

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	LaK	20	13.5/31.4	24	73

Baly 5-13-14
 REGISTERED CIVIL ENGINEER DATE

5-27-14
 PLANS APPROVAL DATE

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THERMOPLASTIC PAVEMENT MARKING

LOCATION (PM)	L+/R+ Med	ORIEN-TATION	TYPE/LEGEND	AREA SQFT	REMARKS
28.61	R+	FEBT	XING	21	
28.62	Med	EB/WB	TYPE III ARROW (L+)	84	2 EA OPPOSING
28.70	R+	FNBT	STOP	22	HOOVER St
28.70	R+		LIMIT LINE	12	HOOVER St
28.70	Rdwy		CROSS WALK	309	HOOVER St EAST SIDE
28.71	Med	EB/WB	TYPE III ARROW (L+)	84	2 EA OPPOSING
24.72	L+	FSBT	STOP	22	STORE EXIT
28.72	L+		LIMIT LINE	24	STORE EXIT
28.79	Med	EB/WB	TYPE III ARROW (L+)	84	2 EA OPPOSING
28.80	L+	FSBT	STOP	22	STORE EXIT
28.80	L+		LIMIT LINE	24	STORE EXIT
28.80	L+	FSBT	XING	21	
28.81	L+	FSBT	PED	18	
28.84	R+	FSBT	STOP (2 EA)	44	KEYS Blvd
28.84	R+		LIMIT LINE	40	KEYS Blvd
28.88	Med	EB/WB	TYPE III ARROW (L+)	84	2 EA OPPOSING
29.35	R+	FNBT	STOP	22	ORCHARD SHORES Dr
29.35	R+		LIMIT LINE	26	ORCHARD SHORES Dr
29.37	Med	EB/WB	TYPE III ARROW (L+)	84	2 EA OPPOSING
29.44	Med	EB/WB	TYPE III ARROW (L+)	84	2 EA OPPOSING
29.53	Med	EB/WB	TYPE III ARROW (L+)	84	2 EA OPPOSING
29.54	R+	FNBT	STOP	22	SULPHUR BANK Dr
29.54	R+		LIMIT LINE	38	SULPHUR BANK Dr
29.55	Med	EB/WB	TYPE III ARROW (L+)	42	L+ TURN POCKET
29.85	L+	FSBT	STOP	22	MORINE RANCH Rd
29.85	L+		LIMIT LINE	35	MORINE RANCH Rd
31.32	R+	FNBT	STOP (2 EA)	22	DEL WAY
31.32	R+		LIMIT LINE	30	DEL WAY
31.36	R+	FEBT	TYPE I 24'-0" ARROW	31	TO SB ROUTE 53
SUBTOTAL				1,457	
SUBTOTAL1 PDQ-10				4,057	
SUBTOTAL2 PDQ-10				5,262	
SUBTOTAL3 PDQ-11				2,109	
SUBTOTAL4 PDQ-11				4,115	
TOTAL				17,000	

