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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 SHASTA COUNTY AT SHASTA**  
**FROM 0.1 MILE WEST OF TRINITY ALLEY**  
**TO 0.1 MILE WEST OF IRON MOUNTAIN ROAD**

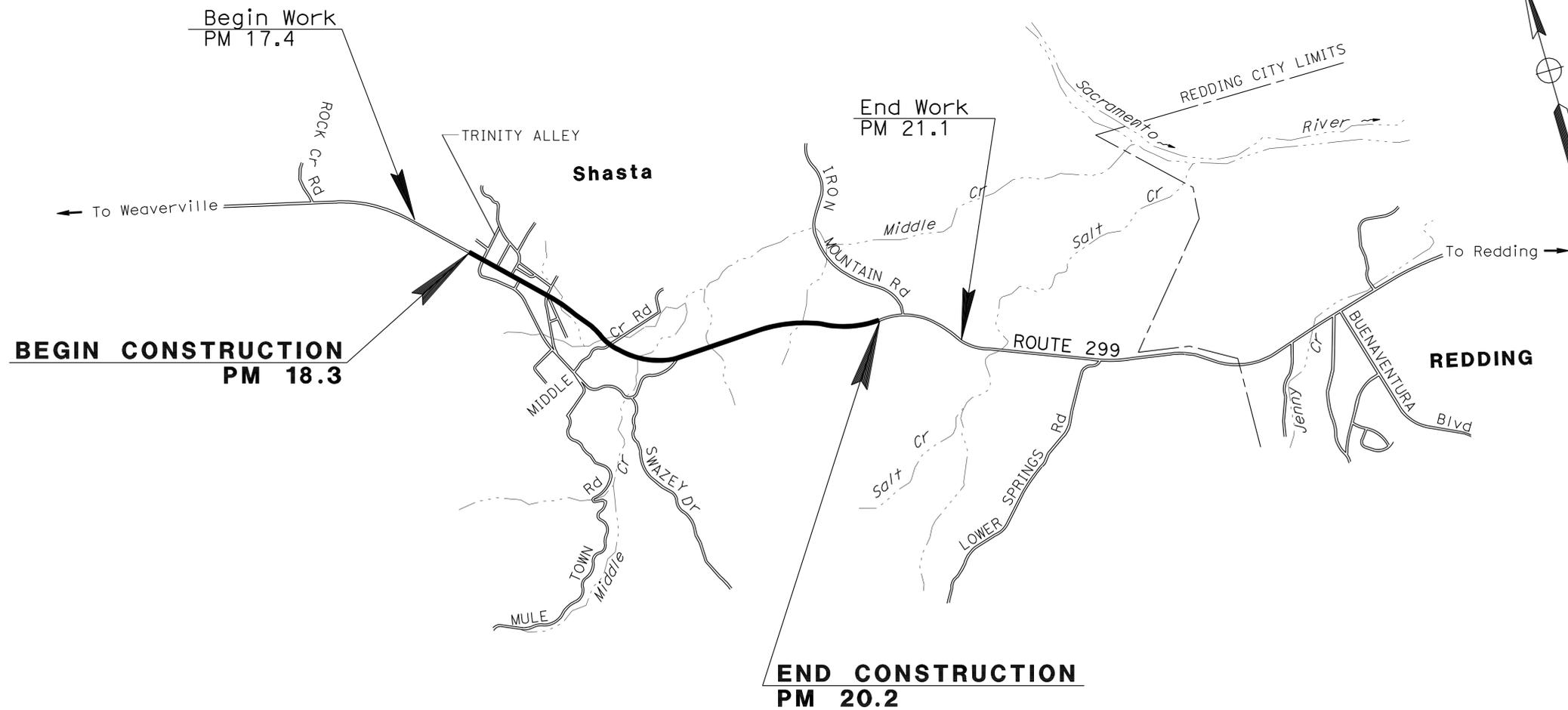
TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha	299	18.3/20.2	1	11





LOCATION MAP



PROJECT MANAGER  
 LANCE BROWN  
 DESIGN ENGINEER  
 LANCE BROWN

*Tanise Suzere* 02-06-12  
 PROJECT ENGINEER DATE  
 REGISTERED CIVIL ENGINEER  
 No. C69865  
 Exp. 09-30-12  
**FEBRUARY 6, 2012**  
 PLANS APPROVAL DATE



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

CONTRACT No.	<b>02-3E8704</b>
PROJECT ID	<b>0200020201</b>

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

NO SCALE

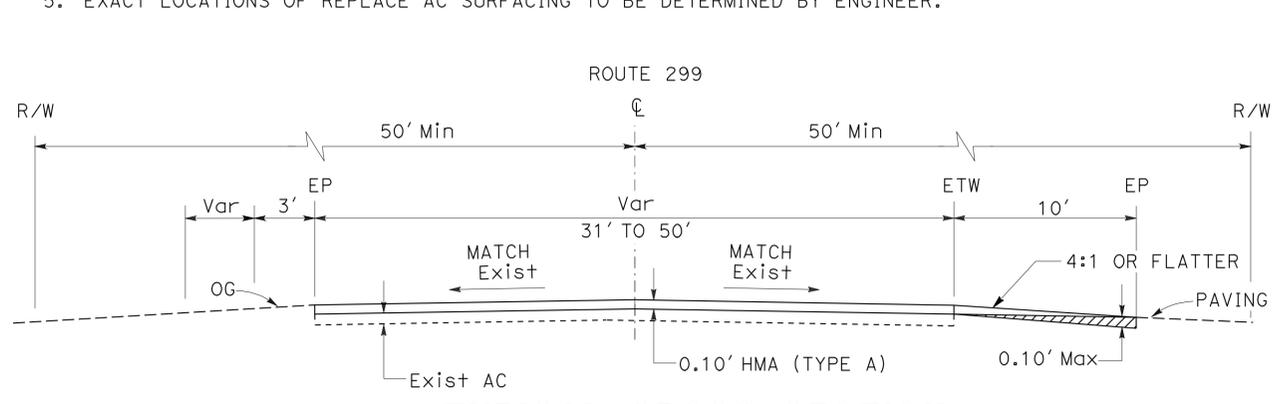
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha	299	18.3/20.2	2	11
<i>Danise Fuzere</i> REGISTERED CIVIL ENGINEER			02-06-12	DATE	
02-06-12 PLANS APPROVAL DATE					
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

**NOTES:**

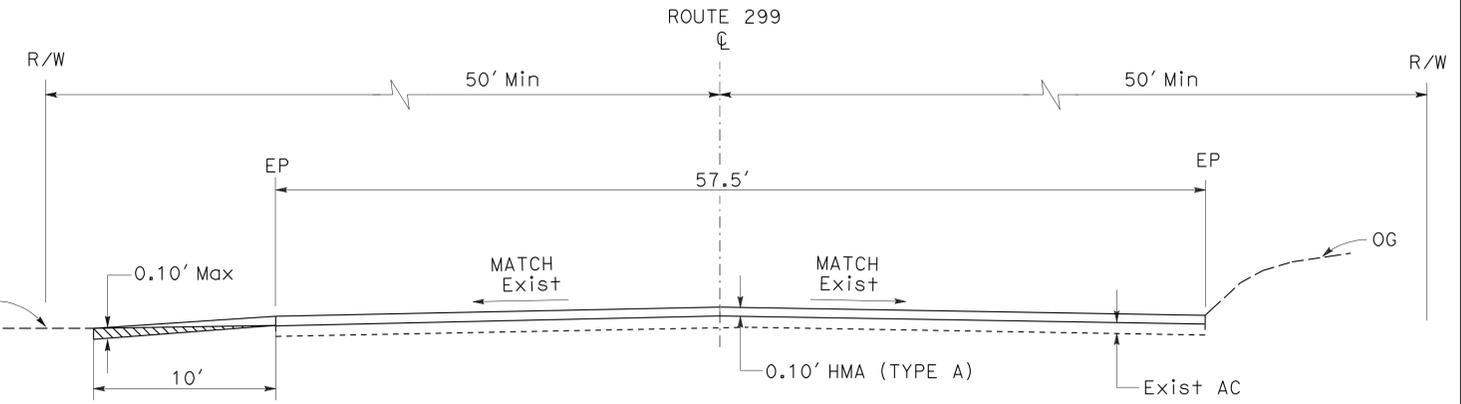
- DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
- SUPERELEVATIONS AS SHOWN OR AS DETERMINED BY THE ENGINEER.
- FOR ACCURATE RIGHT OF WAY DATA, CONTRACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.
- EXACT LOCATIONS OF REPLACE AC SURFACING TO BE DETERMINED BY ENGINEER.

