Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	605	R1.4	1	45

INDEX OF PLANS

SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
2	TYPICAL CROSS SECTIONS
3	LAYOUTS
4-7	CONSTRUCTION DETAILS
8-12	DRAINAGE PLANS, PROFILES, DETAILS AND QUANTITIES
13	UTILITY PLANS
14-18	TRAFFIC HANDLING PLANS
19	CONSTRUCTION AREA SIGNS
20-24	PAVEMENT DELINEATION PLANS, DETAILS AND QUANTITIES
25	SIGN PLANS, DETAILS AND QUANTITIES
26	SUMMARY OF QUANTITIES
27-30	HIGHWAY PLANTING
31-32	ELECTRICAL PLANS
33-45	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

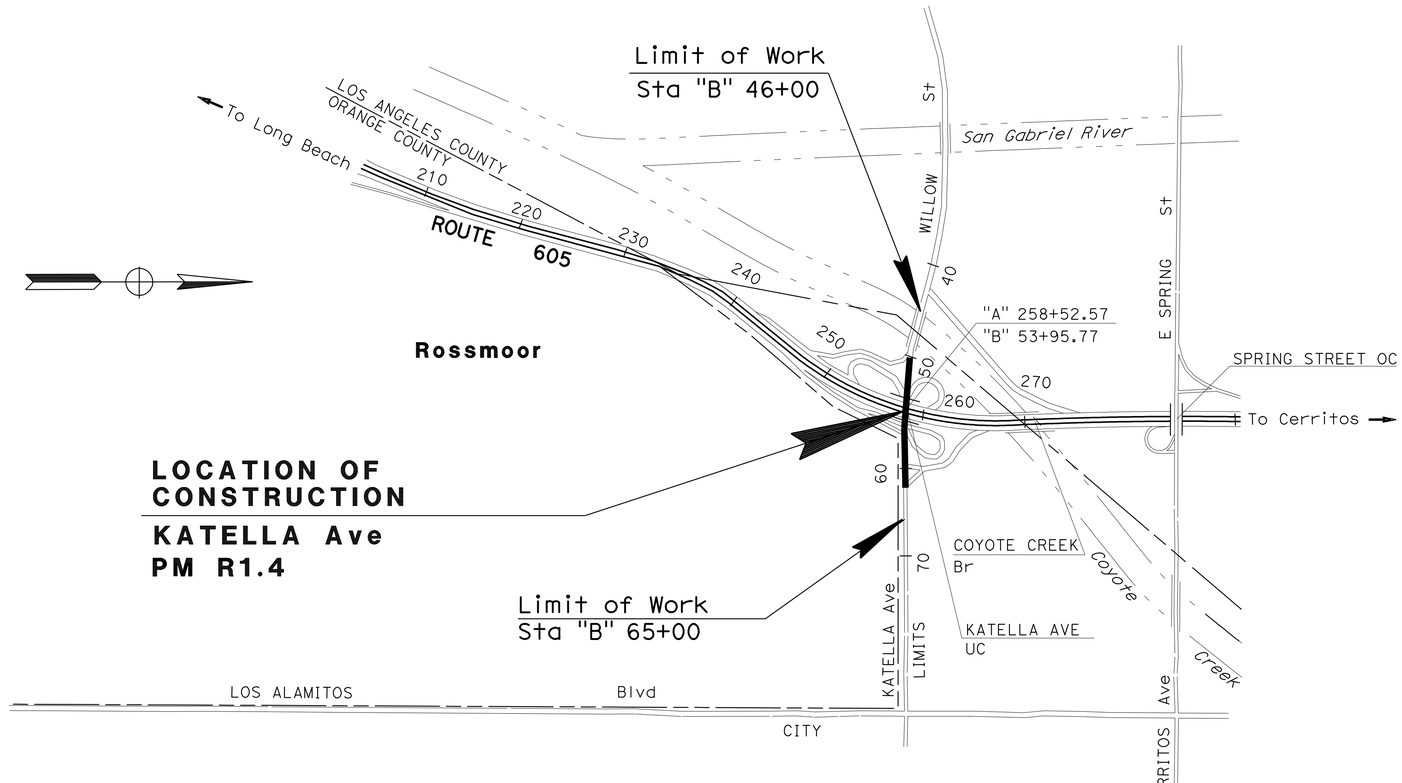
DEPARTMENT OF TRANSPORTATION

PROJECT PLANS FOR CONSTRUCTION ON STATE HIGHWAY

IN ORANGE COUNTY IN LOS ALAMITOS AT KATELLA AVENUE

TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006

LONG BEACH



LOS ALAMITOS

PROJECT MANAGER: AHMAD HINDIYEH

DESIGN ENGINEER: HENRY NGUYEN

04-01-09

PROJECT ENGINEER — DATE

REGISTERED CIVIL ENGINEER

REGISTERED PROFESSIONAL ENGINEER — HENRY NGUYEN — No. C69035 — Exp. 6-30-10 — CIVIL — STATE OF CALIFORNIA

May 18, 2009

PLANS APPROVAL DATE

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LAST REVISION 03-23-09 — DATE PLOTTED => 26-AUG-2009 — TIME PLOTTED => 07:23

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

NO SCALE

CONTRACT No. 12-0J4804

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	605	R1.4	2	45

REGISTERED CIVIL ENGINEER — 04-01-09 DATE

HENRY NGUYEN No. C69035 Exp. 6-30-10 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

5-18-09
PLANS APPROVAL DATE

NOTES:

1. DIMENSIONS OF THE STRUCTURAL SECTIONS ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. FOR CURB RAMP DETAILS NOT SHOWN, SEE STANDARD PLANS.

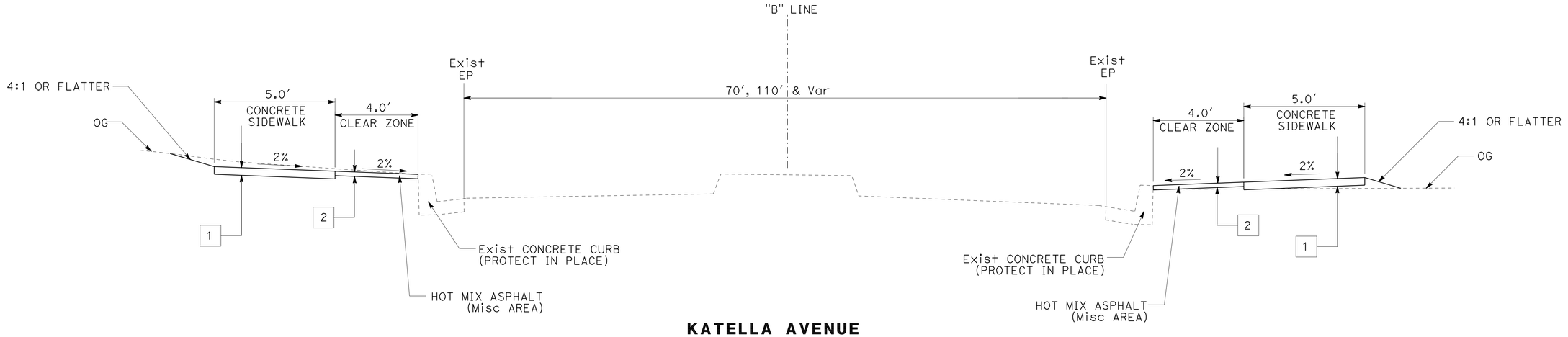
TYPICAL STRUCTURAL SECTION

1 — 4" MINOR CONCRETE (SIDEWALK)

2 — 0.25' HOT MIX ASPHALT (Misc AREA)

EXISTING STRUCTURAL SECTION

3 — 0.33' AC
0.67' RMCTB
0.33' AB
0.67' AS



KATELLA AVENUE

Sta "B" 51+17.62 TO Sta "B" 61+75.54

Sta "B" 48+61.76 TO Sta "B" 55+53.22

CURB RAMP

Sta "B" 48+56.92, 50+25.81, 50+37.08

CURB RAMP

Sta "B" 51+03.23, 57+43.79, 59+60.74

CURB RAMP

Sta "B" 51+13.92, 55+51.31, 55+83.76, 57+48.64, Sta "B" 58+93.36, 59+71.43

ABBREVIATIONS:

HMA - HOT MIX ASPHALT
RMCTB - ROAD MIXED CEMENT TREATED BASE

TYPICAL CROSS SECTION

NO SCALE

X-1

REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY: HENRY NGUYEN
CHECKED BY: M. Q. CUGINI
FUNCTIONAL SUPERVISOR: M. Q. CUGINI
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION — DESIGN
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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	605	R1.4	3	45

REGISTERED CIVIL ENGINEER — 04-01-09 DATE

HENRY NGUYEN No. C69035 Exp. 6-30-10 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

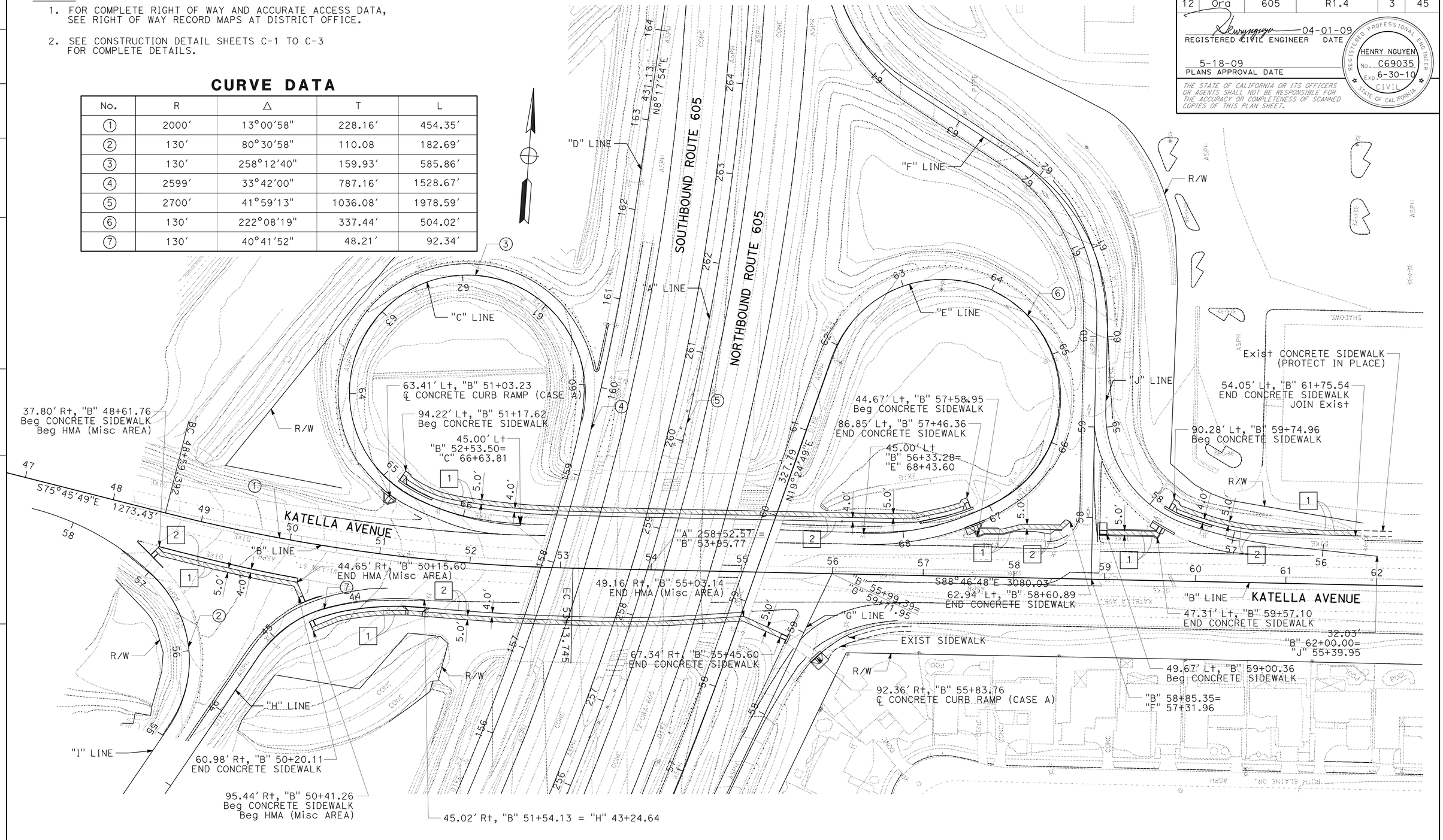
5-18-09
PLANS APPROVAL DATE

NOTES:

1. FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.
2. SEE CONSTRUCTION DETAIL SHEETS C-1 TO C-3 FOR COMPLETE DETAILS.

CURVE DATA

No.	R	Δ	T	L
①	2000′	13°00′58"	228.16′	454.35′
②	130′	80°30′58"	110.08	182.69′
③	130′	258°12′40"	159.93′	585.86′
④	2599′	33°42′00"	787.16′	1528.67′
⑤	2700′	41°59′13"	1036.08′	1978.59′
⑥	130′	222°08′19"	337.44′	504.02′
⑦	130′	40°41′52"	48.21′	92.34′



LEGEND:

5.0′ CONCRETE SIDEWALK

X — STRUCTURAL SECTION No.

LAYOUT

SCALE: 1"=50′ **L-1**

REVISED BY: HENRY NGUYEN — DATE REVISED: 5-18-09
CALCULATED-DESIGNED BY: M. Q. CUGINI — CHECKED BY: M. Q. CUGINI
FUNCTIONAL SUPERVISOR: M. Q. CUGINI

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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	605	R1.4	4	45

REGISTERED CIVIL ENGINEER — 04-01-09 DATE

HENRY NGUYEN No. C69035 Exp. 6-30-10 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

5-18-09
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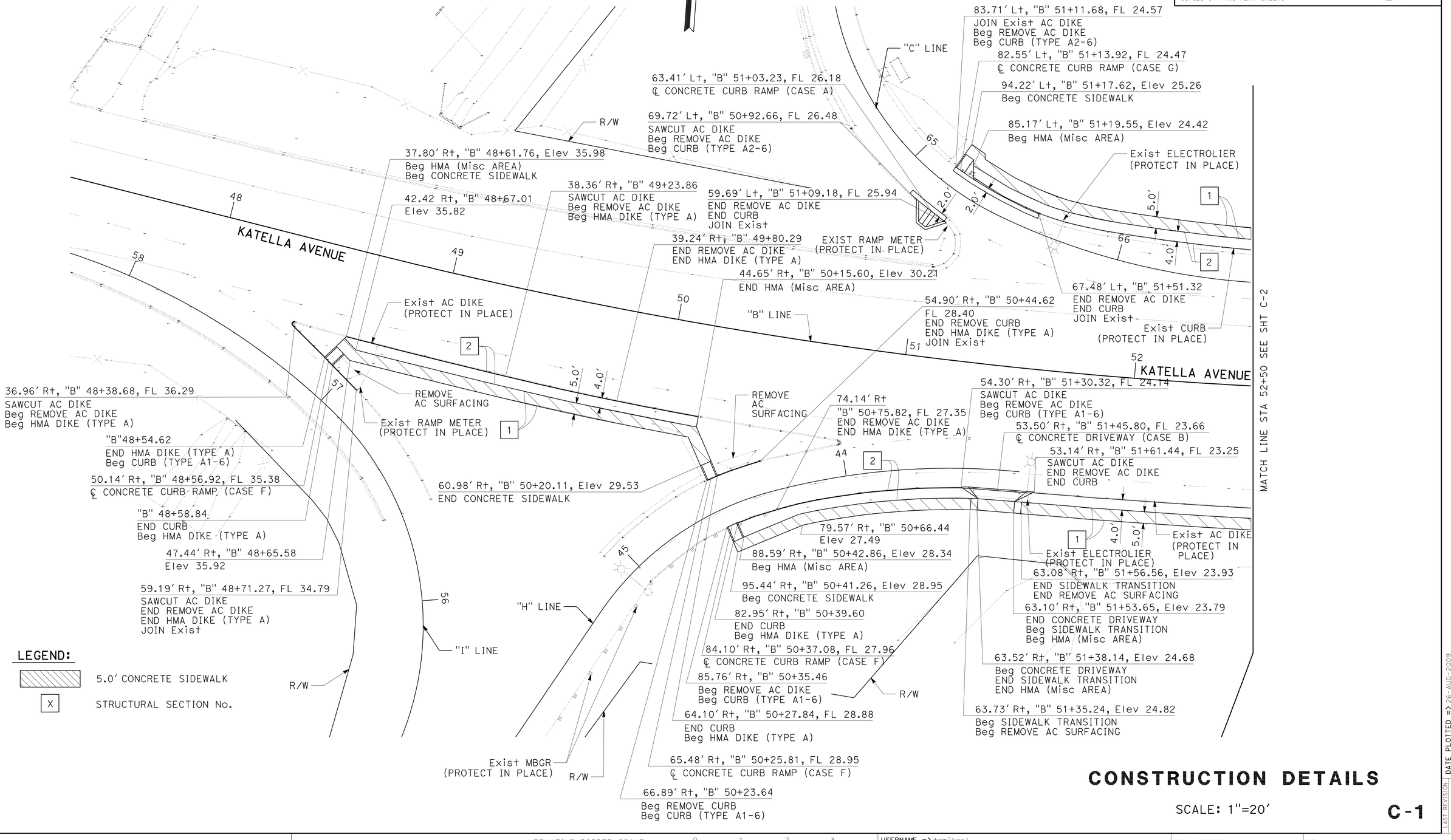

LEGEND:

5.0′ CONCRETE SIDEWALK

X — STRUCTURAL SECTION No.

CONSTRUCTION DETAILS

SCALE: 1"=20′

C-1

REVISED BY	DATE REVISED
HENRY NGUYEN	M. Q. CUGINI
CALCULATED-DESIGNED BY	CHECKED BY
FUNCTIONAL SUPERVISOR	M. Q. CUGINI

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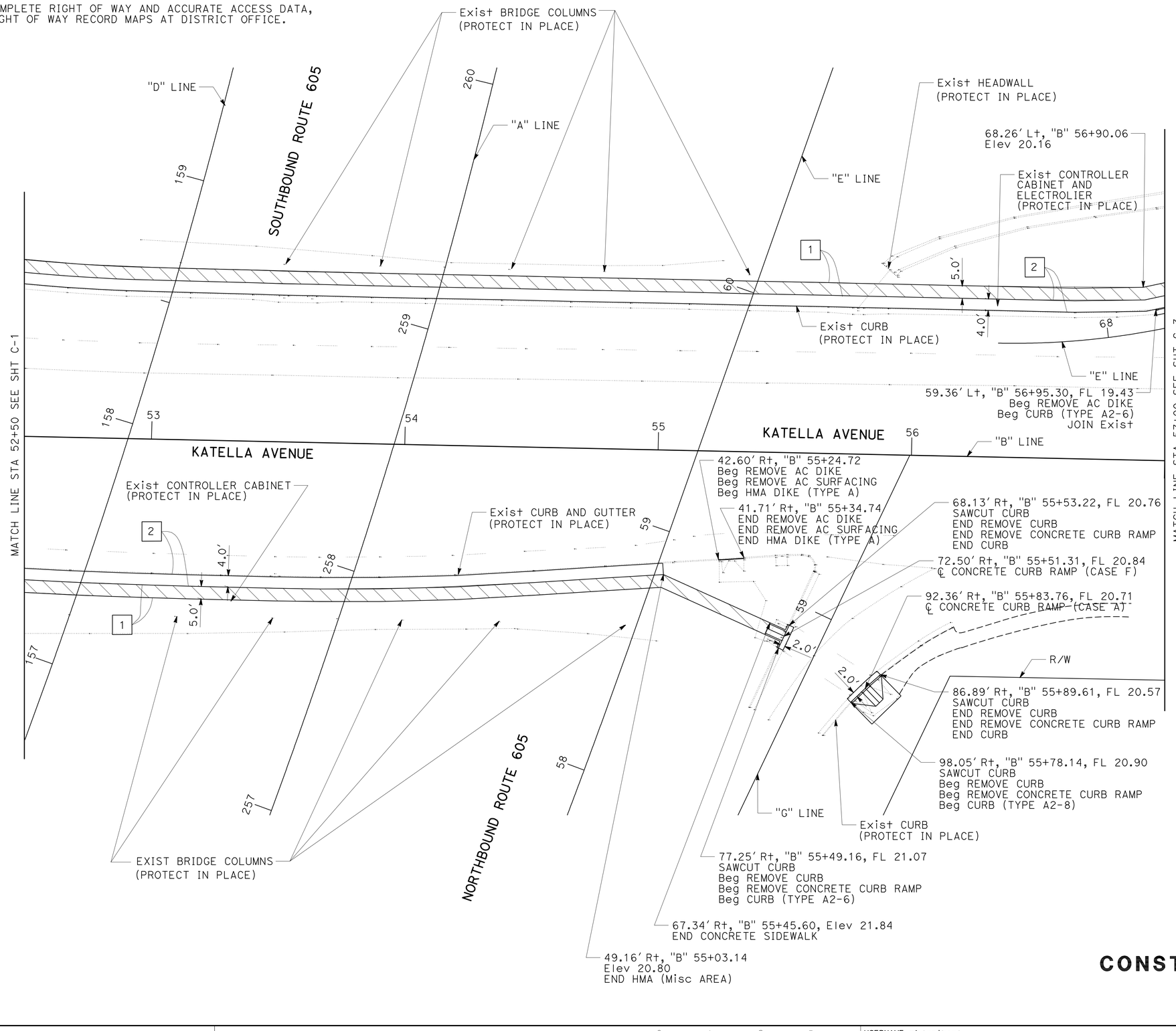
NOTE:

FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	605	R1.4	5	45

REGISTERED CIVIL ENGINEER — 04-01-09 DATE

HENRY NGUYEN No. C69035 Exp. 6-30-10 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

5-18-09
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CONSTRUCTION DETAILS

SCALE: 1"=20'

C-2

REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY: HENRY NGUYEN
CHECKED BY: M. Q. CUGINI
FUNCTIONAL SUPERVISOR: M. Q. CUGINI

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
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DGN FILE => c0j480ga002.dgn

CU 12222

EA 0J4801

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	605	R1.4	6	45

REGISTERED CIVIL ENGINEER — 04-01-09 DATE

5-18-09
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
HENRY NGUYEN
No. C69035
Exp. 6-30-10
CIVIL
STATE OF CALIFORNIA

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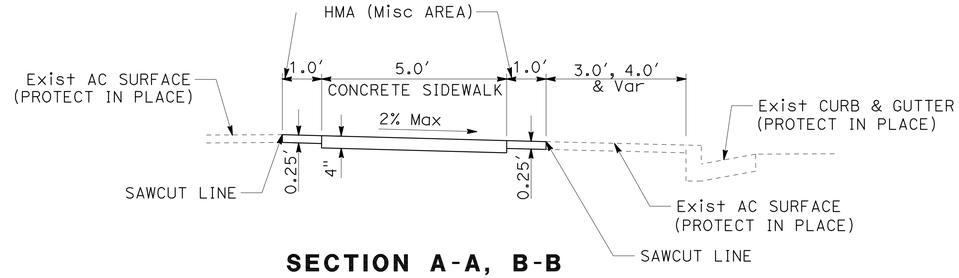
NOTE:

FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.

	STATION	DISTANCE
10	"B" 57+67.48	48.20′ Lt
11	"B" 57+86.71	48.20′ Lt
12	"B" 58+07.52	53.80′ Lt
13	"B" 58+02.20	51.34′ Lt
14	"B" 58+22.38	51.22′ Lt
15	"B" 58+39.10	48.84′ Lt
16	"B" 58+43.71	53.00′ Lt
17	"B" 58+51.52	54.06′ Lt

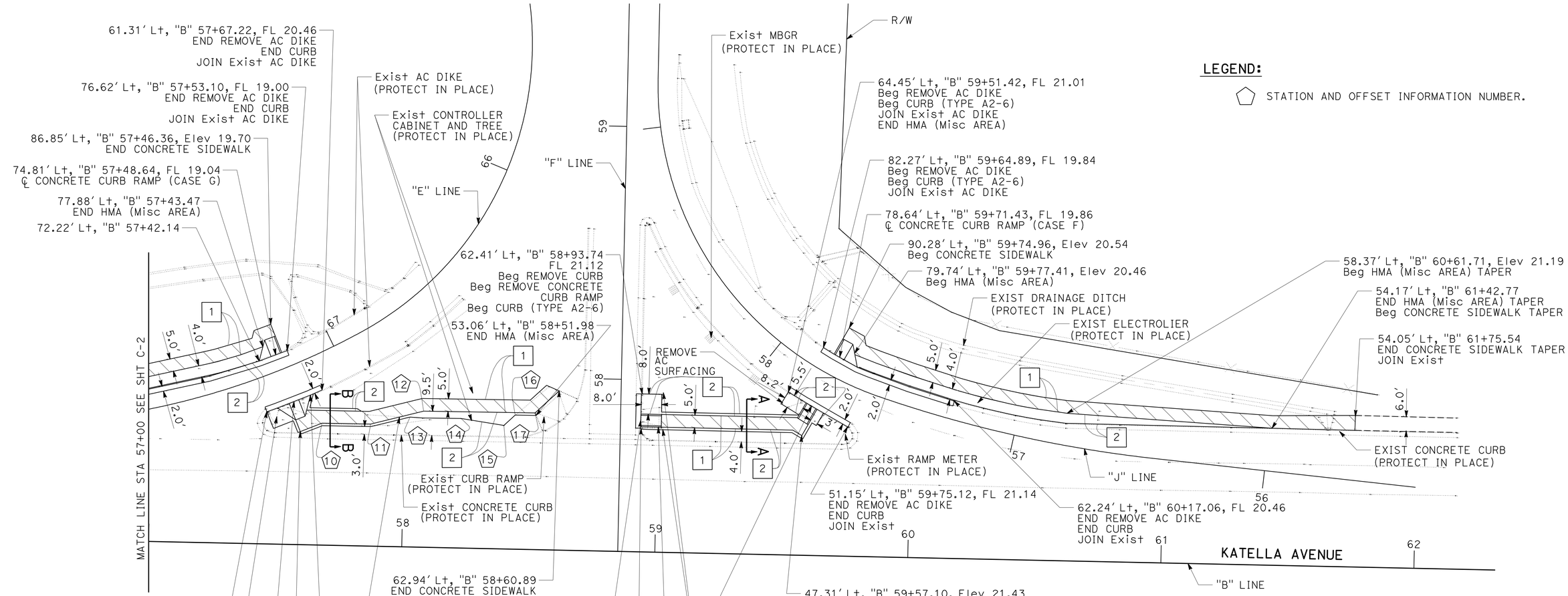


SECTION A-A, B-B

NO SCALE

LEGEND:

⬠ STATION AND OFFSET INFORMATION NUMBER.



