Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	178	15.8/26.5	1	7

INDEX OF PLANS

SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
2	TYPICAL CROSS SECTIONS AND CONSTRUCTION DETAILS,
3	CONSTRUCTION AREA SIGNS AND SUMMARY OF QUANTITIES
4-7	REVISED AND NEW STANDARD PLANS

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

STATE OF CALIFORNIA

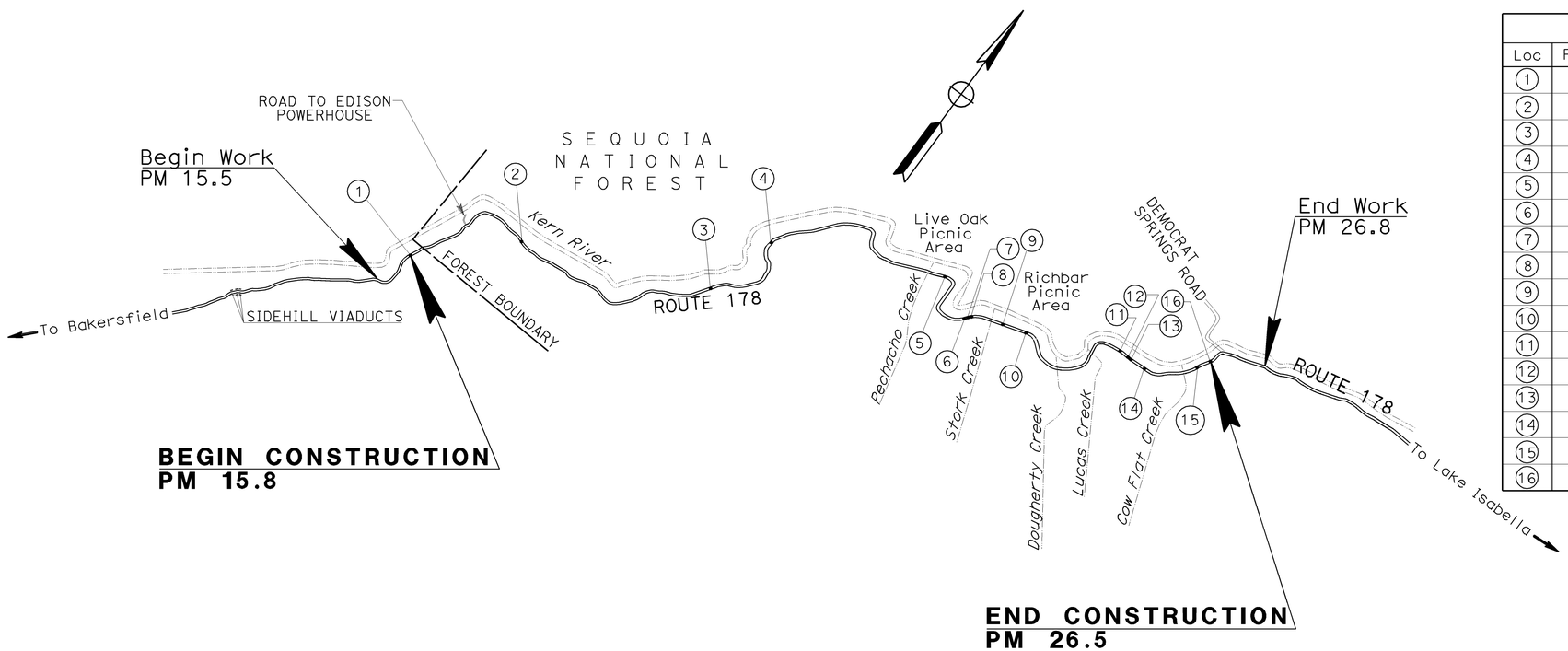
DEPARTMENT OF TRANSPORTATION

PROJECT PLANS FOR CONSTRUCTION ON

STATE HIGHWAY

IN KERN COUNTY
NEAR BAKERSFIELD AT VARIOUS LOCATIONS FROM 2.0 MILES EAST OF SIDEHILL VIADUCT TO 0.1 MILE WEST OF DEMOCRAT SPRINGS ROAD

TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006



LOCATIONS OF CONSTRUCTION		
Loc	POST MILE	DESCRIPTION
1	15.77	1.993 MILES EAST OF SIDEHILL VIADUCT
2	17.35	3.573 MILES EAST OF SIDEHILL VIADUCT
3	19.48	5.703 MILES EAST OF SIDEHILL VIADUCT
4	20.27	6.493 MILES EAST OF SIDEHILL VIADUCT
5	22.48	4.150 MILES WEST OF DEMOCRAT SPRINGS ROAD
6	23.34	3.290 MILES WEST OF DEMOCRAT SPRINGS ROAD
7	23.36	3.270 MILES WEST OF DEMOCRAT SPRINGS ROAD
8	23.38	3.250 MILES WEST OF DEMOCRAT SPRINGS ROAD
9	23.74	2.890 MILES WEST OF DEMOCRAT SPRINGS ROAD
10	24.00	2.630 MILES WEST OF DEMOCRAT SPRINGS ROAD
11	25.48	1.150 MILES WEST OF DEMOCRAT SPRINGS ROAD
12	25.59	1.040 MILES WEST OF DEMOCRAT SPRINGS ROAD
13	25.61	1.020 MILES WEST OF DEMOCRAT SPRINGS ROAD
14	25.79	0.840 MILE WEST OF DEMOCRAT SPRINGS ROAD
15	26.23	0.400 MILE WEST OF DEMOCRAT SPRINGS ROAD
16	26.49	0.140 MILE WEST OF DEMOCRAT SPRINGS ROAD

12-20-10
PROJECT ENGINEER DATE
REGISTERED CIVIL ENGINEER

January 18, 2011
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
JOSE VICTOR ECHEVESTE
No. 50825
Exp. 09-30-11
CIVIL
STATE OF CALIFORNIA

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

PROJECT MANAGER: BILL MOSES
DESIGN ENGINEER: FRANK GONZALEZ

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

NO SCALE

CONTRACT No.	06-0M3004
PROJECT ID	0600000952

LAST REVISION 01-06-11
DATE PLOTTED => 21-JAN-2011
TIME PLOTTED => 14:08

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	178	15.8/26.5	2	7

REGISTERED CIVIL ENGINEER 12-20-10 DATE

1-18-11
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER JOSE VICTOR ECHEVESTE No. 50825 Exp. 09-30-11 CIVIL STATE OF CALIFORNIA

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

NOTES:

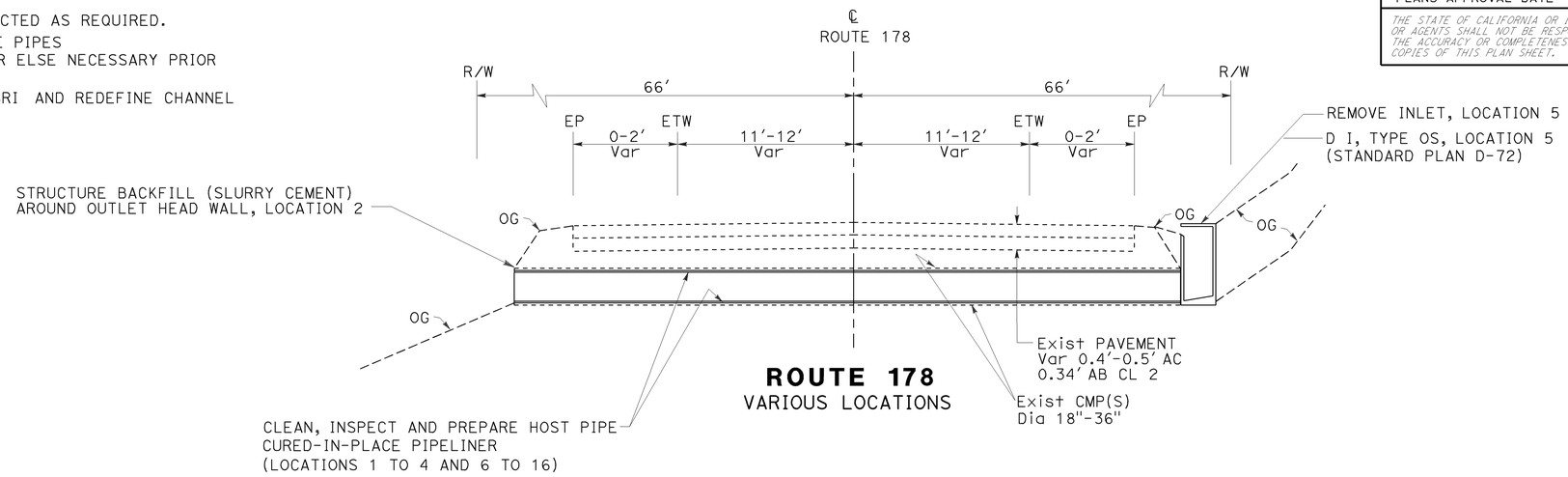
1 DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS

2 FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT DISTRICT OFFICE.

3 DOWNDRAINS SHALL BE DISCONNECTED AND RECONNECTED AS REQUIRED.

4 DELAMINATIONS SHALL BE FIXED PER Specs IN THE PIPES AT LOCATIONS 1, 11, 13, 14 AND 15 AND WHEREVER ELSE NECESSARY PRIOR TO CURE-IN-PLACE PIPE LINER PROCESS.

5 CLEAR ALL THE INLET/OUTLET CHANNELS FROM DEBRI AND REDEFINE CHANNEL FOR PROPER FLOW



ROUTE 178
VARIOUS LOCATIONS

CORRUGATED METAL PIPE CONSTRUCTION DETAILS

LOCATION	POST MILE	DESCRIPTION	DIAMETER	LENGTH	HEIGHT OF INLET
1	15.77	CLEANING, INSPECTING AND PREPARING HOST PIPE, CURED-IN-PLACE PIPE LINER	30"	37′	
2	17.35	CLEANING, INSPECTING AND PREPARING HOST PIPE, CURED-IN-PLACE PIPE LINER STRUCTURE BACKFILL (SLURRY CEMENT) AROUND OUTLET HEAD WALL	24" 24"	54′ 54′	
3	19.48	CLEANING, INSPECTING AND PREPARING HOST PIPE, CURED-IN-PLACE PIPE LINER	30"	49′	
4	20.27	CLEANING, INSPECTING AND PREPARING HOST PIPE, CURED-IN-PLACE PIPE LINER	24"	54′	
5	22.48	REMOVE Exist D I, INSTALL D I (TYPE OS)			3.5′
6	23.34	CLEANING, INSPECTING AND PREPARING HOST PIPE, CURED-IN-PLACE PIPE LINER	18"	37′	
7	23.36	CLEANING, INSPECTING AND PREPARING HOST PIPE, CURED-IN-PLACE PIPE LINER	18"	44′	
8	23.38	CLEANING, INSPECTING AND PREPARING HOST PIPE, CURED-IN-PLACE PIPE LINER	24"	36′	
9	23.74	CLEANING, INSPECTING AND PREPARING HOST PIPE, CURED-IN-PLACE PIPE LINER	30"	57′	
10	24.00	CLEANING, INSPECTING AND PREPARING HOST PIPE, CURED-IN-PLACE PIPE LINER	18"	49′	
11	25.48	CLEANING, INSPECTING AND PREPARING HOST PIPE, CURED-IN-PLACE PIPE LINER	36"	109′	
12	25.59	CLEANING, INSPECTING AND PREPARING HOST PIPE, CURED-IN-PLACE PIPE LINER	24"	126′	
13	25.61	CLEANING, INSPECTING AND PREPARING HOST PIPE, CURED-IN-PLACE PIPE LINER	18"	100′	
14	25.79	CLEANING, INSPECTING AND PREPARING HOST PIPE, CURED-IN-PLACE PIPE LINER	30"	126′	
15	26.23	CLEANING, INSPECTING AND PREPARING HOST PIPE, CURED-IN-PLACE PIPE LINER	24"	105′	
16	26.49	CLEANING, INSPECTING AND PREPARING HOST PIPE, CURED-IN-PLACE PIPE LINER	18"	90′	

NO SCALE

TYPICAL CROSS SECTIONS AND CONSTRUCTION DETAILS
X-1

REVISED BY | DATE REVISED
SADHU SANGHA | JOSE VICTOR ECHEVESTE
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR
FRANK GONZALEZ
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION 01-06-11
DATE PLOTTED => 21-JAN-2011
TIME PLOTTED => 14:08

