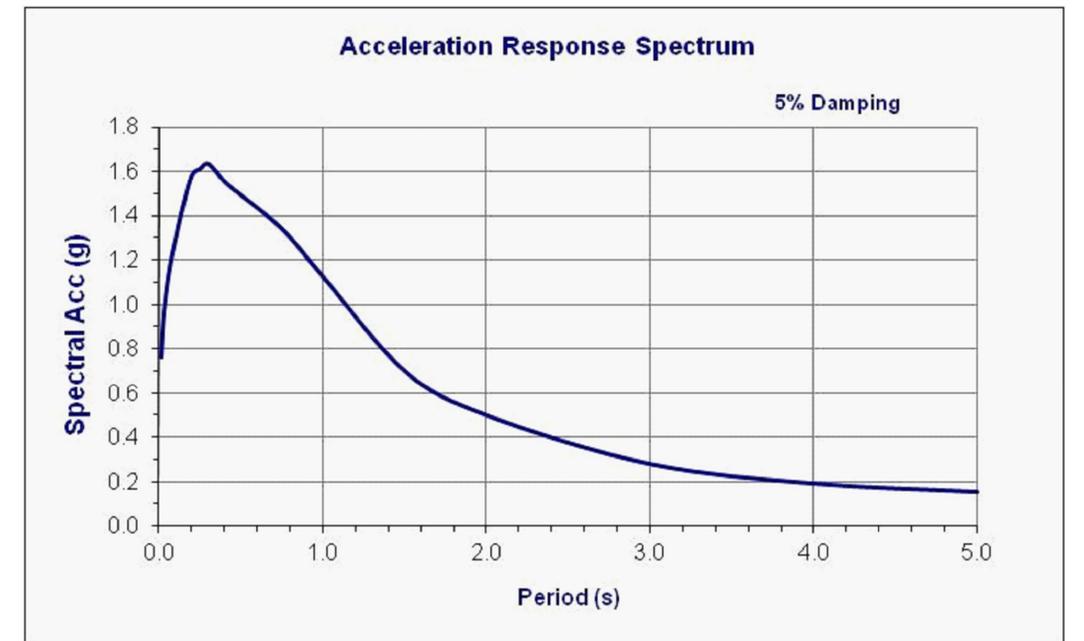
(For determination of design lateral earth pressures)  
 $\phi = 32^\circ$        $\gamma = 120$  pcf

FAULT NAME	FAULT TYPE	MOMENT MAGNITUDE OF MAXIMUM CREDIBLE EARTHQUAKE	DISTANCE FROM FAULT TO PROJECT SITE (MILES)	PEAK GROUND ACCELERATION T=0 SEC (GRAVITY)
SAN JOSE FAULT	REVERSE	6.3	0.7	0.61
MORE RANCH FAULT	REVERSE	7.2	0.7	0.51

PILE DATA TABLE						
LOCATION	PILE TYPE	NOMINAL RESISTANCE (KIPS)		DESIGN TIP ELEVATIONS (FT)	SPECIFIED TIP ELEVATIONS (FT)	NOMINAL DRIVING RESISTANCE (KIPS)
		COMPRESSION	TENSION			
ABUTMENT 1	24" X 1/2" STEEL PIPE PILE	269	N/A	-31(a), -14(a-II), -31(b), -5(c)	-31	269
ABUTMENT 2	24" X 1/2" STEEL PIPE PILE	269	N/A	-31(a), -14(a-II), -31(b), -5(c)	-31	269

### NOTES:

- Design tip elevations for Abutments are controlled by:  
(a) Compression, (b) Lateral, (c) Settlement.
- The specified tip elevation shall not be raised above the design tip elevations for tension load, lateral load, and tolerable settlement.

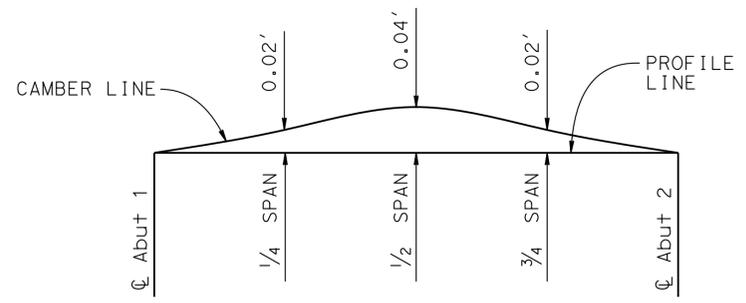
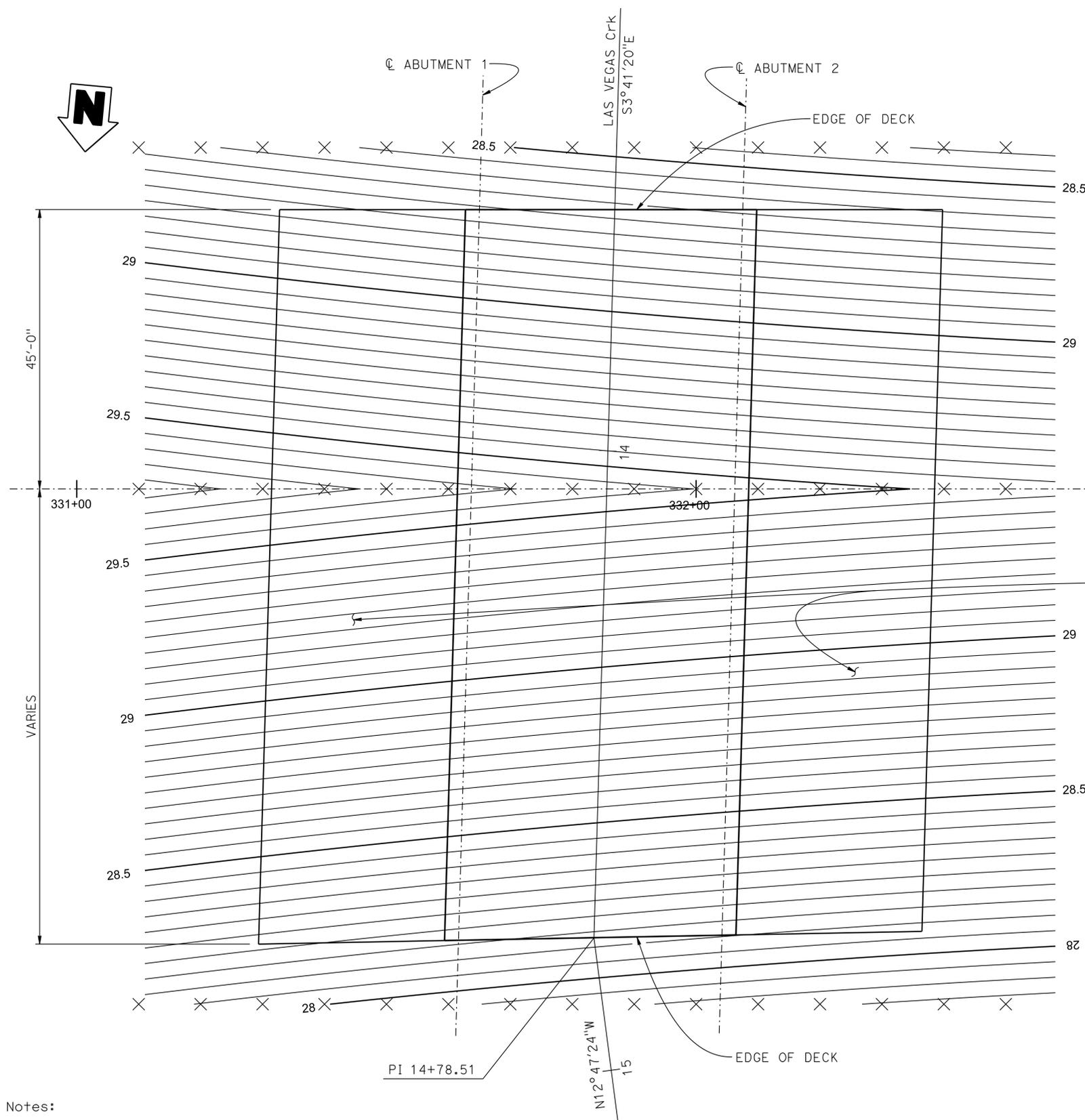


## ARS CURVE

DESIGN	BY MIKE CULLEN	CHECKED X. CHEN/H. PEREZ	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 6	BRIDGE NO. 51-0339	LAS VEGAS CREEK BRIDGE (REPLACE) INDEX TO PLANS				
	DETAILS	BY K. CHONKRIA			CHECKED MIKE CULLEN		POST MILE 22.3-23.0			
QUANTITIES	BY HILARIO TUAZON	CHECKED GLORIA REYES-GUTIERREZ	UNIT: 3591	PROJECT NUMBER & PHASE: 0500000055 & 1	CONTRACT NO.: 0G0701	DISREGARD PRINTS BEARING EARLIER REVISION DATES				
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)			ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	0	1	2	3	REVISION DATES	SHEET 2	OF 17

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	292	343

**M. J. Cullen** 1-17-13  
 REGISTERED CIVIL ENGINEER DATE  
 4-29-13  
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**CAMBER DIAGRAM**

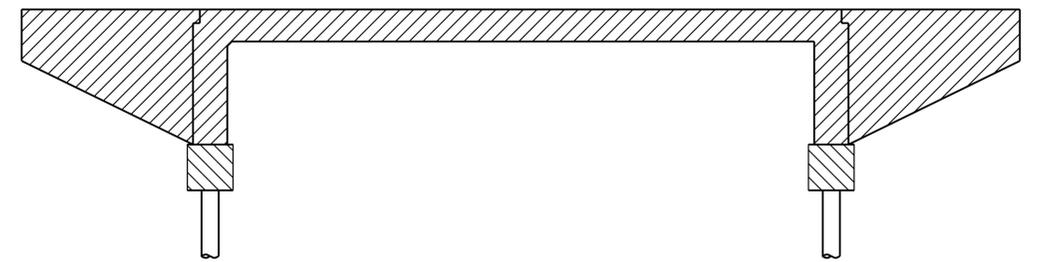
NOTE: Does not include allowance for falsework settlement.

