

INDEX OF PLANS

SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
2-3	TYPICAL CROSS SECTIONS
4-5	LAYOUTS
6	PROFILES AND SUPERELEVATION DIAGRAM
7	CONSTRUCTION DETAILS
8	CONSTRUCTION AREA SIGNS
9-13	STAGE CONSTRUCTION PLANS AND QUANTITIES
14-15	PAVEMENT DELINEATION PLANS
16	SUMMARY OF QUANTITIES
17-19	ELECTRICAL PLANS
20-32	REVISED AND NEW STANDARD PLANS

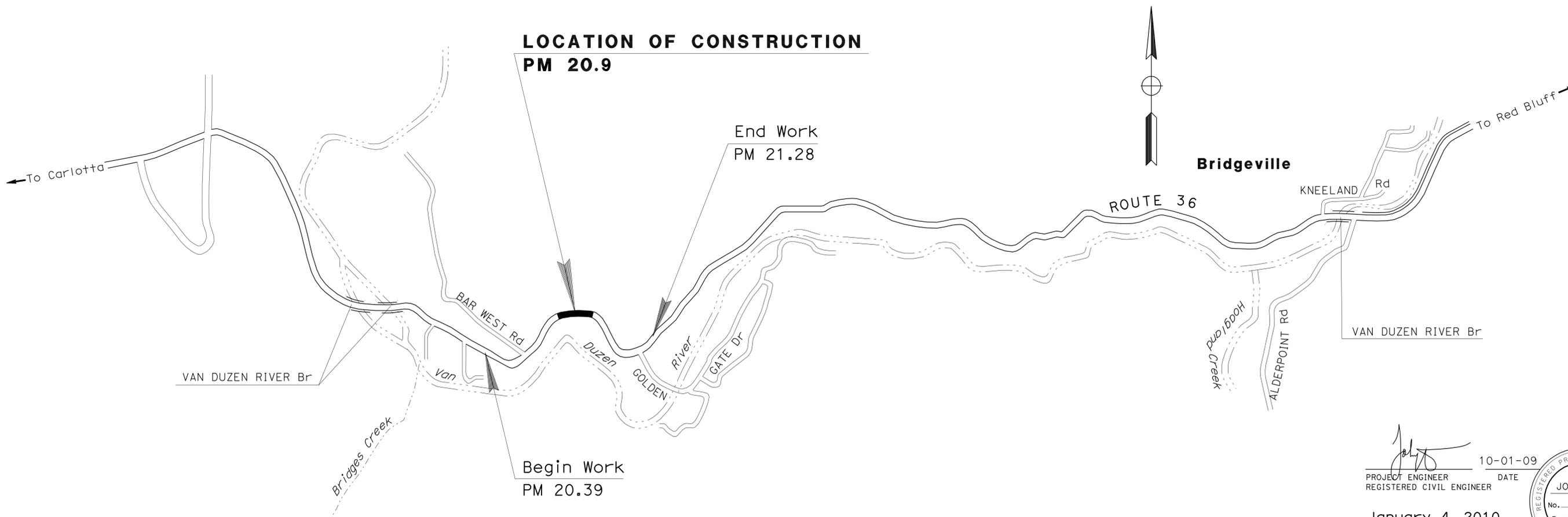
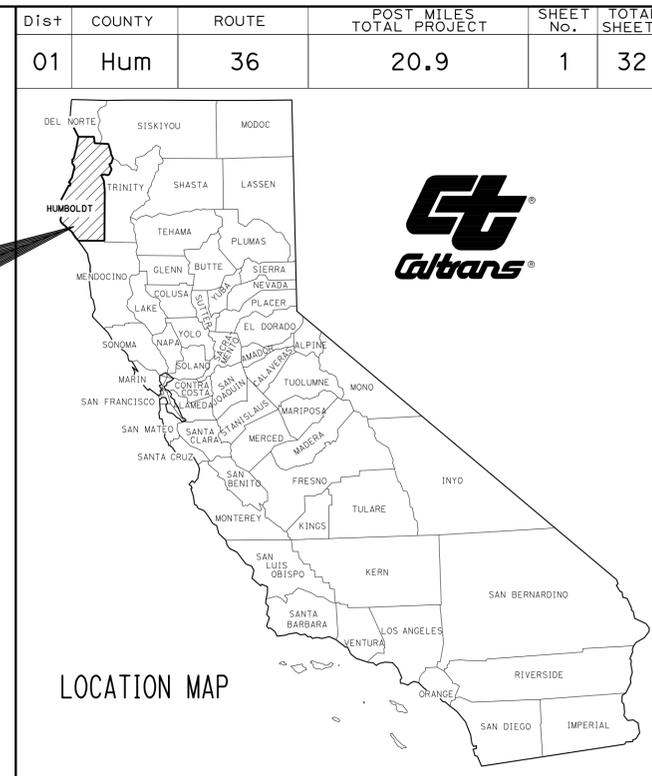
THE STANDARD PLANS LIST APPLICABLE TO THIS CONTRACT IS INCLUDED IN THE NOTICE TO BIDDERS AND SPECIAL PROVISIONS BOOK.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
PROJECT PLANS FOR CONSTRUCTION ON
STATE HIGHWAY

ER-43K1004E

IN HUMBOLDT COUNTY
NEAR BRIDGEVILLE AT 0.4 MILE
WEST OF GOLDEN GATE DRIVE

TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006



PROJECT MANAGER
KIM FLOYD

DESIGN ENGINEER
CHARLES OLSON

PROJECT ENGINEER
 REGISTERED CIVIL ENGINEER

DATE 10-01-09
 No. 64316
 Exp. 6-30-11
 CIVIL



January 4, 2010
 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.

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

NO SCALE

CONTRACT No. **01-475404**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 NORTH REGION
 OFFICE OF DESIGN, SOUTH
 DESIGN BRANCH 10

FUNCTIONAL SUPERVISOR
 CHARLES OLSON

CALCULATED-DESIGNED BY
 CHECKED BY

JOHNY TAN

REVISED BY
 DATE REVISED

JT

- NOTES:**
1. DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
 2. SUPERELEVATION AS SHOWN OR AS DIRECTED BY THE ENGINEER.
 3. SEE INFORMATION HANDOUTS FOR CORING INFORMATION.

LEGEND

 COLD PLANE 0.17' AC PVMT
 0.17' HMA (TYPE A)

DESIGN DESIGNATION

2009 ADT = 1,400
 2019 ADT = 1,660
 2029 ADT = 1,920
 10 YEAR TI = 7.5 D=50%
 20 YEAR TI = 8.0 T=5%

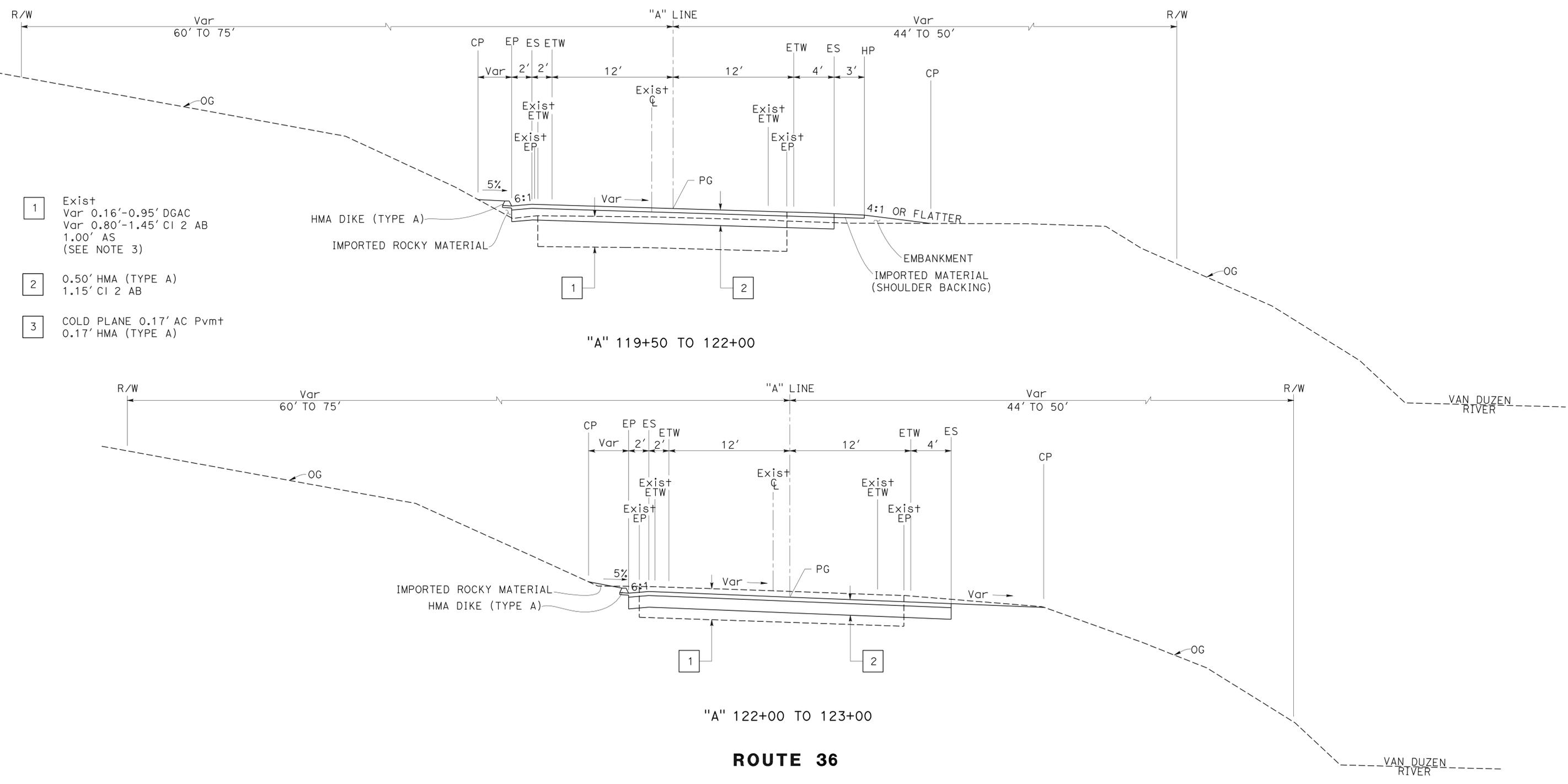
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	36	20.9	2	32

10-01-09
 REGISTERED CIVIL ENGINEER DATE

1-4-10
 PLANS APPROVAL DATE

JOHNY TAN
 No. 64316
 Exp. 6-30-11
 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.



TYPICAL CROSS SECTIONS

NO SCALE

X-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 NORTH REGION
 OFFICE OF DESIGN, SOUTH
 DESIGN BRANCH 10

FUNCTIONAL SUPERVISOR
 CHARLES OLSON

CALCULATED-DESIGNED BY
 CHECKED BY

JOHNY TAN

REVISOR BY
 DATE REVISED

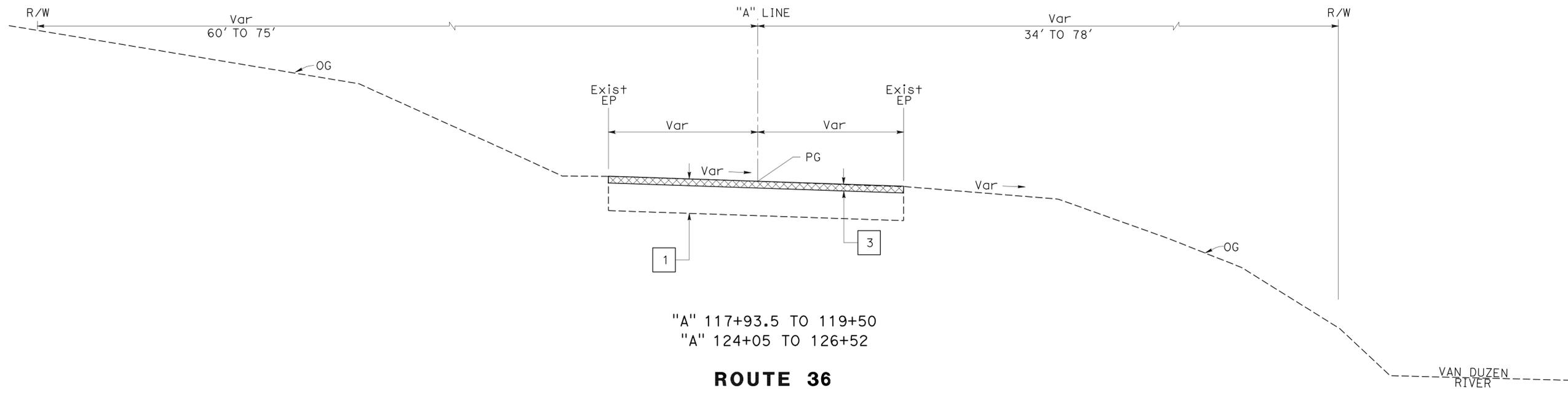
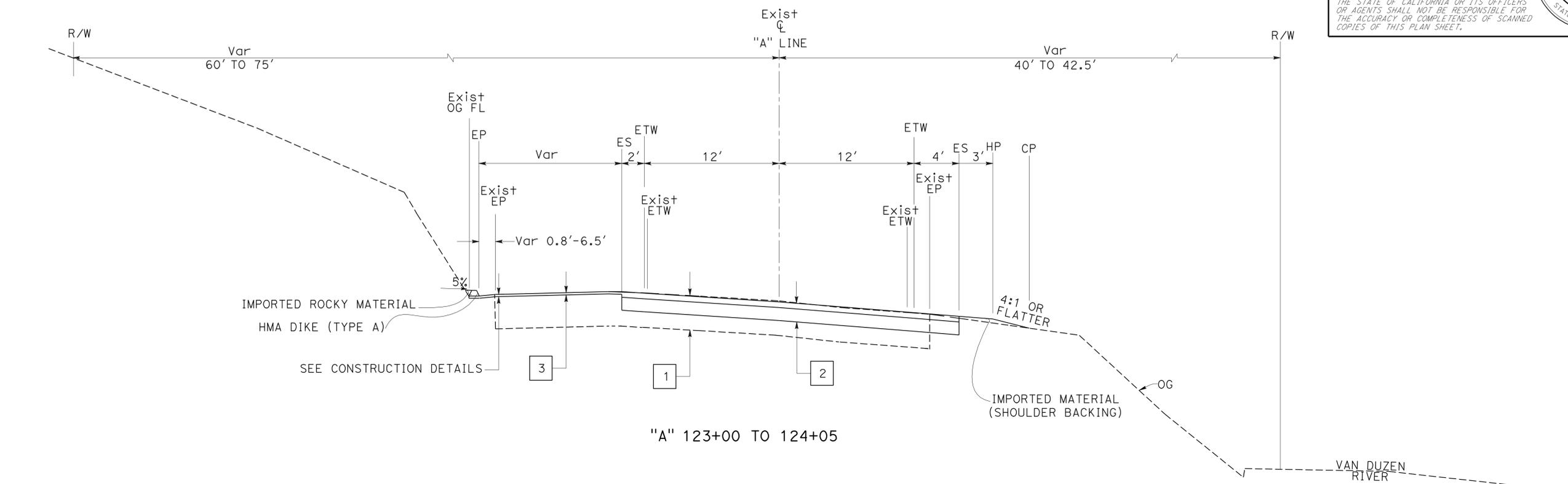
JT

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	36	20.9	3	32

REGISTERED CIVIL ENGINEER DATE 10-01-09
 1-4-10
 PLANS APPROVAL DATE

JOHNY TAN
 No. 64316
 Exp. 6-30-11
 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.



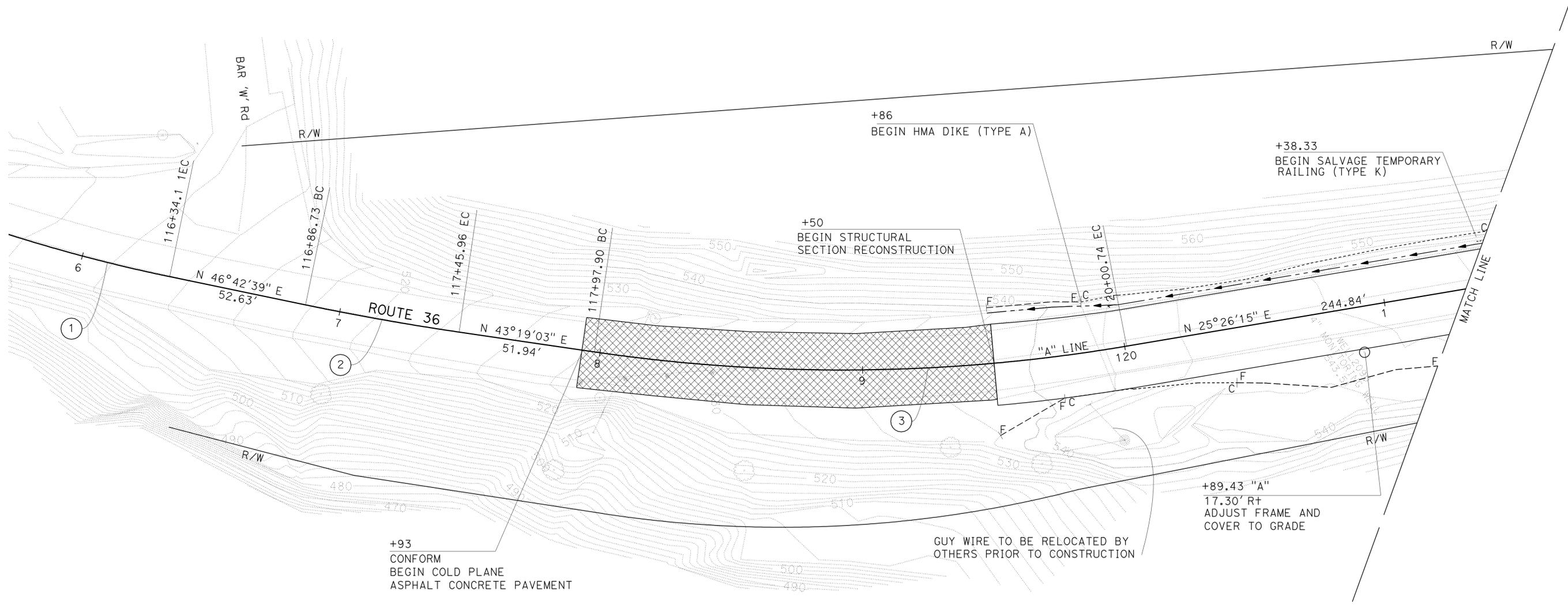
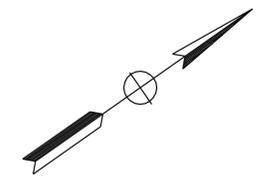
TYPICAL CROSS SECTIONS
 NO SCALE
X-2

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	36	20.9	4	32
			10-01-09	REGISTERED CIVIL ENGINEER DATE	
			1-4-10	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.					

NOTE: FOR COMPLETE RIGHT OF WAY DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.

