

SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
2	CONSTRUCTION DETAILS
3-9	EROSION CONTROL PLANS
10	CONSTRUCTION AREA SIGNS
11	PLANT LIST
12-15	PLANT REMOVAL PLANS
16-19	PLANTING PLANS
20-26	IRRIGATION REMOVAL PLANS
27-33	IRRIGATION PLANS
34-44	ELECTRICAL PLANS AND SYSTEMS
45-57	REVISED AND NEW STANDARD PLANS

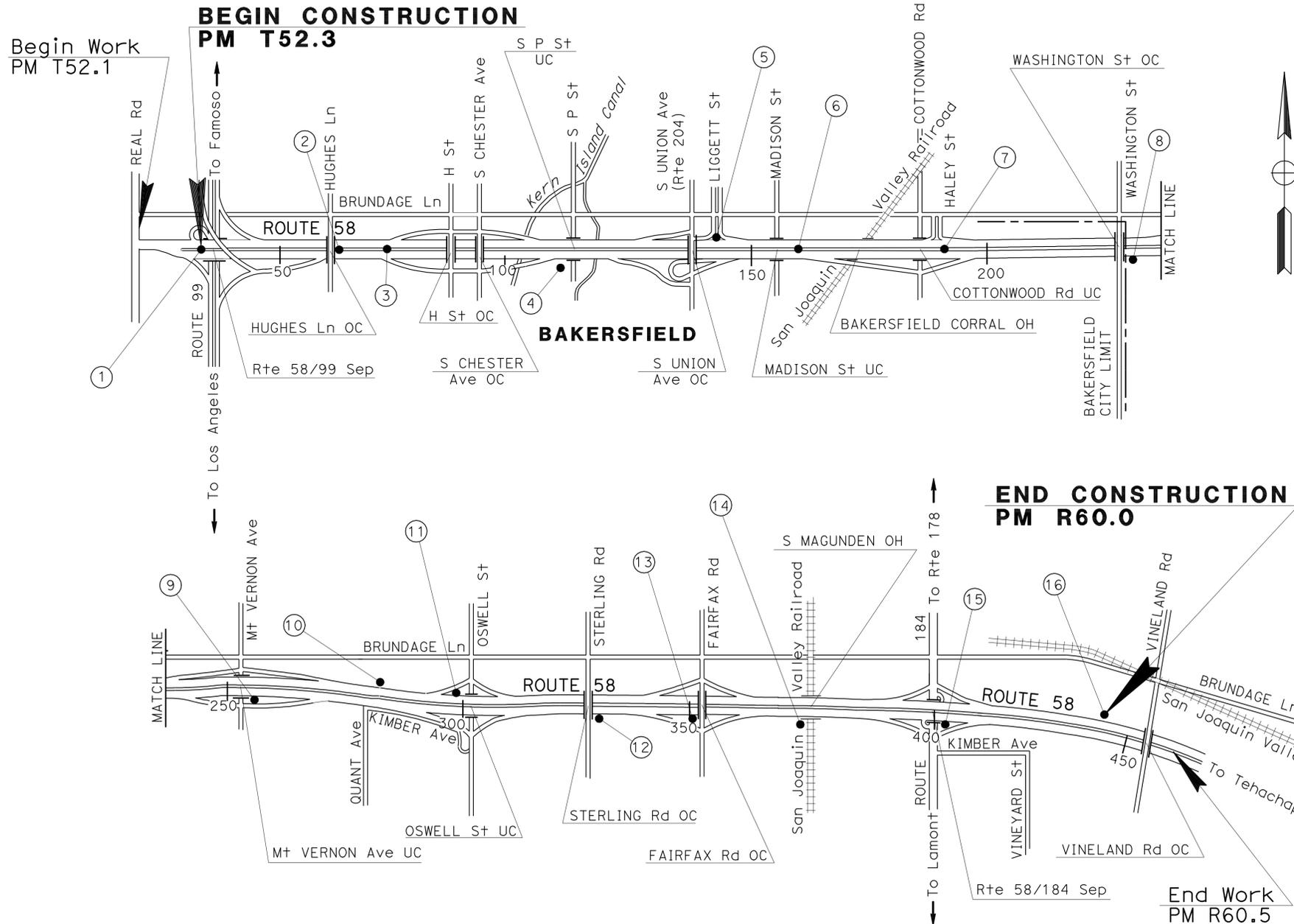
THE STANDARD PLANS LIST APPLICABLE TO THIS CONTRACT IS INCLUDED IN THE NOTICE TO BIDDERS AND SPECIAL PROVISIONS BOOK.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
PROJECT PLANS FOR CONSTRUCTION ON
STATE HIGHWAY
IN KERN COUNTY
IN AND NEAR BAKERSFIELD
AT VARIOUS LOCATIONS
FROM ROUTE 58/99 SEPARATION TO 0.4 MILE
WEST OF VINELAND ROAD OVERCROSSING

TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006

NH-P058(108)E

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	1	57



LOCATIONS OF CONSTRUCTION

Loc No.	PM	DIRECTION	DESCRIPTION
①	T52.26	EB/WB	W OF Rte 99
②	R52.89	EB/WB	E OF HUGHES Ln
③	R53.25	EB/WB	BETWEEN 'H' St & HUGHES Ln
④	R53.91	EB	W OF 'P' St
⑤	R54.42	WB	AT LIGGETT St
⑥	R54.91	EB/WB	E OF MADISON St
⑦	R55.41	EB/WB	E OF COTTONWOOD Rd
⑧	R55.92	EB	E OF WASHINGTON St
⑨	R56.41	EB	E OF Mt VERNON Ave
⑩	R56.91	WB	E OF QUANT Ave
⑪	R57.41	WB	W OF OSWELL St
⑫	R57.93	EB	E OF STERLING Rd
⑬	R58.44	EB	W OF FAIRFAX Rd
⑭	R58.92	EB	W OF MAGUNDEN OH
⑮	R59.43	EB	E OF Rte 184
⑯	R59.96	WB	W OF VINELAND Rd

PROJECT MANAGER
STEVEN MILTON
 DESIGN ENGINEER
MARTIN NISHIKAWA

PROJECT ENGINEER
 REGISTERED CIVIL ENGINEER

DATE: 5-13-10
 July 26, 2010
 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.

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

DATE PLOTTED => 15-SEP-2010
 TIME PLOTTED => 05:55
 LAST REVISION 04-08-10

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	2	57
<i>Martin Nishikawa</i> REGISTERED CIVIL ENGINEER DATE 5-13-10					
7-26-10			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:

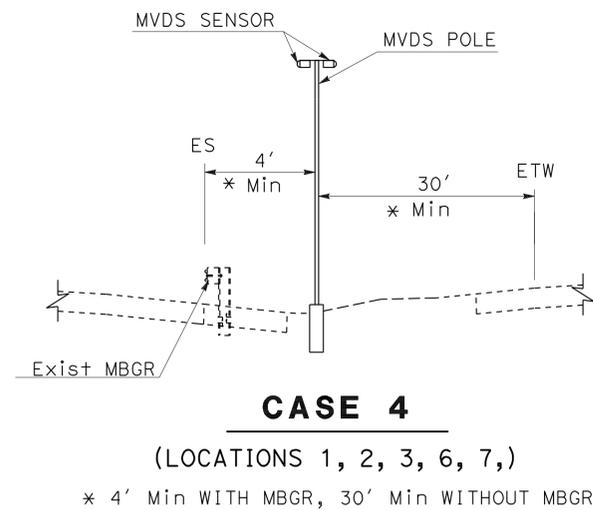
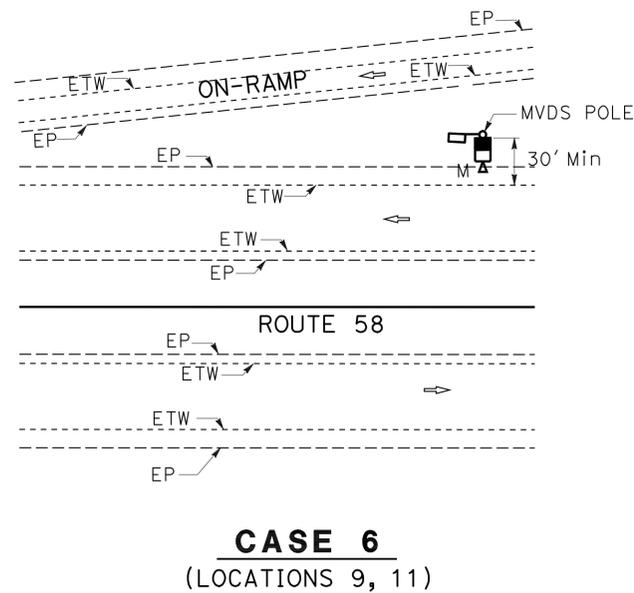
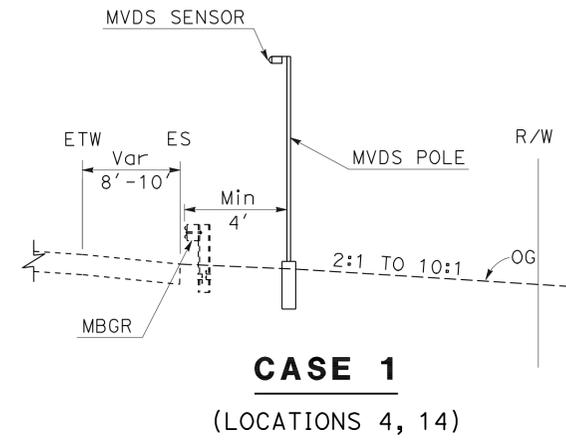
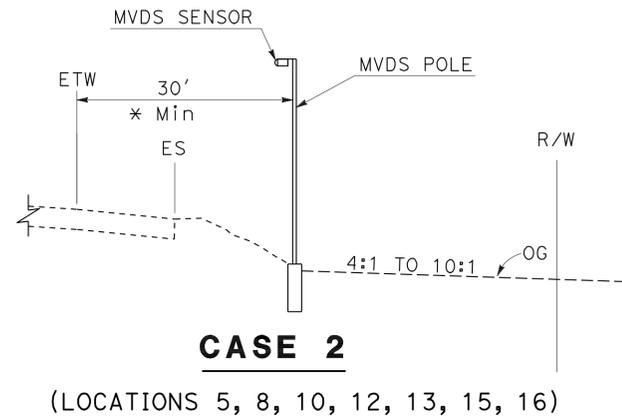
1. IN SLOPES FLATTER THAN 3:1, MVDS POLE SHALL BE A MINIMUM OF 30 FEET FROM EDGE OF TRAVEL WAY. IN SLOPES STEEPER THAN 3:1 A MINIMUM OF 4 FEET VERTICAL CLEARNACE SHOULD BE PROVIDED ABOVE THE HINGE POINT OF CUT SLOPE.
2. MVDS POLE SHALL BE A MINIMUM OF 30' FROM ANY CMS SIGN, SIGN STRUCTURE WITH A PILE FOUNDATION, BRIDGE FOUNDATION OR AS DIRECTED BY THE ENGINEER.
3. FOR SOME LOCATIONS, MORE THAN ONE CASE MAY APPLY.

LEGEND

- DIRECTION OF TRAFFIC
- MVDS
- M

ABBREVIATION

MVDS MICROWAVE VEHICLE DETECTION SYSTEMS



TYPICAL MVDS PLACEMENT DETAILS

CONSTRUCTION DETAILS

NO SCALE

C-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans DESIGN DIVISION
 FUNCTIONAL SUPERVISOR: MARTIN NISHIKAWA
 CALCULATED/DESIGNED BY: CHECKED BY:
 CLEMENTE EUSTAQUIO MARTIN NISHIKAWA
 REVISED BY: DATE REVISED:

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans LANDSCAPE ARCHITECTURE

FUNCTIONAL SUPERVISOR	ELBERT COX
CALCULATED/DESIGNED BY	CHECKED BY
KEVIN GALLO	KEN THOMSON
REVISED BY	DATE REVISED

NOTE:

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

LEGEND

-  EROSION CONTROL (COMPOST BLANKET)
-  TFESA TEMPORARY FENCE (TYPE ESA)
-  MULCH

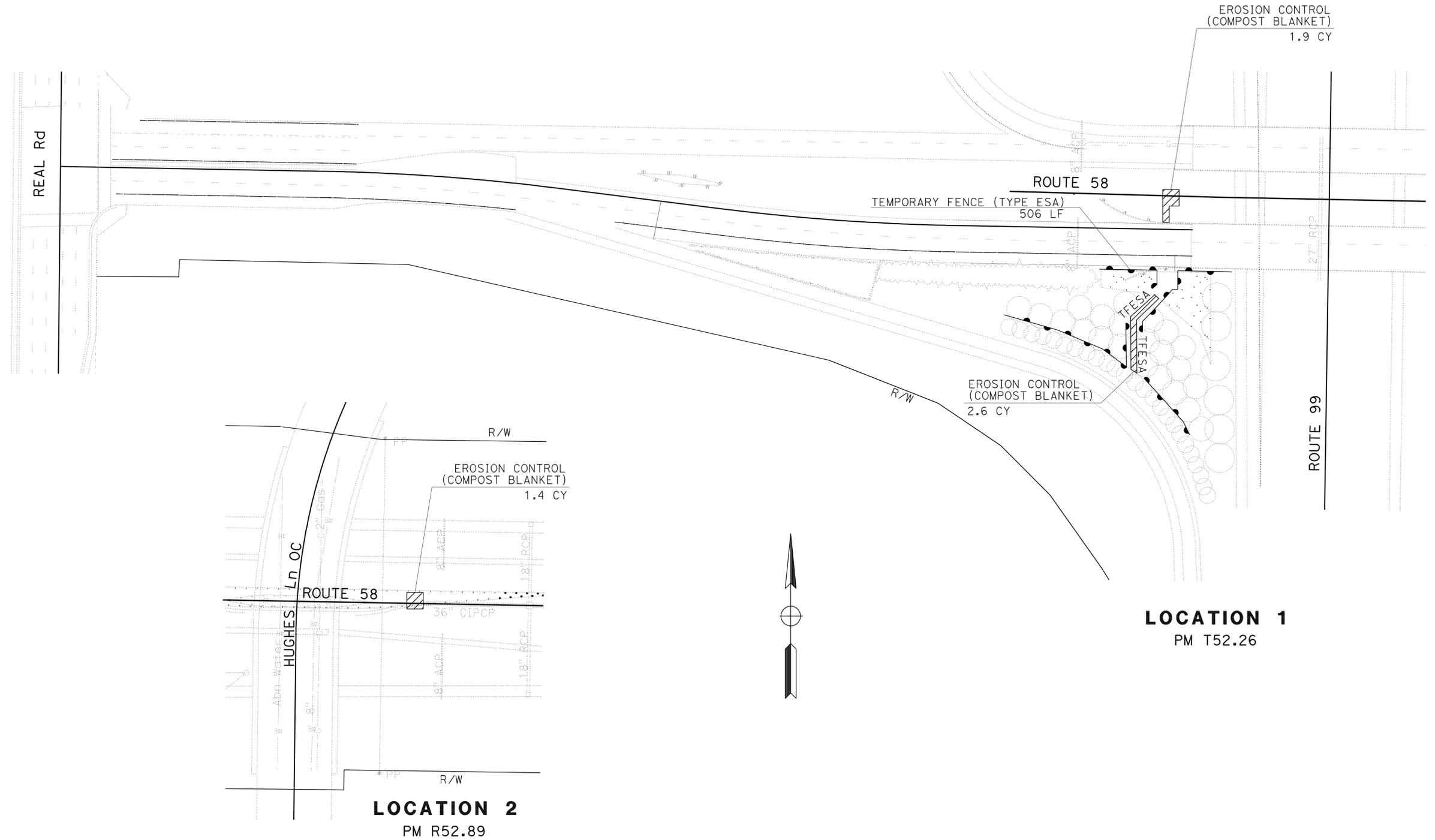
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	3	57

Kevin Gallo
 LICENSED LANDSCAPE ARCHITECT

7-26-10
 PLANS APPROVAL DATE

Kevin Gallo
 Signature
 12/31/11
 Renewal Date
 12/17/09
 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.



LOCATION 1
 PM T52.26

LOCATION 2
 PM R52.89

EROSION CONTROL PLAN
EC-1

SCALE: 1" = 50'

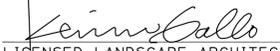
THIS PLAN IS ACCURATE FOR EROSION CONTROL WORK ONLY.

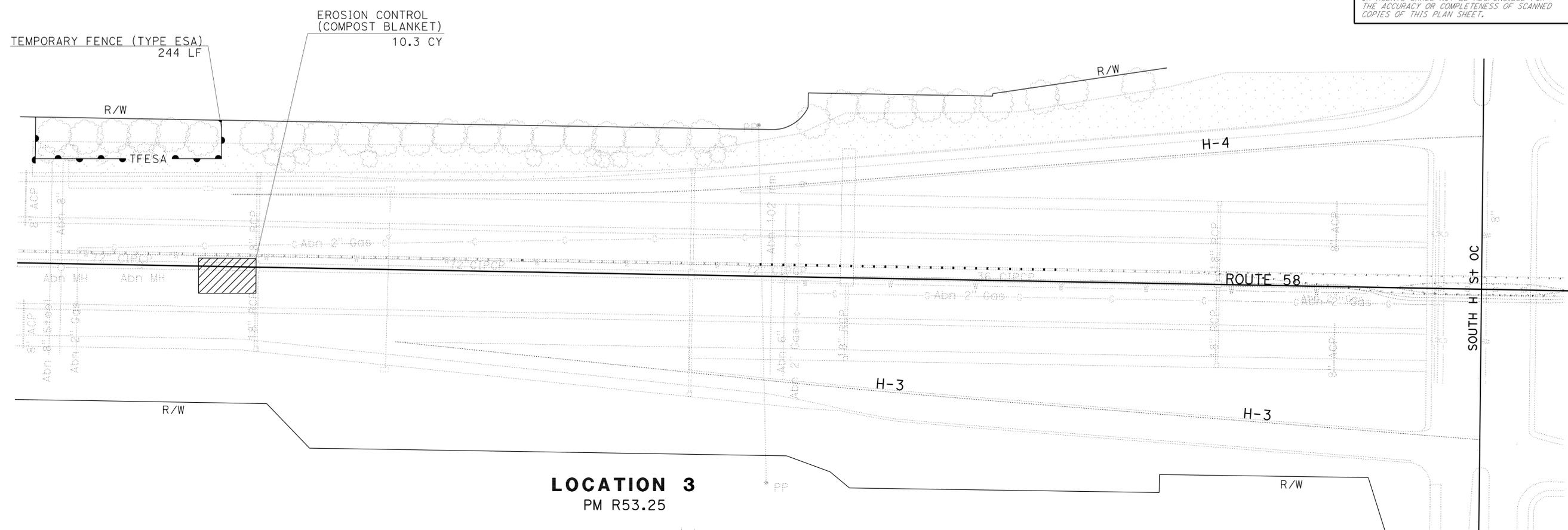
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans LANDSCAPE ARCHITECTURE

FUNCTIONAL SUPERVISOR	ELBERT COX
CALCULATED/DESIGNED BY	CHECKED BY
KEVIN GALLO	KEN THOMSON
REVISED BY	DATE REVISED

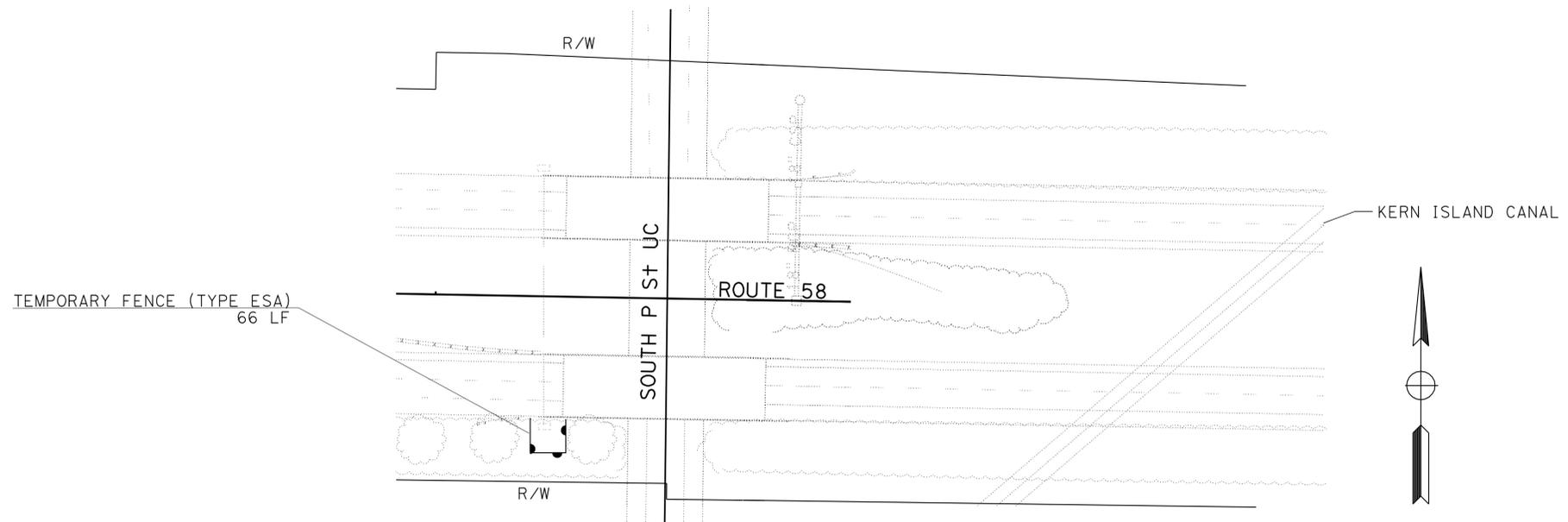
NOTE:
 1. FOR ACCURATE RIGHT OF WAY AND ACCESS DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	4	57


 LICENSED LANDSCAPE ARCHITECT
 7-26-10
 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.

LOCATION 3
 PM R53.25



LOCATION 4
 PM R53.91

THIS PLAN IS ACCURATE FOR EROSION CONTROL WORK ONLY.

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

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	5	57

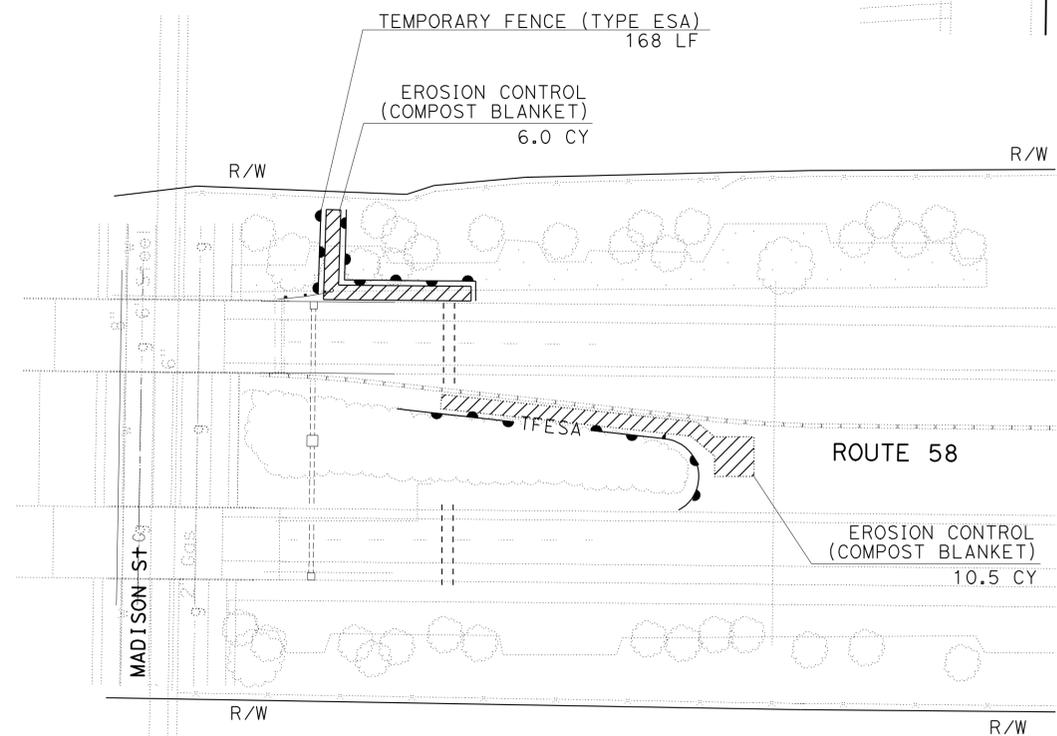
<i>Kevin Gallo</i> LICENSED LANDSCAPE ARCHITECT	
7-26-10	PLANS APPROVAL DATE
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>	



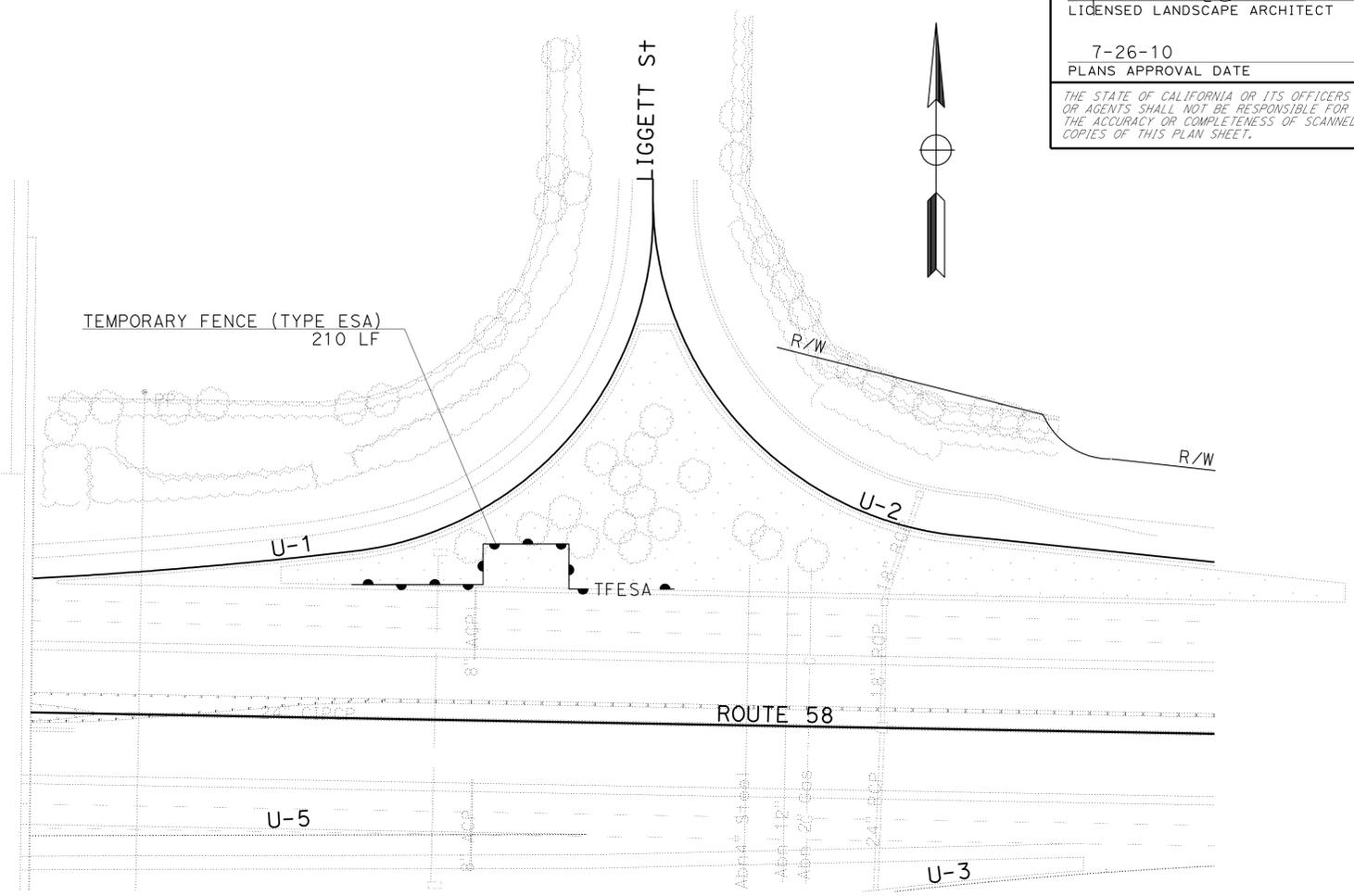
NOTE:

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

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	DESIGNED BY	REVISOR
et Caltrans LANDSCAPE ARCHITECTURE	ELBERT COX	KEVIN GALLO	KEVIN GALLO
		CHECKED BY	DATE REVISOR
		KEN THOMSON	



LOCATION 6
PM R54.91



LOCATION 5
PM R54.42

THIS PLAN IS ACCURATE FOR EROSION CONTROL WORK ONLY.

EROSION CONTROL PLAN

SCALE: 1" = 50'

EC-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans LANDSCAPE ARCHITECTURE

FUNCTIONAL SUPERVISOR	ELBERT COX
CALCULATED/DESIGNED BY	KEVIN GALLO
CHECKED BY	KEN THOMSON
REVISOR	DATE

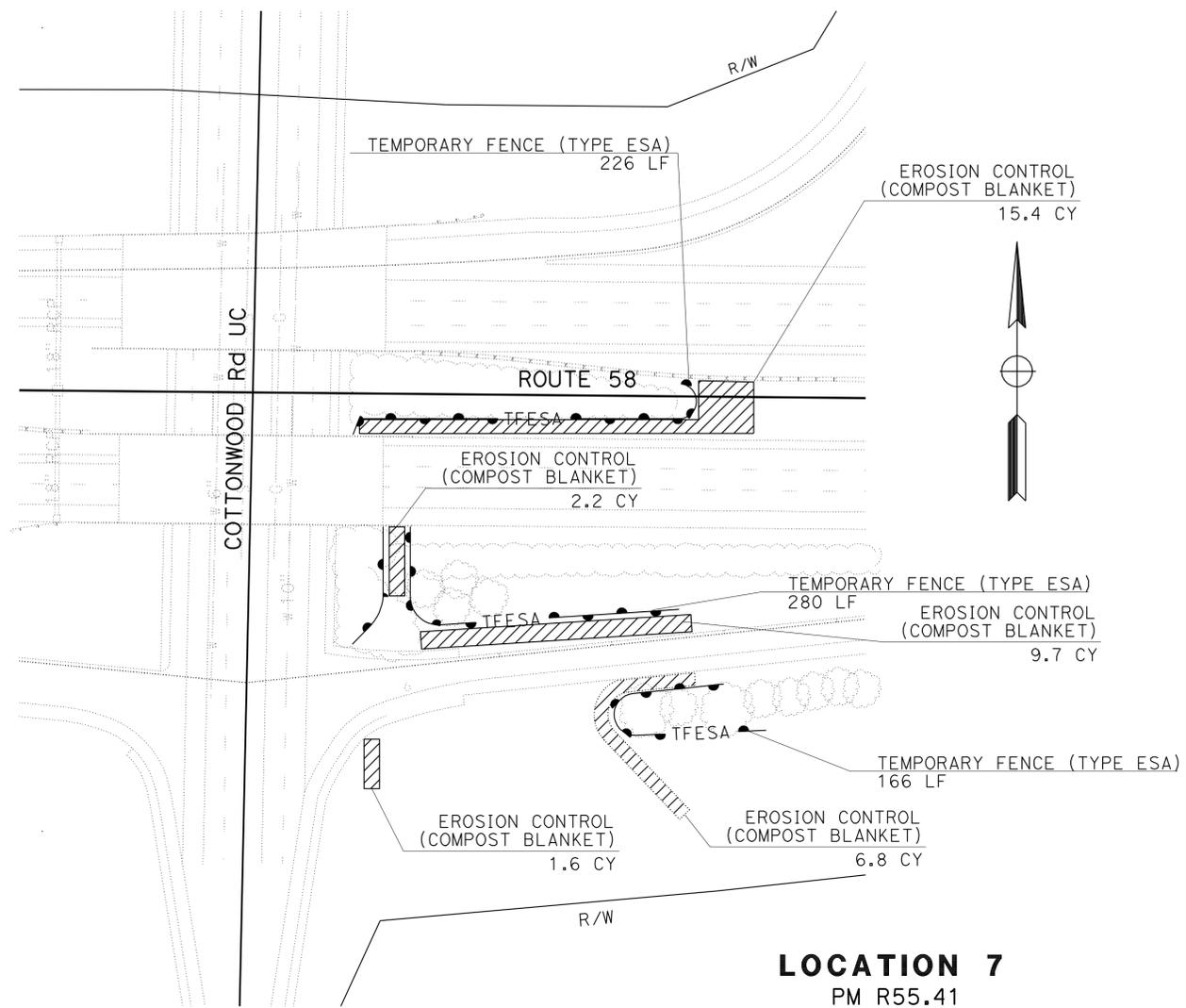
NOTE:
 1. FOR ACCURATE RIGHT OF WAY AND ACCESS DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	6	57

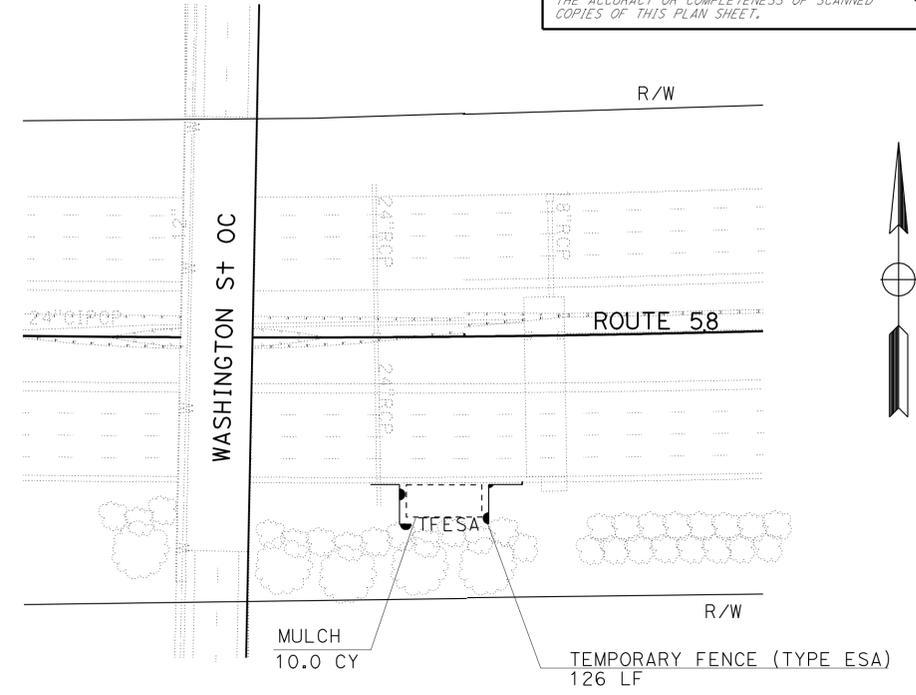
Kevin Gallo
 LICENSED LANDSCAPE ARCHITECT
 Signature: *Kevin Gallo*
 12/31/11
 Renewal Date: 12/11/09
 DATE
 STATE OF CALIFORNIA

7-26-10
 PLANS APPROVAL DATE

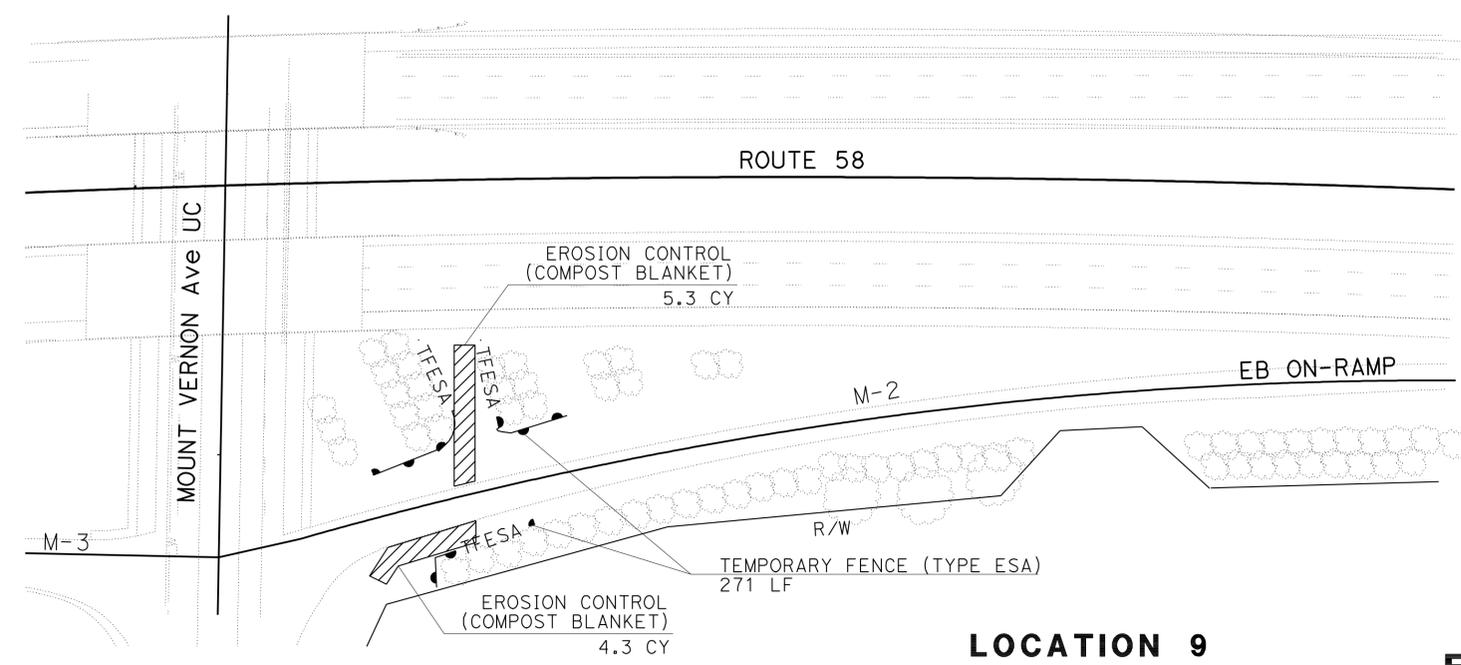
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