**LEGEND:**

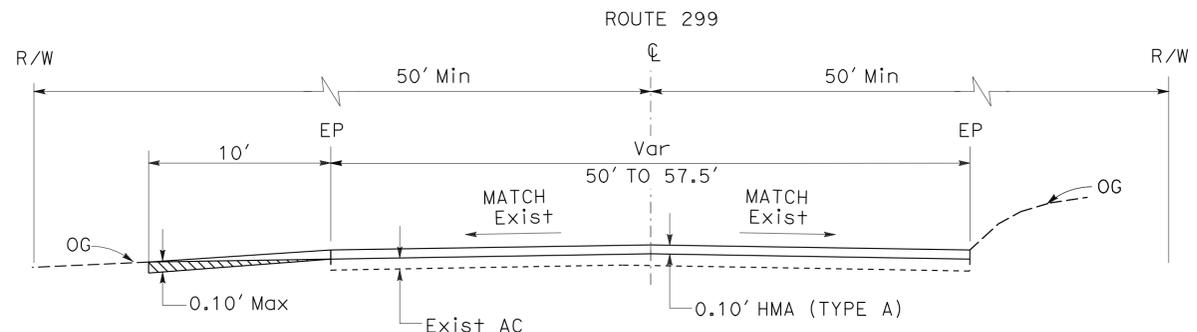
COLD PLANE AC PAVEMENT



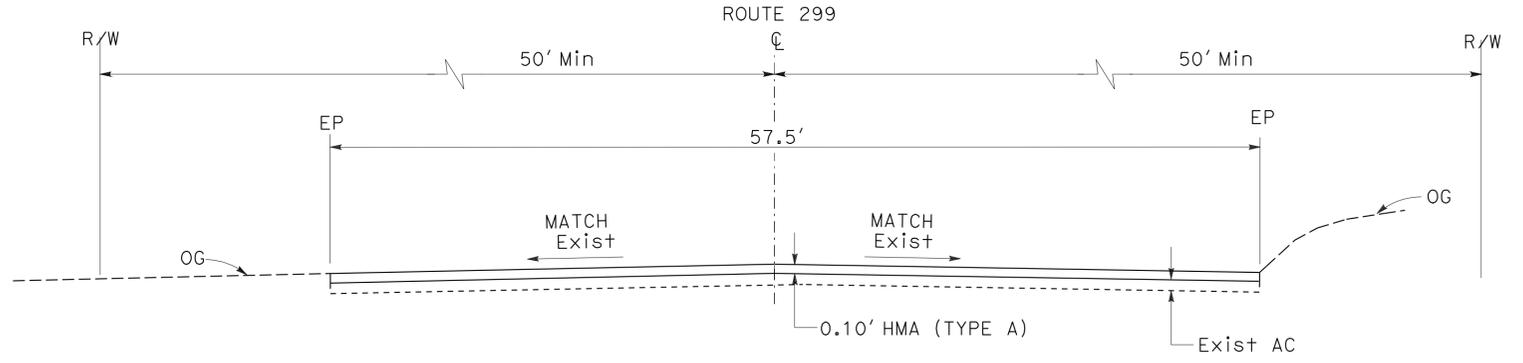
**TYPICAL CROSS SECTION**  
PM 18.30 TO 18.32



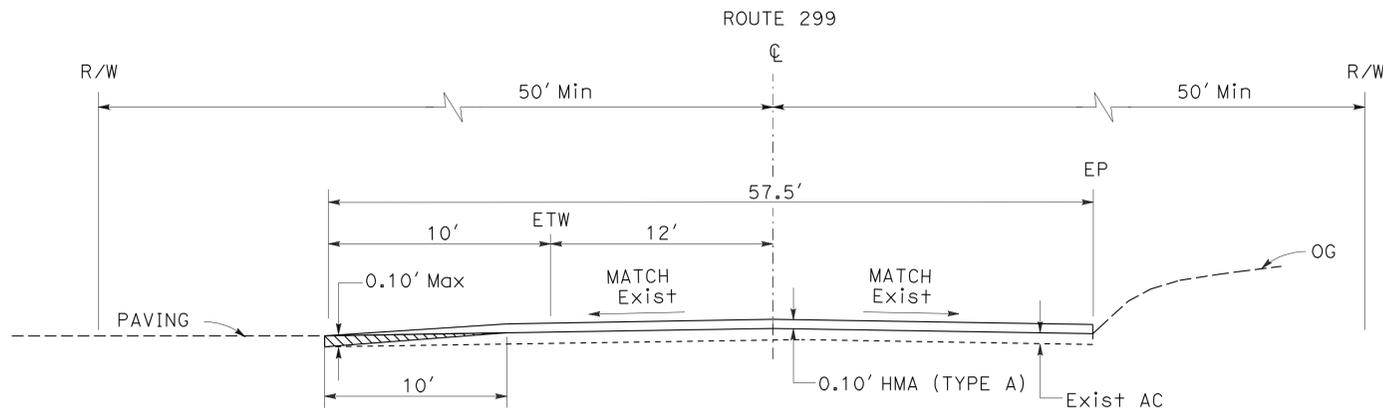
**TYPICAL CROSS SECTION**  
PM 18.44 TO 18.60



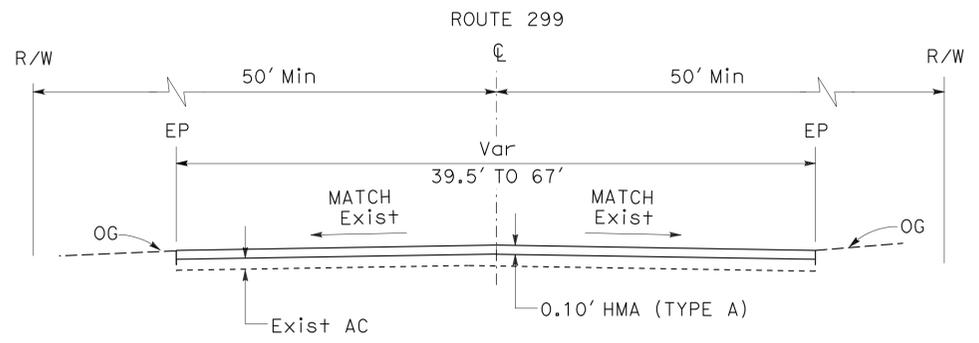
**TYPICAL CROSS SECTION**  
PM 18.32 TO 18.35



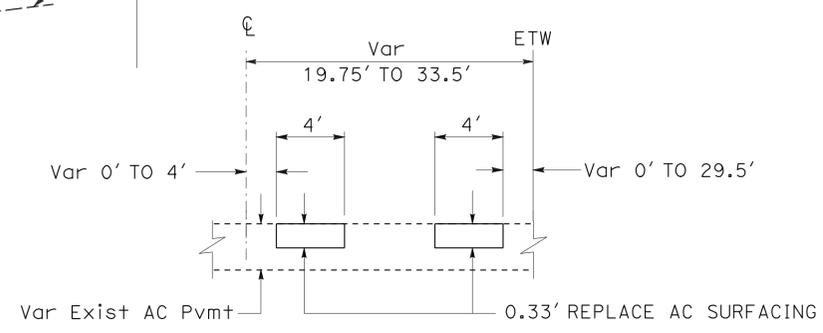
**TYPICAL CROSS SECTION**  
PM 18.60 TO 18.68