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	178	15.8/26.5	3	7

REGISTERED CIVIL ENGINEER 12-20-11 DATE

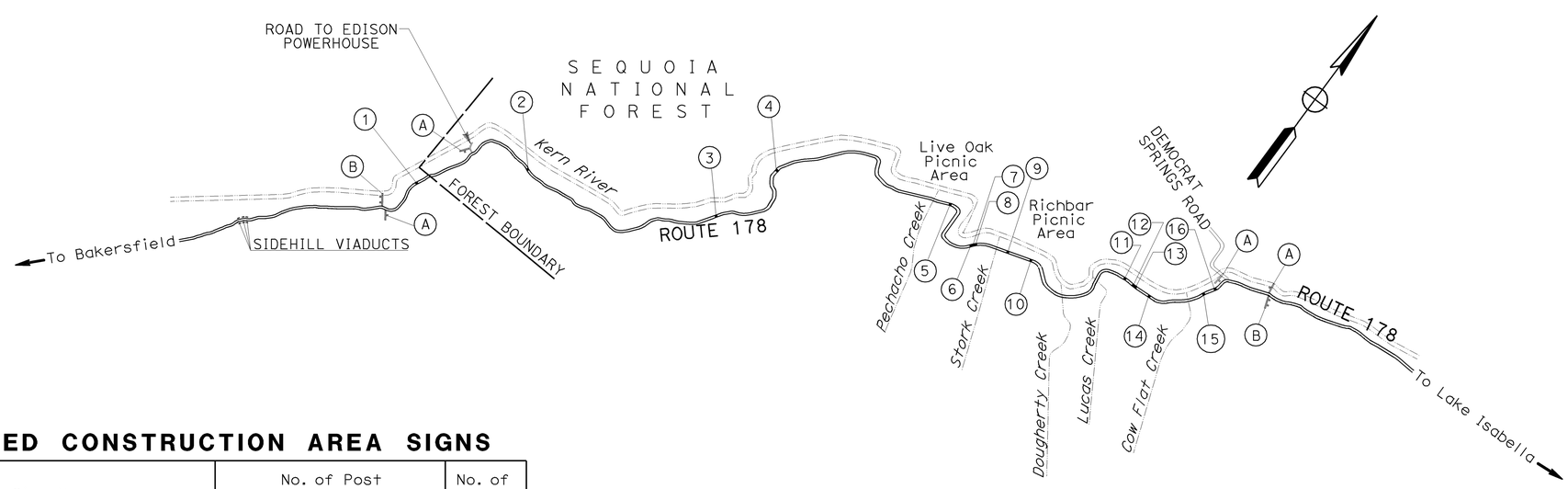
1-18-11
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER JOSE VICTOR ECHEVESTE No. 50825 Exp. 09-30-11 CIVIL STATE OF CALIFORNIA

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

SUMMARY OF QUANTITIES

LOCATION	CURED-IN-PLACE PIPELINER 18"	24"	30"	36"	STRUCTURE BACKFILL (SLURRY CEMENT)	CLEANING, INSPECTING AND PREPARING HOST PIPE	REMOVE INLET	D I (TYPE OS) MINOR CONCRETE (MINOR STRUCTURE)	Misc IRON AND STEEL	TEMPORARY FENCE (TYPE ESA)
	LF	LF	LF	LF	CY	CY	EA	CY	LB	LF
1			37			6.7				
2		54 54			16	6.3 6.3				
3			49			12.8				
4		54				6.3				
5							1	1.5	174	
6	37					2.4				
7	44					2.9				
8		36				4.2				
9			57			10.3				
10	49					3.2				
11				109		28.5				
12		126				14.6				300
13	100					6.5				
14			126			22.9				
15		105				13.2				
16	90					5.9				
TOTAL	320	429	269	109	16	153.0	1	1.5	174	300



STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

Sign No.	Sign Code	Panel Size	Sign Message	No. of Post and Size	No. of Signs
A	W20-1	48" x 48"	ROAD WORK AHEAD	1 - 4" x 6"	4
B	G20-2	48" x 18"	END ROAD WORK	2 - 4" x 4"	2