LOCATION 7
 PM R55.41



LOCATION 8
 PM R55.92



LOCATION 9
 PM R56.41

EROSION CONTROL PLAN
 SCALE: 1" = 50'
EC-4

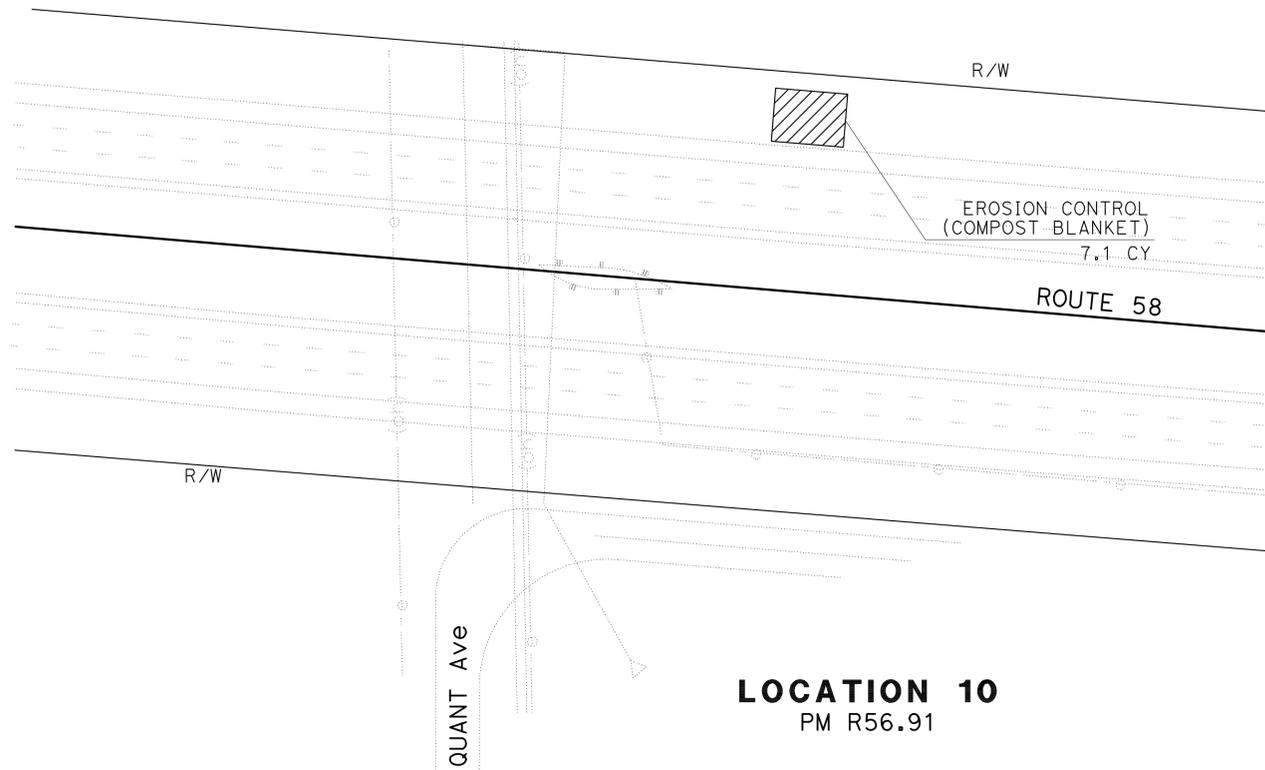
THIS PLAN IS ACCURATE FOR EROSION CONTROL WORK ONLY.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	7	57

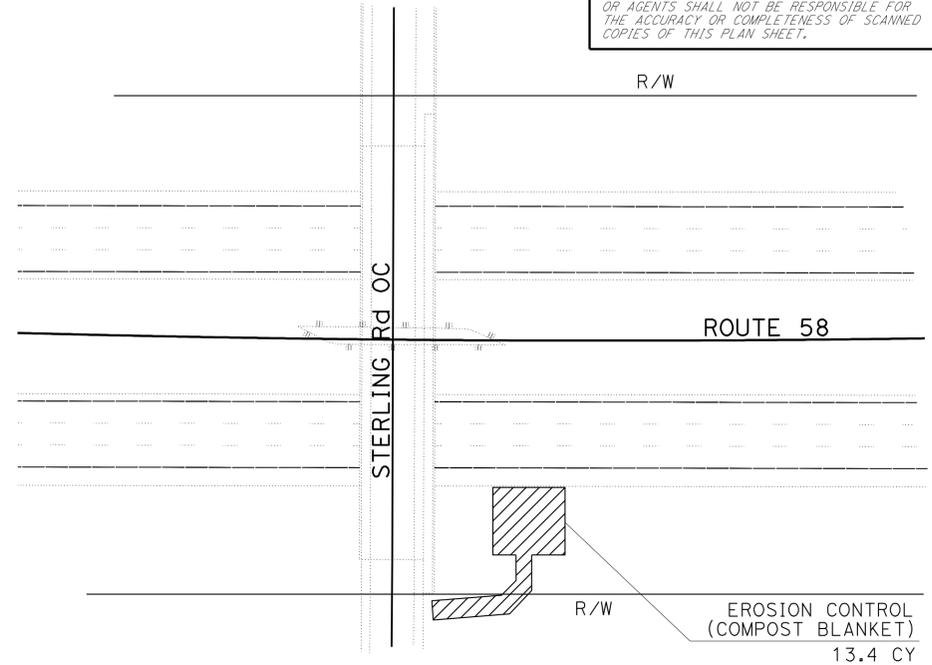
Kevin Gallo
 LICENSED LANDSCAPE ARCHITECT
 Signature
 12/31/11
 Renewal Date
 12/17/09
 Date
 STATE OF CALIFORNIA

7-26-10
 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.

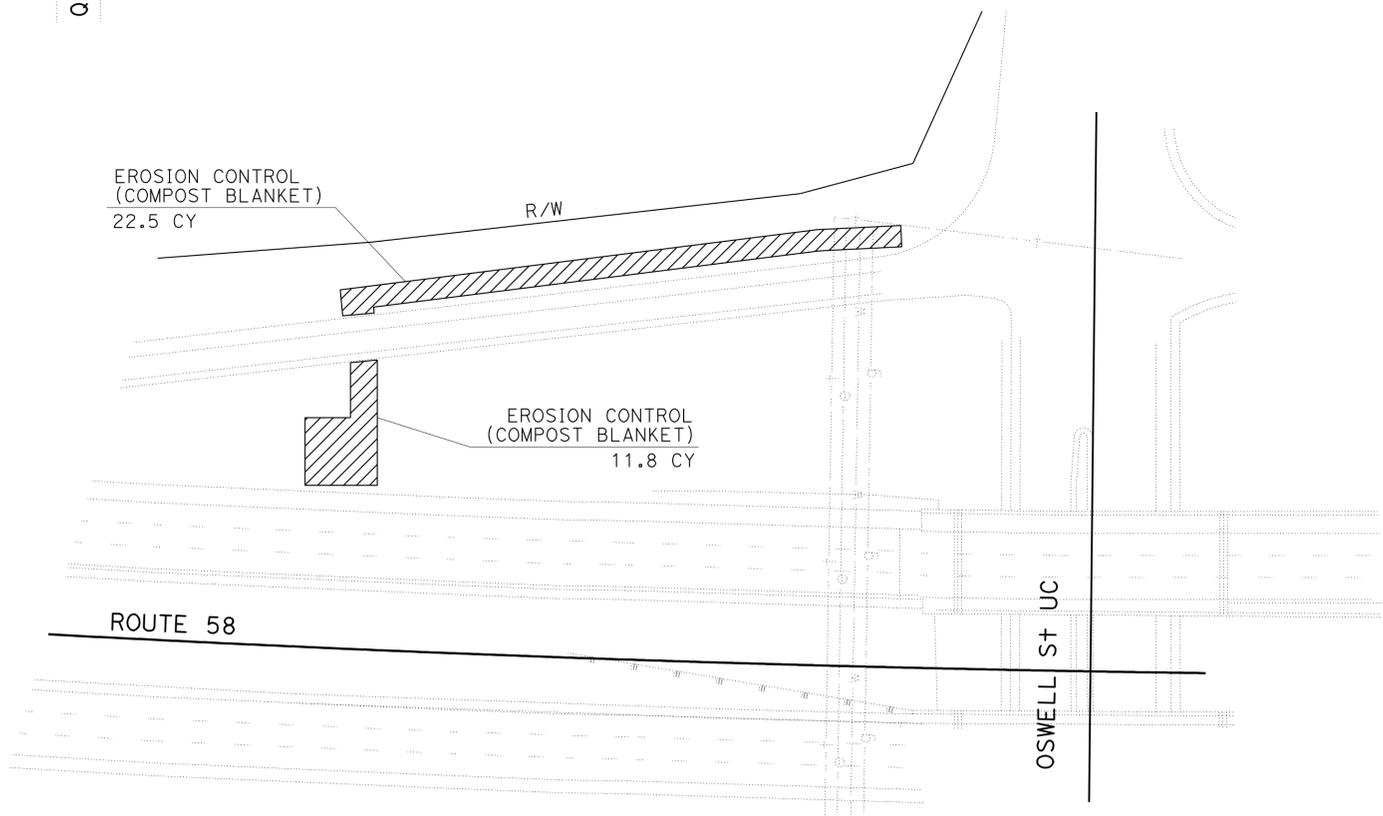
NOTE:
 1. FOR ACCURATE RIGHT OF WAY AND ACCESS DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



LOCATION 10
 PM R56.91



LOCATION 12
 PM R57.93



LOCATION 11
 PM R57.41

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans LANDSCAPE ARCHITECTURE
 FUNCTIONAL SUPERVISOR: ELBERT COX
 CALCULATED/DESIGNED BY: KEVIN GALLO
 CHECKED BY: KEN THOMSON
 REVISED BY: KEVIN GALLO
 DATE REVISED: KEN THOMSON

THIS PLAN IS ACCURATE FOR EROSION CONTROL WORK ONLY.

EROSION CONTROL PLAN

SCALE: 1" = 50'

EC-5

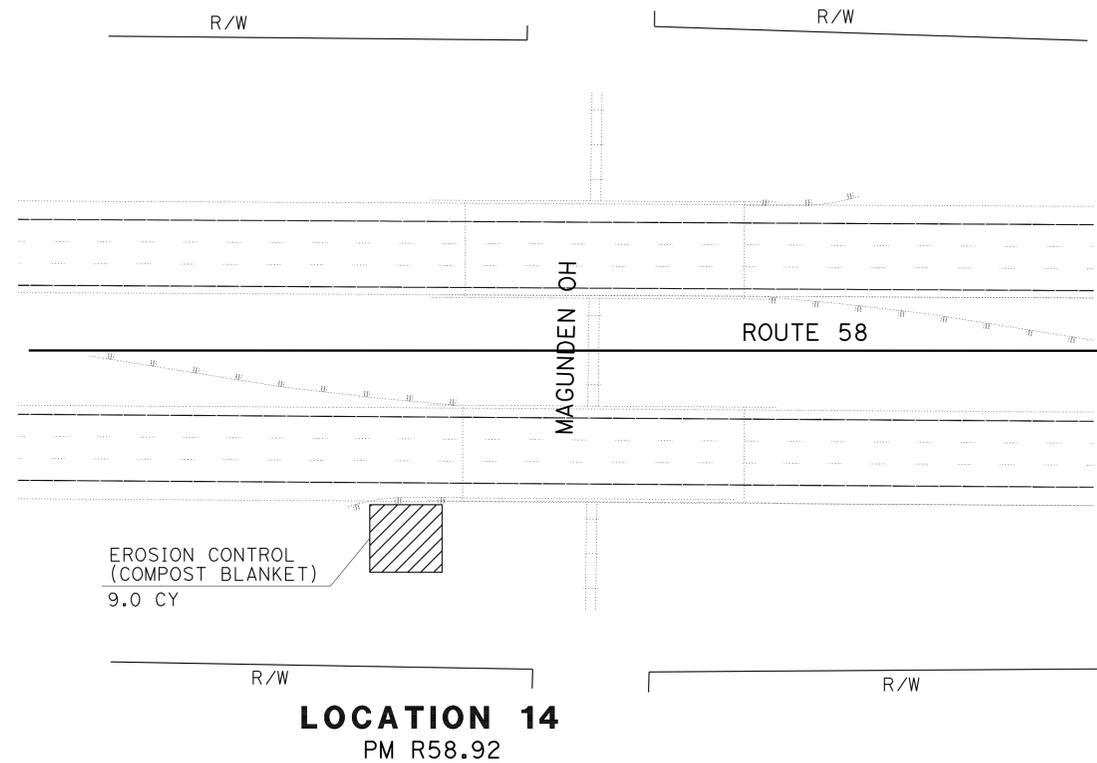
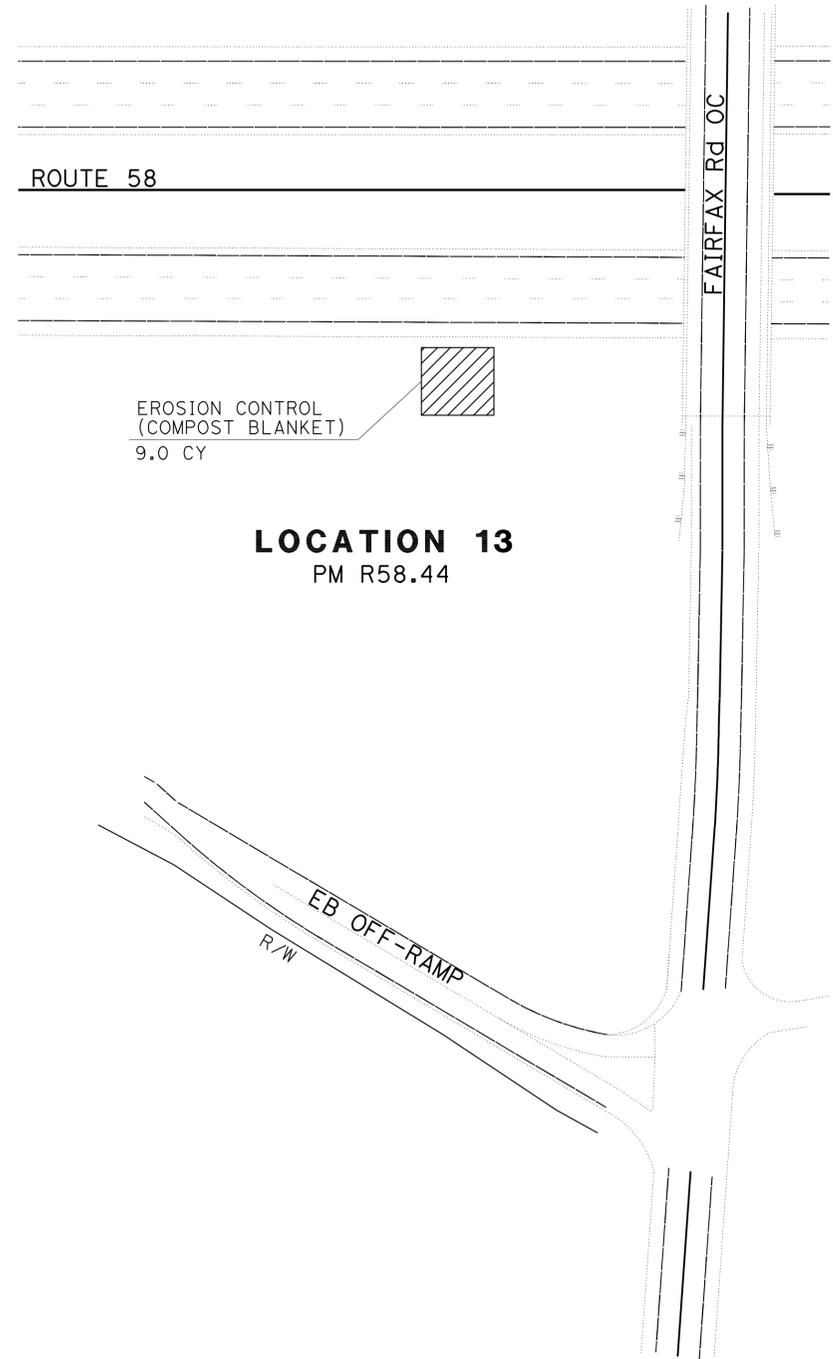
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	8	57

Kevin Gallo
 LICENSED LANDSCAPE ARCHITECT

7-26-10
 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:
 1. FOR ACCURATE RIGHT OF WAY AND ACCESS DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans LANDSCAPE ARCHITECTURE

FUNCTIONAL SUPERVISOR
 ELBERT COX

CALCULATED/DESIGNED BY
 KEVIN GALLO

CHECKED BY
 KEN THOMSON

REVISED BY
 DATE REVISED

THIS PLAN IS ACCURATE FOR EROSION CONTROL WORK ONLY.

EROSION CONTROL PLAN

SCALE: 1" = 50'

EC-6



STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

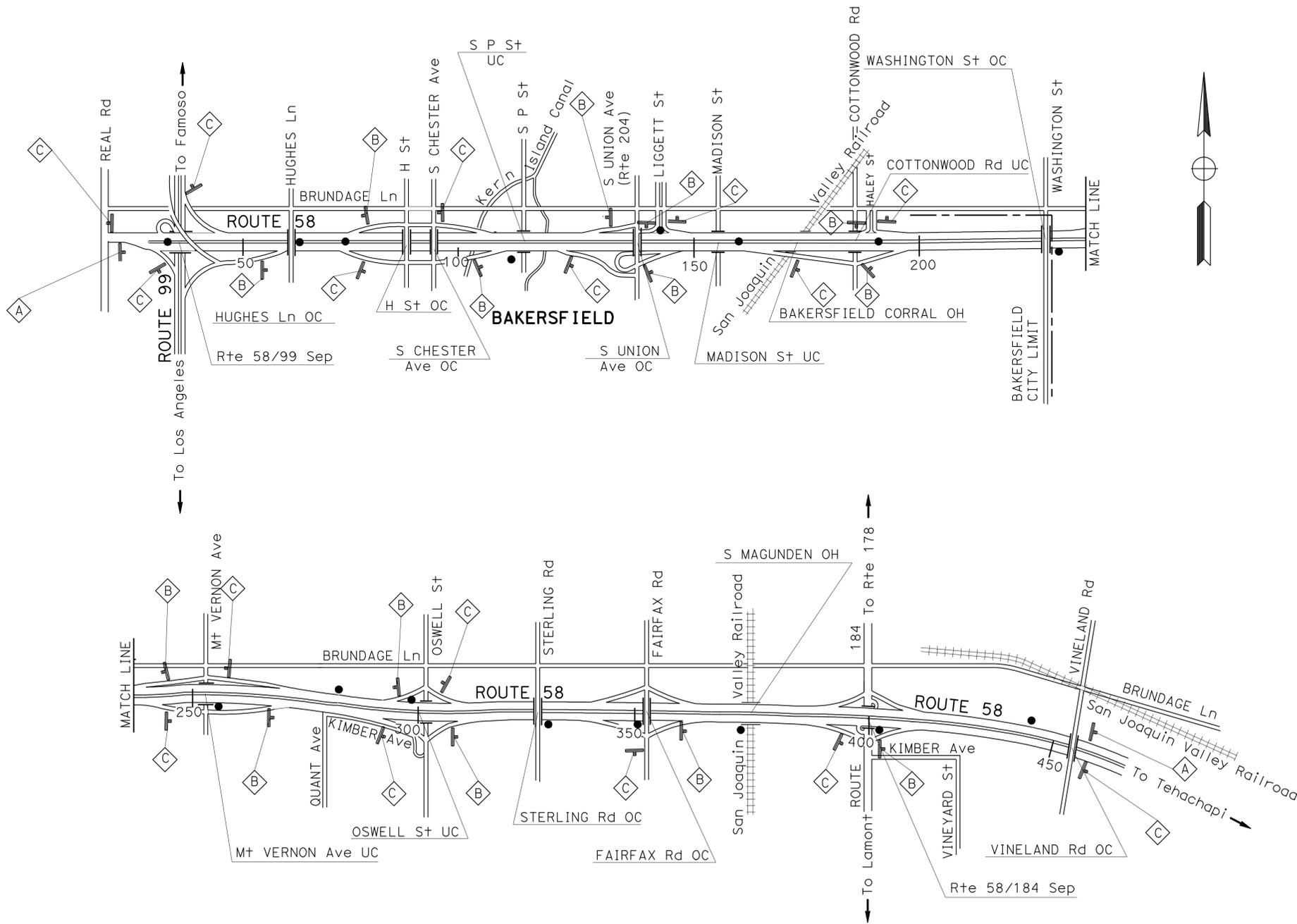
SIGN No.	SIGN CODE	PANEL SIZE	SIGN MESSAGE	No. OF POSTS AND SIZE	No. OF SIGNS
A	W20-1(CA)	48" x 48"	ROAD WORK AHEAD	1-6" x 6"	2
B	W20-1(CA)	36" x 36"	ROAD WORK AHEAD	1-4" x 6"	14
C	G20-2(CA)	36" x 24"	END ROAD WORK	1-4" x 6"	16

LEGEND:

● WORK LOCATIONS

NOTE:

1. LOCATION OF CONSTRUCTION AREA SIGNS ARE APPROXIMATE. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER.



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	10	57

5-10-10
 REGISTERED CIVIL ENGINEER DATE

7-26-10
 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
Caltrans TRAFFIC DESIGN
 FUNCTIONAL SUPERVISOR: MOHAMMED QUATAMI
 CALCULATED/DESIGNED BY: CHECKED BY:
 DAVID BLACK FAWZI YAGHMOUR
 REVISED BY: DATE REVISED:

CONSTRUCTION AREA SIGNS
 NO SCALE
CS-1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	11	57


 LICENSED LANDSCAPE ARCHITECT
 7-26-10
 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.

ABBREVIATIONS

AMEND — AMENDMENT	Max ——— MAXIMUM
B & B — BALLED AND BURLAPPED	Min ——— MINIMUM
Dia ——— DIAMETER	NCN ——— NO COMMON NAME
EA ——— EACH	No. ——— NUMBER
LB ——— POUND	Pkt ——— PACKET
Oz ——— OUNCE	PLT ESTB — PLANT ESTABLISHMENT
Ft ——— FOOT/FEET	Pvm+ ——— PAVEMENT
SQFT ——— SQUARE FEET	R/W ——— RIGHT OF WAY
SQYD ——— SQUARE YARD	SF ——— STATE FURNISHED
CF ——— CUBIC FEET	TRVD ——— TRAVELED

LEGEND:

  EXISTING VEGETATION TO REMAIN

PLANT LIST AND PLANTING SPECIFICATIONS

PLANT GROUP	PLANT No.	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY EACH	HOLE SIZE (INCH)		BASIN TYPE	IRON SULFATE	SOIL AMEND ①	COMMERCIAL FERTILIZER ①		BASIN MULCH ①	STAKING	PLANTING LIMITS							REMARKS
							Dia	DEPTH				PLANTING	PLT ESTB			MINIMUM DISTANCE (Ft) FROM					ON CENTER (Ft)		
																TRVD WAY	PVMT	FENCE	WALL	PAVED DITCH		EARTH DITCH	
A	1		ACACIA <u>REDOLENS</u>	PROSTRATE ACACIA	No. 1	22	⑨	②	11	-	0.35 CF	1 Pkt	0.25 lb	2.0 CF	-	-	20	20	20	20	22	13	SHRUB ④
H	2		CARPOBROTUS <u>EDULIS</u>	HOTTENTOT FIG	CUTTING	2364 SQFT	-	-	-	-	-	-	-	-	-	-	6	6	6	6	6	1	GROUND COVER ⑫

APPLICABLE WHEN CIRCLED:

- ① - QUANTITIES SHOWN ARE "PER PLANT" UNLESS SHOWN AS SQFT OR SQYD APPLICATION RATES.
- ② - SUFFICIENT TO RECEIVE ROOT BALL AND ROOT PROTECTOR WHERE SPECIFIED.
- 3 - DOES NOT APPLY TO MULCH AREAS.
- ④ - AS SHOWN ON PLANS.
- 5 - UNLESS OTHERWISE SHOWN ON PLANS.
- 6 - SEE DETAIL.
- 7 - SEE SPECIAL PROVISIONS.
- 8 - SEE STANDARD SPECIFICATIONS.
- ⑨ - TWICE THE ROOT BALL DIAMETER.
- 10 - ROOT PROTECTOR REQUIRED.
- 11 - REQUIRED.
- ⑫ - TRIANGULAR SPACING.

NOTE:

UNDERLINED PORTIONS OF BOTANICAL NAME INDICATE ABBREVIATIONS USED ON PLANTING PLANS.

MULCH

DESCRIPTION	Qty (CY) (N)
BASIN MULCH	2
MULCH	10
TOTAL	12

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



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	12	57

Kevin Gallo
 LICENSED LANDSCAPE ARCHITECT
 7-26-10
 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.

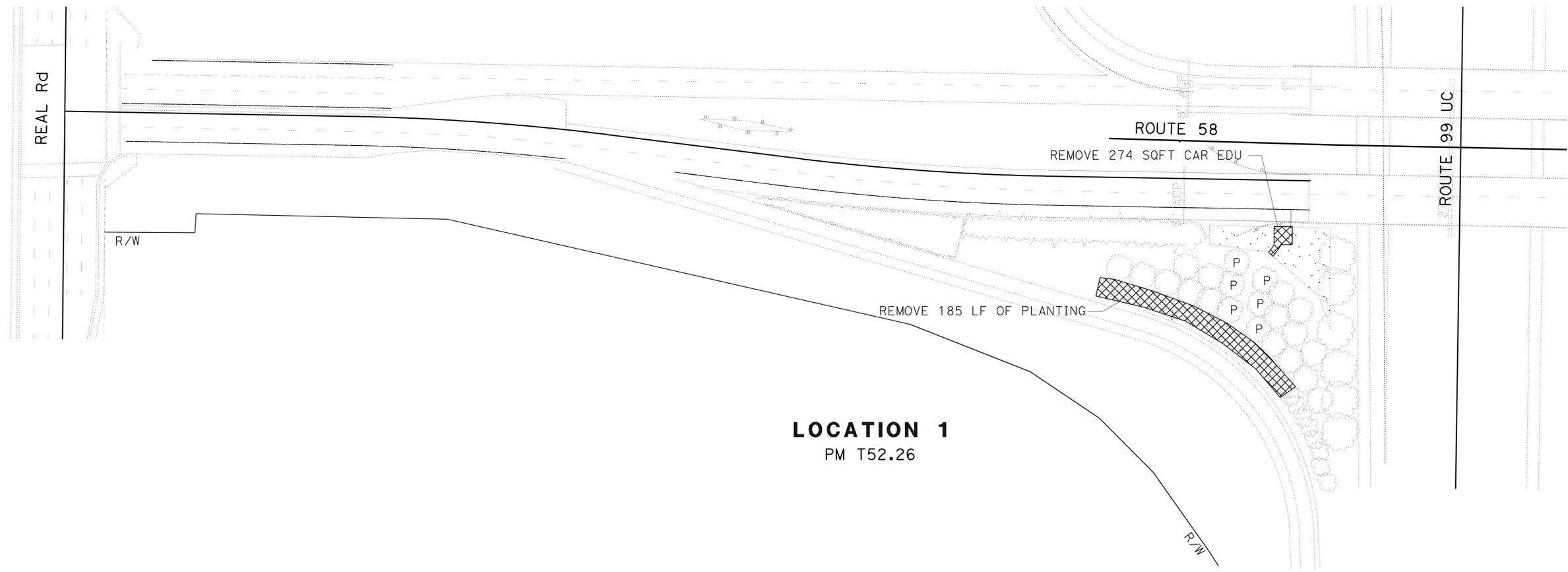
NOTE:

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

LEGEND:

- REMOVE PLANTS
- P PRUNE TREES

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	REVISED BY
Caltrans LANDSCAPE ARCHITECTURE	ELBERT COX	CHECKED BY	DATE REVISED
		KEVIN GALLO	
		KEN THOMSON	



LOCATION 1
 PM T52.26

THIS PLAN IS ACCURATE FOR PLANT REMOVAL WORK ONLY.

PLANT REMOVAL PLAN
PR-1

SCALE: 1" = 50'

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	13	57

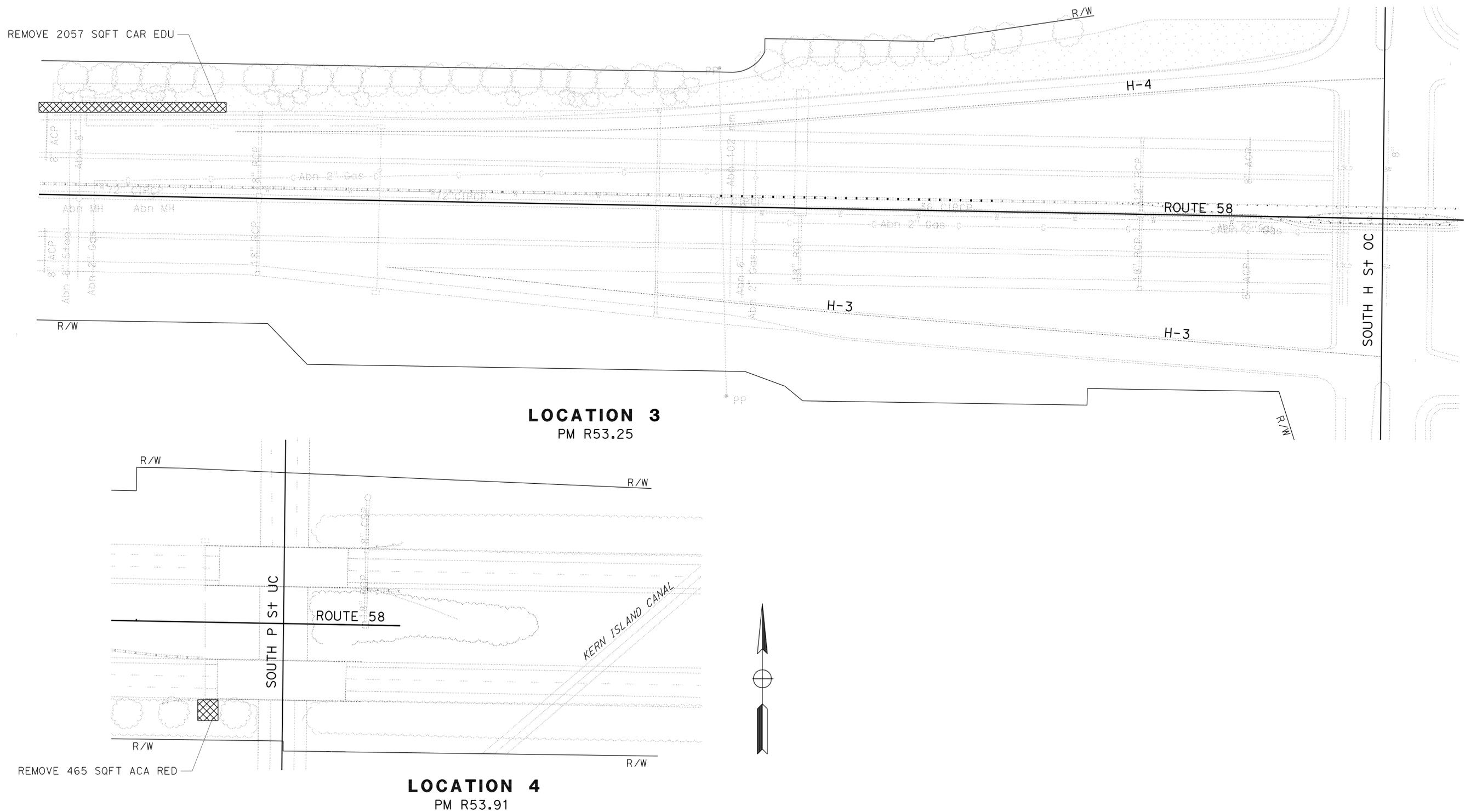
Signature: *Kevin Gallo*
 LICENSED LANDSCAPE ARCHITECT
 Signature: *Kevin Gallo*
 12/31/11
 Renewal Date: 12/17/09
 Date: 7-26-10
 PLANS APPROVAL DATE

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:

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

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	LANDSCAPE ARCHITECTURE	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	REVISOR	DATE
Caltrans		ELBERT COX	KEVIN GALLO	KEVIN GALLO	
			CHECKED BY	KEN THOMSON	



REMOVE 465 SQFT ACA RED

LOCATION 4
PM R53.91

LOCATION 3
PM R53.25

PLANT REMOVAL PLAN
SCALE: 1" = 50'
PR-2

THIS PLAN IS ACCURATE FOR PLANT REMOVAL WORK ONLY.



USERNAME => trstrk
DGN FILE => 601730trf002.dgn

CU 06340 EA 0L7301

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans LANDSCAPE ARCHITECTURE

FUNCTIONAL SUPERVISOR
 ELBERT COX

CALCULATED/DESIGNED BY
 KEVIN GALLO

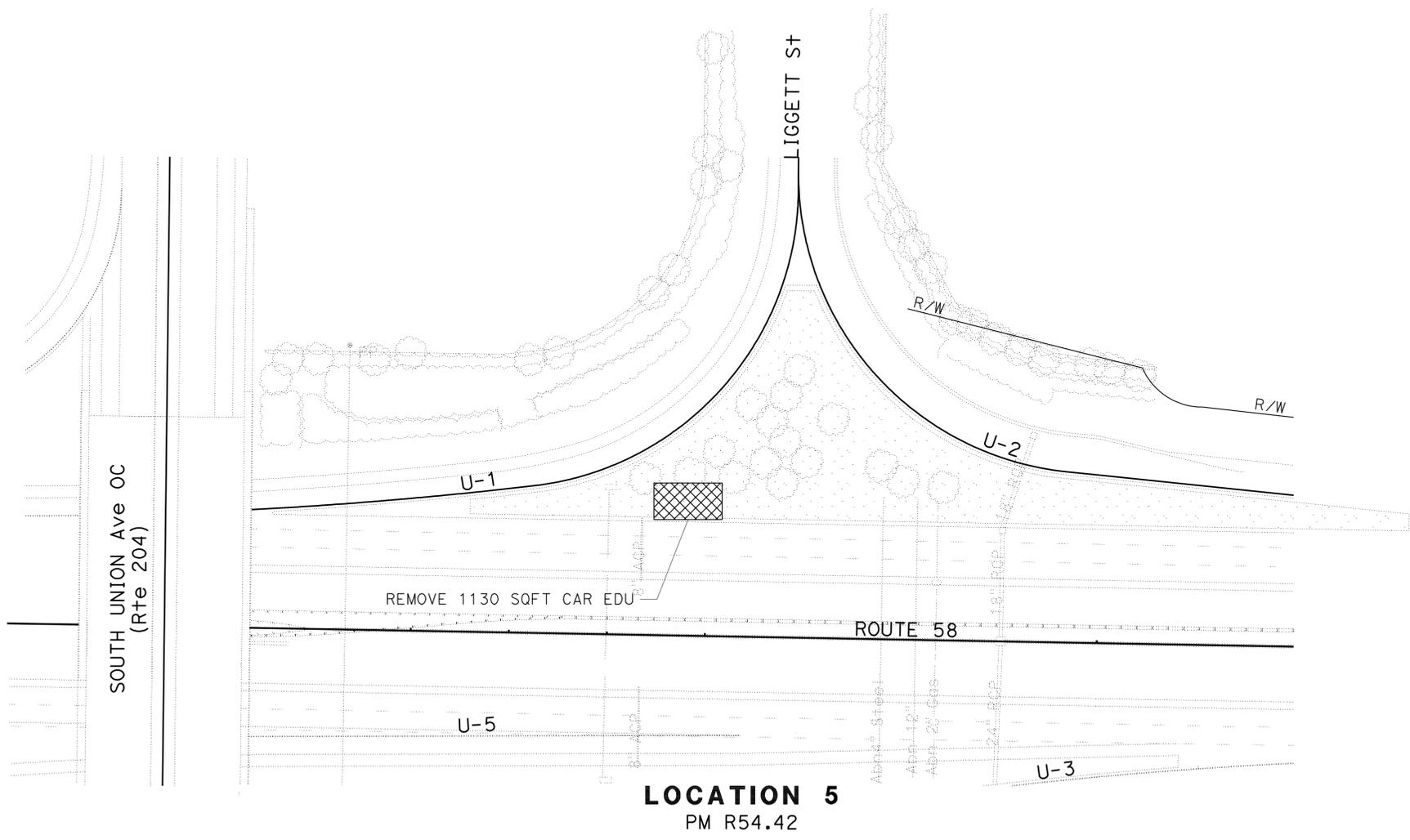
REVISOR
 KEVIN GALLO

REVISOR
 KEN THOMSON

REVISOR
 KEVIN GALLO

NOTE:

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



LOCATION 5
 PM R54.42

REMOVE 1130 SQFT CAR EDU

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	14	57

Kevin Gallo
 LICENSED LANDSCAPE ARCHITECT
 Signature: *Kevin Gallo*
 12/31/11
 Renewal Date: 12/17/09
 Date: 7-26-10
 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.



THIS PLAN IS ACCURATE FOR PLANT REMOVAL WORK ONLY.