REMOVE THERMOPLASTIC PAVEMENT MARKING

LOCATION (PM)	L+/R+ Med	ORIEN-TATION	TYPE/LEGEND	AREA SQFT	REMARKS
18.48	L+	FSBT	StOP	22	RANCHO VISTA Dr
19.03	R+	FEBT	TYPE III ARROW (L+)	42	L+ TURN POCKET
19.03	R+	FEBT	TYPE V ARROW	33	THRU LANE
27.67	R+	FEBT	Ped	18	
27.68	R+	FEBT	Xing	21	
27.84	L+	Rdwy	CROSS WALK	18	PINE St EAST SIDE
27.85	Med	EB/WB	TYPE III ARROW (L+)	84	2 EA OPPOSING
27.89	Rdwy	Rdwy	CROSS WALK	453	END OF PARK
27.90	Med	EB/WB	TYPE III ARROW (L+)	84	2 EA OPPOSING
27.97	Rdwy	Rdwy	CROSS WALK	294	FOOTHILL Blvd WEST SIDE
27.98	Med	FEBT	TYPE III ARROW (L+)	84	2 EA OPPOSING
28.06	Med	FEBT	TYPE III ARROW (L+)	84	2 EA OPPOSING
28.14	Med	FEBT	TYPE III ARROW (L+)	84	2 EA OPPOSING
28.20	Med	FEBT	TYPE III ARROW (L+)	84	2 EA OPPOSING
28.27	Med	EB/WB	TYPE III ARROW (L+)	84	2 EA OPPOSING
28.32	R+	FEBT	SLOW YELLOW	23	
28.32	Med	EB/WB	TYPE III ARROW (L+)	84	2 EA OPPOSING
28.32	R+	FEBT	SCHOOL YELLOW	35	
28.33	R+	FEBT	Xing YELLOW	21	
28.39	Med	EB/WB	TYPE III ARROW (L+)	84	2 EA OPPOSING
28.42	L+	Rdwy	CROSS WALK YELLOW	325	HIGH VALLEY Rd
28.42	Drwy	Rdwy	CROSS WALK YELLOW	330	HIGH VALLEY Rd EAST SIDE
28.48	Med	EB/WB	TYPE III ARROW (L+)	84	2 EA OPPOSING
28.49	L+	FWBT	Xing YELLOW	21	
28.50	L+	FWBT	SCHOOL YELLOW	35	
28.51	L+	FWBT	SLOW YELLOW	23	
28.55	Med	EB/WB	TYPE III ARROW (L+)	84	2 EA OPPOSING
28.60	R+	FEBT	Ped	18	
28.61	R+	FEBT	Xing	21	
28.62	Med	EB/WB	TYPE III ARROW (L+)	84	2 EA OPPOSING
28.70	Rdwy	Rdwy	CROSS WALK	309	HOOVER St EAST SIDE
28.71	Med	EB/WB	TYPE III ARROW (L+)	84	2 EA OPPOSING
28.79	Med	EB/WB	TYPE III ARROW (L+)	84	2 EA OPPOSING
28.80	L+	FSBT	Xing	21	
28.81	L+	FSBT	Ped	18	
28.88	Med	EB/WB	TYPE III ARROW (L+)	84	2 EA OPPOSING
29.37	Med	EB/WB	TYPE III ARROW (L+)	84	2 EA OPPOSING
29.44	Med	EB/WB	TYPE III ARROW (L+)	84	2 EA OPPOSING
29.53	Med	EB/WB	TYPE III ARROW (L+)	84	2 EA OPPOSING
29.55	Med	EB/WB	TYPE III ARROW (L+)	42	L+ TURN POCKET
31.36	R+	FEBT	TYPE I 24'-0" ARROW	31	TO SB ROUTE 53
TOTAL				3,686	

REPLACED PER ADDENDUM No. 1 DATED JULY 18, 2014

PAVEMENT DELINEATION QUANTITIES PDQ-12

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Lak	20	13.5/31.4	31	73

REGISTERED CIVIL ENGINEER DATE 5-13-14

5-27-14 PLANS APPROVAL DATE

BALJINDER S. BRAR No. C 67847 Exp 6-30-15 CIVIL

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

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

ABBREVIATION:

- LNMI - LANE MILE
- TWLT - TWO WAY LEFT TURN
- AR - ASPHALT-RUBBER BINDER
- GPI - GEOSYNTHETIC PAVEMENT INTERLAYER
- GSM - GEOCOMPOSITE STRIP MEMBRANE
- RHMA (GG) - RUBBERIZED HOT MIX ASPHALT (GAP GRADED)
- HMA (A) - HOT MIX ASPHALT (TYPE A)
- ARBSC - ASPHALT RUBBER BINDER SEAL COAT