LEGEND

- COLD PLANE 0.17' AC PVMT
0.17' HMA (TYPE A)
- CUT/FILL LINE



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 NORTH REGION
 OFFICE OF DESIGN, SOUTH
 DESIGN BRANCH 10
 Et Caltrans®
 FUNCTIONAL SUPERVISOR
 CHARLES OLSON
 CALCULATED-DESIGNED BY
 CHECKED BY
 JOHNY TAN
 REVISED BY
 DATE REVISED
 JT
 REVISIONS: 1, 2, 3

CURVE DATA

No.	R	Δ	T	L
①	620.00'	13°19'19"	72.41'	144.16'
②	999.99'	3°23'35"	29.62'	59.22'
③	650.00'	17°52'48"	102.25'	202.84'

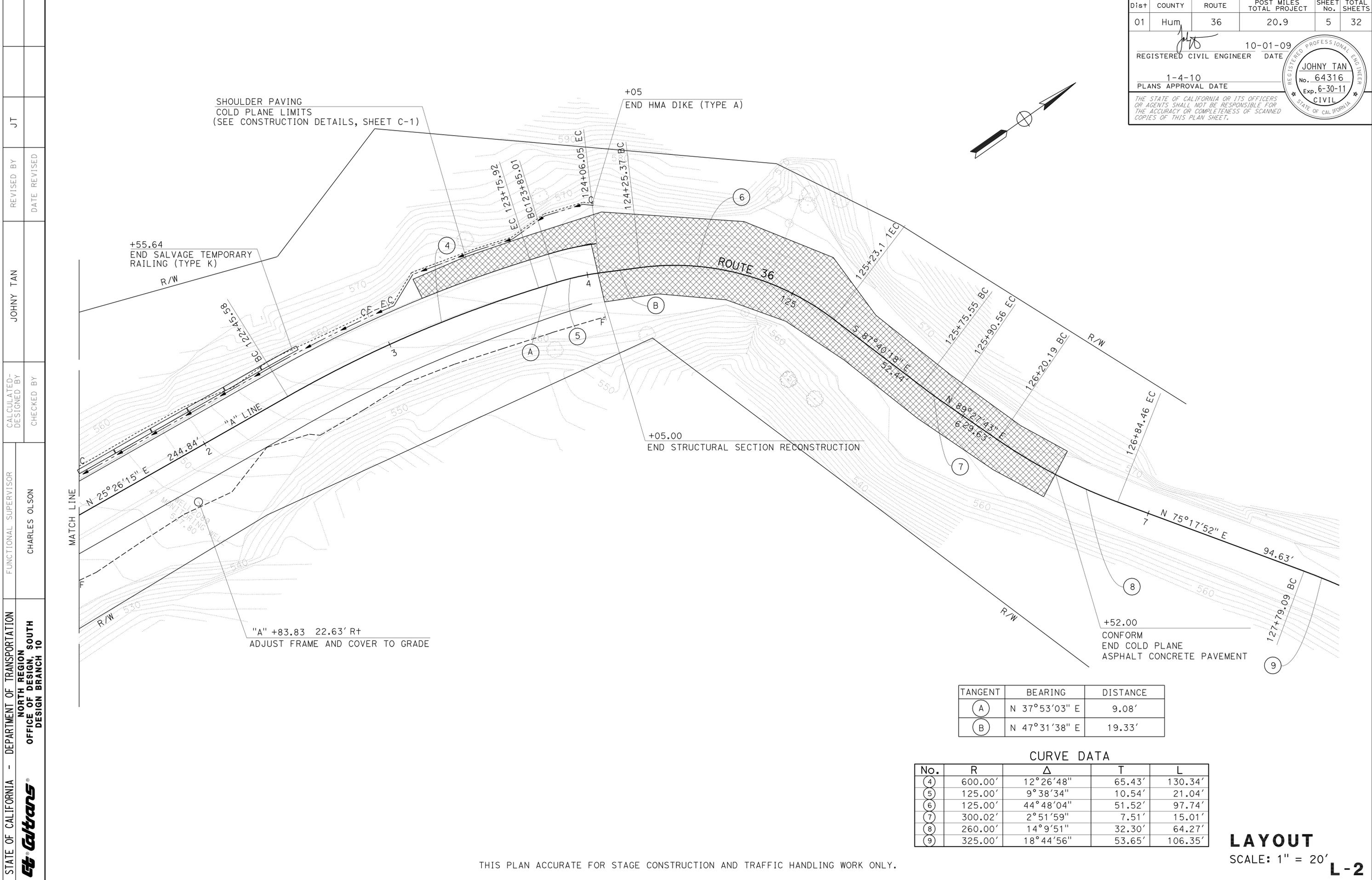
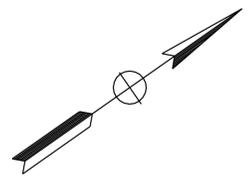
LAYOUT
SCALE: 1" = 20'
L-1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	36	20.9	5	32

10-01-09
 REGISTERED CIVIL ENGINEER DATE
 1-4-10
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
JOHNY TAN
 No. 64316
 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 SCANNED COPIES OF THIS PLAN SHEET.



TANGENT	BEARING	DISTANCE
(A)	N 37°53'03" E	9.08'
(B)	N 47°31'38" E	19.33'

CURVE DATA				
No.	R	Δ	T	L
(4)	600.00'	12°26'48"	65.43'	130.34'
(5)	125.00'	9°38'34"	10.54'	21.04'
(6)	125.00'	44°48'04"	51.52'	97.74'
(7)	300.02'	2°51'59"	7.51'	15.01'
(8)	260.00'	14°9'51"	32.30'	64.27'
(9)	325.00'	18°44'56"	53.65'	106.35'

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 NORTH REGION
 OFFICE OF DESIGN, SOUTH
 DESIGN BRANCH 10

FUNCTIONAL SUPERVISOR
 CHARLES OLSON

CALCULATED/DESIGNED BY
 CHECKED BY

JOHNY TAN

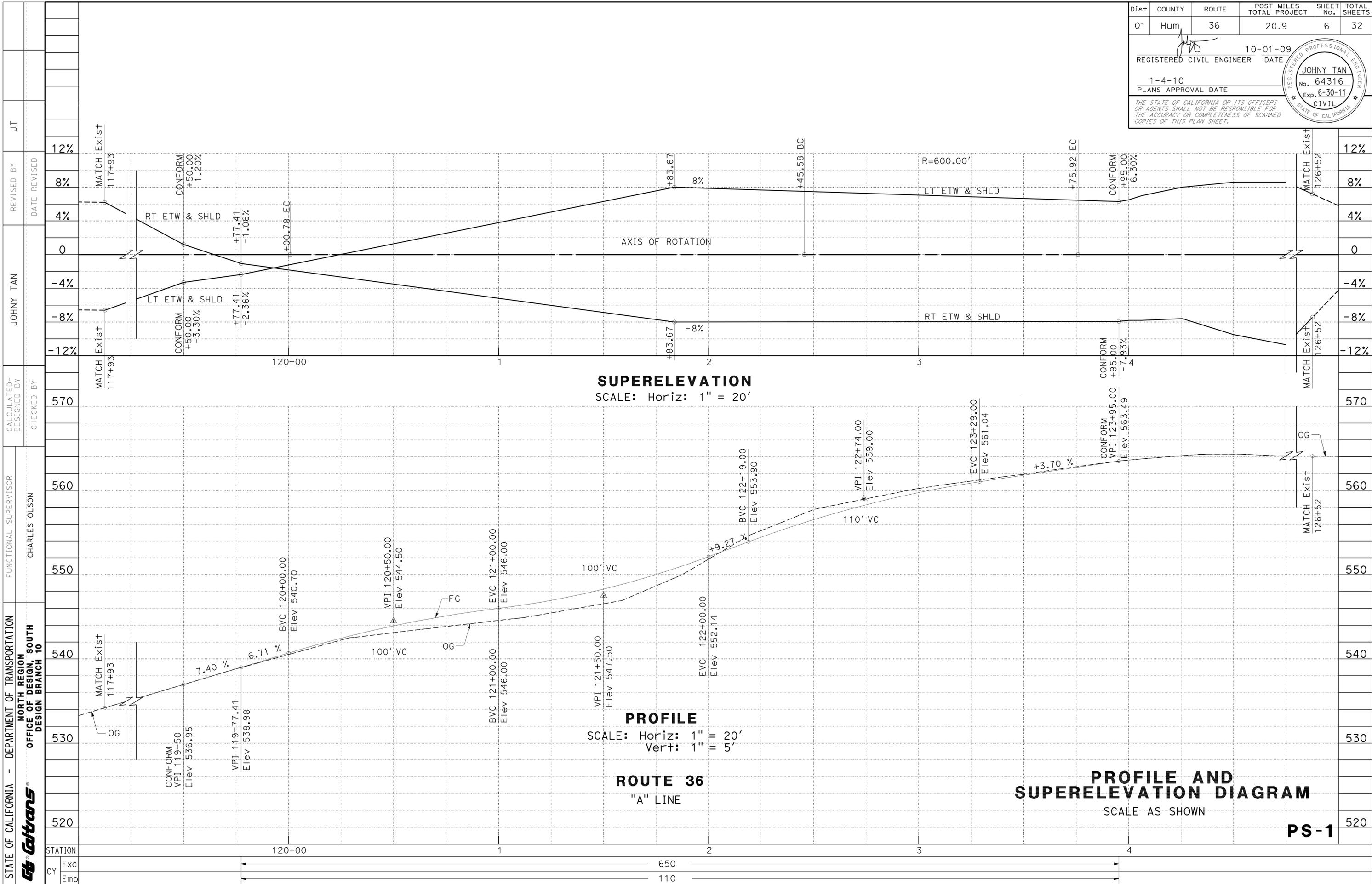
REVISED BY
 DATE REVISED

JT

THIS PLAN ACCURATE FOR STAGE CONSTRUCTION AND TRAFFIC HANDLING WORK ONLY.

LAYOUT
 SCALE: 1" = 20'
L-2

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	36	20.9	6	32
			10-01-09	REGISTERED CIVIL ENGINEER DATE	
			1-4-10	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.					



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 NORTH REGION
 OFFICE OF DESIGN, SOUTH
 DESIGN BRANCH 10

FUNCTIONAL SUPERVISOR
 CHARLES OLSON

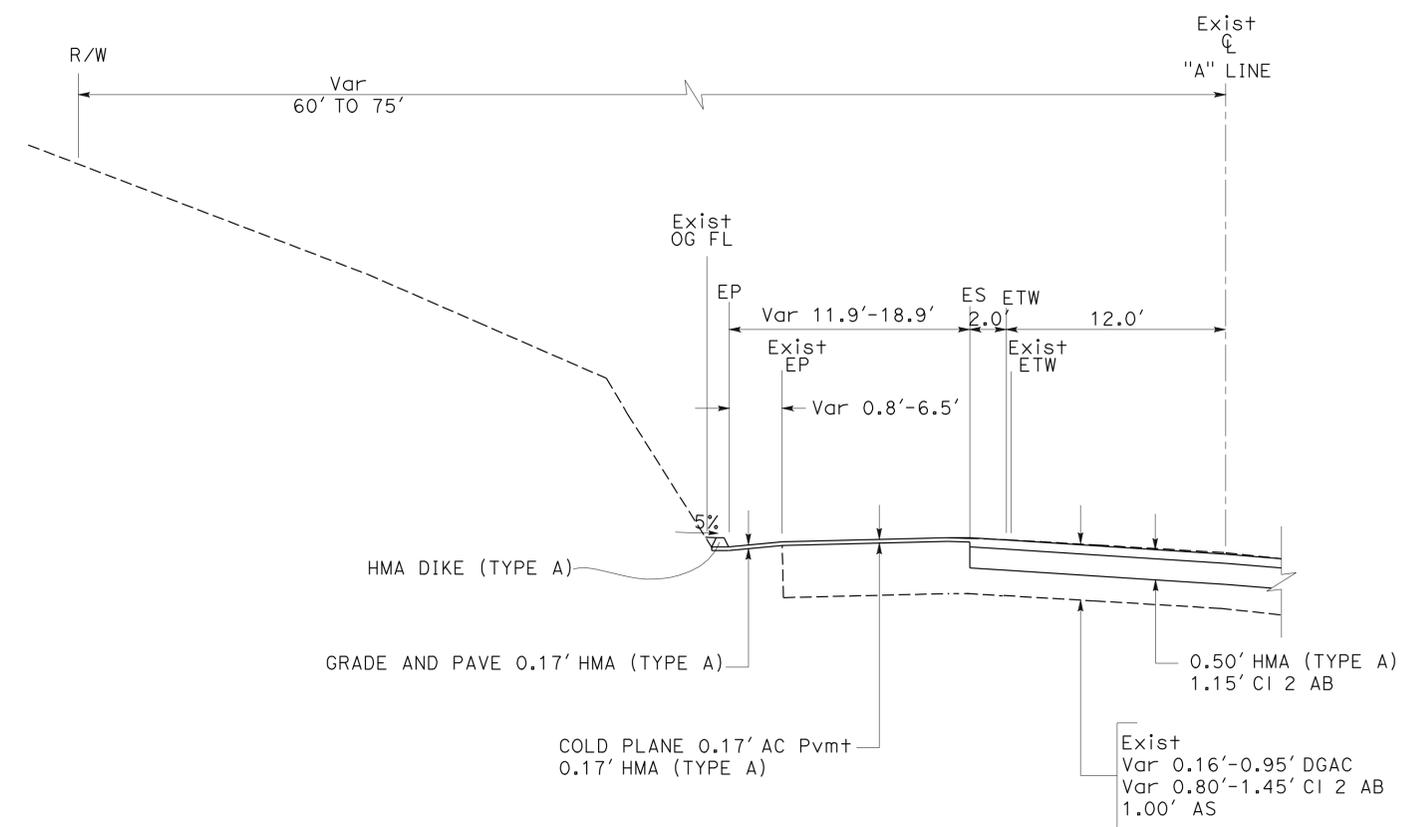
CALCULATED-DESIGNED BY
 CHECKED BY

JOHNY TAN

REVISED BY
 DATE REVISED

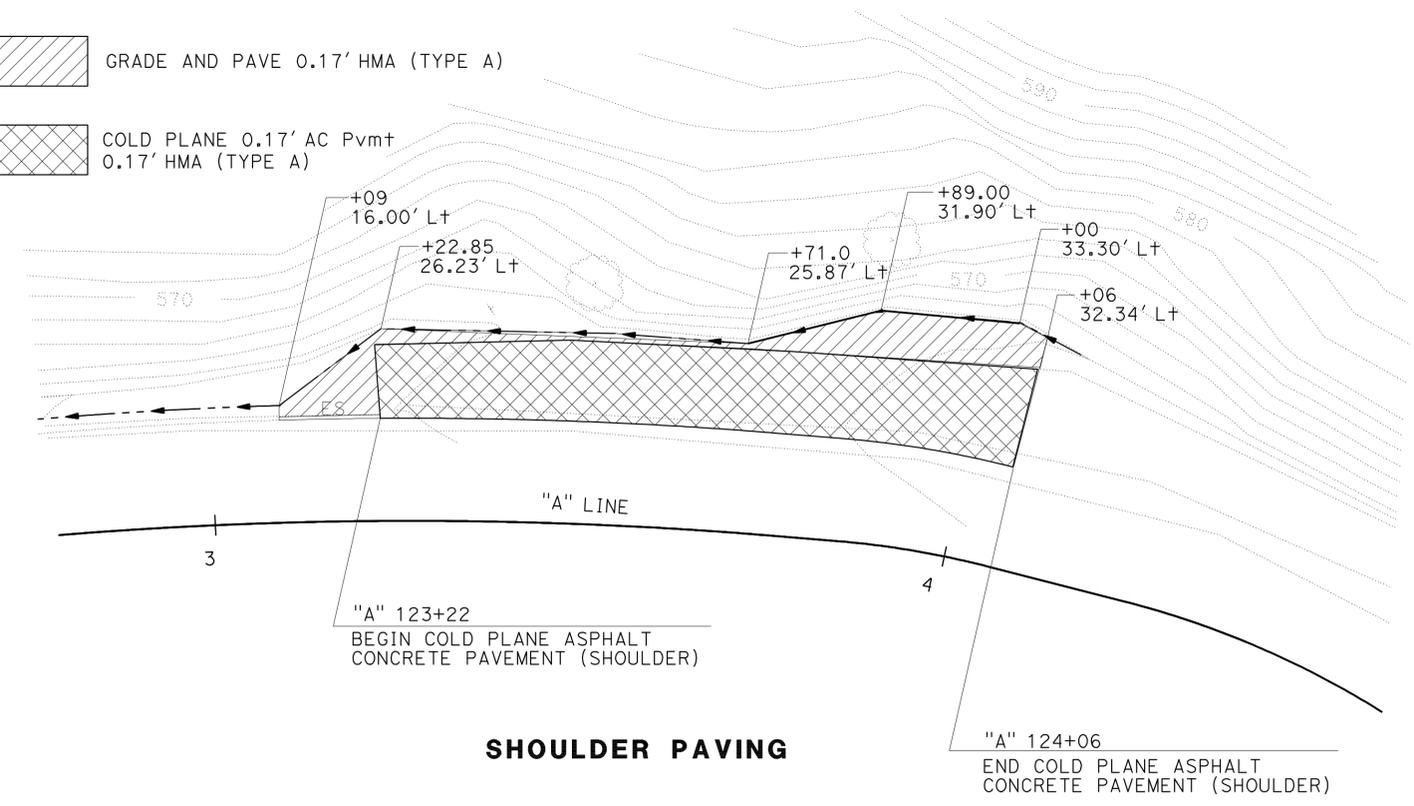
JT

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	36	20.9	7	32
			10-01-09	DATE	
			1-4-10	PLANS APPROVAL DATE	
REGISTERED CIVIL ENGINEER JOHN TAN No. 64316 Exp. 6-30-11 CIVIL STATE OF CALIFORNIA					
<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>					



TYPICAL SECTION

- GRADE AND PAVE 0.17' HMA (TYPE A)
- COLD PLANE 0.17' AC Pvm+ 0.17' HMA (TYPE A)



SHOULDER PAVING

CONSTRUCTION DETAILS

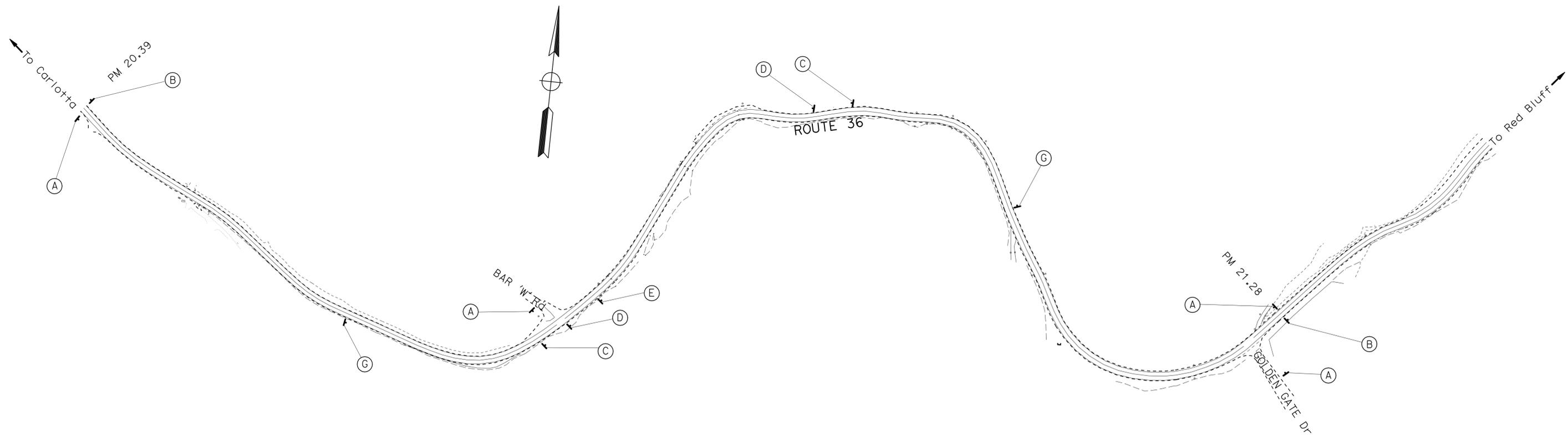
NO SCALE

C-1

- NOTES:
- EXACT SIGN LOCATION TO BE DETERMINED BY THE ENGINEER.
 - SEE STAGE CONSTRUCTION AND TRAFFIC HANDLING PLANS FOR DETAILS.
 - (F) WITH FLASHING BEACON (SEE ELECTRICAL PLANS).

STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

SIGN NO.	SIGN CODE	SIZE	SIGN MESSAGE	NO. OF POST AND SIZE	NO. OF SIGNS	RELOCATE SIGN	LOCATION (PM)		LOCAL STREET LOCATION
(A)	W20-1	36" x 36"	ROAD WORK AHEAD (F)	1- 6" x 6"	4		21.28	20.39	BAR "W" Rd GOLDEN GATE Dr
(B)	G20-2	18" x 36"	END ROAD WORK	1- 4" x 4"	2		20.39	21.28	
(C)	W20-4	36" x 36"	ONE LANE ROAD AHEAD (F)	1- 6" x 6"	2		21.16	20.51	
(D)	W3-3	36" x 36"	SIGNAL (SYMBOL) (F)	1- 4" x 6"	2		21.04	20.72	
(E)	R10-6	24" x 36"	STOP HERE ON RED	1- 4" x 4"	2		20.98	20.81	
(F)	W1-4R	30" x 30"	REVERSE CURVE (SYMBOL)	1- 4" x 4"	1	1	20.96	20.83	
(G)	W11-1	30" x 30"	BICYCLE TRAFFIC (SYMBOL)	1- 6" x 6"	2		21.22	20.45	
	W16-1	18" x 24"	SHARE THE ROAD		2				



CONSTRUCTION AREA SIGNS
NO SCALE
CS-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 NORTH REGION
 OFFICE OF DESIGN, SOUTH
 DESIGN BRANCH 10
 Charles Olson
 Functional Supervisor
 JOHNY TAN
 Revised By
 JT
 Calculated/Designed By
 Checked By

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	36	20.9	9	32

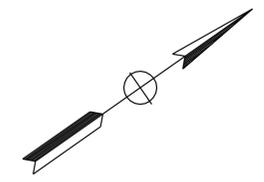
REGISTERED CIVIL ENGINEER	DATE
1-4-10	10-01-09
PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER
JOHNY TAN
No. 64316
Exp. 6-30-11
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.

NOTE:
1. SEE ELECTRICAL PLANS FOR FLASHING BEACON DETAILS.