USERNAME => trsrk
 DGN FILE => 601730+rf003.dgn

PLANT REMOVAL PLAN
PR-3

SCALE: 1" = 50'

CU 06340 EA 0L7301

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans LANDSCAPE ARCHITECTURE

FUNCTIONAL SUPERVISOR
 ELBERT COX

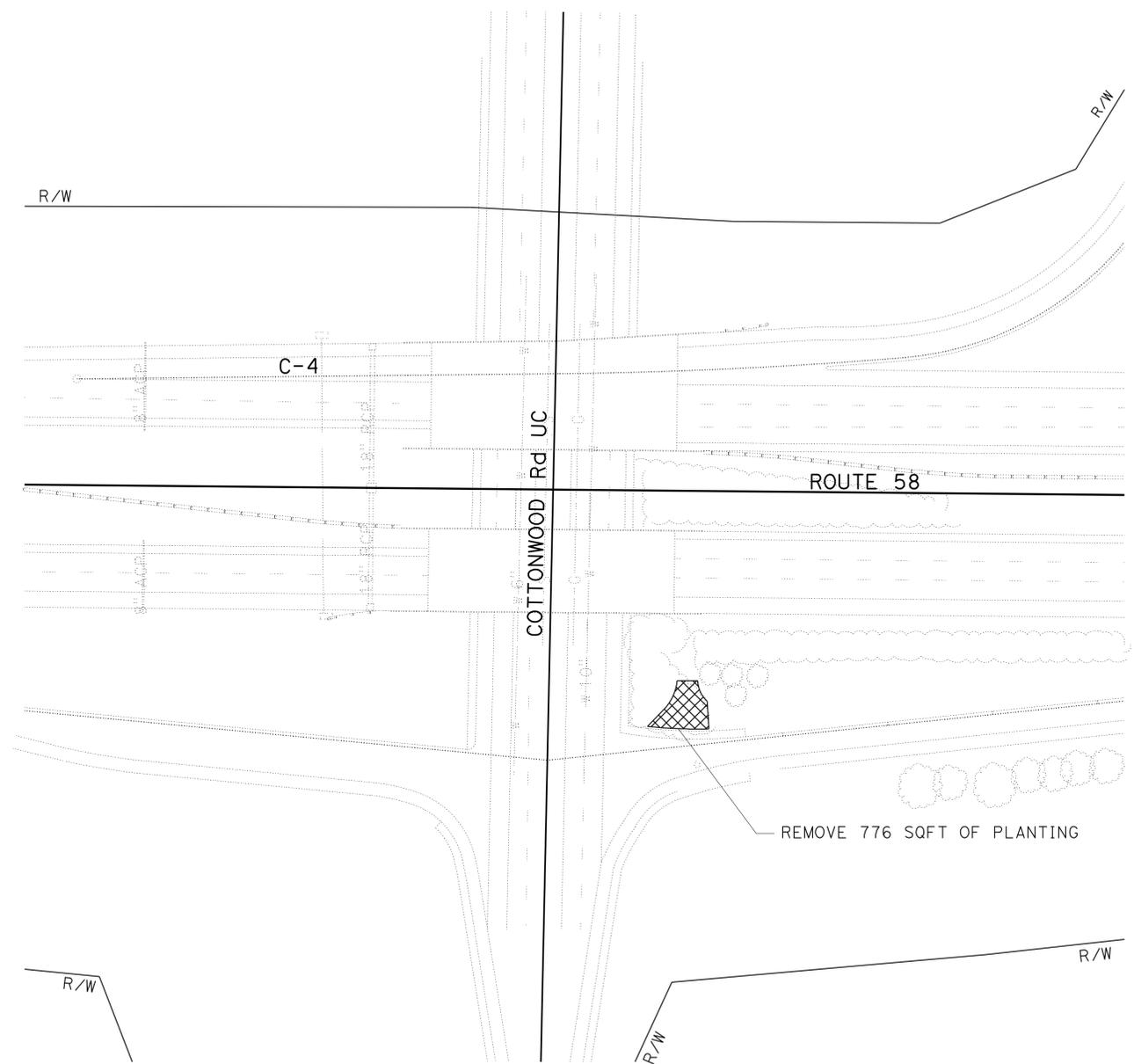
CALCULATED/DESIGNED BY
 CHECKED BY

KEVIN GALLO
 KEN THOMSON

REVISED BY
 DATE REVISED

NOTE:

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



LOCATION 7
 PM R55.41



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	15	57

Signature: *Kevin Gallo*
 LICENSED LANDSCAPE ARCHITECT
 Signature: *Kevin Gallo*
 7-26-10
 PLANS APPROVAL DATE
 12/31/11
 Renewal Date
 12/17/09
 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.

THIS PLAN IS ACCURATE FOR PLANT REMOVAL WORK ONLY.



USERNAME => trstrk
 DGN FILE => 601730+rf004.dgn

PLANT REMOVAL PLAN
PR-4

SCALE: 1" = 50'

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	17	57

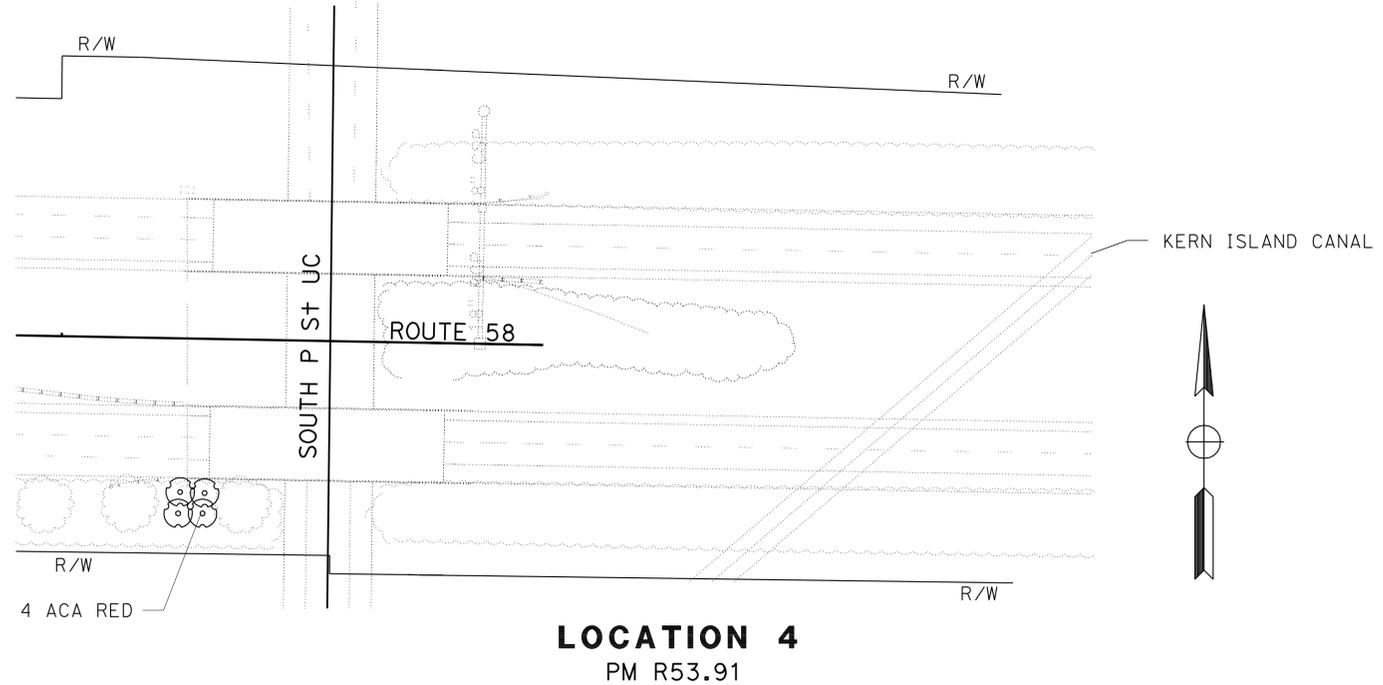
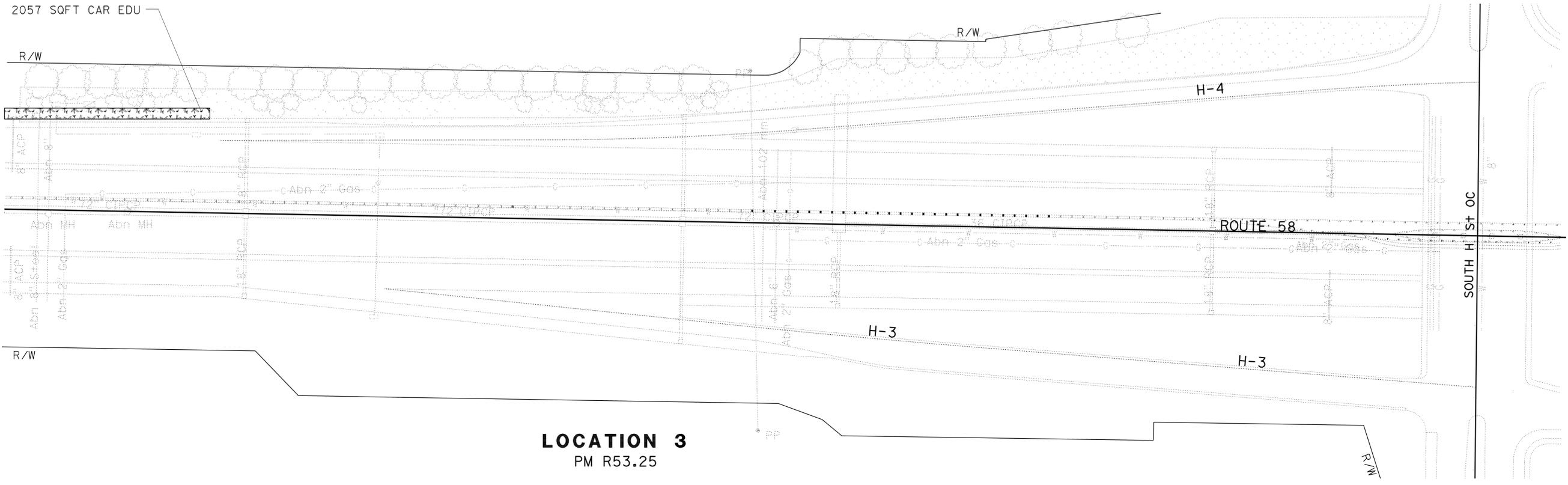
Kevin Gallo
 LICENSED LANDSCAPE ARCHITECT

7-26-10
 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:
 1. FOR ACCURATE RIGHT OF WAY AND ACCESS DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	REVISED BY
Caltrans LANDSCAPE ARCHITECTURE	ELBERT COX	CHECKED BY	DATE REVISED
		KEVIN GALLO	
		KEN THOMSON	



LOCATION 3
 PM R53.25

LOCATION 4
 PM R53.91

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

THIS PLAN IS ACCURATE FOR PLANTING WORK ONLY.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans LANDSCAPE ARCHITECTURE

FUNCTIONAL SUPERVISOR
 ELBERT COX

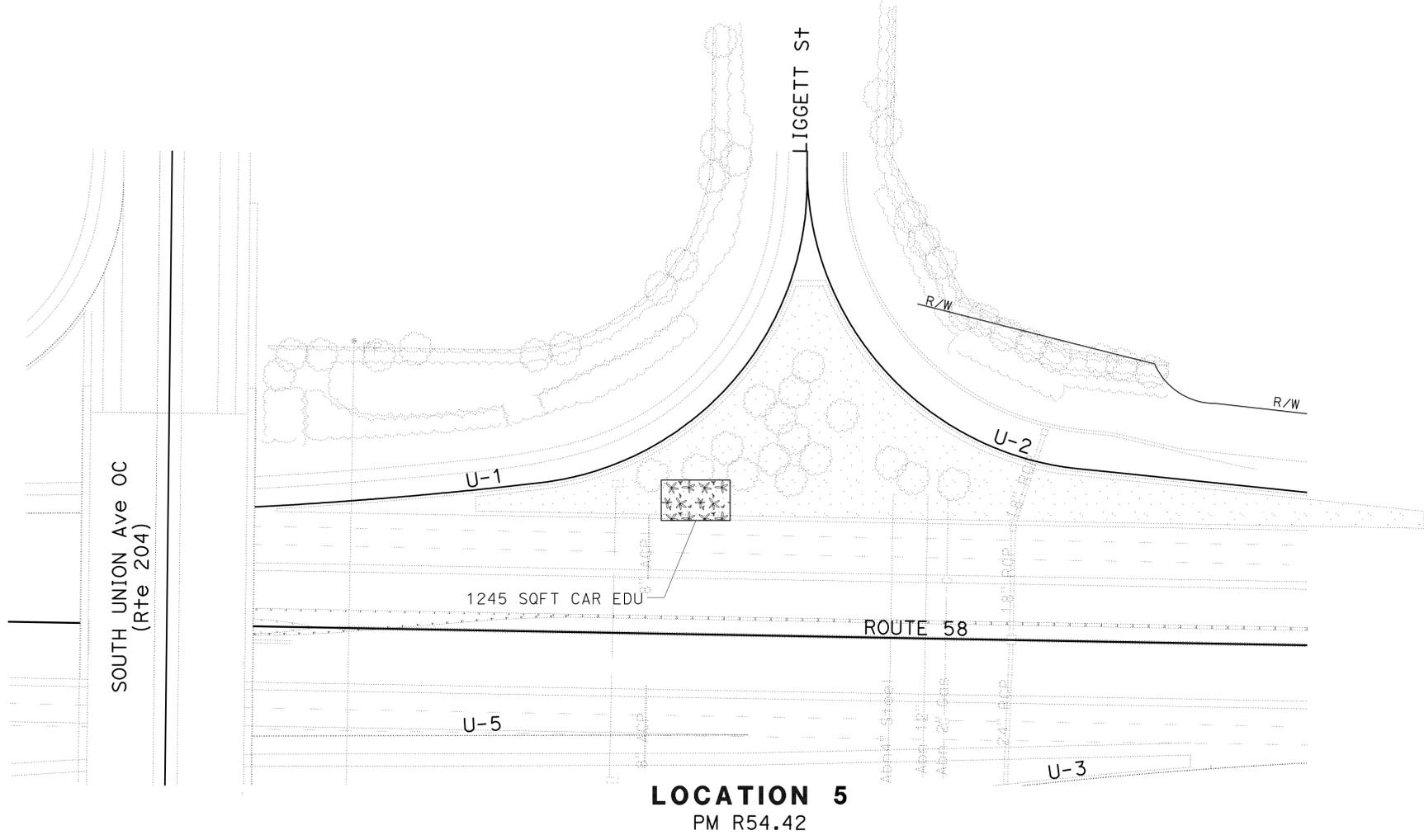
CALCULATED/DESIGNED BY
 CHECKED BY

KEVIN GALLO
 KEN THOMSON

REVISED BY
 DATE REVISED

NOTE:

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



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	18	57

Signature: *Kevin Gallo*
 LICENSED LANDSCAPE ARCHITECT
 Signature: *Kevin Gallo*
 12/31/11
 Signature: *Kevin Gallo*
 12/17/09
 Signature: *Kevin Gallo*
 7-26-10
 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.



LOCATION 5
 PM R54.42

THIS PLAN IS ACCURATE FOR PLANTING WORK ONLY.



USERNAME => trstrk
 DGN FILE => 601730+1003.dgn

CU 06340
 EA 0L7301

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

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans LANDSCAPE ARCHITECTURE

FUNCTIONAL SUPERVISOR
 ELBERT COX

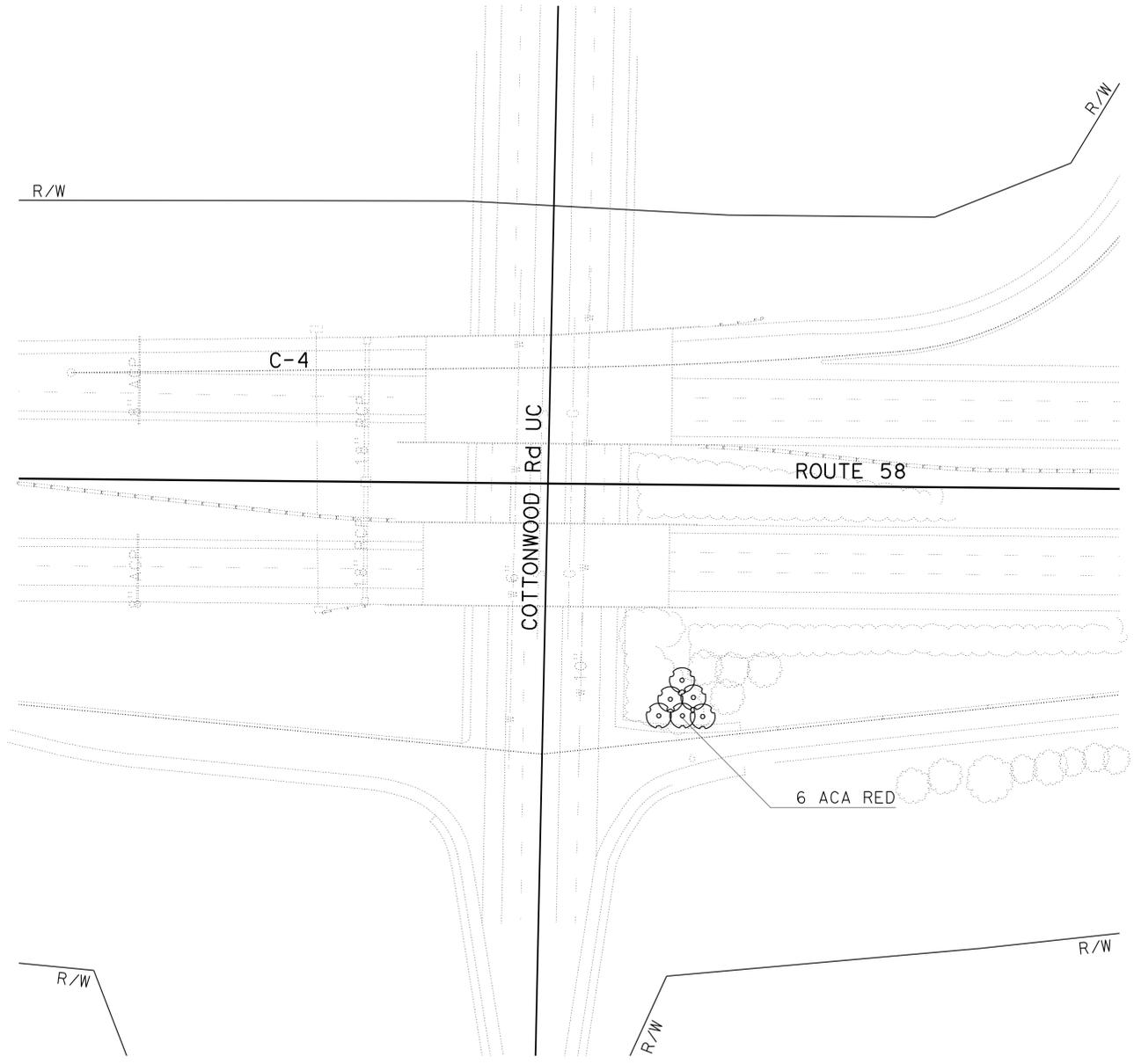
CALCULATED/DESIGNED BY
 CHECKED BY

KEVIN GALLO
 KEN THOMSON

REVISED BY
 DATE REVISED

NOTE:

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



LOCATION 7
 PM R55.41

THIS PLAN IS ACCURATE FOR PLANTING WORK ONLY.



USERNAME => trstrk
 DGN FILE => 601730+1004.dgn

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	19	57

Kevin Gallo
 LICENSED LANDSCAPE ARCHITECT

7-26-10
 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.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	20	57

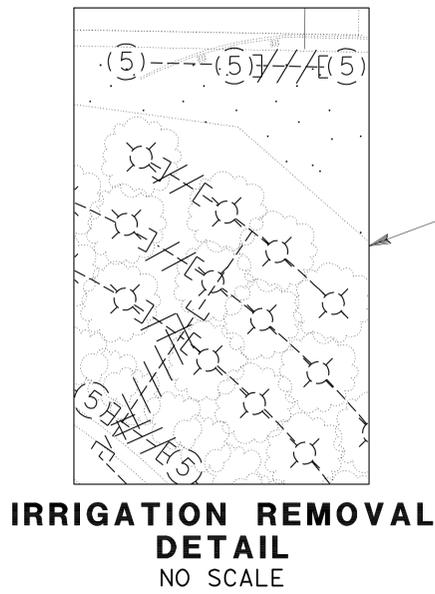
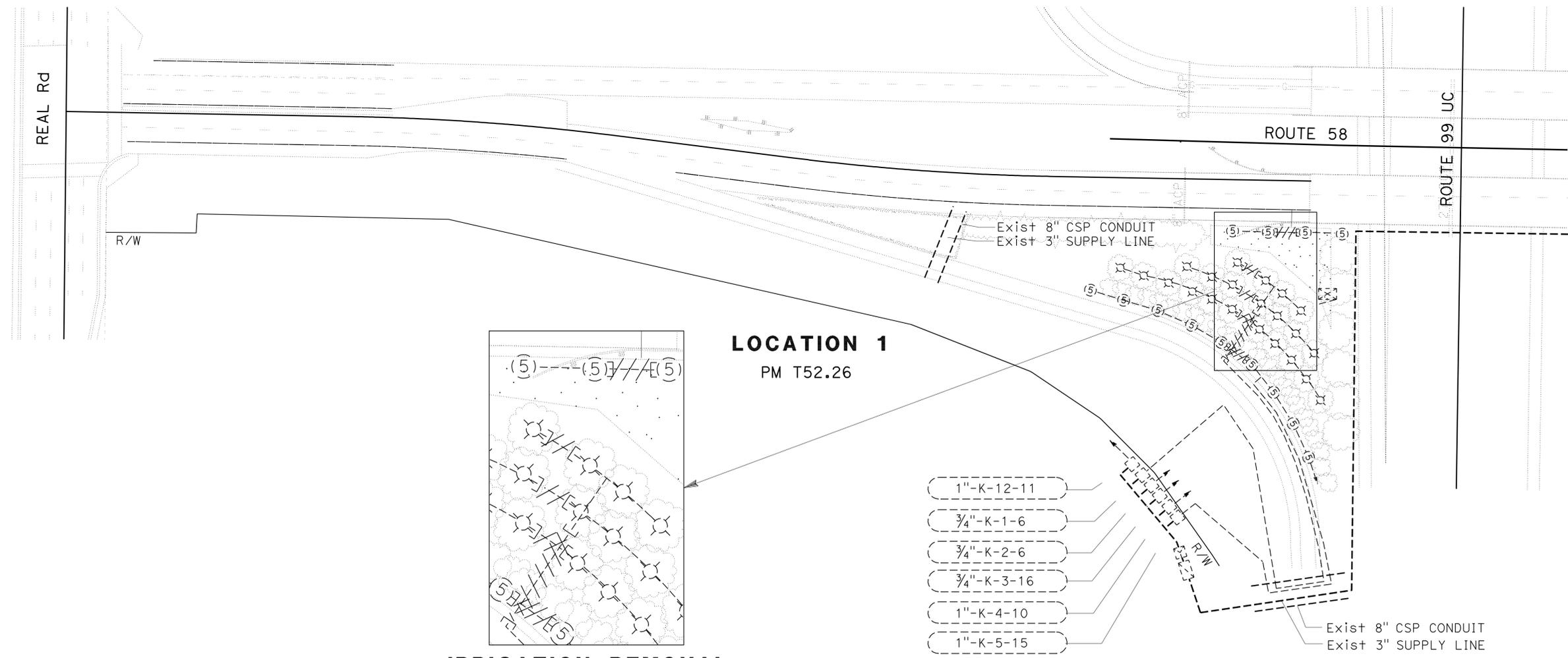
Kevin Gallo
 LICENSED LANDSCAPE ARCHITECT
 Signature
 7-26-10
 PLANS APPROVAL DATE
 Renewal Date
 12/31/11
 12/17/09
 Date
 STATE OF CALIFORNIA

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

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

LEGEND:
 REMOVE IRRIGATION

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	DESIGNED BY	REVISOR
Caltrans LANDSCAPE ARCHITECTURE	ELBERT COX	CHECKED BY	DATE
		KEVIN GALLO	KEVIN GALLO
		KEN THOMSON	KEN THOMSON



- 1"-K-12-11
- 3/4"-K-1-6
- 3/4"-K-2-6
- 3/4"-K-3-16
- 1"-K-4-10
- 1"-K-5-15

IRRIGATION REMOVAL PLAN
IR-1

SCALE: 1" = 50'

THIS PLAN IS ACCURATE FOR IRRIGATION REMOVAL WORK ONLY.



USERNAME => frmikes1
 DGN FILE => 601730tk001.dgn

CU 06340

EA 0L7301

BORDER LAST REVISED 4/11/2008

LAST REVISION | DATE PLOTTED => 27-JUL-2010
 12-17-09 | TIME PLOTTED => 07:52

NOTE:

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

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	21	57

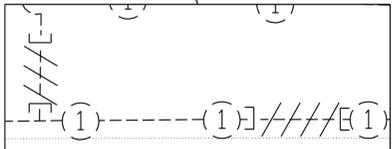
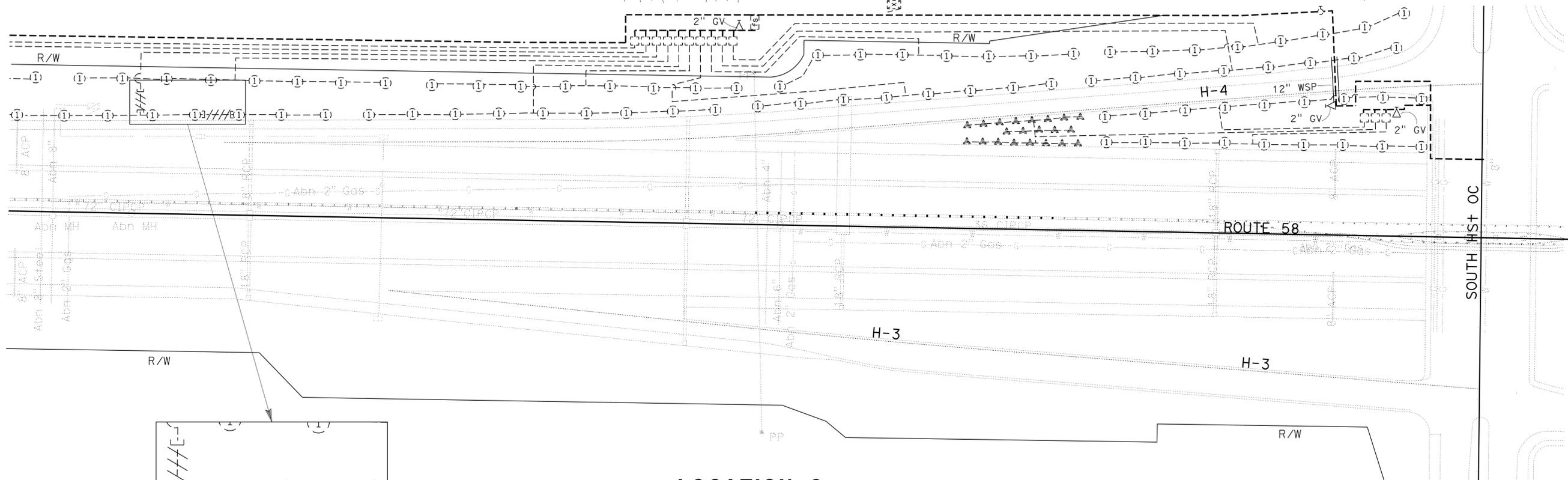
Kevin Gallo
 LICENSED LANDSCAPE ARCHITECT
 Signature
 12/31/11
 Renewal Date
 12/17/09
 Date
 STATE OF CALIFORNIA

7-26-10
 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.

- 2"-D-14-45.0
 - 2"-D-13-40.0
 - 2"-D-12-45.0
 - 2"-D-11-45.0
 - 2"-D-10-45.0
 - 2"-D-15-40.0
 - 2"-D-16-40.0
 - 2"-D-17-40.0
 - 2"-D-18-40.0
 - 2"-D-19-40.0
- ICC 'D'
24 STATIONS
22 STATIONS USED

- 2"-D-22-45.0
- 2"-D-21-41.8
- 2"-D-20-45.0



LOCATION 3
PM R53.25

IRRIGATION REMOVAL DETAIL
NO SCALE

THIS PLAN IS ACCURATE FOR IRRIGATION REMOVAL WORK ONLY.

IRRIGATION REMOVAL PLAN
IR-2

SCALE: 1" = 50'

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans LANDSCAPE ARCHITECTURE
 FUNCTIONAL SUPERVISOR
 ELBERT COX
 CALCULATED/DESIGNED BY
 KEVIN GALLO
 CHECKED BY
 KEN THOMSON
 REVISED BY
 KEN THOMSON
 DATE REVISED

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	22	57

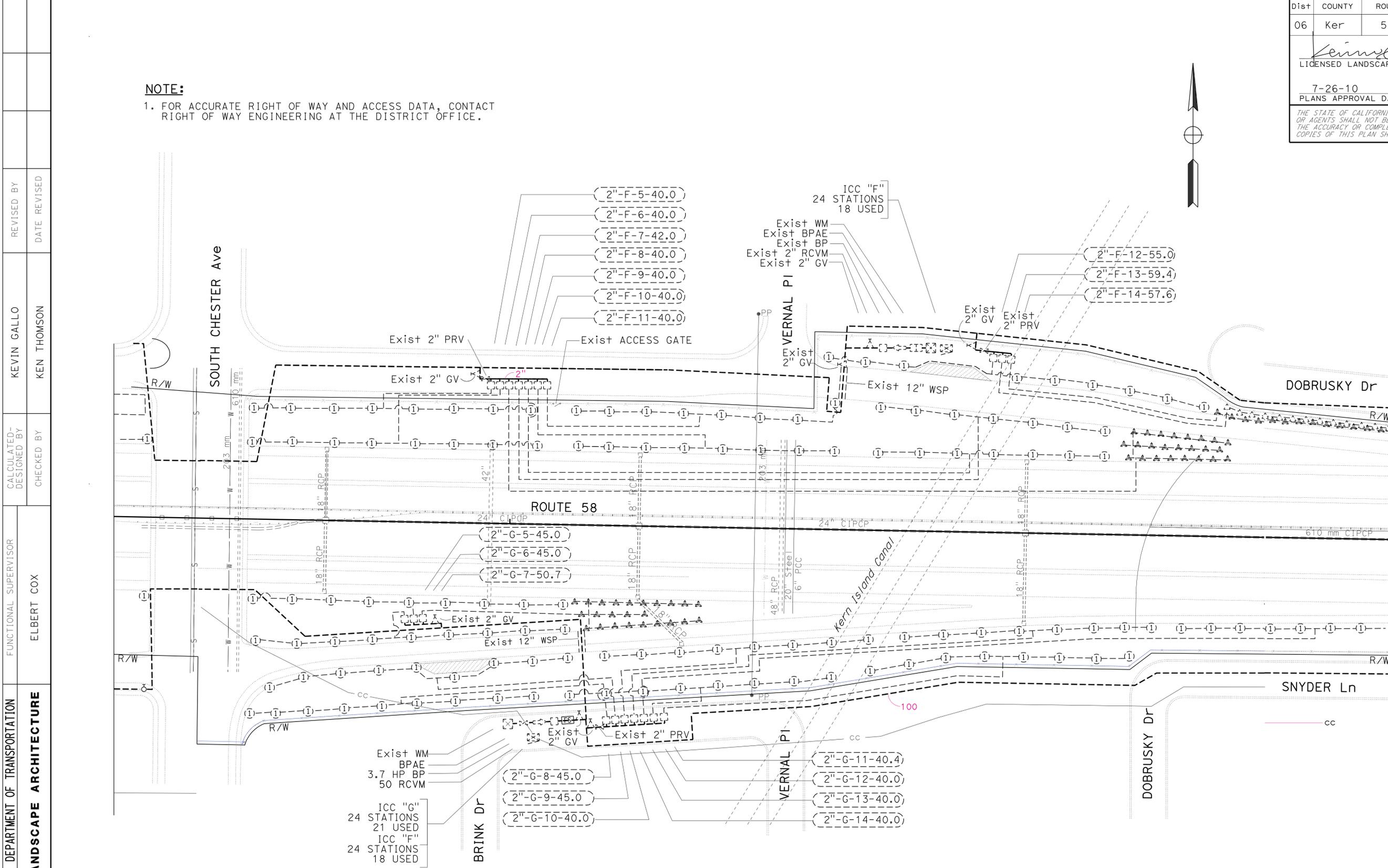
Kevin Gallo
 LICENSED LANDSCAPE ARCHITECT

7-26-10
 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:

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



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	REVISOR
Caltrans LANDSCAPE ARCHITECTURE	ELBERT COX	KEVIN GALLO	KEVIN GALLO
		CHECKED BY	DATE REVISED
		KEN THOMSON	

WEST OF LOCATION 4

IRRIGATION REMOVAL PLAN IR-3

SCALE: 1" = 50'

THIS PLAN IS ACCURATE FOR IRRIGATION REMOVAL WORK ONLY.



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	23	57

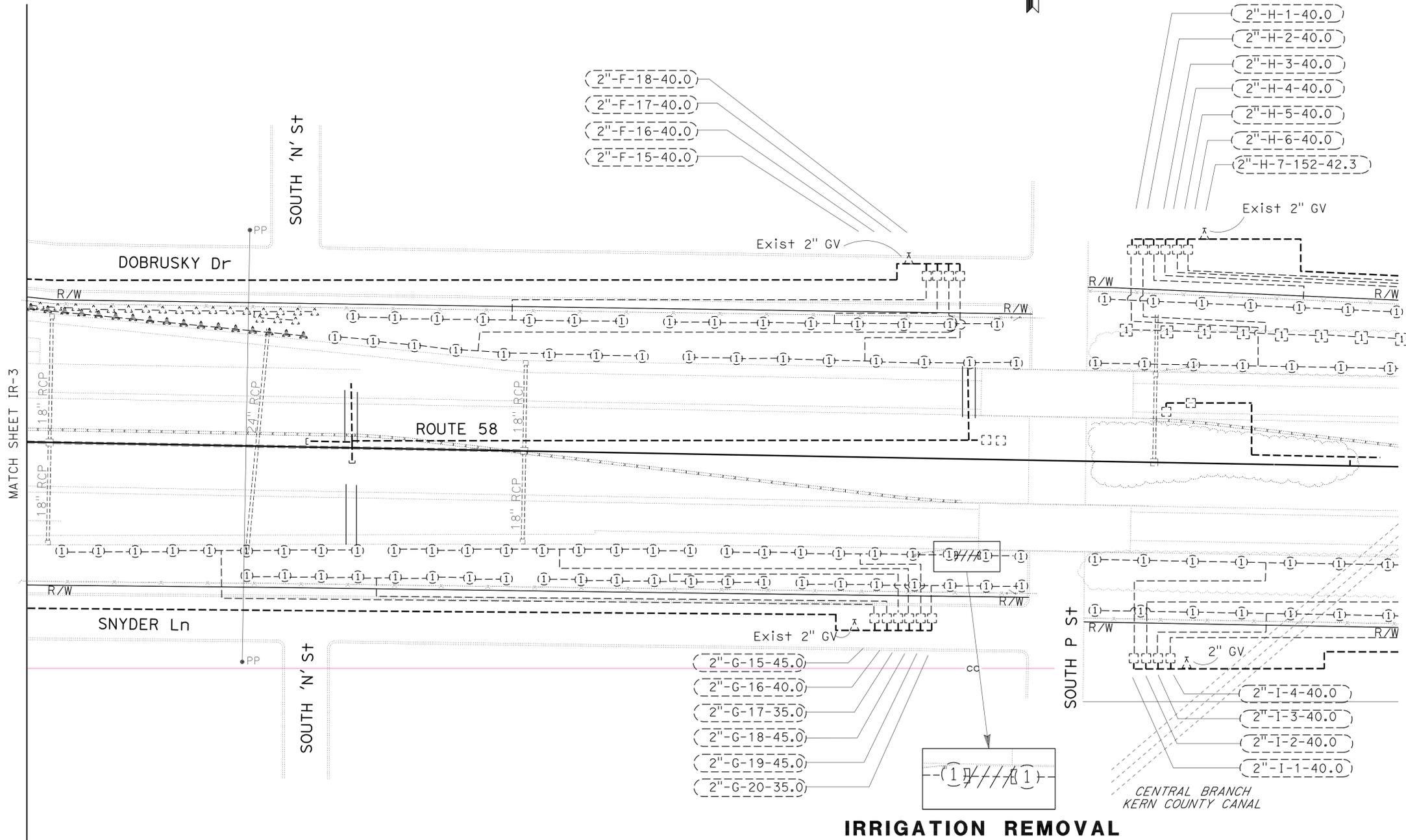
Kevin Gallo
 LICENSED LANDSCAPE ARCHITECT
 Signature: Kevin Gallo
 12/31/11
 12/17/09
 DATE
 STATE OF CALIFORNIA

7-26-10
 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:

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



**IRRIGATION REMOVAL
DETAIL
NO SCALE**

LOCATION 4
PM R53.91

**IRRIGATION REMOVAL PLAN
IR-4**

SCALE: 1" = 50'

THIS PLAN IS ACCURATE FOR IRRIGATION REMOVAL WORK ONLY.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	REVISOR BY
ELBERT COX	ELBERT COX	KEVIN GALLO	KEVIN GALLO
LANDSCAPE ARCHITECTURE	CHECKED BY	KEN THOMSON	KEN THOMSON

NOTE:

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

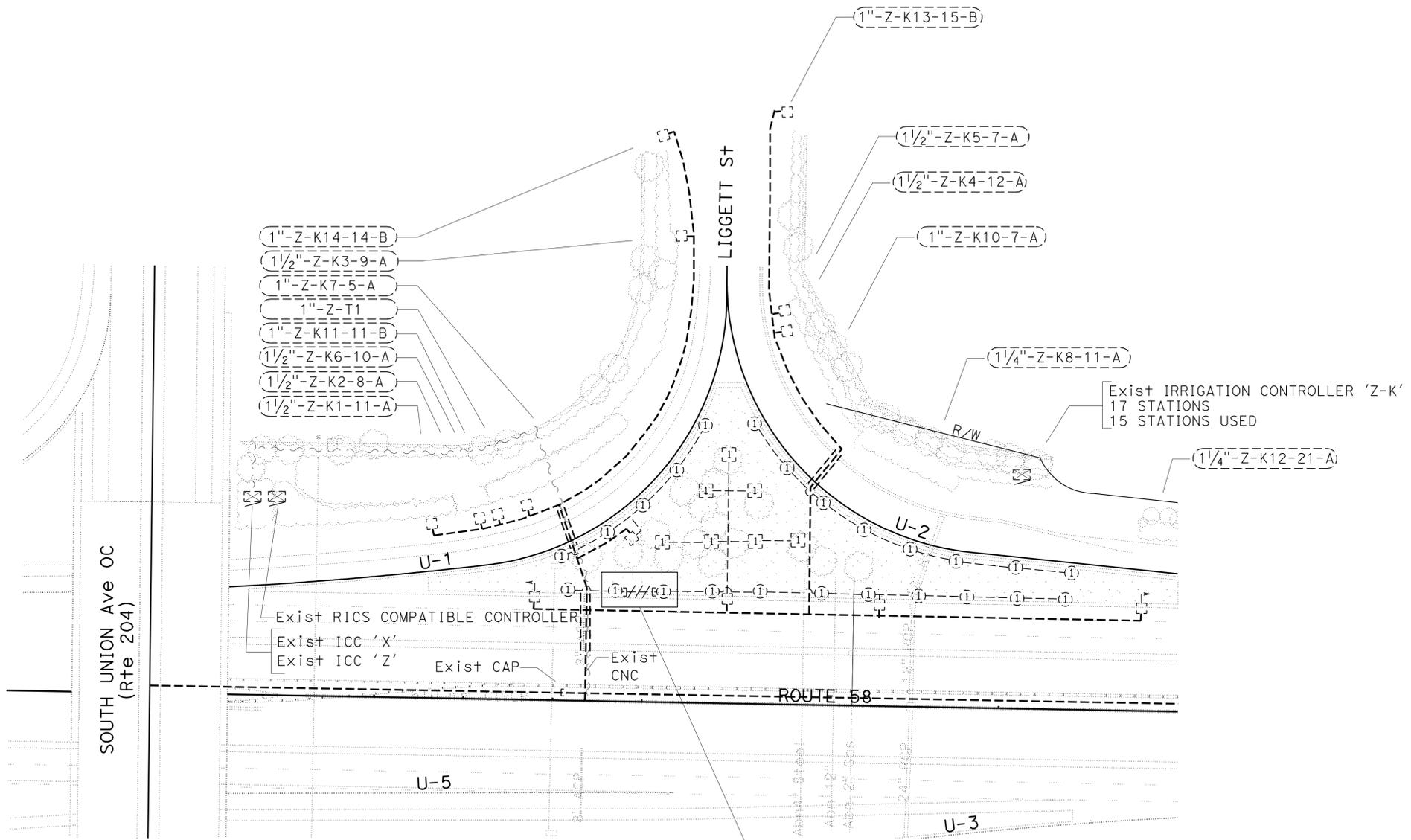
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	24	57


 LICENSED LANDSCAPE ARCHITECT
 7-26-10
 PLANS APPROVAL DATE

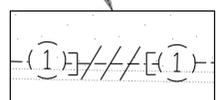


THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	DESIGNED BY	REVISOR
Caltrans LANDSCAPE ARCHITECTURE	ELBERT COX	CHECKED BY	DATE
		KEVIN GALLO	KEVIN GALLO
		KEN THOMSON	KEN THOMSON



LOCATION 5
PM R54.42



**IRRIGATION REMOVAL
DETAIL**
NO SCALE



THIS PLAN IS ACCURATE FOR IRRIGATION REMOVAL WORK ONLY.

