Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Sol	113	6.0/14.0	1	9

INDEX OF PLANS

SHEET No.	DESCRIPTION
1	TITLE SHEET AND LOCATION MAP
2	TYPICAL CROSS SECTIONS
3	CONSTRUCTION AREA SIGNS
4	SUMMARY OF QUANTITIES
5 - 9	NEW AND REVISED STANDARD PLANS

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

STATE OF CALIFORNIA

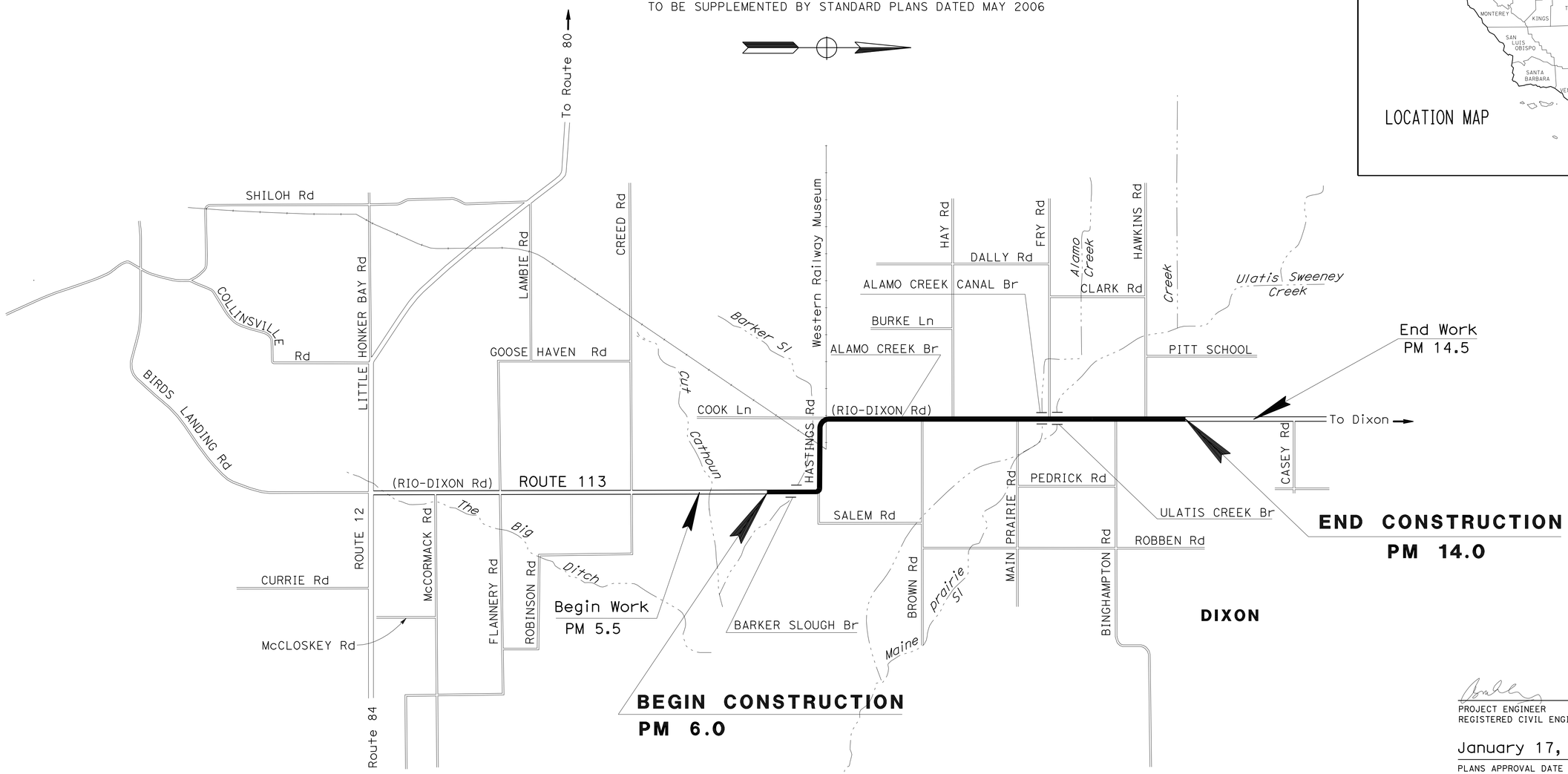
DEPARTMENT OF TRANSPORTATION

PROJECT PLANS FOR CONSTRUCTION ON

STATE HIGHWAY

IN SOLANO COUNTY
NEAR DIXON
FROM 1.0 MILE SOUTH OF HASTINGS ROAD
TO 0.7 MILE NORTH OF HAWKINS ROAD

TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006



NO SCALE

LOCATION MAP

PROJECT MANAGER RAMSES SARGISS

DESIGN ENGINEER VIJITH THILAKARATNE

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

11/16/11
PROJECT ENGINEER DATE
REGISTERED CIVIL ENGINEER

January 17, 2012
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER Binh V. Hong No. 63850 Exp. 9-30-12 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.