PAVEMENT STRUCTURE QUANTITIES

LOCATION (PM)	(N) AVERAGE WIDTH	COLD PLANE ASPHALT CONCRETE PAVEMENT			CRACK TREATMENT	GEOSYNTHETIC PVM+ INTERLAYER (PAVING GRID)	GEOSYNTHETIC PVM+ INTERLAYER (GEOCOMPOSITE STRIP MEMBRANE)	PAVING ASPHALT (BINDER, GEOSYNTHETIC PAVEMENT INTERLAYER)	ASPHALT-RUBBER BINDER	SCREENINGS	TACK COAT	HOT MIX ASPHALT (TYPE A)	RUBBERIZED HOT MIX ASPHALT (GAP GRADED)	REMARKS		
		(0.08' Max)	(0.15' Max)	(0.25' Max)												
FROM	TO	LF	SQYD	SQYD	SQYD	LNMI	SQYD	SQYD	TON	TON	TON	TON	TON			
13.50	13.55	52	1,525			0.27			5.09	28	0.48	126	189	BEGIN PROJECT PM 13.50		
13.55	14.50	52	1,830		798	4.12			78.93	435	7.40	2,393	3,589	COLD PLANE Lt Shldr PM: 13.65-13.76, 14.20-14.26		
14.50	14.80	32	5,632			0.80			15.34	84	1.44	465	697	COLD PLANE PM: 14.44- 18.00		
14.80	14.97	36	3,590			0.51			9.78	54	0.92	296	445	ARBSC PM 13.50-19.25; 26.60-28.85		
14.97	16.30	28	16,098			3.10			59.50	328	5.58	1,804	2,705			
16.30	16.60	32	5,632			0.80			15.34	84	1.44	465	697			
16.60	16.84	40	4,832		800	0.80			15.34	84	1.44	465	697	CONFORM AT BRIDGE BB-EB (PM 16.85)		
16.86	17.96	52	25,795		7,395	4.70			90.18	497	8.45	2,734	4,100	COLD PLANE Lt Shldr PM: 16.86-17.96		
17.96	18.00	32	751			0.11			2.05	11	0.19	62	93	COLD PLANE Rt Shldr PM: 16.87-17.08, 17.26-17.39, 17.48-17.52		
18.00	18.12	32				0.32			6.14	34	0.48	186	279			
18.12	18.35	44				0.84			16.17	89	1.26	490	735			
18.35	18.67	32				0.85			16.36	90	1.28	496	744			
18.67	18.79	44				0.44			8.44	46	0.66	256	384			
18.79	18.99	32				0.53			10.23	56	0.80	310	465			
18.99	19.04	56				0.35			6.78	37	0.52	206	308	LEFT TURN POCKET PM: 18.96-19.13		
19.04	19.25	36				0.63			12.08	67	0.94	366	549			
19.25	19.35	36				0.30					0.27		262			
19.35	22.44	32				8.24					7.96		7,183			
22.44	22.57	44				0.48					0.57		416			
22.57	22.66	36				0.27					0.32		235			
22.66	24.18	32				4.45					4.10		3,885	LEFT TURN POCKET PM 22.53-22.71		
24.18	24.52	48				1.36					1.22		1,186	TURN OUT PM: 23.04-23.09, 23.25-23.30, 23.92-23.97		
24.52	24.78	32		3755		0.69					0.62		604	COLD PLANE Pvm+ PM: 24.45-24.65		
24.78	25.18	36		235		1.20					1.08		1046	COLD PLANE Rt Shldr PM: 25.11-25.16		
25.18	25.38	34				0.57					0.51		494			
25.38	25.75	38				1.17					1.05		1021			
25.75	26.60	32		2253	11,264	2.27					2.04		1,976	COLD PLANE Pvm+ PM: 25.77-25.89		
26.60	27.60	32		1	11,264	2.67			51.13	282	3.99	1,550	2,325	COLD PLANE Pvm+ PM: 26.88-27.08, 27.16-27.56		
27.60	27.72	48				0.48			9.20	51	0.72	279	418	COLD PLANE Rt Shldr PM: 27.70-27.79, 28.17-28.20		
27.72	28.62	60			3,847	4.50			86.28	475	6.74	2,615	3,923	COLD PLANE Lt Shldr PM: 27.85-27.92; 28.42-28.56; 28.80-28.93		
28.62	29.05	64			1,877	2.29	2,933	3.12	23.52	130	3.44	1,333	1,999	COLD PLANE Rt Shldr PM: 28.63-28.68, 28.72-28.73, 28.84-29.05		
29.05	29.50	40				1.69	6,600	7.02			2.53	982	1,560			
29.50	29.60	32				0.56	1,467	1.56			0.15	58	404	TWO WAY LEFT TURN LANE PM 29.31-29.68; END PROJECT PM 31.40		
29.60	30.40	32				2.25	7,187	7.65			2.43		1,962	TWO WAY LEFT TURN LANE PM 29.31-29.68; END PROJECT PM 31.40		
30.40	31.40	32				2.86					4.29	1,618	2,426	TWO WAY LEFT TURN LANE PM 29.31-29.68; END PROJECT PM 31.40		
REPLACE AC SURFACING ROAD/INTERSECTION CONNECTIONS					17,402			24,600	26.15					2,602	FOR LOCATIONS SEE SUMMARY OF QUANTITIES SHEET Q-5	
PRIVATE DRIVEWAY											5.62				FOR LOCATIONS SEE SUMMARY OF QUANTITIES SHEET Q-2	
SAFETY EDGE (CASE B & C)											0.98	450.9			FOR LOCATIONS SEE SUMMARY OF QUANTITIES SHEET Q-3	
COLD PLANE RUTTING PM 21.75-23.20					4,679										FOR LOCATIONS SEE SUMMARY OF QUANTITIES SHEET Q-4	
HMA DIKE												75.8			LOCATIONS: AS PER ENGINEER'S DIRECTION	
SUBTOTAL					70,364	23,645	25,981	59.94	18,187	24,600	45.50	537.88	2,962	83.91	20,081.7	55,457
TOTAL						119,990		59.94	18,187	24,600	45.50	537.88	2,962	83.91	20,081.7	55,457