- LEGEND:
-  CONSTRUCT THIS STAGE
 - (P) PAINT
 - CHANNELIZER (SURFACE MOUNTED) @ 20' C-C
 -  PAVEMENT MARKING ARROW (TYPE VI ARROW)



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 NORTH REGION
 OFFICE OF DESIGN, SOUTH
 DESIGN BRANCH 10
 Et Caltrans

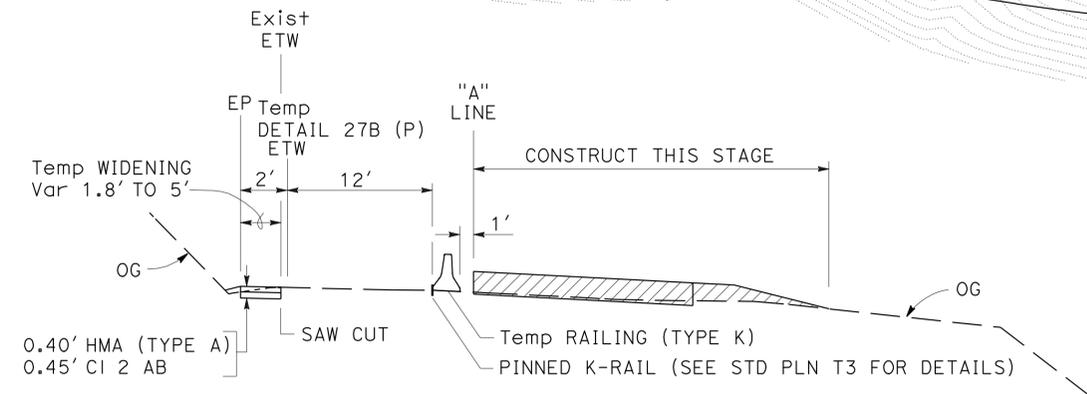
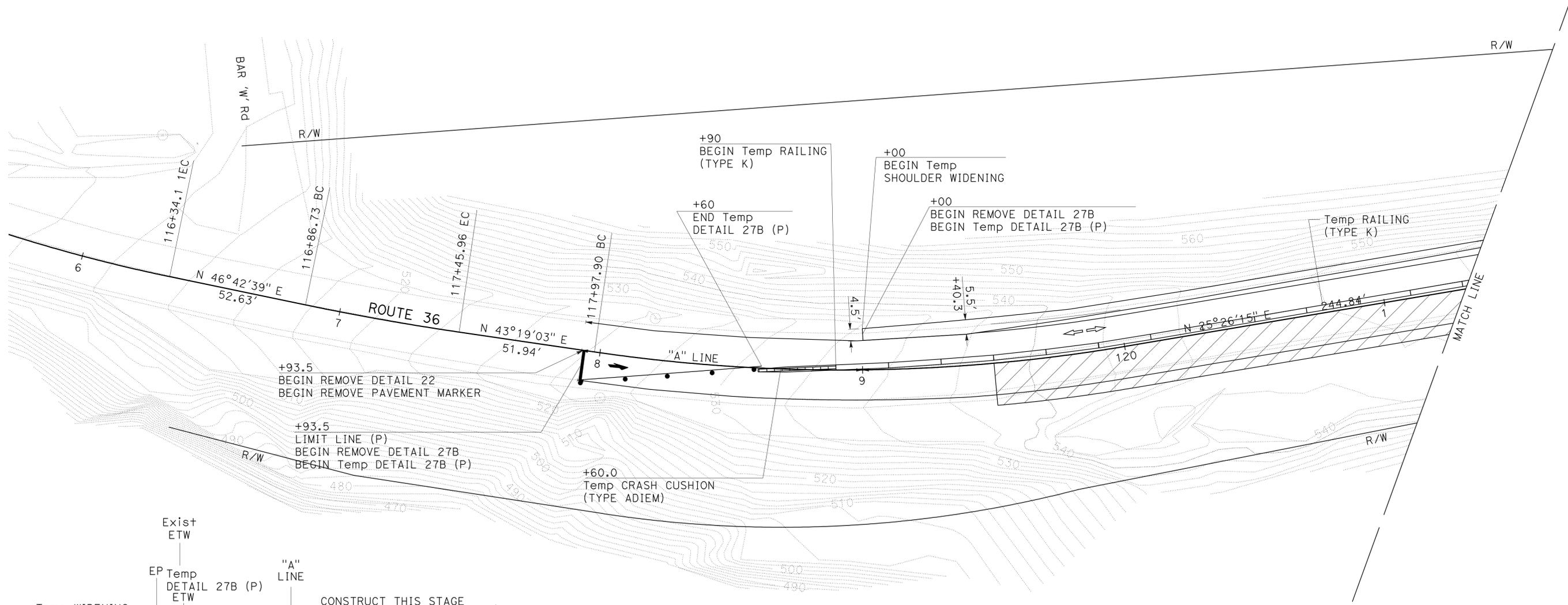
FUNCTIONAL SUPERVISOR
 CHARLES OLSON

CALCULATED-DESIGNED BY
 CHECKED BY

JOHNY TAN

REVISED BY
 DATE REVISED

JT



STAGE CONSTRUCTION AND TRAFFIC HANDLING PLANS (STAGE 1)

SCALE: 1" = 20'

SC-1

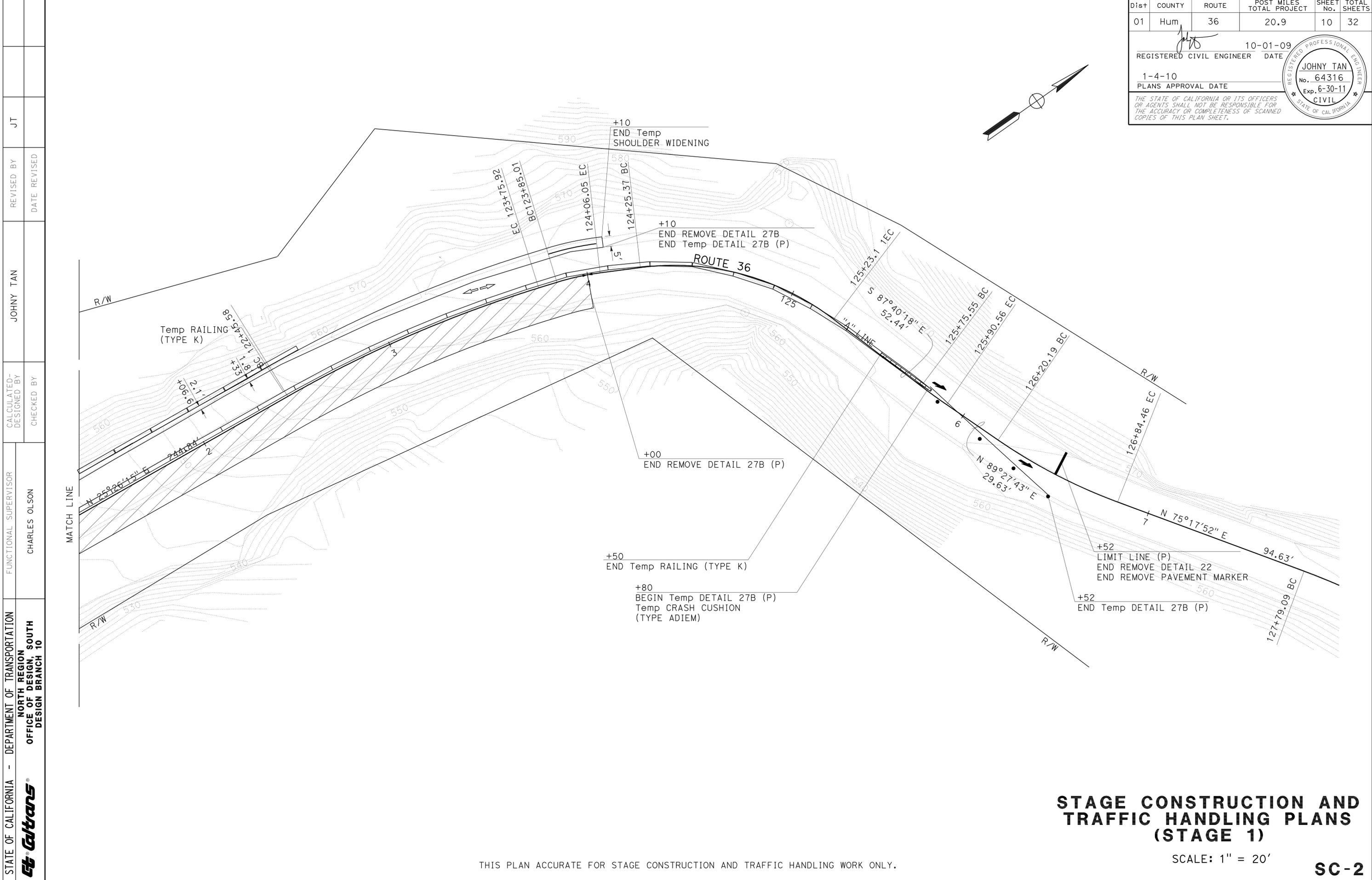
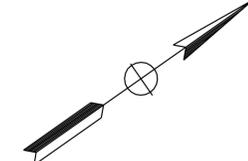
THIS PLAN ACCURATE FOR STAGE CONSTRUCTION AND TRAFFIC HANDLING WORK ONLY.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	36	20.9	10	32

10-01-09
 REGISTERED CIVIL ENGINEER DATE
 1-4-10
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
JOHNY TAN
 No. 64316
 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 SCANNED COPIES OF THIS PLAN SHEET.



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION NORTH REGION OFFICE OF DESIGN, SOUTH DESIGN BRANCH 10	FUNCTIONAL SUPERVISOR CHARLES OLSON	CALCULATED- DESIGNED BY CHECKED BY	JOHNY TAN	REVISED BY DATE REVIS	JT
---	--	--	-----------	--------------------------	----

STAGE CONSTRUCTION AND TRAFFIC HANDLING PLANS (STAGE 1)

SCALE: 1" = 20'

SC-2

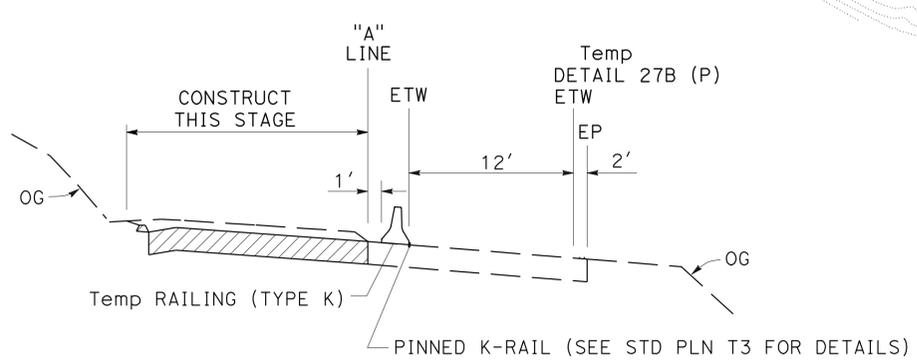
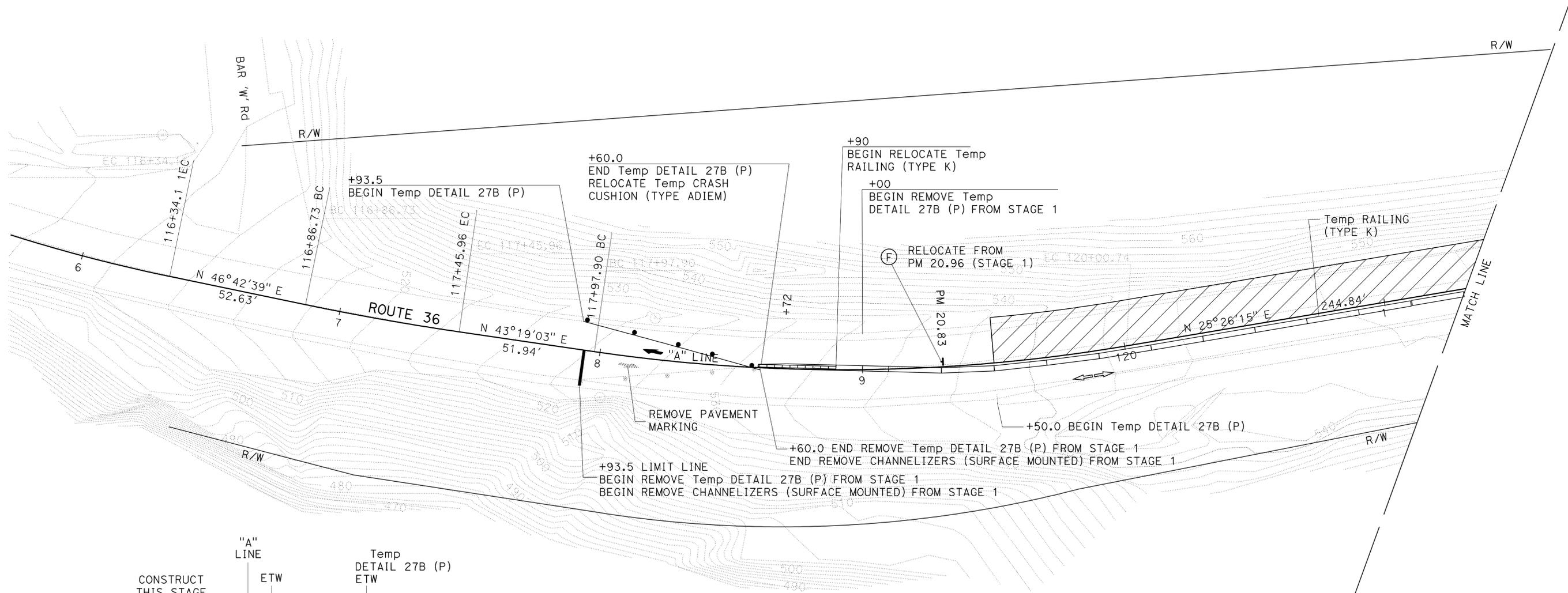
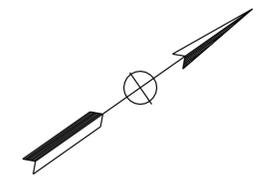
THIS PLAN ACCURATE FOR STAGE CONSTRUCTION AND TRAFFIC HANDLING WORK ONLY.



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	36	20.9	11	32
			REGISTERED CIVIL ENGINEER	DATE	
			10-01-09		
			PLANS APPROVAL DATE		
			1-4-10		
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.					



NOTE:
 1. CONSTRUCTION AREA SIGNS AND Temp PAVEMENT DELINEATION TO REMAIN IN PLACE FROM STAGE 1 UNLESS NOTED OTHERWISE.



STAGE 2

STAGE CONSTRUCTION AND TRAFFIC HANDLING PLANS (STAGE 2)

SCALE: 1" = 20'

SC-3

THIS PLAN ACCURATE FOR STAGE CONSTRUCTION AND TRAFFIC HANDLING WORK ONLY.

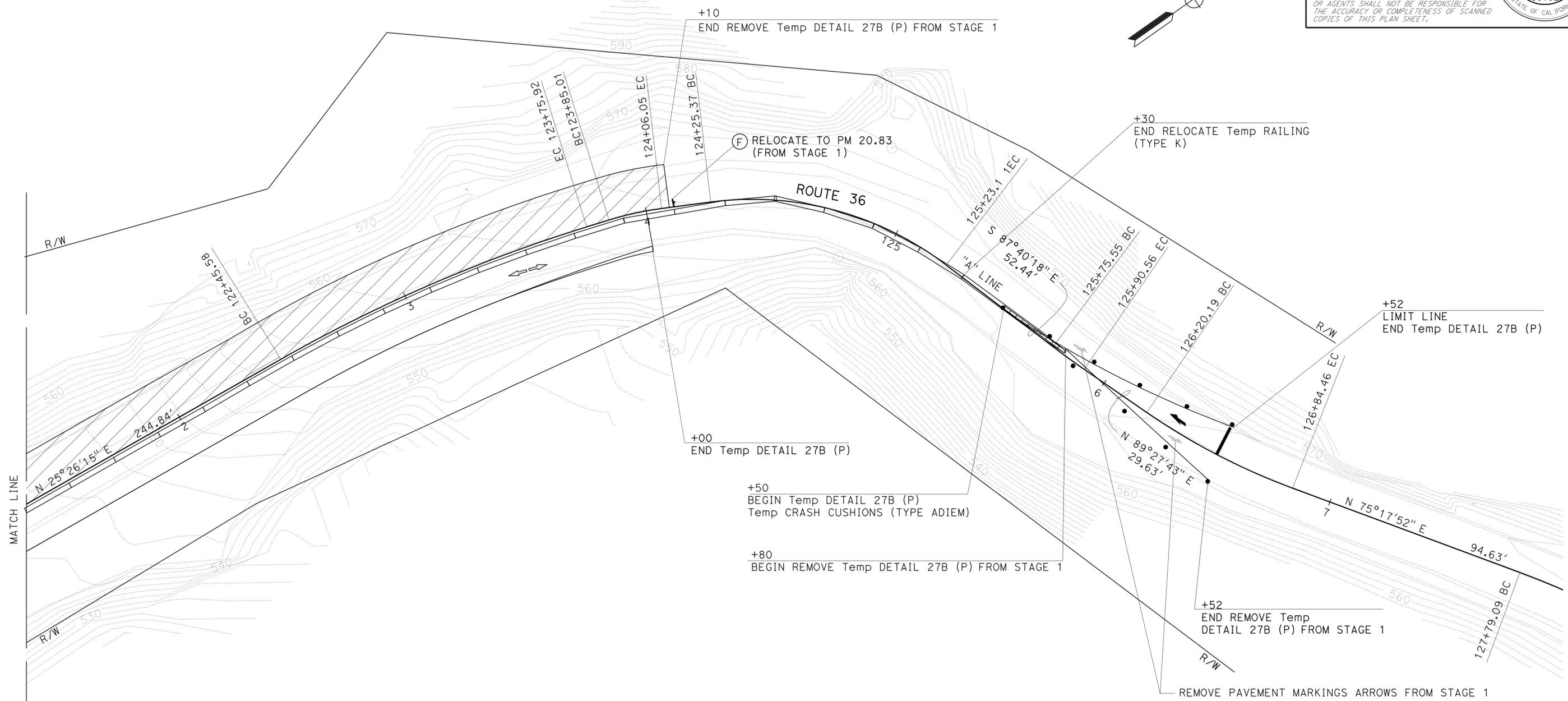
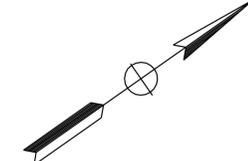
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	JOHNNY TAN	REVISOR	DATE
NORTH REGION OFFICE OF DESIGN, SOUTH DESIGN BRANCH 10	JT	BY	
CHARLES OLSON		DATE	
FUNCTIONAL SUPERVISOR		DATE	
CHECKED BY		DATE	
CALCULATED/DESIGNED BY		DATE	

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	36	20.9	12	32

REGISTERED CIVIL ENGINEER	DATE
1-4-10	10-01-09
PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER
JOHNY TAN
No. 64316
Exp. 6-30-11
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.



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 NORTH REGION
 OFFICE OF DESIGN, SOUTH
 DESIGN BRANCH 10

FUNCTIONAL SUPERVISOR
 CHARLES OLSON

JOHNY TAN

REVISOR
 JT

DATE REVISOR

STAGE CONSTRUCTION AND TRAFFIC HANDLING PLANS (STAGE 2)

SCALE: 1" = 20'

SC-4

THIS PLAN ACCURATE FOR STAGE CONSTRUCTION AND TRAFFIC HANDLING WORK ONLY.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	36	20.9	13	32

10-01-09
REGISTERED CIVIL ENGINEER DATE

1-4-10
PLANS APPROVAL DATE

JOHNY TAN
No. 64316
Exp. 6-30-11
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.