DATE PLOTTED => 18-JAN-2012
TIME PLOTTED => 12:24

CONTRACT No.	04-2E4204
PROJECT ID	0400020688

LAST REVISION 11-16-11

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Sol	113	6.0/14.0	2	9

REGISTERED CIVIL ENGINEER 11/16/11 DATE

1-17-12
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
Binh V. Hong
No. 63850
Exp. 9-30-12
CIVIL
STATE OF CALIFORNIA

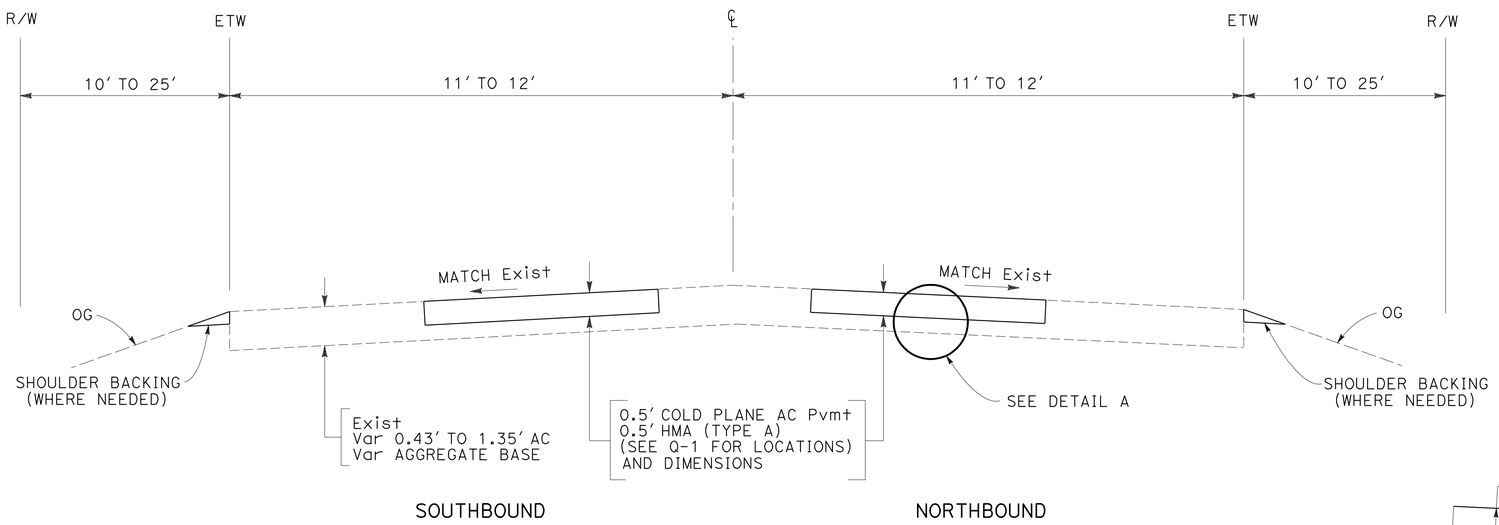
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTES

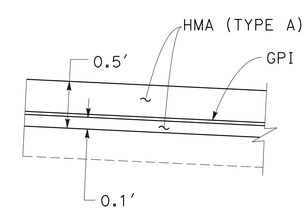
1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
3. EXISTING UTILITY FACILITIES ARE NOT PLOTTED ON THESE PLANS.

ABBREVIATION

GPI GEOSYNTHETIC PAVEMENT INTERLAYER



ROUTE 113



DETAIL A

TYPICAL CROSS SECTIONS

NO SCALE

X-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans®
DESIGN

FUNCTIONAL SUPERVISOR: VIJITH THILAKARATNE

CALCULATED-DESIGNED BY: BINH HONG
CHECKED BY: SHEN RAMACHANDRAN

REVISED BY: BH
DATE REVISED: 10/18/11

LAST REVISION 11-17-12
DATE PLOTTED => 18-JAN-2012
TIME PLOTTED => 12:24

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Sol	113	6.0/14.0	3	9

REGISTERED CIVIL ENGINEER 11/14/11 DATE

1-17-12
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER Florante P. Perez No. 41030 Exp. 3-31-13 CIVIL STATE OF CALIFORNIA

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

STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

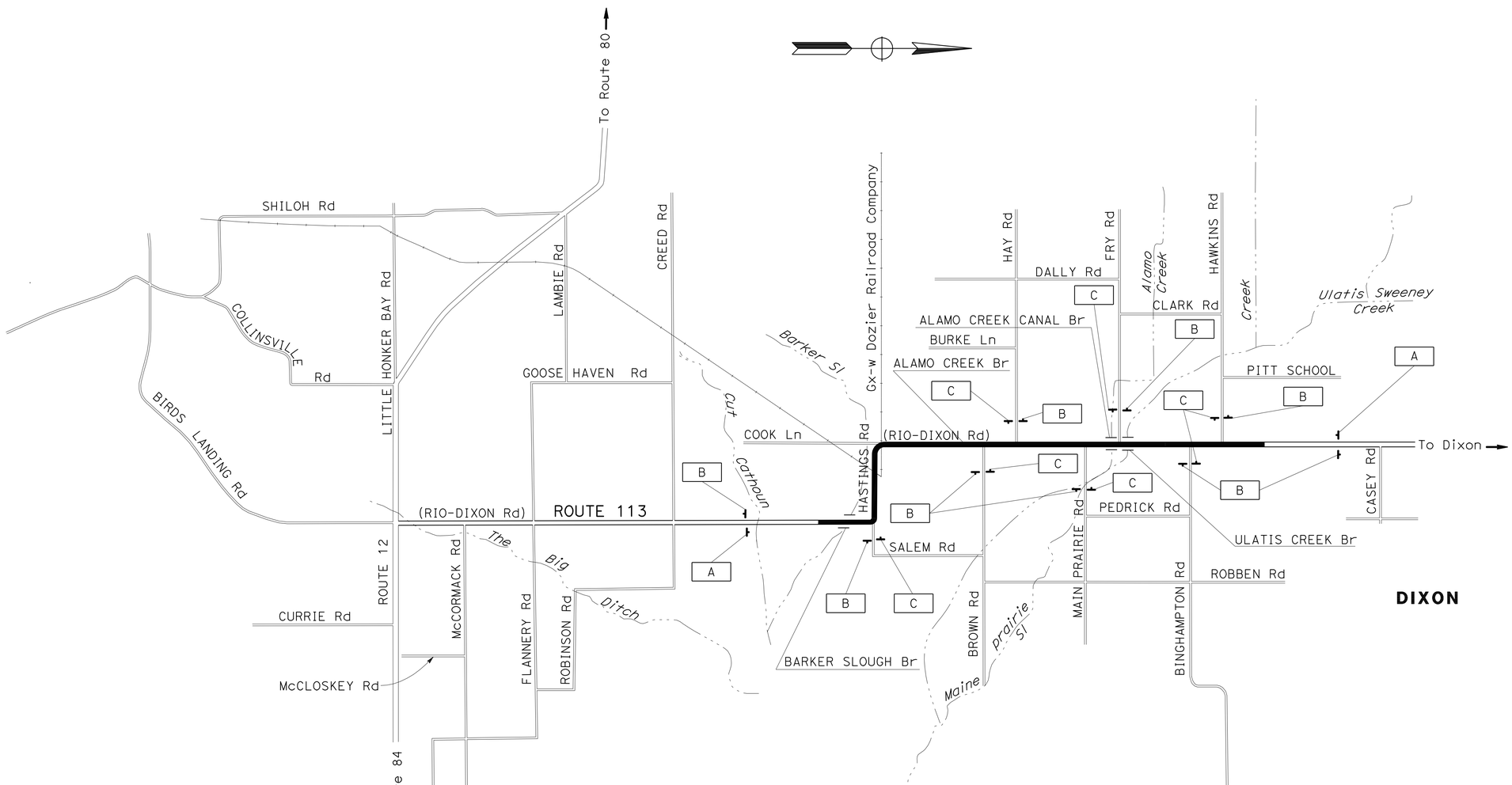
SIGN LETTER	SIGN CODE	PANEL SIZE	SIGN MESSAGE	NUMBER OF POSTS AND SIZE	No. OF SIGNS
A	W20-1	48" x 48"	ROAD WORK AHEAD	1 - 4" x 6"	2
B	G20-2	36" x 18"	END ROAD WORK	1 - 4" x 4"	9
C	W20-1	36" x 36"	ROAD WORK AHEAD	1 - 4" x 6"	7