IRRIGATION REMOVAL PLAN
IR-5

SCALE: 1" = 50'

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	26	57

Signature: *Kevin Gallo*
 LICENSED LANDSCAPE ARCHITECT
 Signature: *Kevin Gallo*
 12/31/11
 12/17/09
 Signature Date
 Date
 STATE OF CALIFORNIA
 7-26-10
 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:

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

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans LANDSCAPE ARCHITECTURE

FUNCTIONAL SUPERVISOR
 ELBERT COX

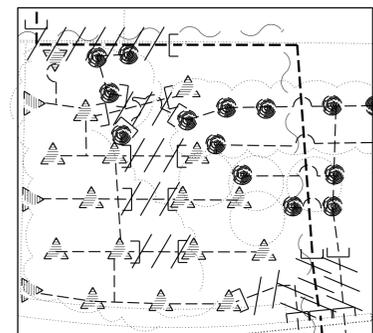
CALCULATED/DESIGNED BY
 KEVIN GALLO

CHECKED BY
 KEN THOMSON

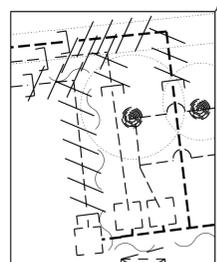
REVISED BY
 KEVIN GALLO

DATE REVISED

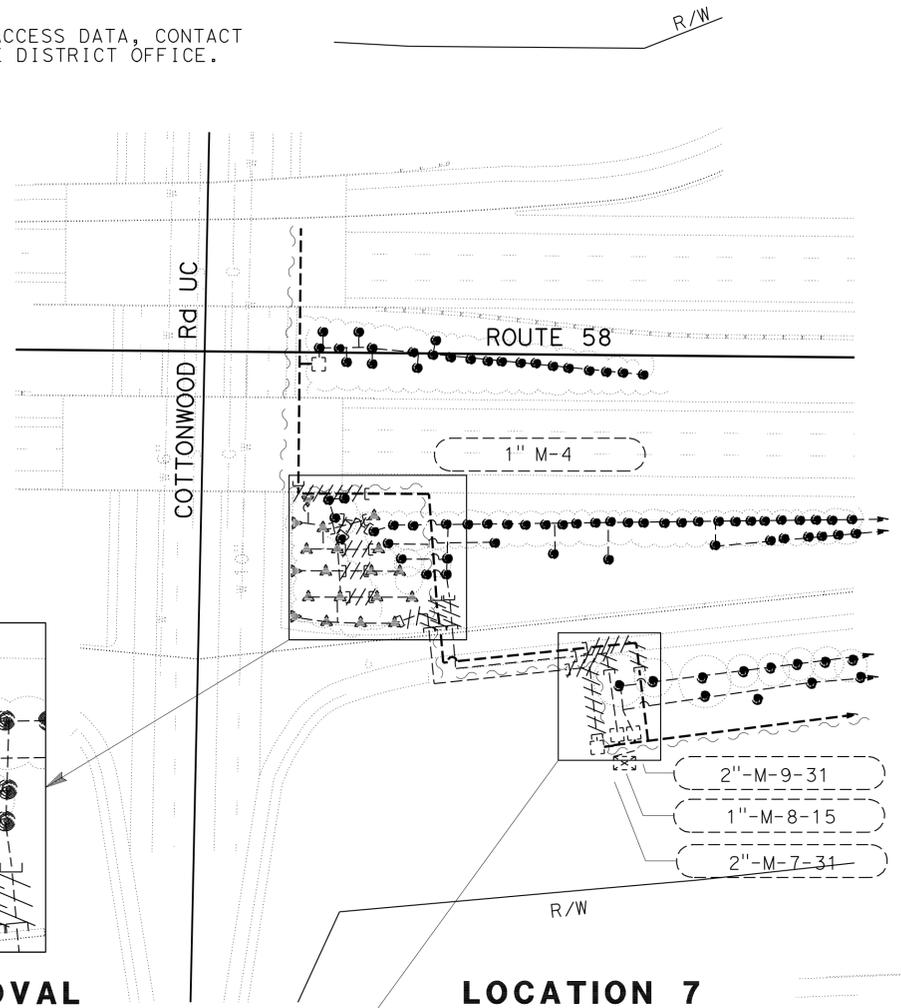
**IRRIGATION REMOVAL
 DETAIL
 NO SCALE**



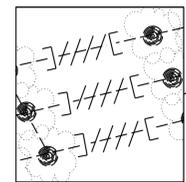
**IRRIGATION REMOVAL
 DETAIL
 NO SCALE**



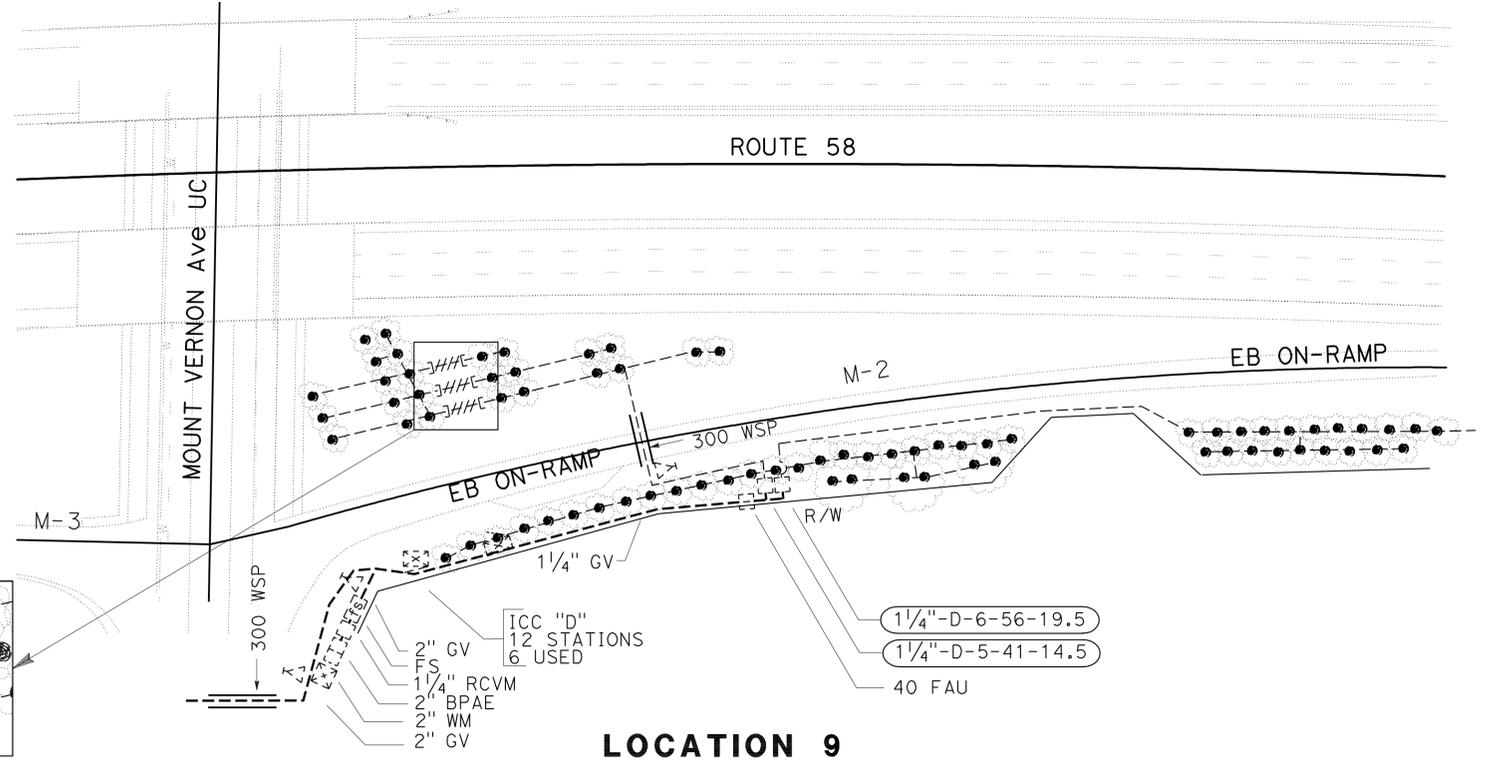
**LOCATION 7
 PM R55.41**



**IRRIGATION REMOVAL
 DETAIL
 NO SCALE**



**LOCATION 9
 PM R56.41**



**IRRIGATION REMOVAL PLAN
 IR-7**

THIS PLAN IS ACCURATE FOR IRRIGATION REMOVAL WORK ONLY.

SCALE: 1" = 50'

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans LANDSCAPE ARCHITECTURE

FUNCTIONAL SUPERVISOR
 ELBERT COX

CALCULATED/DESIGNED BY
 KEVIN GALLO

CHECKED BY
 KEN THOMSON

REVISED BY
 DATE

NOTES:

1. FOR ACCURATE RIGHT OF WAY AND ACCESS DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. PIPE SHALL BE SIZED TO FIT EXISTING CONDITIONS.

LEGEND

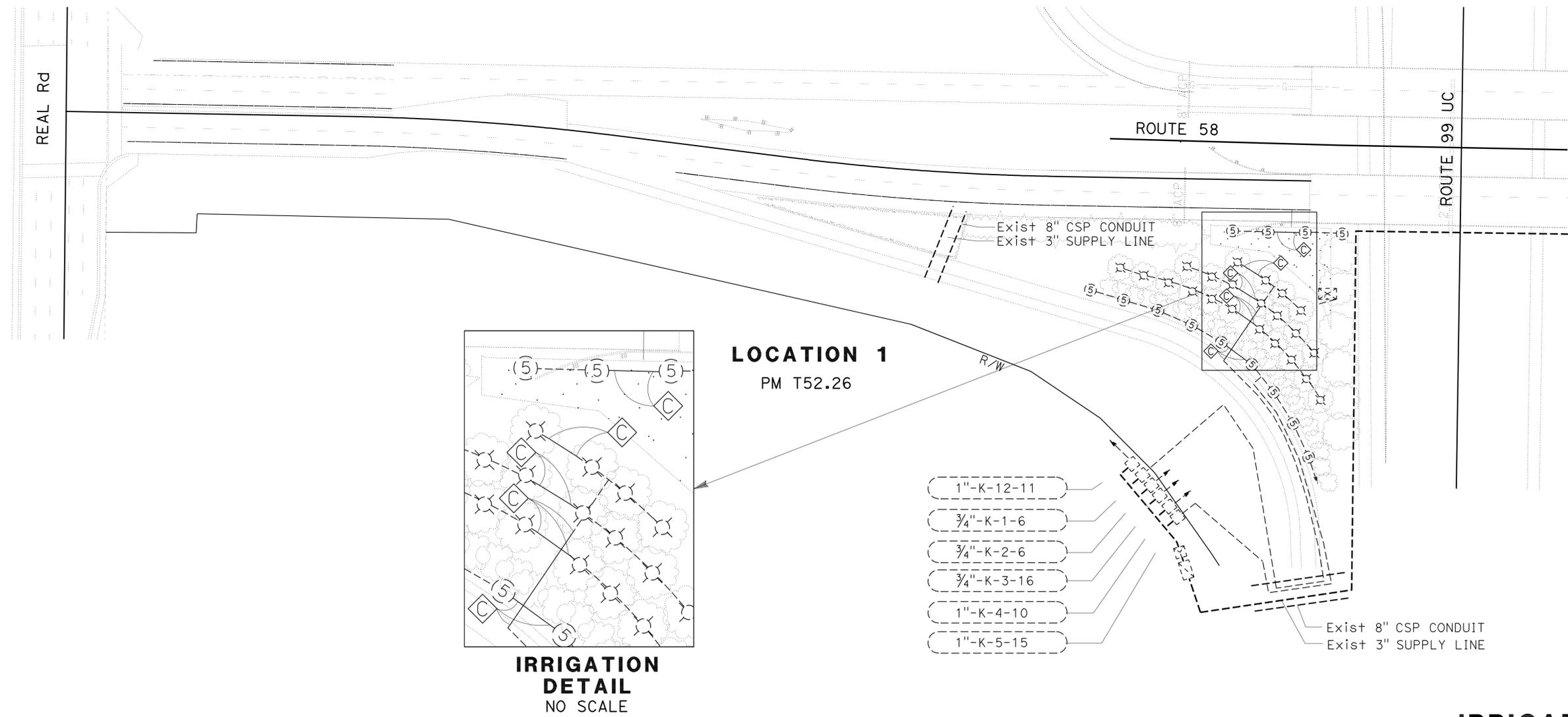
◊ CONNECT TO EXISTING SYSTEM

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	27	57


 LICENSED LANDSCAPE ARCHITECT
 7-26-10
 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.



THIS PLAN IS ACCURATE FOR IRRIGAION WORK ONLY.

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

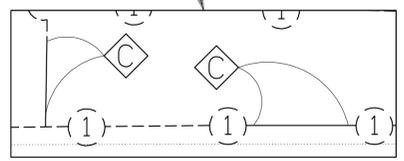
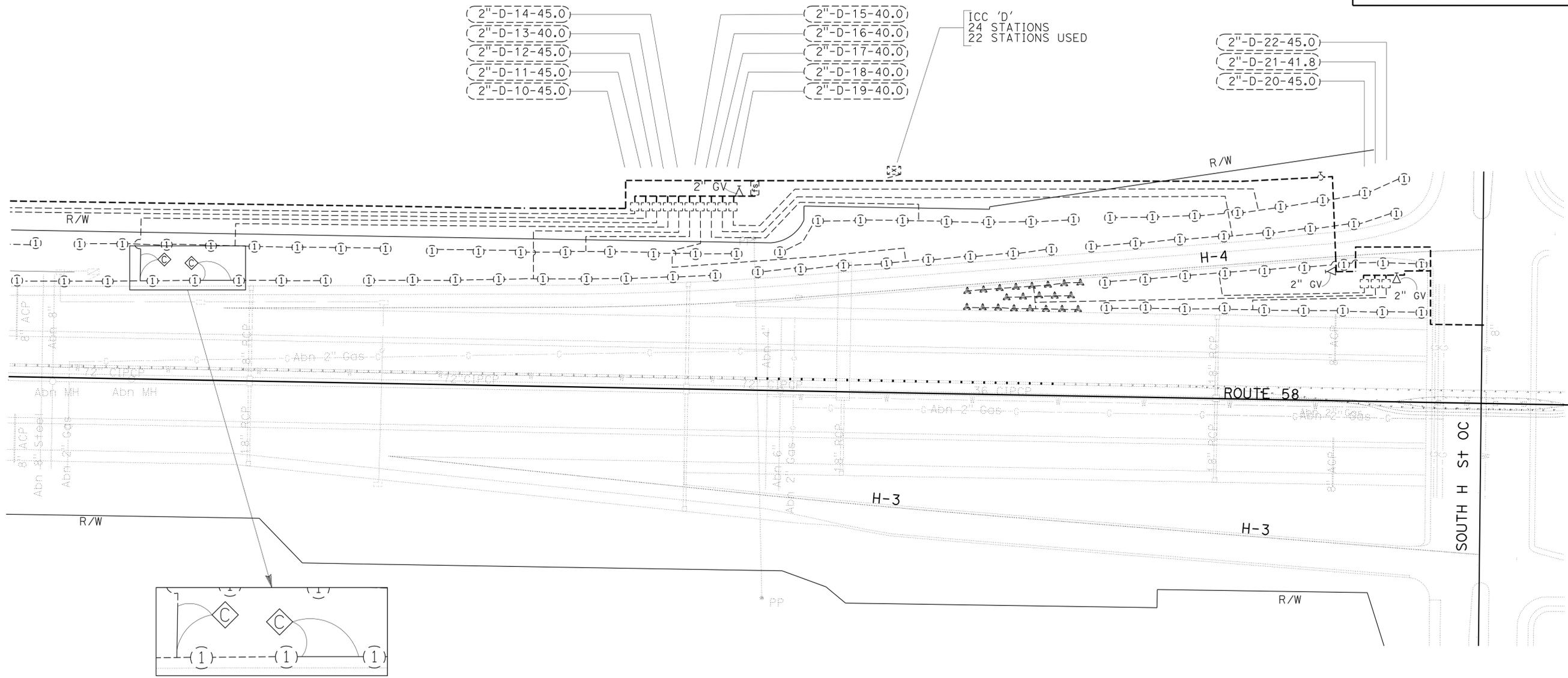
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	28	57

Kevin Gallo
 LICENSED LANDSCAPE ARCHITECT
 7-26-10
 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:

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

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans LANDSCAPE ARCHITECTURE
 FUNCTIONAL SUPERVISOR: ELBERT COX
 CALCULATED/DESIGNED BY: KEVIN GALLO
 CHECKED BY: KEN THOMSON
 REVISED BY: KEVIN GALLO
 DATE REVISED: KEN THOMSON



LOCATION 3
PM R53.25

THIS PLAN IS ACCURATE FOR IRRIGATION WORK ONLY.

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

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	29	57

Kevin Gallo
 LICENSED LANDSCAPE ARCHITECT

7-26-10
 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.

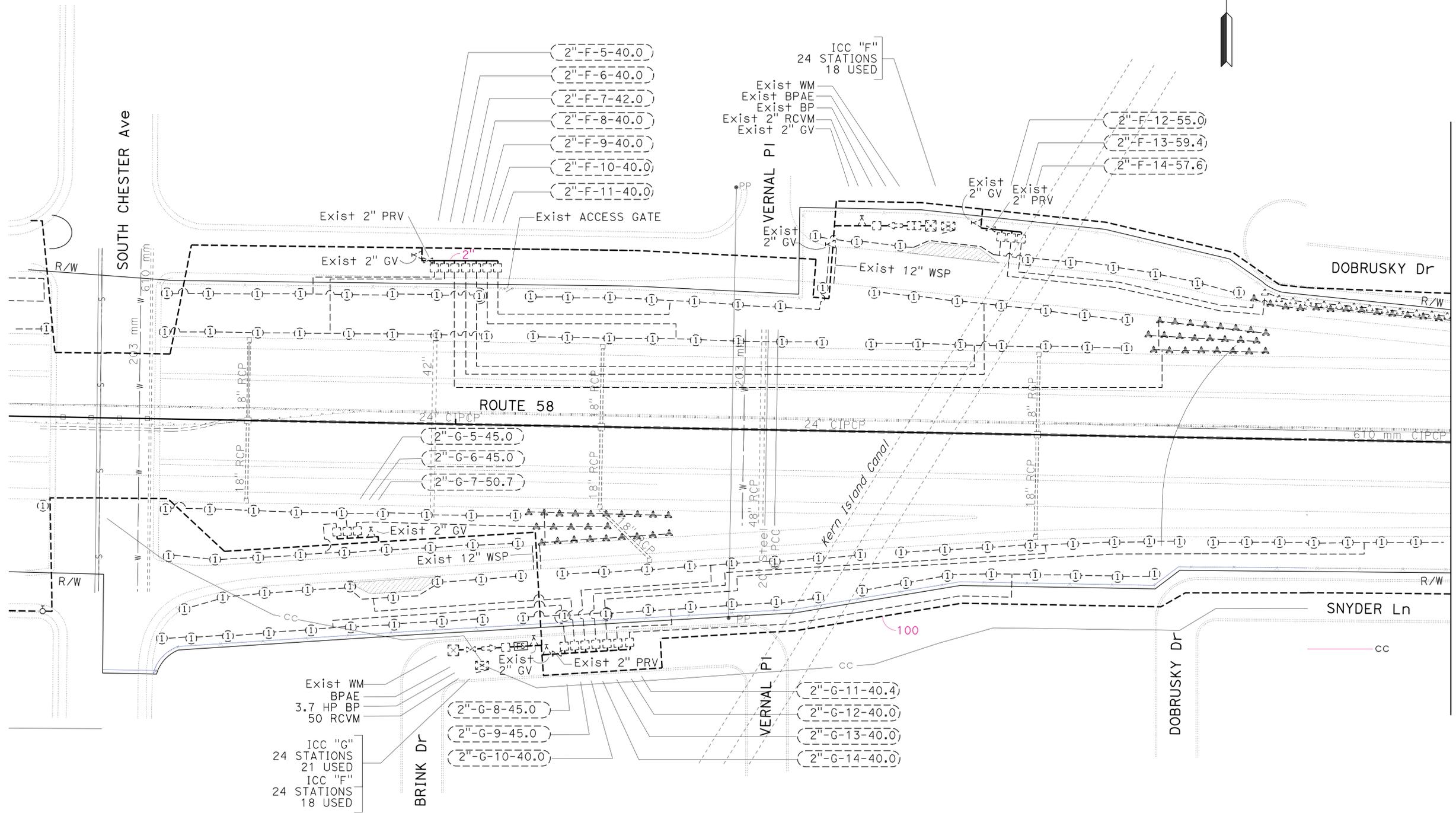
NOTE:

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



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans LANDSCAPE ARCHITECTURE

FUNCTIONAL SUPERVISOR: ELBERT COX
 CALCULATED/DESIGNED BY: KEVIN GALLO
 CHECKED BY: KEN THOMSON
 REVISED BY: KEVIN GALLO
 DATE REVISED: KEN THOMSON



WEST OF LOCATION 4

THIS PLAN IS ACCURATE FOR IRRIGATION WORK ONLY.

IRRIGATION PLAN
IP-3

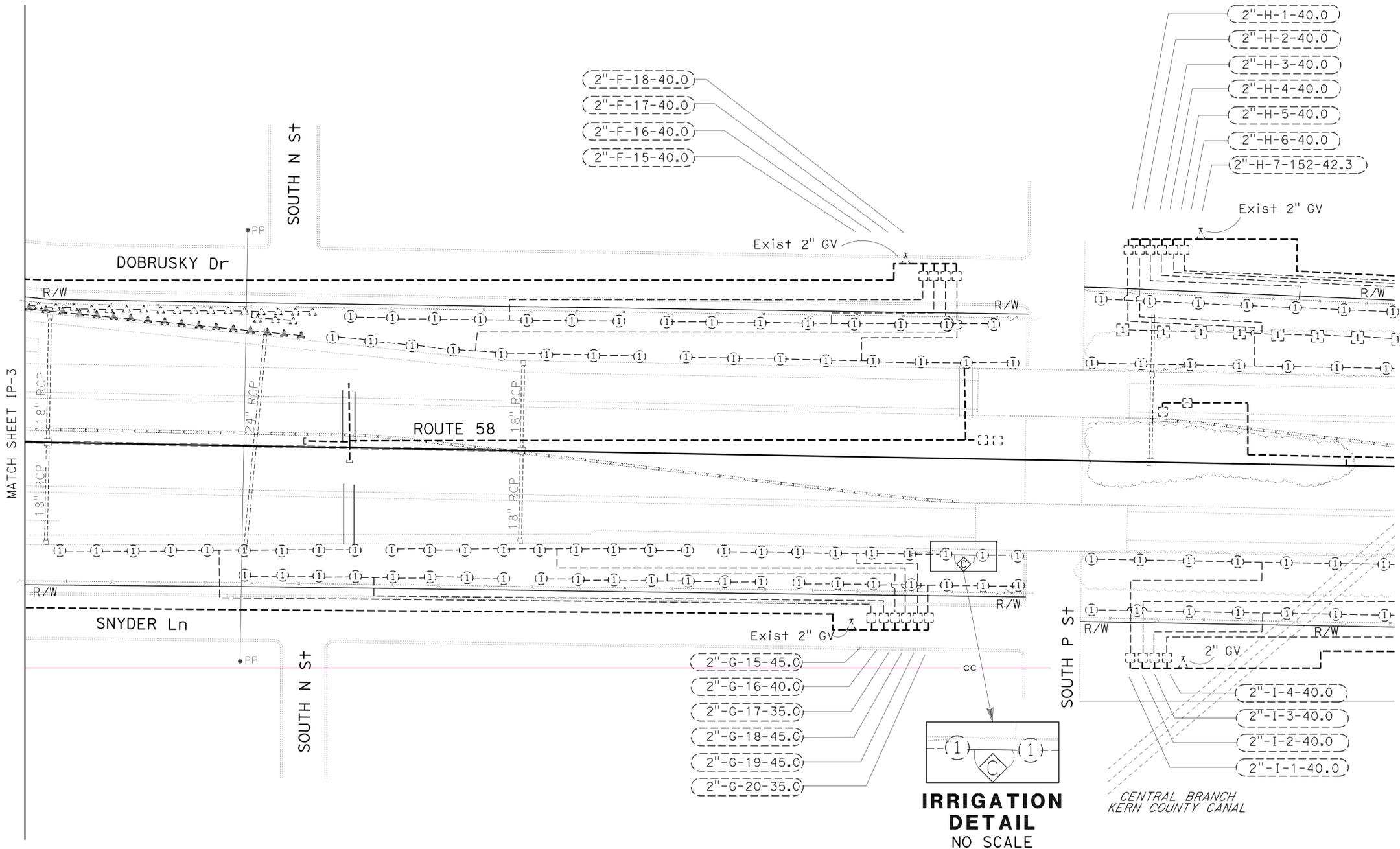
SCALE: 1" = 50'

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	30	57

Kevin Gallo
 LICENSED LANDSCAPE ARCHITECT
 7-26-10
 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:

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



- (2"-F-18-40.0)
- (2"-F-17-40.0)
- (2"-F-16-40.0)
- (2"-F-15-40.0)

- (2"-H-1-40.0)
- (2"-H-2-40.0)
- (2"-H-3-40.0)
- (2"-H-4-40.0)
- (2"-H-5-40.0)
- (2"-H-6-40.0)
- (2"-H-7-152-42.3)

- (2"-G-15-45.0)
- (2"-G-16-40.0)
- (2"-G-17-35.0)
- (2"-G-18-45.0)
- (2"-G-19-45.0)
- (2"-G-20-35.0)

- (2"-I-4-40.0)
- (2"-I-3-40.0)
- (2"-I-2-40.0)
- (2"-I-1-40.0)



LOCATION 4
PM R53.91

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

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	REVISOR
Caltrans LANDSCAPE ARCHITECTURE	ELBERT COX	CHECKED BY	DATE REVISOR
		KEVIN GALLO	KEN THOMSON

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans LANDSCAPE ARCHITECTURE

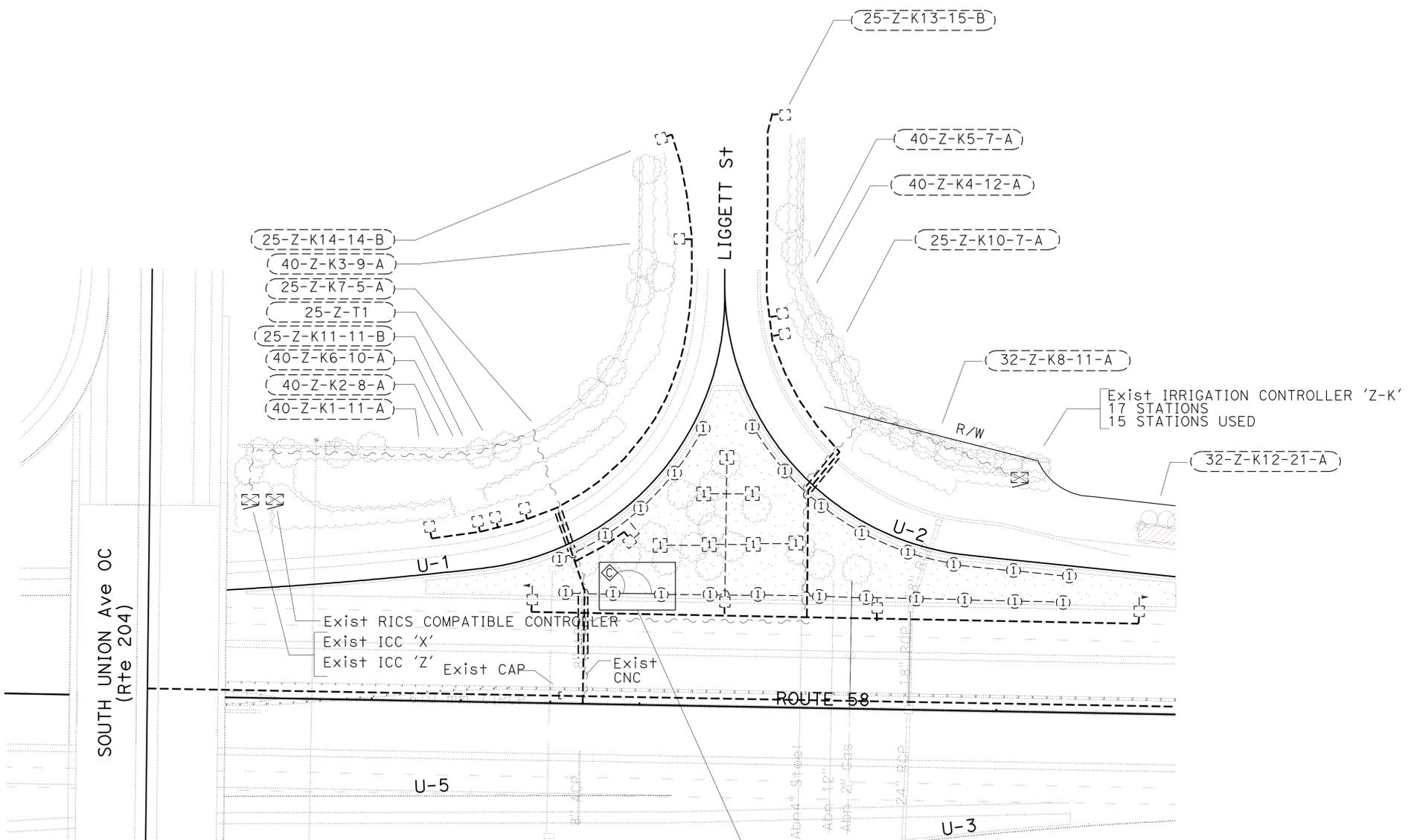
FUNCTIONAL SUPERVISOR	ELBERT COX
CALCULATED/DESIGNED BY	CHECKED BY
KEVIN GALLO	KEN THOMSON
REVISED BY	DATE REVISED

NOTE:

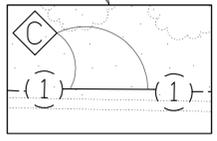
1. FOR ACCURATE RIGHT OF WAY AND ACCESS DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	31	57


 LICENSED LANDSCAPE ARCHITECT
 7-26-10
 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.

LOCATION 5
PM R54.42



IRRIGATION DETAIL
NO SCALE



THIS PLAN IS ACCURATE FOR IRRIGATION WORK ONLY.

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

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans LANDSCAPE ARCHITECTURE

FUNCTIONAL SUPERVISOR
 ELBERT COX

CALCULATED/DESIGNED BY
 KEVIN GALLO

REVISOR
 KEVIN GALLO
 KEVIN GALLO
 KEN THOMSON

REVISOR
 KEVIN GALLO
 KEN THOMSON

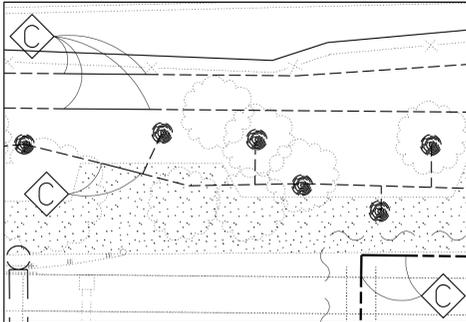
REVISOR
 KEVIN GALLO
 KEN THOMSON

NOTE:

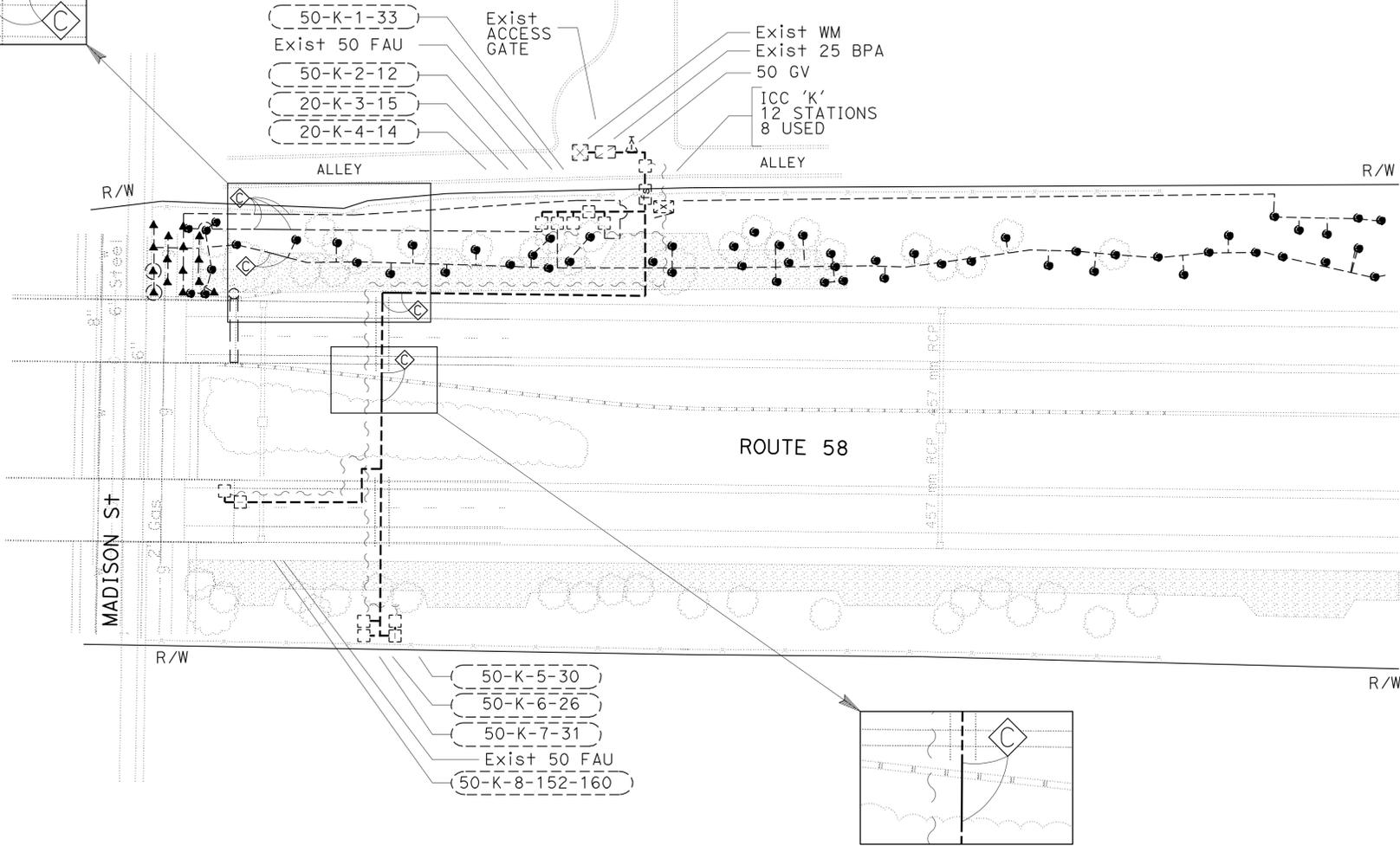
1. FOR ACCURATE RIGHT OF WAY AND ACCESS DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	32	57

Signature: *Kevin Gallo*
 LICENSED LANDSCAPE ARCHITECT
 7-26-10
 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.