**TYPICAL CROSS SECTION**  
PM 18.35 TO 18.44



**TYPICAL CROSS SECTION**  
PM 18.68 TO 20.20



**TYPICAL CROSS SECTIONS**  
NO SCALE

X-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - MAINTENANCE  
 FUNCTIONAL SUPERVISOR: LANCE BROWN  
 CALCULATED/DESIGNED BY: DENISE FUZERE  
 CHECKED BY: KARLIE J. SMITH  
 REVISED BY: DENISE FUZERE  
 DATE REVISED:

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha	299	18.3/20.2	3	11

<i>Danise Fuzere</i> 02-06-12 REGISTERED CIVIL ENGINEER DATE	
02-06-12 PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER  
**DENISE FUZERE**  
 No. C69865  
 Exp. 09-30-12  
 CIVIL  
 STATE OF CALIFORNIA

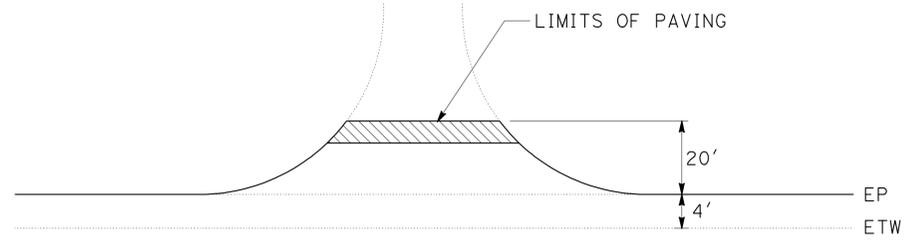
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**NOTES:**

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. EXISTING UTILITY FACILITIES HAVE NOT BEE PLOTTED ON THESE PLANS.

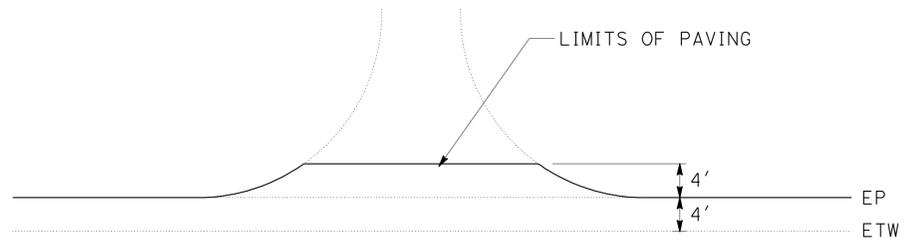
**LEGEND:**

COLD PLANE AC SURFACING (0.00' TO 0.10')



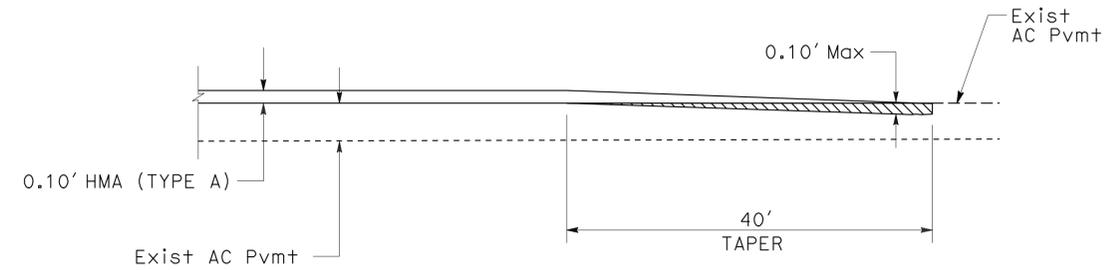
**DETAIL FOR CASE A CONNECTIONS**

- PM 18.35 TRINITY ALLEY - Lt
- PM 18.36 SHURTLEFF ALLEY - Rt
- PM 18.42 MACKLEY ALLEY - Lt
- PM 18.48 FRENCH ALLEY - Lt
- PM 18.53 BUELL ALLEY - Rt
- PM 18.68 RED BLUFF Dr - Rt
- PM 18.68 SECOND St - Lt
- PM 19.02 MIDDLE CREEK Rd - Rt & Lt
- PM 19.31 SWASEY Dr - Rt
- PM 20.00 VICTORIA Dr - Rt

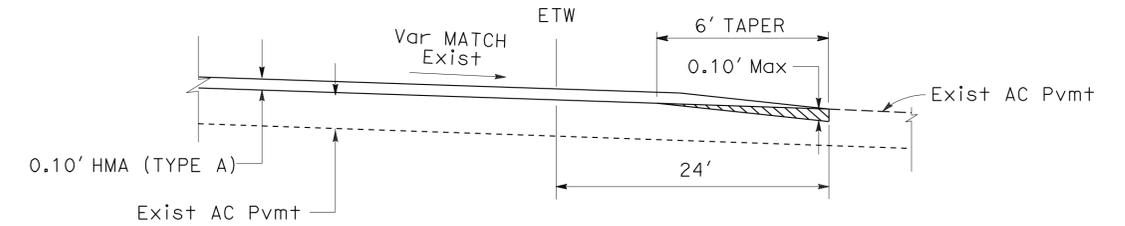


**DETAIL FOR CASE B CONNECTIONS**

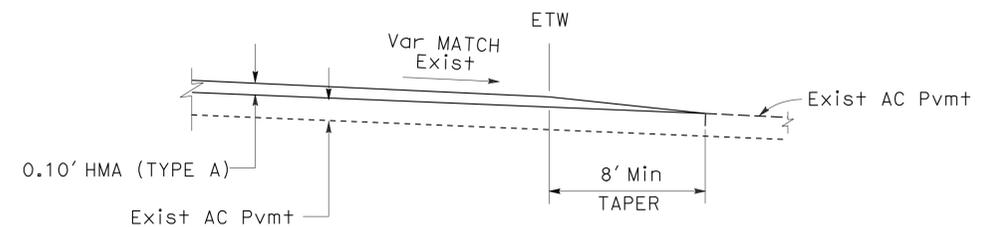
- PM 18.78 PAVED DRIVEWAY - Rt
- PM 18.80 PAVED DRIVEWAY - Rt
- PM 18.83 PAVED DRIVEWAY - Rt
- PM 18.94 PAVED DRIVEWAY - Rt
- PM 18.97 PAVED DRIVEWAY - Lt
- PM 19.07 PAVED DRIVEWAY - Rt
- PM 19.10 PAVED DRIVEWAY - Lt
- PM 19.21 PAVED DRIVEWAY - Rt
- PM 19.32 PAVED DRIVEWAY - Lt
- PM 19.41 PAVED DRIVEWAY - Rt & Lt
- PM 19.50 PAVED DRIVEWAY - Rt & Lt
- PM 19.59 PAVED DRIVEWAY - Rt
- PM 20.14 PAVED DRIVEWAY - Rt