CONSTRUCTION DETAILS

SCALE: 1"=20′

C-3

REVISED BY	DATE REVISED
HENRY NGUYEN	M. O. CUGINI
CALCULATED-DESIGNED BY	CHECKED BY
FUNCTIONAL SUPERVISOR	M. O. CUGINI

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DESIGN

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DGN FILE => c0j480ga003.dgn

CU 12222

EA 0J4801

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	605	R1.4	7	45

04-01-09
REGISTERED CIVIL ENGINEER DATE

HENRY NGUYEN
No. C69035
Exp. 6-30-10
CIVIL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

5-18-09
PLANS APPROVAL DATE

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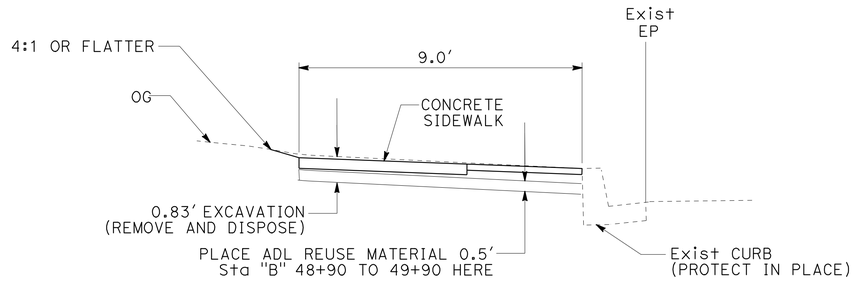
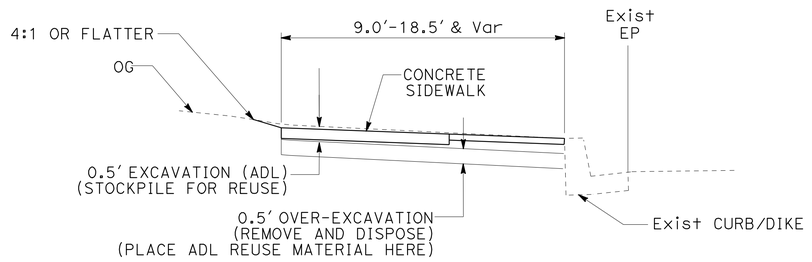


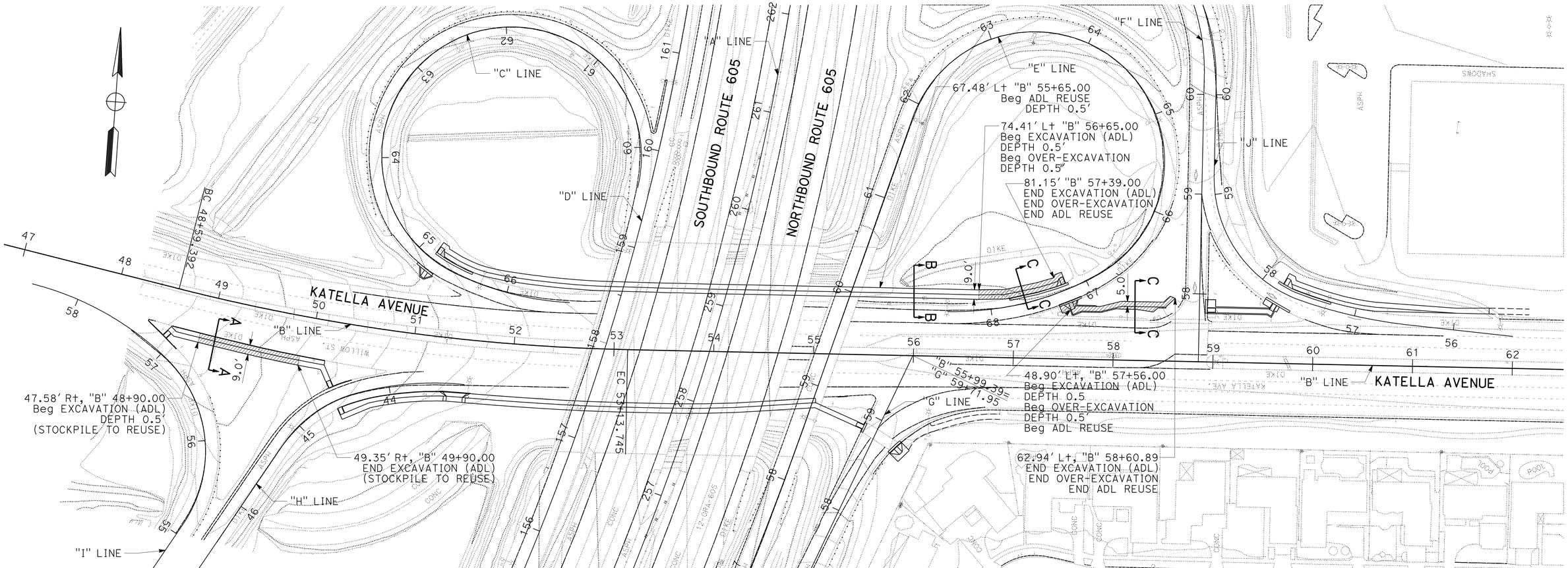
SECTION B-B

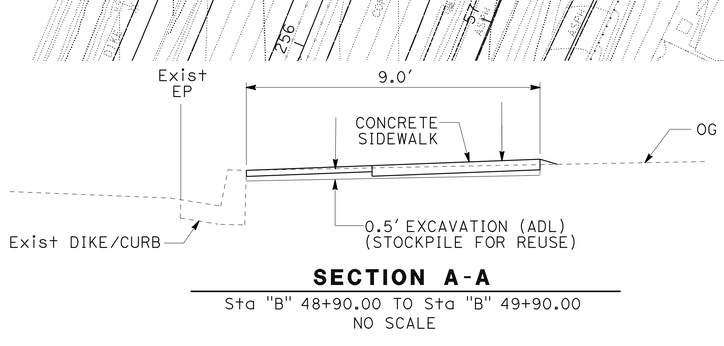
Sta "B" 55+65.00 TO Sta "B" 56+65.00
NO SCALE



SECTION C-C

Sta "B" 56+65.00 TO Sta "B" 57+39.00
Sta "B" 57+56.00 TO Sta "B" 58+60.89
NO SCALE





SECTION A-A

Sta "B" 48+90.00 TO Sta "B" 49+90.00
NO SCALE

LEGEND:

ADL EXCAVATION AREA

ABBREVIATION:

ADL - AERIALLY DEPOSITED LEAD

CONSTRUCTION DETAILS (AERIALLY DEPOSITED LEAD)

SCALE: 1"=50′

C-4

REVISED BY	HENRY NGUYEN	CALCULATED-DESIGNED BY
DATE REVISED	M. Q. CUGINI	CHECKED BY
FUNCTIONAL SUPERVISOR	M. Q. CUGINI	
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DESIGN	

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DGN FILE => c0j480ga004.dgn

CU 12222

EA 0J4801

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	605	R1.4	8	45

Sunil Gupta 04-01-09
REGISTERED CIVIL ENGINEER DATE

5-18-09
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
SUNIL GUPTA
No. C42195
EXP. 3/31/10
CIVIL
STATE OF CALIFORNIA

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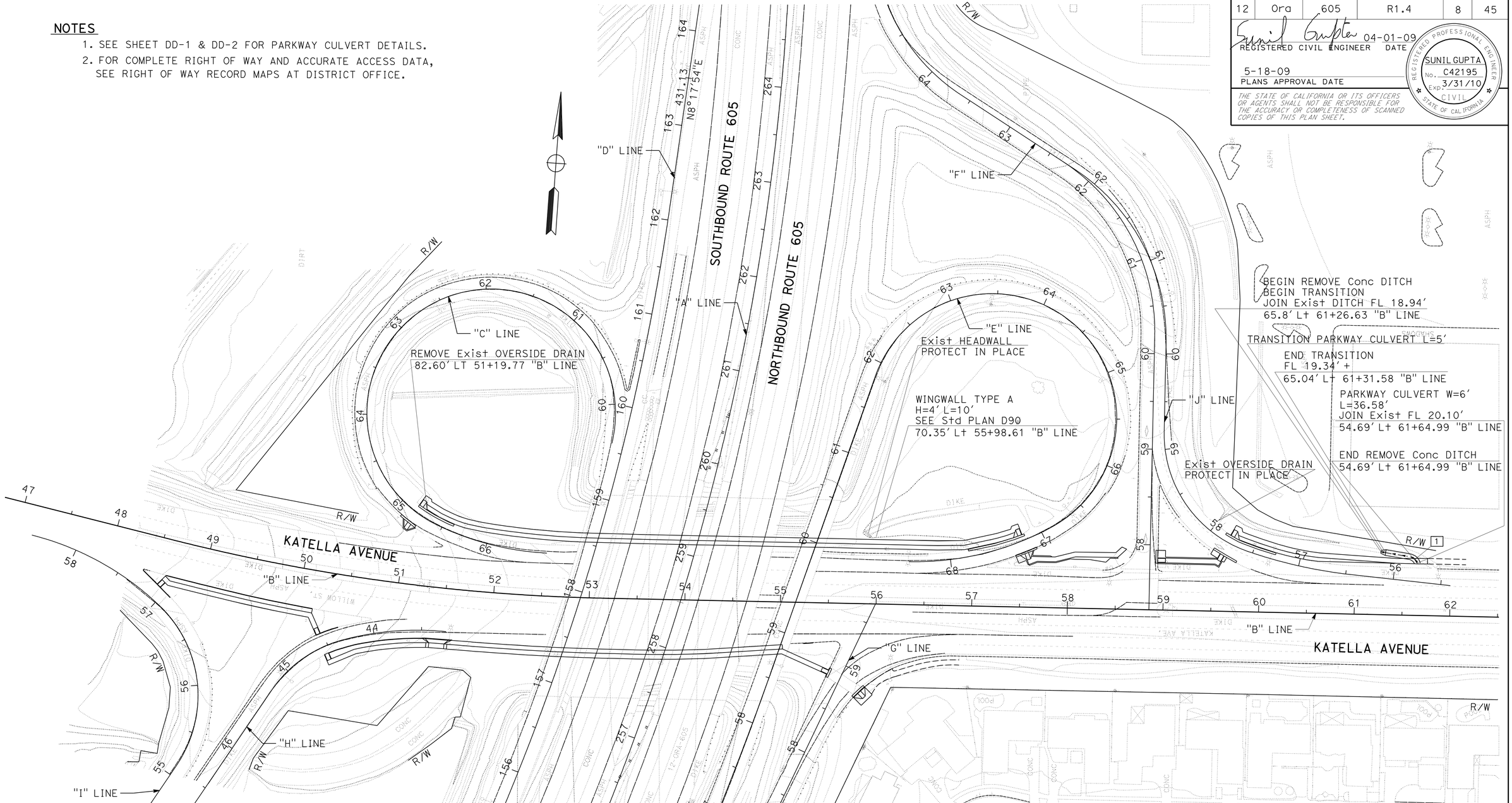
NOTES

1. SEE SHEET DD-1 & DD-2 FOR PARKWAY CULVERT DETAILS.
2. FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.



CURVE DATA

No.	R	Δ	T	L	BC	EC
1	10.52	60°13'18"	6.10	11.06	61.38' Lt 61+56.83 "B" LINE	54.69' Lt 61+64.99 "B" LINE

DRAINAGE PLAN

SCALE: 1"=50'

D-1

THIS PLAN ACCURATE FOR DRAINAGE WORK ONLY

REVISED BY	SG
DATE REVISED	03/23/09
CALCULATED-DESIGNED BY	SG
CHECKED BY	KB
FUNCTIONAL SUPERVISOR	ROGER KAO

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
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USERNAME => trmikesl
DGN FILE => c0j480ia001.dgn

CU 12222

EA 0J4801

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	605	R1.4	9	45

Sunil Gupta 04-01-09
REGISTERED CIVIL ENGINEER DATE

5-18-09
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
SUNIL GUPTA
No. C42195
EXP. 3/31/10
CIVIL
STATE OF CALIFORNIA

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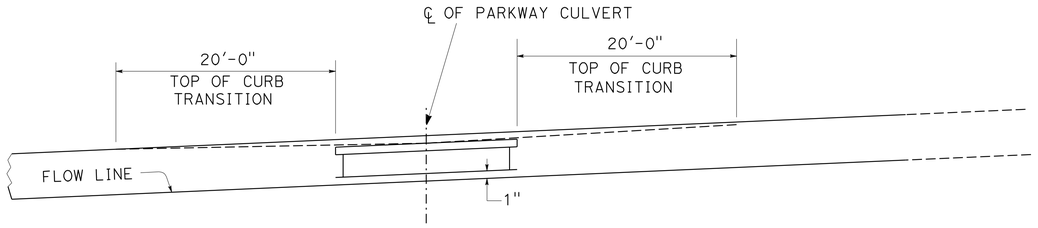

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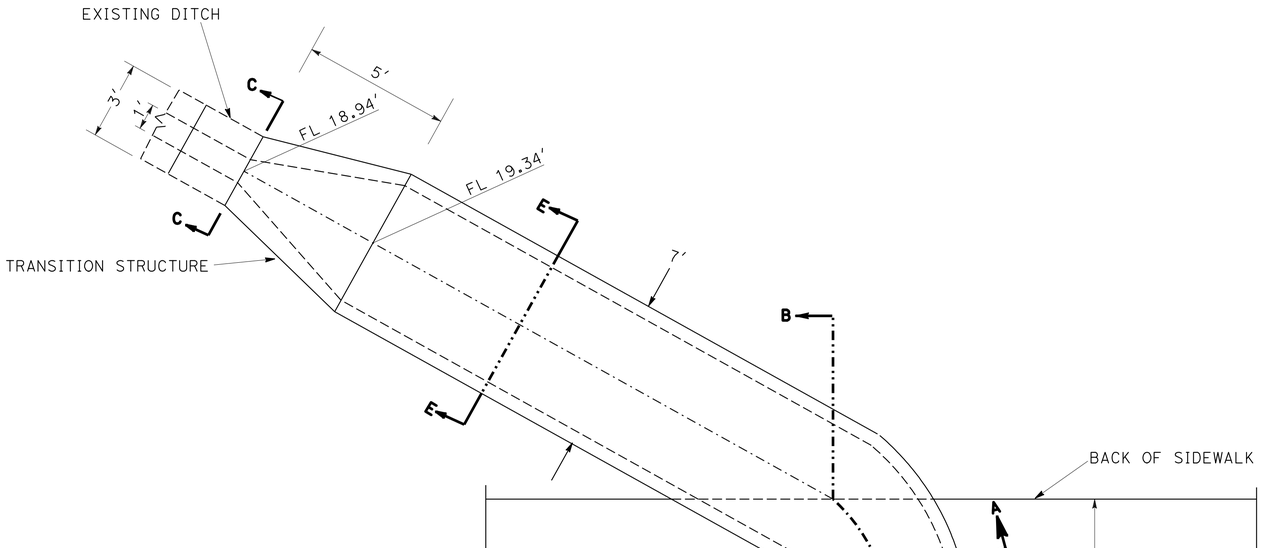

PLAN

PARKWAY CULVERT

DRAINAGE DETAILS

NO SCALE

DD-1

REVISED BY	DATE REVISED
SG	03/23/09

CALCULATED-DESIGNED BY	CHECKED BY
SG	KB

FUNCTIONAL SUPERVISOR: ROGER KAO

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
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LAST REVISION 03-24-09
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BORDER LAST REVISED 4/11/2008

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USERNAME => trmikesl
DGN FILE => c0j480ic001.dgn

CU 12222

EA 0J4801

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	605	R1.4	10	45

Sunil Gupta 04-01-09
REGISTERED CIVIL ENGINEER DATE

5-18-09
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — SUNIL GUPTA — No. C42195 — EXP. 3/31/10 — CIVIL — STATE OF CALIFORNIA

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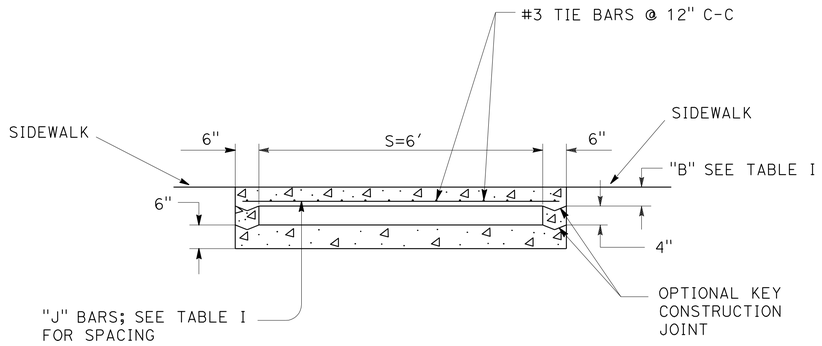
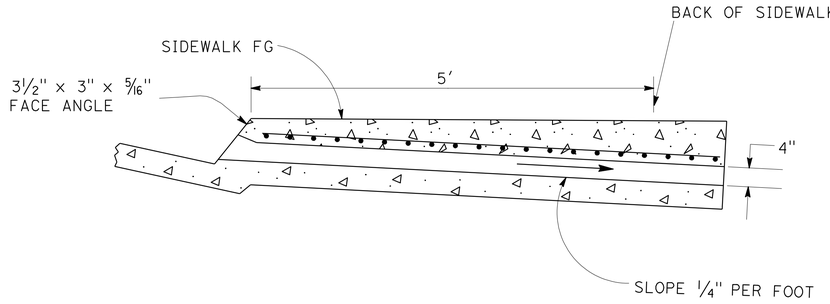


SECTION A-A



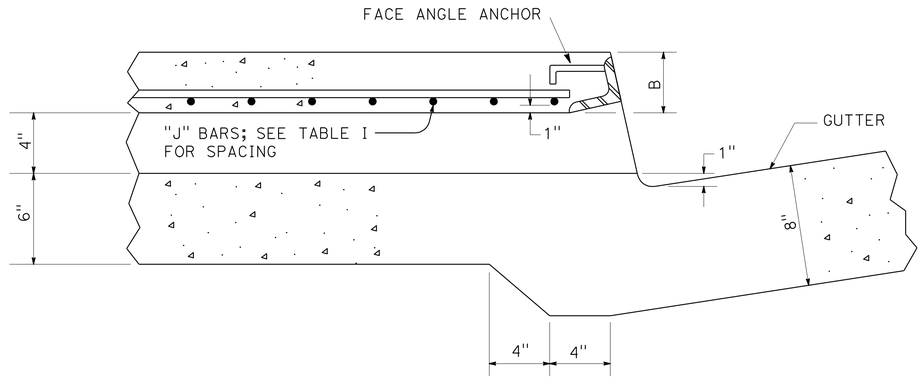
SECTION B-B

TABLE I

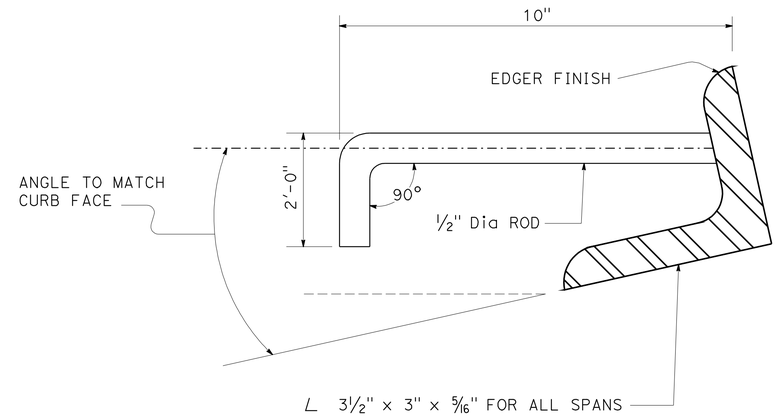
SPAN S	B	STEEL SIZE	SCHEDULE SPACING C-C	J-BARS LENGTH
2'-0"	3"	#3	7"	2'-9"
3'-0"	3"	#3	7"	3'-9"
4'-0"	3"	#3	5"	4'-9"
5'-0"	4"	#3	5"	5'-9"
6'-0"	4"	#3	3½"	6'-9"

GENERAL NOTES:

1. FLOOR OF PARKWAY CULVERT SHALL HAVE A STEEL TROWEL FINISH.
2. ALL EXPOSED METAL SHALL BE GALVANIZED AFTER FABRICATION.
3. REINFORCING STEEL SHALL BE 1" CLEAR TO INSIDE OF CULVERT UNLESS OTHERWISE SHOWN.
4. PRESSURE FLOW THRU CULVERT WILL NOT BE ALLOWED.



INLET DETAIL



LENGTH OF CURB OPENING	No. OF ANCHORS
3' OR LESS	2
3'-6"-6'-0"	3

FACE ANGLE ANCHOR DETAIL

DRAINAGE DETAILS

NO SCALE **DD-2**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION — HYDRAULICS
FUNCTIONAL SUPERVISOR: ROGER KAO
CALCULATED-DESIGNED BY: SG
CHECKED BY: KB
REVISED BY: SG — DATE REVISED: 03/23/09

LAST REVISION 03-24-09 | DATE PLOTTED => 26-AUG-2009 | TIME PLOTTED => 07:25

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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	605	R1.4	11	45

Sunil Gupta 04-01-09
REGISTERED CIVIL ENGINEER DATE

5-18-09
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — SUNIL GUPTA — No. C42195 — EXP. 3/31/10 — CIVIL — STATE OF CALIFORNIA

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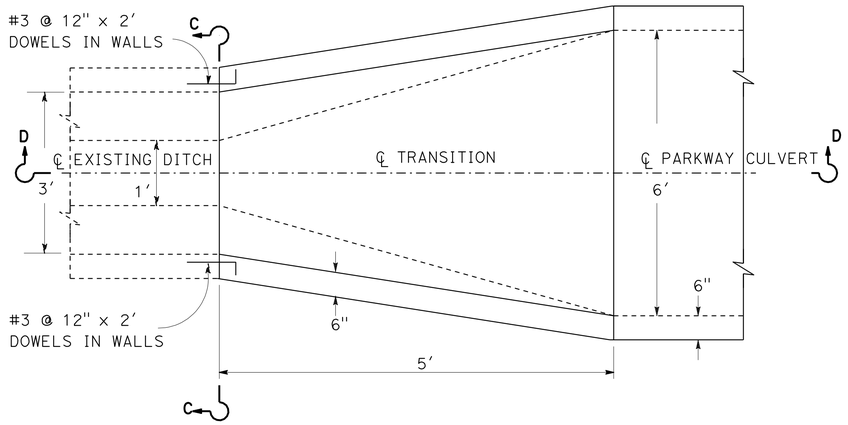
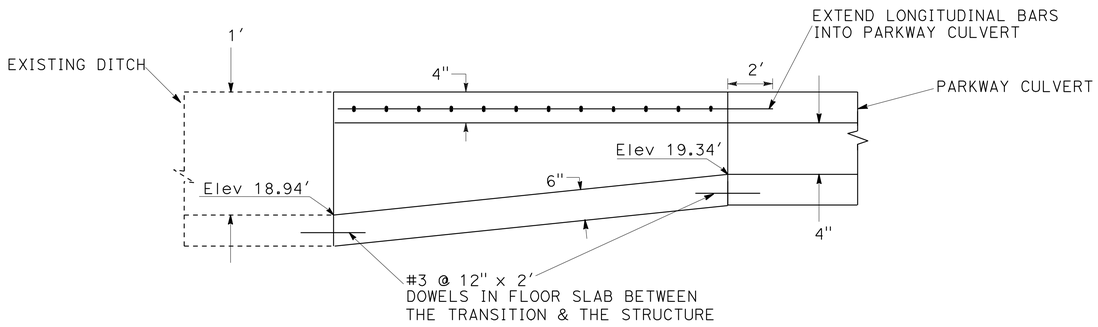


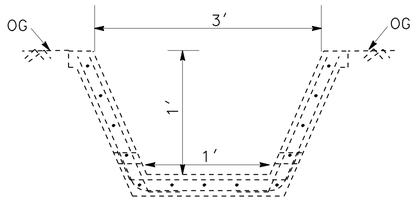
PLAN

TRANSITION STRUCTURE

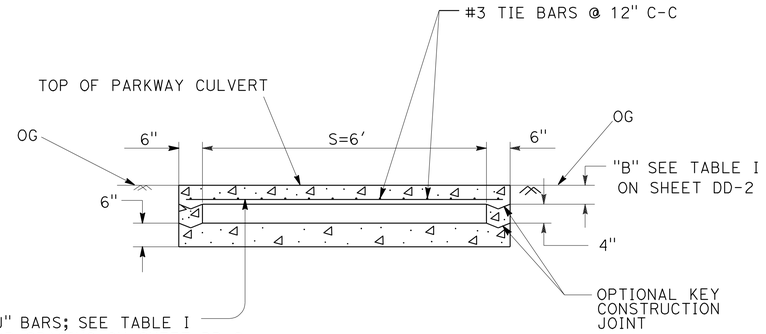
NOTE: FOR REINFORCEMENT DETAIL SEE PARKWAY CULVERT DETAIL SHEET DD-2.