**BUILDING SEQUENCE**

1. Construct Abutment Diaphragms
2. Place channel RSP and channel fill material to interim flow line (See Road Plans) while simultaneously filling behind the abutment diaphragm. The elevation of the fill within the channel and behind the abutment shall be within 2 feet of each other at all times.
3. Construct Deck Slab and remove Falsework.
4. Place remaining backfill behind the abutments.

PROPOSED  $\bar{C}$  Rte 101  
N84°40'00"E

STRUCTURE APPROACH TYPE N(30D)



- STRUCTURAL CONCRETE, BRIDGE
- STRUCTURAL CONCRETE, BRIDGE FOOTING
- STEEL PIPE PILE

**CONCRETE STRENGTH AND TYPE LIMITS**

NO SCALE

Notes:  
 X - 10' Station Interval.  
 0.05' Contour Interval.  
 Contours do not include camber.

**PLAN**  
1" = 10'-0"

DESIGN	BY M. CULLEN	CHECKED X. CHEN / H. PEREZ
DETAILS	BY D. PATO	CHECKED M. CULLEN
QUANTITIES	BY H. TUAZON	CHECKED G. REYES-GUTIERREZ

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES  
STRUCTURE DESIGN  
**DESIGN BRANCH 6**

BRIDGE NO.	51-0339
POST MILE	22.3-23.0

**LAS VEGAS CREEK BRIDGE (REPLACE)  
DECK CONTOURS**

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
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*M. J. Cullen* 1-17-13  
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4-29-13  
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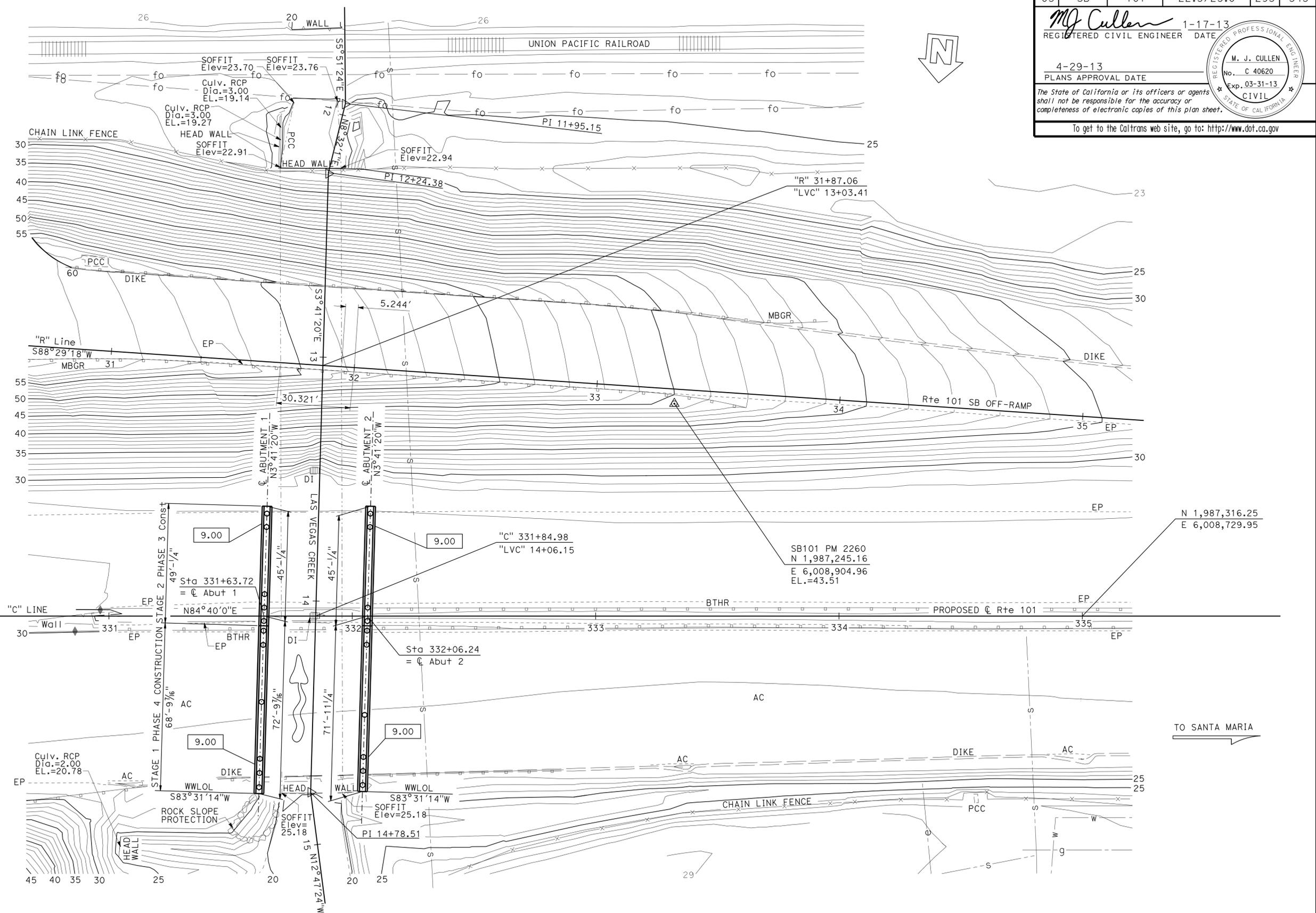
To get to the Caltrans web site, go to: <http://www.dot.ca.gov>

REGISTERED PROFESSIONAL ENGINEER  
 M. J. CULLEN  
 No. C 40620  
 Exp. 03-31-13  
 CIVIL  
 STATE OF CALIFORNIA

- LEGEND:
- Indicates bottom of footing elevation.
  - o - Indicates 24" Pipe pile. Not all piles are shown

**SURVEY CONTROL**  
 SB101 PM 2260  
 Fnd 1" I.P. w/cdot pp & nail  
 87.05 Lt. "C" Line, Proposed C Rte 101  
 Sta. 333+32.95  
 N 1,987,245.16  
 E 6,008,904.96  
 EL.=43.51

SB 101 PM 2261 (Not Shown)  
 Fnd 1" I.P. w/cdot pp & nail  
 176.97 Rt. "C" Line, Proposed C Rte 101  
 Sta. 333+16.35  
 N 1,987,509.58  
 E 6,008,896.95  
 EL.=27.49



TO SANTA BARBARA

TO SANTA MARIA

Note:  
 Elec. Line, Fiber Optic Line,  
 Gas Line, Sewer Line,  
 Water Line, Per Dist. Utility Map

<b>PRELIMINARY INVESTIGATION SECTION</b>				DESIGN	BY M. CULLEN	CHECKED X. CHEN / H. PEREZ	<b>STATE OF CALIFORNIA</b> <b>DEPARTMENT OF TRANSPORTATION</b>	DIVISION OF ENGINEERING SERVICES <b>STRUCTURE DESIGN</b> <b>DESIGN BRANCH 6</b>	BRIDGE NO.	51-0339	<b>LAS VEGAS CREEK BRIDGE (REPLACE)</b> <b>FOUNDATION PLAN</b>															
SCALE	VERT. DATUM	NAVD 88	PHOTOGRAMMETRY AS OF: X	DETAILS	BY D. PATO	CHECKED M. CULLEN			POST MILE	22.3-23.0																
1"=20'	HORIZ. DATUM	NAD 83 (91.35)	SURVEYED	BY DISTRICT	CHECKED BY JIM PALLARES 01/2010	QUANTITIES			BY H. TUAZON	CHECKED G. REYES-GUTIERREZ																
ALIGNMENT TIES Dist. Traverse Sheet				DRAFTED	BY SHARON ZHENG 01/2010	CHECKED	BY T. ZOLNIKOV 01/2010	CU 05 EA 0G0701	DISREGARD PRINTS BEARING EARLIER REVISION DATES	<table border="1"> <tr> <th colspan="6">REVISION DATES</th> </tr> <tr> <td>1/21/2010</td> <td>8/13/2010</td> <td>07-25-12</td> <td>08-08-12</td> <td>08-16-12</td> <td>11-01-12</td> </tr> </table>	REVISION DATES						1/21/2010	8/13/2010	07-25-12	08-08-12	08-16-12	11-01-12	SHEET	OF	4	17
REVISION DATES																										
1/21/2010	8/13/2010	07-25-12	08-08-12	08-16-12	11-01-12																					