TRAFFIC CONTROL ITEMS

STAGE	STATION	TEMPORARY RAILING (TYPE K)	TEMPORARY CRASH CUSHION (TYPE ADIEM)	RELOCATE TEMPORARY RAILING (TYPE K)	RELOCATE TEMPORARY CRASH CUSHION (TYPE ADIEM)
		LF	EA	LF	EA
1	"A" 118+60		1		
1	"A" 118+90 TO "A" 125+50	660			
1	"A" 125+80		1		
2	"A" 118+60				1
2	"A" 118+90 TO "A" 125+30			640	
2	"A" 125+80				1
	TOTAL	660	2	640	2

PAVEMENT DELINEATION REMOVAL

STAGE	STATION	DETAIL No.	L+/R+	REMOVE THERMOPLASTIC TRAFFIC STRIPE		REMOVE PAVEMENT MARKER	REMOVE PAVEMENT MARKING	REMOVE PAINTED TRAFFIC STRIPE
				WHITE	YELLOW (HAZARDOUS WASTE)			
				LF	EA			
1	"A" 117+93.5 TO "A" 126+52	22	CL		1717	72		
1	"A" 117+93.5 TO "A" 124+00	27B	R+	606.5				
1	"A" 119+00.0 TO "A" 124+10	27B	L+	510				
2	"A" 119+00.0 TO "A" 124+10	27B	L+					510
2	"A" 117+93.5 TO "A" 118+60	27B	R+					66.5
2	"A" 125+80.0 TO "A" 126+52	27B	R+					72
2	"A" 118+10	TYPE VI ARROW					42	
2	"A" 125+75	TYPE VI ARROW					42	
2	"A" 126+30	TYPE VI ARROW					42	
	TOTAL			1116.5	1717	72	126	648.5

TEMPORARY TRAFFIC STRIPE

STAGE	STATION	L+/R+	DETAIL No.	TEMPORARY TRAFFIC STRIPE (PAINT)
				SOLID WHITE
1	"A" 117+93.5 TO "A" 118+60	R+	27B	66.5
1	"A" 119+00.0 TO "A" 124+10	L+	27B	510
1	"A" 125+80.0 TO "A" 126+52	R+	27B	72
2	"A" 119+50 TO "A" 124+00	R+	27B	450
2	"A" 117+93.5 TO "A" 118+60	L+	27B	66.5
2	"A" 125+50 TO "A" 126+52	R+	27B	102
	TOTAL			1267

CHANNELIZER (SURFACE MOUNTED)

STAGE	STATION	EA
1	"A" 117+93.5 TO "A" 118+60	5
1	"A" 125+80.0 TO "A" 126+52	4
2	"A" 119+00.0 TO "A" 124+10	5
2	"A" 125+80.0 TO "A" 126+52	6
	TOTAL	20

TEMPORARY SHOULDER WIDENING*

STATION	ROADWAY EXCAVATION	CLASS 2 AGGREGATE BASE	HOT MIX ASPHALT (TYPE A)
	CY	CY	TON
"A" 119+00 TO "A" 124+40.3	6.2	3.3	0.22
"A" 119+40.3 TO "A" 122+06.6	27.6	14.6	0.98
"A" 122+6.6 TO "A" 122+33	1.7	0.9	0.60
"A" 122+33 TO "A" 124+10	23.1	12.2	0.80
TOTAL	58.6	31.0	2.60

* FOR ITEM TOTALS, SEE SUMMARY OF QUANTITIES

TEMPORARY PAVEMENT MARKING

STAGE	STATION	L+/R+	ORIENTATION	TYPE/LEGEND	PAINT
					SQFT
1	"A" 117+93.5	R+	NB	LIMIT LINE	12
1	"A" 126+52	L+	SB	LIMIT LINE	12
1	"A" 118+10	R+	NB	TYPE VI ARROW	42
1	"A" 125+75	L+	NB	TYPE VI ARROW	42
1	"A" 126+30	R+	NB	TYPE VI ARROW	42
2	"A" 118+30	L+	SB	TYPE VI ARROW	42
2	"A" 126+30	L+	SB	TYPE VI ARROW	42
	TOTAL				234

STAGE CONSTRUCTION QUANTITIES

SCQ-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 NORTH REGION
 OFFICE OF DESIGN, SOUTH
 DESIGN BRANCH 10

FUNCTIONAL SUPERVISOR
 CHARLES OLSON

CALCULATED-DESIGNED BY
 CHECKED BY

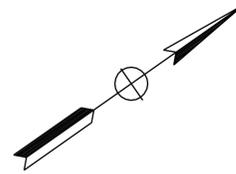
JOHNY TAN

REVISED BY
 DATE REVISED

JT

LEGEND:

-  THERMOPLASTIC TRAFFIC STRIPE DETAIL
-  BEGIN OR END STRIPING DETAIL

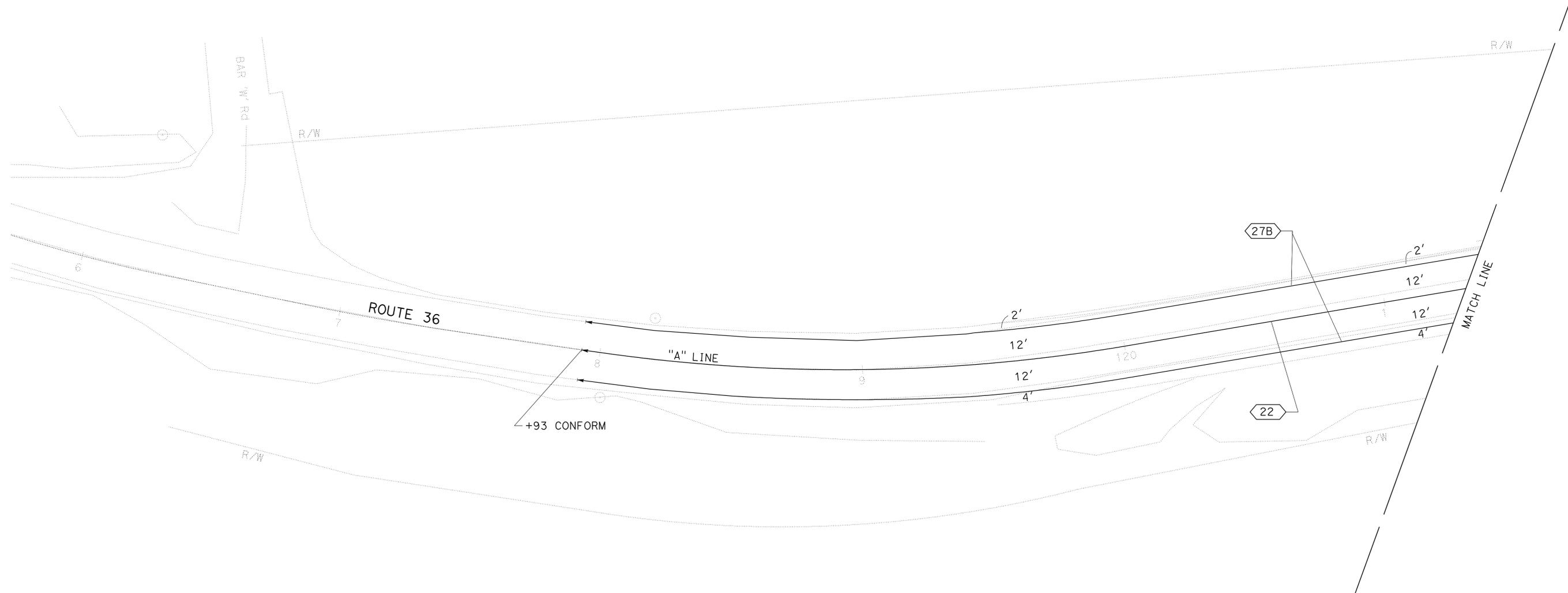


Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	36	20.9	14	32

 10-01-09
 REGISTERED CIVIL ENGINEER DATE
 1-4-10
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
JOHNY TAN
 No. 64316
 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 SCANNED COPIES OF THIS PLAN SHEET.



PAVEMENT DELINEATION PLAN

SCALE: 1" = 20'

PD-1

THIS PLAN ACCURATE FOR PAVEMENT DELINEATION WORK ONLY.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 NORTH REGION
 OFFICE OF DESIGN, SOUTH
 DESIGN BRANCH 10

FUNCTIONAL SUPERVISOR
 CHARLES OLSON

CALCULATED-DESIGNED BY
 CHECKED BY

JOHNY TAN

REVISED BY
 DATE REVISED

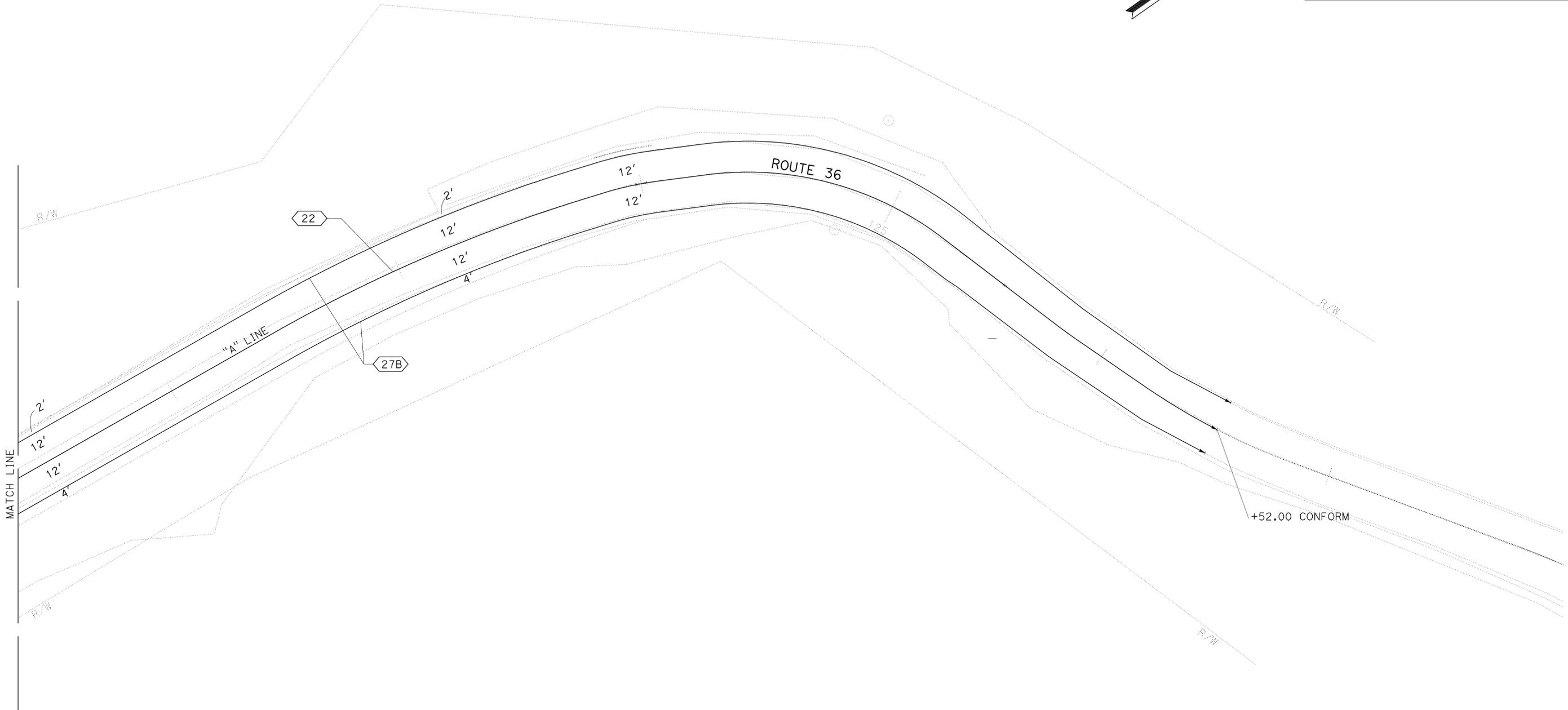
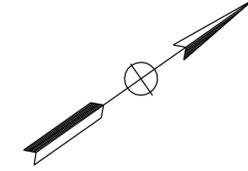
JT

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	36	20.9	15	32

REGISTERED CIVIL ENGINEER DATE 10-01-09
 1-4-10
 PLANS APPROVAL DATE

JOHNY TAN
 No. 64316
 Exp. 6-30-11
 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.



PAVEMENT DELINEATION PLAN

SCALE: 1" = 20'

PD-2

THIS PLAN ACCURATE FOR PAVEMENT DELINEATION WORK ONLY.

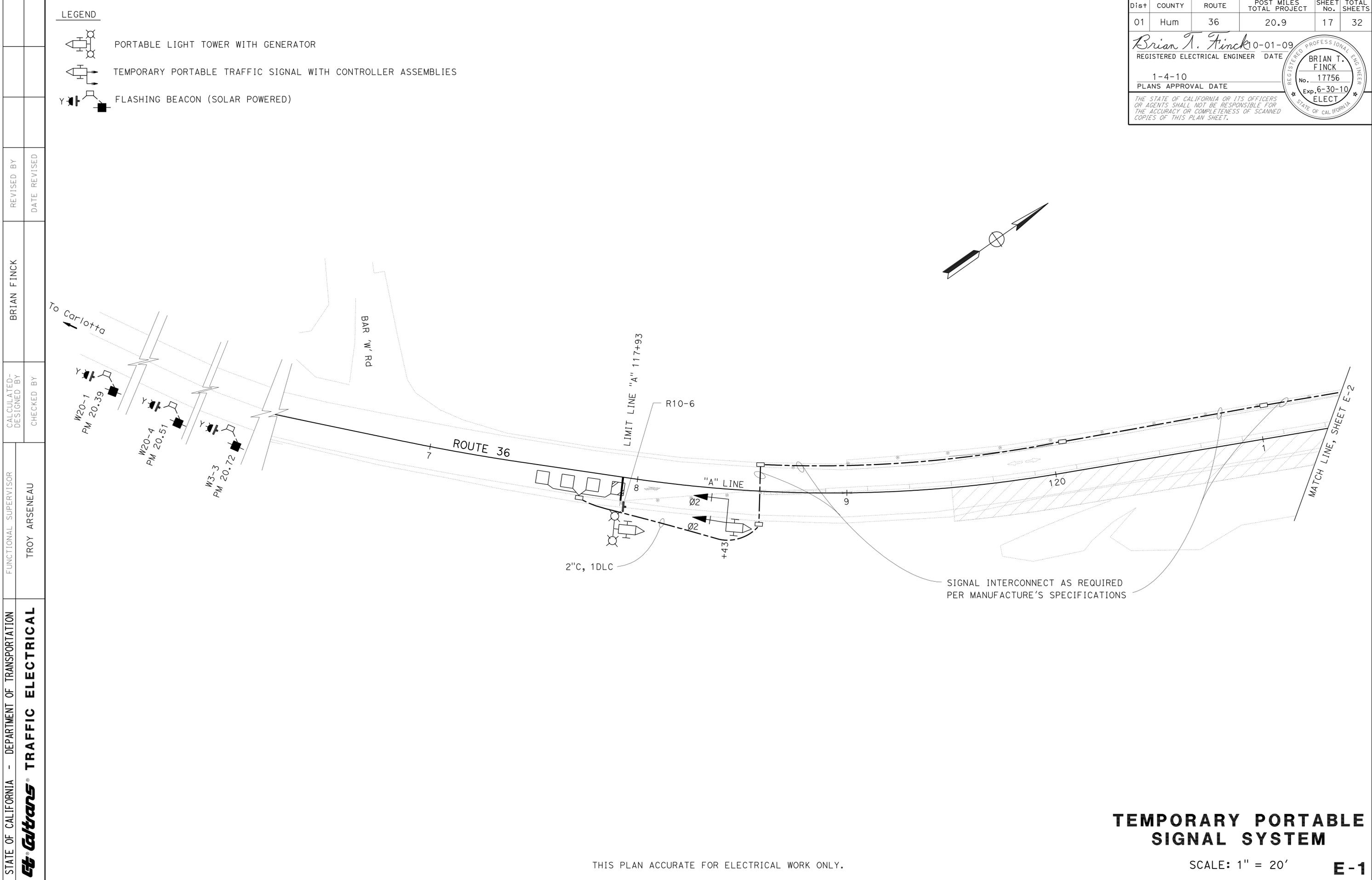
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	36	20.9	17	32

<i>Brian T. Finck</i> 10-01-09	
REGISTERED ELECTRICAL ENGINEER	DATE
1-4-10	
PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER	
BRIAN T. FINCK	
No. 17756	
Exp. 6-30-10	
ELECT	

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.

- LEGEND**
-  PORTABLE LIGHT TOWER WITH GENERATOR
 -  TEMPORARY PORTABLE TRAFFIC SIGNAL WITH CONTROLLER ASSEMBLIES
 -  FLASHING BEACON (SOLAR POWERED)



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	DESIGNED BY	REVISOR
Caltrans TRAFFIC ELECTRICAL	TROY ARSENEAU	BRIAN FINCK	BRIAN FINCK
	CHECKED BY	DATE	REVISION

THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.

TEMPORARY PORTABLE SIGNAL SYSTEM

SCALE: 1" = 20' **E-1**

LAST REVISION DATE PLOTTED => 07-JAN-2010
 00-00-00 TIME PLOTTED => 07:20

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	36	20.9	18	32

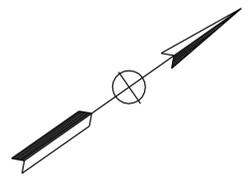
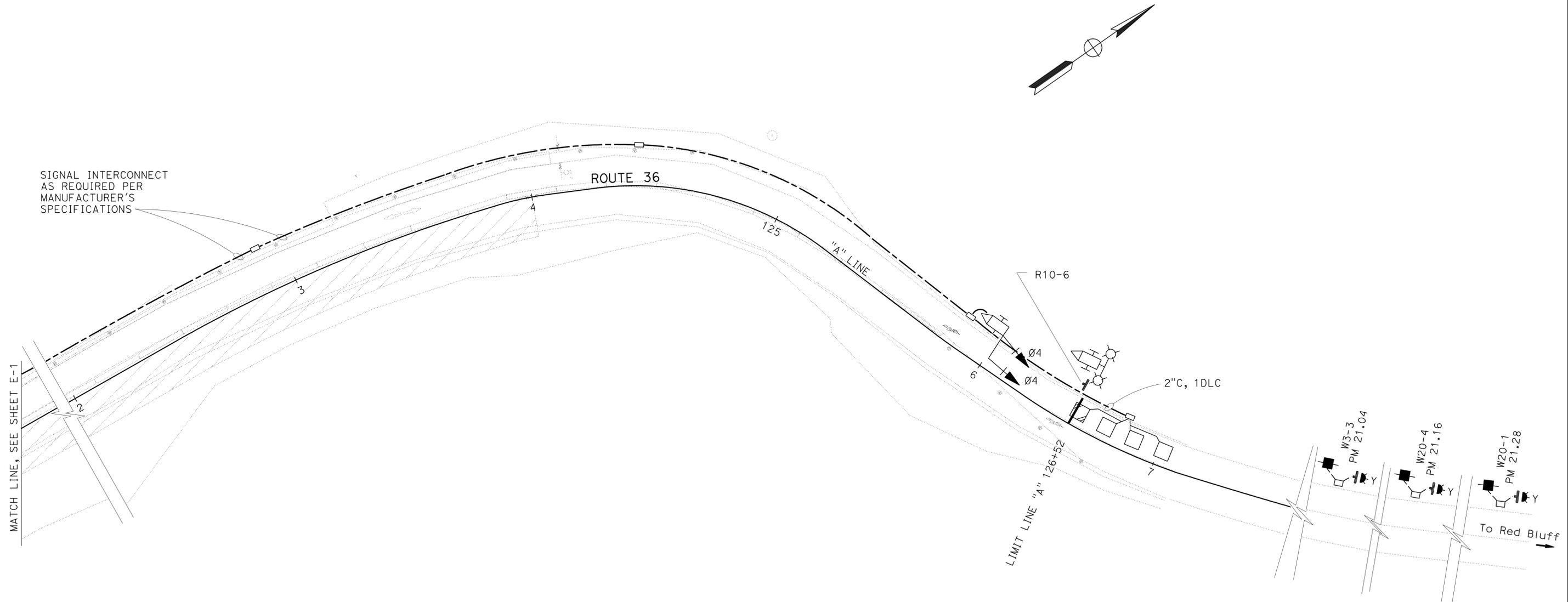
Brian T. Finck 10-01-09
REGISTERED ELECTRICAL ENGINEER DATE

1-4-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
BRIAN T. FINCK
No. 17756
Exp. 6-30-10
ELECT
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.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	REVISOR
Caltrans TRAFFIC ELECTRICAL	TROY ARSENEAU	CHECKED BY	BRIAN FINCK
			REVISOR
			DATE REVISOR