**MAINLINE CONFORM TAPER**



**CONFORM TAPER FOR CASE A CONNECTIONS**



**CONFORM TAPER FOR CASE B CONNECTIONS**

**CONSTRUCTION DETAILS**

NO SCALE

**C-1**

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** MAINTENANCE

FUNCTIONAL SUPERVISOR  
LANCE BROWN

CALCULATED/DESIGNED BY  
CHECKED BY

DENISE FUZERE  
KARLIE J. SMITH

REVISED BY  
DATE REVISED

x  
x  
x  
x  
x

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha	299	18.3/20.2	4	11

*Danise Fuzere* 02-06-12  
 REGISTERED CIVIL ENGINEER DATE  
 02-06-12  
 PLANS APPROVAL DATE

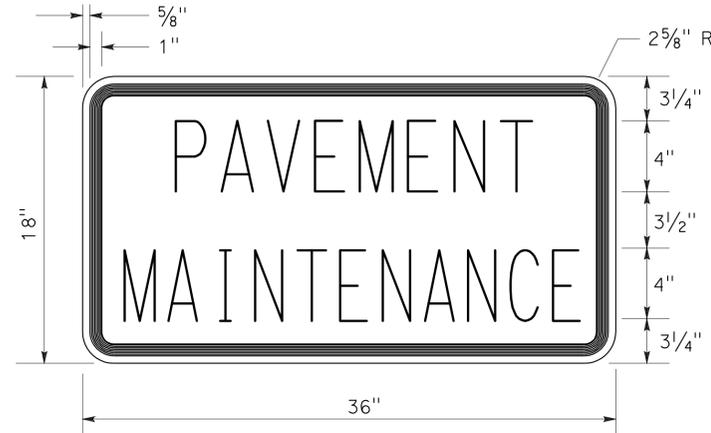
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

**NOTES:**

1. EXACT LOCATION OF ALL SIGNS TO BE DETERMINED BY THE ENGINEER.
2. CALIFORNIA CODES ARE DESIGNATED BY (CA), OTHERWISE FEDERAL CODES ARE SHOWN.
3. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

**LEGEND:**

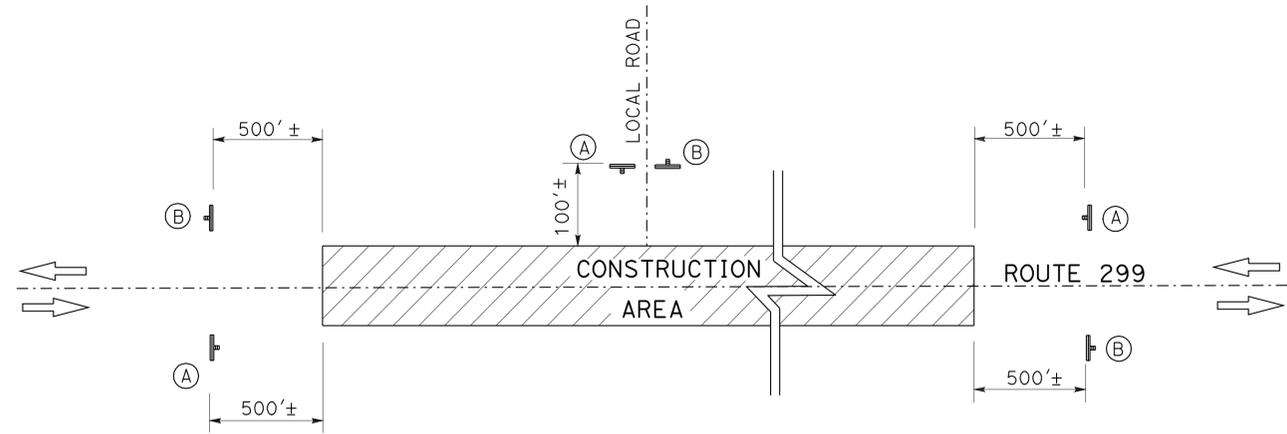
- ↑ ONE POST STATIONARY MOUNTED SIGN.
- ← DIRECTION OF TRAFFIC



**C23B(CA) SIGN PANEL DETAIL**

**ROAD CONNECTIONS**

PM	DESCRIPTION	Ⓐ	Ⓑ
18.35	TRINITY ALLEY - Lt	X	
18.36	SHURTLEFF ALLEY - Rt	X	
18.42	MACKLEY ALLEY - Lt	X	
18.48	FRENCH ALLEY - Lt	X	
18.53	BUELL ALLEY - Rt	X	
18.68	SECOND St - Lt	X	
18.68	RED BLUFF Dr - Rt	X	
19.02	MIDDLE CREEK Rd - Rt & Lt	X	
19.31	SWASEY Dr - Rt	X	X
20.00	VICTORIA Dr - Rt	X	X
20.29	IRON MOUNTAIN Rd - Lt	X	



**CONSTRUCTION AREA SIGNS (STATIONARY MOUNTED)**

**CONSTRUCTION AREA SIGNS (STATIONARY MOUNTED)**

TYPE	CODE	PANEL SIZE	SIGN MESSAGE	No. AND SIZE OF POST	No. OF SIGNS
Ⓐ	W20-1 C23B(CA)	48" x 48" 36" x 18"	ROAD WORK AHEAD "PAVEMENT MAINTENANCE"	1- 4" x 6"	14
Ⓑ	G20-2	36" x 18"	END ROAD WORK	1- 4" x 4"	4

**CONSTRUCTION AREA SIGNS**

NO SCALE

**CS-1**

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** MAINTENANCE

FUNCTIONAL SUPERVISOR  
 LANCE BROWN

CALCULATED-DESIGNED BY  
 CHECKED BY

DENISE FUZERE  
 KARLIE J. SMITH

REVISED BY  
 DATE REVISED



P:\proj\1\02\3E870\plans\pse\23E870nc001.dgn  
 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - MAINTENANCE  
 DENISE FUZERE  
 KARLIE J. SMITH  
 LANCE BROWN

**NOTES:**

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**ABBREVIATIONS**

Mid MIDDLE

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha	299	18.3/20.2	6	11

02-06-12  
 REGISTERED CIVIL ENGINEER DATE  
 02-06-12  
 PLANS APPROVAL DATE

Denise Fuzere  
 REGISTERED PROFESSIONAL ENGINEER  
 No. C69865  
 Exp. 09-30-12  
 CIVIL  
 STATE OF CALIFORNIA

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**THERMOPLASTIC TRAFFIC STRIPE (SPRAYABLE)**

POST MILE LIMITS	DETAIL 12	DETAIL 22	DETAIL 27B	DETAIL 27C	DETAIL 29	DETAIL 38	DETAIL 38A
PM-PM	LF	LF	LF	LF	LF	LF	LF
18.27 To 20.20	3700	9400	20,750	1650	1100	528	211
TOTAL				37,330			

**THERMOPLASTIC PAVEMENT MARKING**

PM	L+	Mid	R+	(N) EA	SQFT	REMARKS
18.35	X			1	22.0	STOP
18.35	X			1	16.5	ROAD CONNECTION LIMIT LINE
18.35		X		2	153.0	CROSSWALK (56.3')
18.35			X	1	22.0	STOP
18.35			X	1	15.0	ROAD CONNECTION LIMIT LINE
18.42	X			1	22.0	STOP
18.42	X			1	15.5	ROAD CONNECTION LIMIT LINE
18.42		X		2	98.0	CROSSWALK (49')
18.42			X	1	31.5	BOX W/NO PARKING
18.48	X			1	22.0	STOP
18.48	X			1	25.0	ROAD CONNECTION LIMIT LINE
18.53			X	1	22.0	STOP
18.53			X	1	16.5	ROAD CONNECTION LIMIT LINE
18.58			X	1	23.0	SLOW (YELLOW)
18.59			X	1	35.0	SCHOOL (YELLOW)
18.59			X	7	105.0	TRANSVERSE LINES X 7
18.61			X	1	21.0	XING (YELLOW)
18.59-18.61	X			1	14.0	NO PARKING
18.65		X		1	15.0	TYPE IV (R) ARROW
18.69		X		1	130.0	CROSSWALK (YELLOW)
18.69	X			1	16.0	ROAD CONNECTION LIMIT LINE
18.69			X	1	22.0	STOP
18.69			X	1	41.0	ROAD CONNECTION LIMIT LINE
18.71	X			1	21.0	XING (YELLOW)
18.72	X			1	35.0	SCHOOL (YELLOW)
18.74	X			1	23.0	SLOW (YELLOW)
19.02	X			1	22.0	STOP
19.02	X			1	35.5	ROAD CONNECTION LIMIT LINE
19.02			X	1	22.0	STOP
19.02			X	1	30.0	ROAD CONNECTION LIMIT LINE
19.31			X	1	22.0	STOP
19.31			X	1	30.0	ROAD CONNECTION LIMIT LINE
19.31		X		1	15.0	TYPE IV (L) ARROW
19.57	X			1	42.0	TYPE VI (R) ARROW
19.61	X			1	42.0	TYPE VI (R) ARROW
19.65	X			1	42.0	TYPE VI (R) ARROW
19.94			X	1	15.0	TYPE IV (R) ARROW
20.00			X	1	40.0	ROAD CONNECTION LIMIT LINE
20.00			X	1	22.0	STOP
20.00		X		1	15.0	TYPE IV (L) ARROW
TOTAL					1434.5	