NOTE

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

LEGEND

A CONSTRUCTION AREA SIGN LETTER



CONSTRUCTION AREA SIGNS

NO SCALE

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

CS-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC

FUNCTIONAL SUPERVISOR: LOURDES DAVID
CALCULATED-DESIGNED BY: LEOPOLDO G. BONGATO
CHECKED BY: FLORANTE P. PEREZ
REVISED BY: FP
DATE REVISED: 11/17/12

LAST REVISION 11-17-12 | DATE PLOTTED => 18-JAN-2012 | TIME PLOTTED => 12:24

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Sol	113	6.0/14.0	4	9

REGISTERED CIVIL ENGINEER DATE 11/16/11

PLANS APPROVAL DATE 1-17-12

REGISTERED PROFESSIONAL ENGINEER Binh V. Hong No. 63850 Exp. 9-30-12 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.

PAVEMENT STRUCTURE QUANTITIES

PM	DIRECTION	LENGTH (N)	WIDTH (N)	AREA (N)	COLD PLANE AC PAVEMENT	HOT MIX ASPHALT (TYPE A)	GPI	TACK COAT	PAVING ASPHALT (BINDER, GPI)
		LF		SQFT	SQYD	TON	SQYD	TON	
6.0 TO 7.0	NB	500	6	3000	333.3	112	333.3	0.2	0.4
6.0 TO 7.0		500	12	6000	666.7	224	666.7	0.4	0.7
7.0 TO 8.0		400	12	4800	533.3	180	533.3	0.4	0.6
8.0 TO 9.0		50	6	300	33.3	11	33.3	0.0	0.0
8.0 TO 9.0		200	12	2400	266.7	90	266.7	0.2	0.3
9.0 TO 10.0		800	12	9600	1066.7	359	1066.7	0.7	1.1
10.0 TO 11.0		900	12	10800	1200.0	404	1200.0	0.8	1.3
11.0 TO 12.0		300	6	1800	200.0	67	200.0	0.1	0.2
12.0 TO 12.5		350	6	2100	233.3	79	233.3	0.2	0.2
12.5 TO 13.0		100	12	1200	133.3	45	133.3	0.1	0.1
13.0 TO 14.0		500	6	3000	333.3	112	333.3	0.2	0.4
13.0 TO 14.0		350	12	4200	466.7	157	466.7	0.3	0.5
14.0 TO 13.0	SB	500	12	6000	666.7	224	666.7	0.4	0.7
13.0 TO 12.0		900	6	5400	600.0	202	600.0	0.4	0.6
13.0 TO 12.0		400	12	4800	533.3	180	533.3	0.4	0.6
12.0 TO 11.0		800	6	4800	533.3	180	533.3	0.4	0.6
12.0 TO 11.0		900	12	10800	1200.0	404	1200.0	0.8	1.3
11.0 TO 10.0		700	6	4200	466.7	157	466.7	0.3	0.5
11.0 TO 10.0		450	12	5400	600.0	202	600.0	0.4	0.6
10.0 TO 9.0		250	6	1500	166.7	56	166.7	0.1	0.2
10.0 TO 9.0		200	12	2400	266.7	90	266.7	0.2	0.3
9.0 TO 8.0		100	6	600	66.7	22	66.7	0.0	0.1
9.0 TO 8.0		500	12	6000	666.7	224	666.7	0.4	0.7
8.0 TO 7.0		1000	12	12000	1333.3	449	1333.3	0.9	1.4
7.0 TO 6.0		300	6	1800	200.0	67	200.0	0.1	0.2
7.0 TO 6.0		700	12	8400	933.3	314	933.3	0.6	1.0
				TOTAL	13700	4612	13700	9.1	14.6