SECTION D-D



SECTION C-C



SECTION E-E

DRAINAGE DETAILS

NO SCALE

DD-3

CALCULATED-DESIGNED BY	CHECKED BY	REVISED BY	DATE REVISED
SG	KB	SG	03/23/09

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
HYDRAULICS
FUNCTIONAL SUPERVISOR: ROGER KAO

LAST REVISION 03-24-09 | DATE PLOTTED => 26-AUG-2009 | TIME PLOTTED => 07:25

BORDER LAST REVISED 4/11/2008 | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | USERNAME => trmikesl | DGN FILE => c0j480ic003.dgn | CU 12222 | EA 0J4801

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	605	R1.4	12	45

Sunil Gupta 04-01-09
REGISTERED CIVIL ENGINEER DATE

5-18-09
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
SUNIL GUPTA
No. C42195
EXP. 3/31/10
CIVIL
STATE OF CALIFORNIA

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

SHEET No.	REMOVE OVERSIDE DRAIN	REMOVE CONCRETE (DITCH)	MINOR Conc (MINOR Str)	REINFORCING STEEL (PARKWAY CULVERT) (N)	DESCRIPTION	STATIONS
	EA	CY	CY	LB		
D-1	1				Exist OVERSIDE DRAIN	82.60' Lt 51+19.77 "B" LINE
			3.2		WINGWALL TYPE A	70.35' Lt 55+98.61 "B" LINE
			9	505	PARKWAY CULVERT W=6'	BETWEEN 65.8' Lt 61+26.63 "B" LINE & 54.69' Lt 61+64.99 "B" LINE
		3			Exist CONCRETE DITCH	BETWEEN 65.8' Lt 61+26.63 "B" LINE & 54.69' Lt 61+64.99 "B" LINE
TOTAL	1	3	12.2	505		

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

DRAINAGE QUANTITIES

DQ-1

REVISED BY	SG		
DATE REVISED	03/23/09		
CALCULATED-DESIGNED BY	SG		
CHECKED BY	KB		
FUNCTIONAL SUPERVISOR	ROGER KAO		

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
HYDRAULICS

LAST REVISION 03-24-09
DATE PLOTTED => 26-AUG-2009
TIME PLOTTED => 07:26

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	605	R1.4	13	45

04-01-09
REGISTERED CIVIL ENGINEER DATE

5-18-09
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
CHRISTOPHER LE
No. C55788
Exp. 12-31-10
CIVIL
STATE OF CALIFORNIA

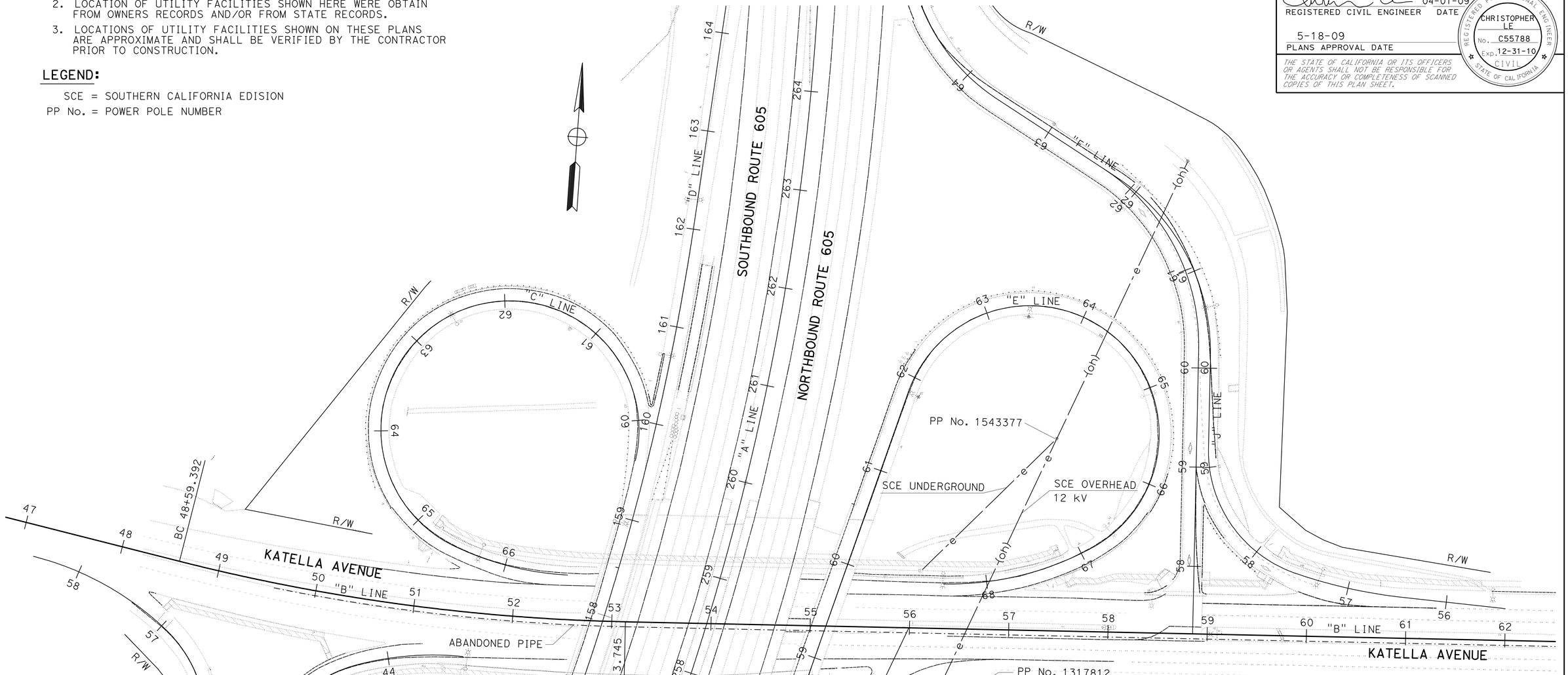
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTES:

1. FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.
2. LOCATION OF UTILITY FACILITIES SHOWN HERE WERE OBTAIN FROM OWNERS RECORDS AND/OR FROM STATE RECORDS.
3. LOCATIONS OF UTILITY FACILITIES SHOWN ON THESE PLANS ARE APPROXIMATE AND SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

LEGEND:

SCE = SOUTHERN CALIFORNIA EDISION
PP No. = POWER POLE NUMBER



UTILITY PLAN

SCALE: 1"=50'

U-1

CALCULATED-DESIGNED BY	MINH PHAM	REVISED BY	3/09
CHECKED BY	C.H. LE	DATE REVISED	
FUNCTIONAL SUPERVISOR	C.H. LE		
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DESIGN		

LAST REVISION | DATE PLOTTED => 26-AUG-2009
03-30-09 | TIME PLOTTED => 07:26

BORDER LAST REVISED 4/11/2008

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

USERNAME => trmikesl
DGN FILE => c0j480ka001.dgn

CU 12236

EA 0J4801

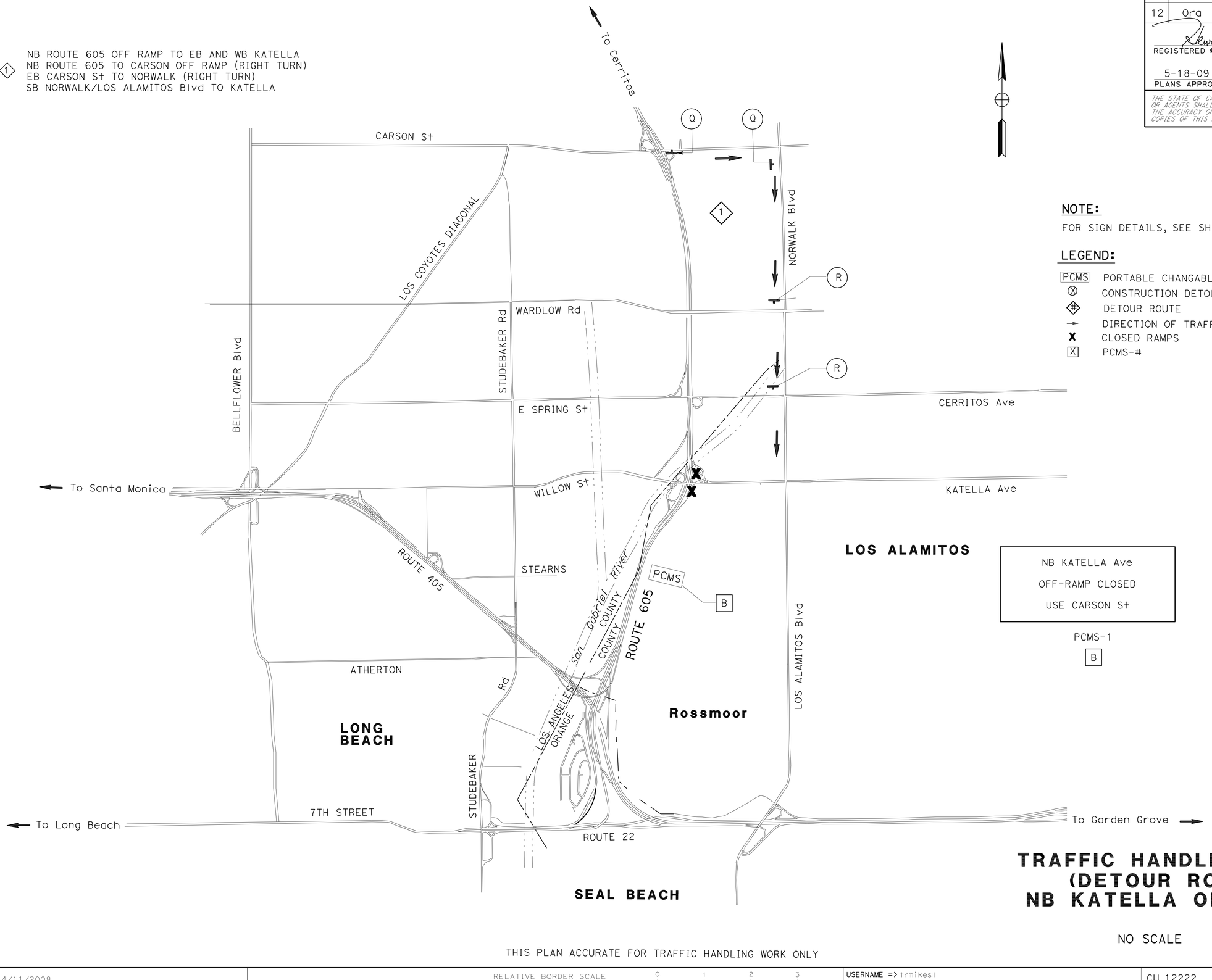
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	605	R1.4	14	45

REGISTERED CIVIL ENGINEER — 04-01-09 DATE

HENRY NGUYEN No. C69035 Exp. 6-30-10 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

5-18-09
PLANS APPROVAL DATE

① NB ROUTE 605 OFF RAMP TO EB AND WB KATELLA
NB ROUTE 605 TO CARSON OFF RAMP (RIGHT TURN)
EB CARSON St TO NORWALK (RIGHT TURN)
SB NORWALK/LOS ALAMITOS Blvd TO KATELLA



NB KATELLA Ave
OFF-RAMP CLOSED
USE CARSON St

PCMS-1
B

NOTE:

FOR SIGN DETAILS, SEE SHEET THQ-1.

LEGEND:

- PCMS — PORTABLE CHANGABLE MESSAGE SIGN
- ⊗ — CONSTRUCTION DETOUR SIGNS
- ◈ — DETOUR ROUTE
- → — DIRECTION OF TRAFFIC
- ✖ — CLOSED RAMPS
- [X] — PCMS-#

TRAFFIC HANDLING PLAN (DETOUR ROUTE) NB KATELLA OFF-RAMP

NO SCALE

TH-1

THIS PLAN ACCURATE FOR TRAFFIC HANDLING WORK ONLY

CALCULATED-DESIGNED BY: HENRY NGUYEN
CHECKED BY: M. Q. CUGINI
REVISED BY
DATE REVISED
FUNCTIONAL SUPERVISOR: M. Q. CUGINI
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DESIGN
Caltrans

LAST REVISION | DATE PLOTTED => 26-AUG-2009
03-24-09 | TIME PLOTTED => 07:26

BORDER LAST REVISED 4/11/2008 | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | USERNAME => trmikesl | DGN FILE => c0j480md001.dgn | CU 12222 | EA 0J4801

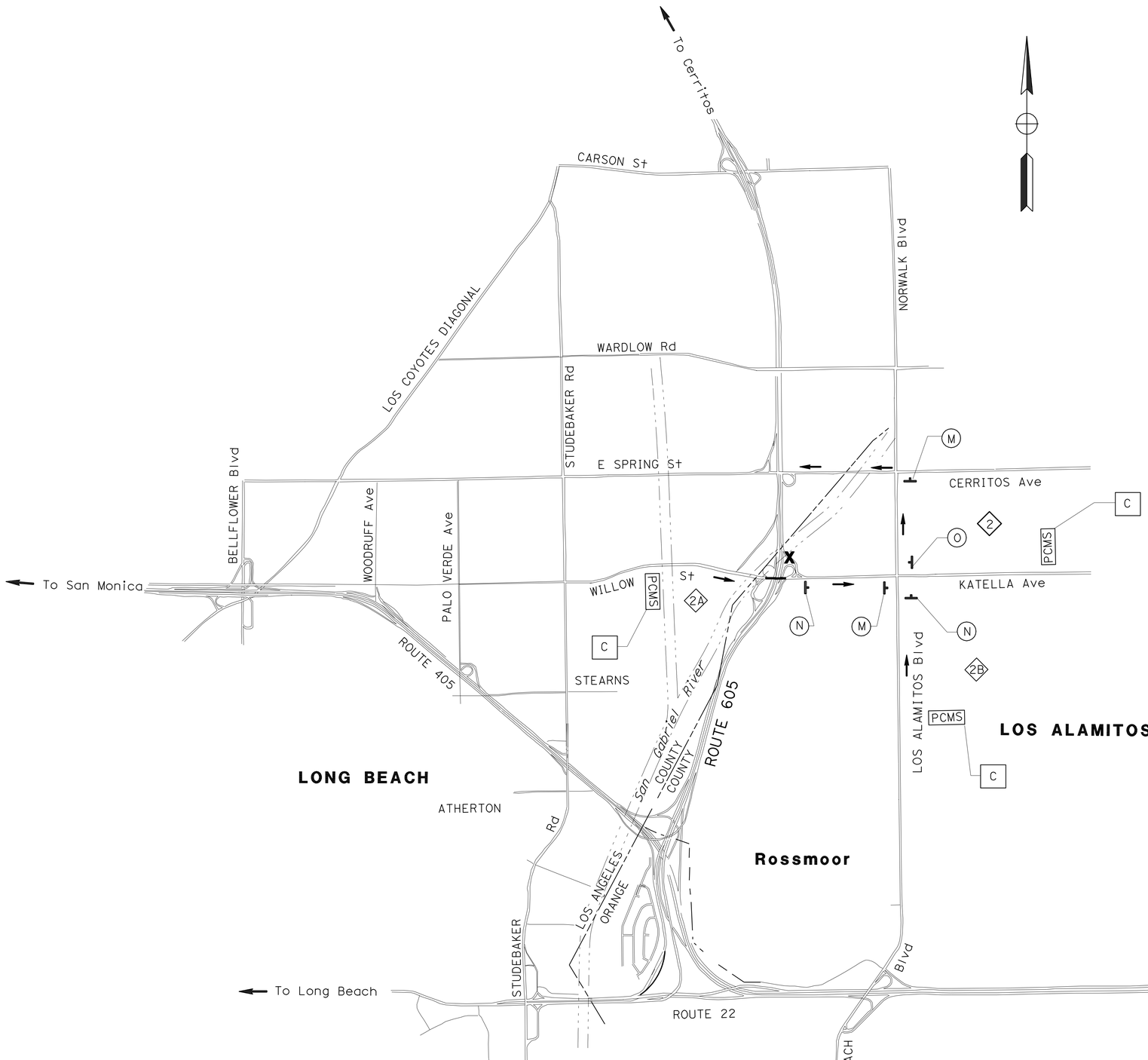
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	605	R1.4	15	45

04-01-09
REGISTERED CIVIL ENGINEER DATE

HENRY NGUYEN
No. C69035
Exp. 6-30-10
CIVIL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

5-18-09
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 KATELLA Ave ON RAMP TO NB ROUTE 605
WB KATELLA TO LOS ALAMITOS (RIGHT TURN)
NB LOS ALAMITOS TO CERRITOS (LEFT TURN)
WB CERRITOS TO NB ROUTE 605 ON-RAMP

2A EB KATELLA TO LOS ALAMITOS (LEFT TURN)
NB LOS ALAMITOS TO CERRITOS (LEFT TURN)
WB CERRITOS TO NB ROUTE 605 ON-RAMP

2B NB LOS ALAMITOS TO CERRITOS (LEFT TURN)
WB CERRITOS TO NB ROUTE 605 ON-RAMP

NB KATELLA Ave
ON-RAMP CLOSED
USE CERRITOS Ave

PCMS-2
C

TRAFFIC HANDLING PLAN (DETOUR ROUTE) KATELLA NB ON-RAMP

NO SCALE

THIS PLAN ACCURATE FOR TRAFFIC HANDLING WORK ONLY

TH-2

HENRY NGUYEN — CALCULATED-DESIGNED BY
M. Q. CUGINI — CHECKED BY
M. Q. CUGINI — FUNCTIONAL SUPERVISOR
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DESIGN
Caltrans

REVISED BY
DATE REVISED

LAST REVISION 03-23-09
DATE PLOTTED => 26-AUG-2009
TIME PLOTTED => 07:26

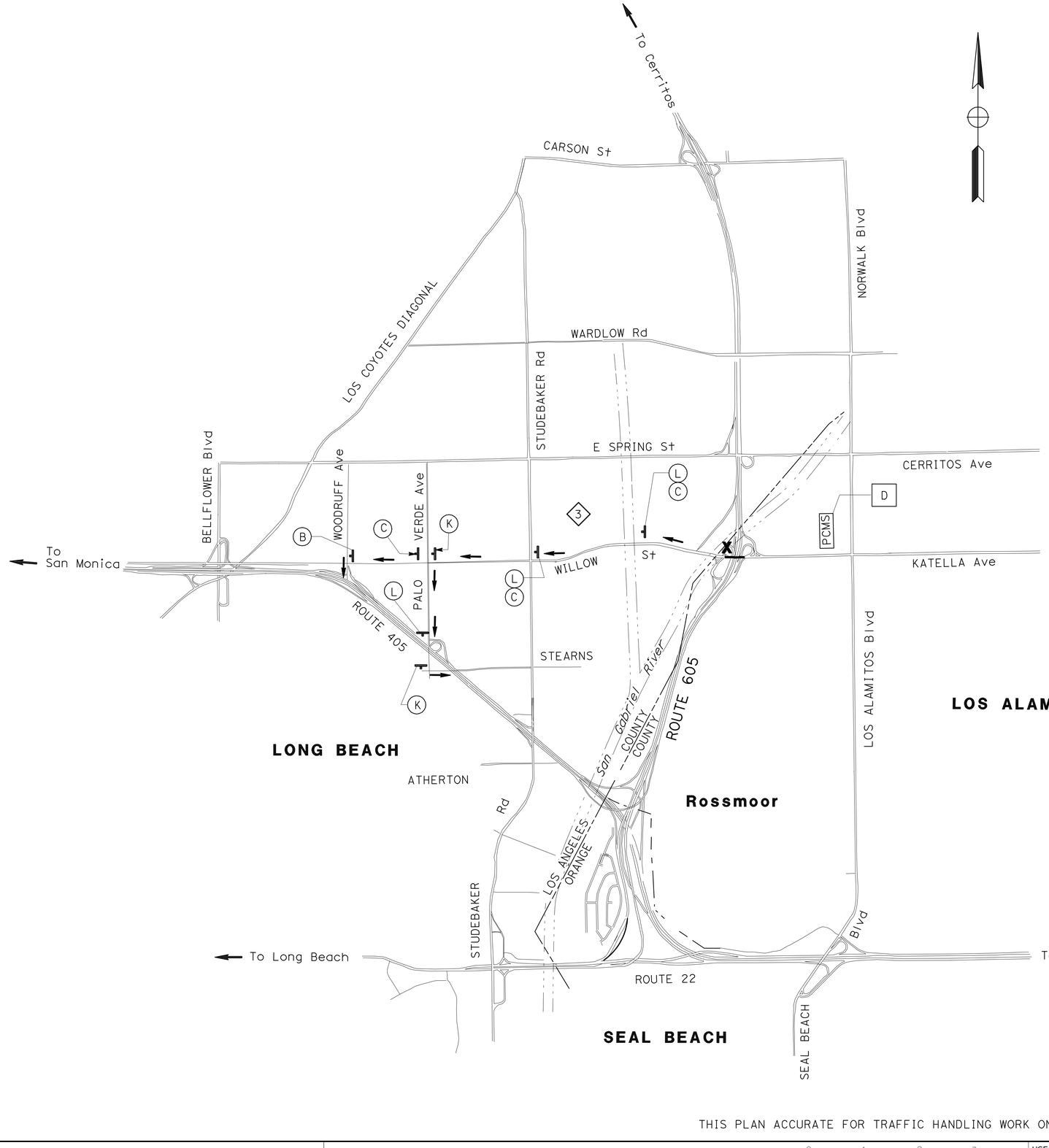
BORDER LAST REVISED 4/11/2008
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
USERNAME => trmikesl
DGN FILE => c0j480md002.dgn
CU 12222
EA 0J4801

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	605	R1.4	16	45

REGISTERED CIVIL ENGINEER — 04-01-09 DATE

HENRY NGUYEN No. C69035 Exp. 6-30-10 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

5-18-09
PLANS APPROVAL DATE



WB KATELLA Ave ON-RAMP TO SB ROUTE 605

③ WB KATELLA/WILLOW TO PALO VERDE (LEFT TURN)
SB PALO VERDE TO STEARNS (LEFT TURN)
EB STEARNS TO SB ROUTE 405 ON-RAMP

WB KATELLA Ave ON-RAMP TO NB ROUTE 405

WB KATELLA/WILLOW TO WOODRUFF (LEFT TURN)
SB WOODRUFF TO NB ROUTE 405 ON-RAMP

SB 605 ON-RAMP
AT KATELLA CLOSED
USE DETOUR

PCMS-3
D

TRAFFIC HANDLING PLAN (DETOUR ROUTE) KATELLA SB ON-RAMP

NO SCALE

THIS PLAN ACCURATE FOR TRAFFIC HANDLING WORK ONLY

TH-3

LAST REVISION | DATE PLOTTED => 26-AUG-2009 | 03-23-09 | TIME PLOTTED => 07:26

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION | DESIGN | Caltrans

FUNCTIONAL SUPERVISOR: M. Q. CUGINI

CALCULATED-DESIGNED BY: HENRY NGUYEN | CHECKED BY: M. Q. CUGINI

REVISED BY | DATE REVISED

BORDER LAST REVISED 4/11/2008

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

USERNAME => trmikesl
DGN FILE => c0j480md003.dgn

CU 12222

EA 0J4801

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	605	R1.4	17	45

04-01-09
REGISTERED CIVIL ENGINEER DATE

HENRY NGUYEN
No. C69035
Exp. 6-30-10
CIVIL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

5-18-09
PLANS APPROVAL DATE

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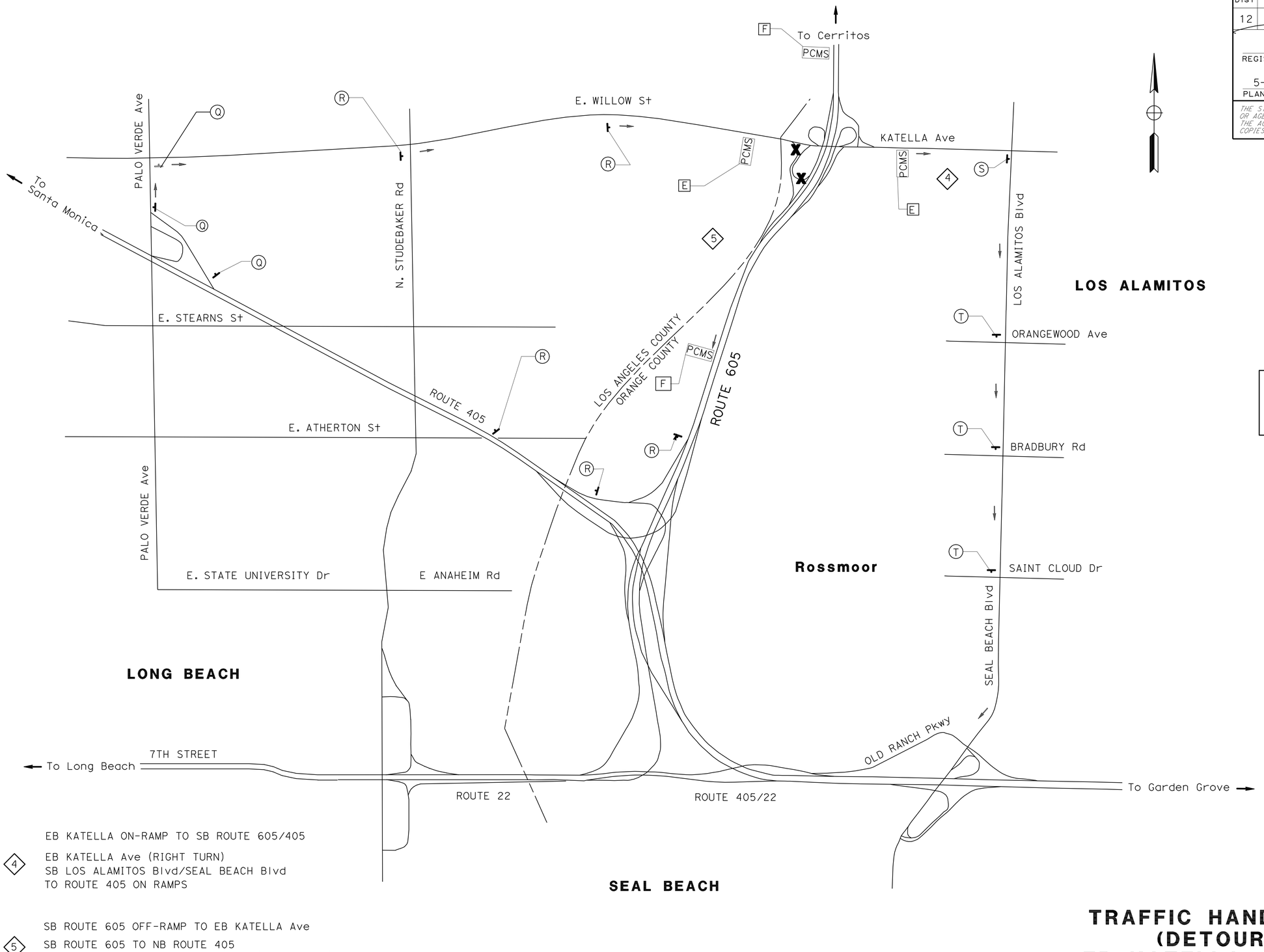