**REMOVE THERMOPLASTIC PAVEMENT MARKING**

PM	L+	Mid	R+	(N) EA	SQFT	REMARKS
18.35	X			1	22.0	STOP
18.35	X			1	16.5	ROAD CONNECTION LIMIT LINE
18.35		X		1	153.0	CROSSWALK
18.36			X	1	22.0	STOP
18.36			X	1	15.0	ROAD CONNECTION LIMIT LINE
18.42	X			1	22.0	STOP
18.42	X			1	15.5	ROAD CONNECTION LIMIT LINE
18.42		X		1	98.0	CROSSWALK
18.42			X	1	31.5	BOX W/NO PARKING
18.48	X			1	22.0	STOP
18.48	X			1	25.0	ROAD CONNECTION LIMIT LINE
18.53			X	1	22.0	STOP
18.53			X	1	16.5	ROAD CONNECTION LIMIT LINE
18.59			X	7	105.0	TRANSVERSE LINES X 7
18.59-18.61	X			1	14.0	NO PARKING
18.65	X			1	15.0	TYPE IV (R) ARROW
18.69	X			1	16.0	ROAD CONNECTION LIMIT LINE
18.69			X	1	22.0	STOP
18.69			X	1	41.0	ROAD CONNECTION LIMIT LINE
19.02	X			1	22.0	STOP
19.02	X			1	35.5	ROAD CONNECTION LIMIT LINE
19.02			X	1	22.0	STOP
19.02			X	1	30.0	ROAD CONNECTION LIMIT LINE
19.31			X	1	22.0	STOP
19.31			X	1	30.0	ROAD CONNECTION LIMIT LINE
19.31		X		1	15.0	TYPE IV (L) ARROW
19.57	X			1	42.0	TYPE VI (R) ARROW
19.61	X			1	42.0	TYPE VI (R) ARROW
19.65	X			1	42.0	TYPE VI (R) ARROW
19.94			X	1	15.0	TYPE IV (R) ARROW
20.00			X	1	40.0	ROAD CONNECTION LIMIT LINE
20.00			X	1	22.0	STOP
20.00		X		1	15.0	TYPE IV (L) ARROW
TOTAL					1156.5	

**PAVEMENT MARKER (RETROREFLECTIVE RECESSED)**

PM-PM	TYPE D	TYPE G
	EA	EA
18.27 TO 20.20	876	93
TOTAL	969	

**REMOVE YELLOW THERMOPLASTIC PAVEMENT MARKING (HAZARDOUS WASTE)**

PM	L+	Mid	R+	EA	SQFT	REMARKS
18.58			X	1	23.0	SLOW (YELLOW)
18.59			X	1	35.0	SCHOOL (YELLOW)
18.61			X	1	21.0	XING (YELLOW)
18.69		X		1	130.0	CROSSWALK (YELLOW)
18.71	X			1	21.0	XING (YELLOW)
18.72	X			1	35.0	SCHOOL (YELLOW)
18.74	X			1	23.0	SLOW (YELLOW)
TOTAL					288.0	

**PAVEMENT DELINEATION QUANTITIES PDQ-1**

LAST REVISION | DATE PLOTTED => 07-FEB-2012 | TIME PLOTTED => 09:08

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha	299	18.3/20.2	7	11

*Danise Fuzere* 02-06-12  
 REGISTERED CIVIL ENGINEER DATE  
 02-06-12  
 PLANS APPROVAL DATE

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3. EXACT LOCATIONS OF REPLACE ASPHALT CONCRETE SURFACING TO BE DETERMINED BY ENGINEER.

**REPLACE ASPHALT CONCRETE SURFACING**

POST MILE LIMITS	DIRECTION	(N) No. OF DIGOUTS	(N) Avg LENGTH	(N) WIDTH	(N) DEPTH	REPLACE AC SURFACING CY
			LF	LF	LF	
PM - PM			LF	LF	LF	CY
18.3 TO 20.2	WB	29	100	4	0.33	142
18.3 TO 20.2	EB	29	100	4	0.33	142
TOTAL						284

**ROADWAY QUANTITIES SUMMARY**

POST MILE LIMITS		(N) WIDTH	(N) LENGTH	HMA (TYPE A)	SHOULDER BACKING	TACK COAT
BEG	END	LF	LF	TON	TON	TON
18.30	18.35	42.0 TO 57.5	264.0	3861	500	14.1
18.35	18.42	57.5 TO 57.5	369.6			
18.42	18.48	57.5 TO 56.0	316.8			
18.48	18.50	56.0 TO 55.0	105.6			
18.50	18.68	55.0 TO 39.5	950.4			
18.68	18.89	39.5 TO 42.0	1108.8			
18.89	19.00	42.0 TO 45.0	580.8			
19.00	19.31	45.0 TO 57.0	1636.8			
19.31	19.43	57.0 TO 41.0	633.6			
19.43	19.57	41.0 TO 47.5	739.2			
19.57	19.77	47.5 TO 47.5	1056.0			
19.77	19.84	47.5 TO 60.0	369.6			
19.84	19.92	60.0 TO 54.5	422.4			
19.92	19.93	54.5 TO 67.0	52.8			
19.93	20.00	67.0 TO 67.0	369.6			
20.00	20.20	67.0 TO 54.0	1056.0			
TOTAL						

**COLD PLANE ASPHALT CONCRETE**

POST MILE LIMITS	(N) LENGTH	(N) WIDTH	AREA	REMARKS
	LF	LF	SQYD	
18.30	40.0	42	186.7	CONFORM GRIND AT BEGIN OF PROJECT
18.30 TO 18.32	105.6	10	117.3	CONFORM TAPER
18.32 TO 18.35	158.4	10	176.0	CONFORM TAPER
18.35	6.0	23.5	15.7	CONFORM TAPER AT TRINITY ALLEY - Lt
18.36	6.0	21.5	14.3	CONFORM TAPER AT SHURTLEFF ALLEY - Rt
18.42	6.0	23.0	15.3	CONFORM TAPER AT MACKLEY ALLEY - Lt
18.48	6.0	29.5	19.7	CONFORM TAPER AT FRENCH ALLEY - Lt
18.53	6.0	23.0	15.3	CONFORM TAPER AT BUELL ALLEY - Rt
18.68	6.0	26.0	17.3	CONFORM TAPER AT SECOND St - Rt
18.68	6.0	56.0	37.3	CONFORM TAPER AT RED BLUFF Dr - Lt
19.02	6.0	49.2	32.8	CONFORM TAPER AT MIDDLE CREEK Dr - Rt & Lt
19.31	6.0	65.6	43.7	CONFORM TAPER AT SWASEY Dr - Rt & Lt
20.00	6.0	65.6	43.7	CONFORM TAPER AT VICTORIA Dr - Rt
20.20	40.0	54.0	240.0	CONFORM GRIND AT END OF PROJECT
TOTAL			975.3	