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

TRAFFIC STRIPES, PAVEMENT MARKINGS AND PAVEMENT MARKERS

PM	DIRECTION	DETAIL No. OR PAVEMENT MARKING	PAVEMENT MARKER (RETROREFLECTIVE)		TRAFFIC STRIPE (THERMOPLASTIC)				PAVEMENT MARKING (THERMOPLASTIC)
			TYPE D	TYPE H	4" YELLOW SOLID	4" WHITE SOLID	4" WHITE (BROKEN 12'-3')	4" YELLOW (BROKEN 36'-12')	SYMBOL
			EA		LF				SQFT
6.0 TO 14.0	NB	27B				5050			
		6	61					725	
		19	36	72	1700			425	
		22	40		900		42		
		27C							
		RAILROAD CROSSING							166
14.0 TO 6.0	SB	27B				7850			
		6	109					1300	
		19	27	53	1250			313	
		22	127		3000				
		27C					42		
		RAILROAD CROSSING							166
SUBTOTAL			400	125	6850	12900	84	2763	332
TOTAL			525		19750		84	2763	332

SUMMARY OF QUANTITIES

Q-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans DESIGN

FUNCTIONAL SUPERVISOR: VIJITH THILAKARATNE

CALCULATED-DESIGNED BY: BINH HONG

CHECKED BY: SHEN RAMACHANDRAN

REVISED BY: BH

DATE REVISED: 10/18/11

LAST REVISION 1-17-12

DATE PLOTTED => 18-JAN-2012

TIME PLOTTED => 12:24

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	Sol	113	6.0/14.0	5	9

REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER Donald E. Howe No. C46402 Exp. 3-31-09 CIVIL STATE OF CALIFORNIA

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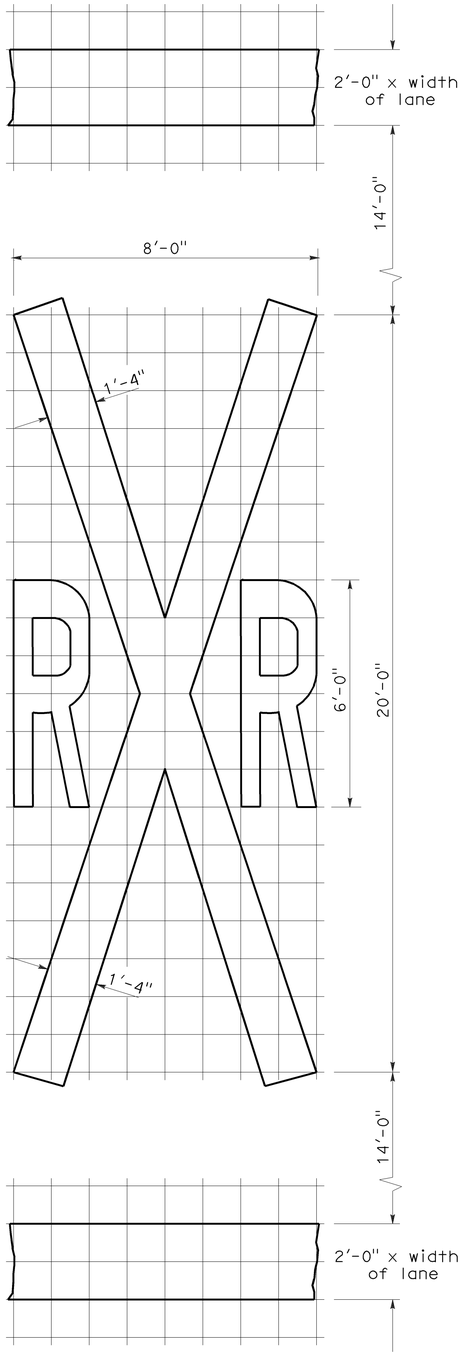
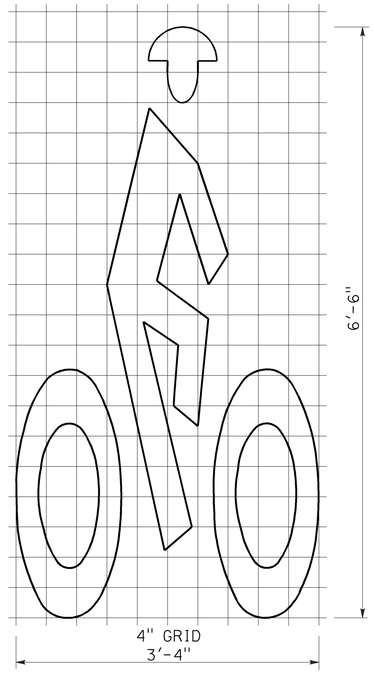
To accompany plans dated 1-17-12