SB 605
ON-RAMP CLOSED
USE LOS ALAMITOS Bl

PCMS-4
E

KATELLA Ave
OFF-RAMP CLOSED USE
NB 405 PALO VERDE

PCMS-5
F

EB KATELLA ON-RAMP TO SB ROUTE 605/405

4 EB KATELLA Ave (RIGHT TURN)
SB LOS ALAMITOS Blvd/SEAL BEACH Blvd
TO ROUTE 405 ON RAMPS

SB ROUTE 605 OFF-RAMP TO EB KATELLA Ave

5 SB ROUTE 605 TO NB ROUTE 405
NB ROUTE 405 TO PALO VERDE Ave (RIGHT TURN)
NB PALO VERDE Ave TO EB WILLOW (RIGHT TURN)
EB WILLOW/KATELLA Ave

TRAFFIC HANDLING PLAN (DETOUR ROUTE) EB KATELLA ON/OFF-RAMPS

THIS PLAN ACCURATE FOR TRAFFIC HANDLING WORK ONLY

NO SCALE

TH-4

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DESIGN
FUNCTIONAL SUPERVISOR: M. Q. CUGINI
CALCULATED-DESIGNED BY: HENRY NGUYEN
CHECKED BY: M. Q. CUGINI
REVISED BY
DATE REVISED

LAST REVISION DATE PLOTTED => 26-AUG-2009
TIME PLOTTED => 07:26
03-23-09

BORDER LAST REVISED 4/11/2008
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
USERNAME => trmikesl
DGN FILE => c0j480md004.dgn
CU 12222
EA 0J4801

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	605	R1.4	18	45

REGISTERED CIVIL ENGINEER — 04-01-09 DATE

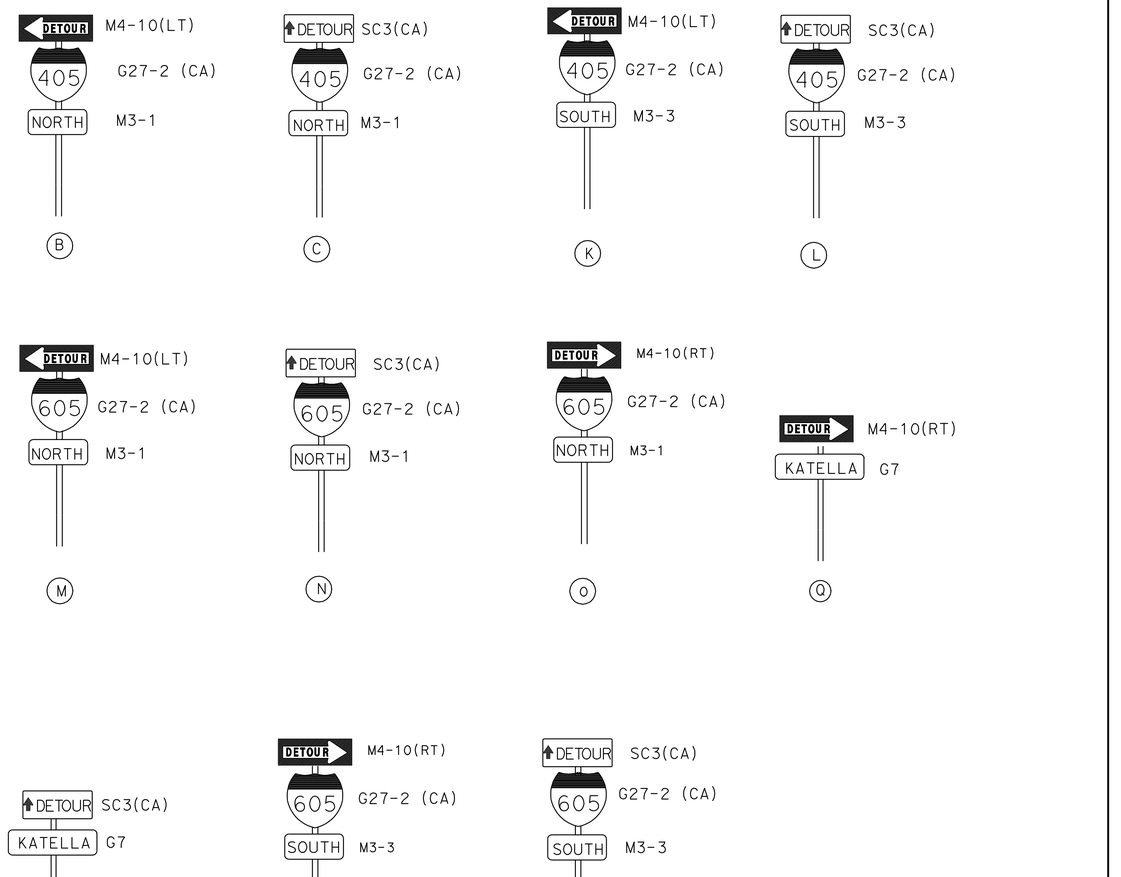
HENRY NGUYEN No. C69035 Exp. 6-30-10 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

5-18-09
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.

STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

SIGN SYMBOL	SIGN CODE	PANEL SIZE	No. OF SIGNS	No. OF POST AND SIZE	SIGN MESSAGE
Ⓑ	M4-10(LT)	48" x 48"	1	1 - 6" x 6"	SEE CS-5 FOR DETAIL
	G27-2(CA)	42" x 36"			
	M3-1	30" x 15"			
Ⓒ	SC3(CA)	48" x 48"	3	1 - 6" x 6"	SEE CS-5 FOR DETAIL
	G27-2(CA)	42" x 36"			
	M3-1	30" x 15"			
Ⓚ	M4-10(LT)	48" x 48"	2	1 - 6" x 6"	SEE CS-5 FOR DETAIL
	G27-2(CA)	42" x 36"			
	M3-3	30" x 15"			
Ⓛ	SC3(CA)	48" x 48"	3	1 - 6" x 6"	SEE CS-5 FOR DETAIL
	G27-2(CA)	42" x 36"			
	M3-3	30" x 15"			
Ⓜ	M4-10(LT)	48" x 48"	2	1 - 6" x 6"	SEE CS-5 FOR DETAIL
	G27-2(CA)	42" x 36"			
	M3-1	30" x 15"			
Ⓝ	SC3(CA)	48" x 48"	2	1 - 6" x 6"	SEE CS-5 FOR DETAIL
	G27-2(CA)	42" x 36"			
	M3-1	30" x 15"			
Ⓞ	M4-10(RT)	48" x 18"	1	1 - 6" x 6"	SEE CS-5 FOR DETAIL
	G27-2(CA)	42" x 36"			
	M3-1	30" x 15"			
Ⓠ	M4-10(RT)	48" x 18"	5	1 - 6" x 6"	SEE CS-5 FOR DETAIL
	G7-1	Var x 6"			
Ⓡ	SC3(CA)	48" x 18"	7	1 - 6" x 6"	SEE CS-5 FOR DETAIL
	G7-1	Var x 6"			
Ⓢ	M4-10(RT)	48" x 18"	1	1 - 6" x 6"	SEE CS-5 FOR DETAIL
	G27-2(CA)	42" x 36"			
	M3-3	30" x 15"			
Ⓣ	SC3(CA)	48" x 18"	3	1 - 6" x 6"	SEE CS-5 FOR DETAIL
	G27-2(CA)	42" x 36"			
	M3-3	30" x 15"			



PORTABLE CHANGABLE MESSAGE SIGN

SIGN SYMBOL	SIGN CODE	SHEET No.	NUMBER OF SIGNS
B	PCMS-1	TH-1	1
C	PCMS-2	TH-2	3
D	PCMS-3	TH-3	1
E	PCMS-4	TH-4	2
F	PCMS-5	TH-4	2

TRAFFIC HANDLING QUANTITIES

THQ-1

REVISED BY | DATE REVISED
HENRY NGUYEN | M. Q. CUGINI
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR: M. Q. CUGINI
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DESIGN
Caltrans

LAST REVISION | DATE PLOTTED => 26-AUG-2009
03-23-09 | TIME PLOTTED => 07:26

BORDER LAST REVISED 4/11/2008 | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | USERNAME => trmikesl | DGN FILE => c0j480mf001.dgn | CU 12222 | EA 0J4801

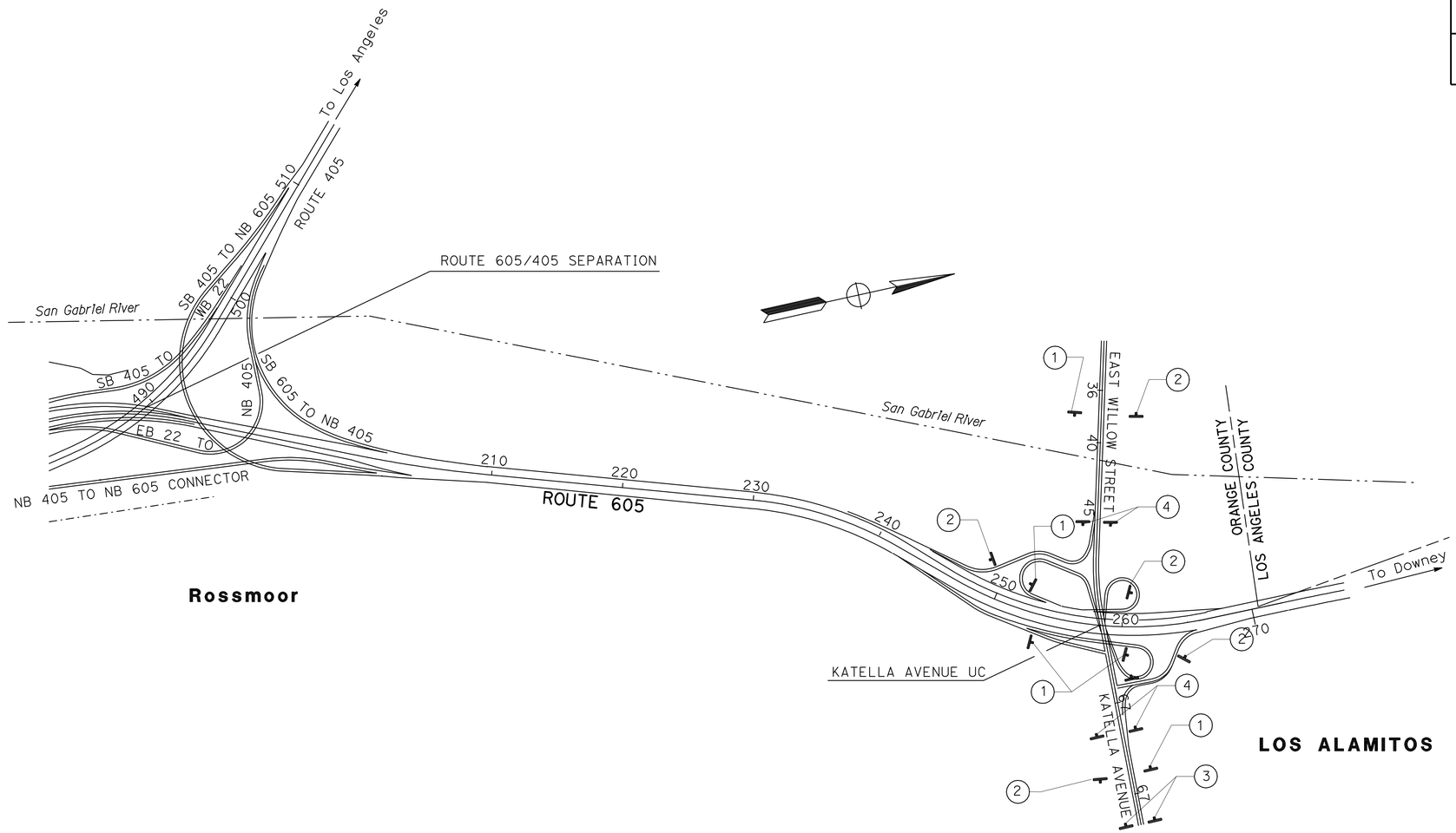
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	605	R1.4	19	45

REGISTERED CIVIL ENGINEER — 04-01-09 DATE

HENRY NGUYEN No. C69035 Exp. 6-30-10 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

5-18-09
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.



STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

SIGN NUMBER	SIGN CODE	No. OF SIGNS	PANEL SIZE	WOOD POST No. OF POST AND SIZE	SIGN MESSAGE
(1)	G20-1	5	36" x 18"	1 - 4" x 6"	ROAD CONSTRUCTION AHEAD
(2)	G20-2	5	48" x 18"	1 - 4" x 6"	END CONSTRUCTION
(3)	R9-11	2	36" x 12"	1 - 4" x 6"	SIDEWALK CLOSED AHEAD CROSS HERE
(4)	R9-9	4	24" x 12"	1 - 4" x 6"	SIDEWALK CLOSED

THIS PLAN ACCURATE FOR CONSTRUCTION AREA SIGNS ONLY

CONSTRUCTION AREA SIGNS

NO SCALE

CS-1

CALCULATED-DESIGNED BY: HENRY NGUYEN
CHECKED BY: M. O. CUGINI
FUNCTIONAL SUPERVISOR: M. O. CUGINI
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DESIGN
Caltrans

REVISED BY | DATE REVISED

LAST REVISION 03-24-09 | DATE PLOTTED => 26-AUG-2009 | TIME PLOTTED => 07:27

BORDER LAST REVISED 4/11/2008

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

USERNAME => trmikesl
DGN FILE => c0j4801a001.dgn

CU 12222

EA 0J4801

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	605	R1.4	20	45

Mostafa Aliakbarzadeh 04-01-09
REGISTERED CIVIL ENGINEER DATE

5-18-09
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
MOSTAFA ALIAKBARZADEH
No. C53003
Exp. 3-31-11
CIVIL
STATE OF CALIFORNIA

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

LEGEND:

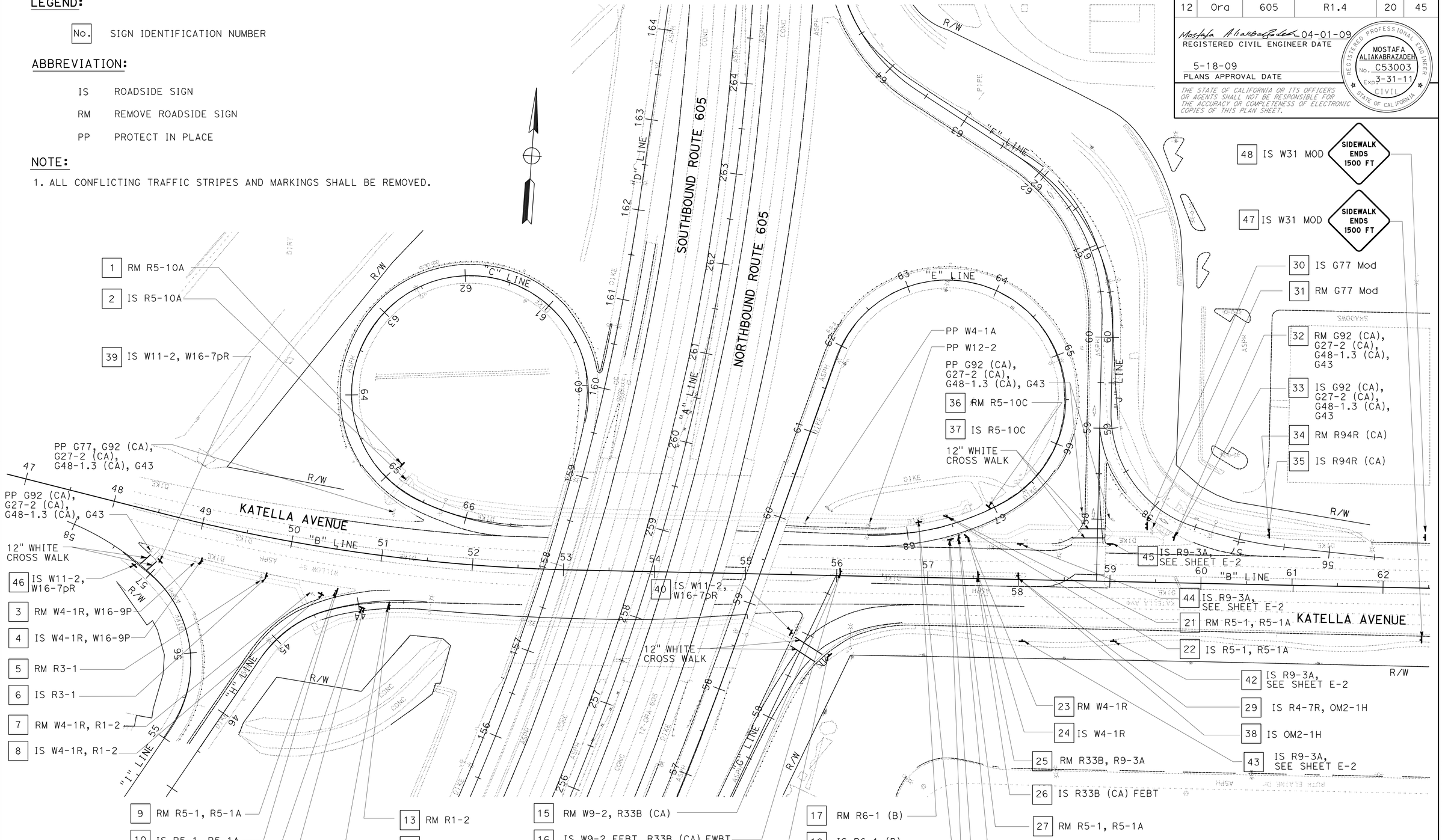
[No.] SIGN IDENTIFICATION NUMBER

ABBREVIATION:

IS ROADSIDE SIGN
RM REMOVE ROADSIDE SIGN
PP PROTECT IN PLACE

NOTE:

1. ALL CONFLICTING TRAFFIC STRIPES AND MARKINGS SHALL BE REMOVED.



PAVEMENT DELINEATION AND SIGN PLAN

SCALE: 1"=50'

PD-1

THIS PLAN IS ACCURATE FOR PAVEMENT DELINEATION AND SIGN ONLY

CALCULATED-DESIGNED BY	M. ALIAKBARZADEH		
CHECKED BY	ADEL MALEK		
FUNCTIONAL SUPERVISOR	ADEL MALEK		
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DESIGN	REVISED BY	10-08
Caltrans		DATE REVISED	10-08

LAST REVISION DATE PLOTTED => 26-AUG-2009
03-26-09 TIME PLOTTED => 07:27

BORDER LAST REVISED 3/1/2007 | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | USERNAME => trmikesl | DGN FILE => c0j480na001.dgn | CU 12222 | EA 0J4801

ROADSIDE SIGN QUANTITIES

SHEET No.	SIGN No.	SIGN CODE	PANEL SIZE	POST SIZE & LENGTH			ROADSIDE SIGN		INSTALL SIGN (STRAP & SADDLE BRACKET METHOD)	REMOVE ROADSIDE SIGN	REMARK
				4"x4"	4"x6"	6"x6"	ONE POST	TWO POST			
				FT	FT	FT	EA	EA	EA	EA	
PD-1	1	R5-10A								1	
	2	R5-10A	36" x 30"		15		1				
	3	W4-1R, W16-9P								1	
	4	W4-1R	36" x 36"		16		1				
		W16-9P	24" x 12"								
	5	R3-1								1	
	6	R3-1	30" x 30"		14.5		1				
	7	W4-1R, R1-2								1	
	8	W4-1R	36" x 36"			18	1				
		R1-2	36" x 36"								
	9	R5-1, R5-1A								1	
	10	R5-1	48" x 48"			14.5	1				
		R5-1A	42" x 30"								
	11	R5-1, R5-1A								1	
	12	R5-1	48" x 48"			14.5	1				
		R5-1A	42" x 30"								
	13	R1-2								1	
	14	R1-2	36" x 36"		15		1				
	15	W9-2, R33B (CA)								1	
	16	W9-2L (FEBT)	30" x 30"				1				
		R33B (CA) FWBT	24" x 60"								
	17	R6-1 (B)								1	
	18	R6-1 (B)	36" x 12"	4.5			1				
	19	R6-1 (B)								1	
	20	R6-1 (B)	36" x 12"	4.5			1				
	21	R5-1, R5-1A								1	
	22	R5-1	48" x 48"			14.5	1				
		R5-1A	42" x 30"								
	23	W4-1R								1	
	24	W4-1R	36" x 36"		14.5		1				
	25	R33B, R9-3A									
	26	R33B (CA) FEBT	24" x 60"			16	1			1	
SUBTOTAL							13			13	

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	605	R1.4	21	45

Mostafa Aliakbarzadeh 04-01-09
REGISTERED CIVIL ENGINEER DATE

5-18-09
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
MOSTAFA ALIAKBARZADEH
No. C53003
Exp. 3-31-11
CIVIL
STATE OF CALIFORNIA

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

PAVEMENT DELINEATION QUANTITIES

SHEET No.		THERMOPLASTIC PAVEMENT MARKING	REMOVE
		12" WHITE CROSS WALK	THERMOPLASTIC PAVEMENT MARKING
		SQFT	SQFT
PD-1	Rte 605	169	96
	TOTAL	169	96

10-08	10-08
REVISED BY	DATE REVISED
M. ALIAKBARZADEH	ADEL MALEK
CALCULATED-DESIGNED BY	CHECKED BY
FUNCTIONAL SUPERVISOR	ADEL MALEK

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DESIGN
Caltrans

PAVEMENT DELINEATION AND SIGN QUANTITIES

PDQ-1

LAST REVISION 03-26-09
DATE PLOTTED => 26-AUG-2009
TIME PLOTTED => 07:27

BORDER LAST REVISED 3/1/2007
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
USERNAME => trmikesl
DGN FILE => c0j480nc001.dgn
CU 12222
EA 0J4801

ROADSIDE SIGN QUANTITIES

SHEET No.	SIGN No.	SIGN CODE	PANEL SIZE	POST SIZE & LENGTH			ROADSIDE SIGN		INSTALL SIGN (STRAP & SADDLE BRACKET METHOD)	REMOVE ROADSIDE SIGN	REMARK
				4"x4"	4"x6"	6"x6"	ONE POST	TWO POST			
				FT	FT	FT	EA	EA	EA	EA	
PD-1	27	R5-1, R5-1A								1	
	28	R5-1	48" x 48"			15	1				
		R5-1A	42" x 30"								
	29	R4-7R	12" x 18"						1		
	30	G77 MOD								1	
	31	G77 MOD	72" x 70"			19		1			
	32	G92, G27-2, G48-1.3, G43								1	
	33	G92 (CA)	48" x 30"		15		1				
		G27-2 (CA)	18" x 21"								
		G48-1.3 (CA)	20" x 15"								
		G43	21" x 15"								
	34	R94R								1	
	35	R94R (CA)	60" x 42"			17	1				
	36	R5-10C								1	
	37	R5-10C	24" x 12"	12			1				
	38	OM2-1	12" x 6"	2.5			1				
	39	W11-2	24" x 24"		17		1				
		W16-7pR	24" x 12"								
	40	W11-2	24" x 24"		17		1				
		W16-7pR	24" x 12"								
	41	W11-2	24" x 24"		17		1				
		W16-7pL	24" x 12"								
	42	R9-3A	24" x 24"						1		
	43	R9-3A	24" x 24"						1		
	44	R9-3A	24" x 24"						1		
	45	R9-3A	24" x 24"						1		
	46	W11-2	24" x 24"		17		1				
		W16-7pR	24" x 12"								
	47	W31 MOD	36" x 36"		17		1				
	48	W31 MOD	36" x 36"		17		1				
			SUBTOTAL				11	1	5	5	
			TOTAL				24	1	5	18	

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	605	R1.4	22	45

Mostafa Aliakbarzadeh 04-01-09
REGISTERED CIVIL ENGINEER DATE

5-18-09
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — MOSTAFA ALIAKABRAZADEH — No. C53003 — Exp. 3-31-11 — CIVIL — STATE OF CALIFORNIA

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

CALCULATED-DESIGNED BY: M. ALIAKBARZADEH
CHECKED BY: ADEL MALEK
FUNCTIONAL SUPERVISOR: ADEL MALEK
REVISED BY: 10-08
DATE REVISED: 10-08

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
DESIGN

PAVEMENT DELINEATION AND SIGN QUANTITIES

PDQ-2

LAST REVISION 03-26-09
DATE PLOTTED => 26-AUG-2009
TIME PLOTTED => 07:27

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

USERNAME => trmikesl
DGN FILE => c0j480nc002.dgn

CU 12222

EA 0J4801

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	605	R1.4	23	45

Mostafa Aliakbarzadeh 04-01-09
REGISTERED CIVIL ENGINEER DATE

5-18-09
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
MOSTAFA ALIAKBARZADEH
No. C53003
Exp. 3-31-11
CIVIL
STATE OF CALIFORNIA

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

MATERIAL SUMMARY (CONTRACTOR FURNISHED SIGNS)