**SUMMARY OF QUANTITIES**

**Q-1**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** MAINTENANCE  
 FUNCTIONAL SUPERVISOR LANCE BROWN  
 CALCULATED/DESIGNED BY DENISE FUZERE  
 CHECKED BY KARLIE J. SMITH  
 REVISED BY DATE REVISION  
 USERNAME => s115152  
 DGN FILE => 23E870pa001.dgn

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Sha	299	18.3/20.2	8	11

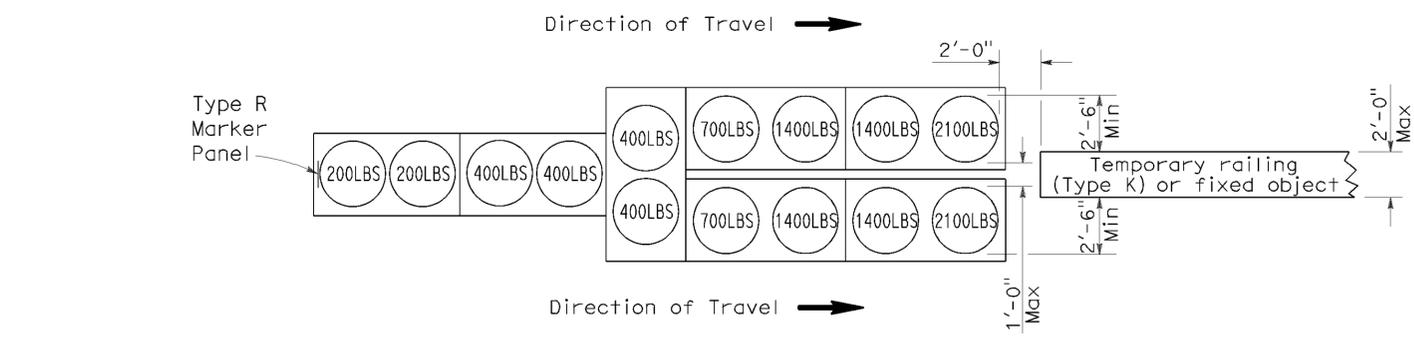
*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

June 6, 2008  
PLANS APPROVAL DATE

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

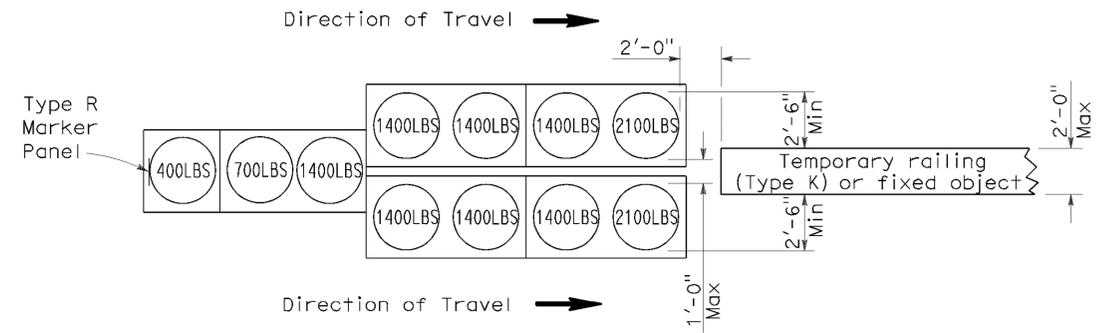
REGISTERED PROFESSIONAL ENGINEER  
No. C50200  
Exp. 6-30-09  
CIVIL  
STATE OF CALIFORNIA