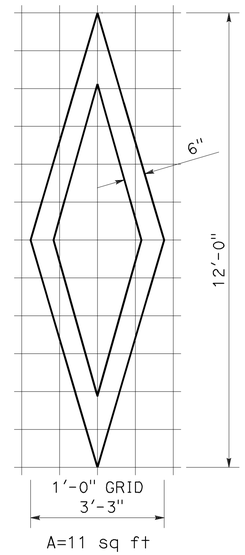


RAILROAD CROSSING SYMBOL

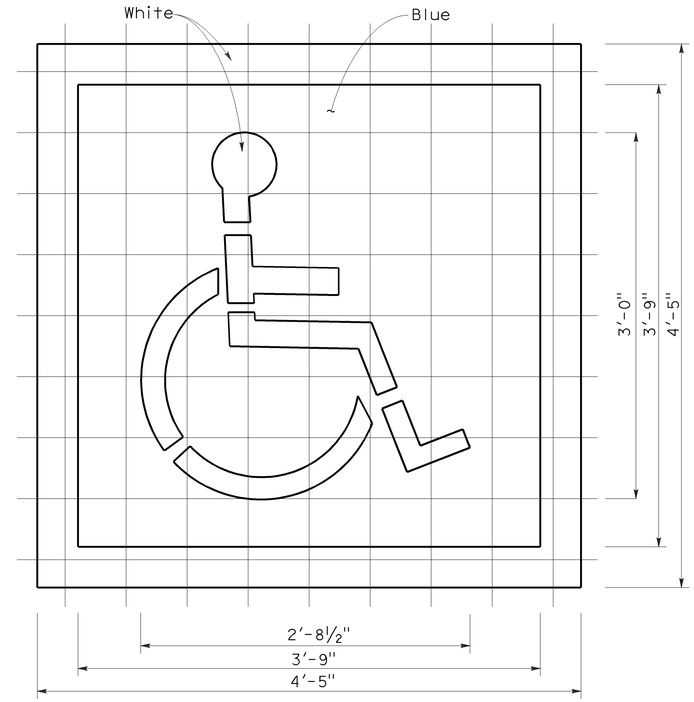
✳70 sq ft DOES NOT INCLUDE THE 2'-0" x VARIABLE WIDTH TRANSVERSE LINES.



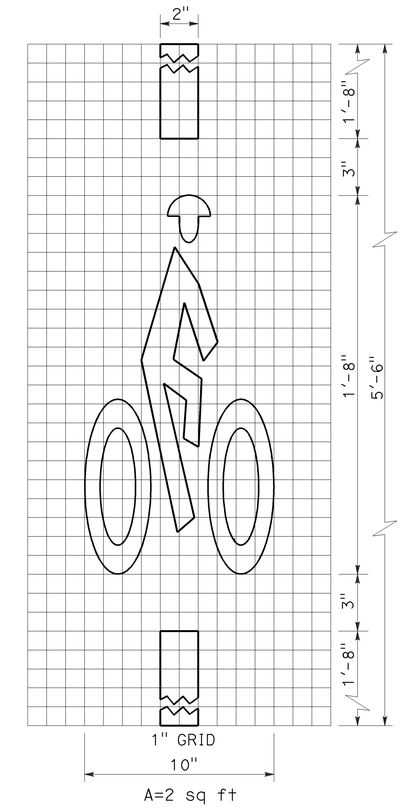
BIKE LANE SYMBOL



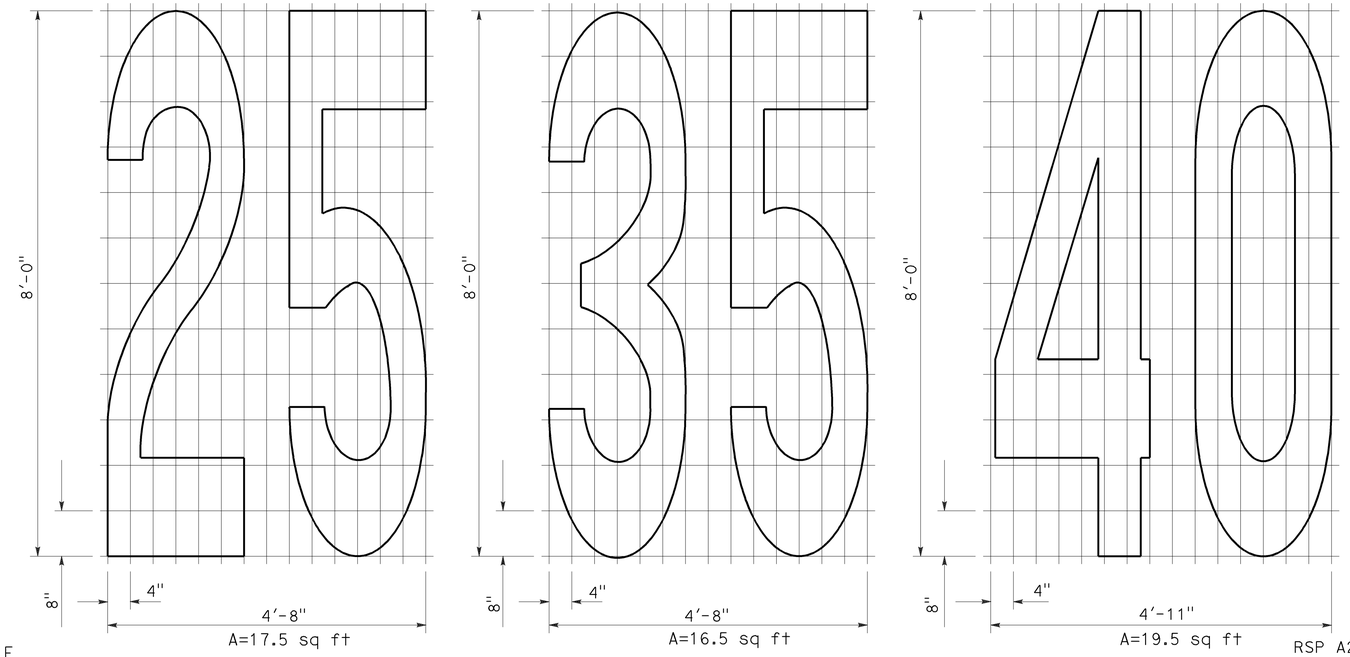
DIAMOND SYMBOL



INTERNATIONAL SYMBOL OF ACCESSIBILITY MARKING



BICYCLE LOOP DETECTOR SYMBOL



NUMERALS

NOTE:

1. Minor variations in dimensions may be accepted by the Engineer.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS SYMBOLS AND NUMERALS

NO SCALE

RSP A24C DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN A24C DATED MAY 1, 2006 - PAGE 11 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP A24C