IRRIGATION DETAIL
 NO SCALE



LOCATION 6
 PM R54.91

IRRIGATION DETAIL
 NO SCALE

THIS PLAN IS ACCURATE FOR IRRIGATION WORK ONLY.



USERNAME => trstrk
 DGN FILE => 601730+1006.dgn

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

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans LANDSCAPE ARCHITECTURE

FUNCTIONAL SUPERVISOR
 ELBERT COX

CALCULATED/DESIGNED BY
 KEVIN GALLO

CHECKED BY
 KEN THOMSON

REVISED BY
 KEVIN GALLO

DATE REVISED

NOTE:

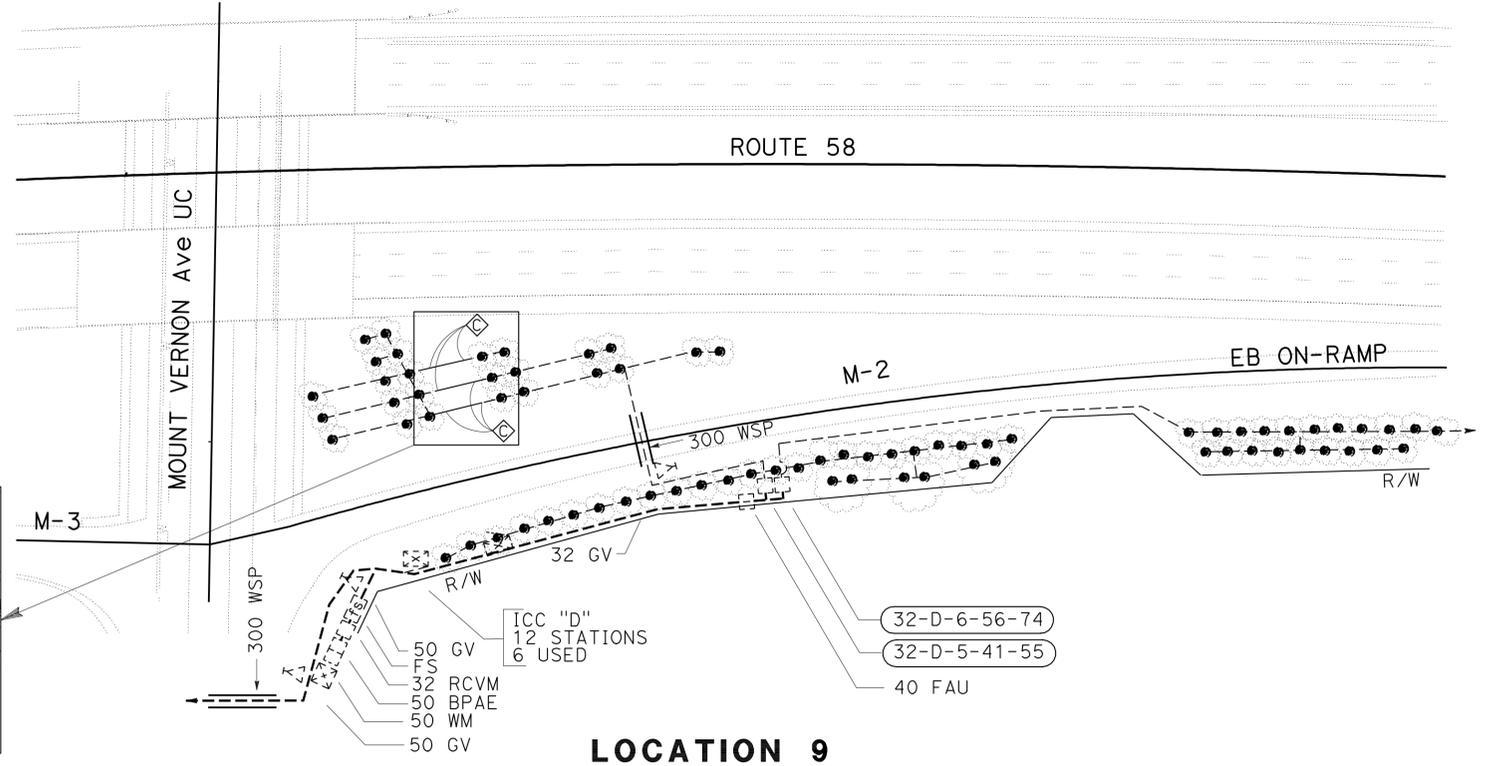
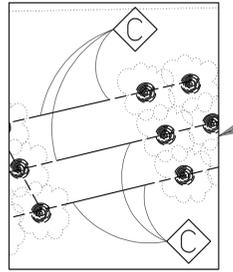
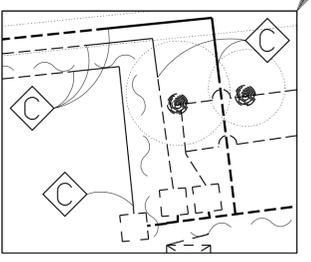
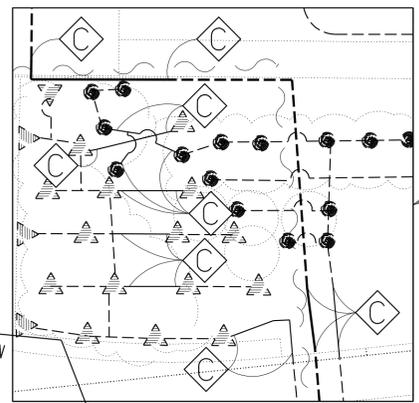
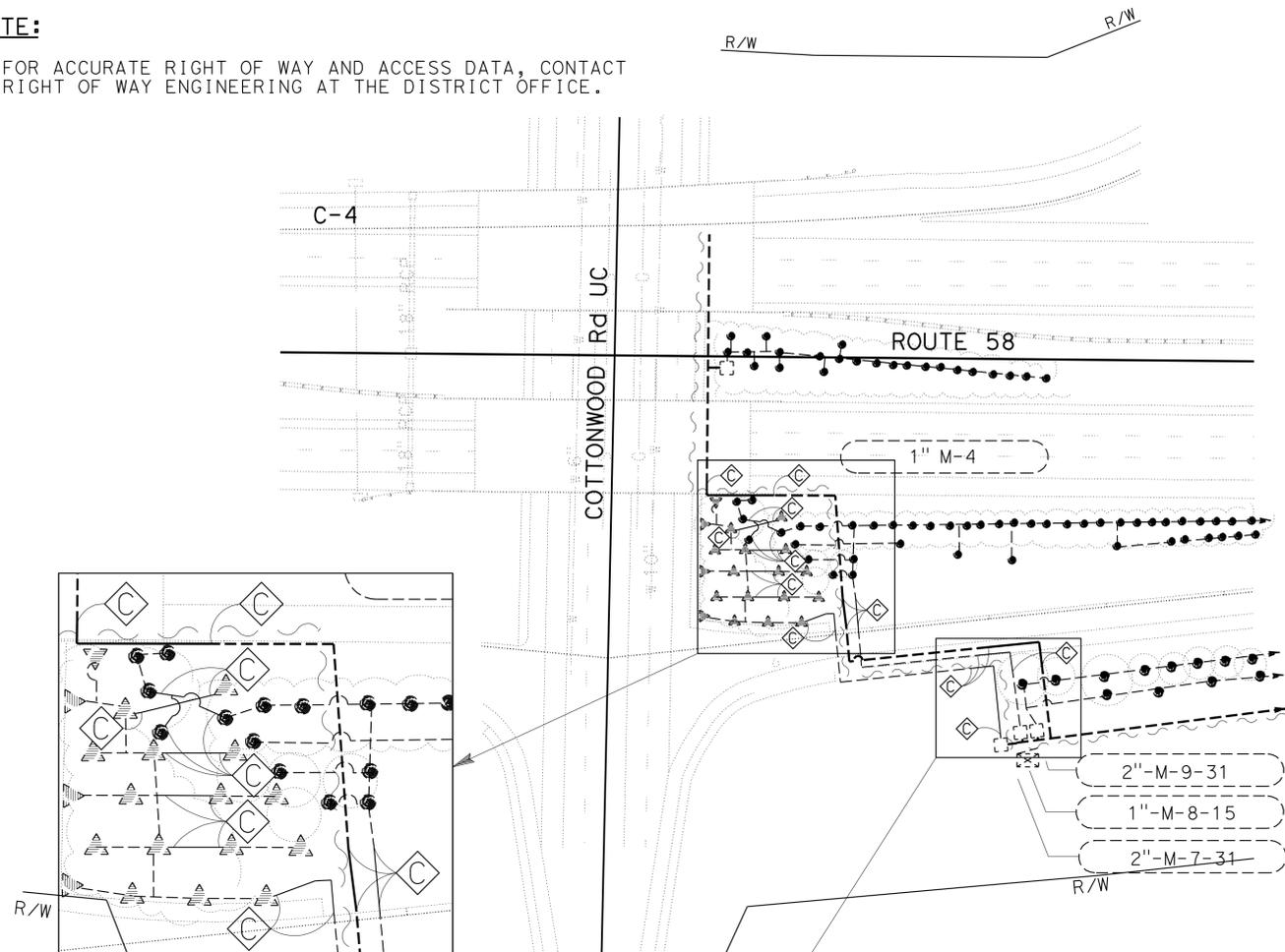
1. FOR ACCURATE RIGHT OF WAY AND ACCESS DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	33	57

Kevin Gallo
 LICENSED LANDSCAPE ARCHITECT
 Signature
 12/31/11
 Renewal Date
 12/17/09
 Date
 STATE OF CALIFORNIA

7-26-10
 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.



LOCATION 9
 PM R56.41

IRRIGATION PLAN
 SCALE: 1" = 50'
IP-7

THIS PLAN IS ACCURATE FOR IRRIGATION WORK ONLY.

RELATIVE BORDER SCALE
 1" = 100'
 0 1 2 3

USERNAME => trsrk
 DGN FILE => 601730+1007.dgn

CU 06340

EA 0L7301

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® ELECTRICAL DESIGN

FUNCTIONAL SUPERVISOR
 ALI BAKHDOUD

REVISOR
 XAVIER ALFARO
 PAUL MATOS

DESIGNED BY
 CALULATED-DESIGNED BY

CHECKED BY

DATE

REVISIONS

NOTES: (FOR SHEET E-1 TO SHEET E-9)

1. GROUNDING ELECTRODE IN PULL BOX.
2. FOR ACCURATE RIGHT OF WAY AND ACCESS DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
3. 120/240 V, 1Ø, 3-WIRE, TYPE III-CF SERVICE EQUIPMENT ENCLOSURE. INSTALL 240/480 STEP-UP XFMR FOR HIGHWAY AND SIGN LIGHTING (SEE SERVICE WIRING DIAGRAM ON SHEET E-9).
4. ALL PULL BOXES SHALL BE No. 5(E) UNLESS OTHERWISE NOTED.
5. FOR MVDS SYSTEM DETAILS, SEE MVDS LOCATION TABLE ON SHEET E-9.

LEGEND:

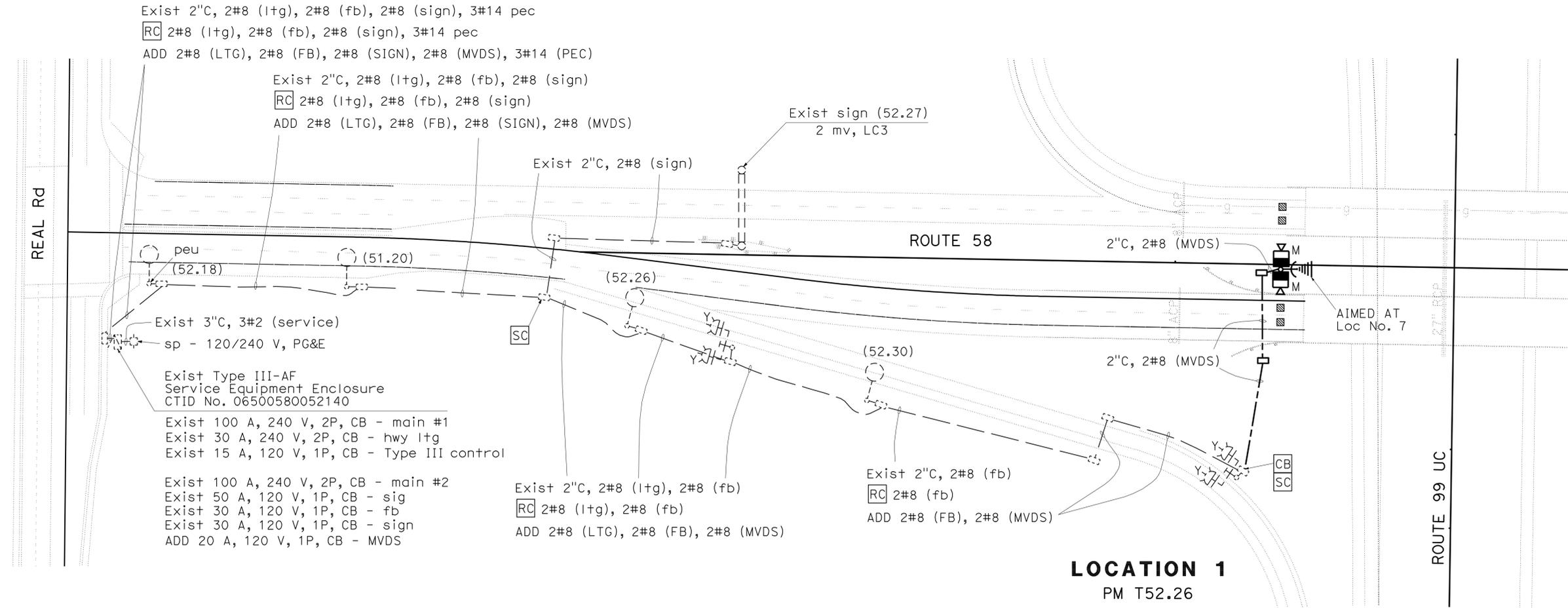
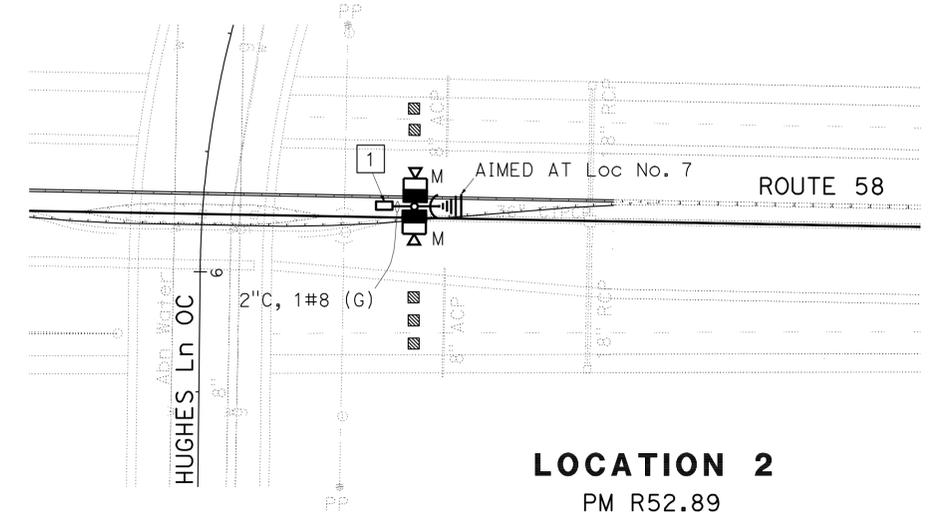
- OMNIDIRECTIONAL ANTENNA
- DIRECTIONAL ANTENNA

ABBREVIATIONS:

- CTID - CALTRANS IDENTIFICATION
- MVDS - MICROWAVE VEHICLE DETECTION SYSTEM
- PG&E - PACIFIC GAS AND ELECTRIC COMPANY
- PV - PHOTOVOLTAIC
- RJ - REGISTERED JACK
- EIA-232 - STANDARD FOR SERIAL COMMUNICATIONS
- ATT - AMERICAN TELEPHONE AND TELEGRAPH
- COAX - COAXIAL
- CAT - CATEGORY
- DSL - DIGITAL SUBSCRIBER LINE

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	34	57

Xavier Alfaro 5-12-10
 REGISTERED ELECTRICAL ENGINEER DATE
 7-26-10
 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.



**WIRELESS INTERCONNECT SYSTEM
 MICROWAVE VEHICLE DETECTION SYSTEM
 E-1**

THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

SCALE: 1" = 50'

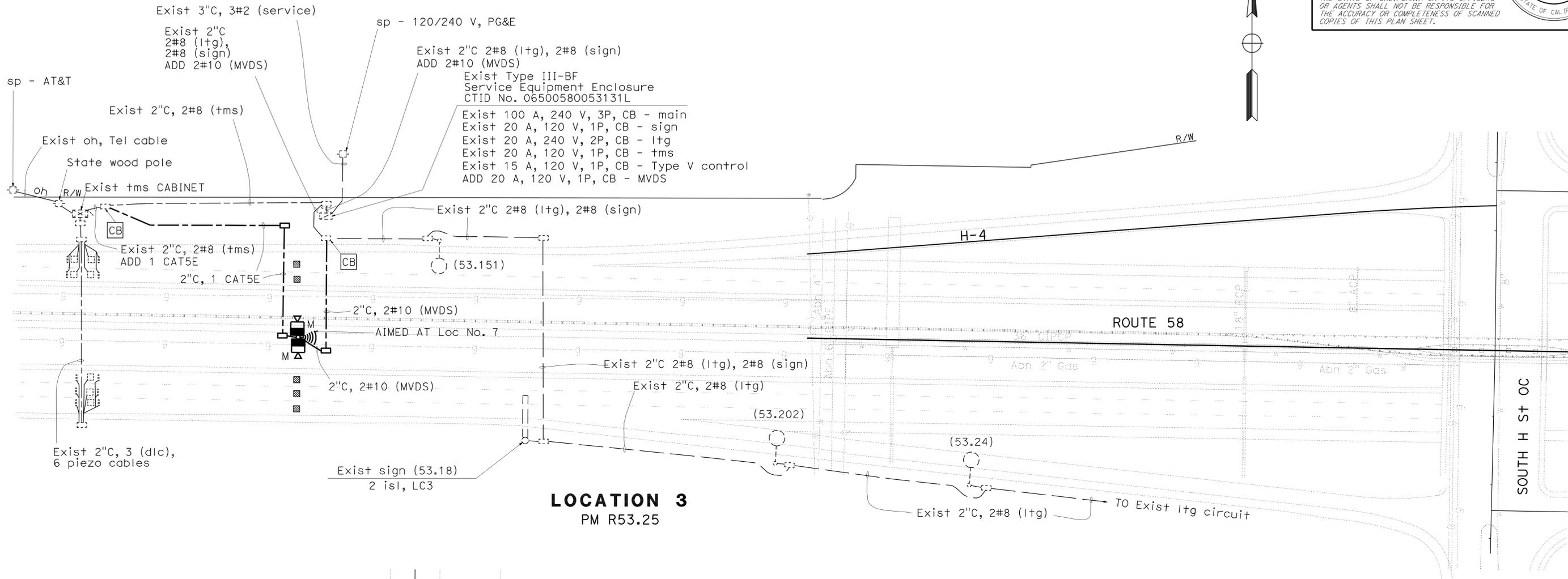
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	35	57

<i>Xavier Alfaro</i> 5-12-10 REGISTERED ELECTRICAL ENGINEER DATE	
7-26-10 PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER XAVIER I. ALFARO No. E17488 Exp. 6-30-11 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.

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



LOCATION 3
 PM R53.25



LOCATION 4
 PM R53.91

**WIRELESS INTERCONNECT SYSTEM
 MICROWAVE VEHICLE DETECTION SYSTEM**

SCALE: 1" = 50'

E-2

THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	REVISOR
Caltrans ELECTRICAL DESIGN	ALI BAKHDOUD	XAVIER ALFARO PAUL MATOS	DATE REVISOR

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	37	57

<i>Xavier Alfaro</i>	5-12-10
REGISTERED ELECTRICAL ENGINEER	DATE
7-26-10	
PLANS APPROVAL DATE	

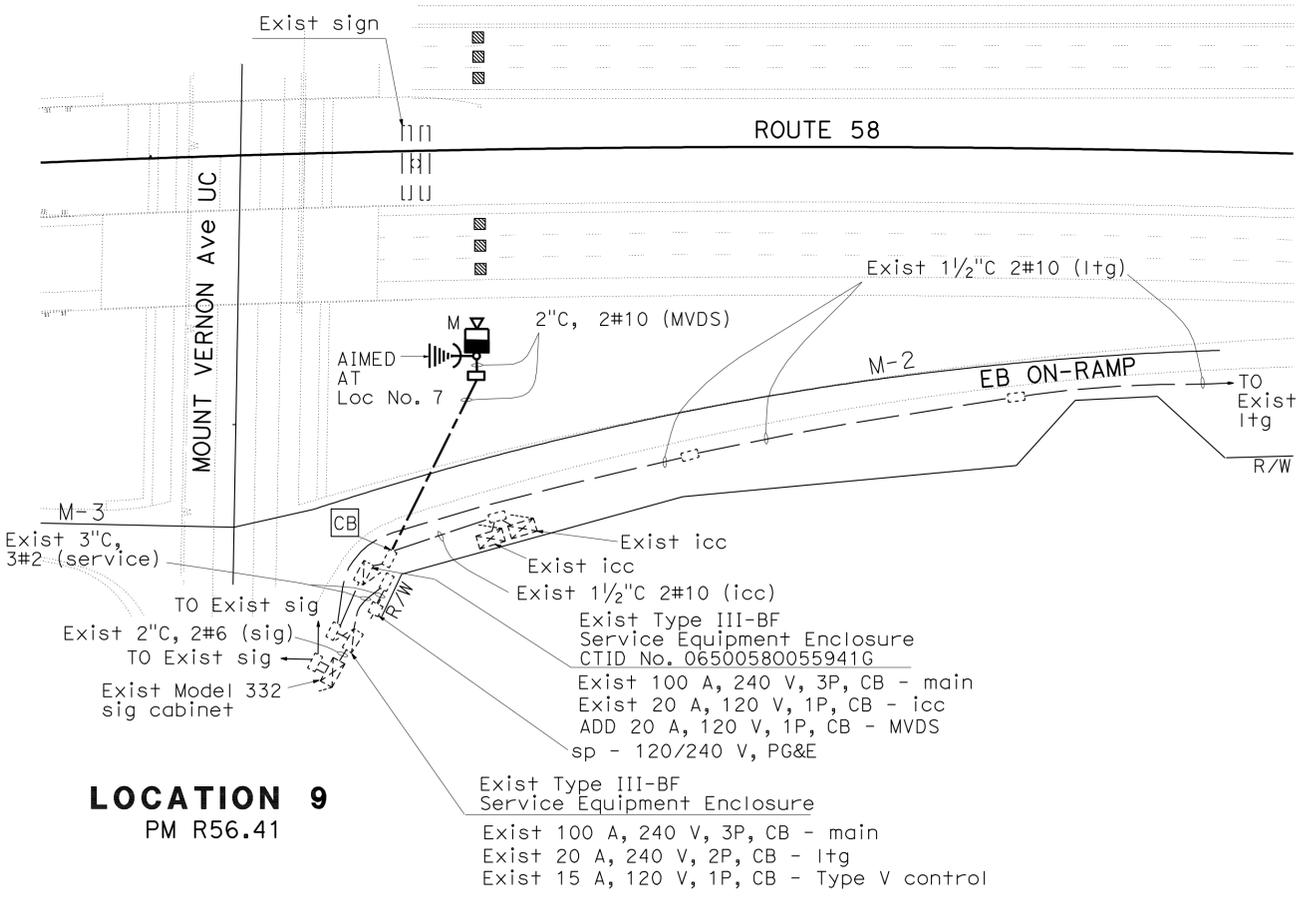
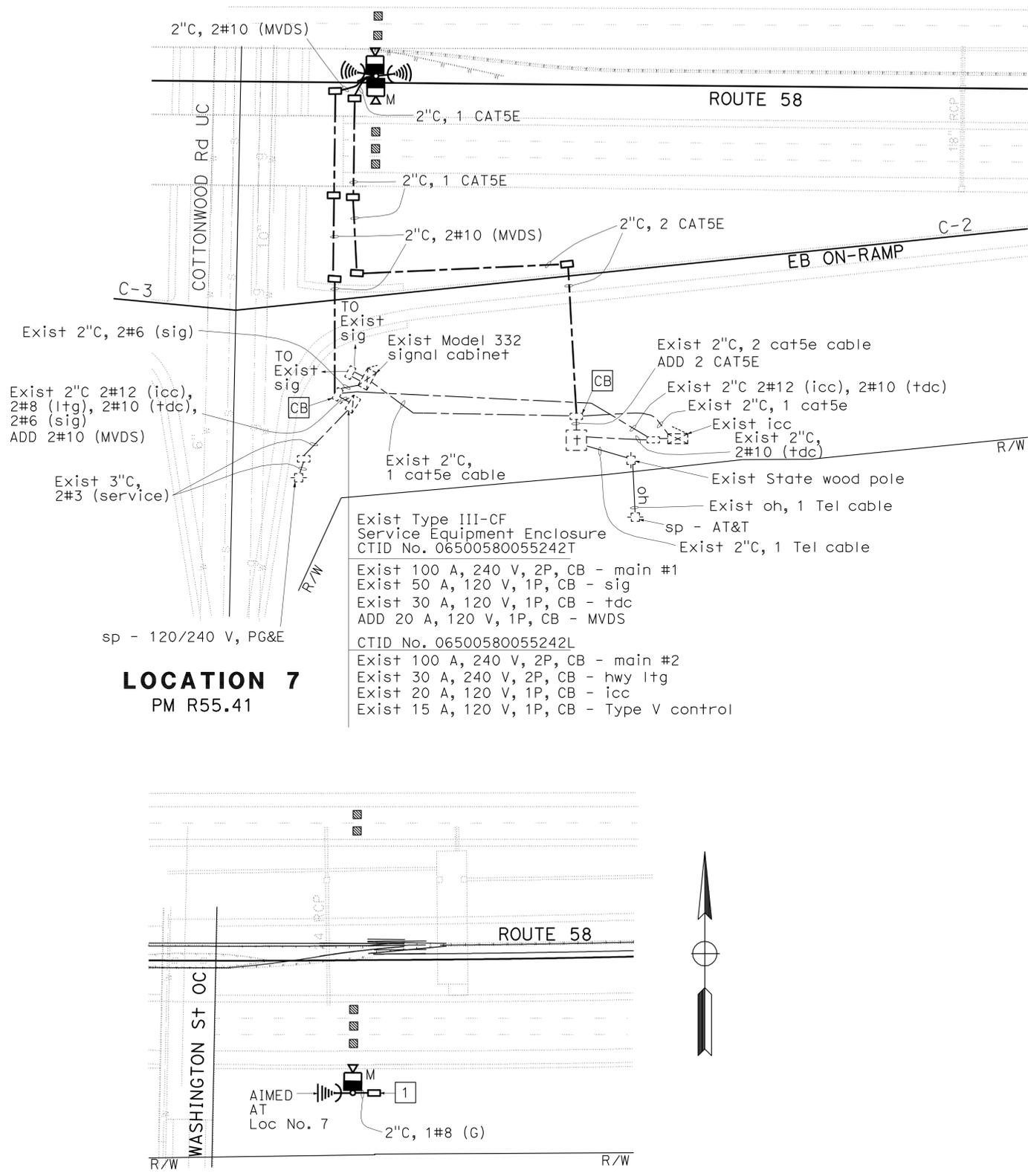
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTE:

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

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN

FUNCTIONAL SUPERVISOR: ALI BARHOUD
 CALCULATED/DESIGNED BY: XAVIER ALFARO
 CHECKED BY: PAUL MATOS
 REVISED BY: XAVIER ALFARO
 DATE REVISED: XAVIER ALFARO



**WIRELESS INTERCONNECT SYSTEM
 MICROWAVE VEHICLE DETECTION SYSTEM
 E-4**

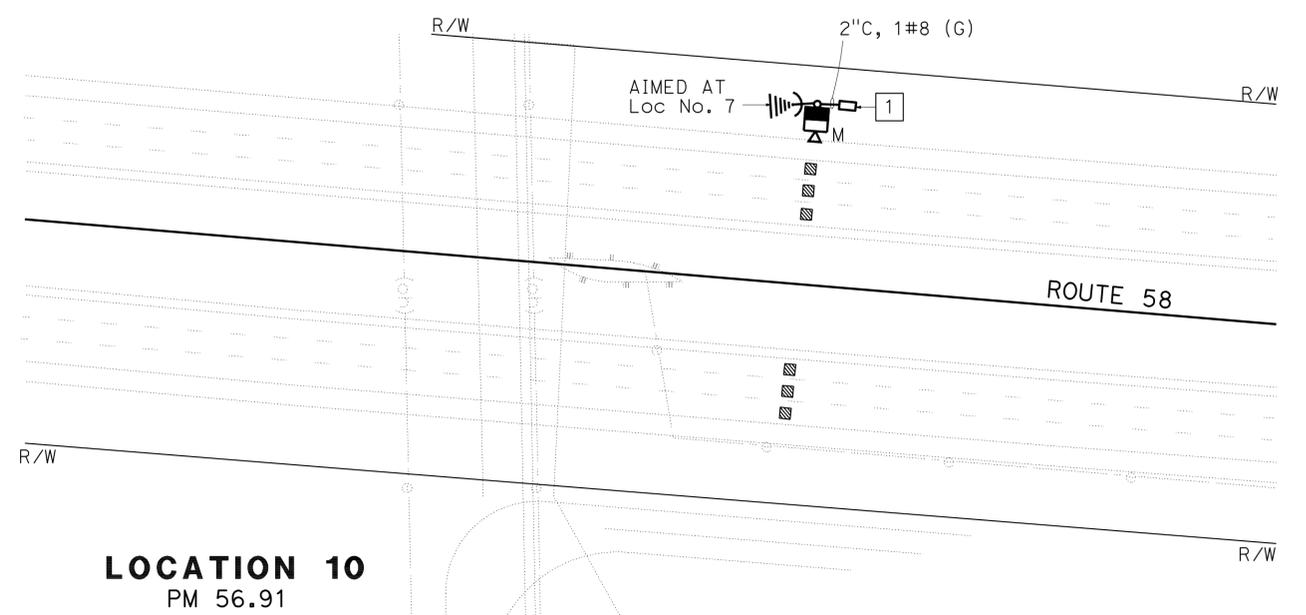
THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

SCALE: 1" = 50'

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	38	57

5-12-10 REGISTERED ELECTRICAL ENGINEER DATE	7-26-10 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>	

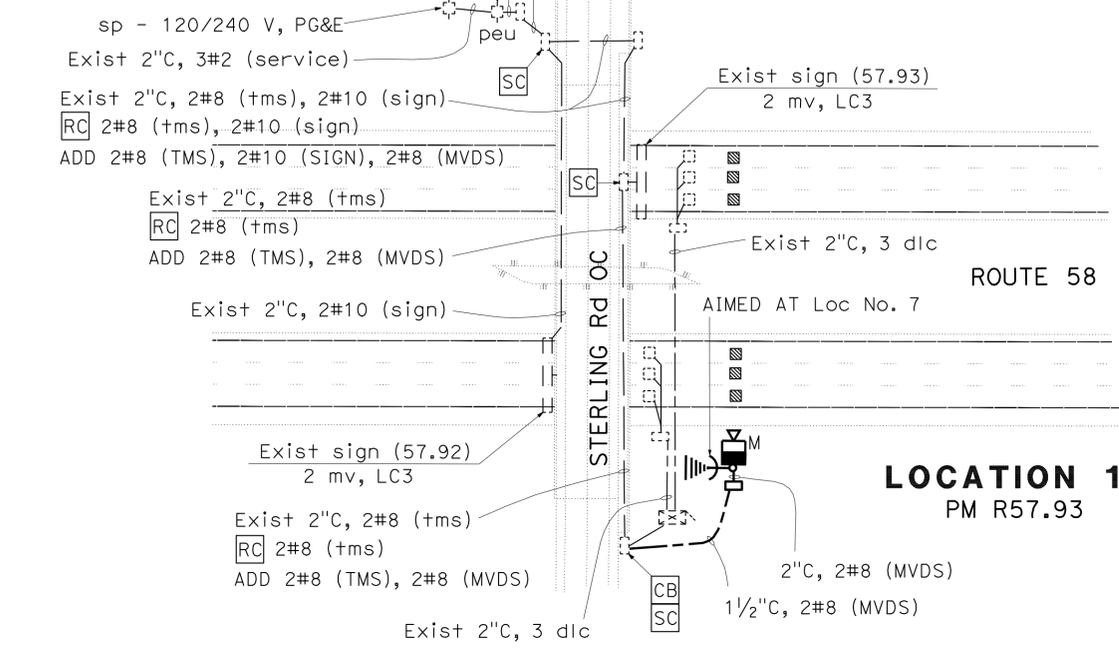
NOTE:
 1. FOR ACCURATE RIGHT OF WAY AND ACCESS DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



LOCATION 10
 PM 56.91

Exist 1" C, 2#10 (sign), 2#8 (tms)
 RC 2#10 (sign), 2#8 (tms)
 ADD 2#8 (TMS), 2#10 (SIGN), 2#8 (MVDS)

Exist TYPE JM service
 Exist 100 A, 240 V, 2P, CB - main
 Exist 30 A, 240 V, 2P, CB - sign
 Exist 30 A, 120 V, 1P, CB - tms
 ADD 20 A, 120 V, 1P, CB - MVDS



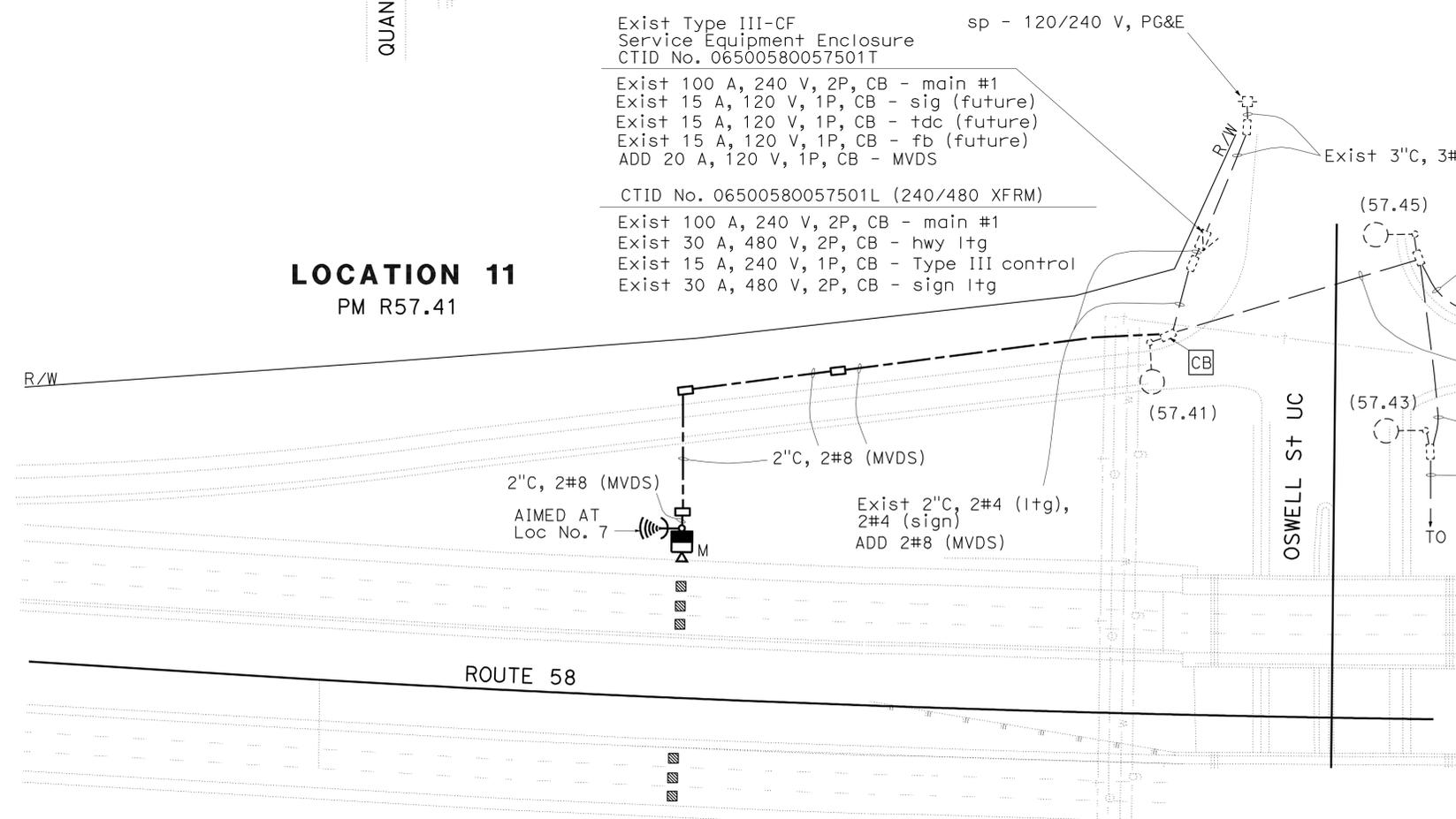
LOCATION 12
 PM R57.93

Exist Type III-CF Service Equipment Enclosure
 CTID No. 06500580057501T

Exist 100 A, 240 V, 2P, CB - main #1
 Exist 15 A, 120 V, 1P, CB - sig (future)
 Exist 15 A, 120 V, 1P, CB - tdc (future)
 Exist 15 A, 120 V, 1P, CB - fb (future)
 ADD 20 A, 120 V, 1P, CB - MVDS