SHEET No.	SIGN No. ☐	SIGN CODE	PANEL SIZE	SIGN AREA (SQFT)	SINGLE FACED	PROTECTIVE OVERLAY	BACKGROUND		LEGEND		ROADSIDE SIGN	
											FURNISH SINGLE-SHEET	
											UNFRAMED ALUMINUM	FRAMED ALUMINUM
							SHEETING COLOR	RETROREFLECTIVE ASTM TYPE	SHEETING COLOR	RETROREFLECTIVE ASTM TYPE	0.063 inch	0.063 inch
											SQFT	SQFT
PD-1	2	R5-10A	36" x 30"	7.5	x	N/A	W	VII	B	Non	7.5	
	4	W4-1R	36" x 36"	9	x	N/A	Y	VII	B	Non	9	
		W16-9P	24" x 12"	2	x	N/A	Y	VII	B	Non	2	
	6	R3-1	30" x 30"	6.25	x	N/A	B	VII	R, B	Non	6.25	
	8	W4-1R	36" x 36"	9	x	N/A	Y	VII	B	Non	9	
		R1-2	36" x 36"	9		N/A	W	VII	R	Non	9	
	10	R5-1	48" x 48"	16	X	N/A	W	VII	W, R	Non	16	
		R5-1A	42" x 30"	8.75	X	N/A	R	VII	W	Non	8.75	
	12	R5-1	48" x 48"	16	X	N/A	W	VII	W, R	Non	16	
		R5-1A	42" x 30"	8.75	X	N/A	R	VII	W	Non	8.75	
	14	R1-2	36" x 36"	9	X	N/A	W	VII	R	Non	9	
	16	W9-2L (FEBT)	30" x 30"	6.25	X	N/A	Y	VII	B	Non	6.25	
		R33B (CA) FWBT	24" x 60"	10	X	N/A	W	VII	B, R	Non	10	
	18	R6-1 (B)	36" x 12"	3	X	N/A	B	VII	B, W	Non	3	
	20	R6-1 (B)	36" x 12"	3	X	N/A	B	VII	B, W	Non	3	
	22	R5-1	48" x 48"	16	X	N/A	W	VII	W, R	Non	16	
		R5-1A	42" x 30"	8.75	X	N/A	R	VII	W	Non	8.75	
	24	W4-1R	36" x 36"	9	x	N/A	Y	VII	B	Non	9	
	26	R33B (CA) FEBT	24" x 60"	10	X	N/A	W	VII	B, R	Non	10	
	28	R5-1	48" x 48"	16	X	N/A	W	VII	W, R	Non	16	
		R5-1A	42" x 30"	8.75	X	N/A	R	VII	W	Non	8.75	
	29	R4-7R	12" x 18"	1.5	X	N/A	W	VII	B	Non	1.5	
	31	G77 MOD	72" x 70"	35	X	N/A	G	VII	W	Non		35
	33	G92 (CA)	48" x 30"	10	X	N/A	G	VII	W	Non	10	
		G27-2 (CA)	18" x 21"	2.92	X	N/A	BLUE, R	VII	W	Non	2.92	
		G48-1.3 (CA)	20" x 15"	2.09	X	N/A	BLUE	VII	W	Non	2.09	
		G43	21" x 15"	2.1	X	N/A	BLUE	VII	W	Non	2.1	
	35	R94R (CA)	60" x 42"	17.5	X	N/A	W	VII	B	Non		17.5
	37	R5-10C	24" x 12"	2	X	N/A	W	VII	B	Non	2	
	38	OM2-1	12" x 6"	0.5	X	N/A	W	VII	Y		0.5	
	TOTAL										213	52

ABBREVIATION:

B = BLACK
G = GREEN
Y = YELLOW
W = WHITE
R = RED
Non = NON-REFLECTIVE
N/A = NOT APPLICAPLE

PAVEMENT DELINEATION AND SIGN QUANTITIES

PDQ-3

REVISED BY	DATE REVISED
M. ALIAKBARZADEH	10-08

CALCULATED-DESIGNED BY: ADEL MALEK
CHECKED BY:
FUNCTIONAL SUPERVISOR: ADEL MALEK

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
DESIGN

LAST REVISION 03-26-09 | DATE PLOTTED => 26-AUG-2009 | TIME PLOTTED => 07:28

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

USERNAME => trmikesl
DGN FILE => c0j480nc003.dgn

CU 12222

EA 0J4801

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	605	R1.4	24	45

Mostafa Aliakbarzadeh 04-01-09
REGISTERED CIVIL ENGINEER DATE

5-18-09
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
MOSTAFA ALIAKBARZADEH
No. C53003
Exp. 3-31-11
CIVIL
STATE OF CALIFORNIA

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

MATERIAL SUMMARY (CONTRACTOR FURNISHED SIGNS)

SHEET No.	SIGN No. ☐	SIGN CODE	PANEL SIZE	SIGN AREA (SQFT)	SINGLE FACED	PROTECTIVE OVERLAY	BACKGROUND		LEGEND		ROADSIDE SIGN	
											FURNISH SINGLE-SHEET	
											UNFRAMED ALUMINUM	FRAMED ALUMINUM
							SHEETING COLOR	RETROREFLECTIVE ASTM TYPE	SHEETING COLOR	RETROREFLECTIVE ASTM TYPE	0.063 inch	0.063 inch
											SQFT	SQFT
PD-1	39	W11-2	24" x 24"	4.0	x	N/A	Y	VII	B	VII	4.0	
		W16-7pR	24" x 12"	2.0	x	N/A	Y	VII	B	VII	2.0	
	40	W11-2	24" x 24"	4.0	x	N/A	Y	VII	B	VII	4.0	
		W16-7pR	24" x 12"	2.0	x	N/A	Y	VII	B	VII	2.0	
	41	W11-2	24" x 24"	4.0	x	N/A	Y	VII	B	VII	4.0	
		W16-7pL	24" x 12"	2.0	x	N/A	Y	VII	B	VII	2.0	
	42	R9-3A	24" x 24"	4.0	x	N/A	W	VII	B/R	VII	4.0	
	43	R9-3A	24" x 24"	4.0	x	N/A	W	VII	B/R	VII	4.0	
	44	R9-3A	24" x 24"	4.0	x	N/A	W	VII	B/R	VII	4.0	
	45	R9-3A	24" x 24"	4.0	x	N/A	W	VII	B/R	VII	4.0	
	46	W11-2	24" x 24"	4.0	x	N/A	Y	VII	B	VII	4.0	
		W16-7pR	24" x 12"	2.0	x	N/A	Y	VII	B	VII	2.0	
	47	W31 MOD	36" x 36"	9.0	x	N/A	Y	VII	B	VII	9.0	
	48	W31 MOD	36" x 36"	9.0	x	N/A	Y	VII	B	VII	9.0	
											58	
	TOTAL										271	52

ABBREVIATION:

B = BLACK
G = GREEN
Y = YELLOW
W = WHITE
R = RED
Non = NON-REFLECTIVE
N/A = NOT APPLICAPLE

PAVEMENT DELINEATION AND SIGN QUANTITIES

PDQ-4

LAST REVISION 03-26-09 | DATE PLOTTED => 26-AUG-2009 | TIME PLOTTED => 07:28

REVISED BY	DATE REVISED
M. ALIAKBARZADEH	10-08
ADEL MALEK	10-08

CALCULATED-DESIGNED BY
CHECKED BY

FUNCTIONAL SUPERVISOR
ADEL MALEK

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
DESIGN

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

USERNAME => trmikesl
DGN FILE => c0j480nc004.dgn

CU 12222

EA 0J4801

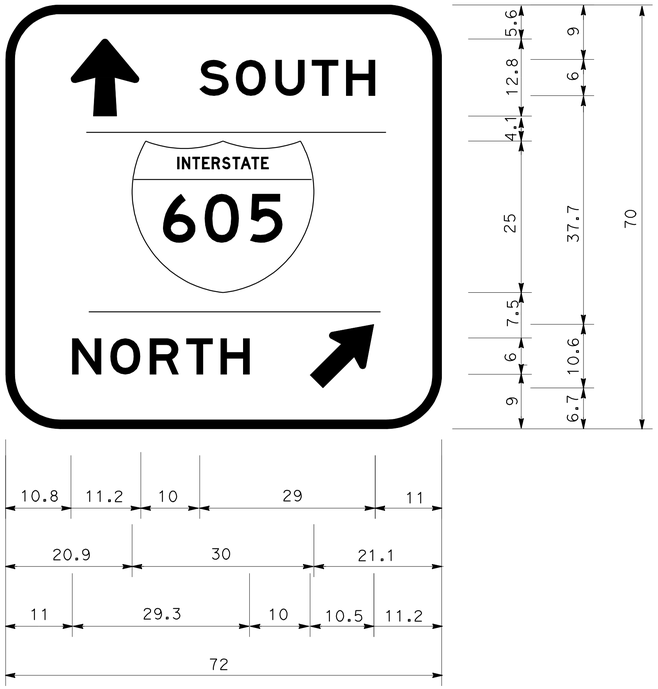
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	605	R1.4	25	45

Mostafa Aliakbarzadeh 04-01-09
REGISTERED CIVIL ENGINEER DATE

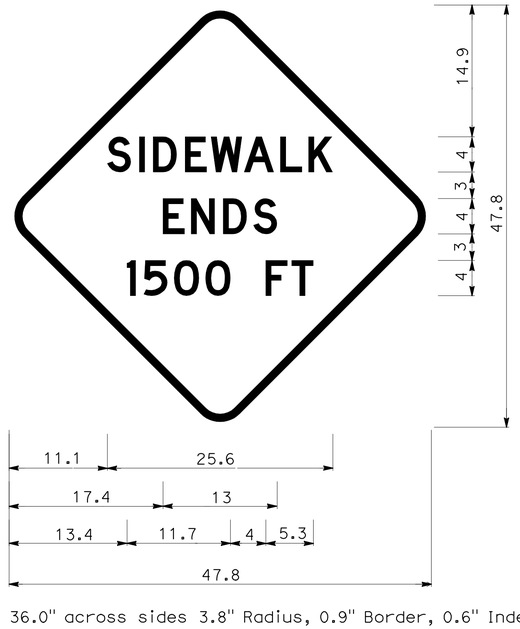
5-18-09
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
MOSTAFA ALIAKABRAZADEH
No. C53003
Exp. 3-31-11
CIVIL
STATE OF CALIFORNIA

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



SIGN DETAIL 31 G77 MOD



36.0" across sides 3.8" Radius, 0.9" Border, 0.6" Indent, Black on Yellow;
[SIDEWALK] White D; [ENDS] White D;
[1500 FT] White D;

SIGN DETAIL 47 W31 MOD, 48 W31 MOD

SIGN DETAIL

NO SCALE

SD-1

CALCULATED-DESIGNED BY	M. ALIAKBARZADEH	10-08	
CHECKED BY	ADEL MALEK	10-08	
FUNCTIONAL SUPERVISOR	ADEL MALEK		
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DESIGN		

LAST REVISION 03-26-09 | DATE PLOTTED => 26-AUG-2009 | TIME PLOTTED => 07:28

BORDER LAST REVISED 3/1/2007 | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | USERNAME => trmikesl | DGN FILE => c0j480ob001.dgn | CU 12222 | EA 0J4801

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	605	R1.4	26	45

04-01-09
REGISTERED CIVIL ENGINEER DATE

REGISTERED PROFESSIONAL ENGINEER
HENRY NGUYEN
No. C69035
EXP. 6-30-10
CIVIL
STATE OF CALIFORNIA

5-18-09
PLANS APPROVAL DATE

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

ROADWAY SUMMARY OF QUANTITIES

SHEET No.	STATION	ROADWAY EXCAVATION	ROADWAY EXCAVATION (AERIALLY DEPOSITED LEAD TYPE Y-1)	(N) REUSE (AERIALLY DEPOSITED LEAD)	(N) EMBANKMENT	MINOR HOT MIX ASPHALT			PLACE HMA (Misc AREA)	PLACE HMA DIKE (TYPE A)	MINOR CONCRETE (CURB, SIDEWALK AND DRIVEWAY)	MINOR CONCRETE (CURB RAMP)	REMOVE ASPHALT CONCRETE DIKE	REMOVE CONCRETE (CURB)	REMOVE CONCRETE CURB RAMP	REMOVE ASPHALT CONCRETE SURFACING
						ROADWAY	Misc AREA	HMA DIKE (TYPE A)								
		CY	CY	CY	CY	TON	TON	TON	SQYD	LF	CY	CY	LF	LF	CY	CY
C-1, C-4	"B" 48+38.68 TO "B" 50+44.62	21	17	17		0.4	11.1	3.0	68	115	10.9	0.8	97	20		1.27
C-1, C-2	"B" 50+31.00 TO "B" 55+89.61	31			23	2.3	31.7	0.7	194	28	35.0	3.1	64	26	2.7	1.07
C-1, C-2, C-3, C-4	"B" 50+92.66 TO "B" 57+53.10	71	12	12	18	4.3	45.3		278		46.7	2.0				0.70
C-3, C-4	"B" 57+45.58 TO "B" 58+60.89	27	27	27		0.8	4.2		26		7.6	0.8	22			3.30
	"B" 58+93.36 TO "B" 59+75.12					1.4	4.0		25		6.0	0.9	24	13	1.3	4.50
	"B" 59+64.89 TO "B" 61+75.54				13	1.9	9.1		56		15.5	0.7	52			
SUBTOTAL		150	56	56	54	11.1	105.4	3.7	647	143	121.7	8.4	377	59	4	11
TOTAL		150	56	56	54	120.2			647	143	121.7	8.4	377	59	4	11

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

TEMPORARY WATER POLLUTION CONTROL SUMMARY OF QUANTITIES

STATION	TEMPORARY DRAINAGE INLET PROTECTION
	EA
"B" 48+54.62 TO 61+77.00	3
TOTAL	3

SUMMARY OF QUANTITIES

Q-1

HENRY NGUYEN — REVISED BY
M. Q. CUGINI — DATE REVISED
CALCULATED-DESIGNED BY
CHECKED BY
FUNCTIONAL SUPERVISOR: M. Q. CUGINI
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DESIGN

LAST REVISION 03-29-09
DATE PLOTTED => 26-AUG-2009
TIME PLOTTED => 07:28

BORDER LAST REVISED 4/11/2008
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
USERNAME => trmikesl
DGN FILE => c0j480pa001.dgn
CU 12222
EA 0J4801

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	605	R1.4	27	45

04-01-09
LICENSED LANDSCAPE ARCHITECT

5-18-09
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.

LICENSED LANDSCAPE ARCHITECT
ERIC DICKSON
No. 3994
10-31-09
Renewal Date
04-01-09
Date
STATE OF CALIFORNIA

MAINTAIN EXISTING PLANTED AREA 47,000 SQ FT

"C" LINE

"D" LINE

"A" LINE

SOUTHBOUND ROUTE 605

NORTHBOUND ROUTE 605

"F" LINE

MAINTAIN EXISTING PLANTED AREA 52,000 SQ FT

"E" LINE

"J" LINE

MAINTAIN EXISTING PLANTED AREA 4,500 SQ FT

MAINTAIN EXISTING PLANTED AREA 4,500 SQ FT

KATELLA AVENUE

"B" LINE

"A" 258+52.57 =
"B" 53+05.77

"B" 55+99.39 =
"G" 59+71.95

S88°46'48"E 3080.03'

"G" LINE

"H" LINE

"I" LINE

MAINTAIN EXISTING PLANTED AREA 30,000 SQ FT

MAINTAIN EXISTING PLANTED AREA 11,000 SQ FT

MAINTAIN EXISTING PLANTED AREA 9,200 SQ FT

MAINTAIN EXISTING PLANTED AREA 9,000 SQ FT

THIS PLAN IS ACCURATE FOR MAINTAIN EXISTING PLANTS WORK ONLY.

MAINTAIN EXISTING PLANTS PLAN

SCALE: 1" = 50'

MA-1

CALCULATED-DESIGNED BY
CHECKED BY
REVISED BY
DATE REVISED

MATTHEW CASLAVKA
ERIC DICKSON
SENIOR LANDSCAPE ARCHITECT
SANDY ANKHASIRISAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
LANDSCAPE ARCHITECTURE
Caltrans

LAST REVISION DATE PLOTTED => 26-AUG-2009
03-23-09 TIME PLOTTED => 07:28

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

USERNAME => trmikesl
DGN FILE => c0j480th001.dgn

CU 12216

EA 0J4801

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	605	R1.4	28	45

04-01-09
LICENSED LANDSCAPE ARCHITECT

5-18-09
PLANS APPROVAL DATE

LICENSED LANDSCAPE ARCHITECT
ERIC DICKSON
Registered
10-31-09
Renewal Date
04-01-09
Date
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.

EXISTING ICC 'H' AND 'W'

EXISTING ICC 'O', 'P' AND 'Q'

"C" LINE

"D" LINE

"A" LINE

"B" LINE

"F" LINE

"H" LINE

SOUTHBOUND ROUTE 605

NORTHBOUND ROUTE 605

"A" 258+52.57 =
"B" 53+95.77

N89°17'54"E 431.13'

S88°46'48"E 3080.03'

KATELLA AVENUE

1½" - H - 6
1½" - H - 3
1¼" - H - 8
1½" - H - 7
1¼" - H - 9
1¼" - H - 10
1¼" - E - 1
1" - E - 10
1¼" - E - 2
1½" - D - 6
1½" - D - 7
1½" - D - 13
1½" - D - 12
1½" - E - 11

EXISTING ICC D,E AND F
SOUTH WEST END OF OFF-RAMP

1½" - 0 - 7
1½" - 0 - 8
1½" - 0 - 1
1½" - P - 4
1½" - 0 - 3
1½" - P - 5
1¼" - P - 6
1¼" - P - 10
1¼" - 0 - 6
1¼" - 0 - 5
1½" - B - 6
1½" - B - 5
1½" - B - 4
1½" - B - 3
1½" - B - 7
1½" - 0 - 4
1½" - B - 2

EXISTING ICC B AND C
SOUTH END OF OFF-RAMP

THIS PLAN IS ACCURATE FOR IRRIGATION REMOVAL WORK ONLY.

IRRIGATION REMOVAL PLAN

SCALE: 1" = 50'

IR-1

REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY
CHECKED BY

MATTHEW CASLAVKA
ERIC DICKSON

SENIOR LANDSCAPE ARCHITECT
SANDY ANKHASIRISAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
LANDSCAPE ARCHITECTURE
Caltrans

LAST REVISION | DATE PLOTTED => 26-AUG-2009
03-23-09 | TIME PLOTTED => 07:29

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

USERNAME => trmikesl
DGN FILE => c0j480tk001.dgn

CU 12216

EA 0J4801

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	605	R1.4	29	45

04-01-09
LICENSED LANDSCAPE ARCHITECT

5-18-09
PLANS APPROVAL DATE

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LICENSED LANDSCAPE ARCHITECT — ERIC DICKSON — 3961 — Registered 10-31-09 — Renewal Date 04-01-09 — STATE OF CALIFORNIA

EXISTING ICC 'H' AND 'W'

1½" - H - 6
1½" - H - 3
1½"-H-4-38.0
1½"-H-7-33.0
1¼" - H - 9
1¼" - H - 10
1¼" - E - 1
1" - E - 10
1¼" - E - 2
1½"-D-6-19.5
1½"-D-3-38.5
1½"-D-13-22.0
1½" - D - 12
1½" - E - 11

"A" 258+52.57 = "B" 53+95.77
"B" LINE
"H" LINE

SOUTHBOUND ROUTE 605
NORTHBOUND ROUTE 605

EXISTING ICC 'O', 'P' AND 'Q'
1½" - O - 7
1½" - O - 8
1½" - O - 1
1½" - P - 4
1½" - O - 3
1½" - P - 5
1¼"-P-6-13.0
1¼"-P-10-14.8
1¼" - O - 6
1¼" - O - 5
1½"-O-4-38.5

KATELLA AVENUE

1½" - B - 6
1½" - B - 5
1½" - B - 4
1½" - B - 3
1½" - B - 7
1½" - O - 4
1½" - B - 2

EXISTING ICC D,E AND F
SOUTH WEST END OF OFF-RAMP

EXISTING ICC B AND C
SOUTH END OF OFF-RAMP

IRRIGATION PLAN

SCALE: 1" = 50'

IP-1

THIS PLAN IS ACCURATE FOR IRRIGATION WORK ONLY.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
LANDSCAPE ARCHITECTURE

CALCULATED-DESIGNED BY: MATTHEW CASLAVKA
CHECKED BY: ERIC DICKSON
SENIOR LANDSCAPE ARCHITECT: SANDY ANKHASIRISAN

REVISED BY | DATE REVISED

LAST REVISION 03-23-09
DATE PLOTTED => 26-AUG-2009
TIME PLOTTED => 07:29

BORDER LAST REVISED 3/1/2007
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
USERNAME => trmikesl
DGN FILE => c0j480t1001.dgn
CU 12216
EA 0J4801

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	605	R1.4	30	45

04-01-09
LICENSED LANDSCAPE ARCHITECT

5-18-09
PLANS APPROVAL DATE

LICENSED LANDSCAPE ARCHITECT — ERIC DICKSON — 3504 — Registered — 10-31-09 Renewal Date — 04-01-09 Date — STATE OF CALIFORNIA

SPRINKLER SCHEDULE

SYMBOL	TYPE	DESCRIPTION	SPRAY PATTERN	OPERATING PRESSURE (PSI)	PRESSURE COMPENSATING	PLUS/MINUS 5% ② DISCHARGE GALLONS PER MINUTE (GPM)	DISCHARGE GALLONS PER HOUR (GPH)	RADIUS (F+)	WIDTH x LENGTH (F+)	MATERIAL	INLET CONNECTION (NPT INCH)	POSITIVE-LOCKING ADJ ARC STOP	BACKSPLASH PREVENTER	DIFFUSER PIN	DISTANCE CONTROL FLAP	ADJ DISCHARGE	RISER TYPE	RISER MATERIAL PLASTIC	RISER MATERIAL GALVANIZED	RISER SIZE (IPS INCH)	RISER HEIGHT (INCH)	RISER FLOW SHUTOFF DEVICE	⑤ SWING JOINT (TYPE)	RISER SUPPORT	SPRINKLER PROTECTOR (TYPE)	REMARKS
⑤	A-5	GEAR DRIVEN	P	50	——	3.4	——	15	——	PL	¾"	X	——	——	——	——	IV	X	——	¾"	18"	——	I	——	——	
⑦	A-7	GEAR DRIVEN	P	50	——	5.2	——	15	——	PL	¾"	X	——	——	——	——	IV	X	——	¾"	18"	——	I	——	——	
△	B-1	SHRUB SPRAY	P	30	——	1.85	——	15	——	PL	½"	——	——	——	——	——	IV	X	——	½"	18"	——	I	——	——	

X IN BOX DENOTES REQUIREMENT

APPLICABLE WHEN CIRCLED BELOW:

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

ABBREVIATIONS

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

CALCULATED-DESIGNED BY: MATTHEW CASLAVKA
CHECKED BY: ERIC DICKSON
REVISED BY
DATE REVISED
SENIOR LANDSCAPE ARCHITECT: SANDY ANKHASIRISAN
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
LANDSCAPE ARCHITECTURE
Caltrans

SPRINKLER SCHEDULE

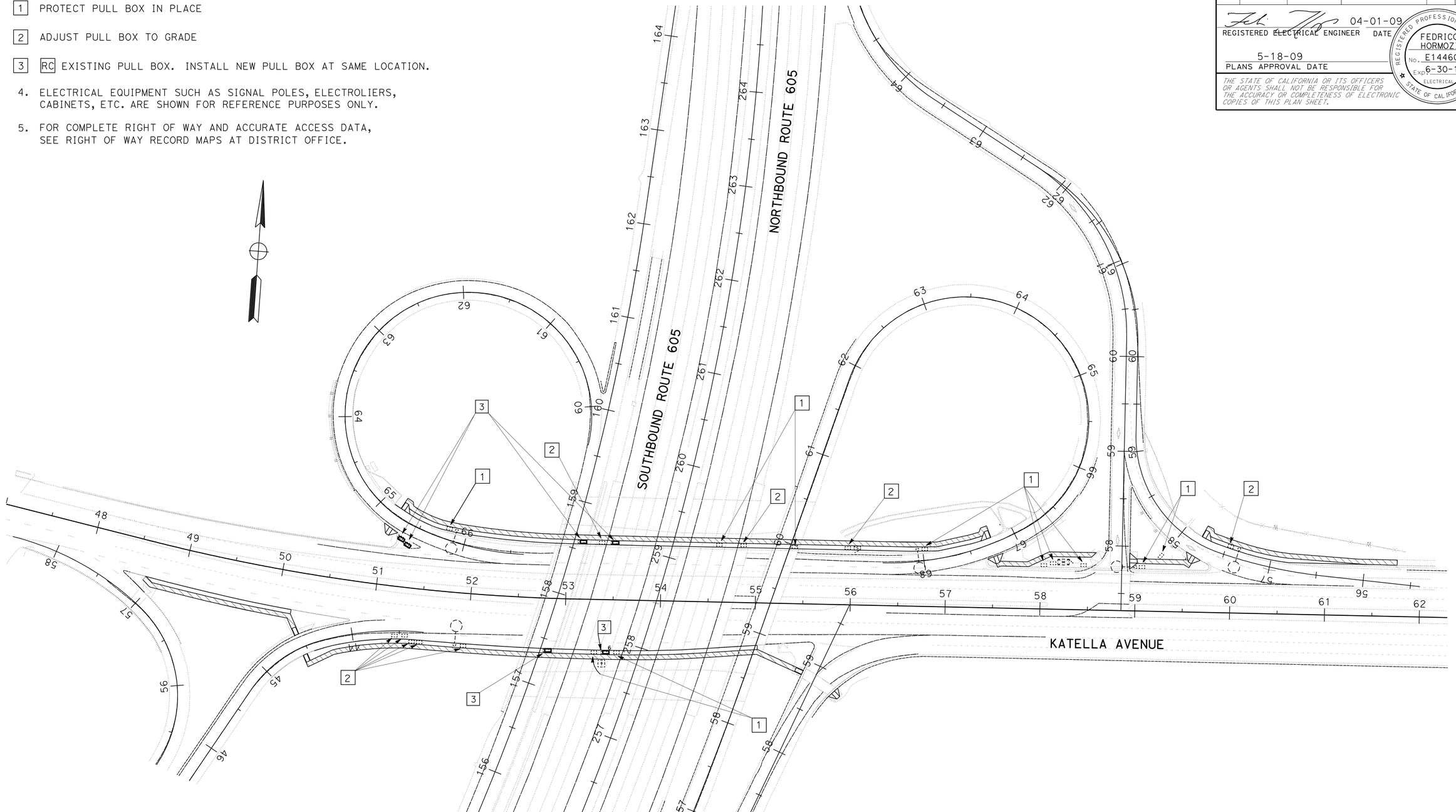
LD-1

LAST REVISION 03-23-09 | DATE PLOTTED => 26-AUG-2009 | TIME PLOTTED => 07:30

BORDER LAST REVISED 3/1/2007 | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | USERNAME => trmikesl | DGN FILE => c0j480to001.dgn | CU 12216 | EA 0J4801

NOTES (THIS SHEET):

1. PROTECT PULL BOX IN PLACE
2. ADJUST PULL BOX TO GRADE
3. RC EXISTING PULL BOX. INSTALL NEW PULL BOX AT SAME LOCATION.
4. ELECTRICAL EQUIPMENT SUCH AS SIGNAL POLES, ELECTROLIERS, CABINETS, ETC. ARE SHOWN FOR REFERENCE PURPOSES ONLY.
5. FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	605	R1.4	31	45

04-01-09
REGISTERED ELECTRICAL ENGINEER — DATE

FEDRICO HORMOZI No. E14460 Exp 6-30-10 ELECTRICAL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

5-18-09
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.