To accompany plans dated 02-06-12



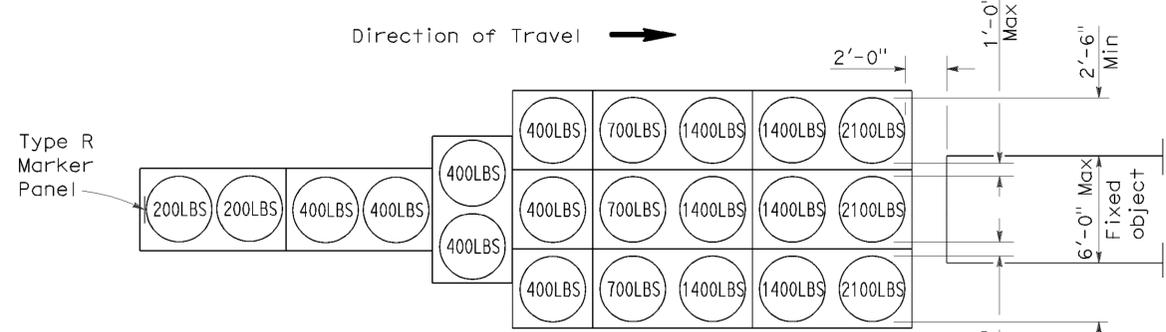
**ARRAY 'TU14'**

Approach speed 45 mph or more



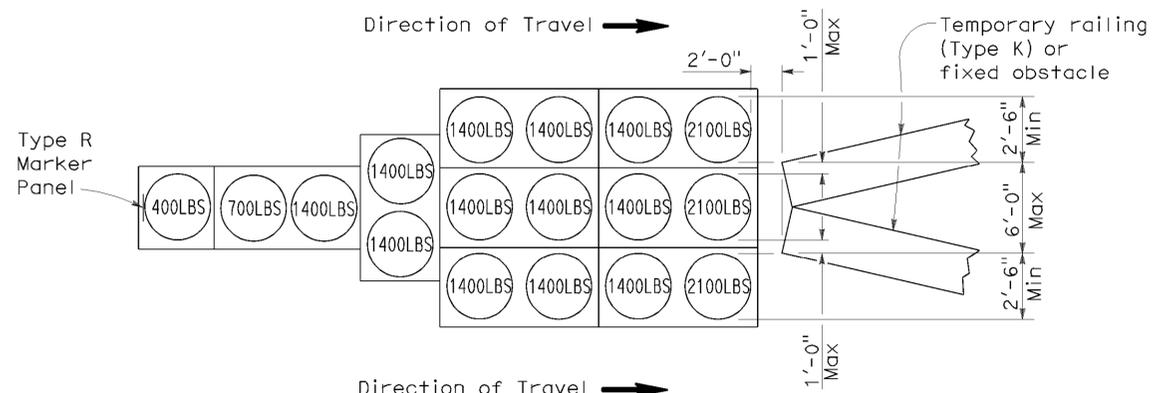
**ARRAY 'TU11'**

Approach speed less than 45 mph



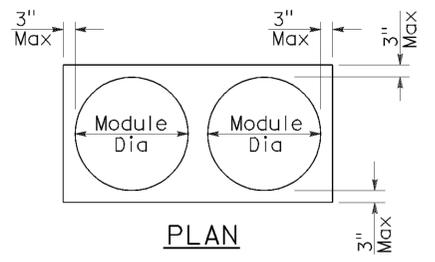
**ARRAY 'TU21'**

Approach speed 45 mph or more

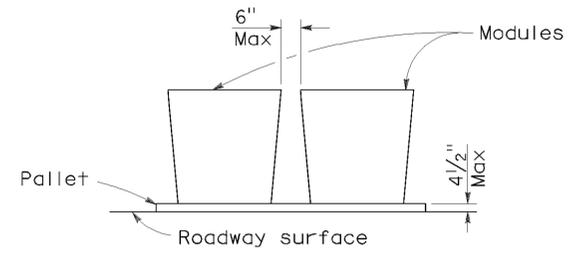


**ARRAY 'TU17'**

Approach speed less than 45 mph



**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**

P:\proj\02\3E870\plans\pse\23e870va001.dgn

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Sha	299	18.3/20.2	9	11

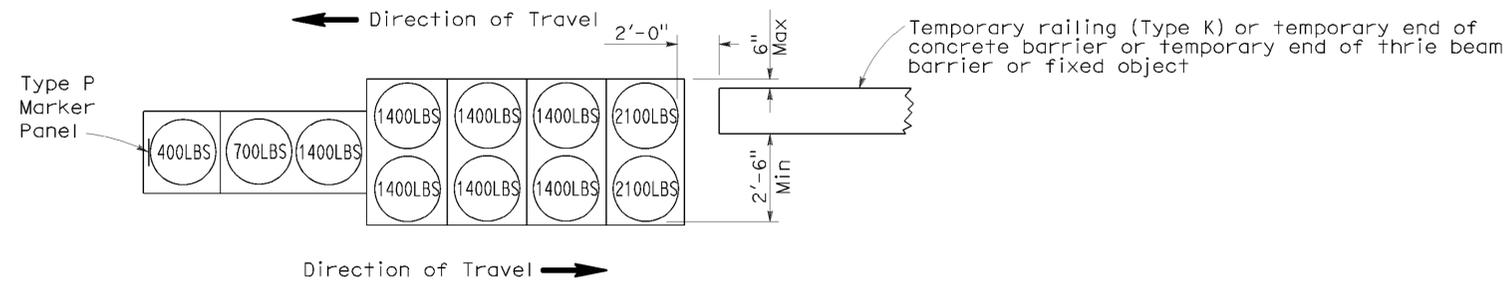
*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

June 6, 2008  
PLANS APPROVAL DATE

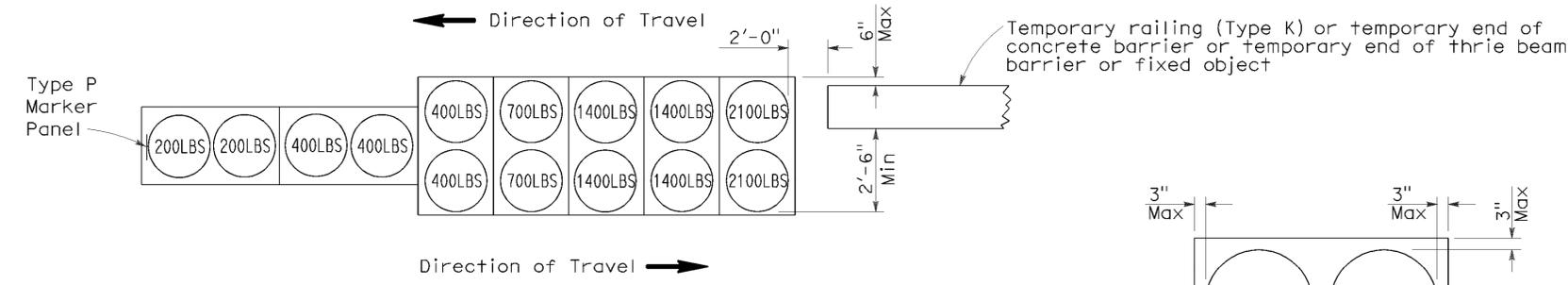
*Randell D. Hiatt*  
No. C50200  
Exp. 6-30-09  
CIVIL  
STATE OF CALIFORNIA

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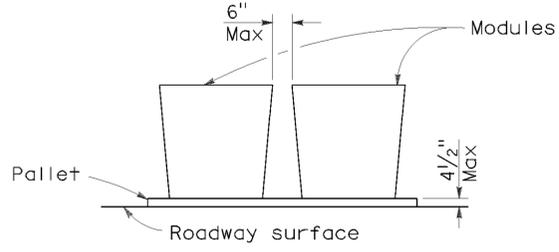
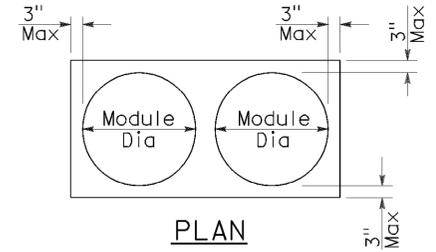
To accompany plans dated 02-06-12



**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**

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2006 REVISED STANDARD PLAN RSP T1B

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Sha	299	18.3/20.2	10	11

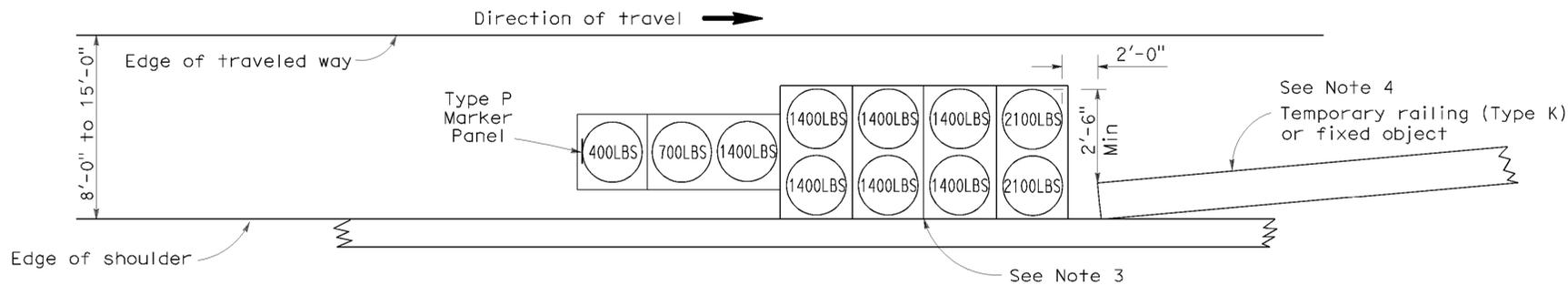
*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

June 6, 2008  
PLANS APPROVAL DATE

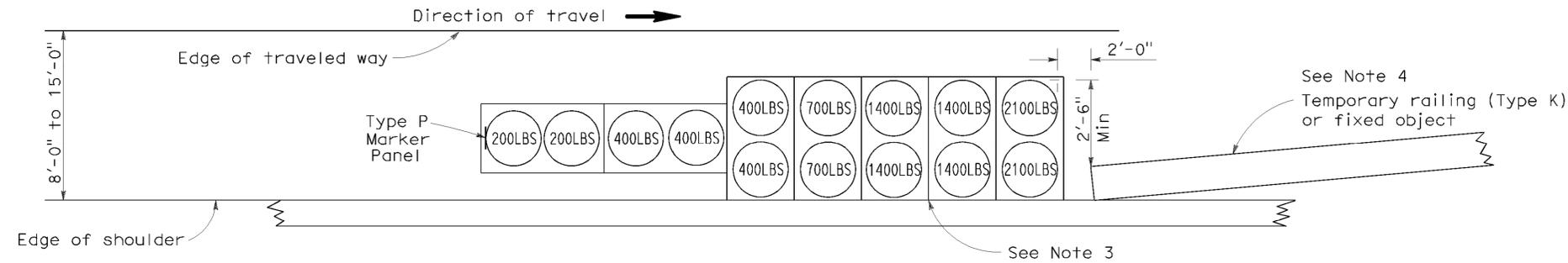
*Randell D. Hiatt*  
REGISTERED PROFESSIONAL ENGINEER  
No. C50200  
Exp. 6-30-09  
CIVIL  
STATE OF CALIFORNIA

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To accompany plans dated 02-06-12