NOTE: GPI (PAVING GRID): PM 28.85-29.60; PM 30.41-30.90



REPLACED PER ADDENDUM No. 1 DATED JULY 18, 2014

SUMMARY OF QUANTITIES Q-1



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Lak	20	13.5/31.4	55A	73

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

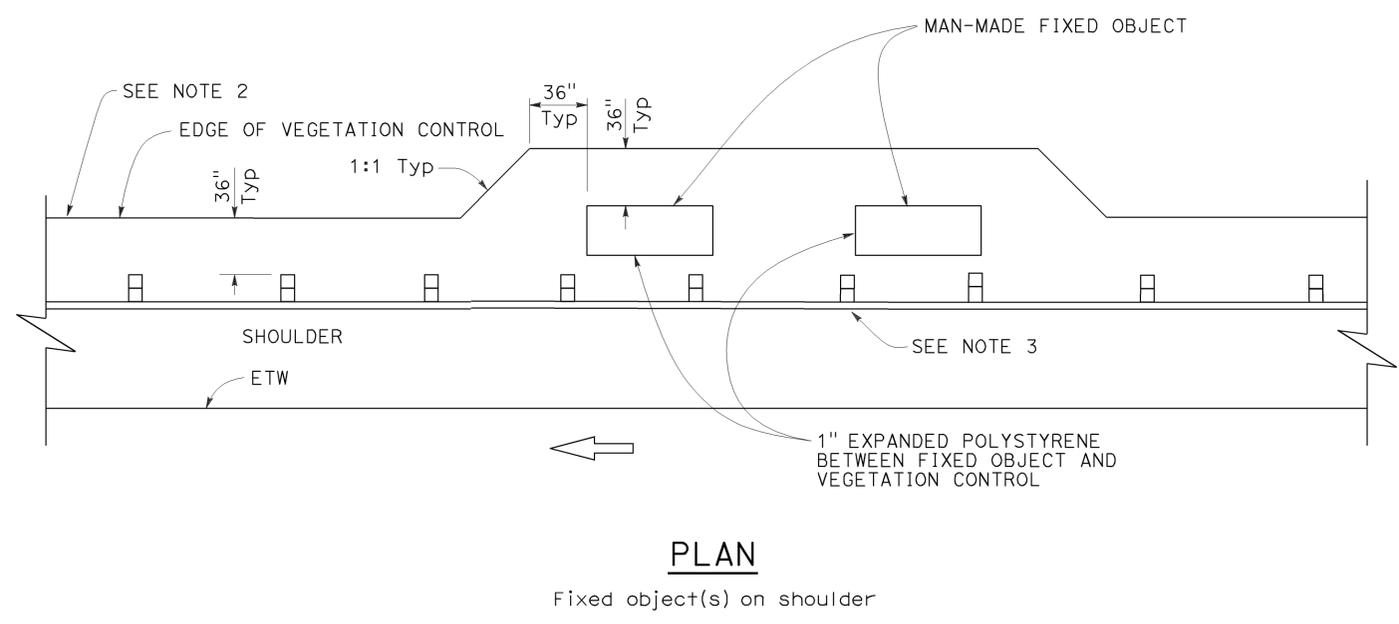
July 19, 2013
PLANS APPROVAL DATE

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TO ACCOMPANY PLANS DATED 5-27-14

NOTES:

1. See Revised Standard Plan RSP A77N5 for additional vegetation control details.
2. Where the distance between back of post and hinge point is less than 42", construct vegetation control to 6" from hinge point while maintaining the 8" block-out at back of post. If the 8" block-out at back of post can not be maintained, construct vegetation control flush with the back edge of post.