ADJUST PULL BOX
REPLACE PULL BOX

SCALE: 1"=50'

THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

E-1

REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY: F. HORMOZI
CHECKED BY: M. FEIZ
FUNCTIONAL SUPERVISOR: S. SHAHRIARI

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
ELECTRICAL DESIGN

LAST REVISION 03-23-09
DATE PLOTTED => 26-AUG-2009
TIME PLOTTED => 07:30

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

USERNAME => trmikesl
DGN FILE => c0j480ua001.dgn

CU 12390

EA 0J4801

NOTE:

FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.

CONDUCTOR AND CONDUIT SCHEDULE

CONDUCTOR	CONDUCTOR RUN	1	2	3	4	5
#14	Ø2		3	3	6	
	Ø5	3	3	3	6	
	Ø2P		2✳		4✳	
	Ø2 PPB		1✳		2✳	
	PPB NEUTRAL		1✳		2✳	
	SPARES	3	3	3	6	
	TOTAL	6	9 / 4✳	9	18 / 8✳	
#10	SIGNAL COMMON	1	1	1	2	
#10	LIGHTING		2			2
#8	SIGNAL SERVICE					2
DLC	Ø2	3	3		3	
	Ø5			1	1	
	TOTAL	3	3	1	4	
CONDUIT SIZE		2"	2"	2"	2-3"	2"

NOTE: ALL EQUIPMENT ARE EXISTING UNLESS OTHERWISE INDICATED ON THE PLANS.

✳ - NEW

EXISTING PHASE DIAGRAM

NEW PHASE DIAGRAM

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	605	R1.4	32	45

REGISTERED ELECTRICAL ENGINEER — DATE 04-01-09

FEDRICO HORMOZI No. E14460 Exp 6-30-10 ELECTRICAL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

5-18-09
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 AND EQUIPMENT SCHEDULE

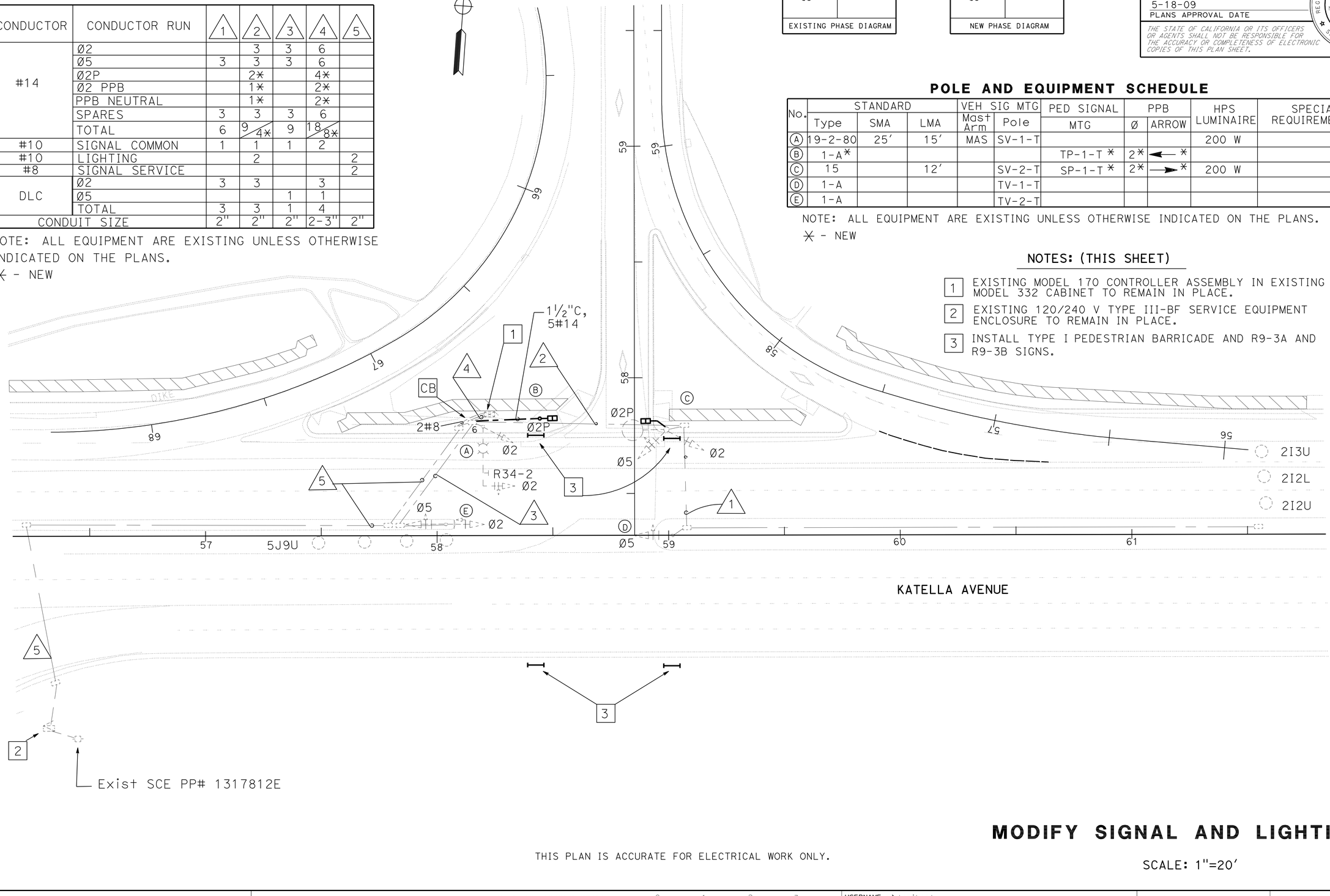
No.	STANDARD Type	SMA	LMA	VEH SIG MTG Mast Arm	Pole	PED SIGNAL MTG	PPB Ø	PPB ARROW	HPS LUMINAIRE	SPECIAL REQUIREMENTS
(A)	19-2-80	25′	15′	MAS	SV-1-T				200 W	
(B)	1-A✳					TP-1-T ✳	2✳	← ✳		
(C)	15		12′		SV-2-T	SP-1-T ✳	2✳	→ ✳	200 W	
(D)	1-A				TV-1-T					
(E)	1-A				TV-2-T					

NOTE: ALL EQUIPMENT ARE EXISTING UNLESS OTHERWISE INDICATED ON THE PLANS.

✳ - NEW

NOTES: (THIS SHEET)

1. EXISTING MODEL 170 CONTROLLER ASSEMBLY IN EXISTING MODEL 332 CABINET TO REMAIN IN PLACE.
2. EXISTING 120/240 V TYPE III-BF SERVICE EQUIPMENT ENCLOSURE TO REMAIN IN PLACE.
3. INSTALL TYPE I PEDESTRIAN BARRICADE AND R9-3A AND R9-3B SIGNS.



THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

MODIFY SIGNAL AND LIGHTING

SCALE: 1"=20′

E-2

LAST REVISION DATE PLOTTED => 26-AUG-2009
TIME PLOTTED => 07:30 03-23-09

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN
FUNCTIONAL SUPERVISOR S. SHAHRIARI
CALCULATED-DESIGNED BY M. FEIZ
CHECKED BY F. HORMOZI
REVISED BY
DATE REVISED

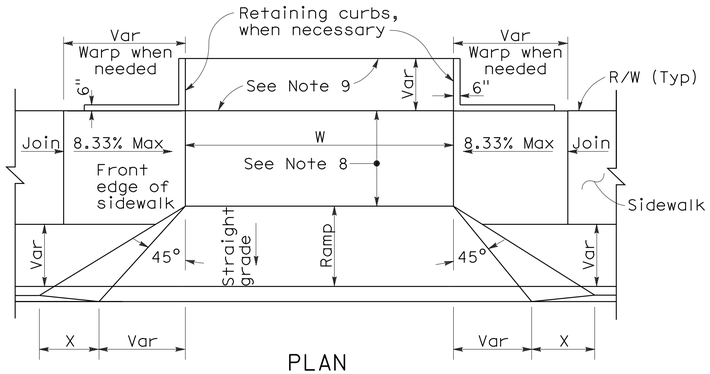
BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

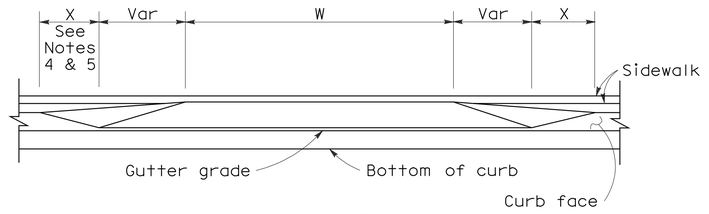
USERNAME => trmikesl
DGN FILE => c0j480ua002.dgn

CU 12390

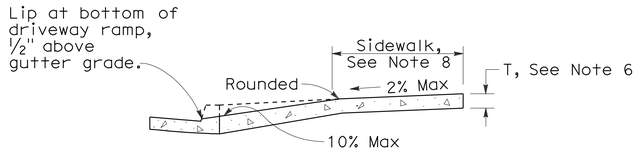
EA 0J4801



PLAN

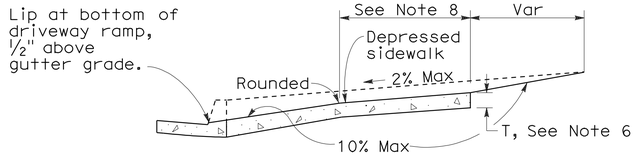


ELEVATION



CASE A

Typical driveway, sidewalk not depressed



CASE B

Driveway with depressed sidewalk

SECTIONS

CURB QUANTITIES

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

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
12	Ora	605	R1.4	33	45

REGISTERED CIVIL ENGINEER

November 17, 2006
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Michael Janzen — No. 44788 — Exp. 03-31-08 CIVIL — STATE OF CALIFORNIA

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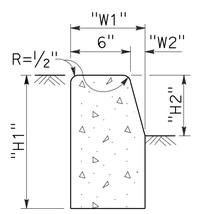
To accompany plans dated 5-18-09

TABLE A

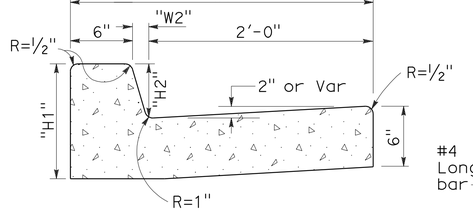
CURB TYPE	DIMENSIONS "H1"	"H2"	"W1"	"W2"
A1-6	1′-2"	6"	7½"	1½"
A1-8	1′-4"	8"	8"	2"
A2-6	1′-0"	6"	2′-7½"	1½"
A2-8	1′-2"	8"	2′-8"	2"
A3-6	6"	5"	7¼"	1¼"
A3-8	8"	7"	7¾"	1¾"
B1-4	1′-0"	4"	7½"	2½"
B1-6	1′-2"	6"	9"	4"
B2-4	10"	4"	2′-7½"	2½"
B2-6	1′-0"	6"	2′-9"	4"
B3-4	4"	3"	7"	2"
B3-6	6"	5"	8½"	3½"
D-4	10"	4"	1′-6"	1′-1"
D-6	1′-0"	6"	2′-2"	1′-8"

DRIVEWAYS



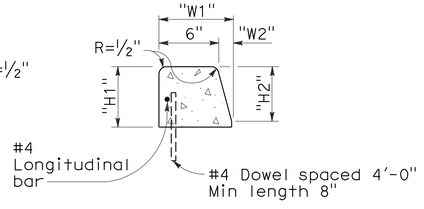
TYPE A1 CURBS

See Table A



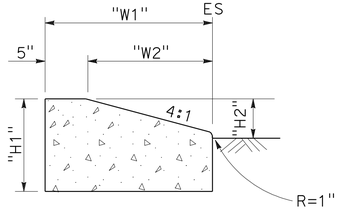
TYPE A2 CURBS

See Table A



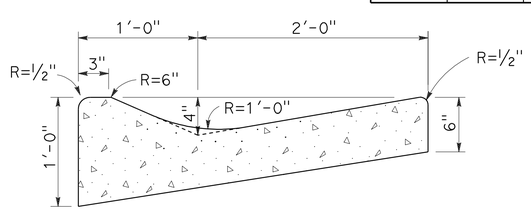
TYPE A3 CURBS

Superimposed on existing pavement
See Table A

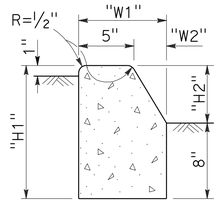


TYPE D CURBS

See Table A

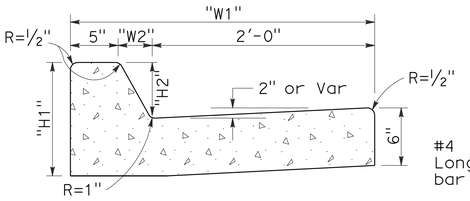


TYPE E CURB



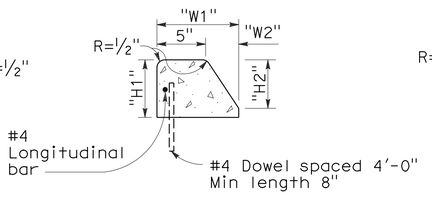
TYPE B1 CURBS

See Table A



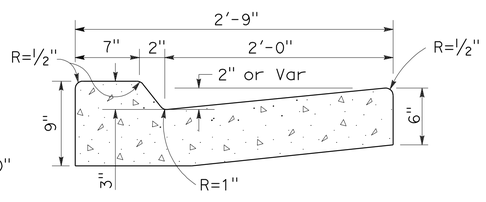
TYPE B2 CURBS

See Table A

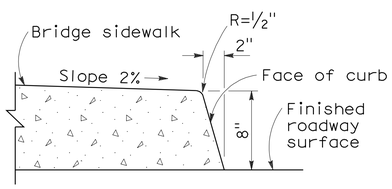


TYPE B3 CURBS

Superimposed on existing pavement
See Table A



TYPE B4 CURBS



TYPE H CURB

On Bridges

NOTES:

1. Case A driveway section typically applies.
2. Use Case B driveway section when ramp slopes would exceed 10% in Case A.
3. Use Case B driveway section when sidewalk cross slope would exceed 2% in Case A.
4. X=3′-0" except for curb heights over 10" where 4:1 slopes shall be used on curb slope.

CURBS

5. X is a variable when sidewalk is located where wheelchairs may traverse the surface. Slopes shall not exceed 8.33%.
6. Sidewalk and ramp thickness "T" at driveway shall be 4" for residental and 6" for commercial.
7. Difference in slope of the driveway ramp and the slope of a line between the gutter and a point on the roadway 5′-0" from gutter line shall not exceed 15%. Reduce driveway ramp slope, not gutter slope, where required.
8. Minimum width of clear passageway for sidewalk shall be 4′-0".
9. Retaining curbs and acquisition of construction easement may be necessary for narrow sidewalks or curb heights in excess of 6".
10. Across the pedestrian route at curb ramp locations, the gutter pan slope shall not exceed 1" of depth for each 2′-0" of width.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

CURBS AND DRIVEWAYS

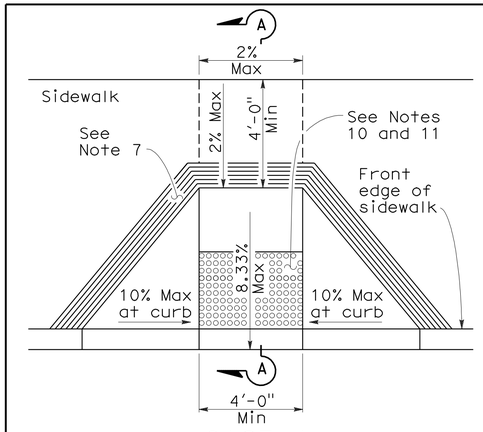
NO SCALE

RSP A87A DATED NOVEMBER 17, 2006 SUPERSEDES STANDARD PLAN A87A
DATED MAY 1, 2006 - PAGE 113 OF THE STANDARD PLANS BOOK DATED MAY 2006.

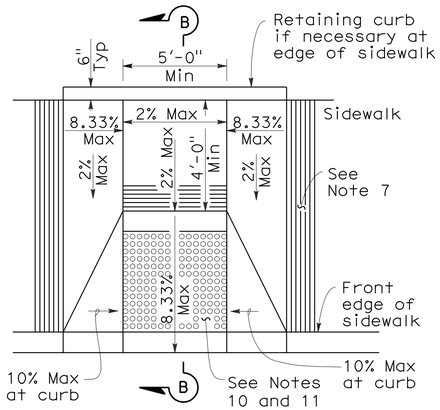
REVISED STANDARD PLAN RSP A87A

2006 REVISED STANDARD PLAN RSP A87A

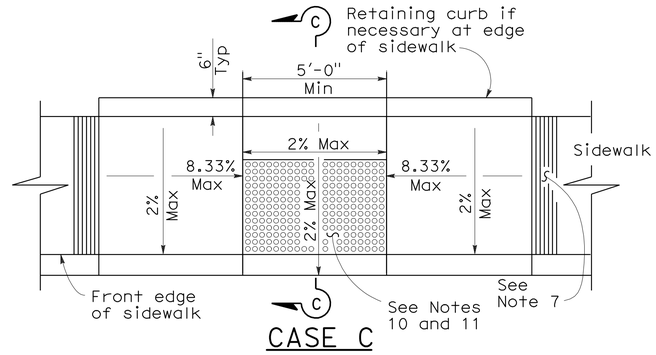
10-25-06



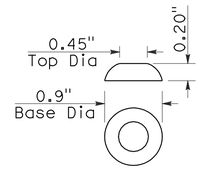
CASE A



CASE B



CASE C



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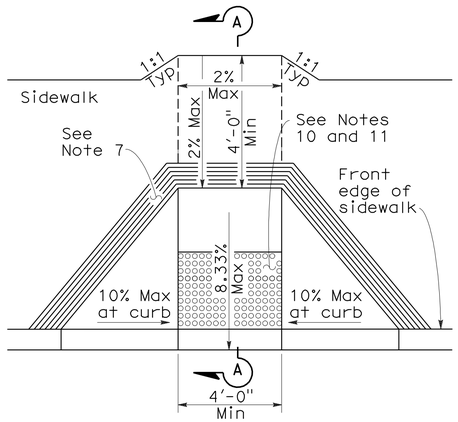
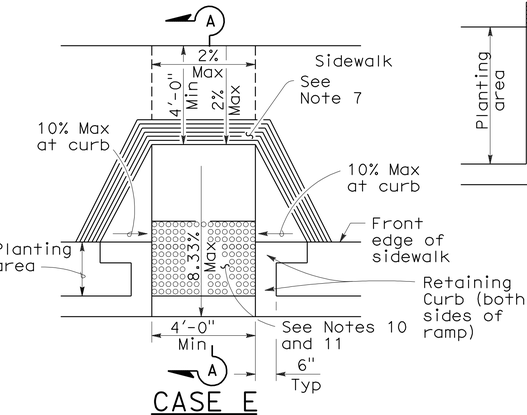
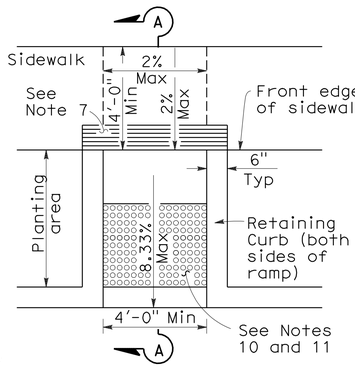


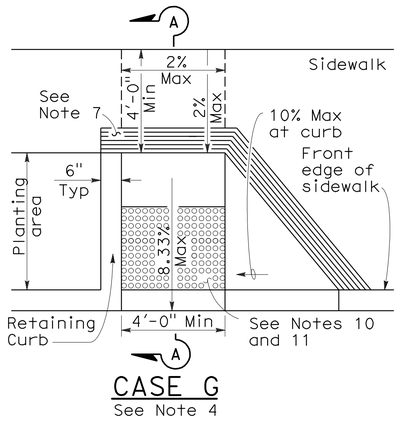
CASE D



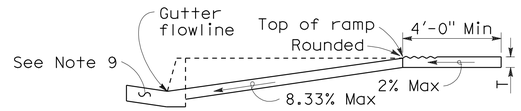
CASE E



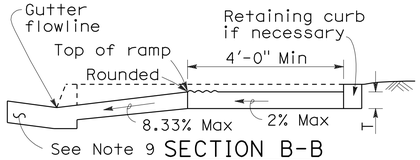
CASE F



CASE G
See Note 4

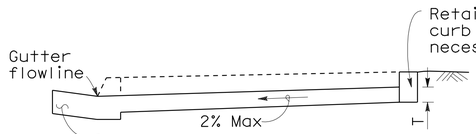


SECTION A-A

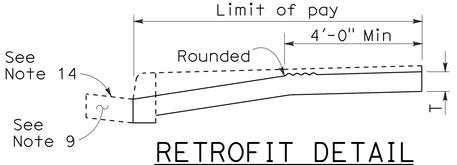


SECTION B-B

Depress entire sidewalk as required

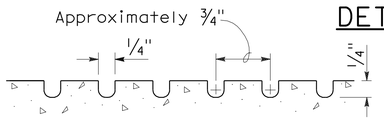


SECTION C-C

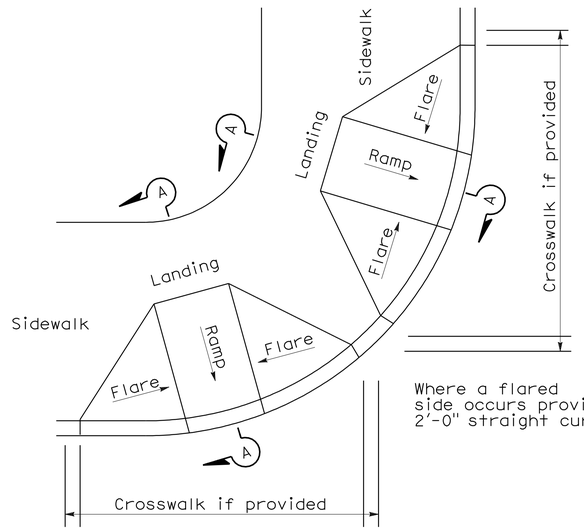


RETROFIT DETAIL

Existing curb and sidewalk



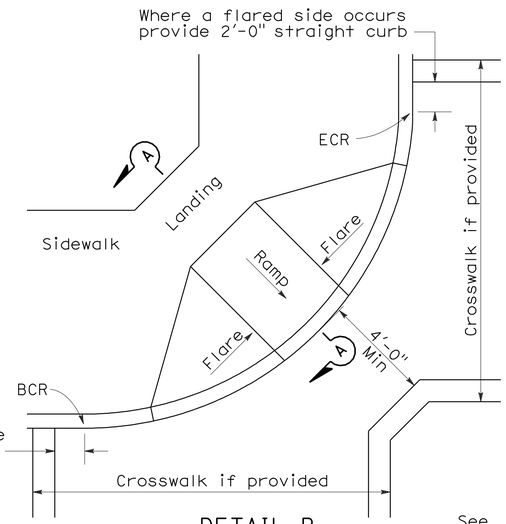
GROOVING DETAIL



DETAIL A

TYPICAL TWO-RAMP CORNER INSTALLATION

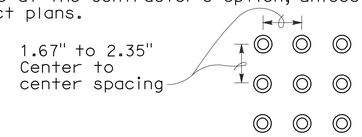
See Note 1



DETAIL B

TYPICAL ONE-RAMP CORNER INSTALLATION

See Notes 1 and 3



RAISED TRUNCATED DOME PATTERN (IN-LINE)

DETECTABLE WARNING SURFACE

See Note 10

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
12	Ora	605	R1.4	34	45

REGISTERED CIVIL ENGINEER

Hector David Cordova No. C41957 Exp. 3-31-08 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

September 1, 2006

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 5-18-09

NOTES:

1. As site conditions dictate, Case A through Case G curb ramps may be used for corner installations similar to those shown in Detail A and Detail B. The case of curb ramps used in Detail A do not have to be the same. Case A through Case G curb ramps also may be used at mid block locations, as site conditions dictate.
2. If distance from curb to back of sidewalk is too short to accommodate ramp and 4'-0" platform (landing) as shown in Case A, the sidewalk may be depressed longitudinally as in Case B, or C or may be widened as in Case D.
3. When ramp is located in center of curb return, crosswalk configuration must be similar to that shown for Detail B.
4. As site conditions dictate, the retaining curb side and the flared side of the Case G ramp shall be constructed in reversed position.
5. If located on a curve, the sides of the ramp need not be parallel, but the minimum width of the ramp shall be 4'-0".
6. Side slope of ramp flares vary uniformly from a maximum of 10% at curb to conform with longitudinal sidewalk slope adjacent to top of the ramp, except in Case C and Case F.
7. The curb ramp shall be outlined, as shown, with a 1'-0" wide border with 1/4" grooves approximately 3/4" on center. See grooving detail.
8. Transitions from ramps and landing to walks, gutters or streets shall be flush and free of abrupt changes.
9. Maximum slopes of adjoining gutters, the road surface immediately adjacent to the curb ramp or accessible route shall not exceed 5 percent within 4'-0" of the top and bottom of the curb ramp.
10. Curb ramps shall have a detectable warning surface that extends the full width and 3'-0" depth of the ramp. Detectable Warning Surfaces shall conform to the details on this plan and the requirements in the Special Provisions.
11. The edge of the detectable warning surface nearest the street shall be between 6" and 8" from the gutter flowline.
12. Sidewalk and ramp thickness, "T", shall be 3 1/2" minimum.
13. Utility pull boxes, manholes, vaults and all other utility facilities within the boundaries of the curb ramp will be relocated or adjusted to grade by the owner prior to, or in conjunction with, curb ramp construction.
14. For retrofit conditions, removal and replacement of curb apron will be at the Contractor's option, unless otherwise shown on project plans.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