TEMPORARY PORTABLE SIGNAL SYSTEM

SCALE: 1" = 20' **E-2**

THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	36	20.9	19	32

Brian T. Finck 10-01-09
REGISTERED ELECTRICAL ENGINEER DATE
1-4-10
PLANS APPROVAL DATE

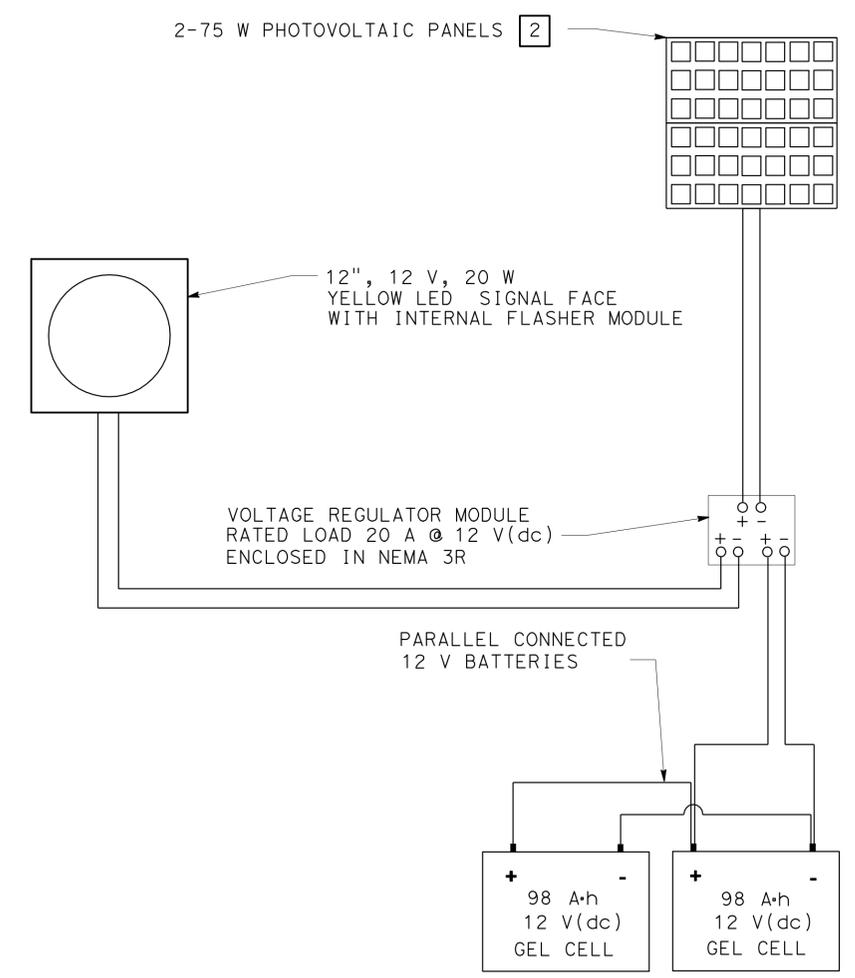
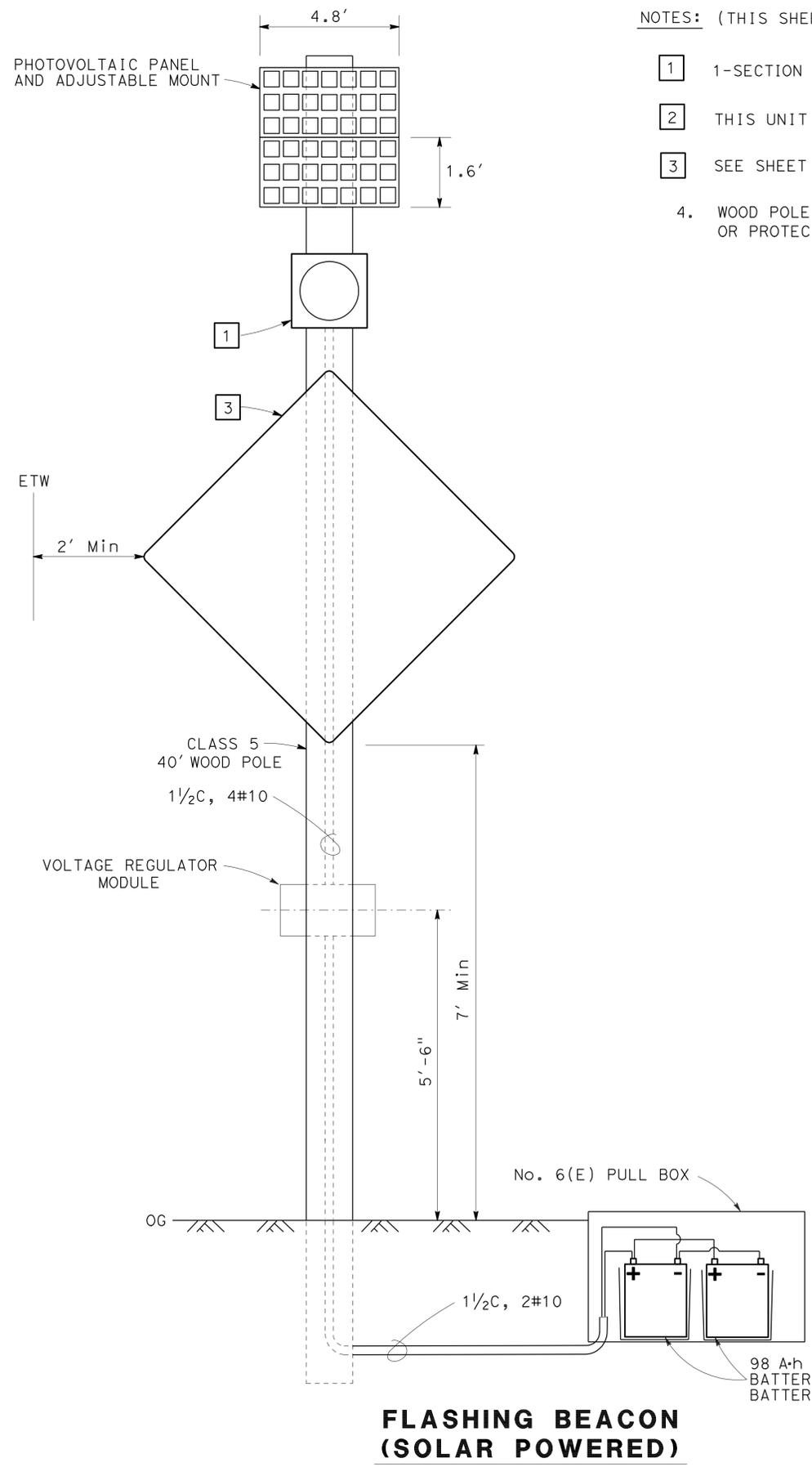
BRIAN T. FINCK
No. 17756
Exp. 6-30-10
ELECT

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.

LEGEND
A·h = AMPERE HOUR

NOTES: (THIS SHEET ONLY)

- 1 1-SECTION SIGNAL FACE WITH VISOR AND BACKPLATE.
- 2 THIS UNIT SHALL BE LOCATED IN AN UNSHADED AREA.
- 3 SEE SHEET CS-1 FOR SIGNS A, C & D.
4. WOOD POLE SHALL BE LOCATED OUTSIDE THE CLEAR RECOVERY ZONE OR PROTECTED IN PLACE.



CONNECTION DIAGRAM

**FLASHING BEACON
(SOLAR POWERED)**

**TEMPORARY PORTABLE
SIGNAL SYSTEM
(DETAILS)**

NO SCALE **E-3**

THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY



USERNAME => trmikes1
DGN FILE => 147540ua003.dgn

CU 03290

EA 475401

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans TRAFFIC ELECTRICAL
FUNCTIONAL SUPERVISOR TROY ARSENEAU
DESIGNED BY
CHECKED BY
BRIAN FINCK
REVISOR BY
DATE REVISED

LAST REVISION | DATE PLOTTED => 07-JAN-2010
00-00-00 TIME PLOTTED => 06:26

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
01	Hum	36	20.9	20	32

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

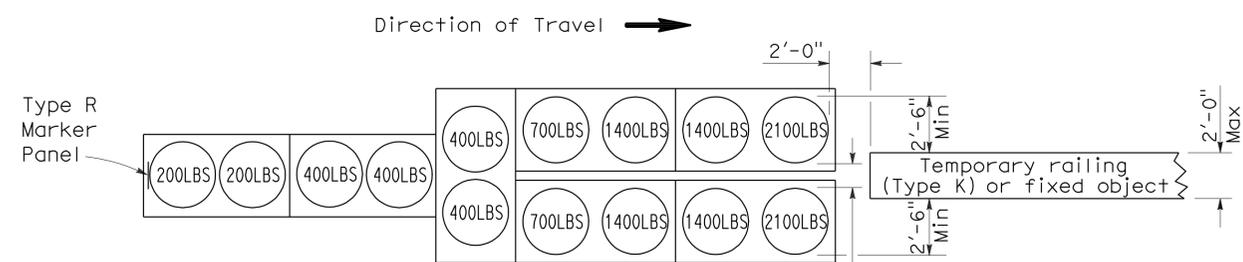
June 6, 2008
PLANS APPROVAL DATE

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

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.

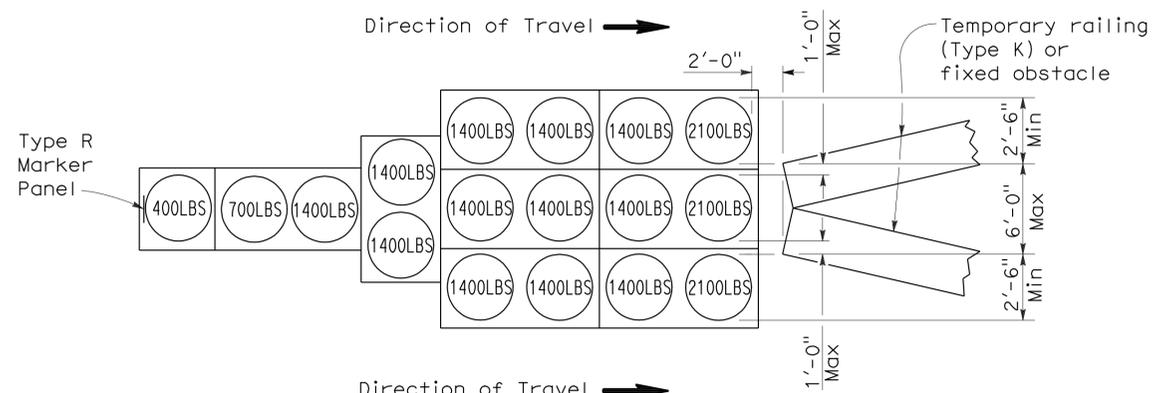
To accompany plans dated 1-4-10

2006 REVISED STANDARD PLAN RSP T1A



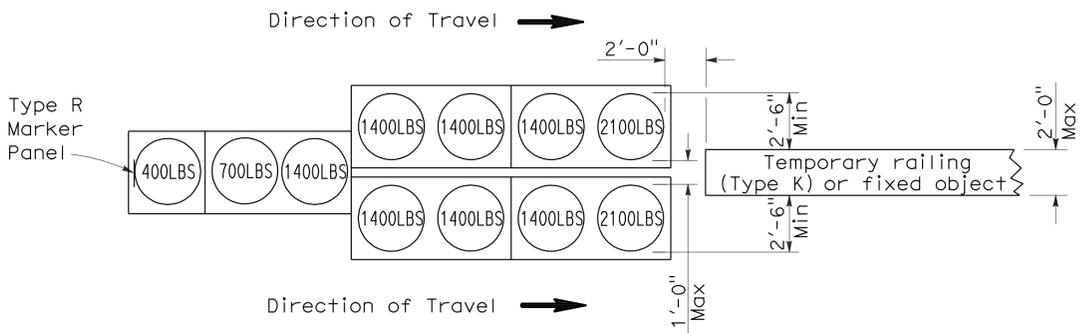
ARRAY 'TU14'

Approach speed 45 mph or more



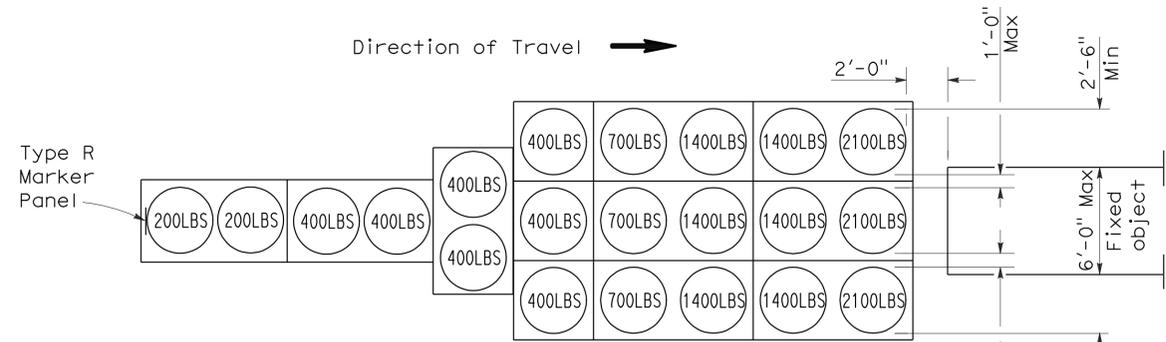
ARRAY 'TU17'

Approach speed less than 45 mph



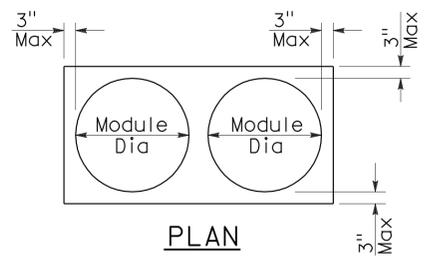
ARRAY 'TU11'

Approach speed less than 45 mph

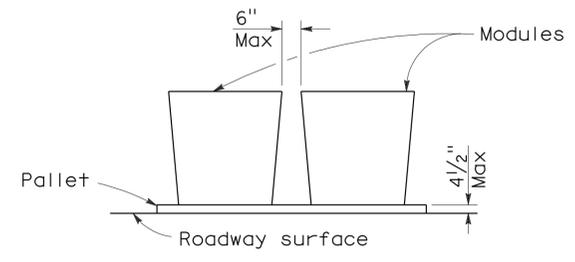


ARRAY 'TU21'

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

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
01	Hum	36	20.9	21	32

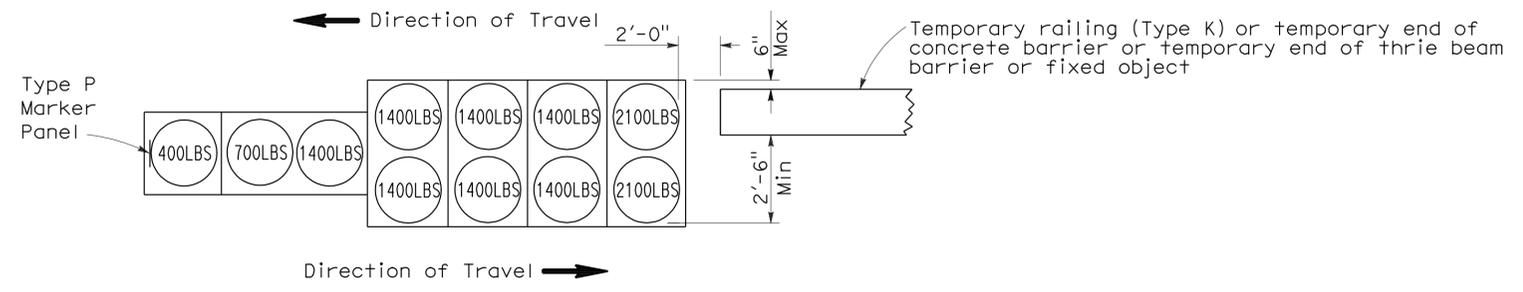
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

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.

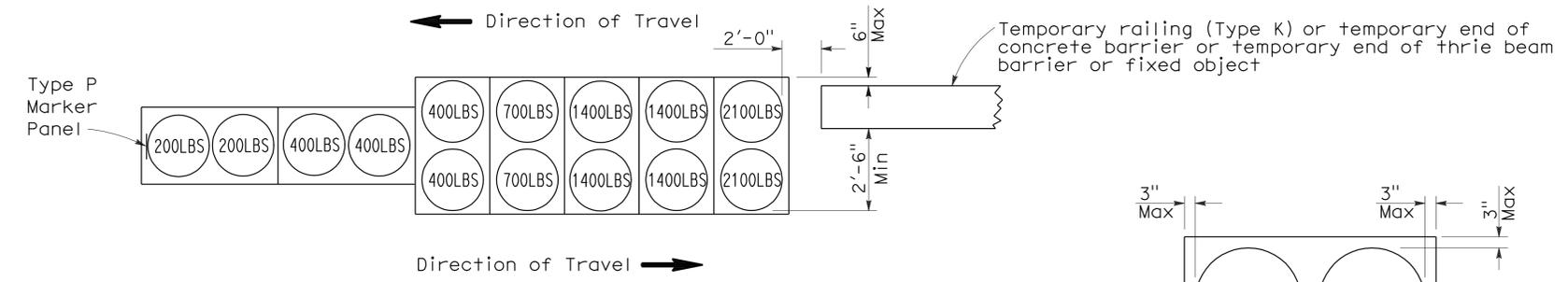
REGISTERED PROFESSIONAL ENGINEER
No. C50200
Exp. 6-30-09
CIVIL
STATE OF CALIFORNIA

To accompany plans dated 1-4-10



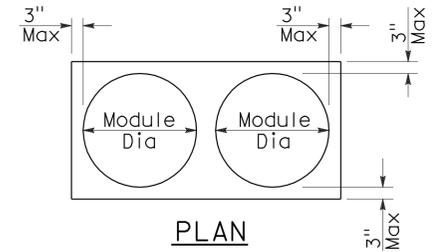
ARRAY 'TB11'

Approach speed less than 45 mph

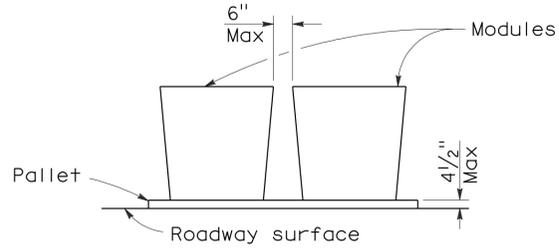


ARRAY 'TB14'

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

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
01	Hum	36	20.9	22	32

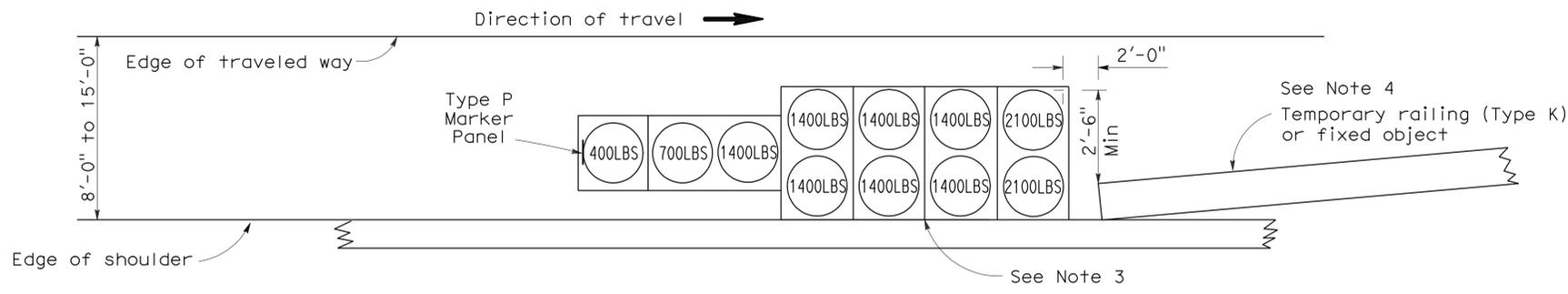
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

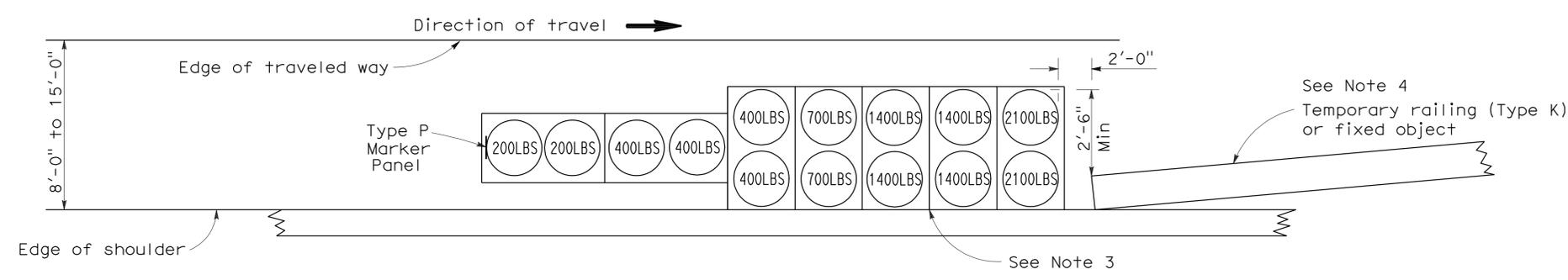
Randell D. Hiatt
REGISTERED PROFESSIONAL ENGINEER
No. C50200
Exp. 6-30-09
CIVIL
STATE OF CALIFORNIA

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.

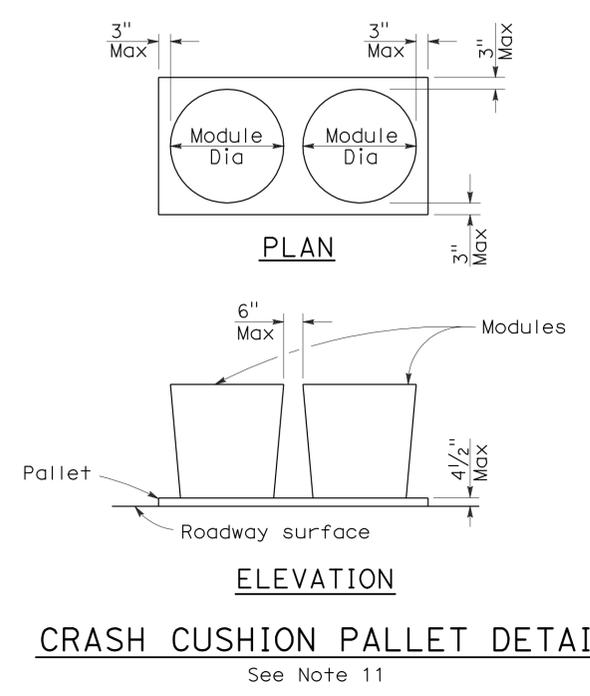
To accompany plans dated 1-4-10



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



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



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

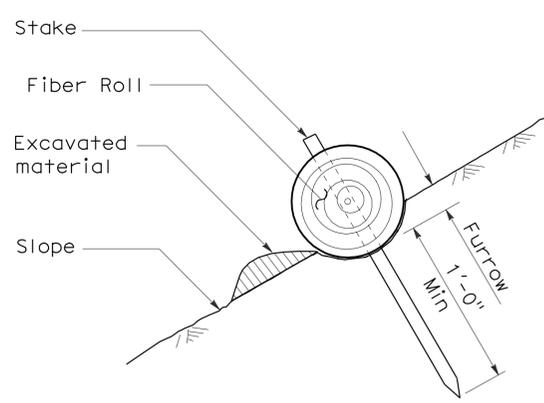
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
01	Hum	36	20.9	23	32

Robert B. Schott
 LICENSED LANDSCAPE ARCHITECT
 April 3, 2009
 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.