3. Where dike is constructed under railing, construct vegetation control to back edge of dike. Where paved shoulder is constructed within 36" in front of the post, construct vegetation control to the edge of paved shoulder.



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**MIDWEST GUARDRAIL SYSTEM
TYPICAL VEGETATION CONTROL
AT FIXED OBJECT**
NO SCALE

1 ADDED PER ADDENDUM No. 1 DATED JULY 18, 2014

RSP A77N8 DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.
REVISED STANDARD PLAN RSP A77N8

2010 REVISED STANDARD PLAN RSP A77N8



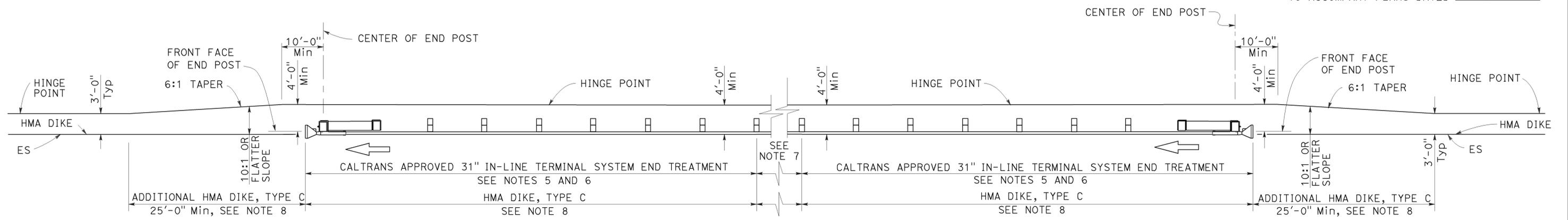
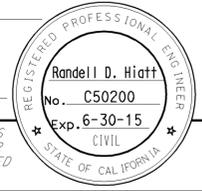
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Lak	20	13.5/31.4	56A	73

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

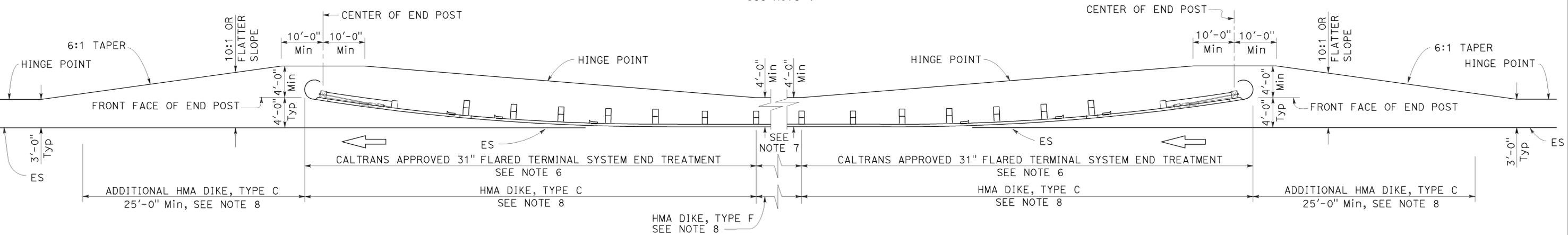
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TO ACCOMPANY PLANS DATED 5-27-14