CURB RAMP DETAILS

NO SCALE

RSP A88A DATED SEPTEMBER 1, 2006 SUPERSEDES STANDARD PLAN A88A DATED MAY 1, 2006 - PAGE 115 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP A88A

2006 REVISED STANDARD PLAN RSP A88A

8-3-06

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
12	Ora	605	R1.4	35	45

Gregory A Balzer
LICENSED LANDSCAPE ARCHITECT

March 7, 2008
PLANS APPROVAL DATE

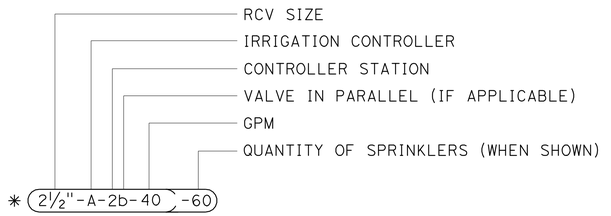
LICENSED LANDSCAPE ARCHITECT — Gregory A. Balzer 2576 — 10-31-2008 Renewal Date — 02-28-2009 Renewal Date — 02-21-2008 Date — STATE OF CALIFORNIA

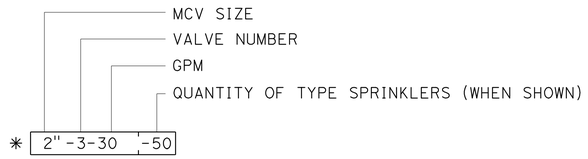
To accompany plans dated 5-18-09

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)
FS	FS	FLOW SENSOR (FS)
X		MASTER IRRIGATION CONTROLLER (MIC)
		AUXILIARY IRRIGATION CONTROLLER (AIC)
		IRRIGATION CONTROLLER (IC)/ IRRIGATION CONTROLLER (IC) (BATTERY)
		IRRIGATION CONTROLLER(S) IN CONTROLLER ENCLOSURE CABINET (ICC)
		CONTROL AND NEUTRAL CONDUCTORS (CNC)
SCC	SCC	SPRINKLER CONTROL CONDUIT (SCC)
		CONDUIT (COND)
		IRRIGATION SLEEVE
DIP	DIP	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)
		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 COUPLER VALVE (QCV)
		CAM COUPLING 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
3	3	SPRINKLER W/SPRINKLER PROTECTOR
		CONNECT TO EXISTING SYSTEM
		CAP
		CAP EXISTING

VALVE CODE





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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PLANTING AND IRRIGATION SYMBOLS

NO SCALE

RSP H2 DATED MARCH 7, 2008 SUPERSEDES 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

2-20-08

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
12	Ora	605	R1.4	36	45

Randall D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

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

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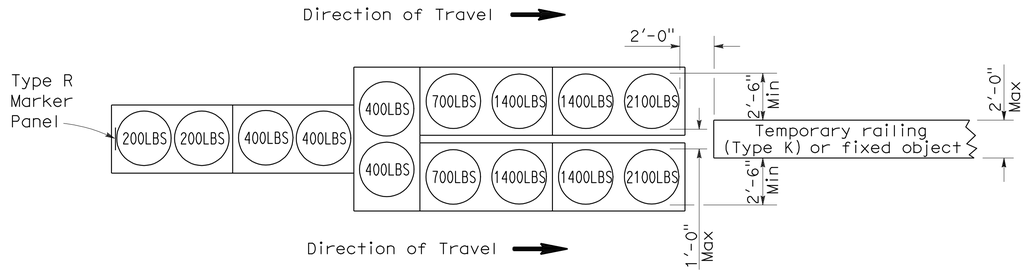
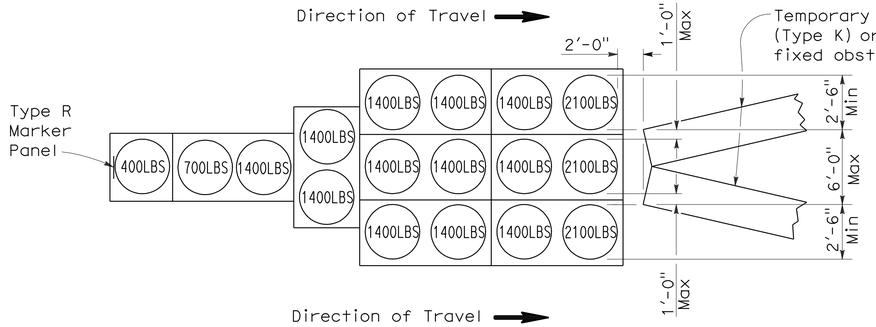
To accompany plans dated 5-18-09



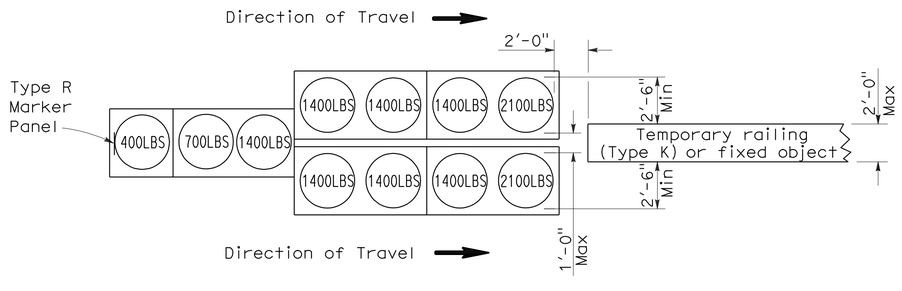
ARRAY 'TU14'

Approach speed 45 mph or more



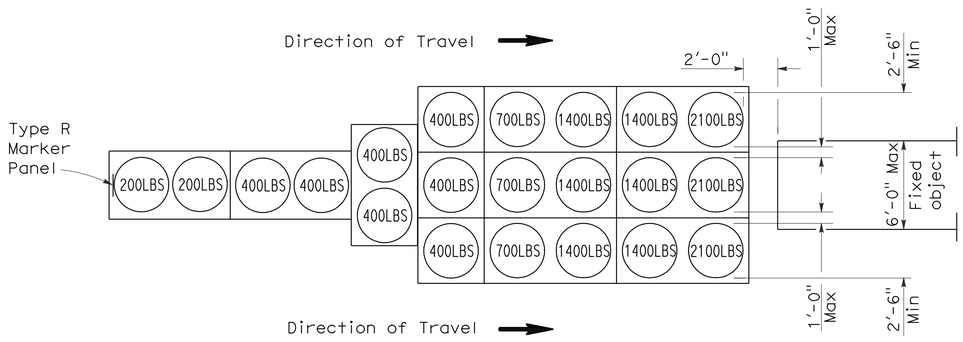
ARRAY 'TU17'

Approach speed less than 45 mph



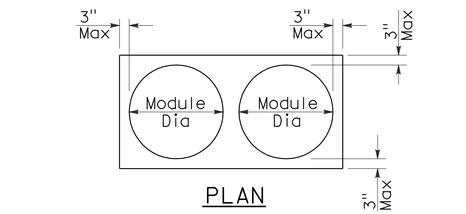
ARRAY 'TU11'

Approach speed less than 45 mph

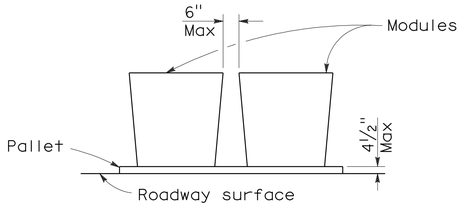


ARRAY 'TU21'

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

5-15-08

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
12	Ora	605	R1.4	37	45

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

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

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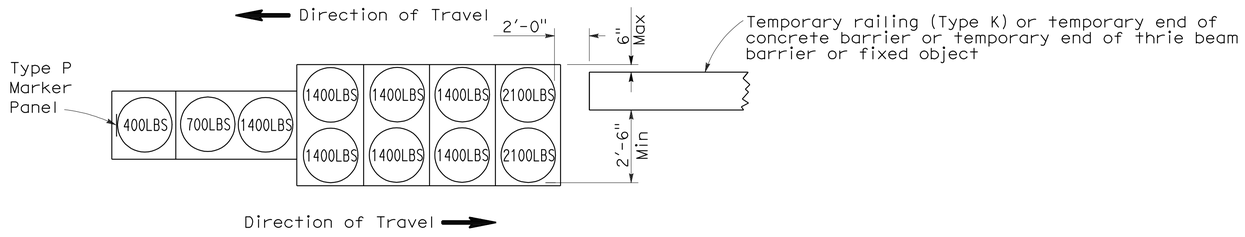
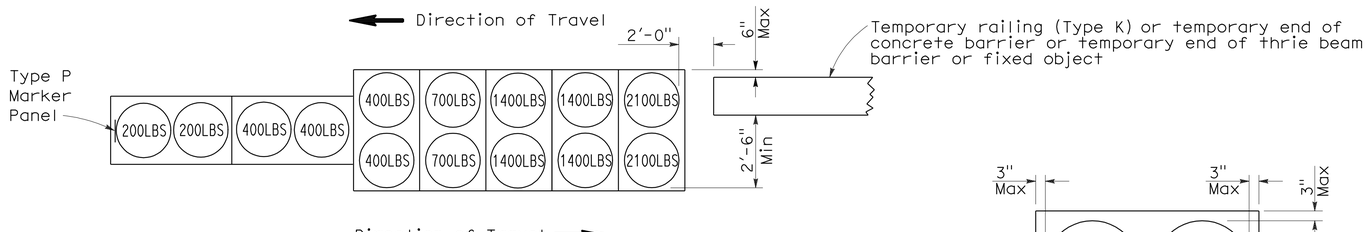
To accompany plans dated 5-18-09



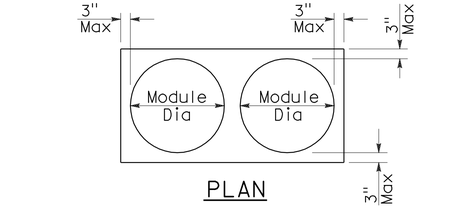
ARRAY 'TB11'

Approach speed less than 45 mph

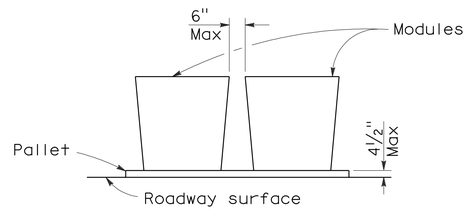


ARRAY 'TB14'

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 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

5-15-08

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
12	Ora	605	R1.4	38	45

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

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

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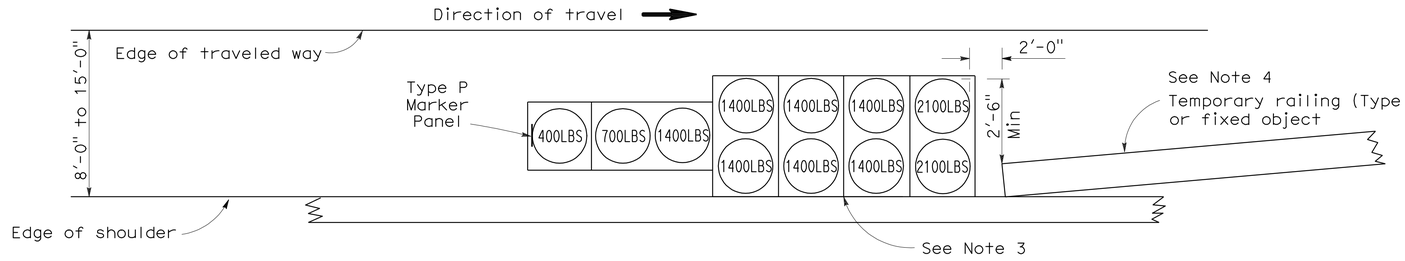
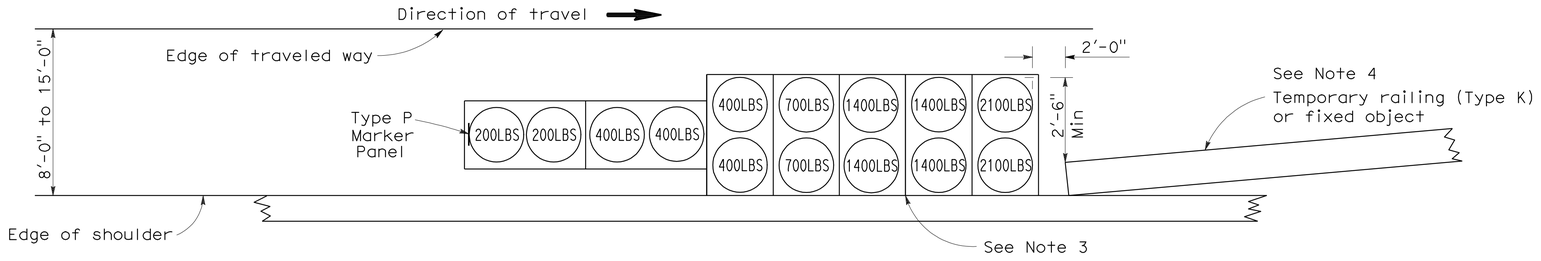
To accompany plans dated 5-18-09



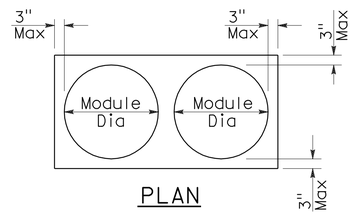
ARRAY 'TS11'

Approach speed less than 45 mph
See Note 9

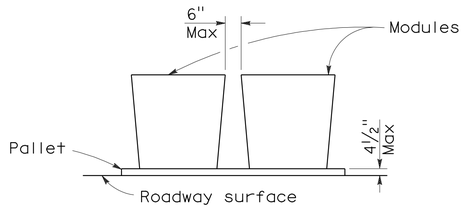


ARRAY 'TS14'

Approach speed 45 mph or more
See Note 9



PLAN



ELEVATION

CRASH CUSHION PALLET DETAIL

See Note 11

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. 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.
4. 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.
5. Temporary crash cushion arrays shall not encroach on the traveled way.
6. Arrays for median shoulders shall conform to details shown on this plan for outside shoulders.
7. Place the Type P marker panel so that the bottom of the panel rests upon the pallet and faces traffic.
8. Refer to Standard Plan A73B for marker details.
9. 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.
10. Approach speeds indicated conform to NCHRP 350 Report criteria.
11. Use of pallets is optional.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TEMPORARY CRASH CUSHION, SAND FILLED (SHOULDER INSTALLATIONS)

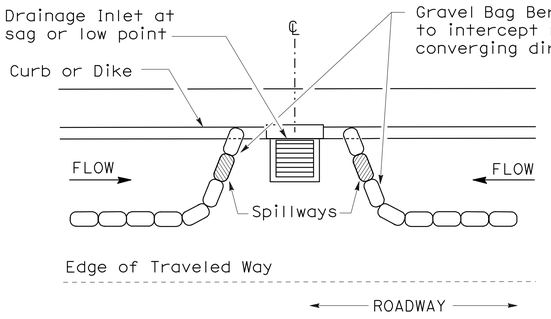
NO SCALE

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

5-15-08



PLAN

CONFIGURATION FOR SAG POINT INLET (GRAVEL BAG BERM)

GRAVEL BAG BERM (TYPE 3A) SPACING TABLE

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

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

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
12	Ora	605	R1.4	39	45

Robert B Schott
LICENSED LANDSCAPE ARCHITECT

August 15, 2008
PLANS APPROVAL DATE

LICENSED LANDSCAPE ARCHITECT — Robert B. Schott 3825 — Signature — 11-04-08 Renewal Date — 08-11-08 Date — STATE OF CALIFORNIA

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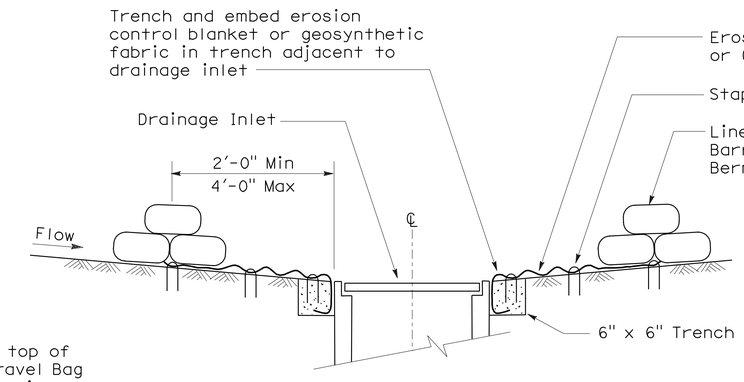
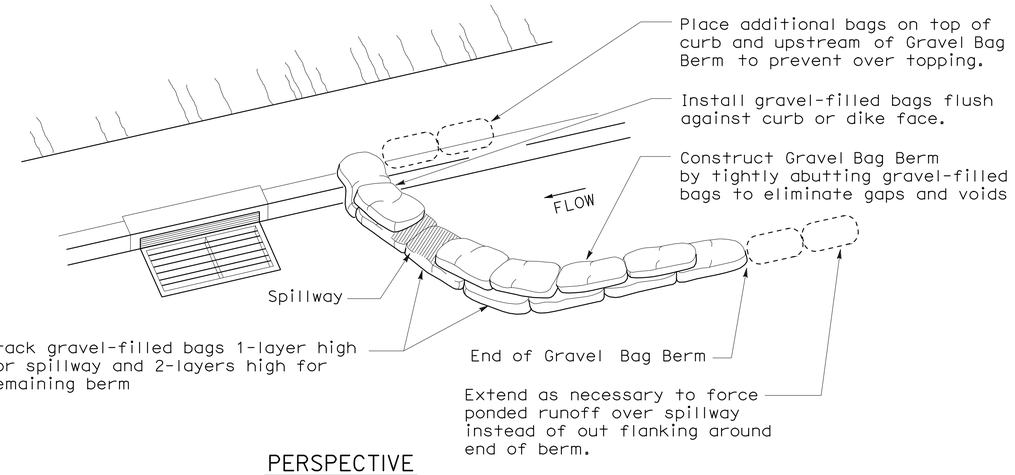
To accompany plans dated 5-18-09



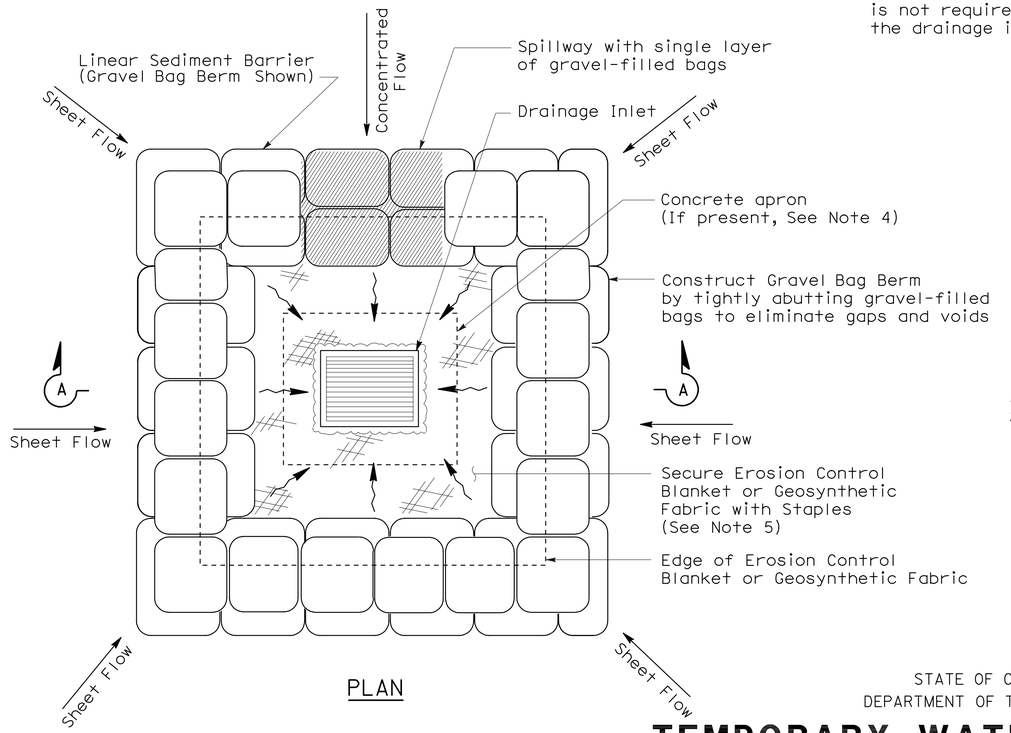
SECTION A-A

NOTES:

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

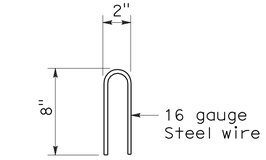


PERSPECTIVE

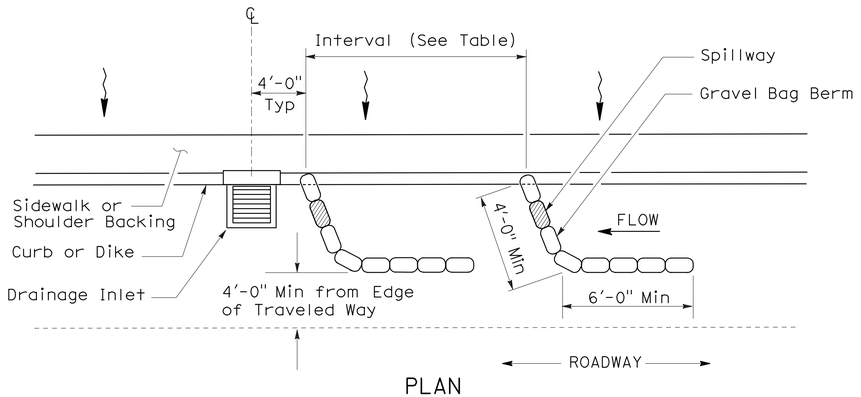


PLAN

TEMPORARY DRAINAGE INLET PROTECTION (TYPE 3B)



STAPLE DETAIL



PLAN

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TEMPORARY WATER POLLUTION CONTROL DETAILS (TEMPORARY DRAINAGE INLET PROTECTION)

NO SCALE

NSP T62 DATED AUGUST 15, 2008 SUPPLEMENTS THE STANDARD PLANS BOOK DATED MAY 2006.

NEW STANDARD PLAN NSP T62

2006 NEW STANDARD PLAN NSP T62

7-11-08

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
12	Ora	605	R1.4	40	45

Jeffrey G. McRae
REGISTERED ELECTRICAL ENGINEER

October 5, 2007
PLANS APPROVAL DATE

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

To accompany plans dated 5-18-09

ELECTROLIERS

STANDARD TYPES
15, 15D
15 STRUCTURE
21, 21D STRUCTURE
30
31
32
35
36-20A

High mast light pole

Double Arm lighting standard

Existing electrolier

Electrolier foundation (Future installation)

NOTES:

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

Electrolier (see project notes or project plans)

Luminaire on wood pole

STANDARD NOTES:

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

ABBREVIATIONS AND EQUIPMENT DESIGNATIONS

PROPOSED	EXISTING	
BBS	bbs	Battery backup system
BC	bc	Bolt circle
C	C	Conduit
CCTV	cctv	Closed circuit television
CKT	ckt	Circuit
CMS	cms	Changeable message sign
DLC	dlc	Loop detector lead-in cable
EMS	ems	Extinguishable message sign
EVC	evc	Emergency vehicle cable
EVD	evd	Emergency vehicle detector
FB	fb	Flashing beacon
FBCA	fbca	Flashing beacon control assembly
FBS	fbs	Flashing beacon with slip base
FO	fo	Fiber optic
G	G	Ground (Equipment Grounding Conductor)
GFCI	GFCI	Ground fault circuit interrupt
HAR	har	Highway advisory radio
HEX	hex	Hexagonal
HPS	hps	High pressure sodium
IISNS	iisns	Internally illuminated street name sign
ISL	isl	Induction sign lighting
LED	led	Light emitting diode
LMA	lma	Luminaire mast arm
LPS	lps	Low pressure sodium
LTG	ltg	Lighting
LUM	lum	Luminaire
MAT	mat	Mast arm mounting vehicle signal faces, top attachment
MAS	mas	Mast arm mounting vehicle signal faces, side attachment
MAS-4A	mas-4A	Mast arm mounting vehicle signal faces,
MAS-4B	mas-4B	side attachment - 4 signal section
MAS-4C	mas-4C	
MAS-5A	mas-5A	Mast arm mounting vehicle signal faces,
MAS-5B	mas-5B	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

SOFFIT AND WALL MOUNTED LUMINAIRES

Pendant, 70 W HPS unless otherwise specified.

Flush, 70 W HPS unless otherwise specified.

Wall surface, 70 W HPS unless otherwise specified.

Existing soffit or wall luminaire to remain unmodified.

Existing soffit or wall luminaire to be modified as specified.