NOTE: SIGN LOCATIONS SHOWN ARE APPROXIMATE ONLY. EXACT LOCATIONS TO BE DETERMINED BY THE ENGINEER

NO SCALE

CONSTRUCTION AREA SIGNS AND SUMMARY OF QUANTITIES

Q-1

REVISED BY | DATE REVISED
SADHU SANGHA | JOSE VICTOR ECHEVESTE
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR: FRANK GONZALEZ
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION 01-06-11 | DATE PLOTTED => 21-JAN-2011 | TIME PLOTTED => 14:08

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
06	Ker	178	15.8/26.5	4	7

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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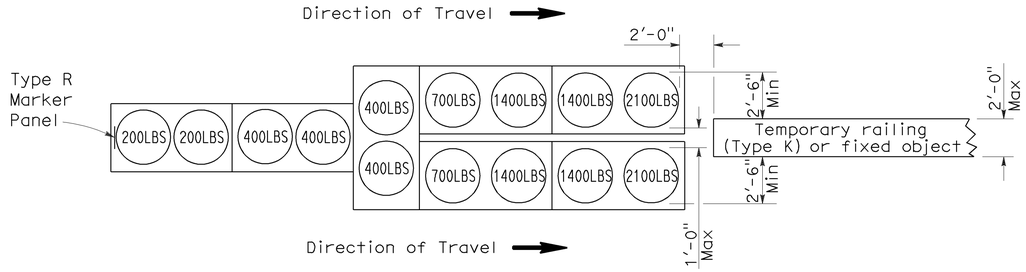
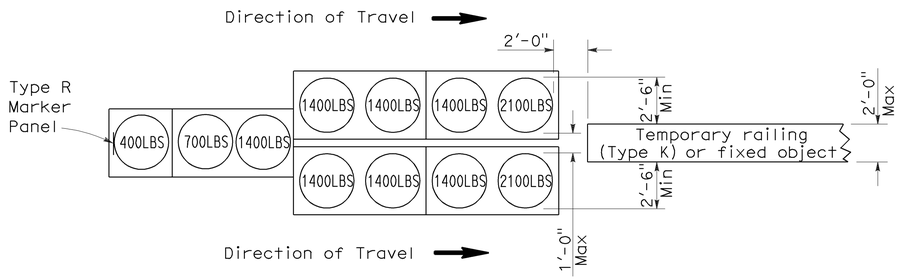
To accompany plans dated **1-18-11**



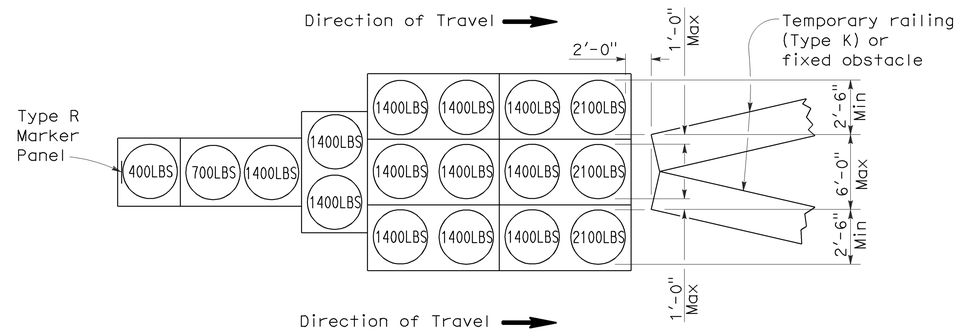
ARRAY 'TU14'

Approach speed 45 mph or more



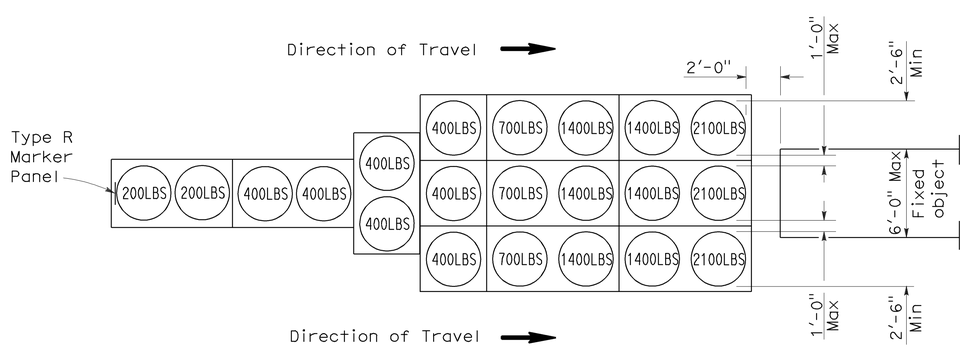
ARRAY 'TU11'