CTID No. 06500580057501L (240/480 XFRM)

Exist 100 A, 240 V, 2P, CB - main #1
 Exist 30 A, 480 V, 2P, CB - hwy Itg
 Exist 15 A, 240 V, 1P, CB - Type III control
 Exist 30 A, 480 V, 2P, CB - sign Itg



LOCATION 11
 PM R57.41

**WIRELESS INTERCONNECT SYSTEM
 MICROWAVE VEHICLE DETECTION SYSTEM**

THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

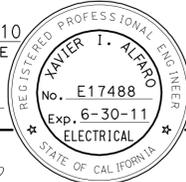
SCALE: 1" = 50' **E-5**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	REGISTERED PROFESSIONAL ENGINEER
Caltrans ELECTRICAL DESIGN	XAVIER ALFARO
FUNCTIONAL SUPERVISOR	PAUL MATOS
CALCULATED/DESIGNED BY	REVISOR
CHECKED BY	DATE REVISED
ALI BAKHOUD	

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	40	57

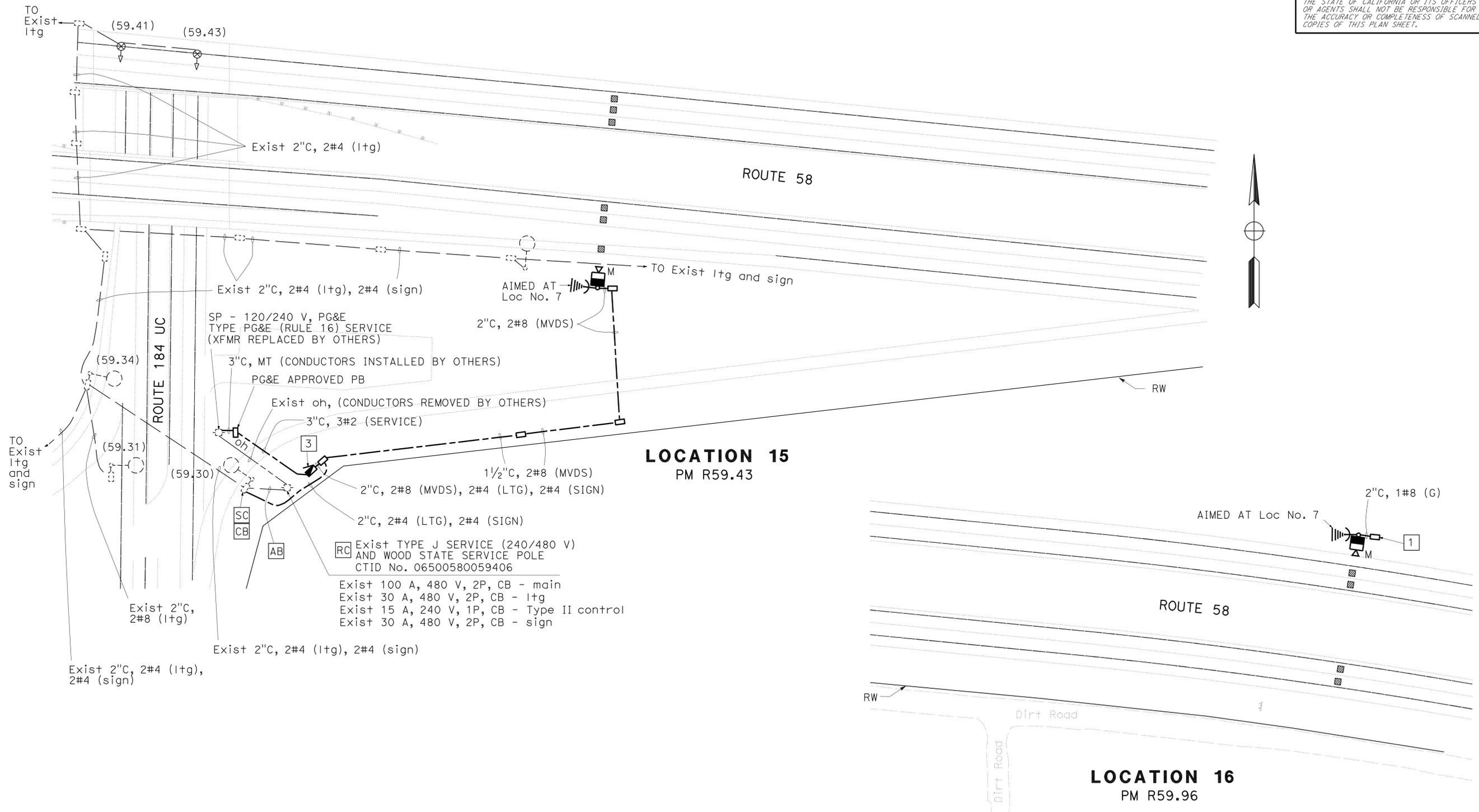
<i>Xavier Alfaro</i>	5-12-10
REGISTERED ELECTRICAL ENGINEER	DATE
7-26-10	
PLANS APPROVAL DATE	

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:

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



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® ELECTRICAL DESIGN

REVISOR BY
 DATE REVISED

XAVIER ALFARO
 PAUL MATOS

CALCULATED/DESIGNED BY
 CHECKED BY

FUNCTIONAL SUPERVISOR
 ALI BAKHDOD

THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

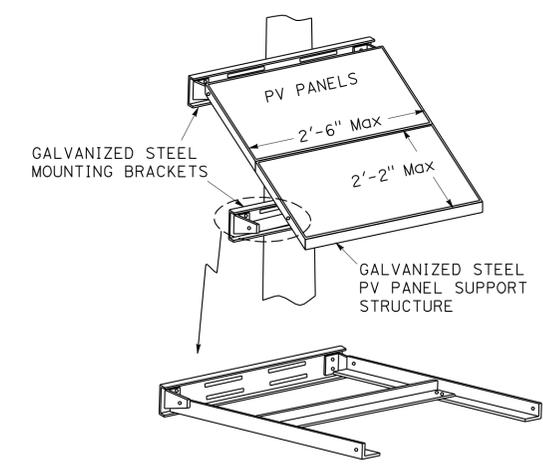
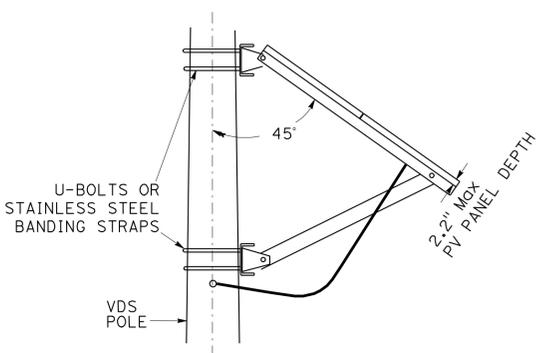
SCALE: 1" = 50'

E-7

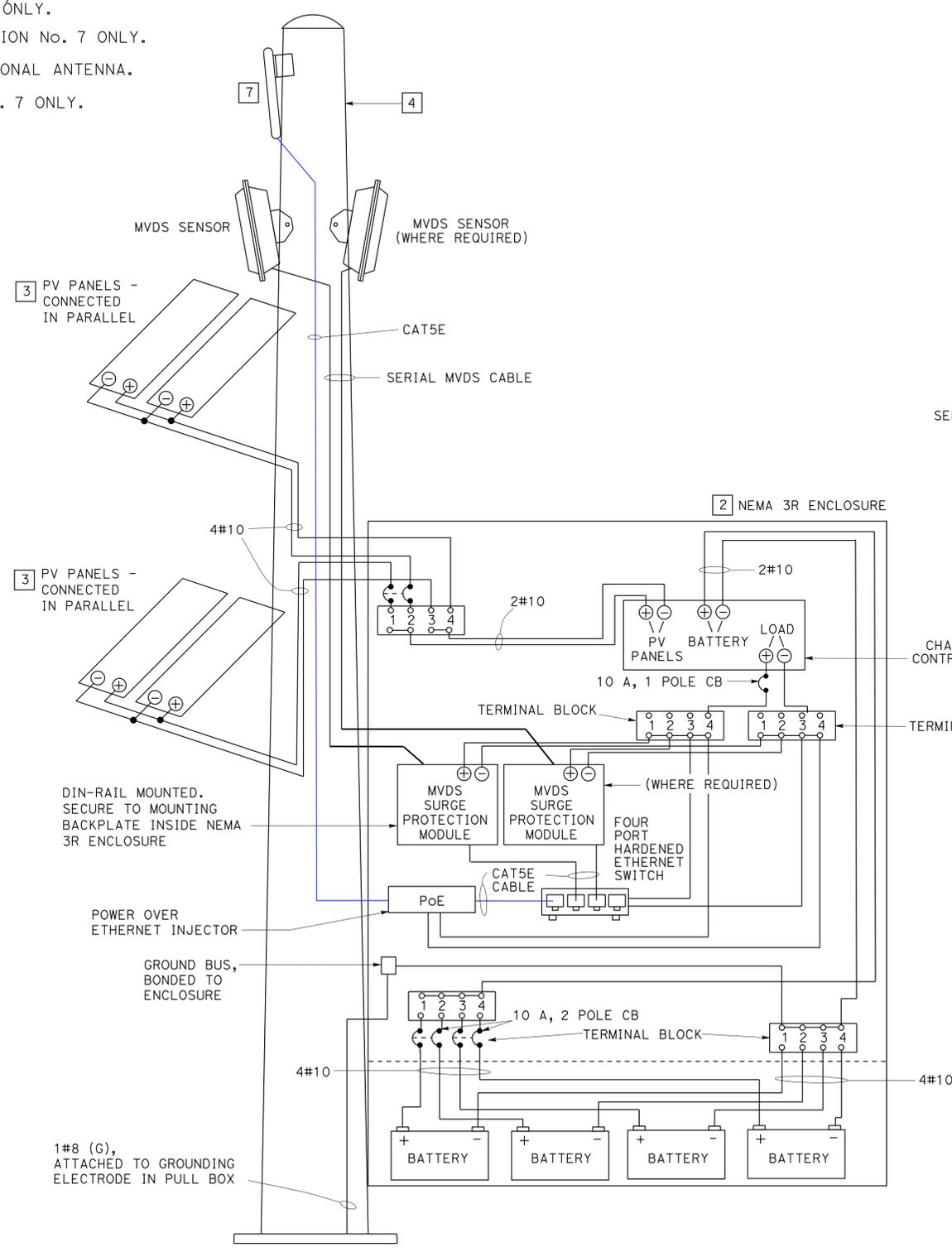
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	41	57
<i>Xavier Alfaro</i> 5-12-10 REGISTERED ELECTRICAL ENGINEER DATE					
7-26-10			PLANS APPROVAL DATE		
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

NOTES: (FOR THIS SHEET ONLY)

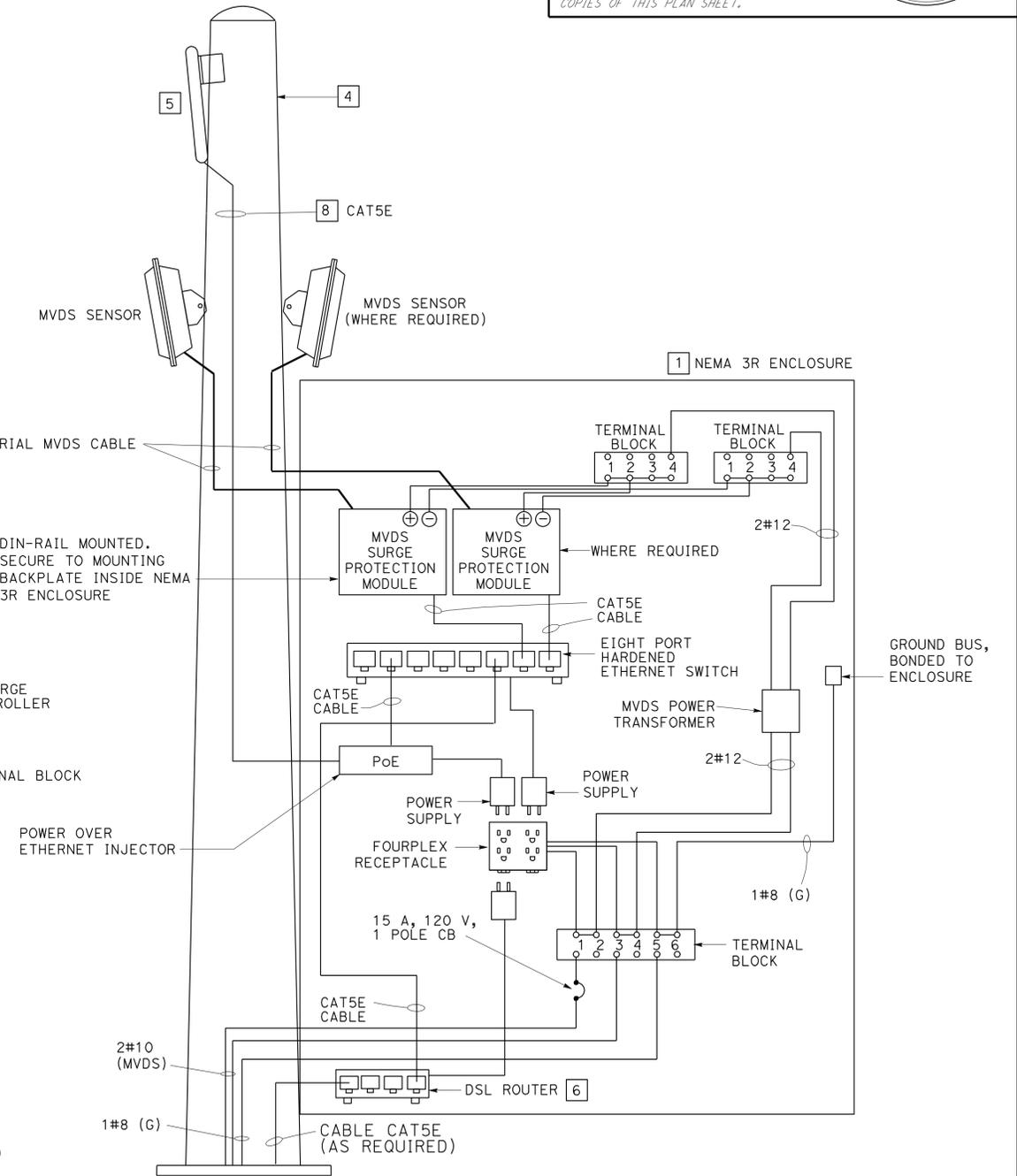
- 1 Min DIMENSIONS 24" W x 24" H x 12" D NEMA 3R ENCLOSURE WITH HINGED DOOR, PADLOCK HASP AND INTERIOR PANEL FOR THE EQUIPMENT.
- 2 Min DIMENSIONS 56" W x 26" H x 12" D NEMA 3R ENCLOSURE WITH HINGED DOOR, PADLOCK HASP AND INTERIOR PANEL FOR THE EQUIPMENT.
- 3 FOR PV PANEL MOUNTING DETAILS, SEE DETAIL C.
- 4 FOR VDS POLE TYPE SEE MVDS LOCATION TABLE ON SHEET E-9.
- 5 RADIO TRANSCEIVER WITH INTEGRATED ANTENNA, EXCEPT 2-ACCESS POINTS AT LOCATION No. 7 ONLY.
- 6 USE DSL ROUTER PROVIDED BY AT&T AT LOCATION No. 7 ONLY.
- 7 RADIO TRANSCEIVER WITH INTEGRATED DIRECTIONAL ANTENNA.
- 8 TWO CAT5E ETHERNET CABLES AT LOCATION No. 7 ONLY.



**PV MOUNTING DETAIL
DETAIL C**



**LOCATIONS: 2, 4, 5, 8, 10, 14, 16
DETAIL A**



**LOCATIONS: 1, 3, 6, 7, 9, 11, 12, 13, 15
DETAIL B**

**WIRELESS INTERCONNECTION SYSTEM
MICROWAVE VEHICLE DETECTION SYSTEM
(ELECTRICAL DETAILS)
E-8**

NO SCALE

THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

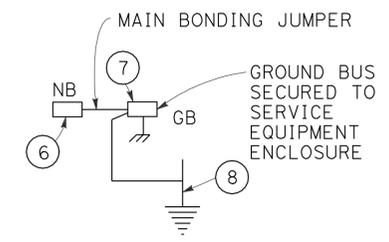
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN
 FUNCTIONAL SUPERVISOR: ALI BAKHDOUN
 CALCULATED/DESIGNED BY: XAVIER ALFARO
 CHECKED BY: PAUL MATOS
 REVISIONS: (None shown)

TYPE III-CF SERVICE EQUIPMENT LEGEND

ITEM No.	COMPONENT	NAME PLATE DESCRIPTION	ITEM No.	COMPONENT	NAME PLATE DESCRIPTION
1	NEUTRAL LUG		13	15 A, 120 V, 1P, CB	SPARE (120 V)
2	LANDING LUG		14	20 A, 480 V, 2P, CB	SIGN ILLUMINATION (480 V)
3	TEST BYPASS FACILITY		15	100 A, 240 V, 2P, CB	MAIN BREAKER (240 V)
4	METER SOCKET AND SUPPORT		16	20 A, 480 V, 2P, CB	LIGHTING (480 V)
5	TERMINAL BLOCKS		17	50 A, 120 V, 1P, CB	MVDS (120 V)
6	NEUTRAL BUS		18	30 A, 240 V, 2P, CB	XFMR PRIMARY (240 V)
7	GROUND BUS		19	20 A, 120 V, 1P, CB	SPARE (120 V)
8	GROUNDING ELECTRODE		20	15 A, 240 V, 1P, CB	LIGHTING CONTROL (240 V)
9	30 A, 2PNO, CONTACTOR	SIGN ILLUMINATION (480 V)	21	PHOTOELECTRIC UNIT (TYPE V)	
10	PHOTOELECTRIC UNIT (TYPE V)		22	15 A, 1P, TEST SWITCH	LIGHTING CONTROL (240 V)
11	15 A, 1P, TEST SWITCH	SIGN ILLUMINATION TEST SWITCH (240 V)	23	30 A, 2PNO CONTACTOR	LIGHTING (480 V)
12	15 A, 240 V, 1P, CB	SIGN ILLUMINATION CONTROL (240 V)	24	STEP-UP TRANSFORMER	5 KVA, 240-240/480 V, 1Ø

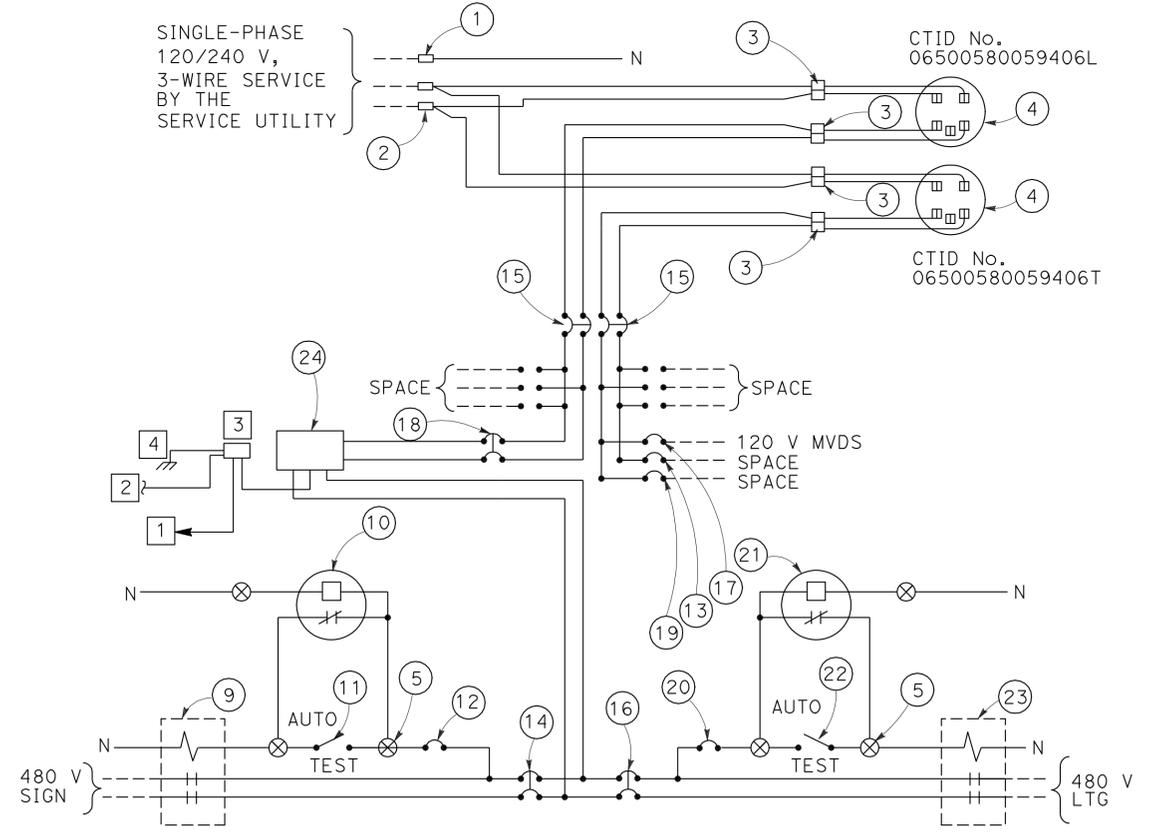
NOTES: (FOR THIS SHEET ONLY)

- 240/480 V TRANSFORMER GROUNDED CIRCUIT CONDUCTOR (NEUTRAL CONDUCTOR).
- 240/480 V TRANSFORMER GROUNDING ELECTRODE CONDUCTOR.
- 240/480 V SYSTEM NEUTRAL BUS AND GROUND BUS.
- 240/480 V ENCLOSURE BONDING JUMPER.



MICROWAVE VEHICLE DETECTION SYSTEM (LOCATION TABLE)

LOCATION No.	POST MILE	DIRECTION OF TRAVEL	ELECTRICAL DETAIL SHEET	POLE DETAIL SHEET	TYPE OF INSTALLATION	OFFSET FROM ETW	STANDARD TYPE	POWER SOURCE
1	T52.26	MEDIAN	E-8 DETAIL B	SES-1 SES-2	DUAL MVDS	30' TO ETW	VDS 40	120 V
2	R52.89	MEDIAN	E-8 DETAIL A	SES-1 SES-2	DUAL MVDS	30' TO ETW	VDS 40	PV
3	R53.25	MEDIAN	E-8 DETAIL B	SES-1 SES-2	DUAL MVDS	30' TO ETW	VDS 40	120 V
4	R53.91	EB MAINLINE	E-8 DETAIL A	SES-1 SES-2	SINGLE MVDS	4' BEHIND MBGR	VDS 35	PV
5	R54.42	WB MAINLINE	E-8 DETAIL A	SES-1 SES-2	SINGLE MVDS	30' TO WB ETW	VDS 40	PV
6	R54.91	MEDIAN	E-8 DETAIL B	SES-1 SES-2	DUAL MVDS	30' TO ETW	VDS 35	120 V
7	R55.41	MEDIAN	E-8 DETAIL B	SES-1 SES-2	DUAL MVDS	30' TO ETW	VDS 40	120 V
8	R55.92	EB MAINLINE	E-8 DETAIL A	SES-1 SES-2	SINGLE MVDS	30' TO EB ETW	VDS 35	PV
9	R56.41	EB MAINLINE	E-8 DETAIL B	SES-1 SES-2	SINGLE MVDS	30' TO EB ON-RAMP ETW	VDS 40	120 V
10	R56.91	WB MAINLINE	E-8 DETAIL A	SES-1 SES-2	SINGLE MVDS	30' TO WB ETW	VDS 35	PV
11	R57.41	WB MAINLINE	E-8 DETAIL B	SES-1 SES-2	SINGLE MVDS	30' TO WB ETW	VDS 40	120 V
12	R57.93	EB MAINLINE	E-8 DETAIL B	SES-1 SES-2	SINGLE MVDS	30' TO EB ETW	VDS 35	120 V
13	R58.44	EB MAINLINE	E-8 DETAIL B	SES-1 SES-2	SINGLE MVDS	30' TO EB ETW	VDS 40	120 V
14	R58.92	EB MAINLINE	E-8 DETAIL A	SES-1 SES-2	SINGLE MVDS	4' BEHIND MBGR	VDS 35	PV
15	R59.43	EB MAINLINE	E-8 DETAIL B	SES-1 SES-2	SINGLE MVDS	30' to EB ETW	VDS 40	120 V
16	R59.96	WB MAINLINE	E-8 DETAIL A	SES-1 SES-2	SINGLE MVDS	30' to WB ETW	VDS 40	PV



SERVICE WIRING DIAGRAM

WIRELESS INTERCONNECT SYSTEM
 MICROWAVE VEHICLE DETECTION SYSTEM
 (ELECTRICAL DETAILS)
E-9

THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

NO SCALE

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	43	57

Eliseo Lopez
 REGISTERED CIVIL ENGINEER 1/7/10 DATE
 No. C72910
 Exp. 12/31/10
 CIVIL
 STATE OF CALIFORNIA

7-26-10
 PLANS APPROVAL DATE

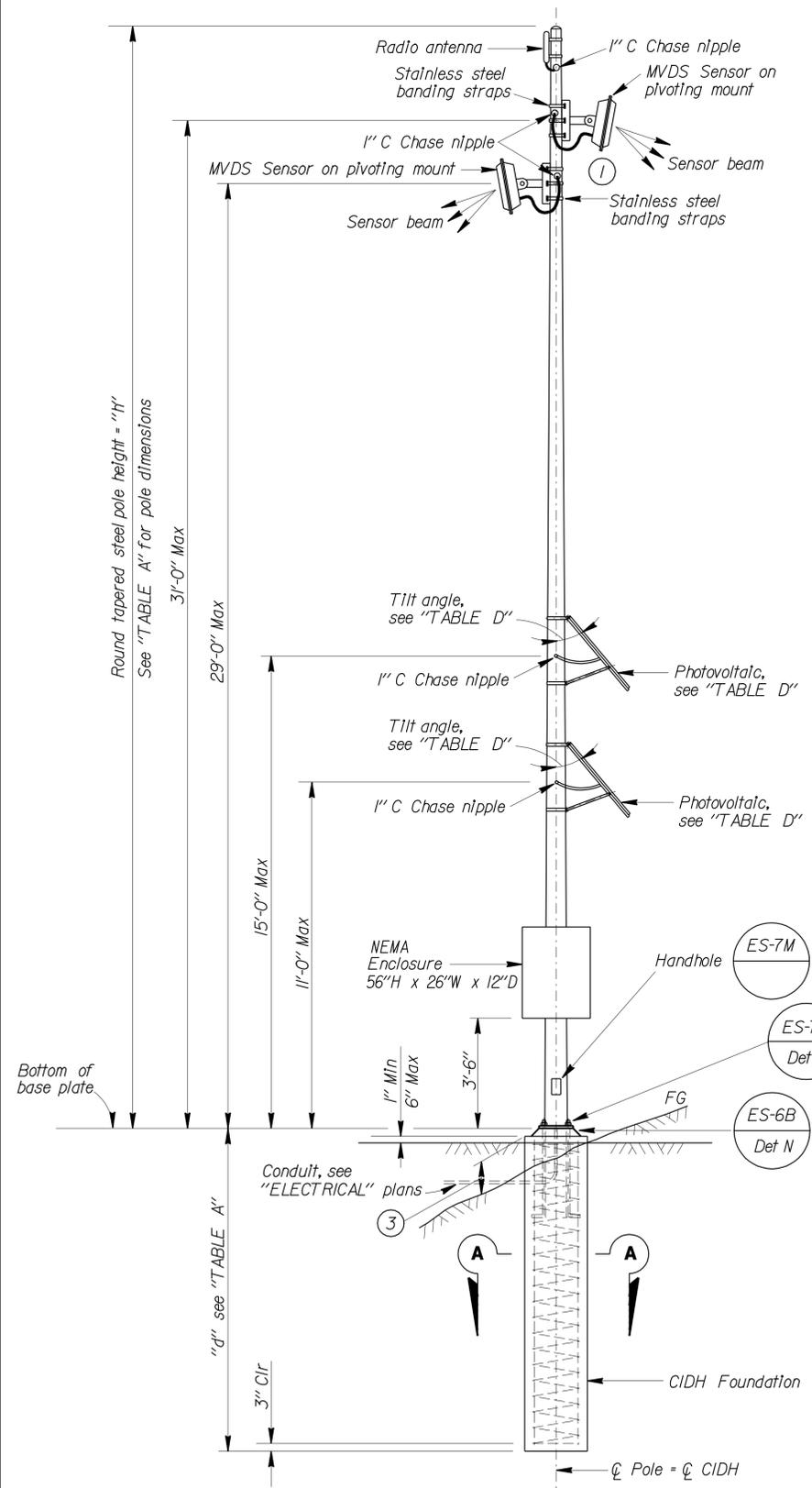
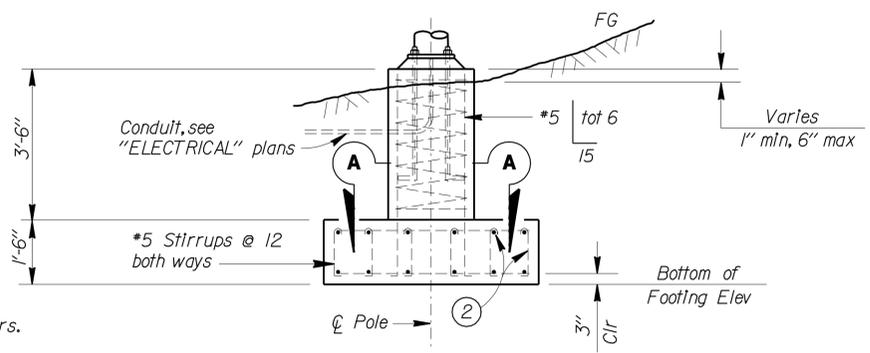
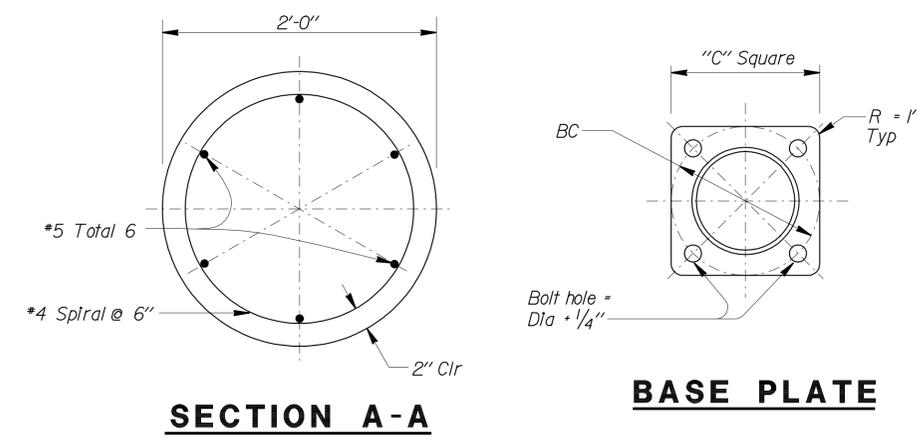
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

POLE TYPE	POLE DATA				BASE PLATE DATA				"d" 2'-0" Ø CIDH Pile		STRUCTURAL STEEL LBS PLUS 3.5% GALVANIZING
	HEIGHT "H"	Min OD		THICKNESS "C"	THICKNESS "C"	ANCHOR BOLTS		LEVEL GROUND	SLOPING GROUND		
		BASE	TOP			SIZE	BC - BOLT CIRCLE				
VDS 35	35'	8 7/8"	3 7/8"	0.1793"	1'-1"	1"	1 1/4" x 3'-0" x 4"	1'-1"	10'-0"	12'-0"	550
VDS 40	40'	9 3/8"	3 7/8"	0.1793"	1'-1"	1"	1 1/4" x 3'-0" x 4"	1'-1"	11'-0"	13'-0"	650

ATTACHMENT	MOUNTING HEIGHT	WEIGHT LIMITS (MAX)
Enclosure	3'-6" Max bottom Clr	400 lbs
Bottom Photovoltaic	11'-0" Max	40 lbs
Top Photovoltaic	15'-0" Max	40 lbs
Bottom MVDS	29'-0" Max	5 lbs
Top MVDS	31'-0" Max	5 lbs
Radio Antenna	Within top 3' of pole	4 lbs

SPREAD FOOTING		
GROUND	FOOTING SIZE LENGTH x WIDTH x DEPTH	REINFORCEMENT TOP & BOTTOM
Level	7'-0" x 7'-0" x 1'-6"	7 - #5
Sloping	8'-0" x 8'-0" x 1'-6"	8 - #5

PHOTOVOLTAIC PANEL LIMITS	
PANEL SIZE	TILT ANGLE
11 ft ² max Top photovoltaic	45° Min
15 ft ² max Bottom photovoltaic	45° Min



- ① 1' min vertical clearance between both MVDS sensors.
- ② *5 Bars and *5 stirrups (Top and bottom) to run both longitudinal and transverse directions.
- ③ 1'-3" Max for sloped finished grade.

ABBREVIATIONS:

MVDS = Microwave Vehicle Detection System
 VDS = Vehicle Detection System

DESIGN NOTES:

SPECIFICATIONS
 Design: AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals dated 2001.

LOADING

Wind Loadings: 100 mph

UNIT STRESSES

Structural steel: f_y = 48,000 psi tapered steel pole
 f_y = 36,000 psi unless otherwise noted.

Anchor bolts = A307

Reinforced concrete: f'_c = 3,600 psi
 f_y = 60,000 psi

NOTES:

1. All steel shall be galvanized after fabrication.
2. During pole erection the pole shall be raked as necessary with the use of leveling nuts to provide a plumb pole axis.
3. The foundation shall be treated as level ground condition if the slope inclination is flatter than 4H:1V.
4. Mount the smaller photovoltaic panel on top when two photovoltaic panels are required per pole location.
5. Foundation design is based on AASHTO 2001 article 13.6 Broms' approximate procedure assuming a cohesionless material. The angle of internal friction used is 30 degrees and unit weight of soil used is 120 lbs/ft³.
6. For details not shown, see 2006 "STANDARD PLANS" and 2006 "REVISED STANDARD PLANS".