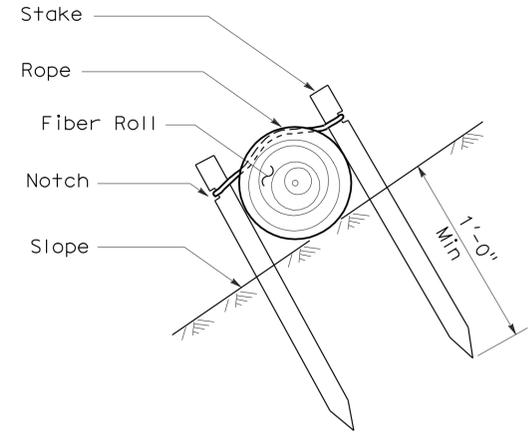
To accompany plans dated 1-4-10

NOTES:

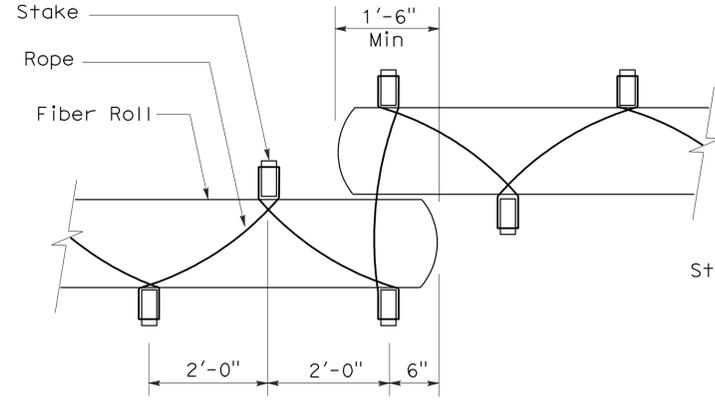
1. Temporary fiber roll spacing varies depending upon slope inclination.
2. Installations shown in the perspectives are for slope inclination of 10:1 and steeper.



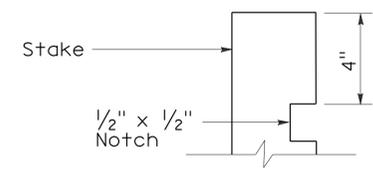
SECTION
TEMPORARY FIBER ROLL
(TYPE 1)



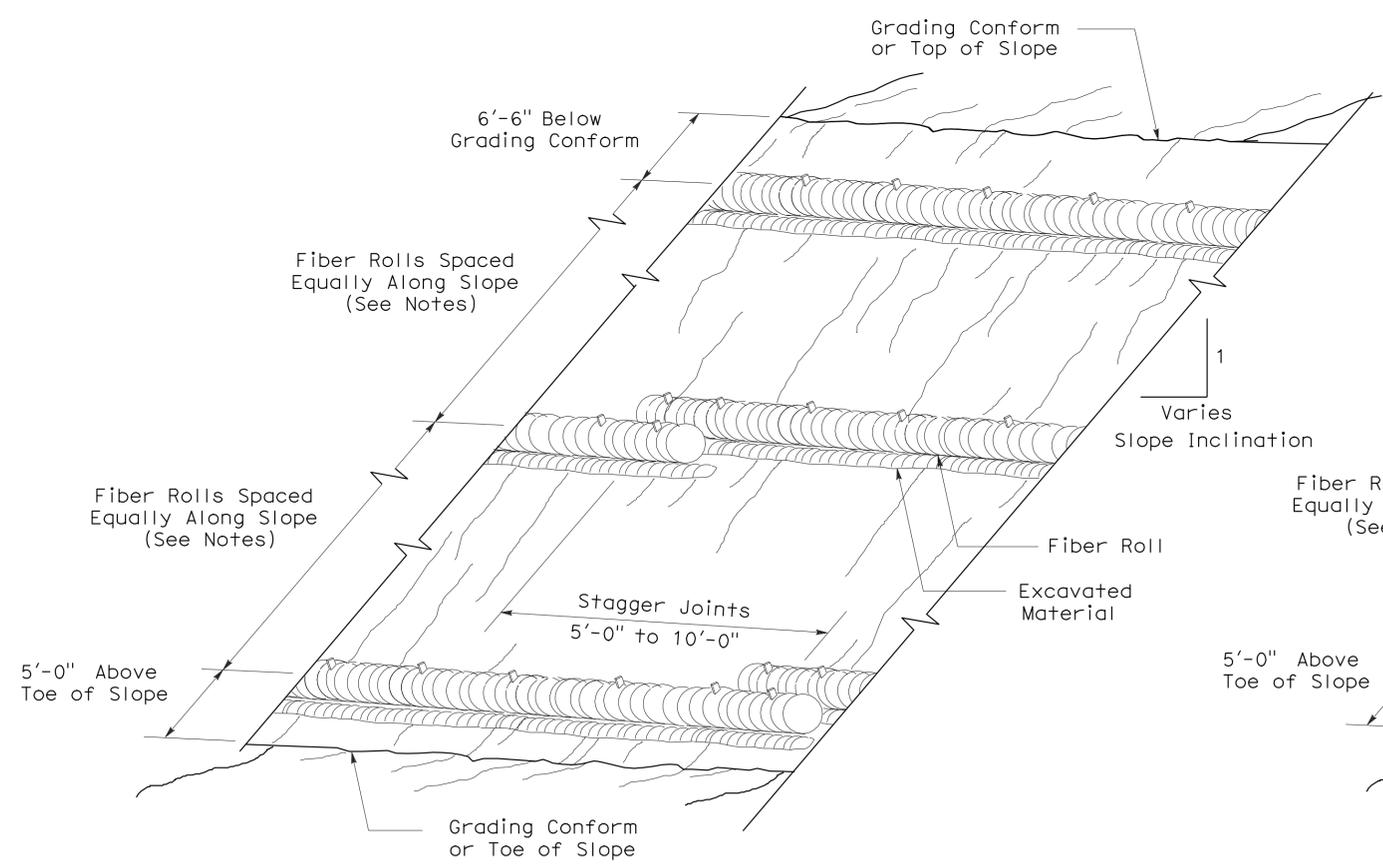
SECTION
TEMPORARY FIBER ROLL
(TYPE 2)



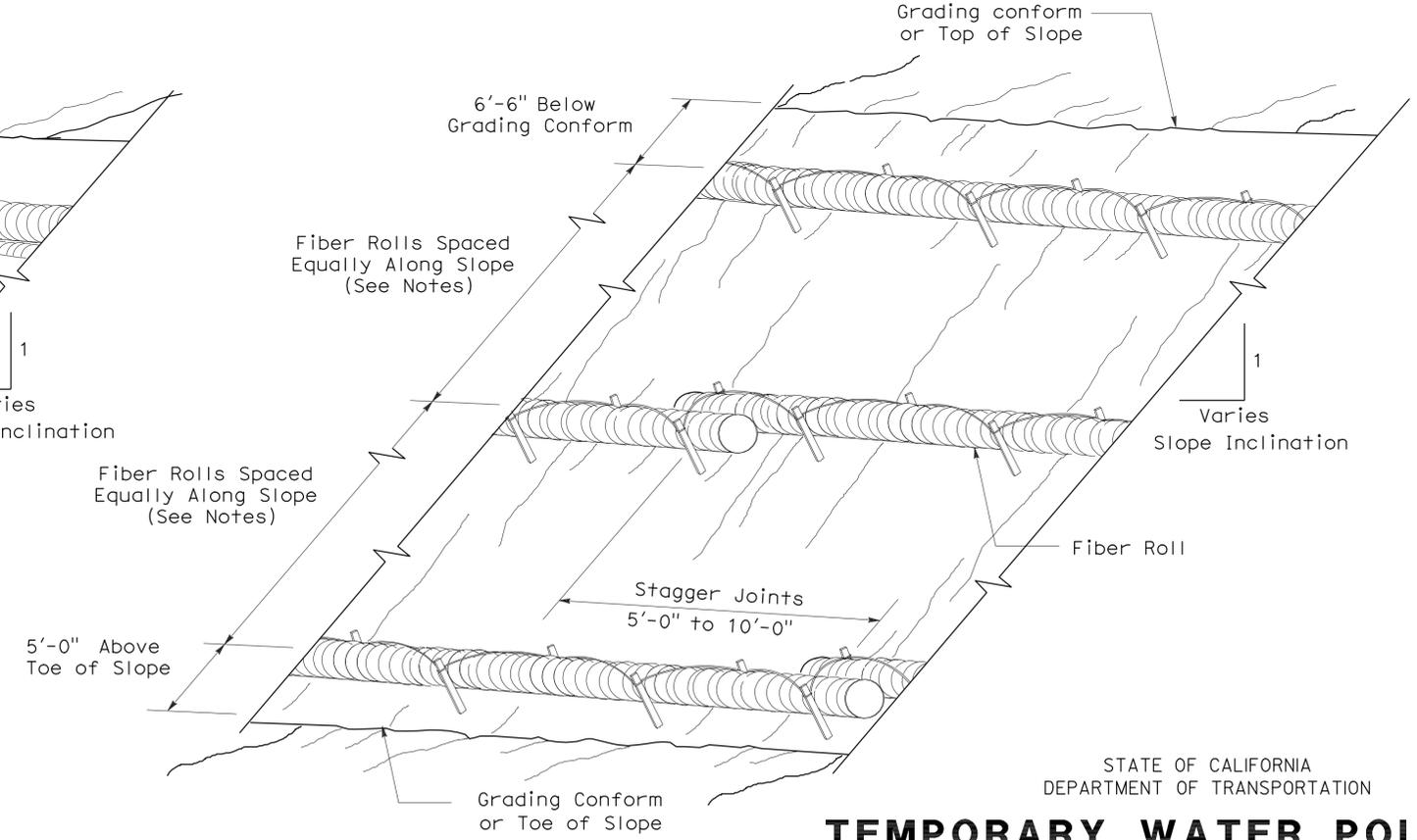
PLAN



ELEVATION
STAKE NOTCH DETAIL



PERSPECTIVE
TEMPORARY FIBER ROLL (TYPE 1)



PERSPECTIVE
TEMPORARY FIBER ROLL (TYPE 2)

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
TEMPORARY WATER POLLUTION CONTROL DETAILS
(TEMPORARY FIBER ROLL)

NO SCALE

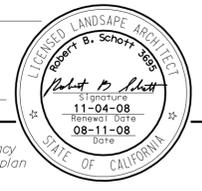
RSP T56 DATED APRIL 3, 2009 SUPERSEDES STANDARD PLAN T56
 DATED MAY 1, 2006 - PAGE 232 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP T56

2006 REVISED STANDARD PLAN RSP T56

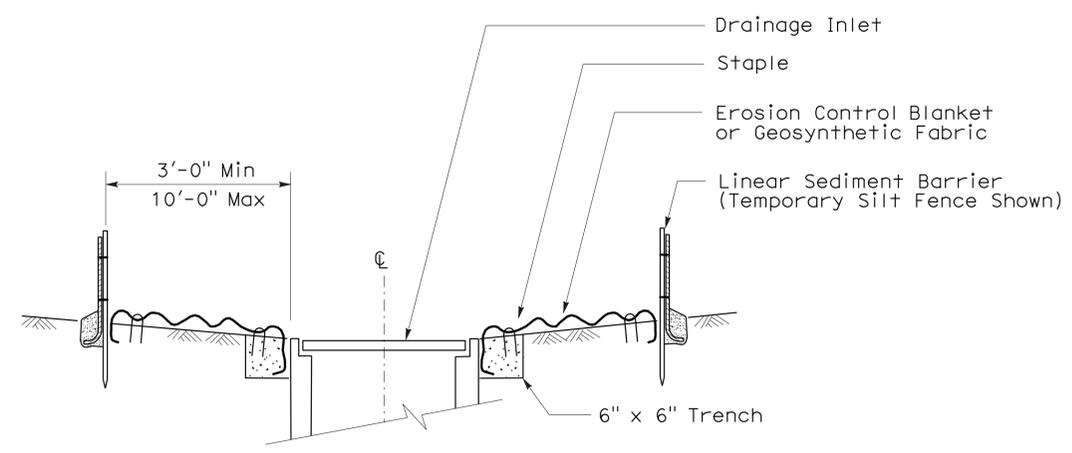
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
01	Hum	36	20.9	24	32

Robert B. Schott
 LICENSED LANDSCAPE ARCHITECT
 August 15, 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.

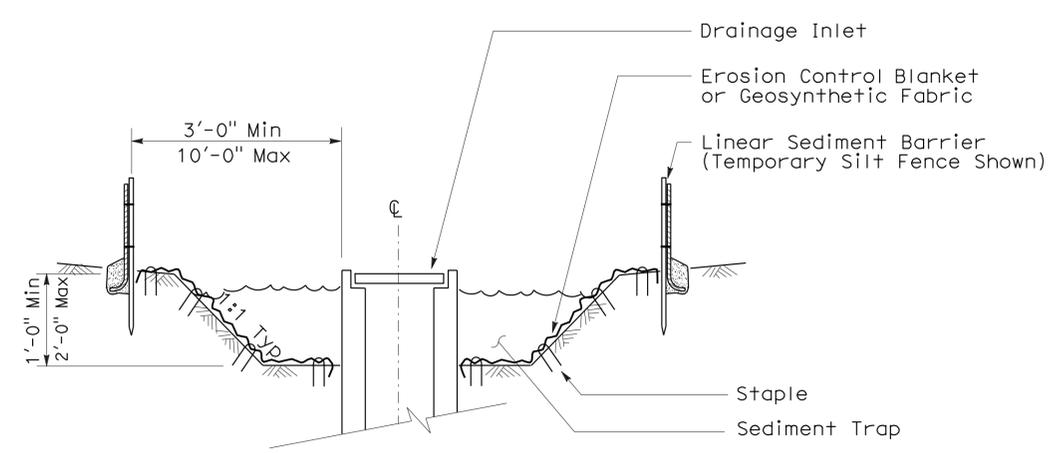


To accompany plans dated 1-4-10

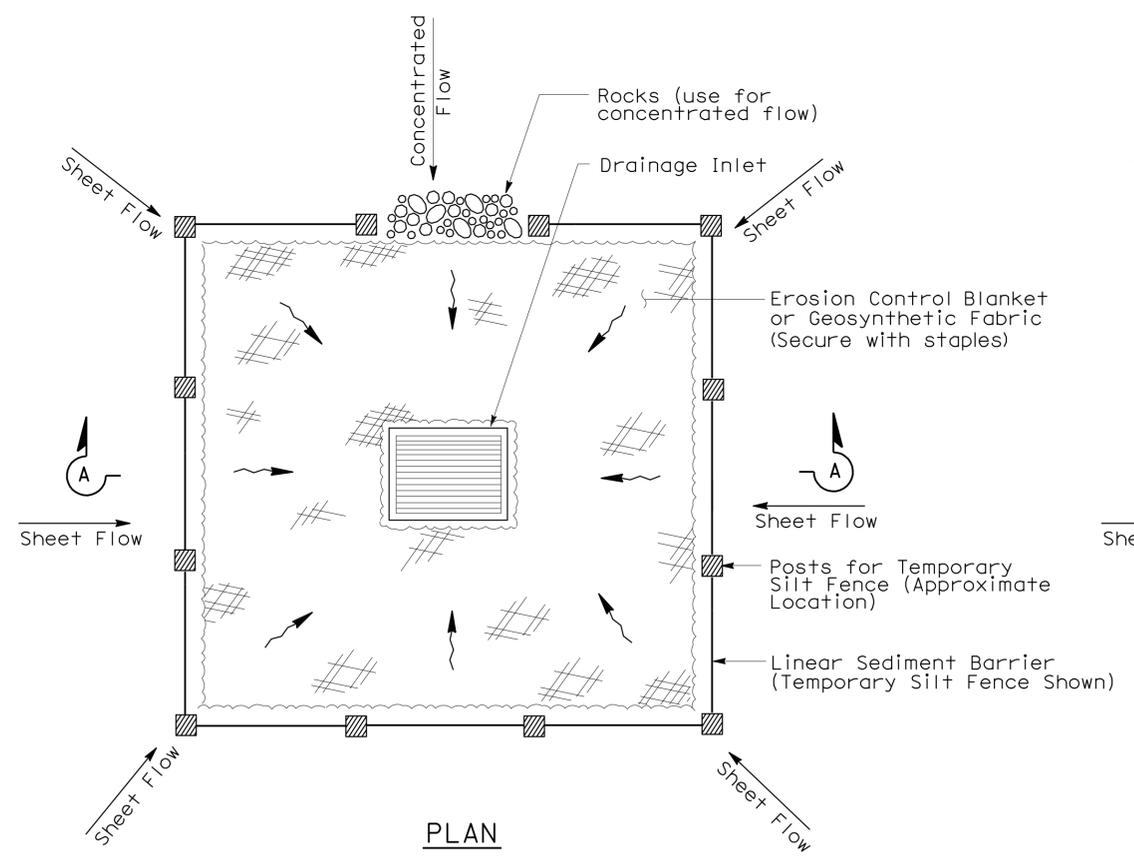
- NOTES:**
- See Standard Plan T51 for Temporary Silt Fence.
 - Dimensions may vary to fit field conditions.



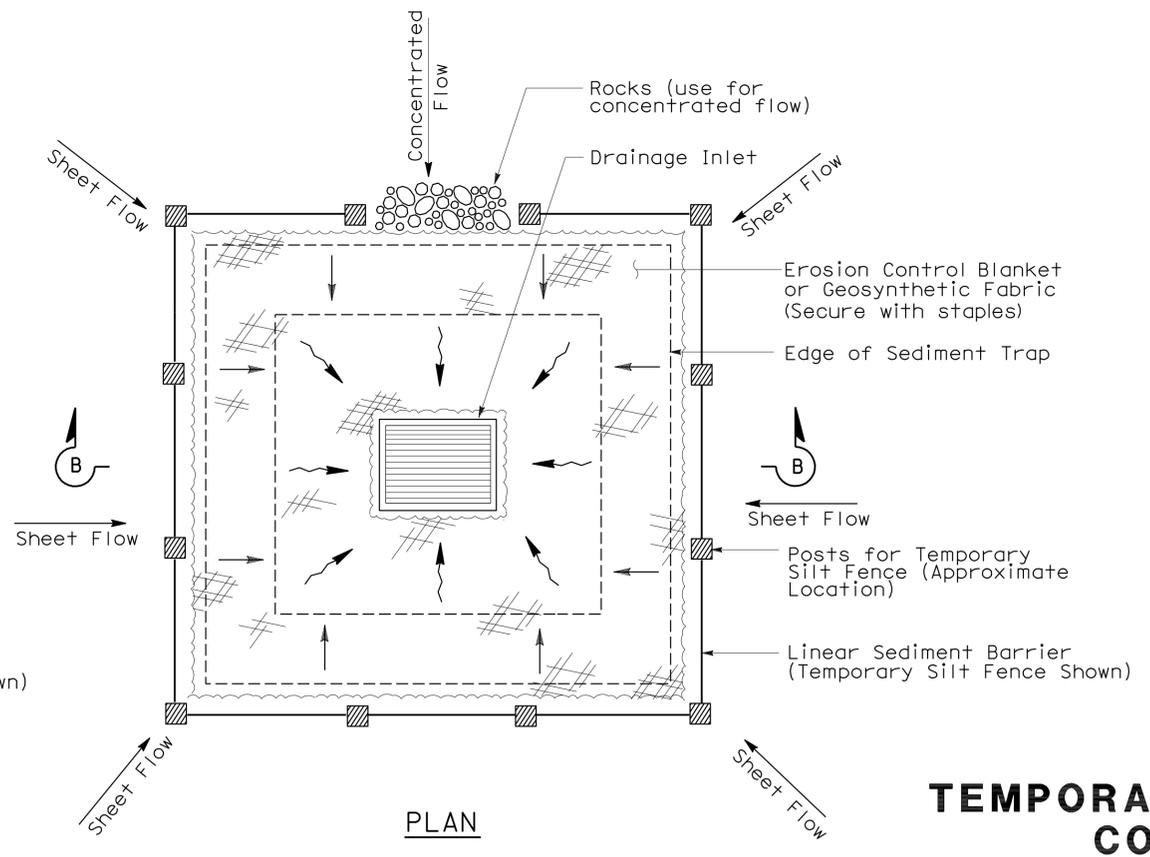
SECTION A-A



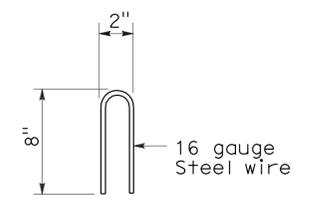
SECTION B-B



TEMPORARY DRAINAGE INLET PROTECTION (TYPE 1)



TEMPORARY DRAINAGE INLET PROTECTION (TYPE 2) (EXCAVATED SEDIMENT TRAP)



STAPLE DETAIL

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TEMPORARY WATER POLLUTION CONTROL DETAILS (TEMPORARY DRAINAGE INLET PROTECTION)

NO SCALE

NSP T61 DATED AUGUST 15, 2008 SUPPLEMENTS THE STANDARD PLANS BOOK DATED MAY 2006.