NOTE:

Arrow indicates "street side" of luminaire.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (SYMBOLS AND ABBREVIATIONS)

NO SCALE

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

REVISED STANDARD PLAN RSP ES-1A

2006 REVISED STANDARD PLAN RSP ES-1A

7-10-07

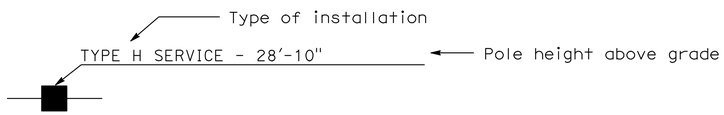
CONDUIT

PROPOSED	EXISTING	
— — —	— — —	Lighting Conduit, unless otherwise indicated or noted
— - — - —	— - — - —	Traffic signal conduit
—C— —	—c— —	Communication conduit
—T— —	—t— —	Telephone conduit
—F— —	—f— —	Fire alarm conduit
—FO— —	—fo— —	Fiber optic conduit
— — —┐	— — —┐	Conduit termination (RSP ES-9A C)
R	r	Conduit riser in/on structure or service pole

SERVICE EQUIPMENT

PROPOSED	EXISTING	
—OH—	—oh—	Overhead lines
U	U	Wood pole "U" indicates utility owned
		Pole guy with anchor
		Utility transformer - ground mounted
III		Service equipment enclosure type
		Service equipment enclosure door indicates front of enclosure
T	t	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

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
PV	PV	Modifications of basic symbols: "L" Indicates all non-arrow sections louvered "LG" Indicates louvered 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
R	Y	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

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
12	Ora	605	R1.4	41	45

Jeffery G. McRae
REGISTERED ELECTRICAL ENGINEER

October 5, 2007
PLANS APPROVAL DATE

Jeffery G. McRae
No. E14512
Exp. 6-30-08
ELECTRICAL
REGISTERED PROFESSIONAL ENGINEER
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 5-18-09

SIGNAL EQUIPMENT Cont

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

NOTES:

1. All signal sections shall be 12" unless shown otherwise.
2. Signal heads shall be provided with backplates unless shown otherwise.
3. 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

7-10-07

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
12	Ora	605	R1.4	42	45

Jeffery G. McRae
REGISTERED ELECTRICAL ENGINEER

October 5, 2007
PLANS APPROVAL DATE

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

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To accompany plans dated 5-18-09

EQUIPMENT IDENTIFICATION

ILLUMINATED SIGN IDENTIFICATION NUMBER:

Sign No. 12345
10 ISL SCI 1.0

- Sign number - Place on post or structure
- Transformer rating (kVA)
- Lighting control type
- Number and type of fixtures

Do NOT place on standard or structure

ELECTROLIER OR EQUIPMENT IDENTIFICATION NUMBER:

12345 - 15'-0"

- Mast arm length, if shown. Do not place on standard or structure.
- Equipment number - Place on standard or structure. Existing equipment numbers are shown in parenthesis

CONDUIT AND CONDUCTOR IDENTIFICATION:

1½"C, 2#10, 15#14, 2 DLC

- Number and size of conductors and cables
- Size of conduit in inches

ø1, ø2, ø2P, etc.	Traffic phase identification for signal faces, detectors and phase diagrams
1 2 3	Project note numbers
A B C	Equipment description, installation or item numbers
1 2 3	Conduit run numbers

SIGNAL AND LIGHTING STANDARD (TYPICAL DESIGNATION):

19A - 3 - 100

- Wind velocity = 100 mph
- Case 3 arm loading
- Standard type
- Standard Plan sheet number
- Detail number or letter

WIRING DIAGRAM LEGEND

P	Pole
CB	Circuit breaker
A	Ampere
V	Volt
M	Metered
UM	Unmetered
NB	Neutral bus
GB	Ground bus
G	Equipment grounding conductor
N	Grounded conductor (Neutral)

- External conductor
- Conductor or bus
- Tie point
- Contactor coil
- Contactor, Contact NO
- Terminal blocks
- Contactor, Contact NC
- Enclosure bond
- Grounding electrode
- Circuit breaker
- Receptacle

PULL BOXES

PROPOSED	EXISTING	
		Pull box-No. 5 unless otherwise indicated or noted.
3	9A(21)	Pull box-Additional designations or descriptions

3 = No. 3½ pull box
5 = No. 5 pull box
6 = No. 6 pull box
7 = No. 7 (Ceiling pull box)
8 = No. 8 (Pendant soffit pull box)
9 = No. 9 pull box
9A = No. 9A pull box

(C) = Communications pull box
(E) = Pull box with extension
(S) = Sprinkler control pull box
(21) = Anchor bolts and conduit for future installation of Type 21 Standard
(T) = Traffic pull box

MISCELLANEOUS EQUIPMENT

PROPOSED	EXISTING	
CMS	cms	Changeable message sign
		Closed circuit television camera
		Highway advisory radio pole and antenna
EMS	ems	Extinguishable message sign
M V	m v	Detection device M = Microwave sensor V = Video image sensor

VEHICLE DETECTORS

5 J 9 U

- Vehicle detector designation
- U = Upper
  L = Lower
- Slot number in input file
- Input file (I or J)
- Phase

PROPOSED	EXISTING	
		Type A detector loop. Outline of sawcut shown.
		Type B detector loop. Outline of sawcut shown.
		Type C detector loop. Outline of sawcut shown.
		Type D detector loop. Outline of sawcut shown.
		Type E detector loop. Outline of sawcut shown.
		Type Q detector loop. Outline of sawcut shown.
		Magnetic detector
DH	dh	Detector handhole
		Microwave or video detection zone

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

7-10-07

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
12	Ora	605	R1.4	43	45

Jeffery G. McRae
REGISTERED ELECTRICAL ENGINEER

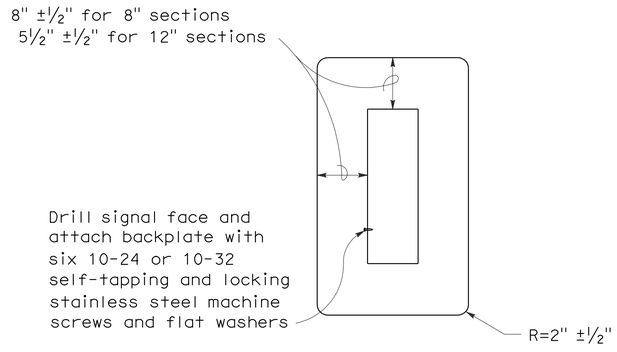
REGISTERED PROFESSIONAL ENGINEER
Jeffery G. McRae
No. E14512
Exp. 6-30-10
ELECTRICAL
STATE OF CALIFORNIA

June 6, 2008
PLANS APPROVAL DATE

To accompany plans dated 5-18-09

VISORS

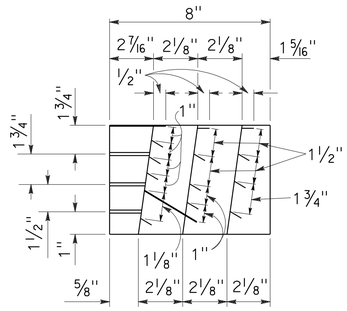
(Right angle is reversed of figure)



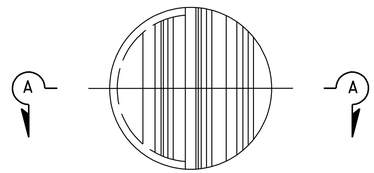
8" AND 12" SECTIONS

BACKPLATE

1/16" minimum thickness
3001-14 aluminum, or plastic when specified



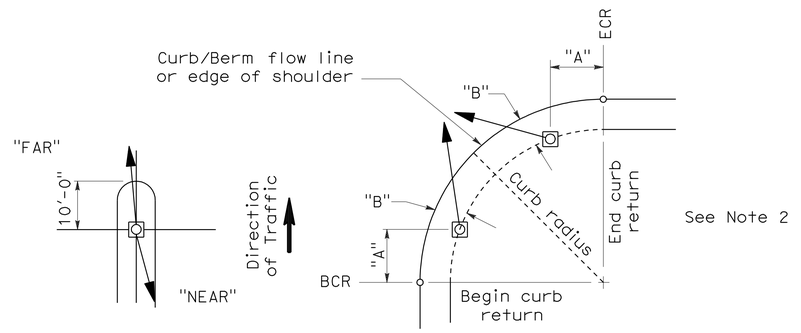
SECTION A-A



FRONT VIEW

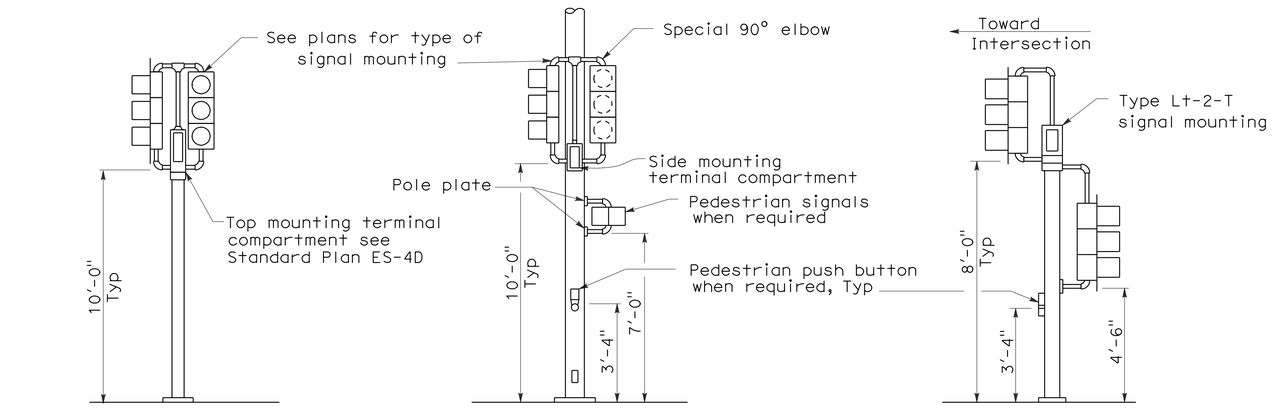
DIRECTIONAL LOUVER

Directional louvers shall be oriented as directed by the Engineer and secured in place with one plated brass machine screw and nut.



NOTES:

1. Typical signal pole placement unless dimensioned on plans.
2. For "A" and "B" dimensions, see Pole Schedule, or as directed by the Engineer.



TOP MOUNTED SIGNALS (TV)

Type 1-A, 1-B, 1-C and 1-D standard as indicated on the plans

SIDE MOUNTED SIGNALS (SV AND SP)

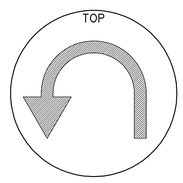
Normally used on standards with luminaire or signal mast arm

LEFT TURN LANE SIGNAL

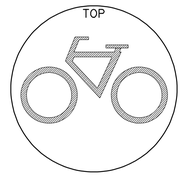
Type 1-A, 1-B, 1-C and 1-D standard as indicated on plans

TYPICAL SIGNAL INSTALLATIONS

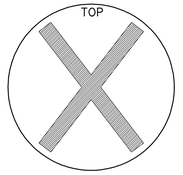
SIGNAL STANDARD PLACEMENT DIMENSIONS AND EQUIPMENT LOCATIONS



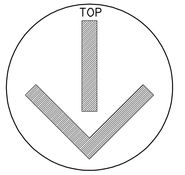
U-TURN SIGNAL FACE



BICYCLE SIGNAL FACE



LANE CONTROL SIGNAL FACE



LANE CONTROL SIGNAL FACE

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (SIGNAL HEADS AND MOUNTINGS)

NO SCALE

RSP ES-4C DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN ES-4C
DATED MAY 1, 2006 - PAGE 420 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-4C

2006 REVISED STANDARD PLAN RSP ES-4C

5-19-08

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
12	Ora	605	R1.4	44	45

Jeffery G. McRae
REGISTERED ELECTRICAL ENGINEER

Jeffery G. McRae
No. E14512
Exp. 6-30-10
ELECTRICAL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

June 6, 2008
PLANS APPROVAL DATE

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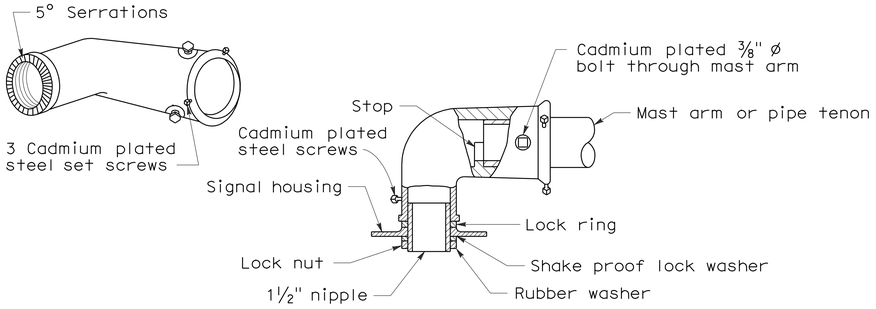
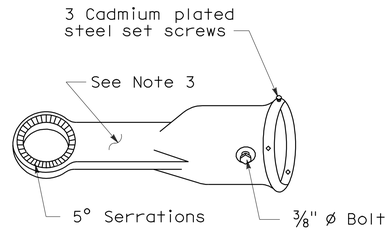
To accompany plans dated 5-18-09



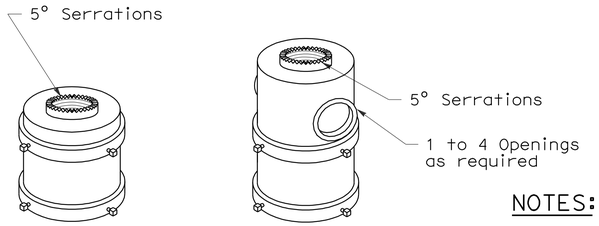
MAST ARM MOUNTING - TYPE "MAT"

For 2 NPS pipe, see Note 1.



MAST ARM MOUNTING - TYPE "MAS"

For 2 NPS pipe. See Note 1.



For one mounting — For mulitiple mountings

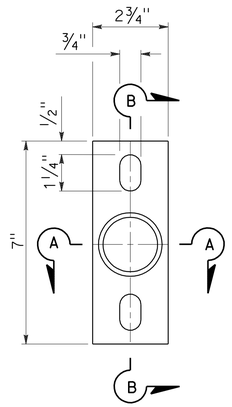
TOP MOUNTINGS

For 4 NPS pipe, see Note 2.

NOTES:

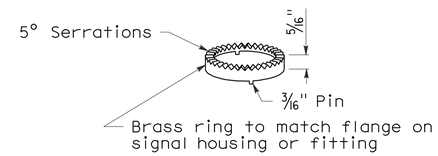
1. After mast arm signal has been plumbed and secured, drill 7/16" hole through mast arm tenon in line with slip fitter hole. Place a cadmium plated ⅜" ø galvanized bolt with washer under bolt head through hole and secure with washer, nut, and locknut. Seal openings between mast arm mountings and mast arm with mastic.
2. (a) Threaded top mounted slip fitter openings shall be 1½ NPS.
   (b) Serrations in fittings shall match those on bottom of signal heads or in lock ring.
   (c) Top opening shall be offset when backplate is used.
3. Wireway shall have a cross section area of 0.95 square inch minimum. Minimum width of ½".

SIGNAL SLIP FITTERS



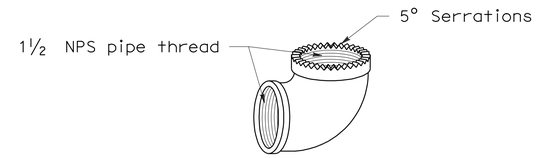
POLE PLATE

For side mountings



LOCK RING

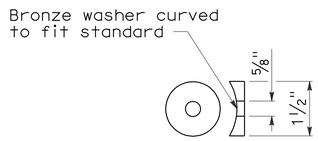
Use where locking ring is not integral with signal housing or fitting.



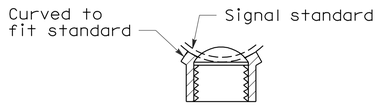
SPECIAL 90° ELBOW

One for each signal head, except those with special slip fitter mounting

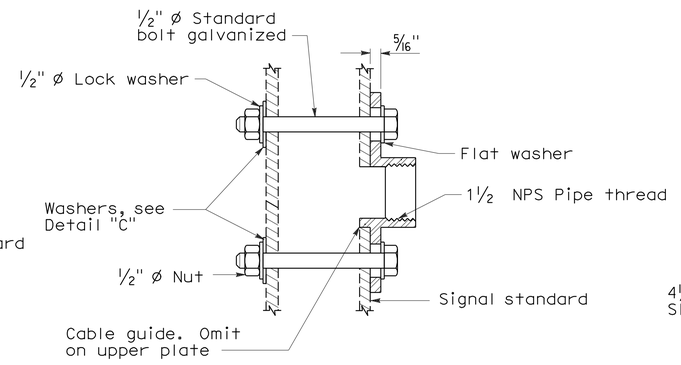
MISCELLANEOUS MOUNTING HARDWARE



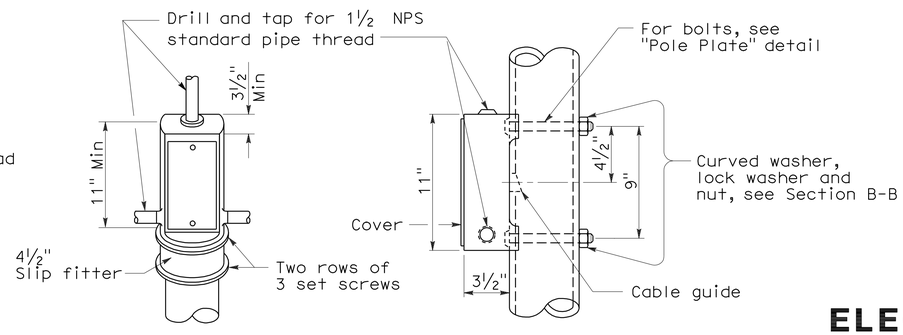
DETAIL "C"



SECTION A-A



SECTION B-B



TOP MOUNTING — SIDE MOUNTING

TERMINAL COMPARTMENTS

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (SIGNAL HEADS AND MOUNTINGS)

NO SCALE

RSP ES-4D DATED June 6, 2008 SUPERSEDES STANDARD PLAN ES-4D
DATED MAY 1, 2006 - PAGE 421 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-4D

2006 REVISED STANDARD PLAN RSP ES-4D

5-19-08

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
12	Ora	605	R1.4	45	45

REGISTERED CIVIL ENGINEER

October 5, 2007
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
Stanley P. Johnson
No. C57793
Exp. 3-31-08
CIVIL
STATE OF CALIFORNIA

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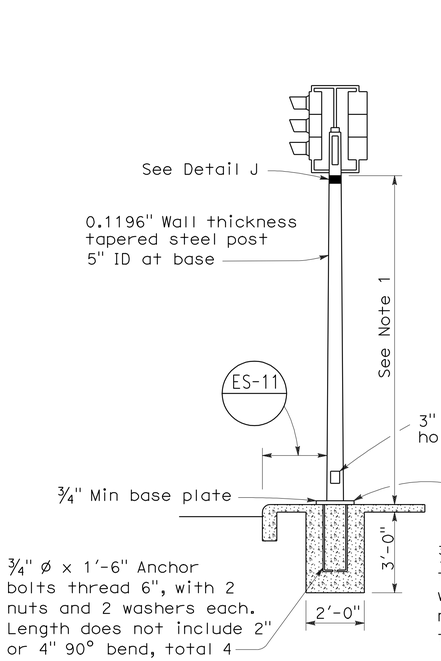
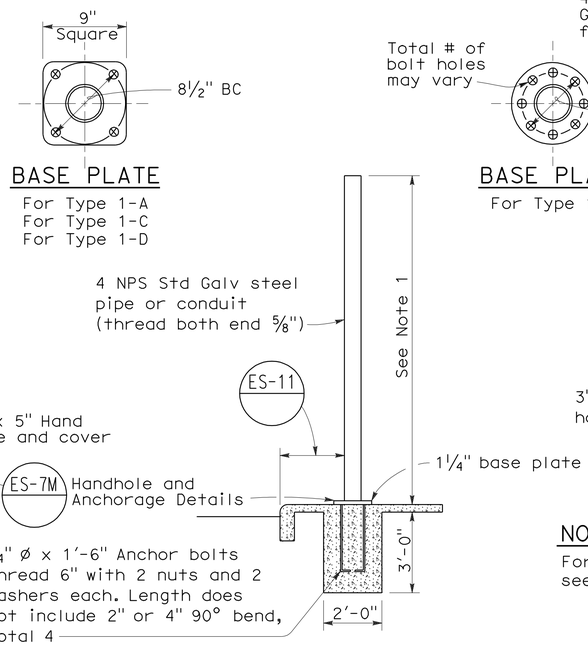
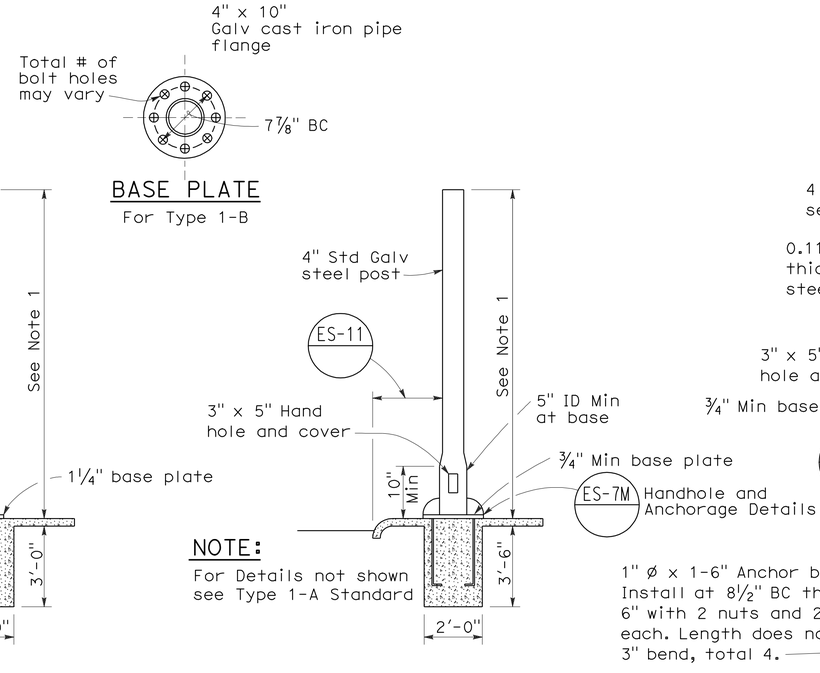
To accompany plans dated 5-18-09



TYPE 1-A STANDARD

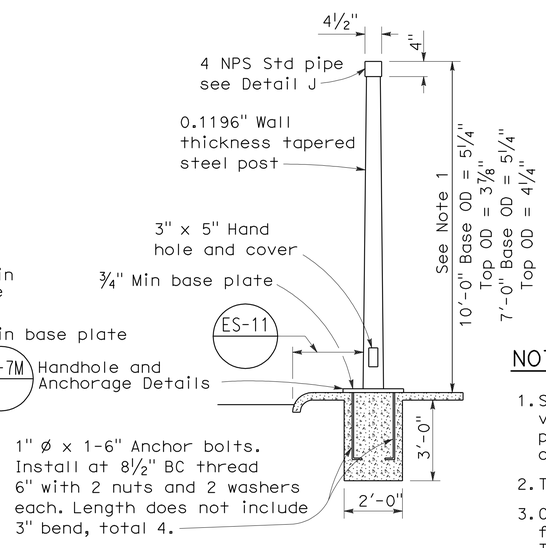


TYPE 1-B STANDARD



NOTE:
For Details not shown see Type 1-A Standard

TYPE 1-C STANDARD



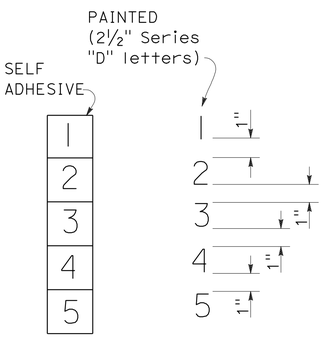
1" Ø x 1-6" Anchor bolts. Install at 8½" BC thread 6" with 2 nuts and 2 washers each. Length does not include 3" bend, total 4.

TYPE 1-D STANDARD

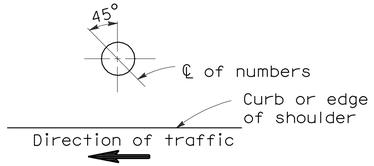
NOTES:

1. Standards shall be 10'-0" ± 2" for vehicle signals and 7'-0" ± 2" for pedestrian signals unless otherwise noted on plans.
2. Top of standards shall be 4½" OD.
3. Conduits shall extend 2" maximum above finished surface of foundation and for Types 1-A, 1-C and 1-D shall be sloped toward handhole.
4. Anchor bolts shall be bonded to conduit or grounding conductor.
5. Conduit between standard and adjacent pull box shall be 2" minimum.
6. Paint numbers on roadway side facing traffic when electrolier or post is left of direction of traffic.

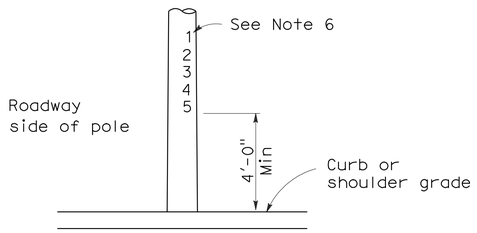
TYPE 1 SIGNAL STANDARDS



NUMBER DETAIL

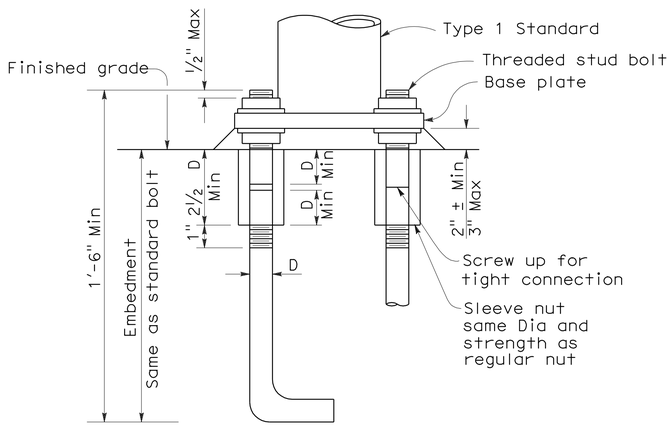


PLAN



TYPE NUMBER FORMAT

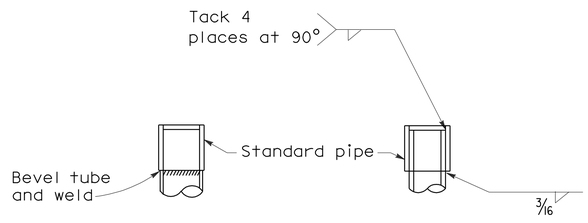
LOCATION OF EQUIPMENT NUMBERS ON STANDARDS AND POSTS



ANCHOR BOLTS WITH SLEEVE NUTS

Sleeve nuts to be used only when shown or specified on Project Plans

D = Diameter of anchor bolt



DETAIL J

Tube may be inserted into pipe or butted as required

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (SIGNAL AND LIGHTING STANDARD TYPE 1 STANDARD AND EQUIPMENT NUMBERING)

NO SCALE

RSP ES-7B DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-7B
DATED MAY 1, 2006 - PAGE 438 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-7B

2006 REVISED STANDARD PLAN RSP ES-7B

7-10-07