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

BRANCH CHIEF *Coffey & Woody*

DESIGN	BY ELISEO LOPEZ	CHECKED MAHFOUD LICHA
DETAILS	BY R. YEE	CHECKED ELISEO LOPEZ
QUANTITIES	BY ELISEO LOPEZ	CHECKED MAHFOUD LICHA

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 DESIGN AND TECHNICAL SERVICES
 SPECIAL DESIGNS BRANCH

NO SCALE

BRIDGE NO.	
POST MILE	

ELECTRICAL SYSTEMS
MICROWAVE VEHICLE DETECTION SYSTEM
POLE DETAILS

SES-1

USERNAME => hrmikes1 DATE PLOTTED => 27-JUL-2010 TIME PLOTTED => 12:10

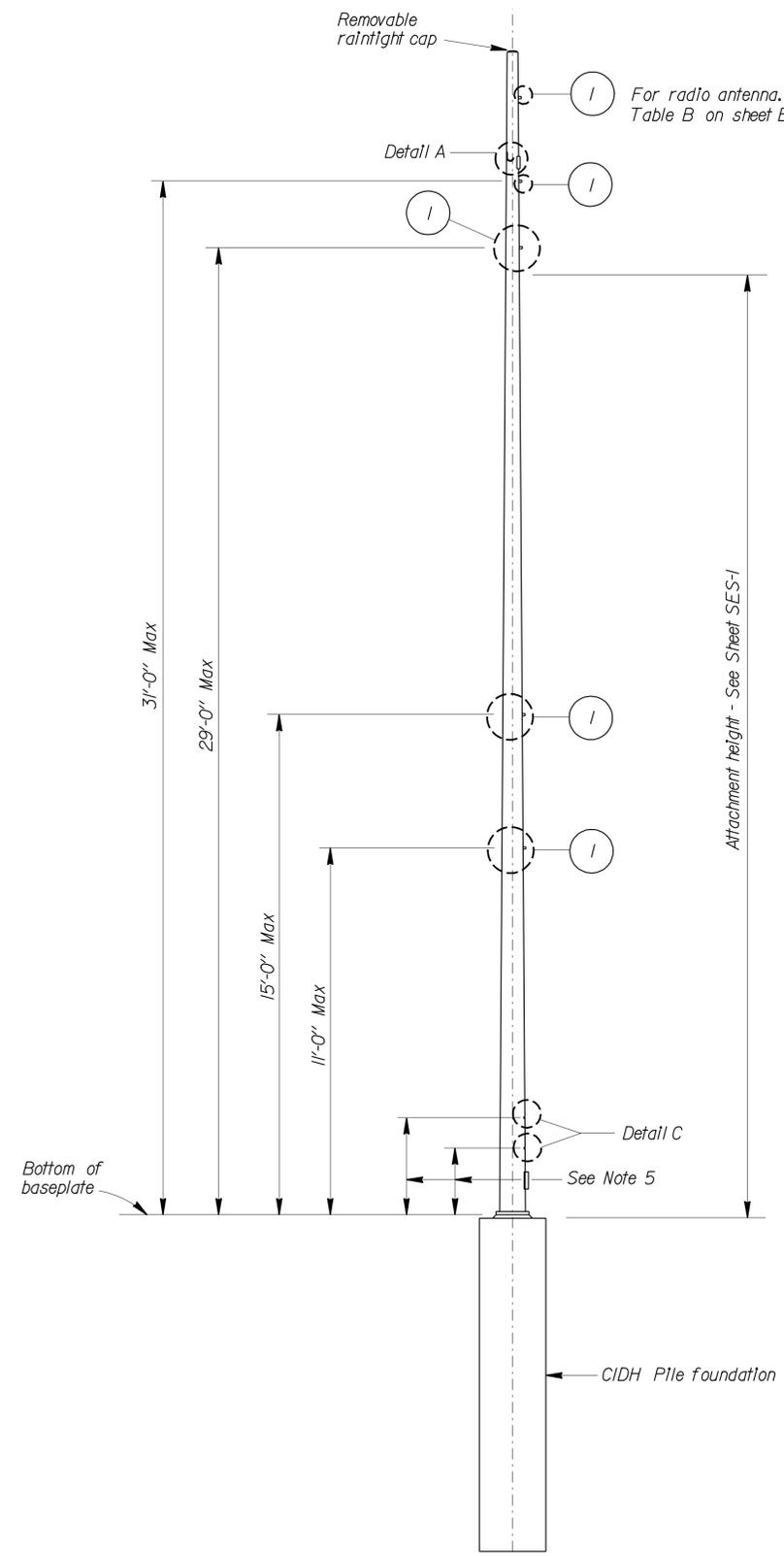
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	44	57

Eliseo Lopez 1/7/10
 REGISTERED CIVIL ENGINEER DATE

7-26-10
 PLANS APPROVAL DATE

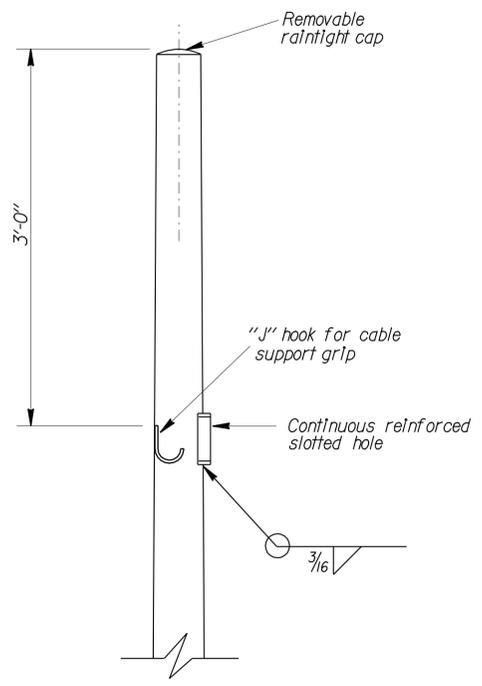
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

REGISTERED PROFESSIONAL ENGINEER
 ELISEO LOPEZ
 No. C72910
 Exp. 12/31/10
 CIVIL
 STATE OF CALIFORNIA

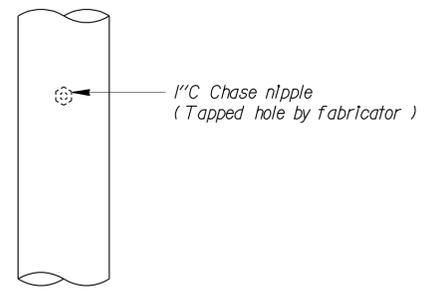


ELEVATION
 VDS 35 and VDS 40

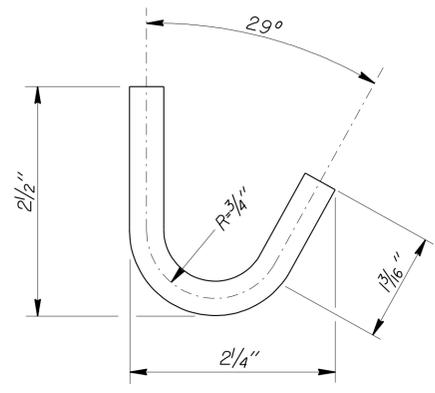
① Drill and tap for 1" chase nipple and plug with raintight plugs. 1" chase nipple per attachment per pole. See "DETAIL B".



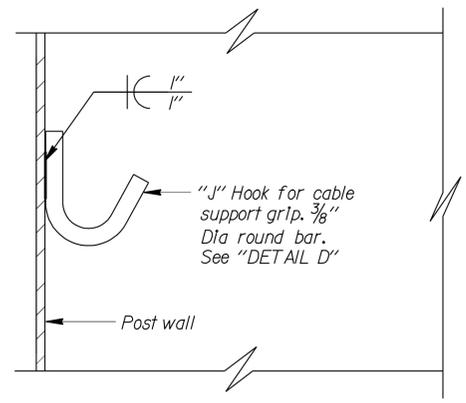
DETAIL A



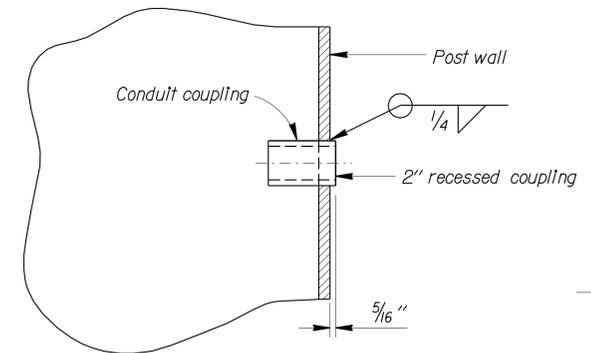
DETAIL B
 TYPICAL ELECTRICAL ACCESS DETAIL



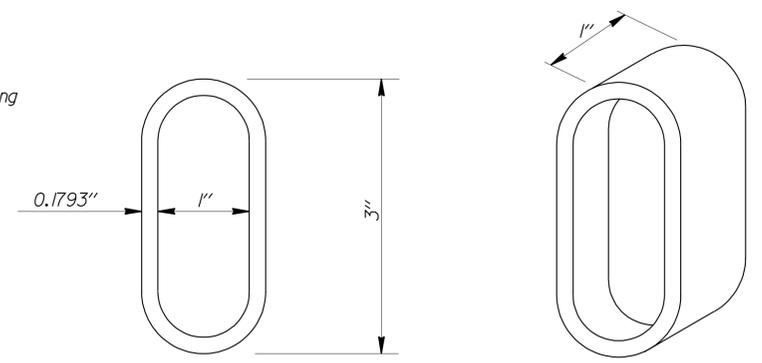
DETAIL D



J HOOK DETAIL



2" RECESSED COUPLING DETAIL C (TYPICAL)



SLOTTED HOLE

NOTES:

1. Place all couplings on the same side of pole.
2. Chase nipples and slotted hole have a raintight plug. Plug should only be removed if chase nipple or slotted hole is used.
3. The chase nipples shall be 1'-0" min vertical clearance from the slotted hole and not on the same side as the slotted hole.
4. For attachment details, see sheet SES-1.
5. Coupling location above ground and spacing shall be verified to match choice of enclosure, prior to fabrication.
6. All attachments, unless otherwise noted, shall be mounted to pole with stainless steel straps or other method without drilling holes in pole. Enclosure may require drilling through post for mounting. Method of mounting enclosure will require Engineer's approval.

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

BRANCH CHIEF *Coffey B Woody*

DESIGN	BY ELISEO LOPEZ	CHECKED MAHFOUD LICHA
DETAILS	BY R. YEE	CHECKED ELISEO LOPEZ
QUANTITIES	BY ELISEO LOPEZ	CHECKED MAHFOUD LICHA

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 DESIGN AND TECHNICAL SERVICES
 SPECIAL DESIGNS BRANCH **A**

NO SCALE

BRIDGE NO.	
POST MILE	

ELECTRICAL SYSTEMS
MICROWAVE VEHICLE DETECTION SYSTEM
POLE DETAILS

SES-2

(ENGLISH) SPECIAL DESIGNS BRANCH BORDER SHEET (REV. 7-1-09)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS
 0 1 2 3
 CU 06
 EA 0L7301

DISREGARD PRINTS BEARING EARLIER REVISION DATES

10/2/09	12/7/09	1/7/10	2/26/10	5/25/10	7/9/10
---------	---------	--------	---------	---------	--------

SHEET OF

USERNAME => hrmikes1 DATE PLOTTED => 27-JUL-2010 TIME PLOTTED => 12:10

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	45	57

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

To accompany plans dated 7-26-10

2006 REVISED STANDARD PLAN RSP H1

A

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

B

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

C

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

D

Dia diameter
 DIP ductile iron pipe
 DN diameter nominal

E

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

F

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

G

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

H

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

I

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

L

L length
 LF linear foot

M

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

N

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

O

O/C on center
 OD outside diameter
 Oz ounce

P

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

Q

Q quarter circle
 QCV quick coupling valve

R

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

S

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

T

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

U

UG underground

V

VAU valve assembly unit

W

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

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

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

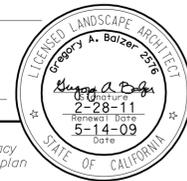
NO SCALE

RSP H1 DATED JUNE 5, 2009 SUPERSEDES STANDARD PLAN H1
 DATED MAY 1, 2006 - PAGE 201 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP H1

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	46	57

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

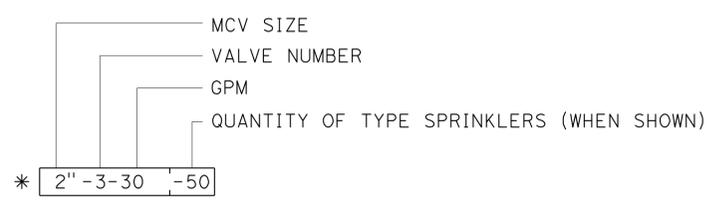
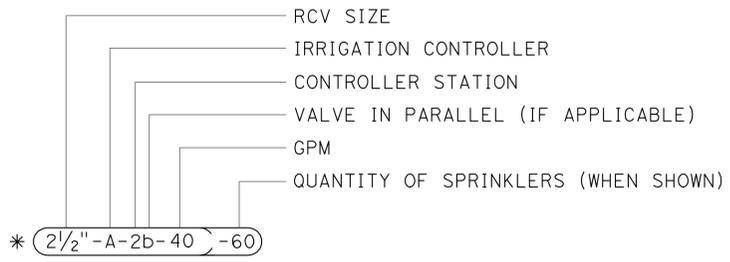


To accompany plans dated 7-26-10

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

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

VALVE CODE



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

PLANTING AND IRRIGATION SYMBOLS

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

NO SCALE

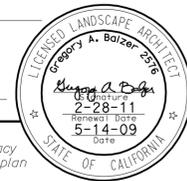
RSP H2 DATED JUNE 5, 2009 SUPERSEDES RSP H2 DATED MARCH 7, 2008 AND STANDARD PLAN H2 DATED MAY 1, 2006 - PAGE 202 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP H2

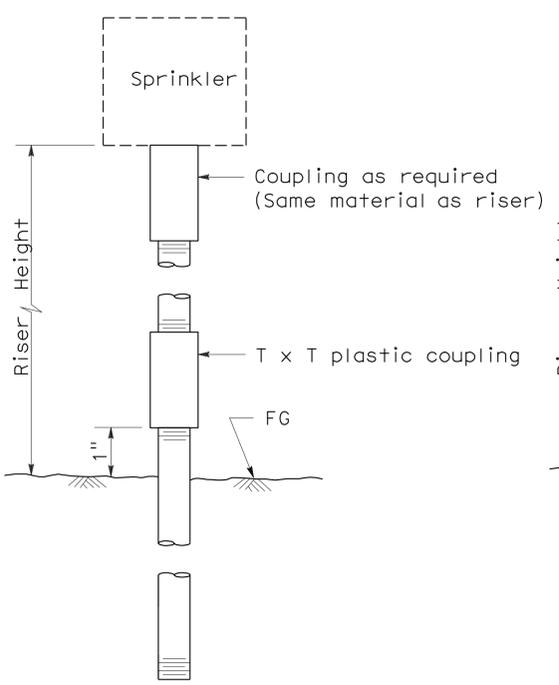
2006 REVISED STANDARD PLAN RSP H2

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	47	57

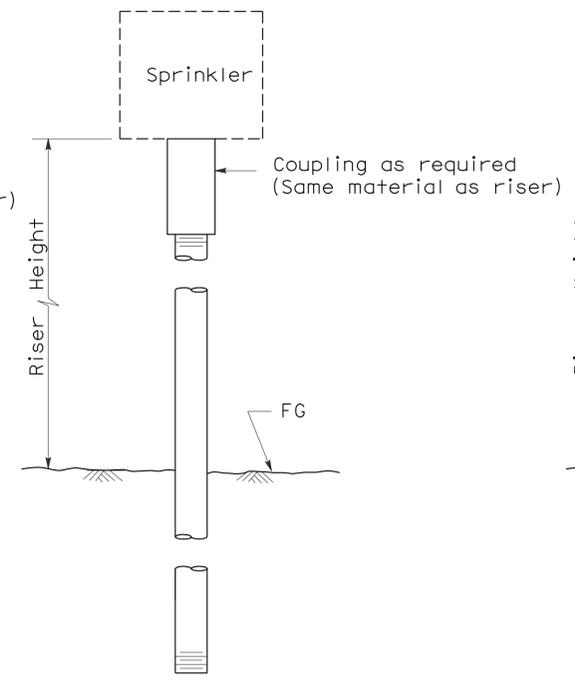
Gregory A. Balzer
 LICENSED LANDSCAPE ARCHITECT
 June 5, 2009
 PLANS APPROVAL DATE
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



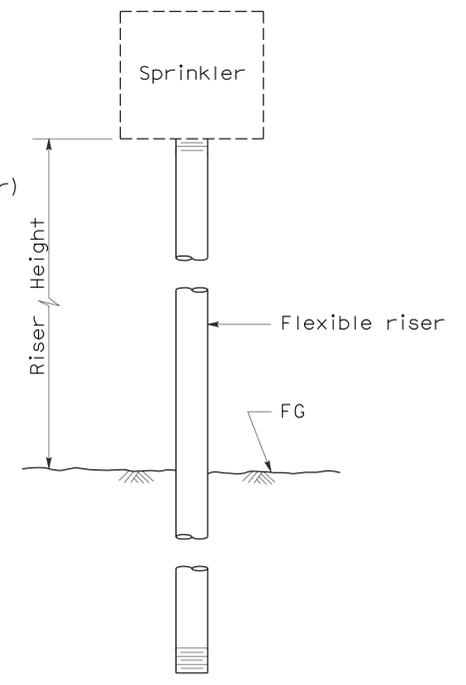
To accompany plans dated 7-26-10



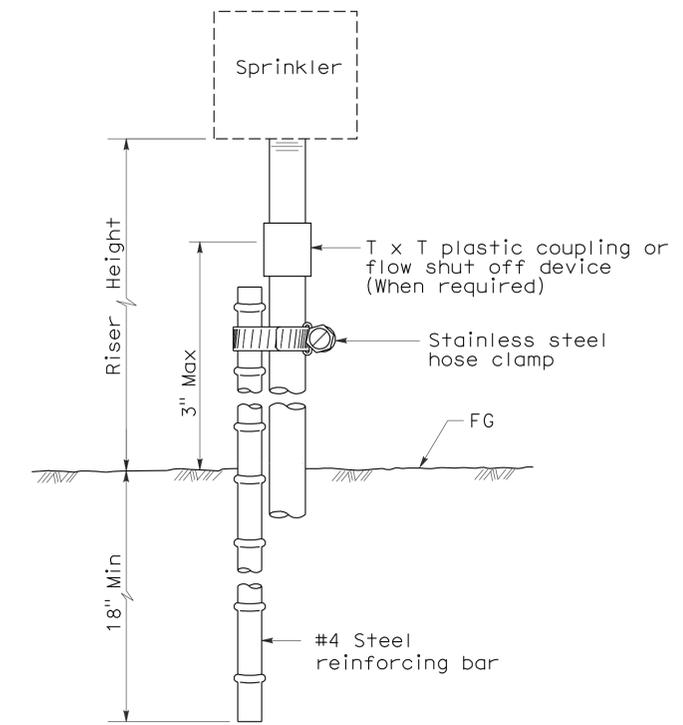
ELEVATION
RISER TYPE I



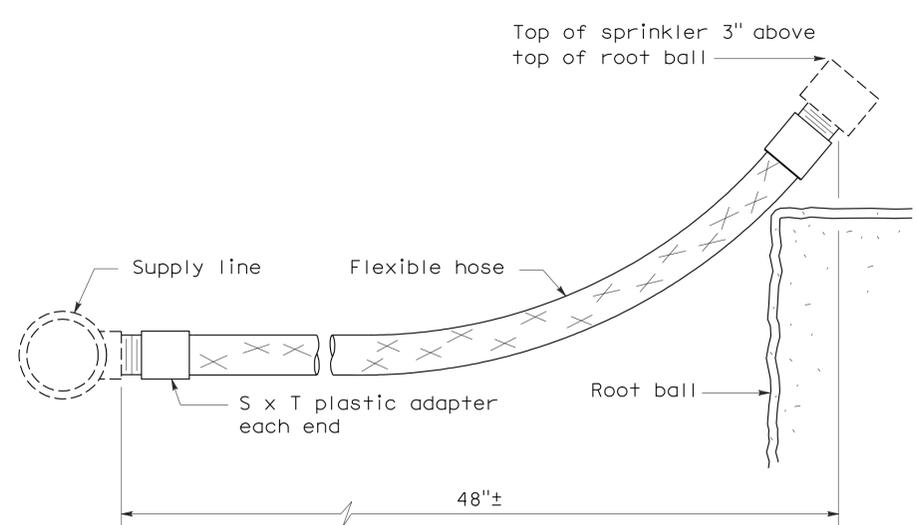
ELEVATION
RISER TYPE II



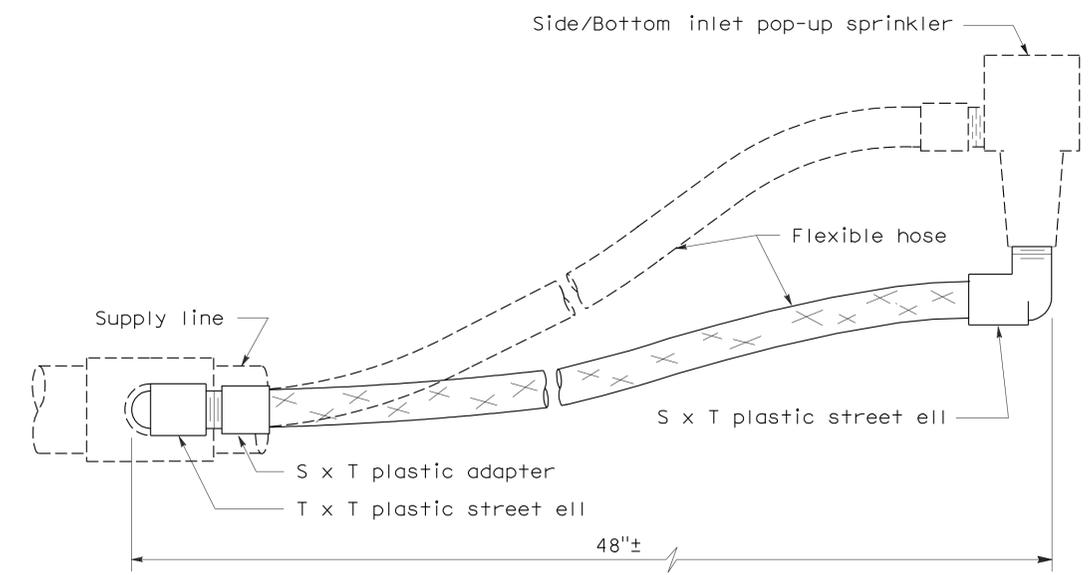
ELEVATION
RISER TYPE III



ELEVATION
RISER TYPE IV



ELEVATION
RISER TYPE V



ELEVATION
RISER TYPE VI

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

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

REVISED STANDARD PLAN RSP H5

2006 REVISED STANDARD PLAN RSP H5

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	48	57

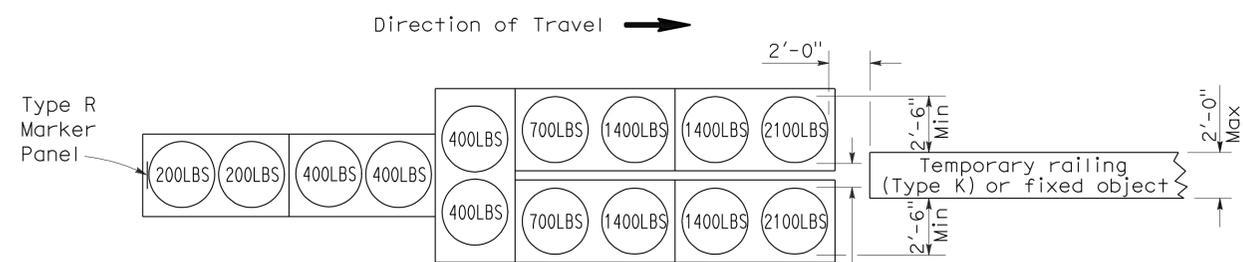
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

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

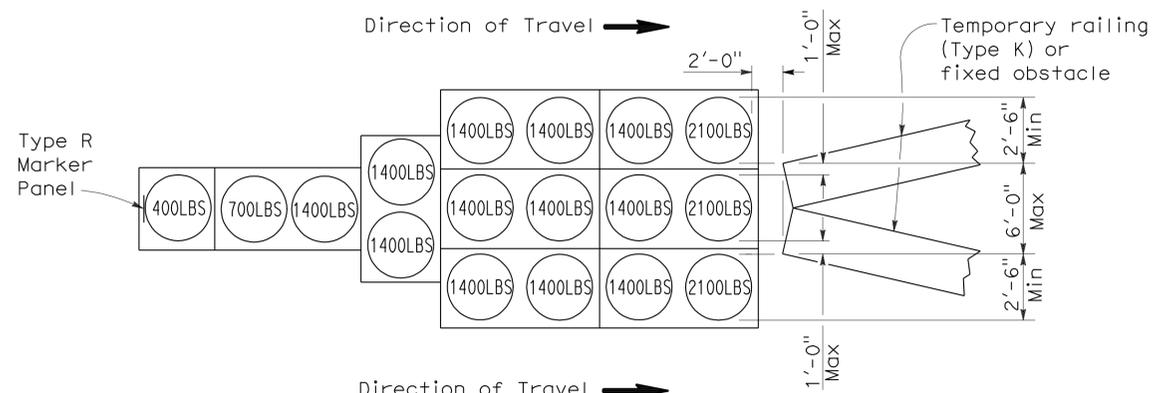
To accompany plans dated 7-26-10

2006 REVISED STANDARD PLAN RSP T1A



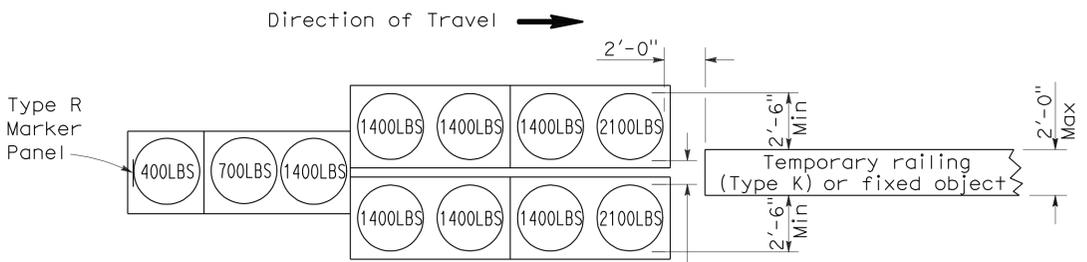
ARRAY 'TU14'

Approach speed 45 mph or more



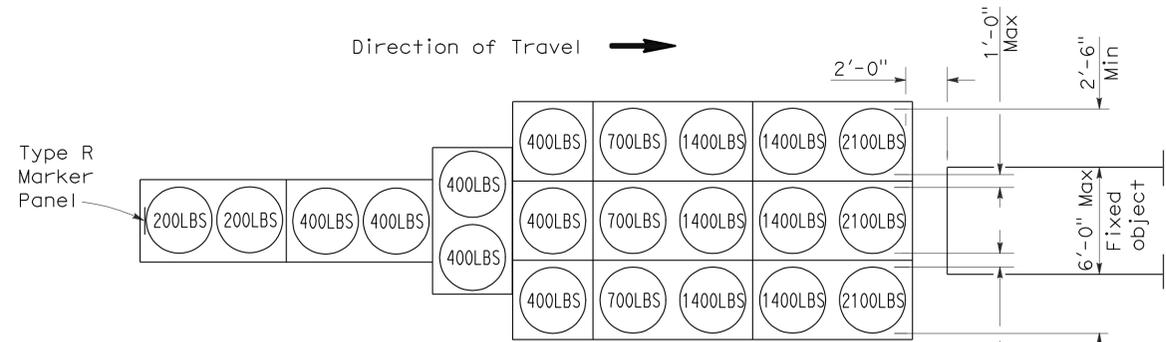
ARRAY 'TU17'

Approach speed less than 45 mph



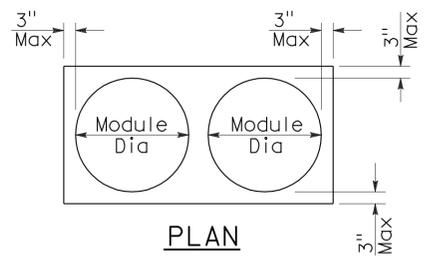
ARRAY 'TU11'

Approach speed less than 45 mph

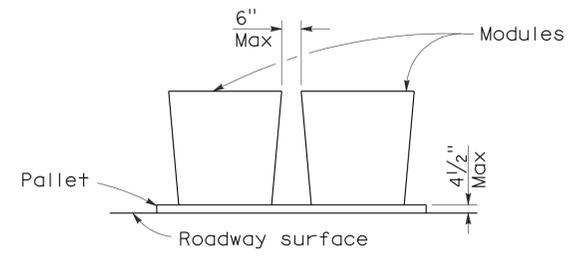


ARRAY 'TU21'

Approach speed 45 mph or more



PLAN



ELEVATION

CRASH CUSHION PALLET DETAIL

See Note 7

NOTES:

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

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

NO SCALE

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

REVISED STANDARD PLAN RSP T1A

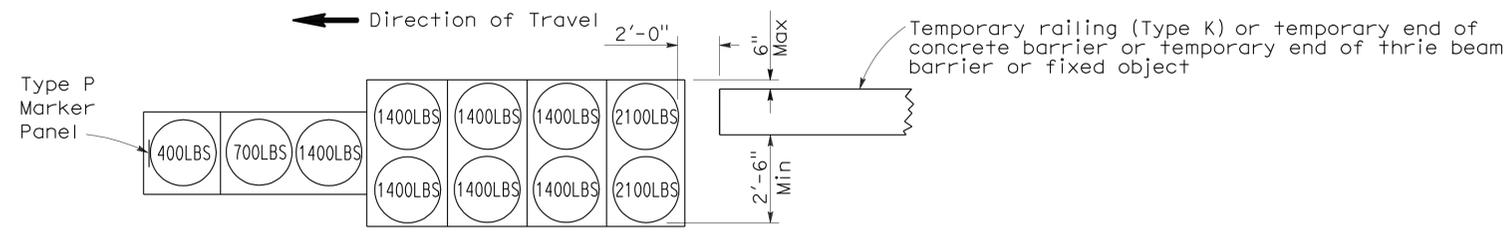
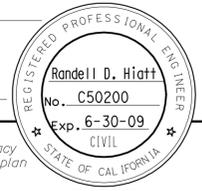
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	49	57

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

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

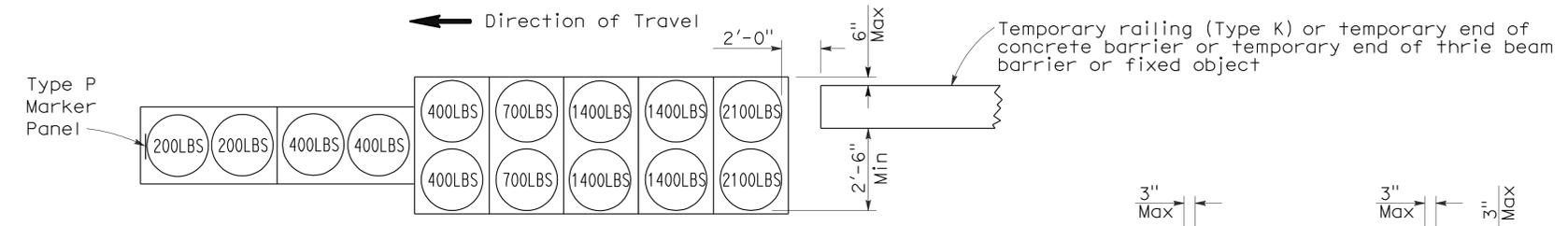
To accompany plans dated 7-26-10



Direction of Travel ←

Direction of Travel →

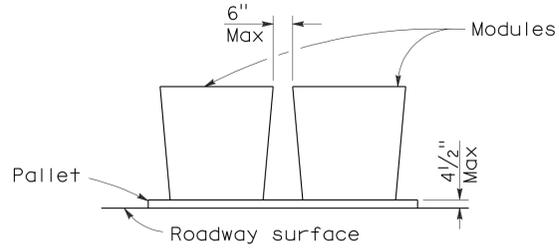
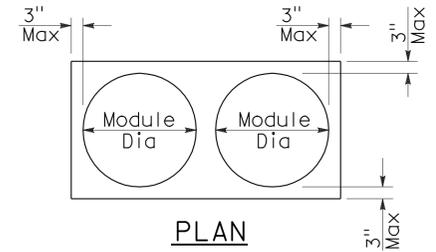
ARRAY 'TB11'
Approach speed less than 45 mph



Direction of Travel ←

Direction of Travel →

ARRAY 'TB14'
Approach speed 45 mph or more



CRASH CUSHION PALLET DETAIL
See Note 7

NOTES:

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

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

NO SCALE

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

REVISED STANDARD PLAN RSP T1B

2006 REVISED STANDARD PLAN RSP T1B

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	50	57

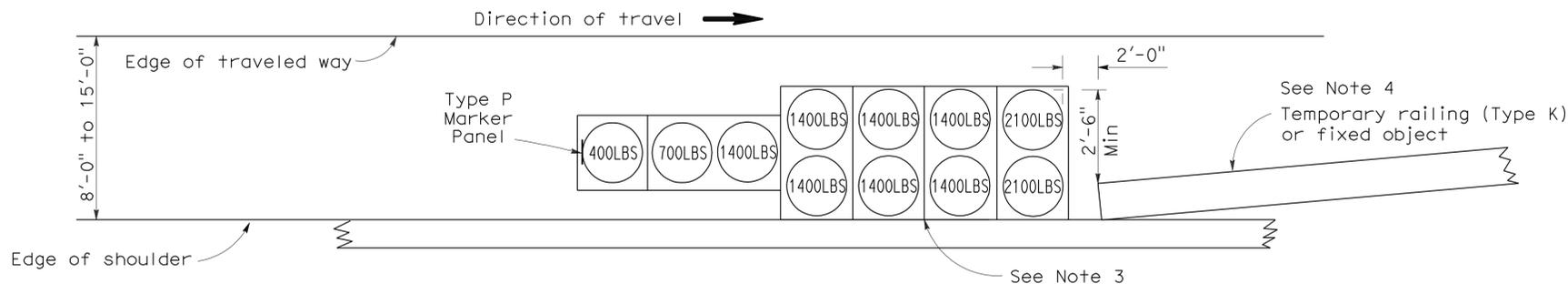
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

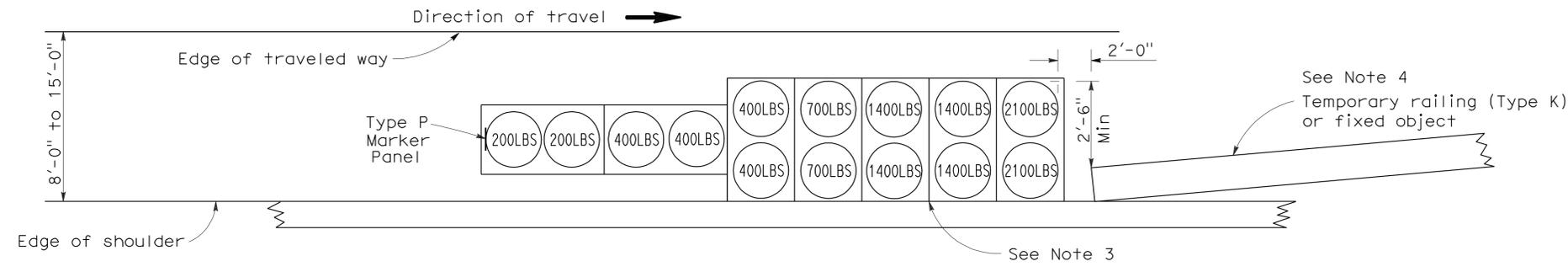
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

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

To accompany plans dated 7-26-10



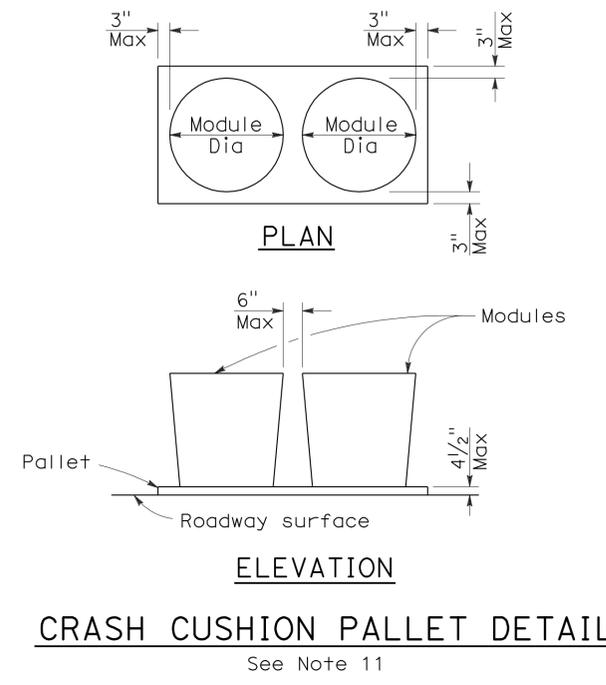
ARRAY 'TS11'
Approach speed less than 45 mph
See Note 9



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

NOTES:

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



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**TEMPORARY CRASH CUSHION,
SAND FILLED
(SHOULDER INSTALLATIONS)**

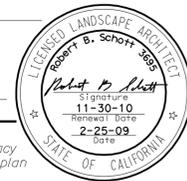
NO SCALE
RSP T2 DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN T2
DATED MAY 1, 2006 - PAGE 213 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP T2

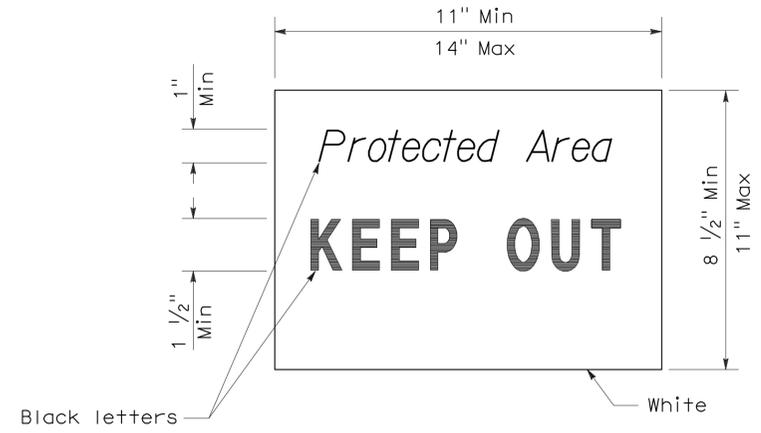
2006 REVISED STANDARD PLAN RSP T2

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	51	57

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



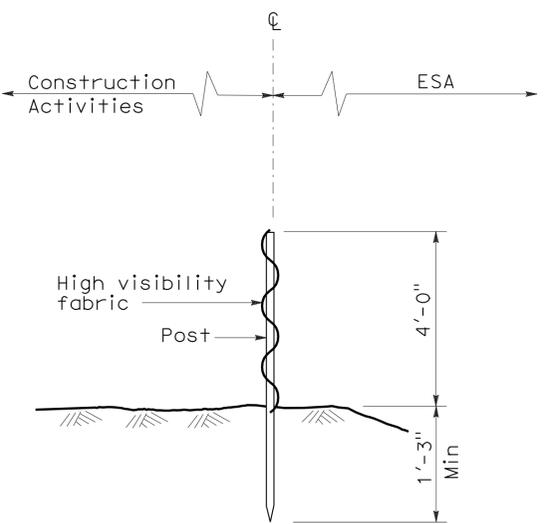
To accompany plans dated 7-26-10



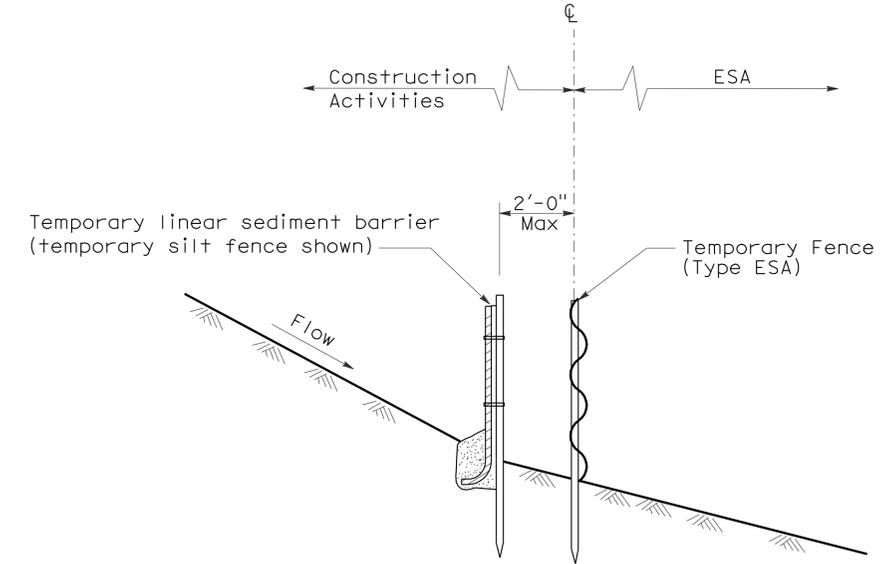
SIGN DETAIL

NOTE:

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

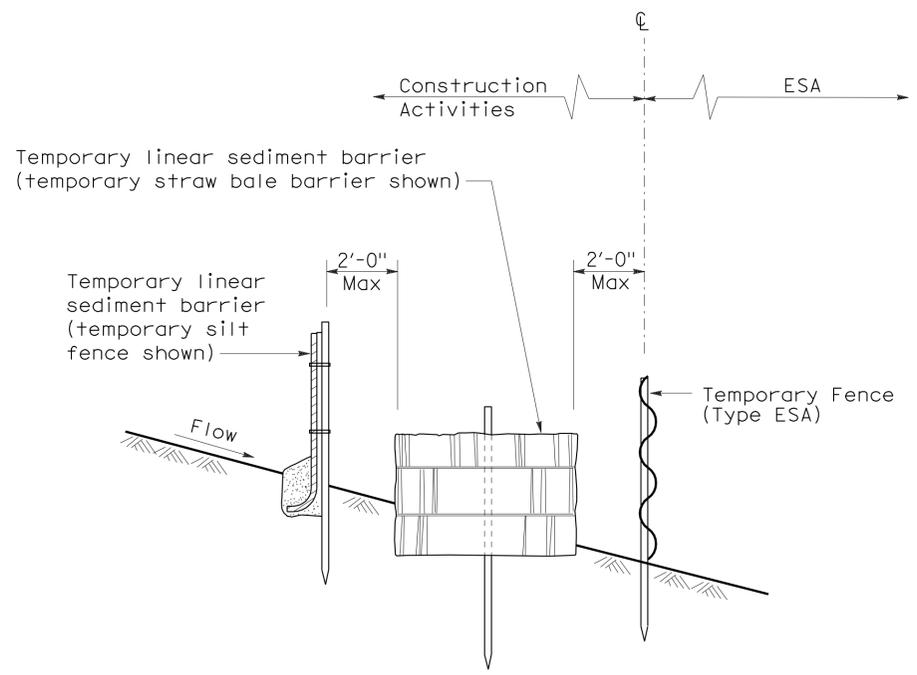


SECTION
TEMPORARY FENCE (TYPE ESA)



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

(See Note 1)



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

(See Note 1)

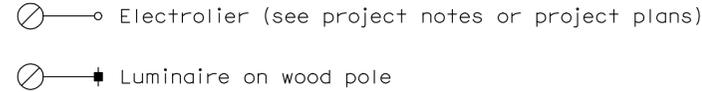
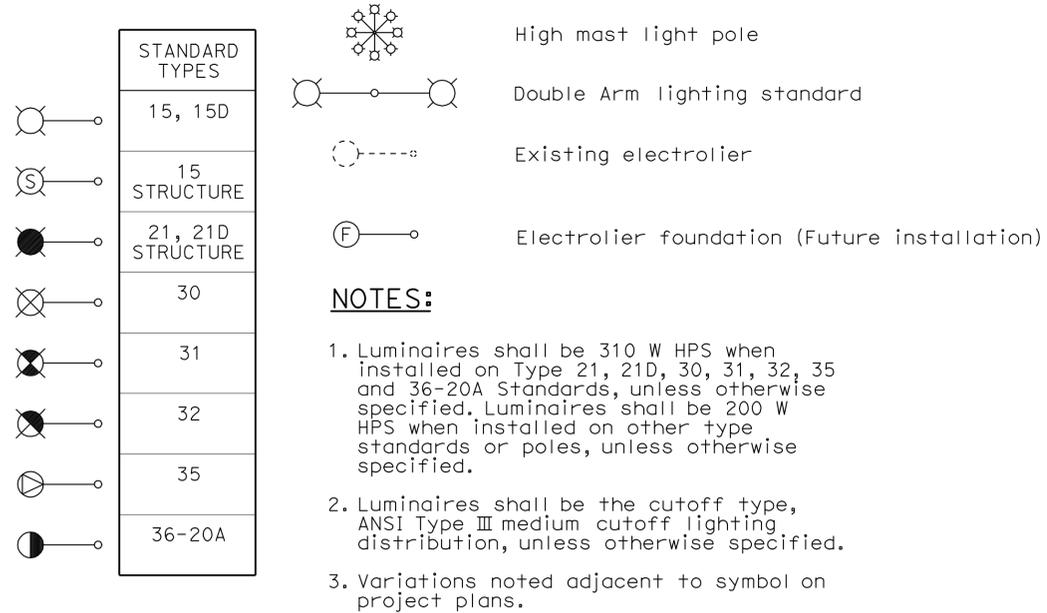
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

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

NO SCALE

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

ELECTROLIERS



STANDARD NOTES:

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

ABBREVIATIONS AND EQUIPMENT DESIGNATIONS

PROPOSED EXISTING

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

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	52	57

Jeffery G. McRae
REGISTERED ELECTRICAL ENGINEER

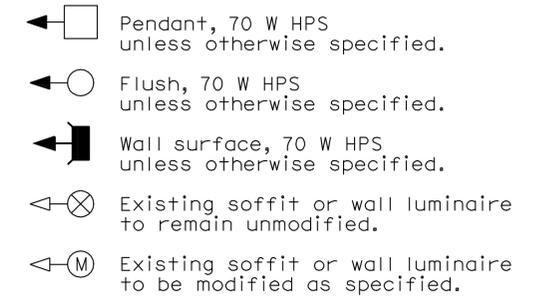
October 5, 2007
PLANS APPROVAL DATE

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

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

To accompany plans dated 7-26-10

SOFFIT AND WALL MOUNTED LUMINAIRES



NOTE:
Arrow indicates "street side" of luminaire.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (SYMBOLS AND ABBREVIATIONS)

NO SCALE

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

REVISED STANDARD PLAN RSP ES-1A

2006 REVISED STANDARD PLAN RSP ES-1A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	53	57

Jeffery G. McRae
 REGISTERED ELECTRICAL ENGINEER
 October 5, 2007
 PLANS APPROVAL DATE
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

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

CONDUIT

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

SIGNAL EQUIPMENT

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

SERVICE EQUIPMENT

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

POLE-MOUNTED SERVICE DESIGNATION



ILLUMINATED OVERHEAD SIGN

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

SIGNAL EQUIPMENT Cont

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

NOTES:

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

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

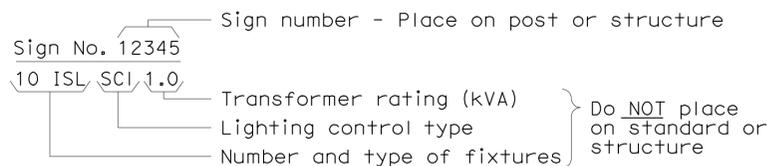
RSP ES-1B DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-1B
 DATED MAY 1, 2006 - PAGE 401 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-1B

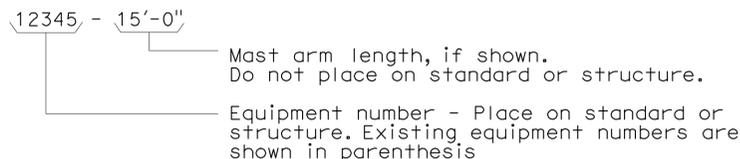
2006 REVISED STANDARD PLAN RSP ES-1B

EQUIPMENT IDENTIFICATION

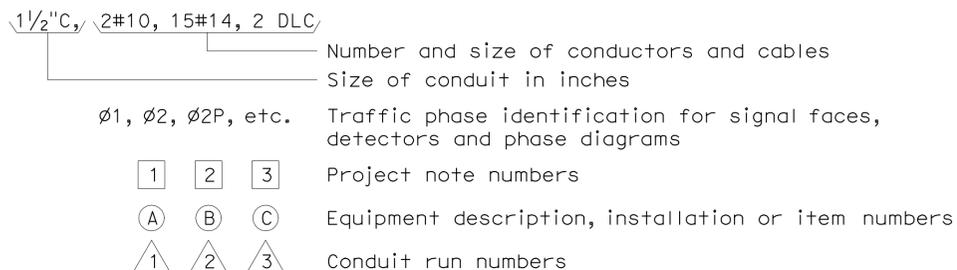
ILLUMINATED SIGN IDENTIFICATION NUMBER:



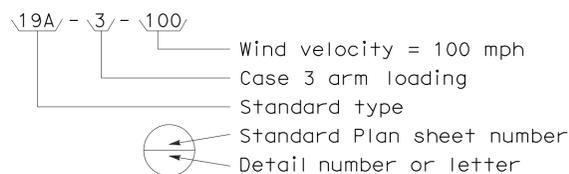
ELECTROLIER OR EQUIPMENT IDENTIFICATION NUMBER:



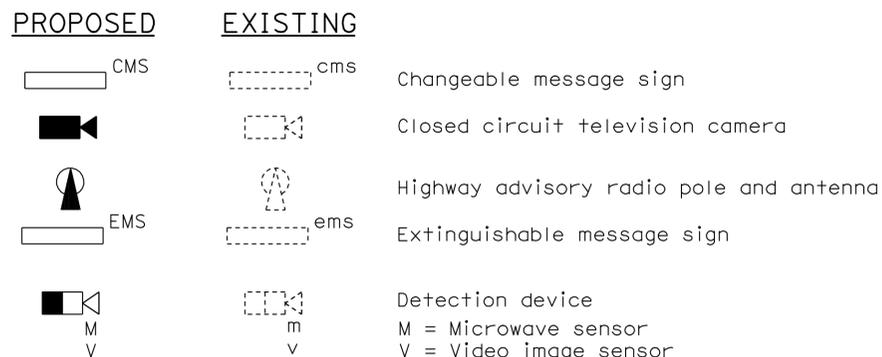
CONDUIT AND CONDUCTOR IDENTIFICATION:



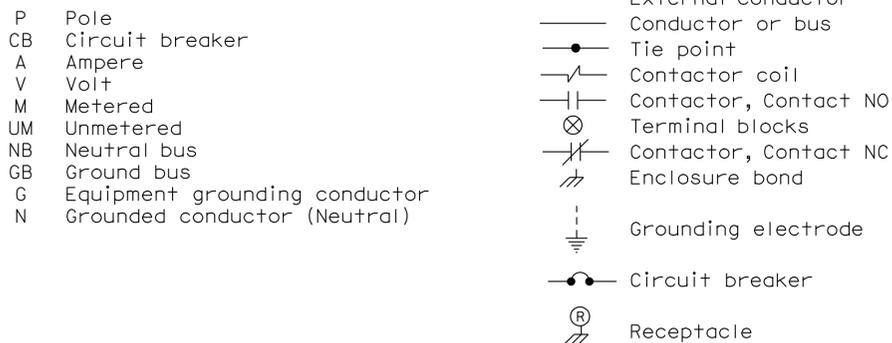
SIGNAL AND LIGHTING STANDARD (TYPICAL DESIGNATION):



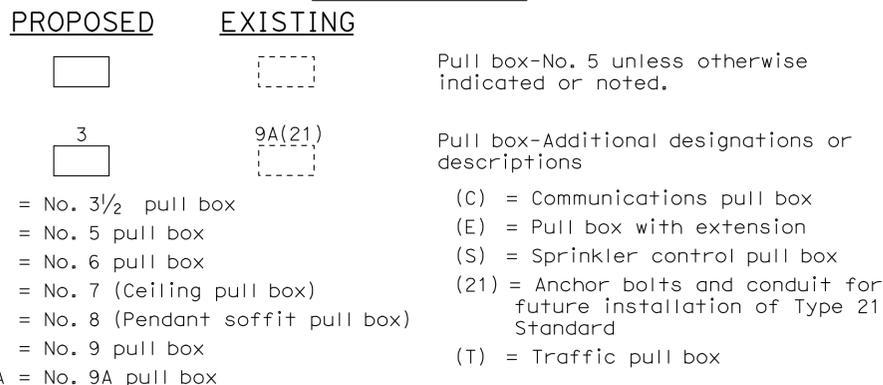
MISCELLANEOUS EQUIPMENT



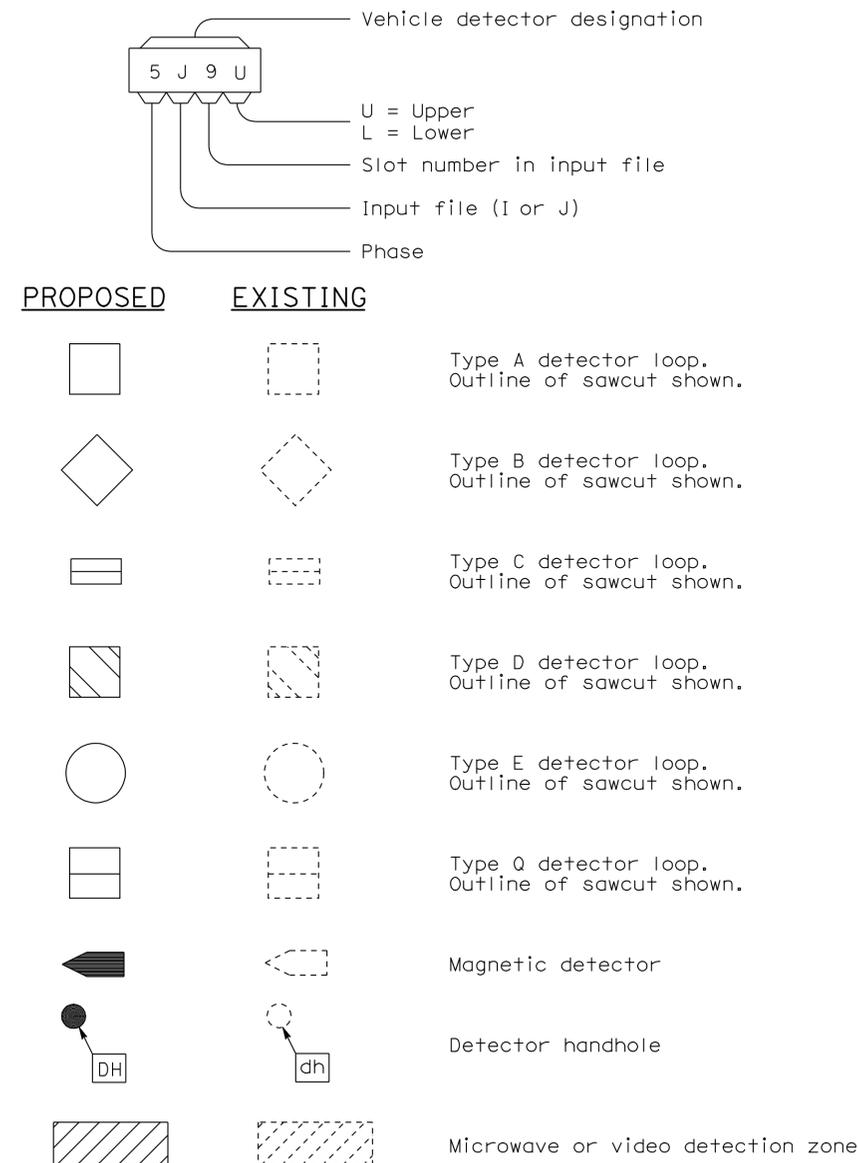
WIRING DIAGRAM LEGEND



PULL BOXES



VEHICLE DETECTORS



STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (SYMBOLS AND ABBREVIATIONS)

NO SCALE

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

REVISED STANDARD PLAN RSP ES-1C

2006 REVISED STANDARD PLAN RSP ES-1C

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
06	Ker	58	T52.3/R60.0	55	57

Jeffery G. McRae
 REGISTERED ELECTRICAL ENGINEER

October 5, 2007
 PLANS APPROVAL DATE

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

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

NOTES-TYPE III SERVICE EQUIPMENT ENCLOSURES:

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

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

To accompany plans dated 7-26-10

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

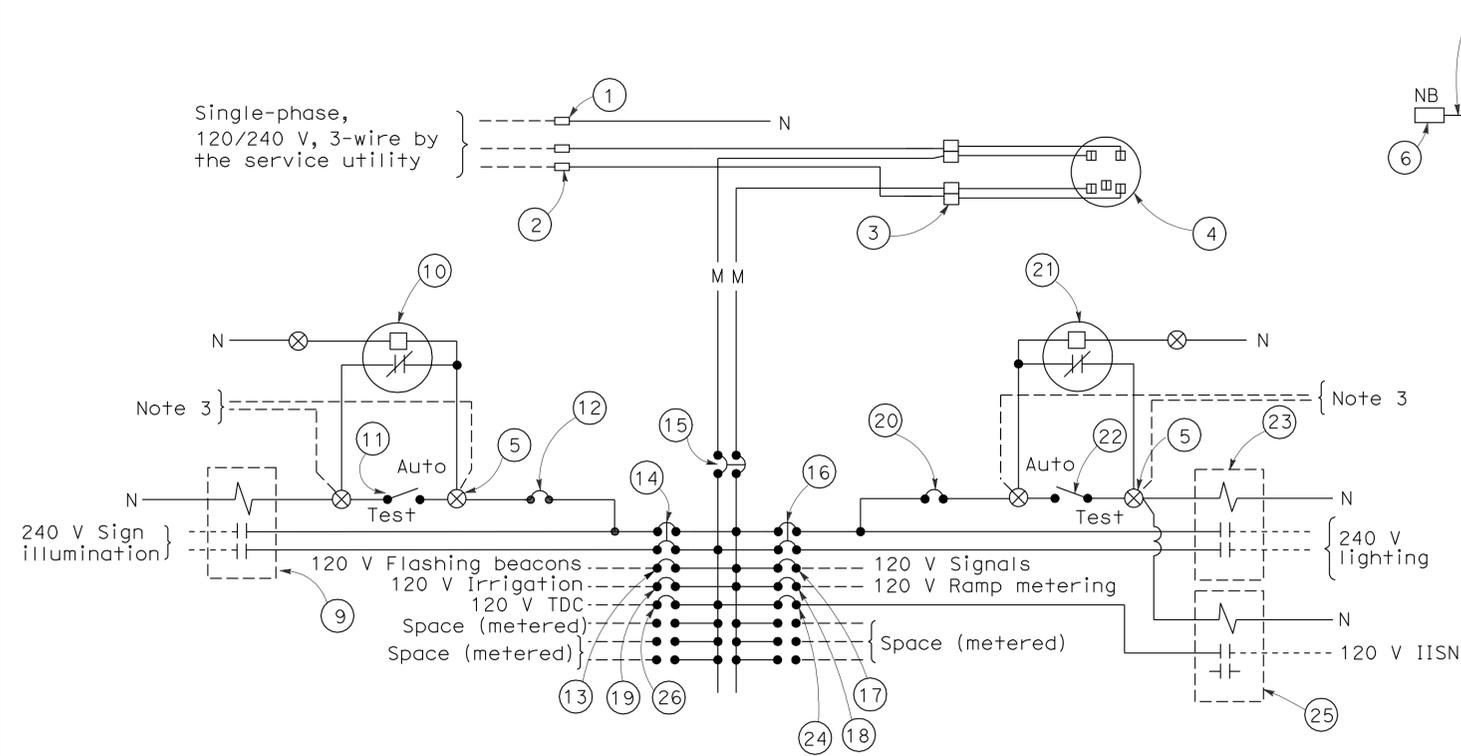
**ELECTRICAL SYSTEMS
 (SERVICE EQUIPMENT NOTES
 TYPE III SERIES)**

NO SCALE

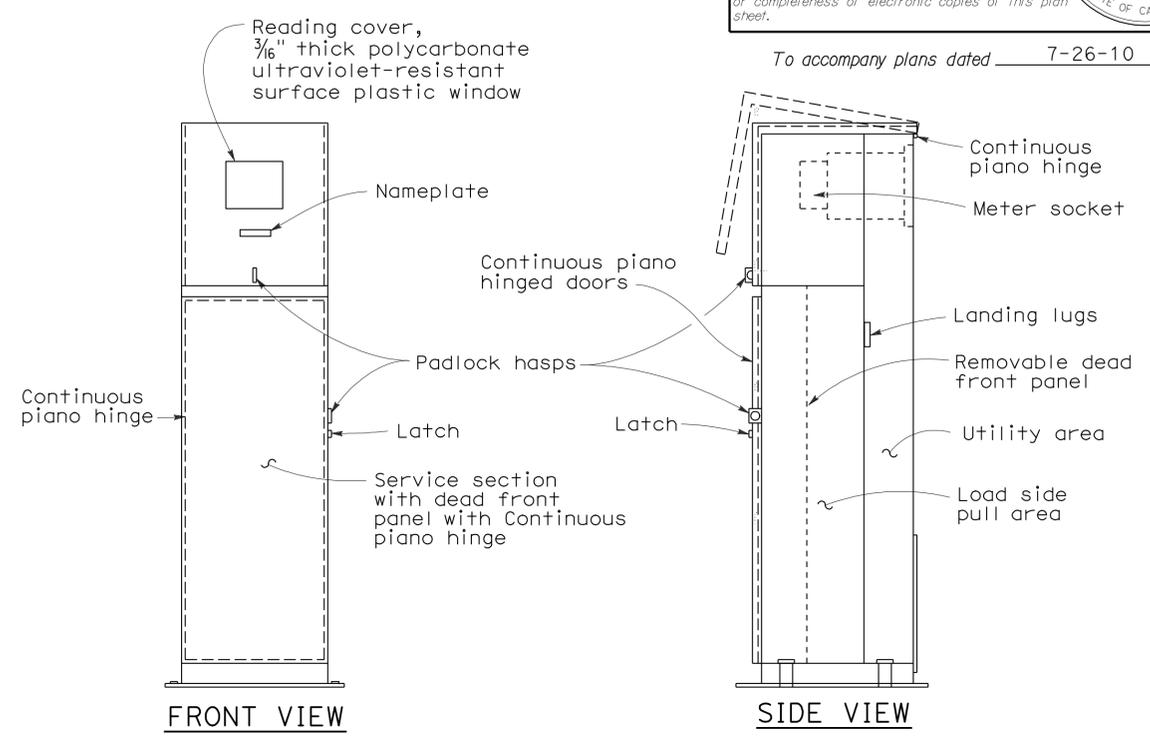
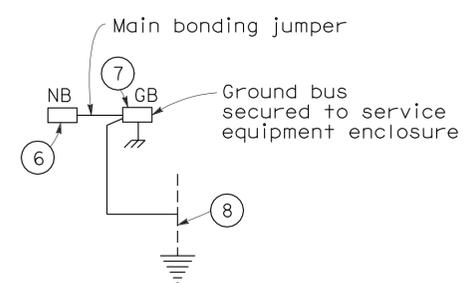
RSP ES-2C DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-2C
 DATED MAY 1, 2006 - PAGE 405 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-2C

2006 REVISED STANDARD PLAN RSP ES-2C



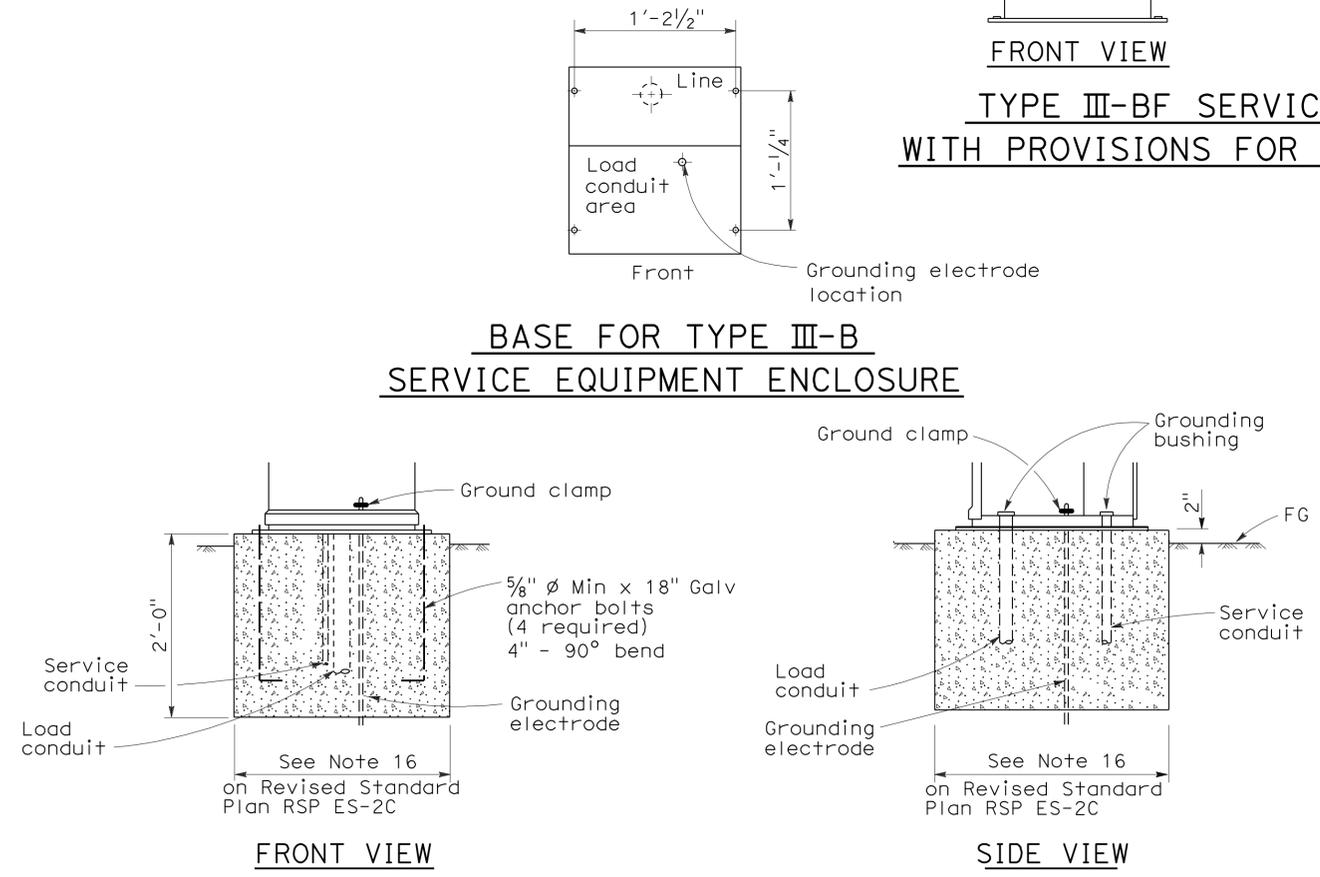
120/240 V SERVICE WIRING DIAGRAM (TYPICAL)



TYPE III-BF SERVICE EQUIPMENT ENCLOSURE WITH PROVISIONS FOR ONE 100 A METER (TYPICAL)

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

BASE FOR TYPE III-B SERVICE EQUIPMENT ENCLOSURE

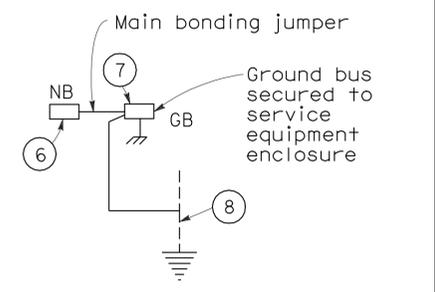
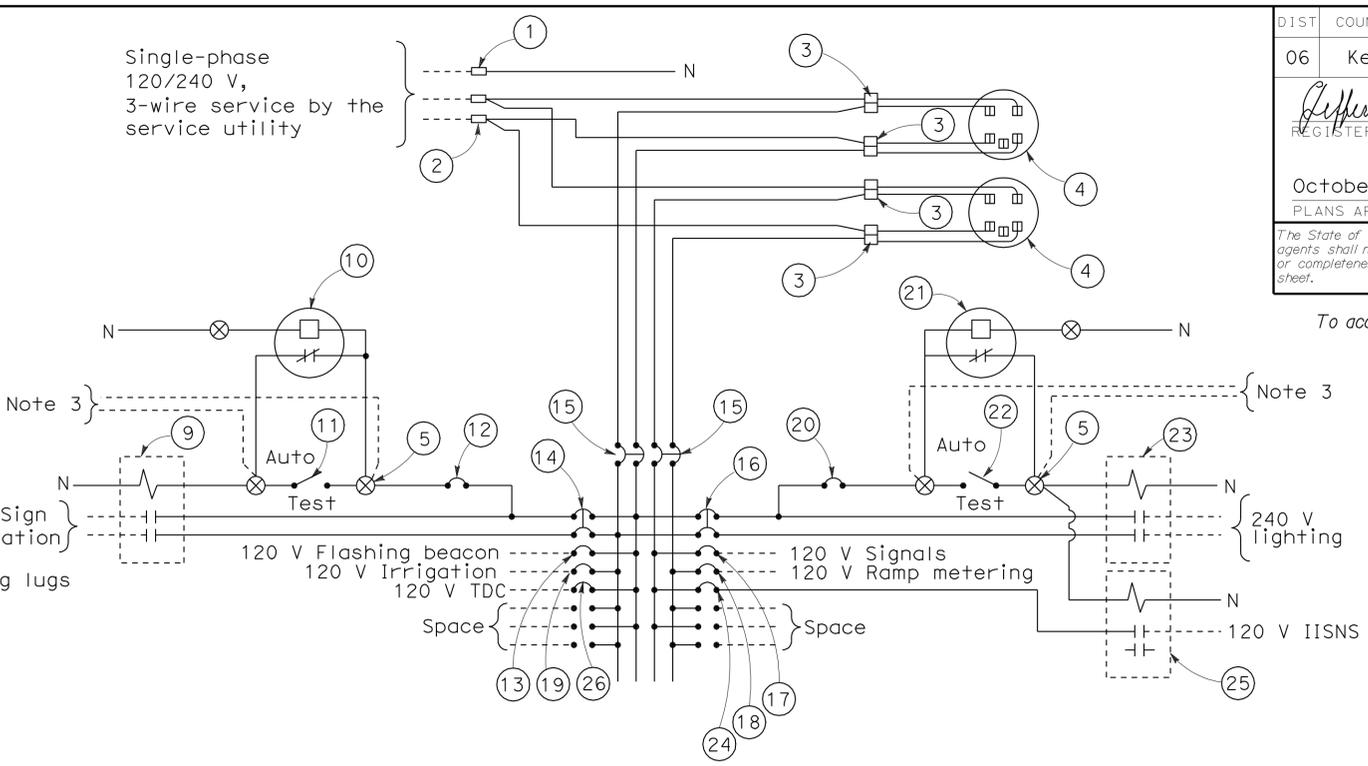
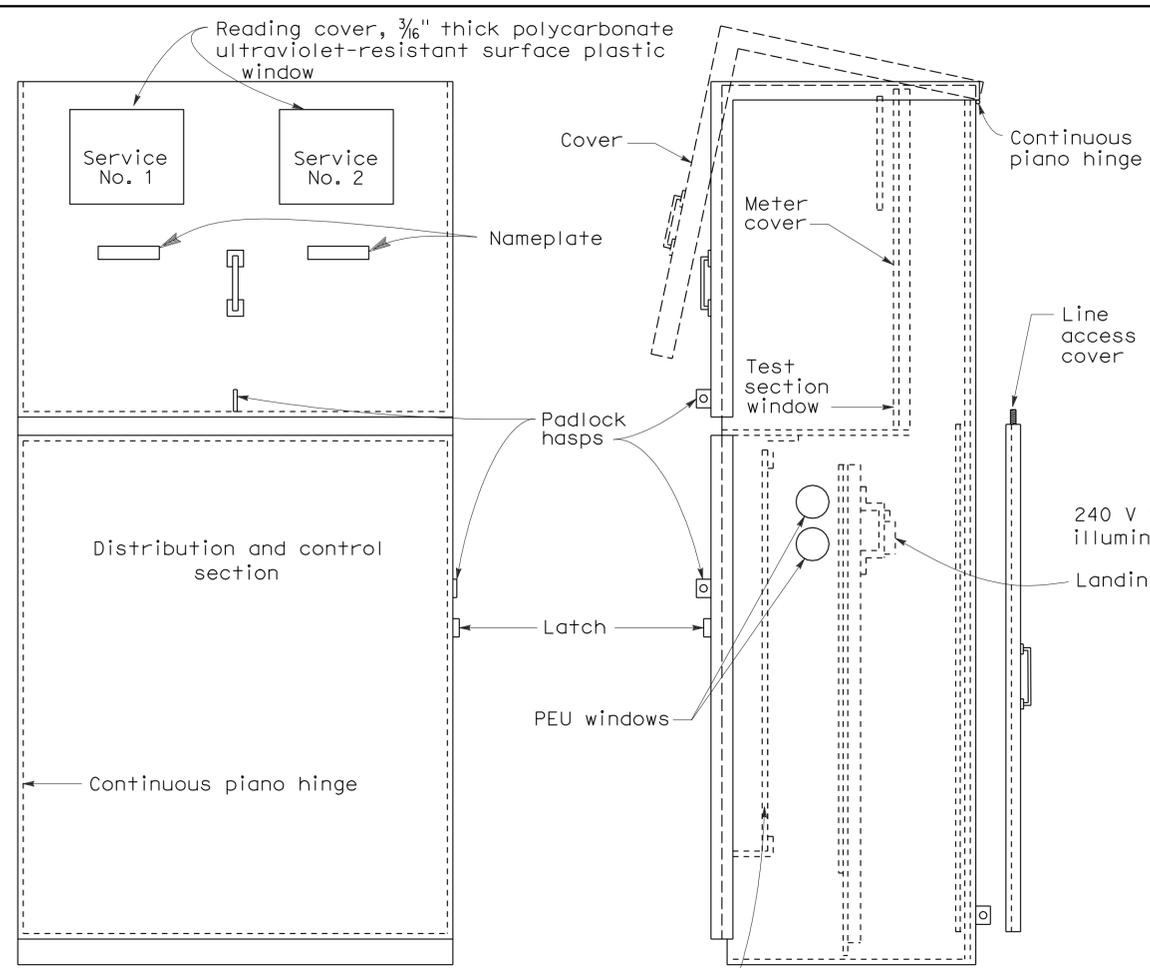


TYPE III-B SERVICE EQUIPMENT ENCLOSURE FOUNDATION DETAILS

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

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
 (SERVICE EQUIPMENT AND
 TYPICAL WIRING DIAGRAM,
 TYPE III-B SERIES)**
 NO SCALE

RSP ES-2E DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-2E
 DATED MAY 1, 2006 - PAGE 407 OF THE STANDARD PLANS BOOK DATED MAY 2006.



120/240 V SERVICE WIRING DIAGRAM (TYPICAL)

TYPE III-CF SERVICE EQUIPMENT ENCLOSURE WITH PROVISIONS FOR TWO 100 A METERS (TYPICAL)

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

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

NOTES: (FOR SERVICE EQUIPMENT ENCLOSURE)

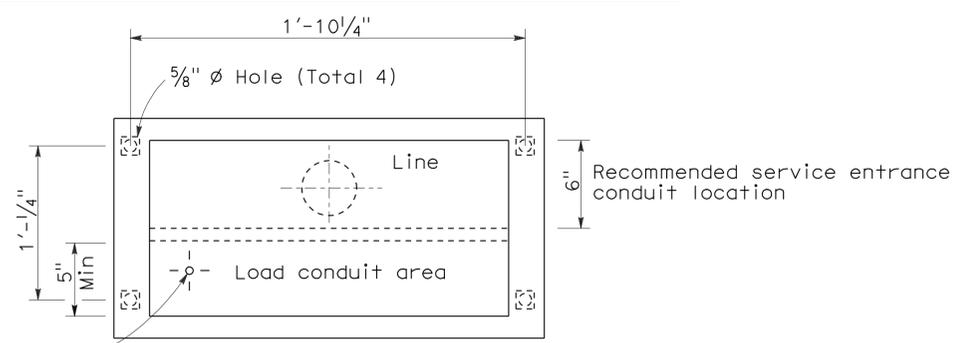
- Voltage ratings of service equipment shall conform to the service voltages indicated on the plans.
- Unless otherwise indicated on the plans, service equipment items shall be provided for each service equipment enclosure as shown.
- Connect to remote test switch mounted on lighting standards, sign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

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
 (SERVICE EQUIPMENT AND
 TYPICAL WIRING DIAGRAM
 TYPE III - C SERIES)**

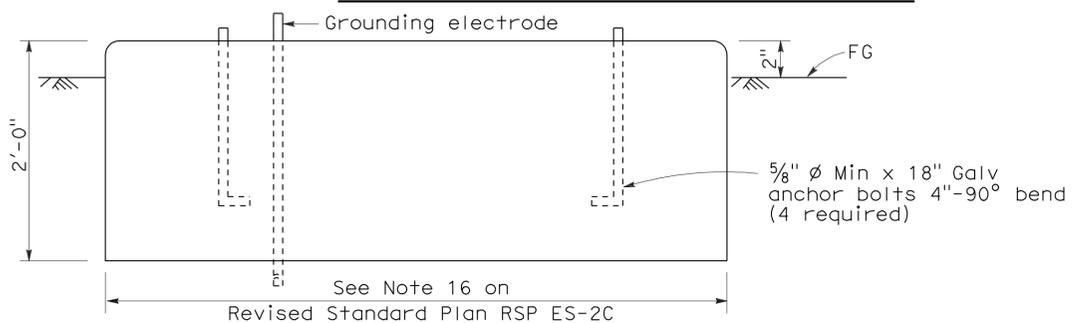
NO SCALE

RSP ES-2F DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-2F DATED MAY 1, 2006 - PAGE 408 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-2F



BASE FOR TYPE III-C SERVICE EQUIPMENT ENCLOSURE



FOUNDATION DETAIL

2006 REVISED STANDARD PLAN RSP ES-2F