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

FILE => 51\_0339-e-fp101-new.dgn

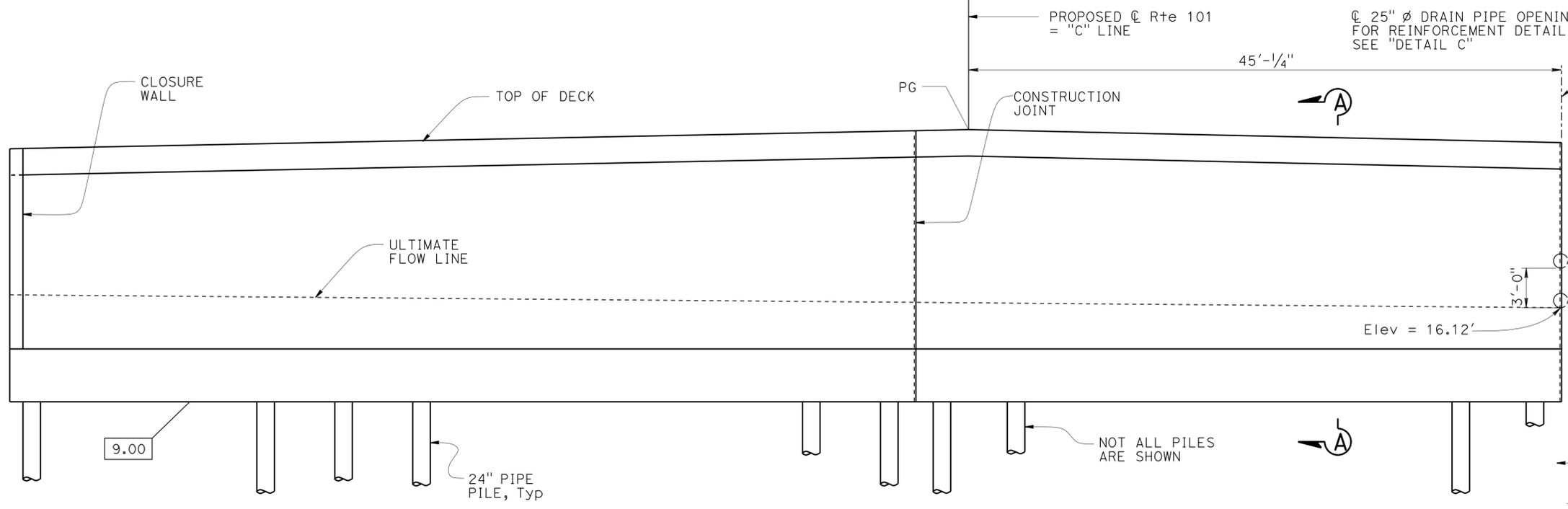
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
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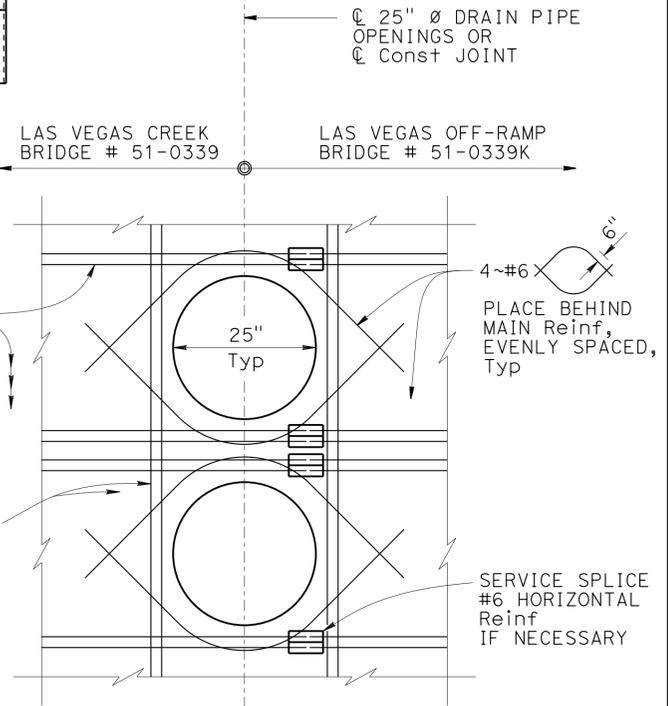
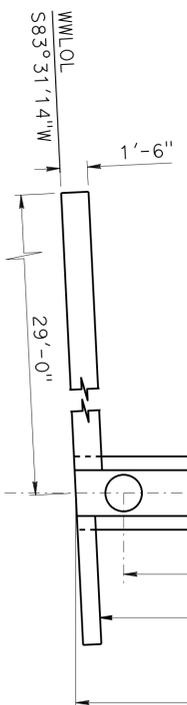
**ABUTMENT ELEVATION**  
1" = 5'-0"

**LEGEND:**

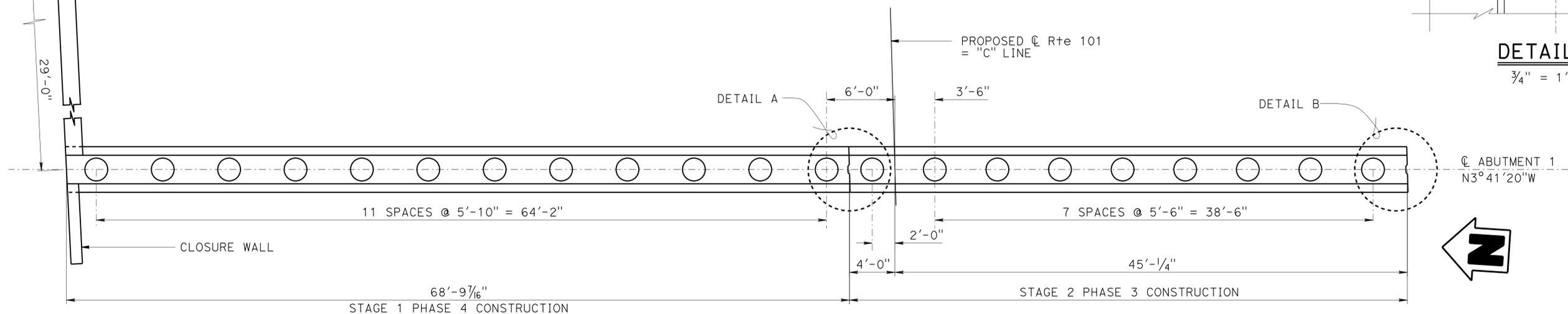
Indicates bottom of footing elevation

**NOTES:**

1. For "SECTION A-A" see "ABUTMENT DETAILS NO. 1" sheet.
2. For DETAIL A and DETAIL B see "ABUTMENT LAYOUT NO. 2" sheet.



**DETAIL C**  
3/4" = 1'-0"



**ABUTMENT & PILE FOOTING PLAN**  
1" = 5'-0"

DESIGN	BY MIKE CULLEN	CHECKED X. CHEN / H. PEREZ
DETAILS	BY SUSAN NG	CHECKED MIKE CULLEN
QUANTITIES	BY HILARIO TUAZON	CHECKED GLORIA REYES-GUTIERREZ

**STATE OF CALIFORNIA**  
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES  
 STRUCTURE DESIGN  
**DESIGN BRANCH 6**