TYPE 11D LAYOUT

(Embankment MGS installation with 31" in-line end treatment at each end of railing)
See Note 4



TYPE 11E LAYOUT

(Embankment MGS installation with 31" flared end treatment at each end of railing)
See Note 4

NOTES:

1. Line post, blocks and hardware to be used are shown on Revised Standard Plans RSP A77L1, RSP A77L2, RSP A77M1, RSP A77N1 and RSP A77N2.
2. MGS post spacing to be 6'-3" center to center, except as otherwise noted.
3. Except as noted, line posts are 6" x 8" x 6'-0" wood with 6" x 12" x 1'-2" wood blocks. W6 x 8.5 or W6 x 9 steel posts, 6'-0" in length, with 6" x 12" x 1'-2" notched wood blocks or plastic blocks may be used for 6" x 8" x 6'-0" wood post with 6" x 12" x 1'-2" wood blocks where applicable and when specified.
4. Layout Types 11D through 11L, shown on the A77P Series of Standard Plans, are typically used where MGS is recommended to shield embankment slopes and a crashworthy 31" end treatment is required for both directions of traffic.
5. 31" in-line terminal system end treatments are used where site conditions will not accommodate a flared end treatment.
6. The type of 31" terminal system end treatment to be used will be shown on the Project Plans.
7. Dependent on site conditions (embankment height and side slope), construction of additional MGS (length equal to multiples of 12'-6" with 6'-3" post spacing) may be advisable.
8. Where placement of dike is required with MGS installations, see Revised Standard Plan RSP A77N4 for dike positioning details.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**MIDWEST GUARDRAIL SYSTEM
TYPICAL LAYOUTS FOR
EMBANKMENTS**

NO SCALE

1 ADDED PER ADDENDUM No. 1 DATED JULY 18, 2014

RSP A77P2 DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77P2

2010 REVISED STANDARD PLAN RSP A77P2



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Lak	20	13.5/31.4	56B	73

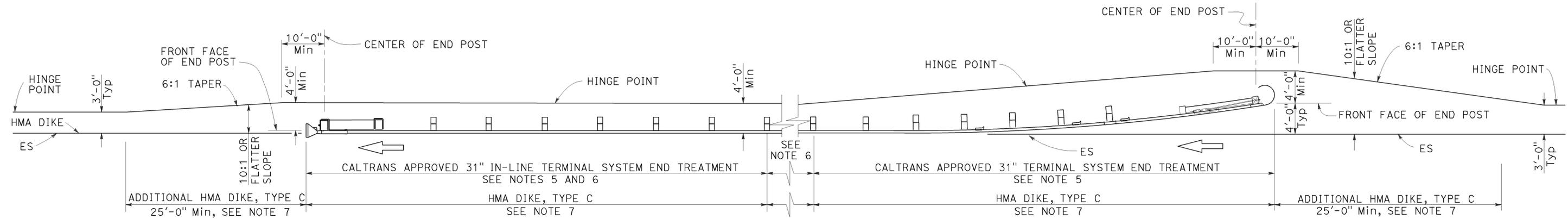
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

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REGISTERED PROFESSIONAL ENGINEER
Randell D. Hiatt
No. C50200
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA

TO ACCOMPANY PLANS DATED 5-27-14



TYPE 11H LAYOUT

(Embankment MGS installation with 31" flared end treatment and 31" in-line treatment at the ends of railing)
See Notes 4 and 7

NOTES:

1. Line post, blocks and hardware to be used are shown on Revised Standard Plans RSP A77L1, RSP A77L2, RSP A77M1, RSP A77N1 and RSP A77N2.
2. MGS post spacing to be 6'-3" center to center, except as otherwise noted.
3. Except as noted, line posts are 6" x 8" x 6'-0" wood with 6" x 12" x 1'-2" wood blocks, W6 x 8.5 or W6 x 9 steel posts, 6'-0" in length, with 6" x 12" x 1'-2" notched wood blocks or plastic blocks may be used for 6" x 8" x 6'-0" wood post with 6" x 12" x 1'-2" wood blocks where applicable and when specified.
4. Layout Types 11D through 11L, shown on the A77P Series of Standard Plans, are typically used where MGS is recommended to shield embankment slopes and a crashworthy 31" end treatment is required for both directions of traffic.
5. The type of 31" terminal system end treatment to be used will be shown on the Project Plans.
6. Dependent on site conditions (embankment height and side slope), construction of additional MGS (length equal to multiples of 12'-6" with 6'-3" post spacing) may be advisable.
7. Where placement of dike is required with MGS installations, see Revised Standard Plan RSP A77N4 for dike positioning details.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**MIDWEST GUARDRAIL SYSTEM
TYPICAL LAYOUTS FOR
EMBANKMENTS**
NO SCALE

1 ADDED PER ADDENDUM No. 1 DATED JULY 18, 2014

RSP A77P4 DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77P4

2010 REVISED STANDARD PLAN RSP A77P4

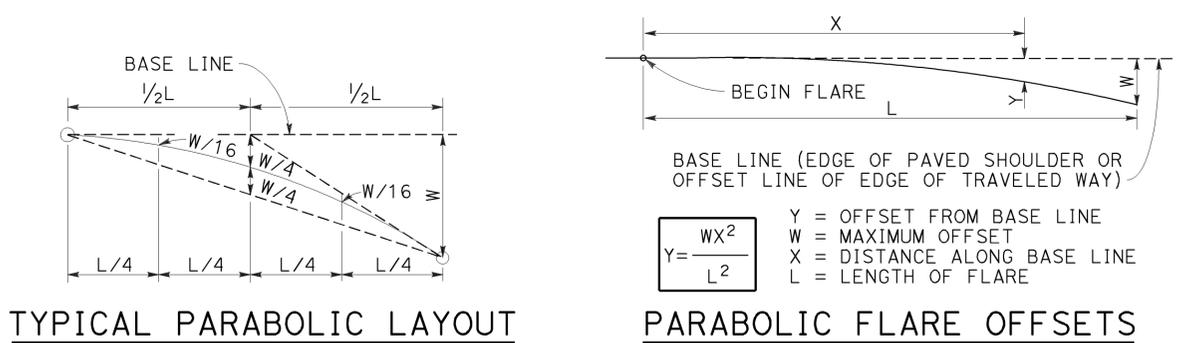
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Lak	20	13.5/31.4	56C	73