2006 REVISED STANDARD PLAN RSP A24C

5-27-08

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	Sol	113	6.0/14.0	6	9

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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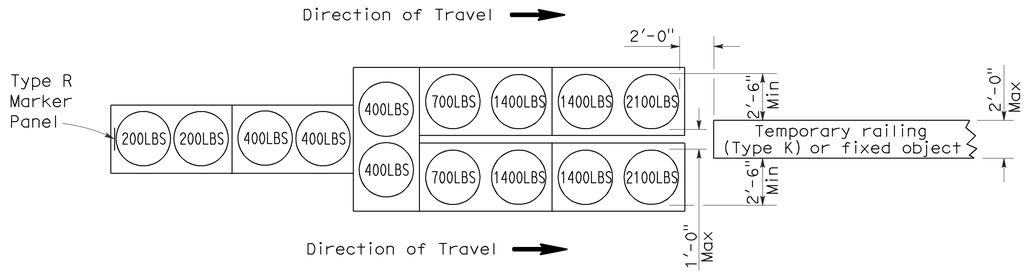
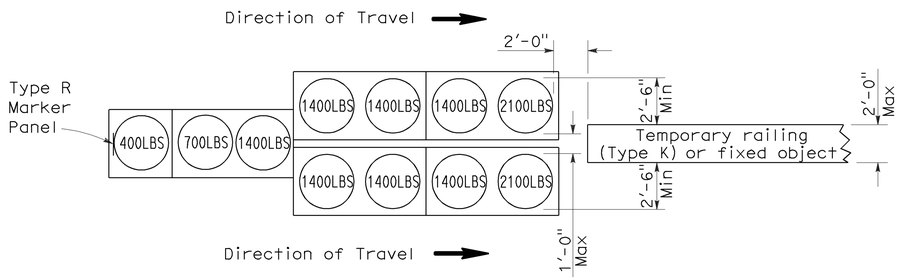
To accompany plans dated 1-17-12



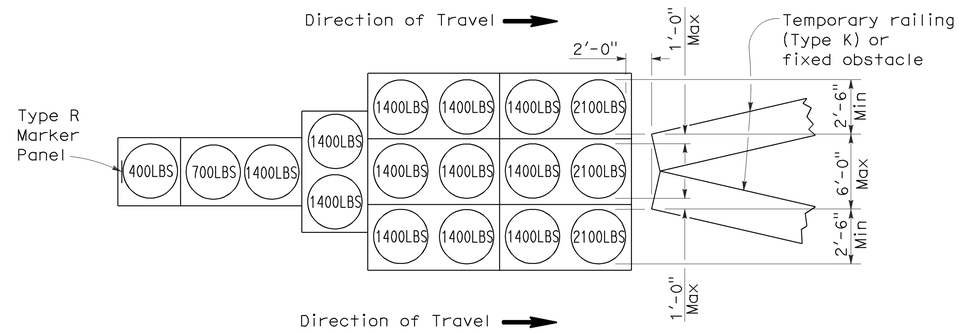
ARRAY 'TU14'

Approach speed 45 mph or more



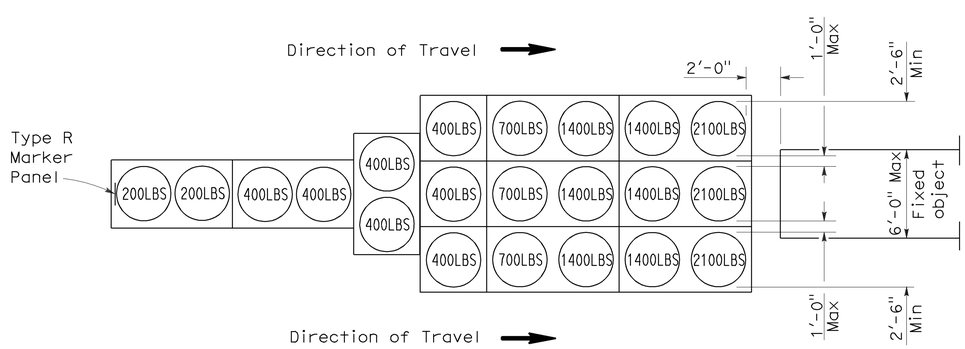
ARRAY 'TU11'

Approach speed less than 45 mph



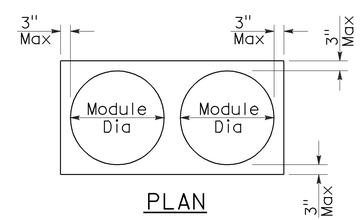
ARRAY 'TU17'

Approach speed less than 45 mph

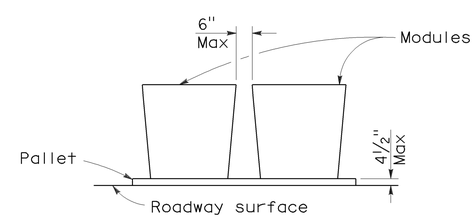


ARRAY 'TU21'

Approach speed 45 mph or more



PLAN



ELEVATION

CRASH CUSHION PALLET DETAIL

See Note 7

NOTES:

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TEMPORARY CRASH CUSHION, SAND FILLED (UNIDIRECTIONAL)

NO SCALE

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

REVISED STANDARD PLAN RSP T1A

2006 REVISED STANDARD PLAN RSP T1A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	Sol	113	6.0/14.0	7	9

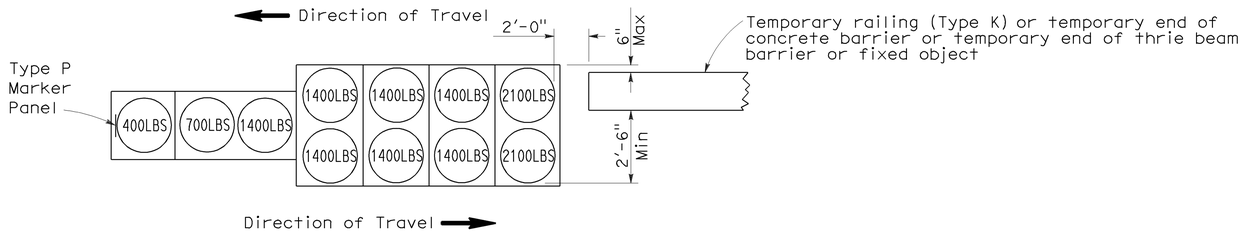
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