BRIDGE NO.	51-0339
POST MILE	22.3-23.0

**LAS VEGAS CREEK BRIDGE (REPLACE)**  
**ABUTMENT 1 LAYOUT**

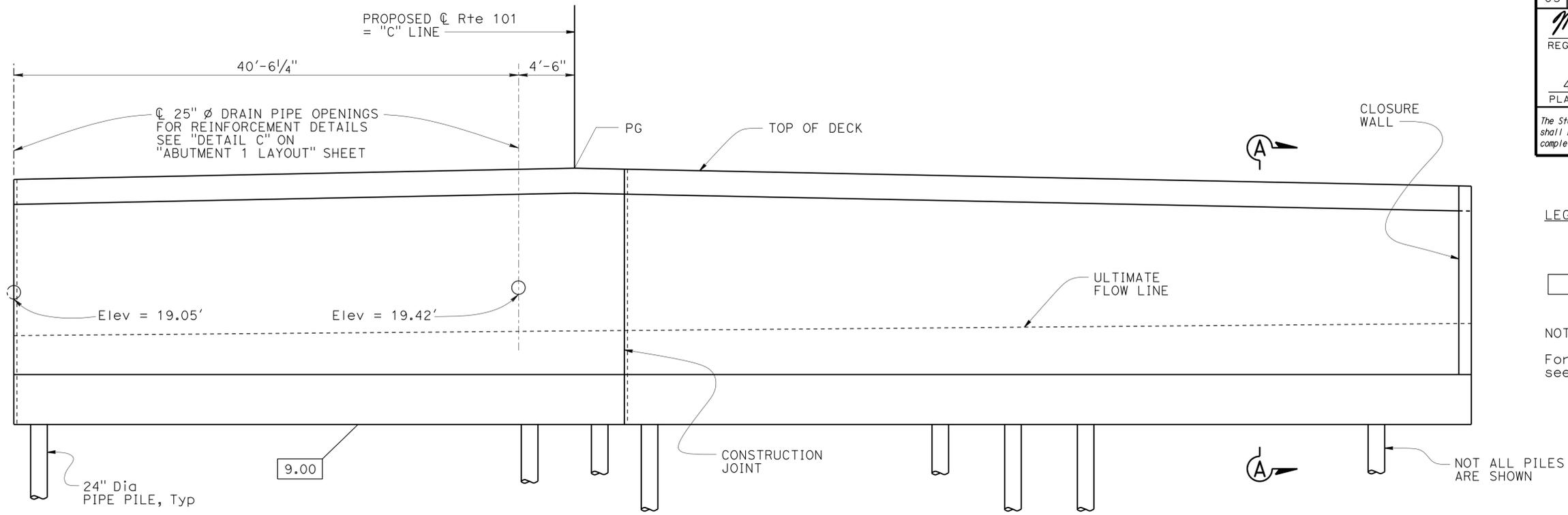
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
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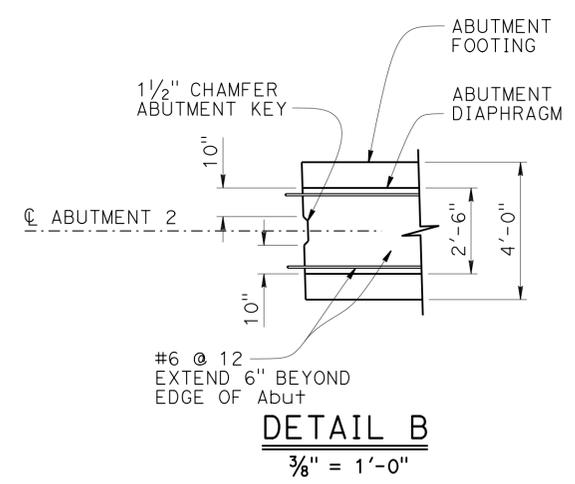
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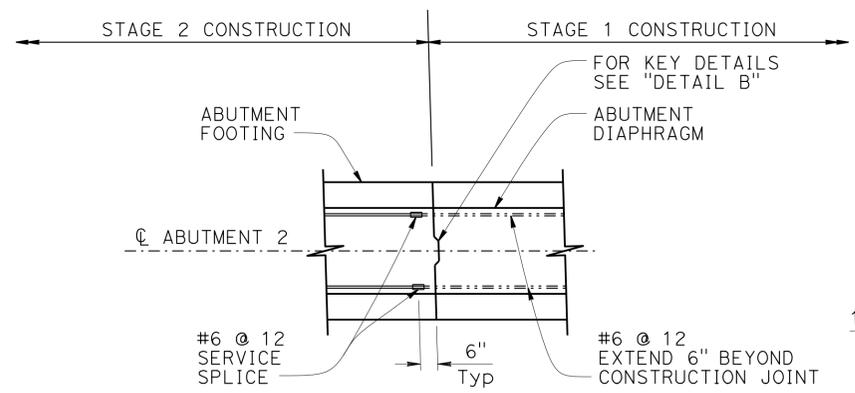
**ABUTMENT ELEVATION**  
1" = 5'-0"

LEGEND:  
 Indicates bottom of footing elevation

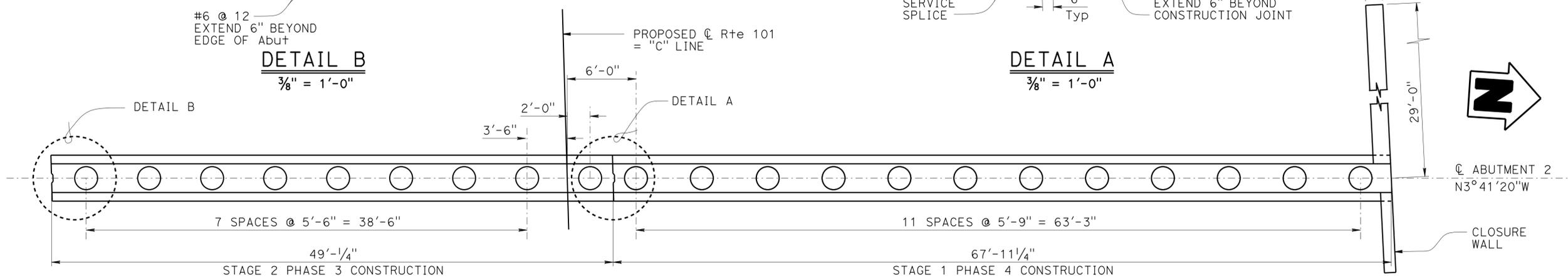
NOTE:  
For "SECTION A-A" and "DETAIL C" see "ABUTMENT DETAILS NO. 1" sheet



**DETAIL B**  
3/8" = 1'-0"



**DETAIL A**  
3/8" = 1'-0"



**ABUTMENT & PILE FOOTING PLAN**  
1" = 5'-0"

DESIGN	BY MIKE CULLEN	CHECKED X. CHEN / H. PEREZ
DETAILS	BY SUSAN NG	CHECKED MIKE CULLEN
QUANTITIES	BY HILARIO TUAZON	CHECKED GLORIA REYES-GUTIERREZ

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES  
STRUCTURE DESIGN  
**DESIGN BRANCH 6**

BRIDGE NO.	51-0339
POST MILE	22.3-23.0

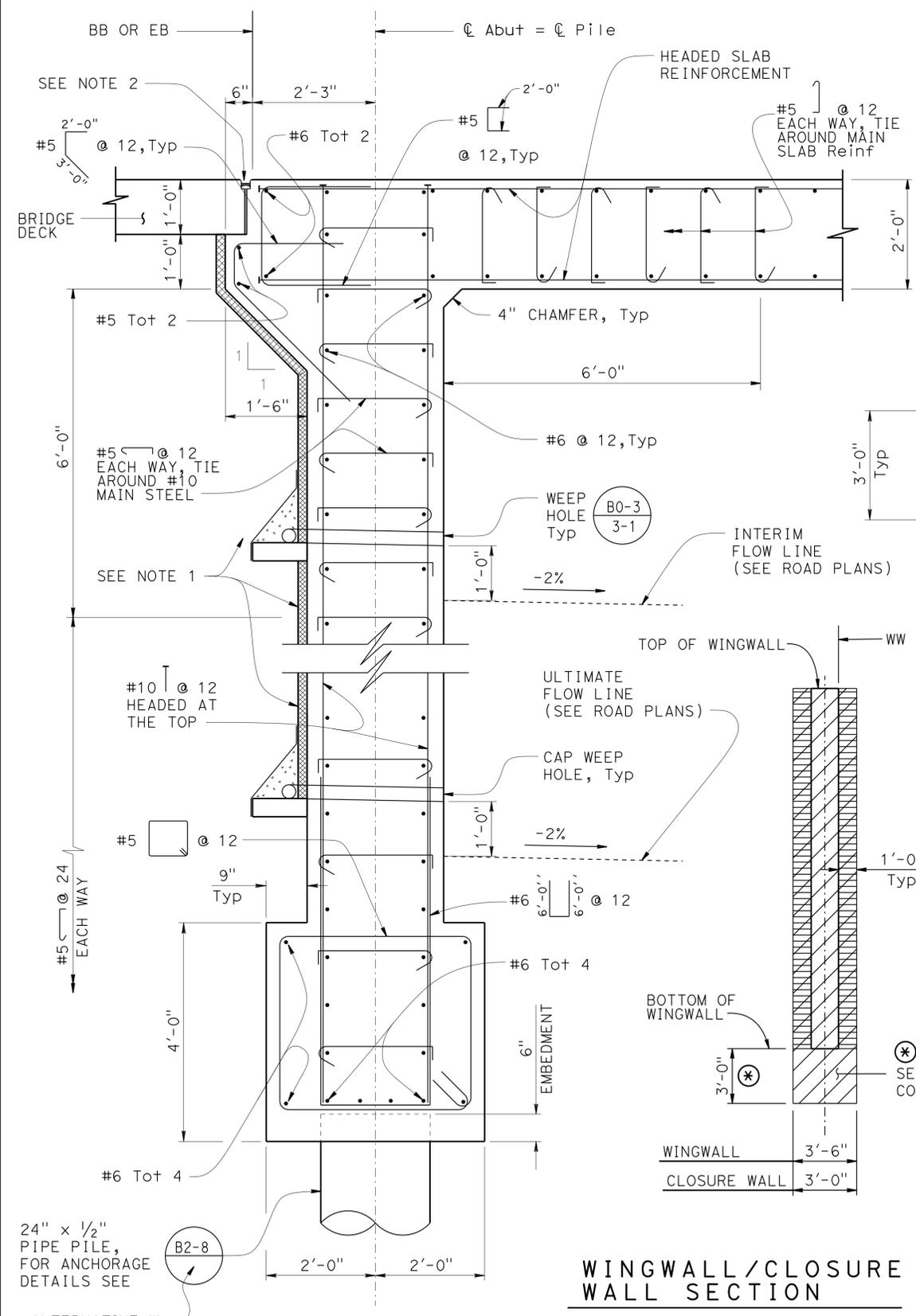
**LAS VEGAS CREEK BRIDGE (REPLACE)**  
**ABUTMENT 2 LAYOUT**

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	296	343

M.J. Cullen 1-17-13  
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 4-29-13  
 PLANS APPROVAL DATE  
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 CIVIL  
 STATE OF CALIFORNIA  
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NOTES:

- Geocomposite Drain, see "STRUCTURE APPROACH DRAINAGE DETAILS" sheet.
- Joint Seal MR = 1/2"
- Closure wall located at Abutment 1 Right and Abutment 2 Right only.
- Closure wall vertical steel to be developed 1'-6" into slab.
- For SECTION B-B and SECTION C-C, see "ABUTMENT DETAILS NO. 2" sheet.