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

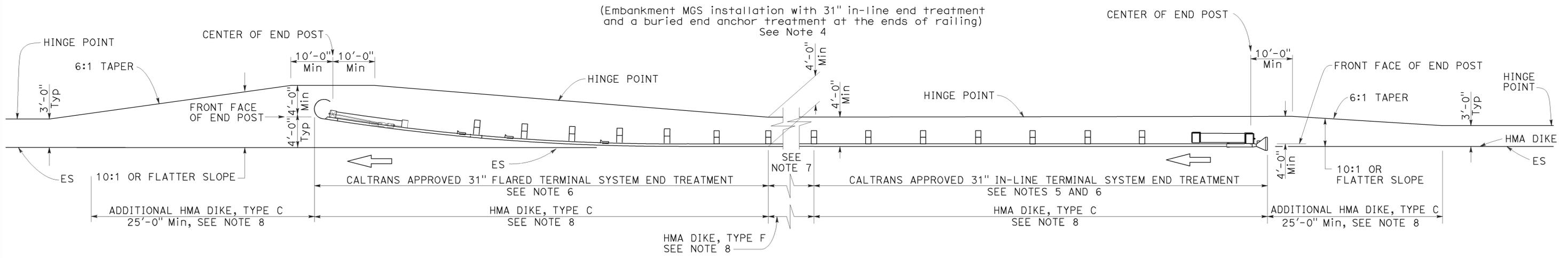
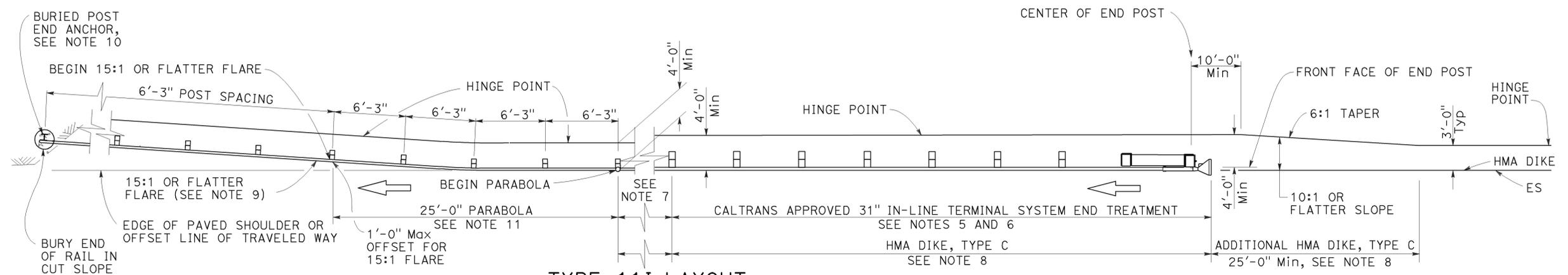
July 19, 2013
PLANS APPROVAL DATE

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REGISTERED PROFESSIONAL ENGINEER
No. C50200
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA



TO ACCOMPANY PLANS DATED 5-27-14



NOTES:

- Line post, blocks and hardware to be used are shown on Revised Standard Plans RSP A77L1, RSP A77L2, RSP A77M1, RSP A77N1 and RSP A77N2.
- MGS post spacing to be 6'-3" center to center, except as otherwise noted.
- Except as noted, line posts are 6" x 8" x 6'-0" wood with 6" x 12" x 1'-2" wood blocks, W6 x 8.5 or W6 x 9 steel posts, 6'-0" in length, with 6" x 12" x 1'-2" notched wood blocks or plastic blocks may be used for 6" x 8" x 6'-0" wood post with 6" x 12" x 1'-2" wood blocks where applicable and when specified.
- Layout Types 11D through 11L, shown on the A77P Series of Standard Plans, are typically used where MGS is recommended to shield embankment slopes and a crashworthy 31" end treatment is required for both directions of traffic.
- 31" in-line terminal system end treatments are used where site conditions will not accommodate a 31" flared end treatment.
- The type of 31" terminal system end treatment to be used will be shown on the Project Plans.
- Dependent on site conditions (embankment height and side slope), construction of additional MGS (length equal to multiples of 12'-6" with 6'-3" post spacing) may be advisable.
- Where placement of dike is required with MGS installations, see Revised Standard Plan RSP A77N4 for dike positioning details.
- The 15:1 or flatter flare used with buried end anchors is based on the edge of the paved shoulder or offset line of edge of the traveled way. The length of MGS within the 15:1 or flatter flare is based on site conditions and should be a length equal to multiples of 12'-6".
- For details of the buried post end anchor used with Type 11I Layout, see Revised Standard Plan RSP A77T2.
- For typical flare offsets for 25'-0" length parabola with maximum offset of 1'-0", see Revised Standard Plan RSP A77P1.

1 ADDED PER ADDENDUM No. 1
DATED JULY 18, 2014

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**MIDWEST GUARDRAIL SYSTEM
TYPICAL LAYOUTS FOR
EMBANKMENTS**
NO SCALE

RSP A77P5 DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77P5

2010 REVISED STANDARD PLAN RSP A77P5