2006 NEW STANDARD PLAN NSP T61

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
01	Hum	36	20.9	25	32

Robert B. Schott
 LICENSED LANDSCAPE ARCHITECT
 August 15, 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.

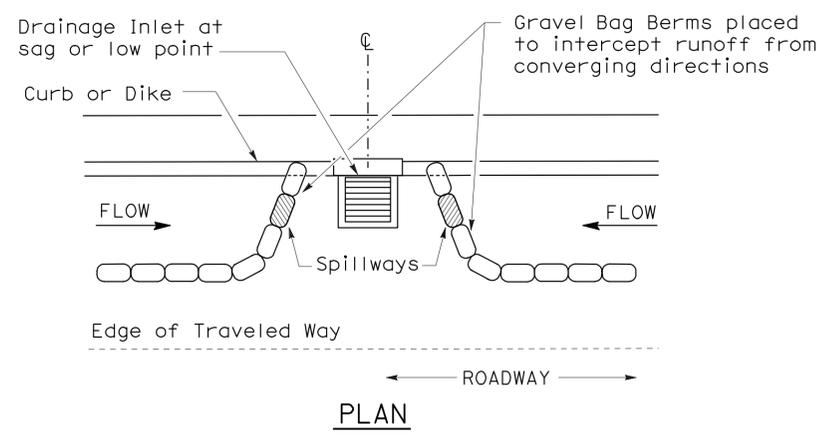


To accompany plans dated 1-4-10

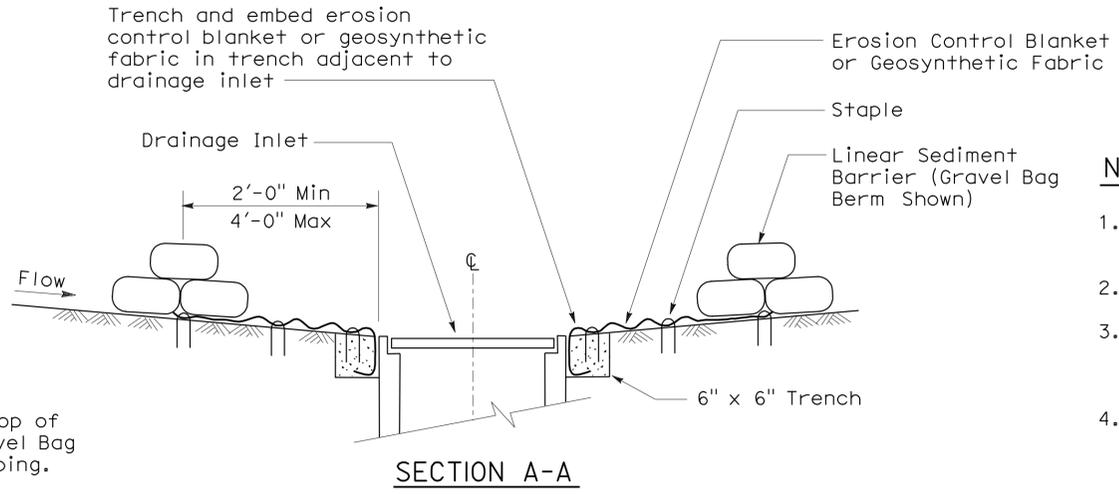
GRAVEL BAG BERM (TYPE 3A) SPACING TABLE

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



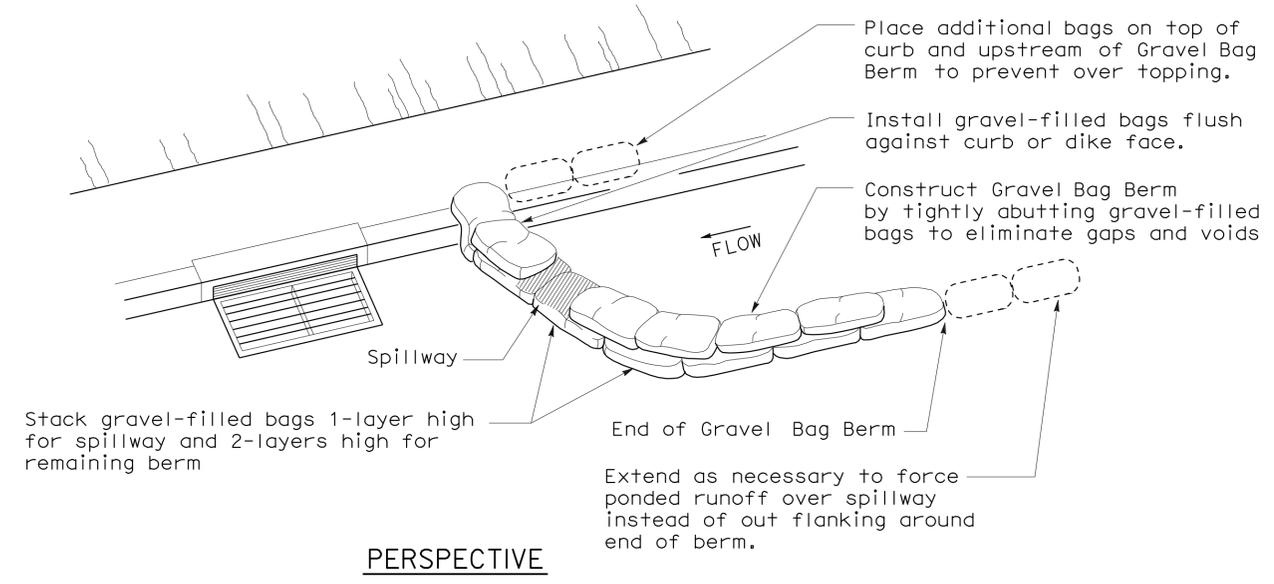
PLAN
CONFIGURATION FOR SAG POINT INLET (GRAVEL BAG BERM)



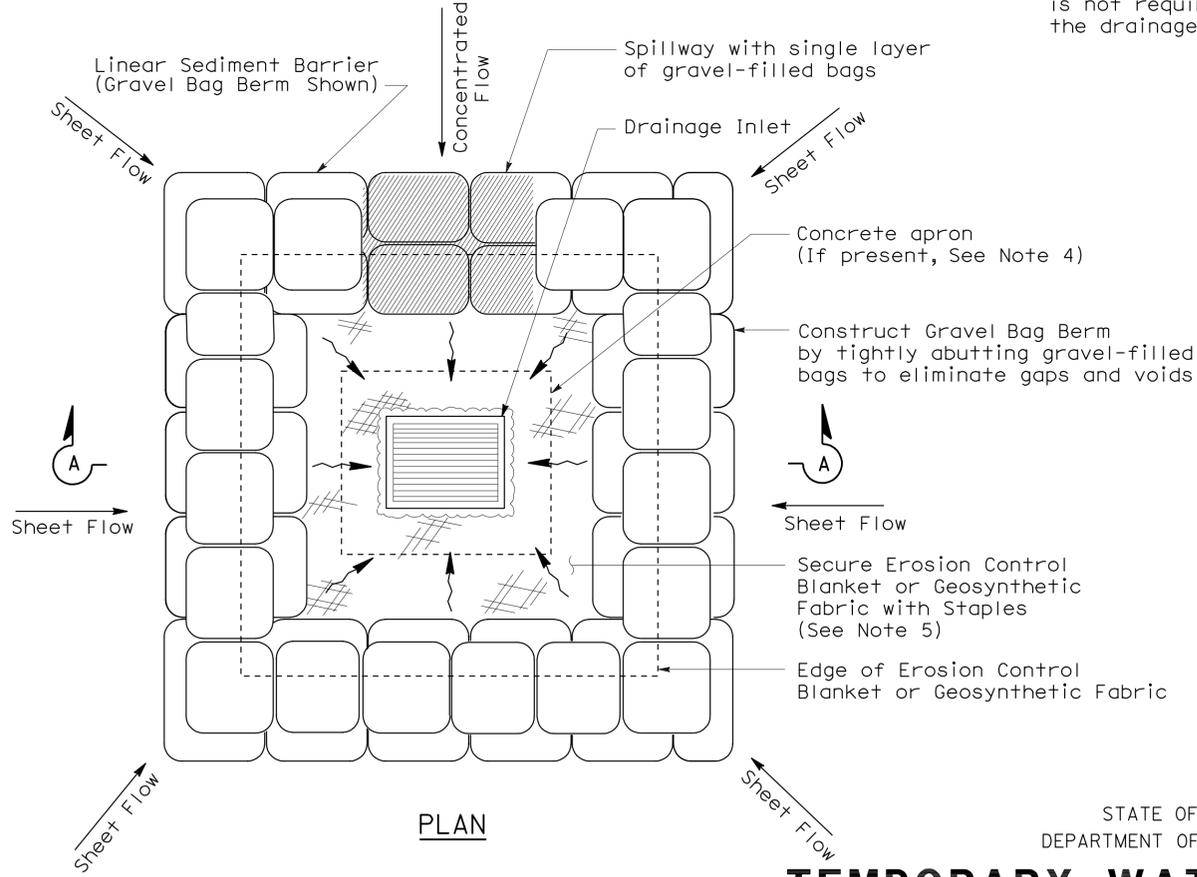
SECTION A-A

NOTES:

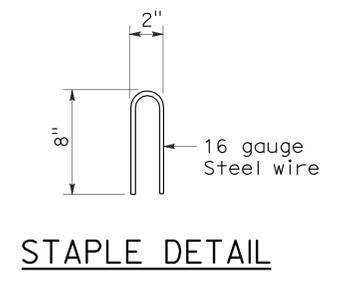
1. Place safety cones adjacent to drainage inlet protection.
2. Dimensions may vary to fit field conditions.
3. Install a minimum of 3 gravel bag berms upstream of each drainage inlet to be protected.
4. Position erosion control blanket or geosynthetic fabric at edge of concrete apron and secure in trench.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



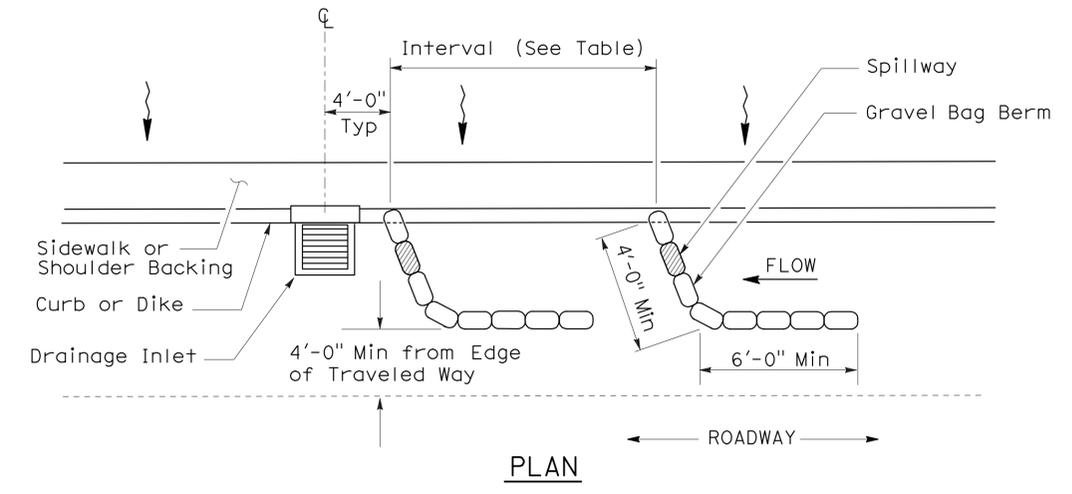
PERSPECTIVE



PLAN
TEMPORARY DRAINAGE INLET PROTECTION (TYPE 3B)



STAPLE DETAIL



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

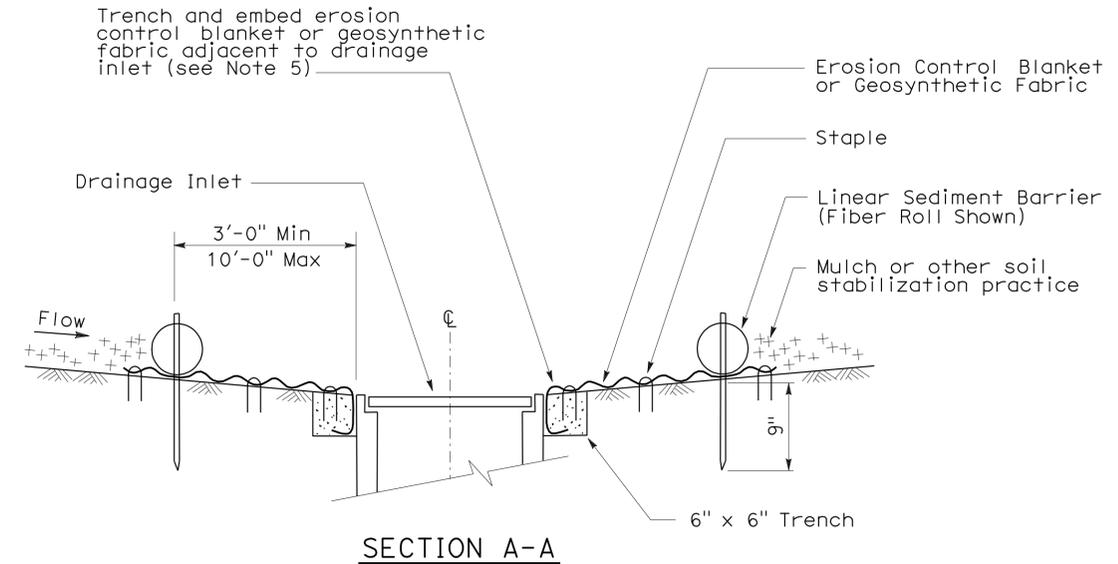
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
TEMPORARY WATER POLLUTION CONTROL DETAILS (TEMPORARY DRAINAGE INLET PROTECTION)

NO SCALE
NSP T62 DATED AUGUST 15, 2008 SUPPLEMENTS THE STANDARD PLANS BOOK DATED MAY 2006.

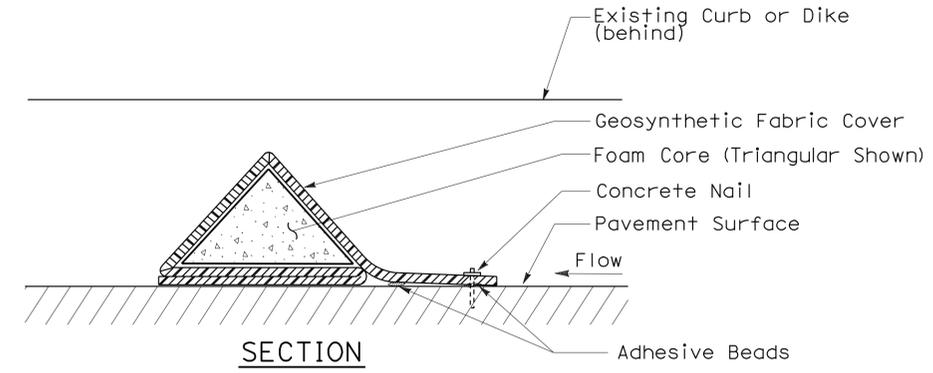
2006 NEW STANDARD PLAN NSP T62

FLEXIBLE SEDIMENT BARRIER SPACING TABLE

SLOPE OF ROADWAY (PERCENT)	0 to 0.9	1 to 1.9	2 to 2.9	3 to 4	5+
INTERVAL BETWEEN BARRIERS	50'	35'	30'	25'	20'
ANGLE FROM FACE OF CURB	70°	70°	70°	45°	45°
SUGGESTED BARRIER LENGTH	6'	6'	6'	6'	6'



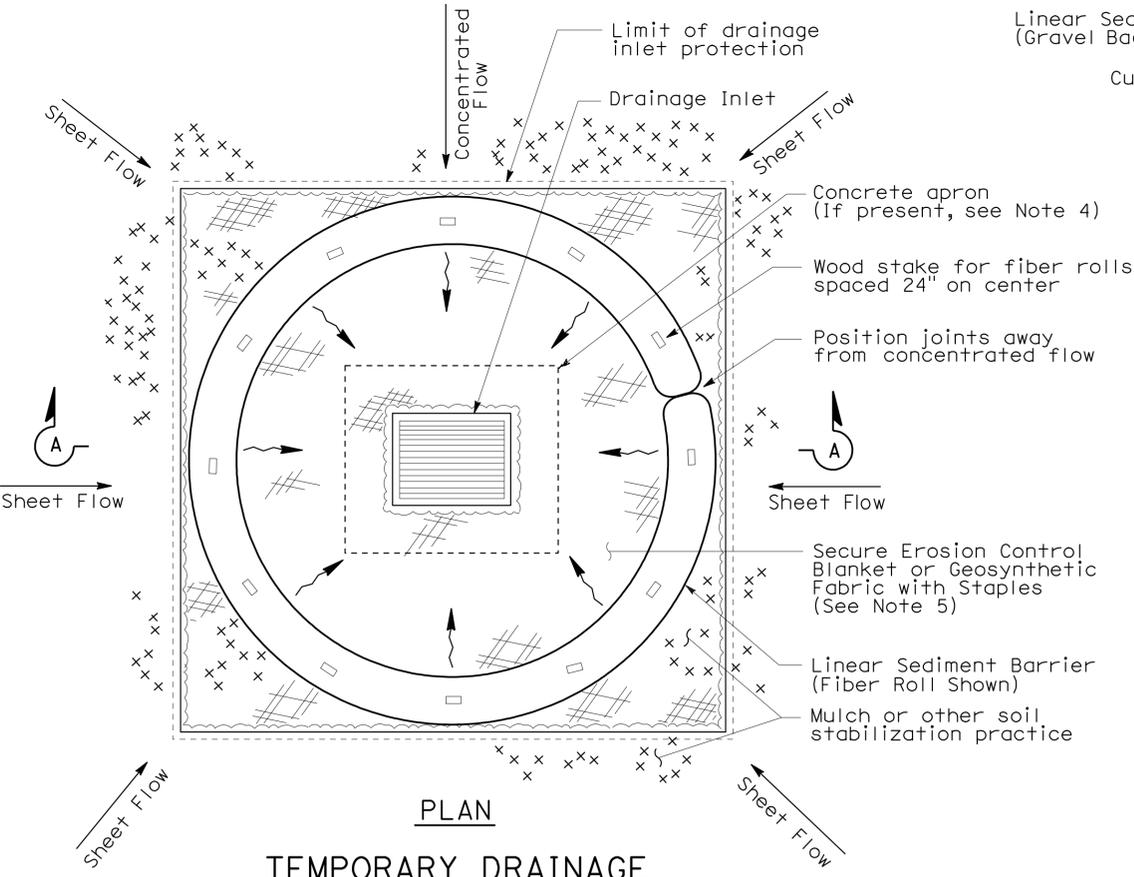
SECTION A-A



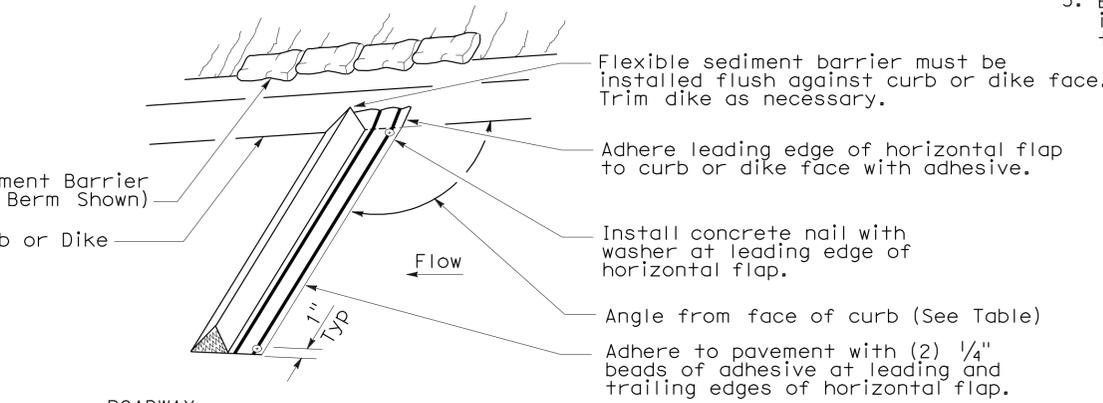
SECTION FLEXIBLE SEDIMENT BARRIER DETAIL (FOAM BARRIER SHOWN)

NOTES:

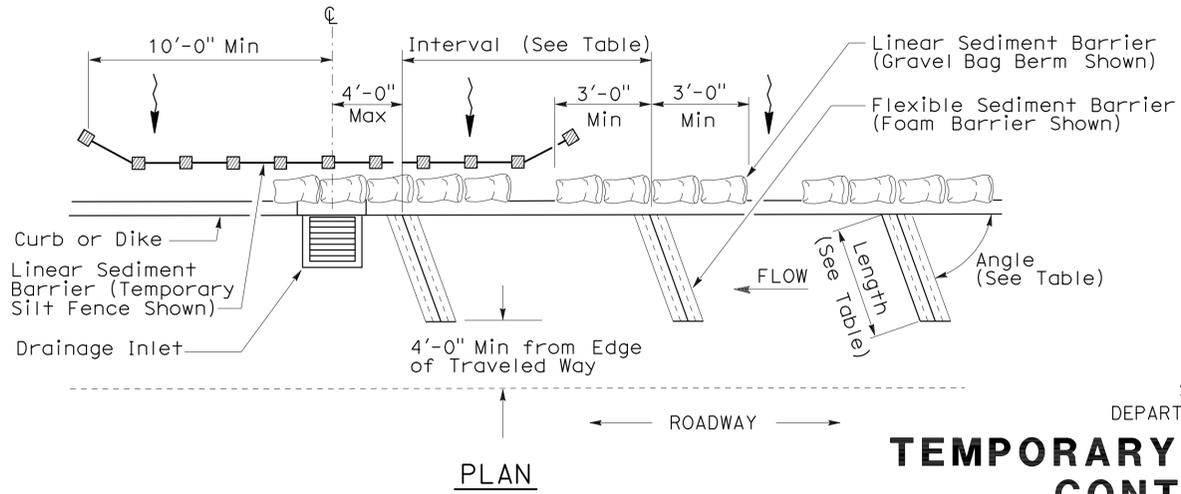
1. See Standard Plan T51 for Temporary Silt Fence.
2. Dimensions may vary to fit field conditions.
3. Install a minimum of 3 flexible sediment barriers upstream of each drainage inlet to be protected.
4. Position erosion control blanket or geosynthetic fabric at edge of concrete apron and secure in trench.
5. Erosion control blanket or geosynthetic fabric is not required if the area adjacent to the drainage inlet is vegetated.