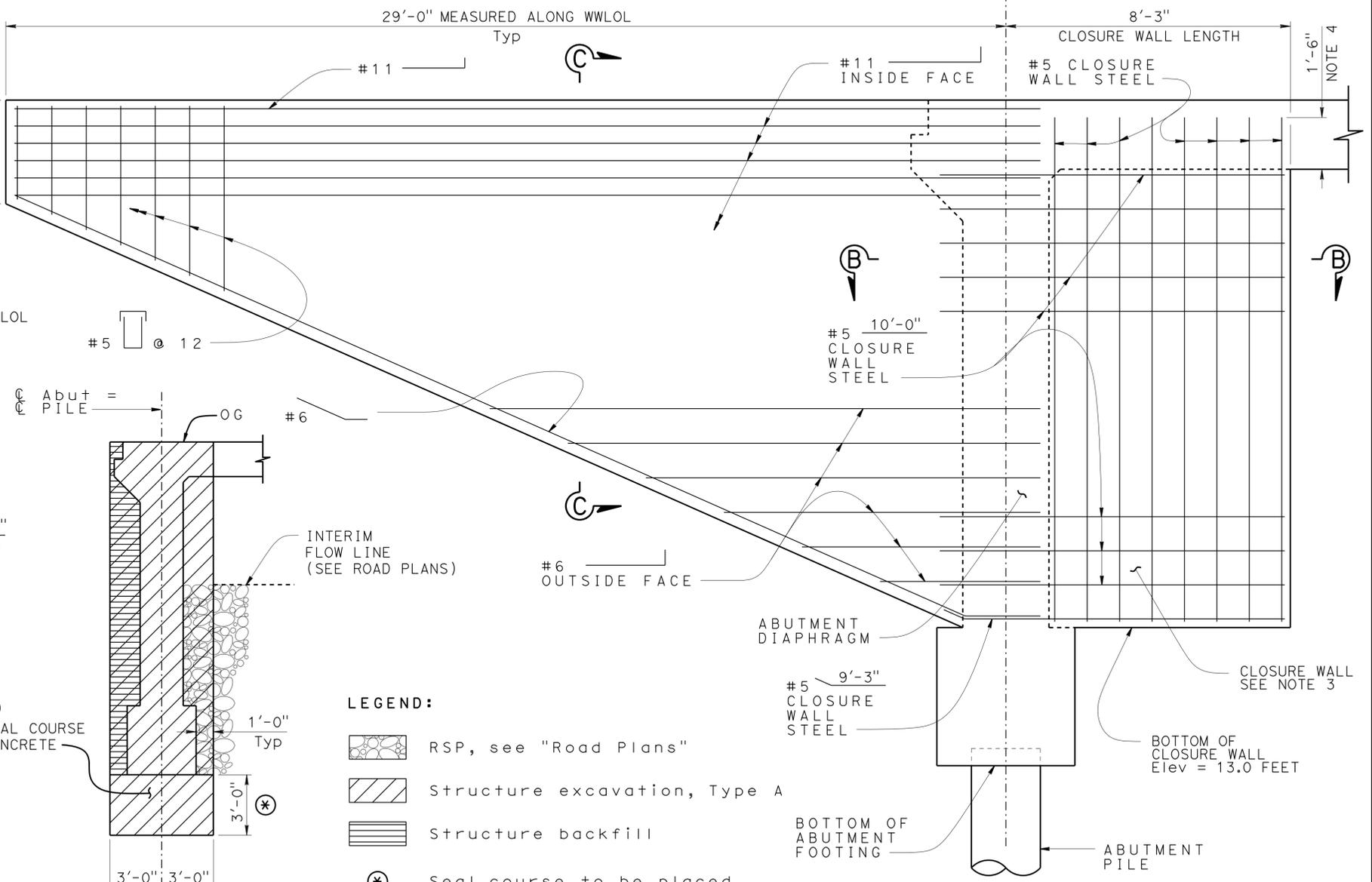


WINGWALL/CLOSURE WALL SECTION ABUTMENTS 1 AND 2

LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL AT ABUTMENTS

1/4" = 1'-0"

3/4" = 1'-0"



WINGWALL ELEVATION

1/2" = 1'-0"

LEGEND:

- RSP, see "Road Plans"
- Structure excavation, Type A
- Structure backfill
- Seal course to be placed only when ordered by the Engineer. Estimated quantities involved are based on the seal thickness shown. The thickness to be used will be determined in the field by the Engineer. When seal is not used, the bottom of the reinforced footing shall remain at the elevation shown.

NOTE:  
Abutment 1 Right wingwall shown  
Abutment 2 Right wingwall similar

DESIGN	BY MIKE CULLEN	CHECKED X. CHEN / H. PEREZ
DETAILS	BY SUSAN NG	CHECKED MIKE CULLEN
QUANTITIES	BY HILARIO TUAZON	CHECKED GLORIA REYES-GUTIERREZ

STATE OF CALIFORNIA	DIVISION OF ENGINEERING SERVICES	BRIDGE NO. 51-0339
DEPARTMENT OF TRANSPORTATION	STRUCTURE DESIGN	POST MILE 22.3-23.0
DESIGN BRANCH 6		

LAS VEGAS CREEK BRIDGE (REPLACE)	
ABUTMENT DETAILS NO. 1	

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	297	343

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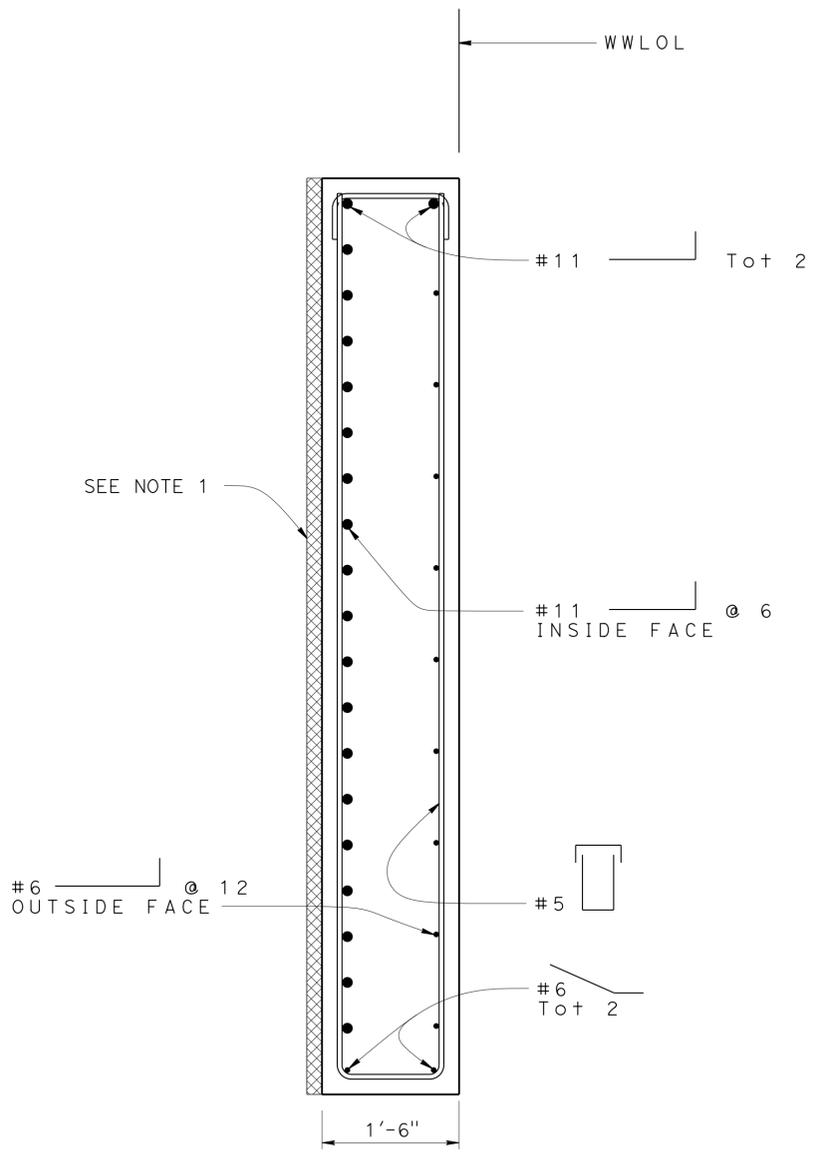
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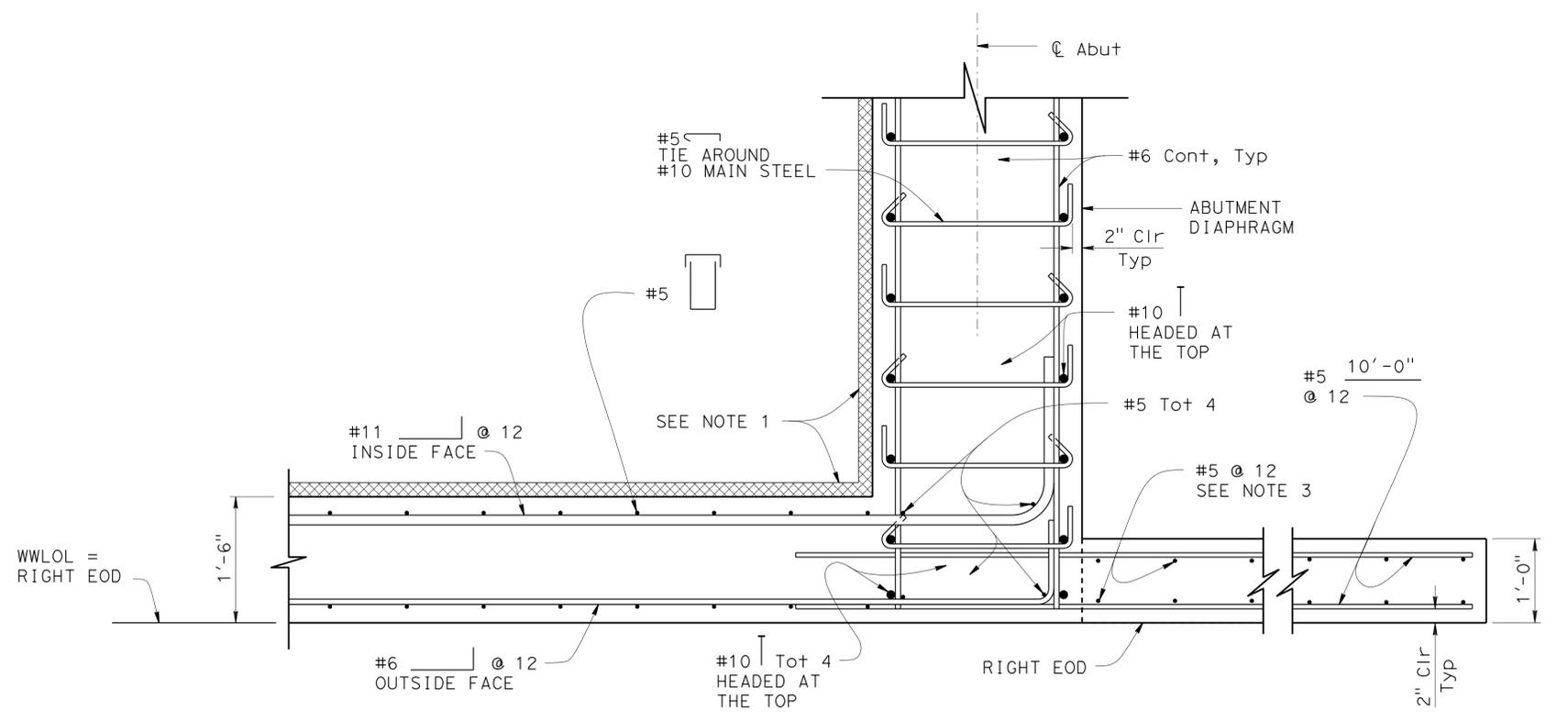
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NOTES:

1. Geocomposite Drain, see "STRUCTURE APPROACH DRAINAGE DETAILS" sheet.
2. Closure wall located at Abutment 1 & 2 right side only.
3. Closure wall vertical steel to be developed 1'-6" into slab.



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



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

DESIGN	BY MIKE CULLEN	CHECKED X. CHEN / H. PEREZ
DETAILS	BY SUSAN NG	CHECKED MIKE CULLEN
QUANTITIES	BY HILARIO TUAZON	CHECKED GLORIA REYES-GUTIERREZ

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES  
 STRUCTURE DESIGN  
**DESIGN BRANCH 6**

BRIDGE NO.	51-0339
POST MILE	22.3-23.0

**LAS VEGAS CREEK BRIDGE (REPLACE)**  
**ABUTMENT DETAILS NO. 2**

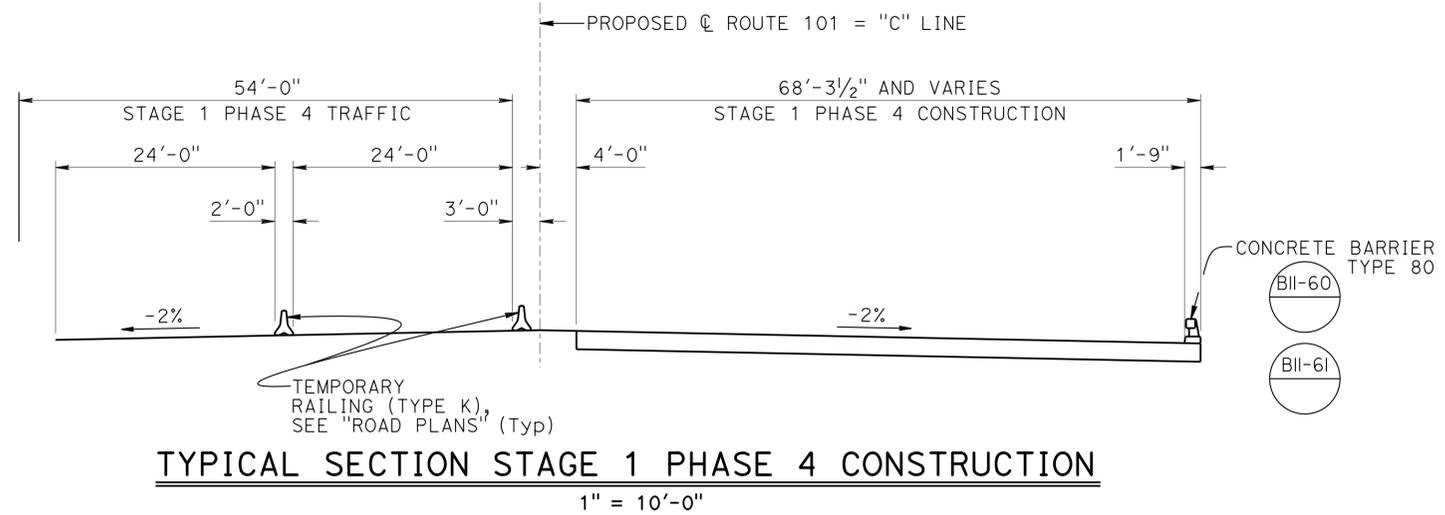
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	298	343