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

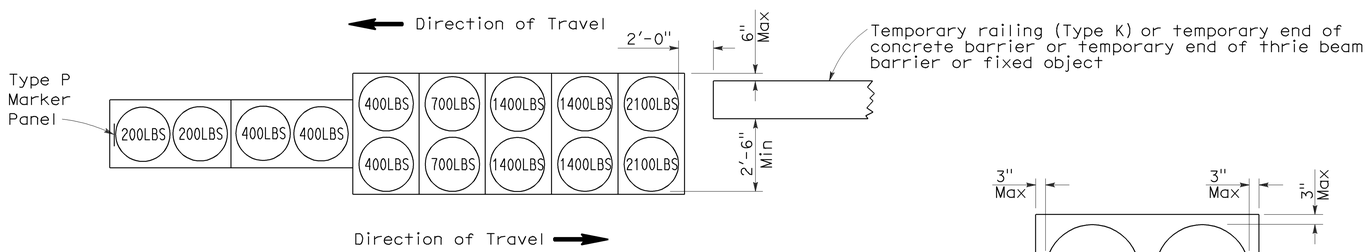
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

To accompany plans dated 1-17-12



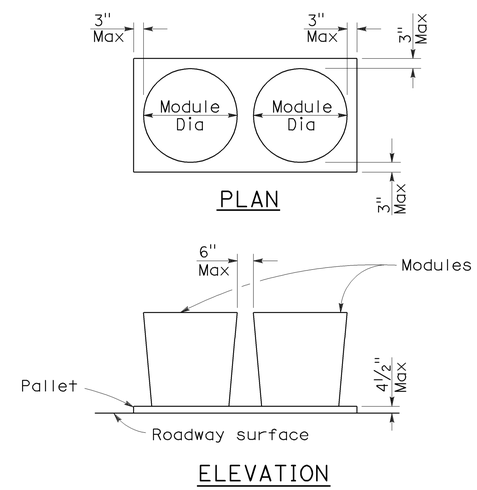
ARRAY 'TB11'

Approach speed less than 45 mph



ARRAY 'TB14'

Approach speed 45 mph or more



CRASH CUSHION PALLET DETAIL

See Note 7

NOTES:

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TEMPORARY CRASH CUSHION, SAND FILLED (BIDIRECTIONAL)

NO SCALE

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

REVISED STANDARD PLAN RSP T1B

2006 REVISED STANDARD PLAN RSP T1B

5-15-08

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	Sol	113	6.0/14.0	8	9

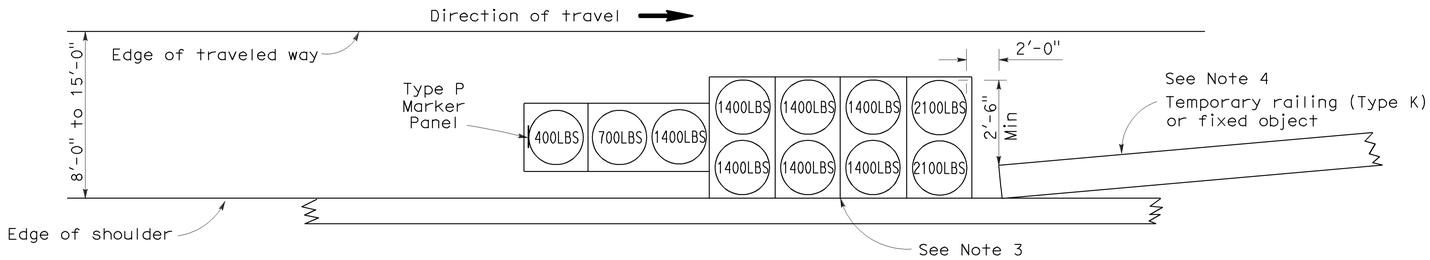
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

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

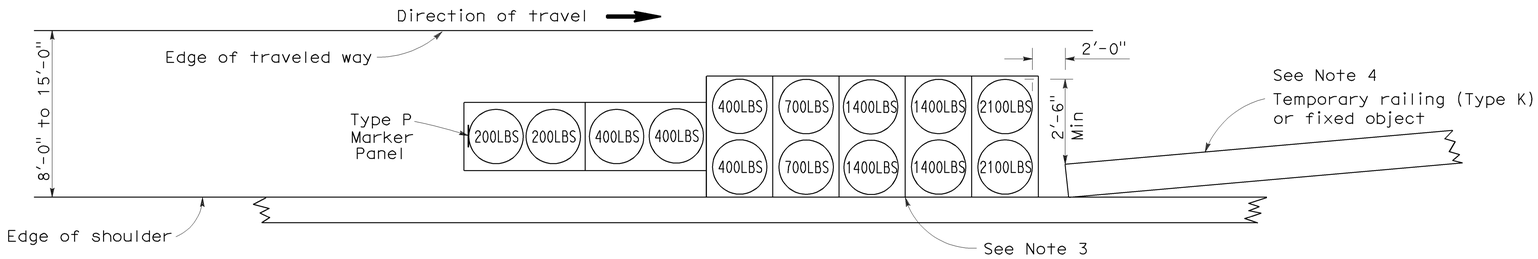
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

To accompany plans dated 1-17-12



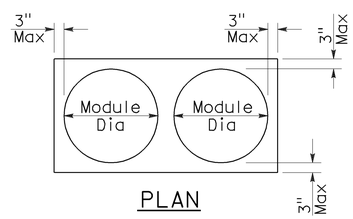
ARRAY 'TS11'