Approach speed less than 45 mph



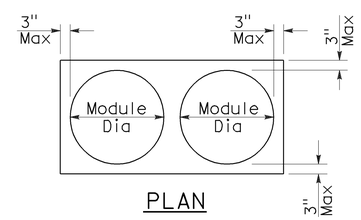
ARRAY 'TU17'

Approach speed less than 45 mph

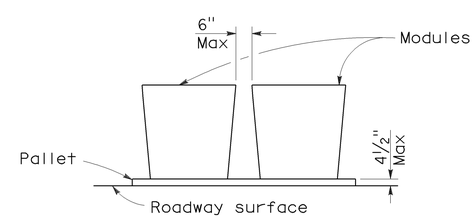


ARRAY 'TU21'

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

5-15-08

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
06	Ker	178	15.8/26.5	5	7

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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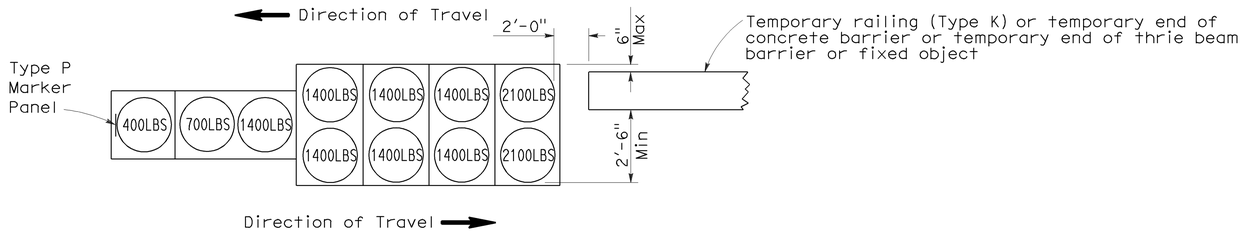
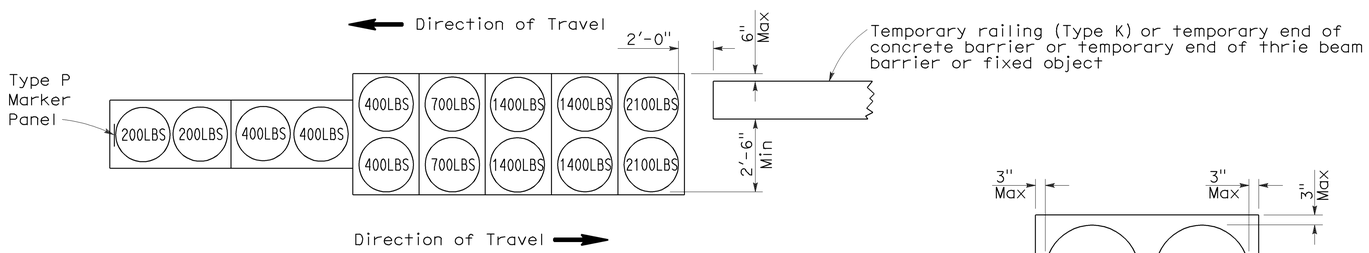
To accompany plans dated 1-18-11



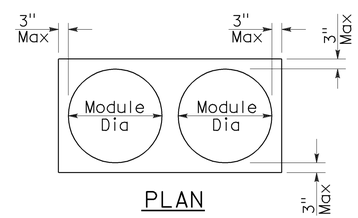
ARRAY 'TB11'

Approach speed less than 45 mph

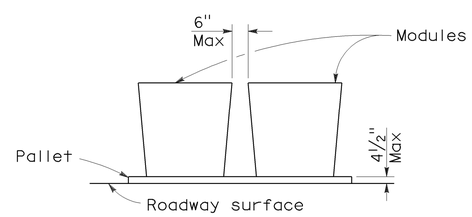


ARRAY 'TB14'