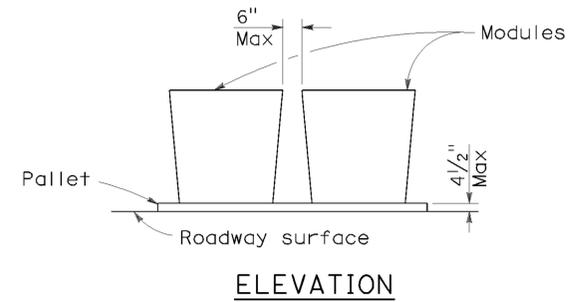
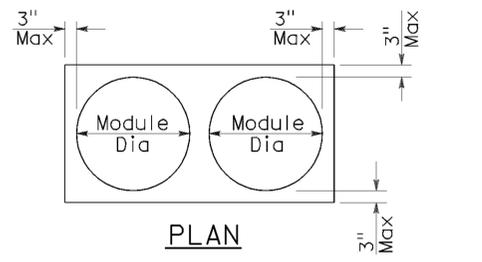
**ARRAY 'TS11'**  
Approach speed less than 45 mph  
See Note 9



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

**NOTES:**

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



**CRASH CUSHION PALLET DETAIL**  
See Note 11

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**

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2006 REVISED STANDARD PLAN RSP T2

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha	299	18.3/20.2	11	11

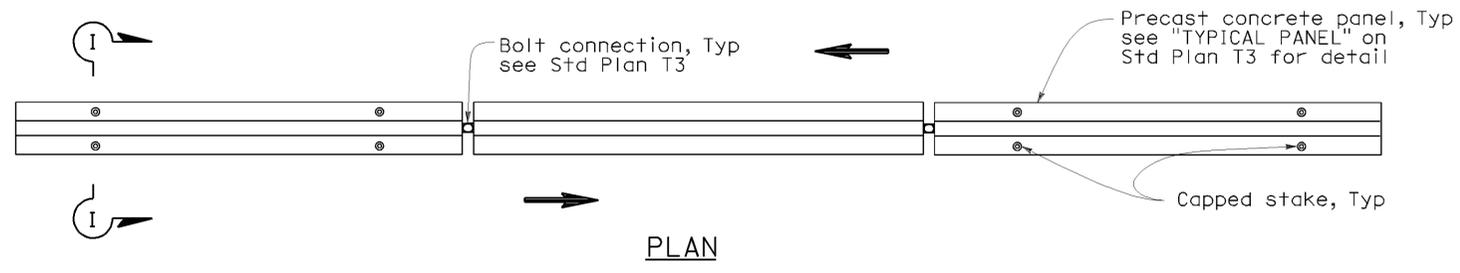
*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

May 20, 2011  
PLANS APPROVAL DATE

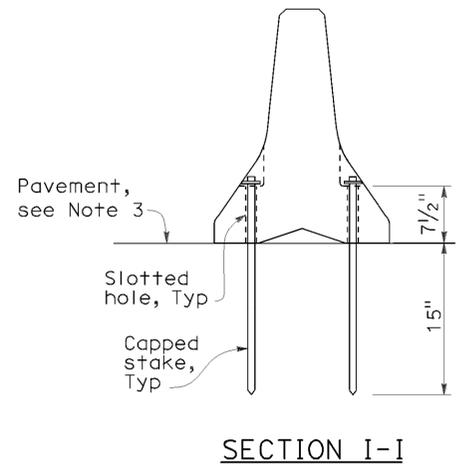
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REGISTERED PROFESSIONAL ENGINEER  
No. C50200  
Exp. 6-30-11  
CIVIL  
STATE OF CALIFORNIA

To accompany plans dated 02-06-12



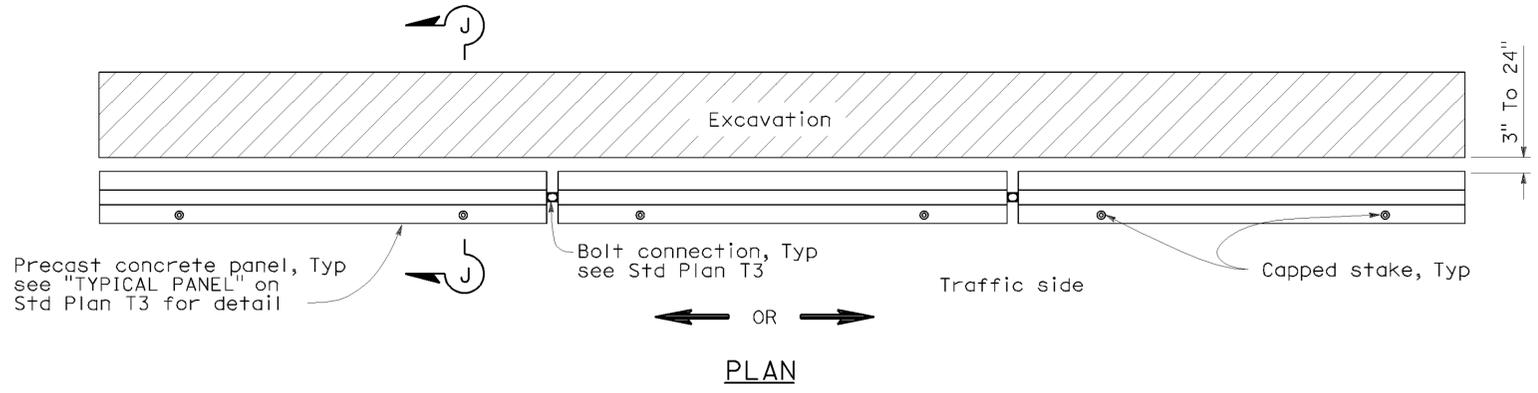
**RAILING STAKING CONFIGURATION FOR TWO-WAY TRAFFIC**  
See Note 1



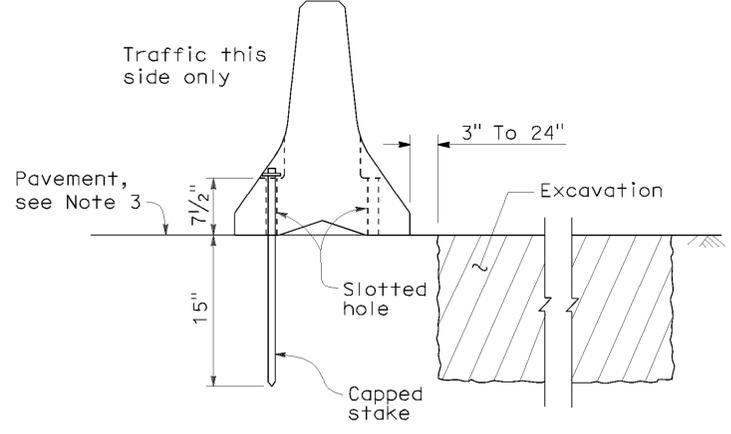
**SECTION I-I**

**NOTES:**

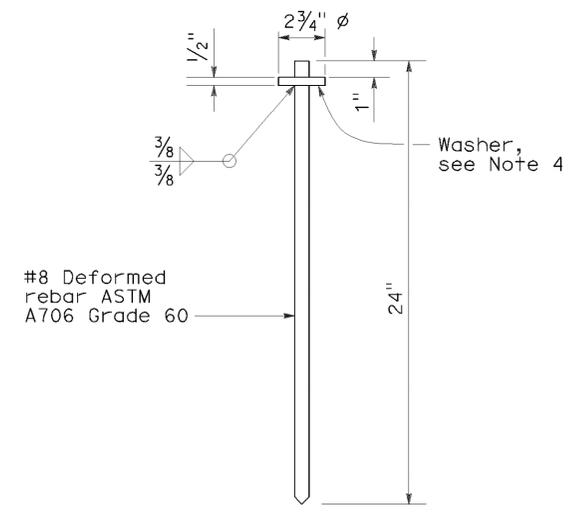
1. Where Type K Temporary Railing is placed as a temporary or long term barrier in two-way traffic on highways with less than 24" from the edge of traveled way, use four capped stakes per every other panel with end panels staked.
2. Where Type K Temporary Railing is placed 3" to 24" from the edge of an excavation on highways, use two capped stakes 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  $\rightleftarrows$ .



**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**

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2006 NEW STANDARD PLAN NSP T3A