Approach speed less than 45 mph
See Note 9

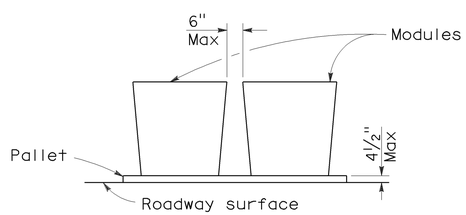


ARRAY 'TS14'

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

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Sol	113	6.0/14.0	9	9

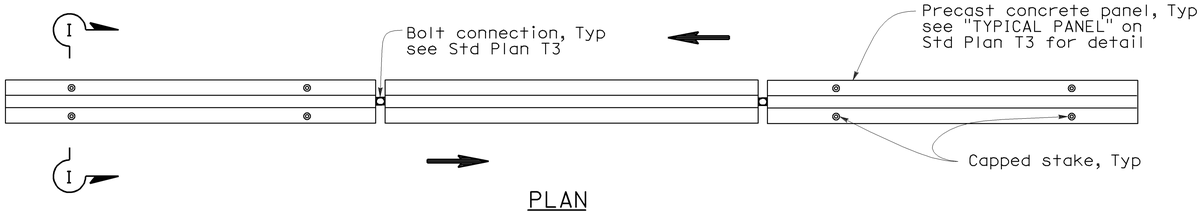
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

May 20, 2011
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
Randell D. Hiatt
No. C50200
Exp. 6-30-11
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.

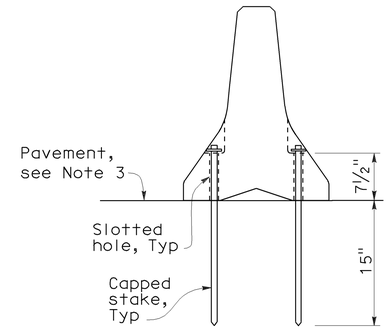
To accompany plans dated 1-17-12



PLAN

RAILING STAKING CONFIGURATION FOR TWO-WAY TRAFFIC

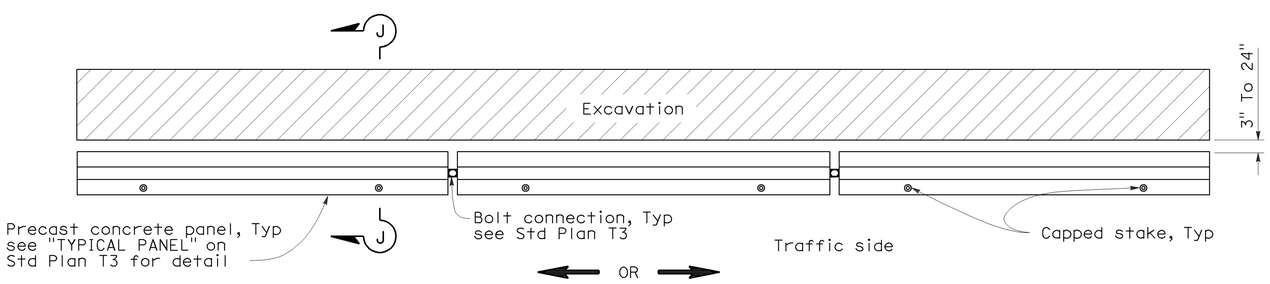
See Note 1



SECTION I-I

NOTES:

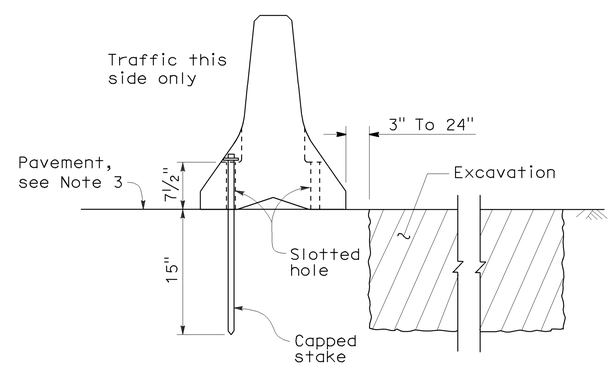
1. Where Type K Temporary Railing is placed as a temporary or long term barrier in two-way traffic on highways with less than 24" from the edge of traveled way, use four capped stakes per every other panel with end panels staked.
2. Where Type K Temporary Railing is placed 3" to 24" from the edge of an excavation on highways, use two capped stakes per panel along the traffic side.
3. Staked Type K Temporary Railing must be supported by at least 4" thick concrete, hot mix asphalt or existing asphalt concrete pavement.
4. The minimum yield strength for the washer must be 60,000 psi.
5. Direction of adjacent traffic indicated by ⟹.



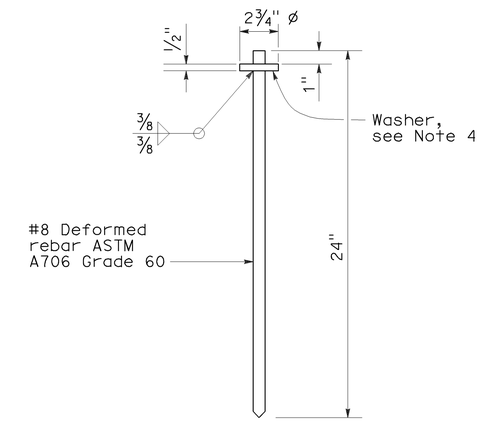
PLAN

RAILING STAKING CONFIGURATION ADJACENT TO AN EXCAVATION

See Note 2



SECTION J-J



CAPPED STAKE DETAIL

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TEMPORARY RAILING (TYPE K)

NO SCALE

NSP T3A DATED MAY 20, 2011 SUPPLEMENTS
THE STANDARD PLANS BOOK DATED MAY 2006.

NEW STANDARD PLAN NSP T3A

2006 NEW STANDARD PLAN NSP T3A