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

2006 REVISED STANDARD PLAN RSP T1B

5-15-08

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
06	Ker	178	15.8/26.5	6	

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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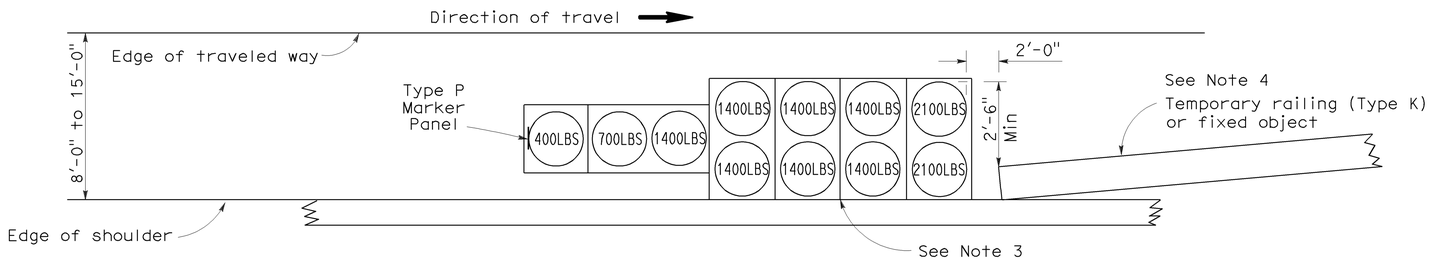
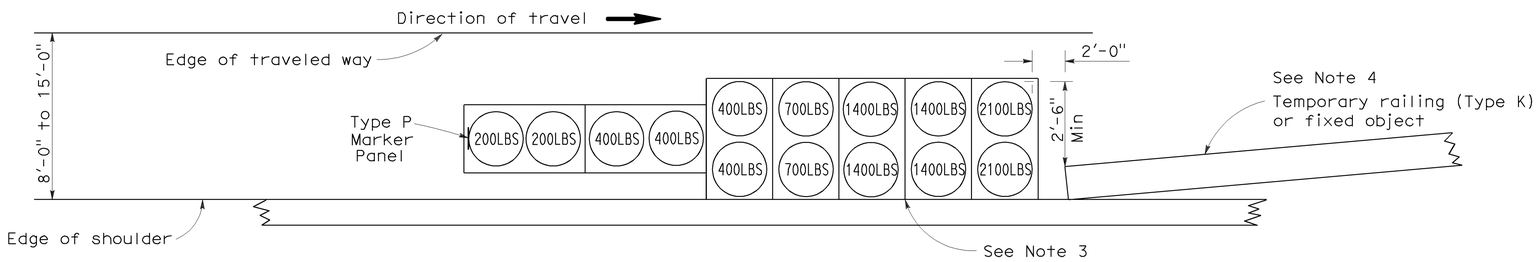
To accompany plans dated _____



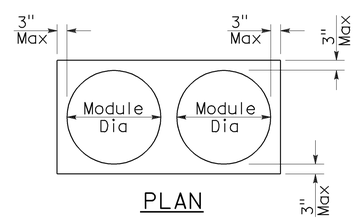
ARRAY 'TS11'

Approach speed less than 45 mph
See Note 9

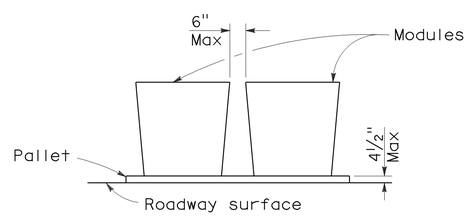


ARRAY 'TS14'

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
06	Ker	178	15.8/26.5	7	7

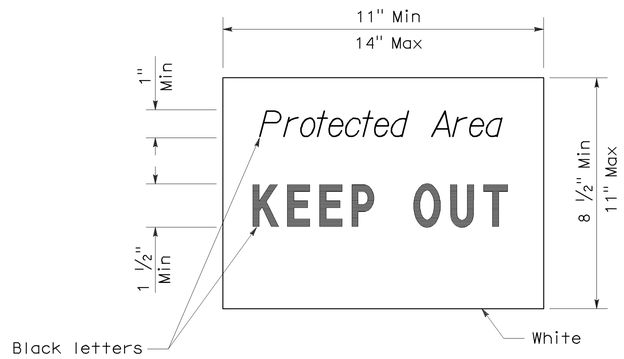
Robert B Schott
LICENSED LANDSCAPE ARCHITECT

April 3, 2009
PLANS APPROVAL DATE

LICENSED LANDSCAPE ARCHITECT
Robert B. Schot 3695
Robert B Schott
Signature
11-30-10
Renewal Date
2-25-09
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.