*M.J. Cullen* 1-17-13  
REGISTERED CIVIL ENGINEER DATE

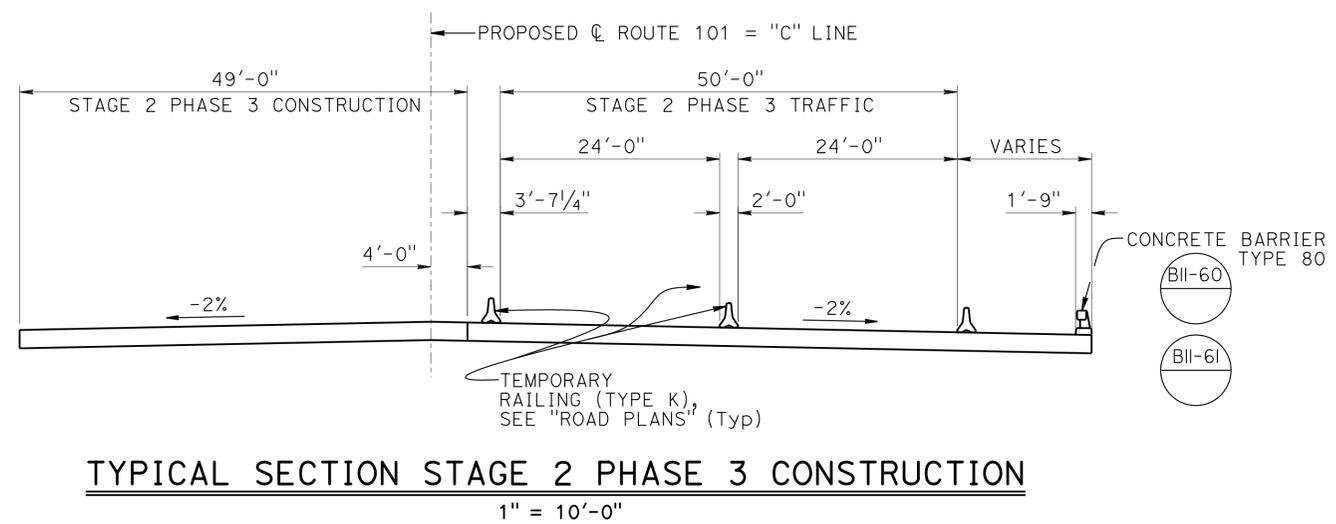
4-29-13  
PLANS APPROVAL DATE

M. J. CULLEN  
No. C 40620  
Exp. 03-31-13  
CIVIL  
STATE OF CALIFORNIA

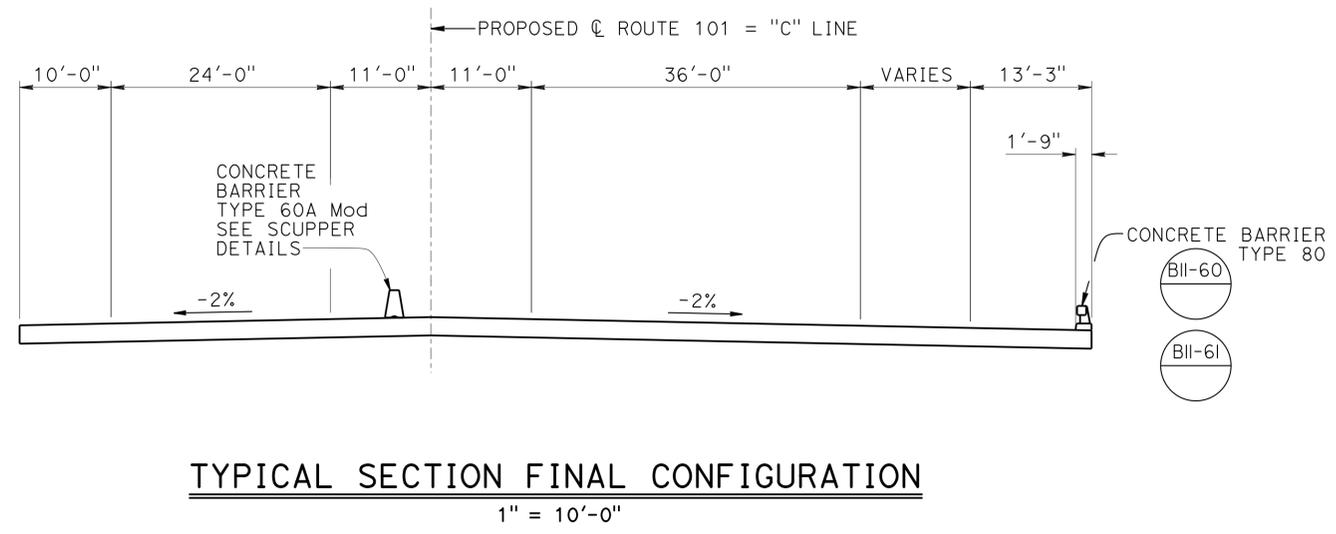
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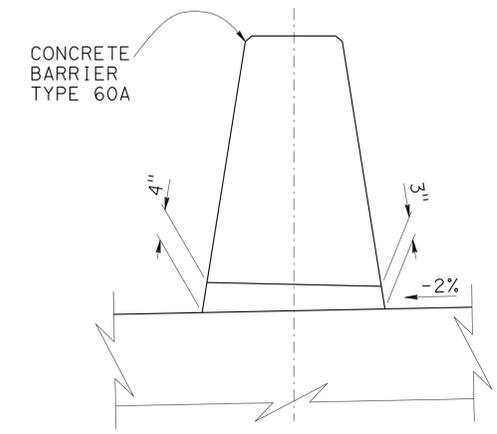
**TYPICAL SECTION STAGE 1 PHASE 4 CONSTRUCTION**  
1" = 10'-0"



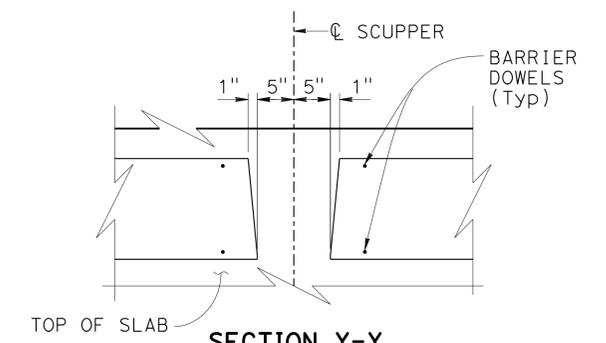
**TYPICAL SECTION STAGE 2 PHASE 3 CONSTRUCTION**  
1" = 10'-0"



**TYPICAL SECTION FINAL CONFIGURATION**  
1" = 10'-0"

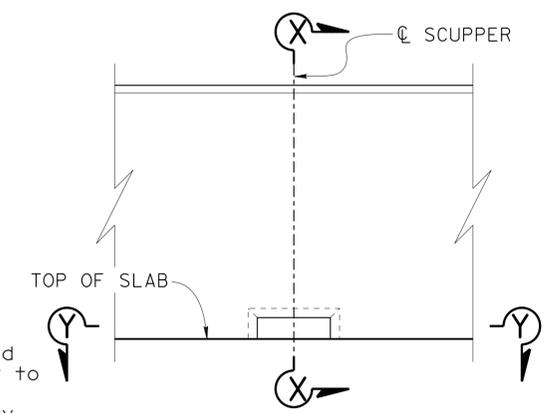


**SECTION X-X**



**SECTION Y-Y**

**SCUPPER DETAILS**  
1" = 1'



**CONCRETE BARRIER TYPE 60A PART ELEVATION**

Note:  
Scuppers to be spaced at 10'-0" Max center to center thru Concrete Barrier Type 60A only

DESIGN	BY	M. CULLEN	CHECKED	X. CHEN / H. PEREZ	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 6	BRIDGE NO.	51-0339	LAS VEGAS CREEK BRIDGE (REPLACE) TYPICAL SECTION NO. 1	
	DETAILS	BY	K. CHONKRIA	CHECKED			M. CULLEN	POST MILE		22.3-23.0
	QUANTITIES	BY	G. REYES-GUTIERREZ	CHECKED			H. TUAZON			
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)					ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	UNIT: 3591 PROJECT NUMBER & PHASE: 0500000055 & 1 CONTRACT NO.: 0G0701	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 9 OF 17	

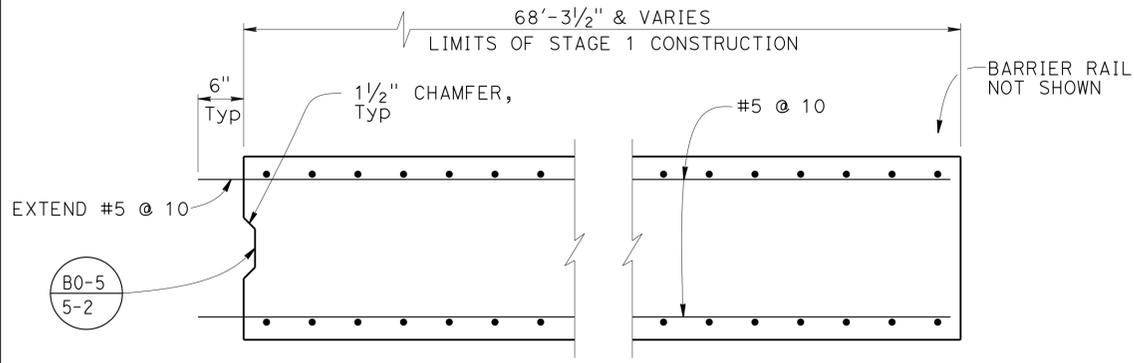
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	299	343