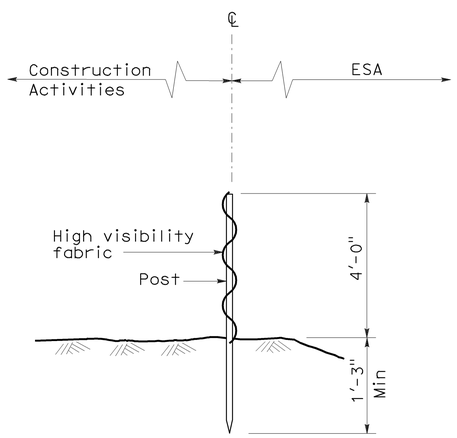
To accompany plans dated 1-18-11



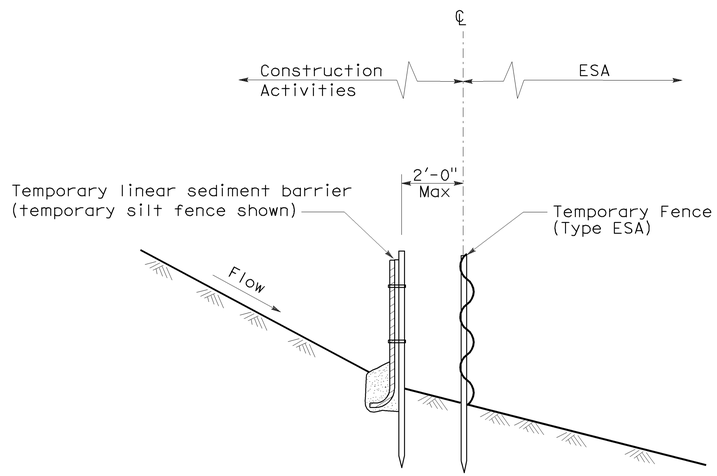
SIGN DETAIL

NOTE:

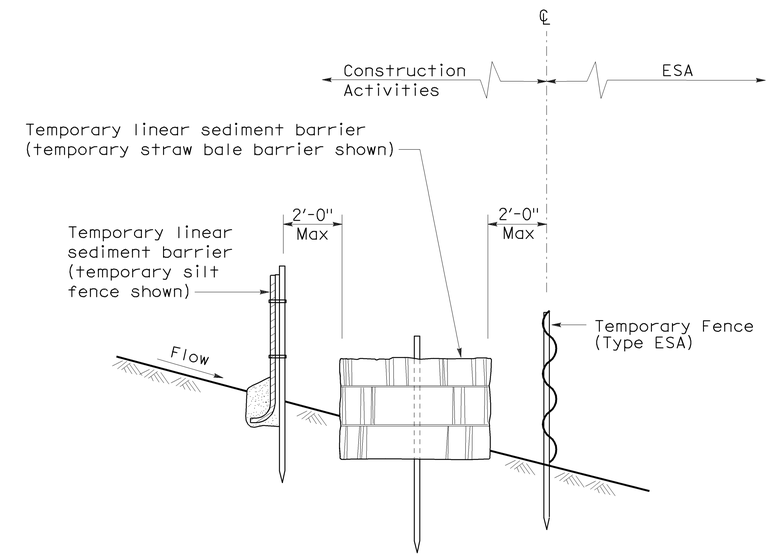
1. Temporary silt fence and temporary straw bale barrier shown for reference purposes only.



SECTION
TEMPORARY FENCE (TYPE ESA)



SECTION
PLACEMENT DETAIL
FOR TEMPORARY LINEAR SEDIMENT BARRIER
USED WITH TEMPORARY
FENCE (TYPE ESA)
(See Note 1)



SECTION
PLACEMENT DETAIL
FOR TEMPORARY SILT FENCE
AND TEMPORARY STRAW BALE BARRIER
USED WITH TEMPORARY FENCE (TYPE ESA)
(See Note 1)

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

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

NO SCALE

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

NEW STANDARD PLAN NSP T65

2006 NEW STANDARD PLAN NSP T65

1-7-09