*M. J. Cullen* 1-17-13  
 REGISTERED CIVIL ENGINEER DATE

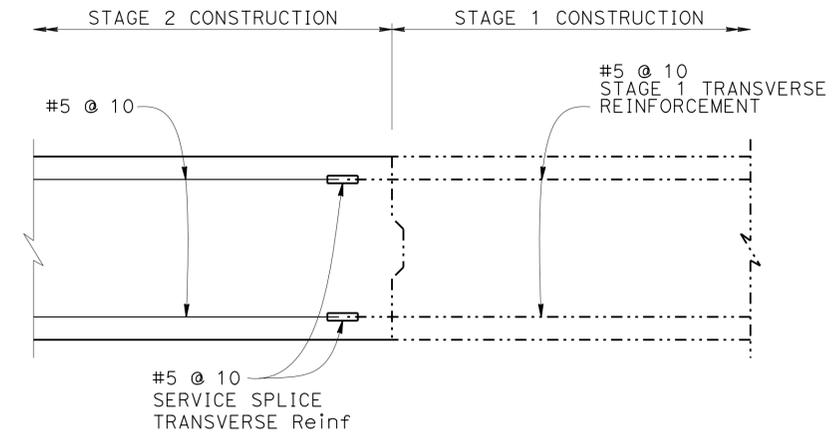
4-29-13  
 PLANS APPROVAL DATE

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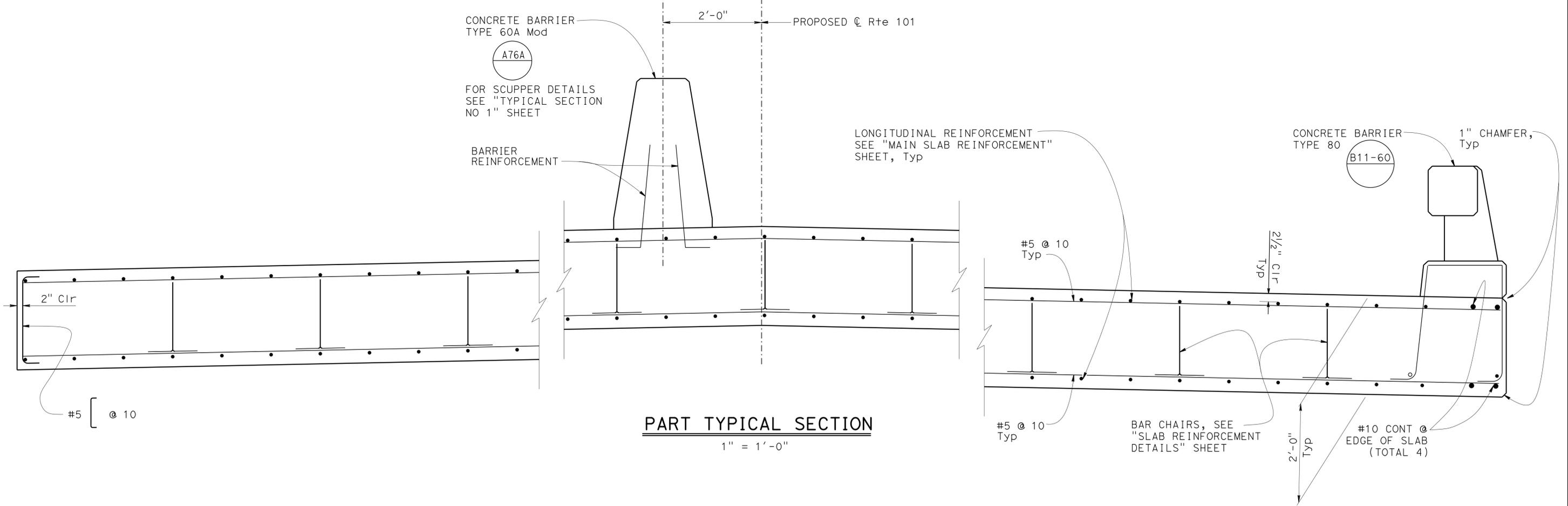
REGISTERED PROFESSIONAL ENGINEER  
 M. J. CULLEN  
 No. C 40620  
 Exp. 03-31-13  
 CIVIL  
 STATE OF CALIFORNIA



**SLAB CONSTRUCTION JOINT DETAIL (STAGE 1)**  
1" = 1'-0"



**SLAB CONSTRUCTION JOINT DETAIL (STAGE 2)**  
1" = 1'-0"



**PART TYPICAL SECTION**  
1" = 1'-0"

DESIGN	BY	M. CULLEN	CHECKED	X. CHEN / H. PEREZ	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 6	BRIDGE NO.	51-0339	LAS VEGAS CREEK BRIDGE (REPLACE) TYPICAL SECTION NO. 2	
	DETAILS	BY	K. CHONKRIA	CHECKED			M. CULLEN	POST MILE		22.3-23.0
	QUANTITIES	BY	H. TUAZON	CHECKED			G. REYES-GUTIERREZ			

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3591 PROJECT NUMBER & PHASE: 0500000055 & 1 CONTRACT NO.: 0G0701

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
07-09-12	10	17

FILE => 51\_0339-k-ts02.dgn

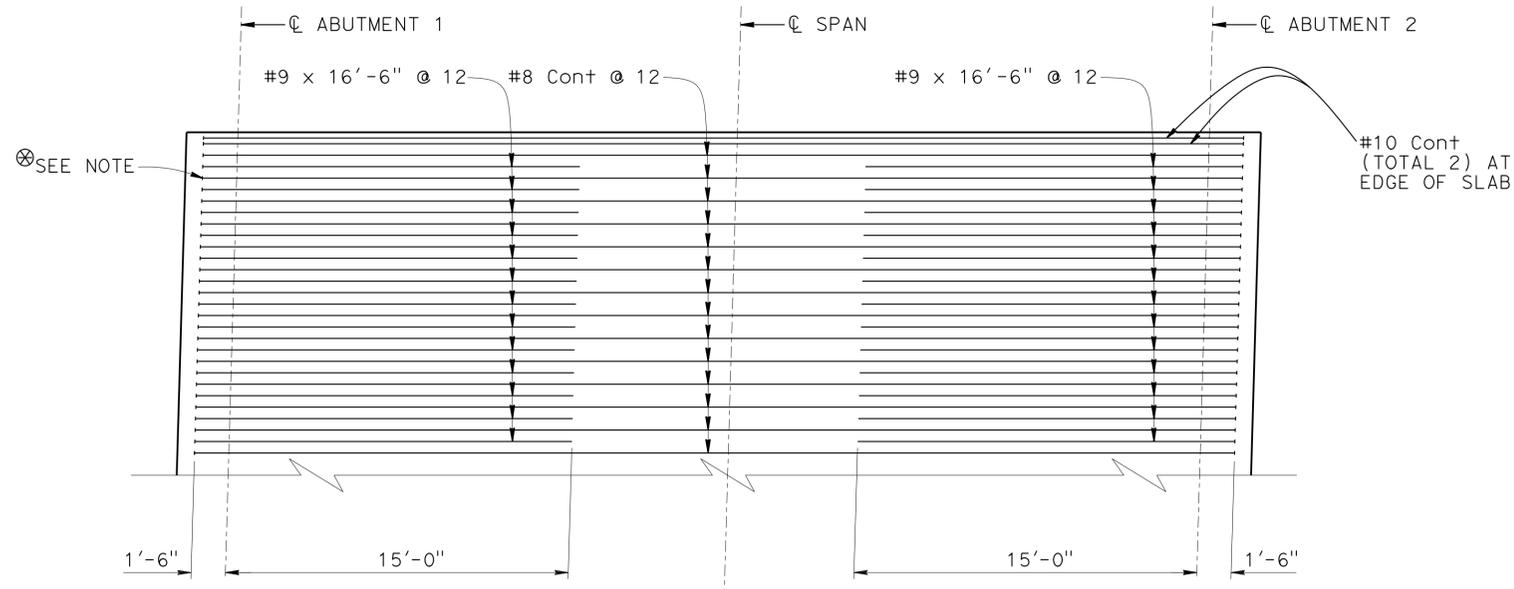
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	101	22.3/23.0	300	343

*M. J. Cullen* 1-17-13  
REGISTERED CIVIL ENGINEER DATE

4-29-13  
PLANS APPROVAL DATE

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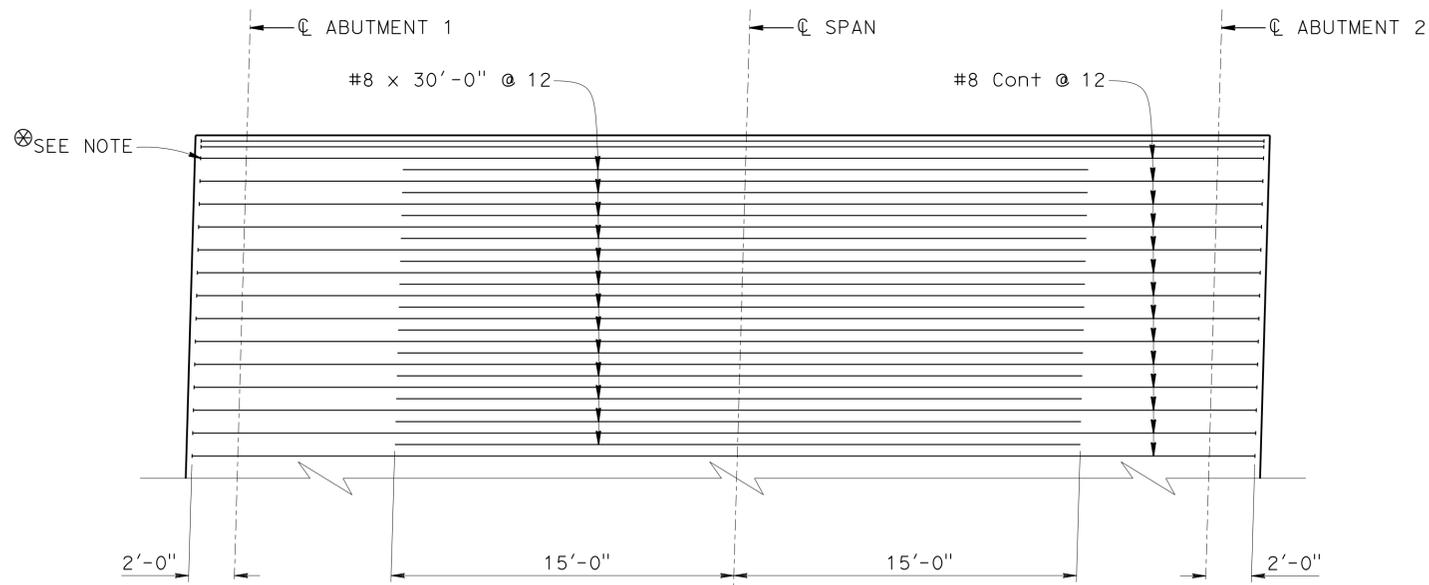
REGISTERED PROFESSIONAL ENGINEER  
M. J. CULLEN  
No. C 40620  
Exp. 03-31-13  
CIVIL  
STATE OF CALIFORNIA



Note:  
All Main Reinf shall be  
Headed at the Abutments, Typ

**PART PLAN - TOP SLAB REINFORCEMENT**

1/4" = 1'-0"



Note:  
All Main Reinf shall be  
Headed at the Abutments, Typ

**PART PLAN - BOTTOM SLAB REINFORCEMENT**

1/4" = 1'-0"

DESIGN	BY M. CULLEN	CHECKED X. CHEN / H. PEREZ
DETAILS	BY K. CHONKRIA	CHECKED M. CULLEN
QUANTITIES	BY H. TUAZON	CHECKED G. REYES GUTIERREZ

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES  
STRUCTURE DESIGN  
**DESIGN BRANCH 6**

BRIDGE NO.	51-0339
POST MILE	22.3-23.0

**LAS VEGAS CREEK BRIDGE (REPLACE)**  
**MAIN SLAB REINFORCEMENT**