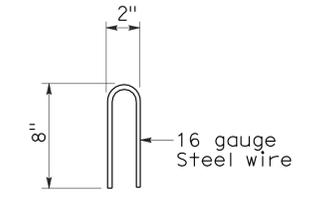
PLAN TEMPORARY DRAINAGE INLET PROTECTION (TYPE 4A)



PERSPECTIVE



PLAN TEMPORARY DRAINAGE INLET PROTECTION (TYPE 4B) FLEXIBLE SEDIMENT BARRIER



STAPLE DETAIL

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
TEMPORARY WATER POLLUTION CONTROL DETAILS (TEMPORARY DRAINAGE INLET PROTECTION)
 NO SCALE
 NSP T63 DATED AUGUST 15, 2008 SUPPLEMENTS THE STANDARD PLANS BOOK DATED MAY 2006.

2006 NEW STANDARD PLAN NSP T63

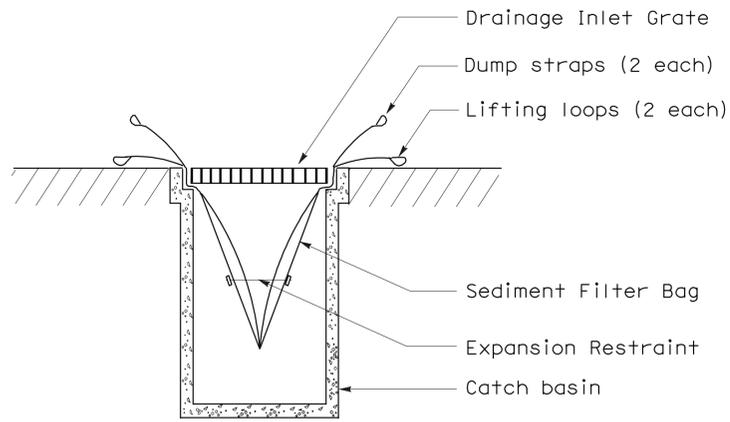
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
01	Hum	36	20.9	27	32

Robert B. Schott
 LICENSED LANDSCAPE ARCHITECT

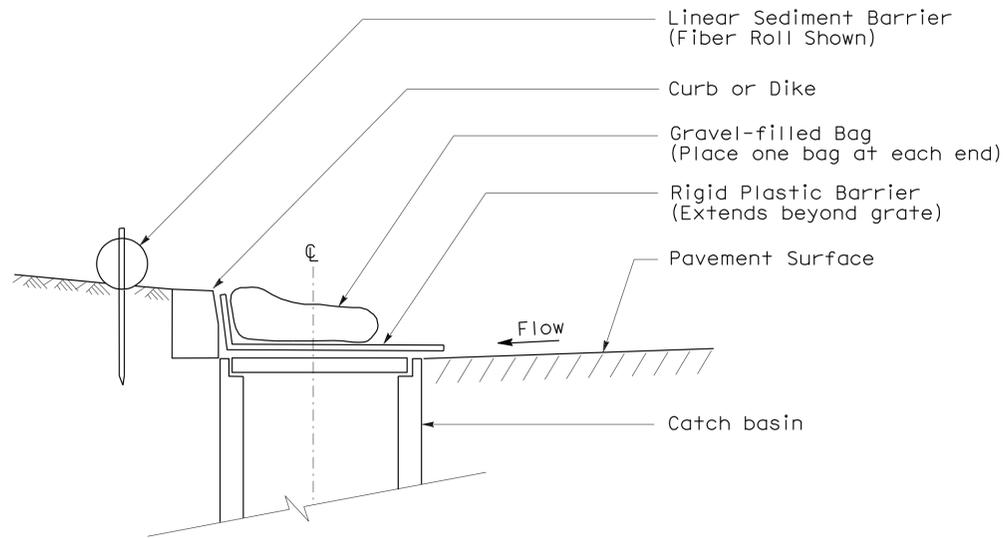
August 15, 2008
 PLANS APPROVAL DATE

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.

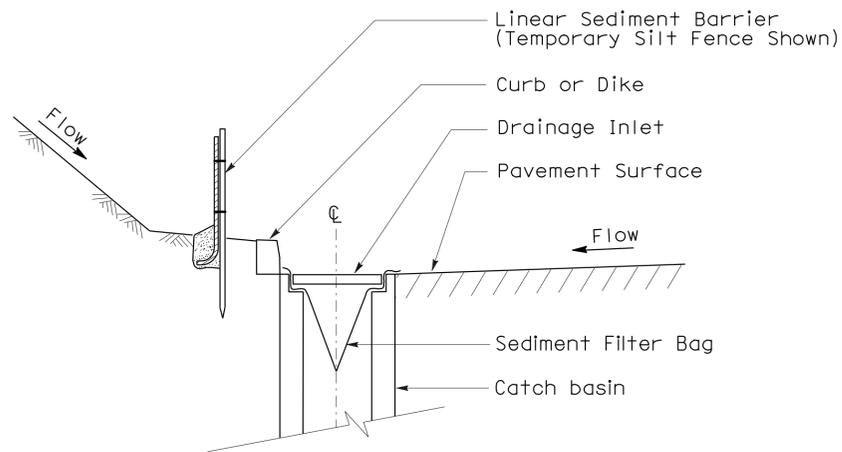
To accompany plans dated 1-4-10



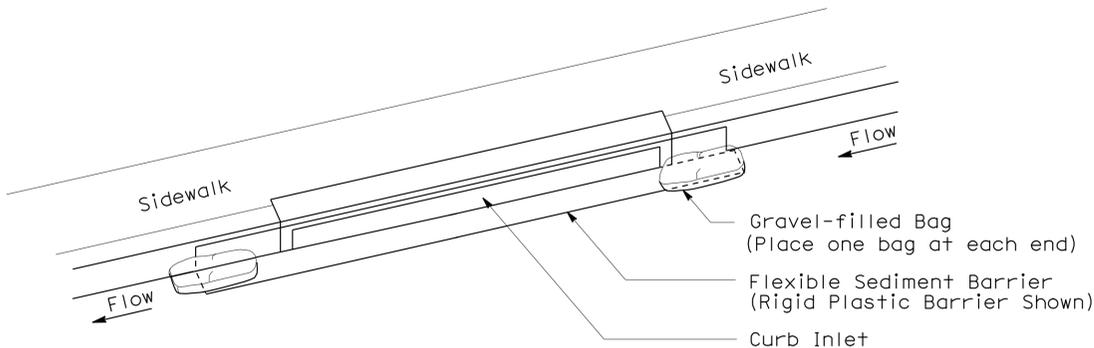
SECTION B-B
SEDIMENT FILTER BAG DETAIL



SECTION
TEMPORARY DRAINAGE
INLET PROTECTION (TYPE 6A)
(CATCH BASIN WITH GRATE)

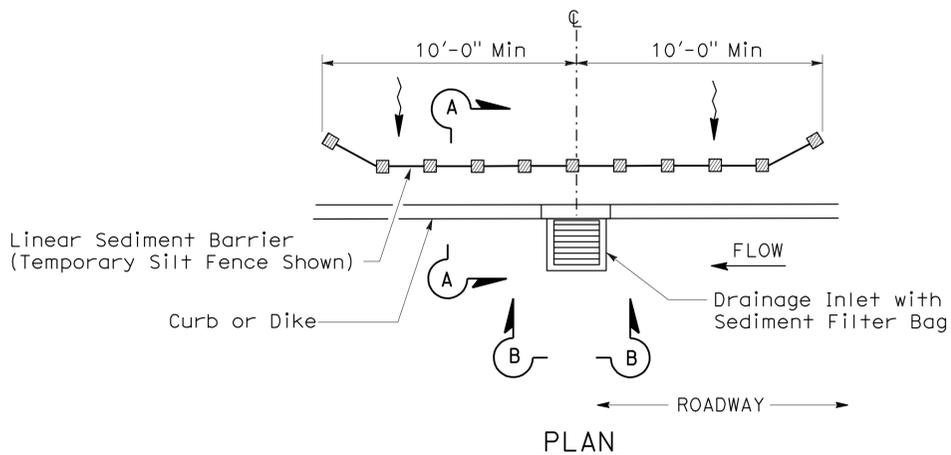


SECTION A-A



PERSPECTIVE

TEMPORARY DRAINAGE
INLET PROTECTION (TYPE 6B)
(CURB INLET WITHOUT GRATE)



PLAN
TEMPORARY DRAINAGE
INLET PROTECTION (TYPE 5)
(SEDIMENT FILTER BAG)

NOTES:

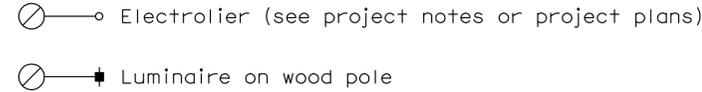
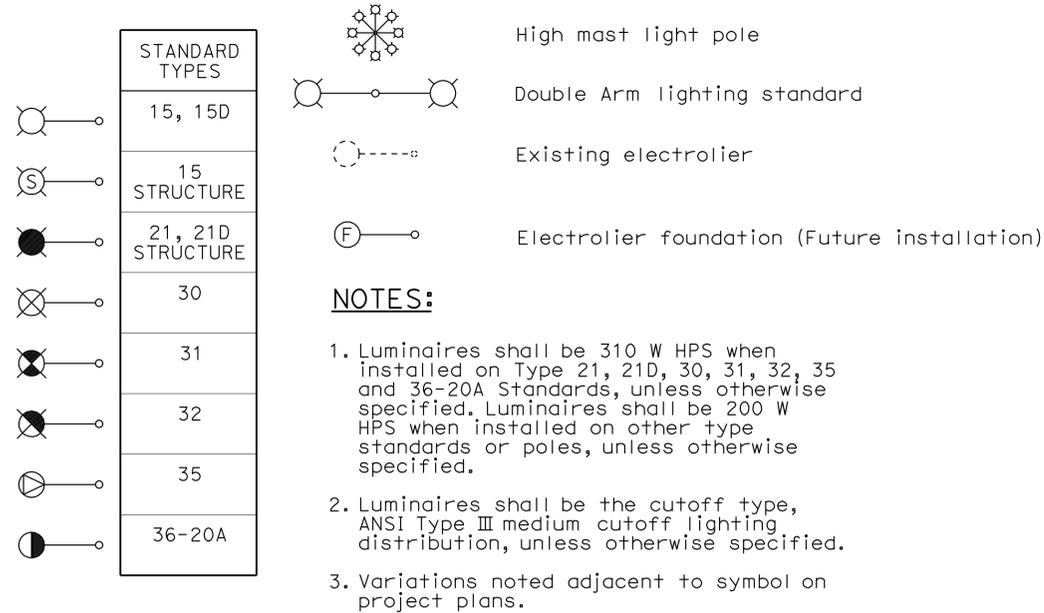
1. See Standard Plan T51 for Temporary Silt Fence.
2. Dimensions may vary to fit field conditions.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**TEMPORARY WATER POLLUTION
CONTROL DETAILS
(TEMPORARY DRAINAGE
INLET PROTECTION)**

NO SCALE
NSP T64 DATED AUGUST 15, 2008 SUPPLEMENTS
THE STANDARD PLANS BOOK DATED MAY 2006.

ELECTROLIERS



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, side attachment - 4 signal section
MAS-4B	mas-4B	
MAS-4C	mas-4C	
MAS-5A	mas-5A	Mast arm mounting vehicle signal faces, side attachment - 5 signal section
MAS-5B	mas-5B	
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

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
01	Hum	36	20.9	28	32

Jeffery G. McRae
REGISTERED ELECTRICAL ENGINEER

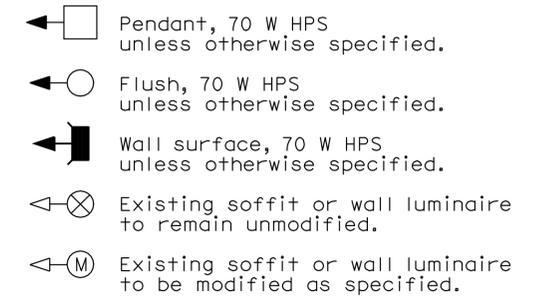
October 5, 2007
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
Jeffery G. McRae
No. E14512
Exp. 6-30-08
ELECTRICAL
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 1-4-10

SOFFIT AND WALL MOUNTED LUMINAIRES



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

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
01	Hum	36	20.9	29	32

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

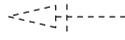
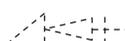
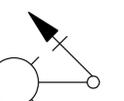
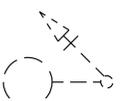
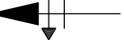
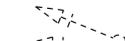
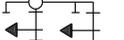
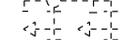
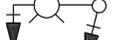
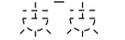
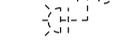
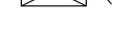
October 5, 2007
 PLANS APPROVAL DATE

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.

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 
		Conduit riser in/on structure or service pole

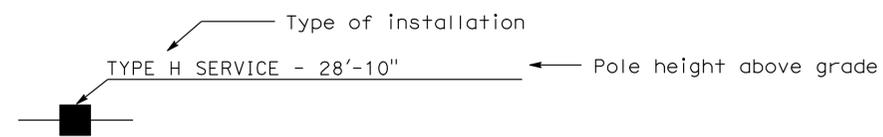
SIGNAL EQUIPMENT

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
		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
		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

SERVICE EQUIPMENT

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

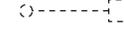
POLE-MOUNTED SERVICE DESIGNATION



ILLUMINATED OVERHEAD SIGN

PROPOSED	EXISTING	
		Overhead sign - Single post
		Overhead sign - Two post
		Overhead sign - Mounted on structure
		Overhead sign with electrolier

SIGNAL EQUIPMENT Cont

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

NOTES:

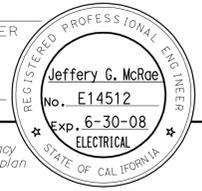
1. All signal sections shall be 12" unless shown otherwise.
2. Signal heads shall be provided with backplates unless shown otherwise.
3. Signal indication shall be LED.

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

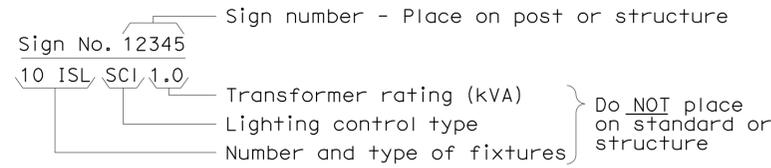
2006 REVISED STANDARD PLAN RSP ES-1B



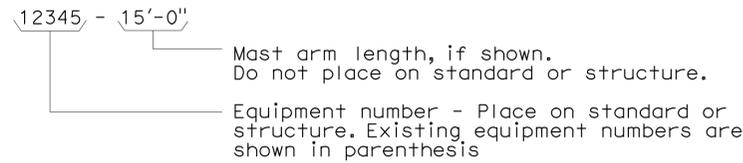
To accompany plans dated 1-4-10

EQUIPMENT IDENTIFICATION

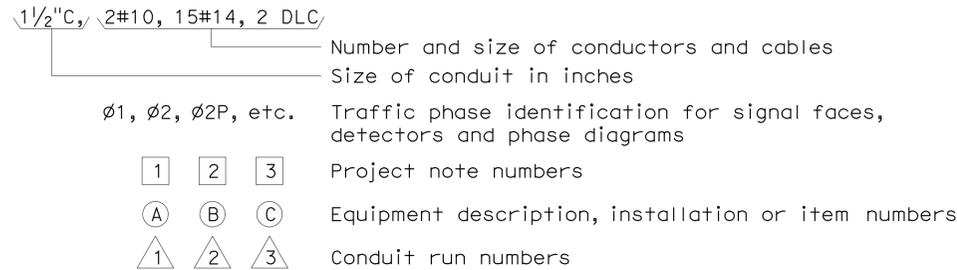
ILLUMINATED SIGN IDENTIFICATION NUMBER:



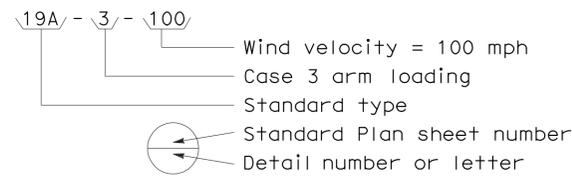
ELECTROLIER OR EQUIPMENT IDENTIFICATION NUMBER:



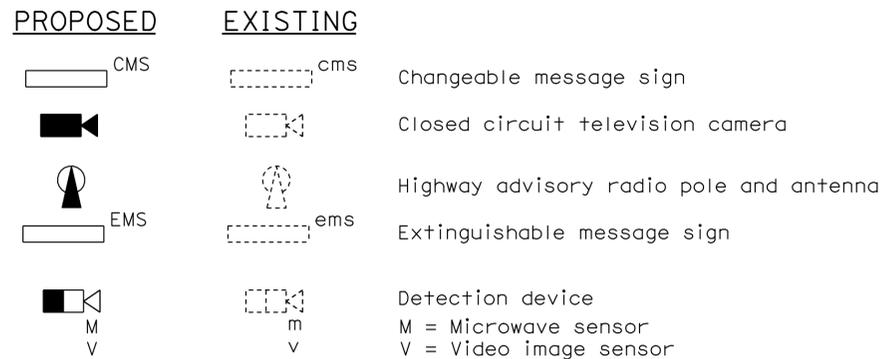
CONDUIT AND CONDUCTOR IDENTIFICATION:



SIGNAL AND LIGHTING STANDARD (TYPICAL DESIGNATION):



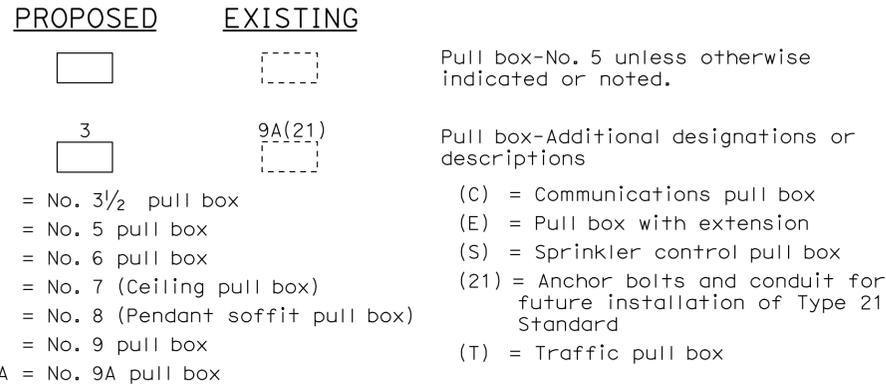
MISCELLANEOUS EQUIPMENT



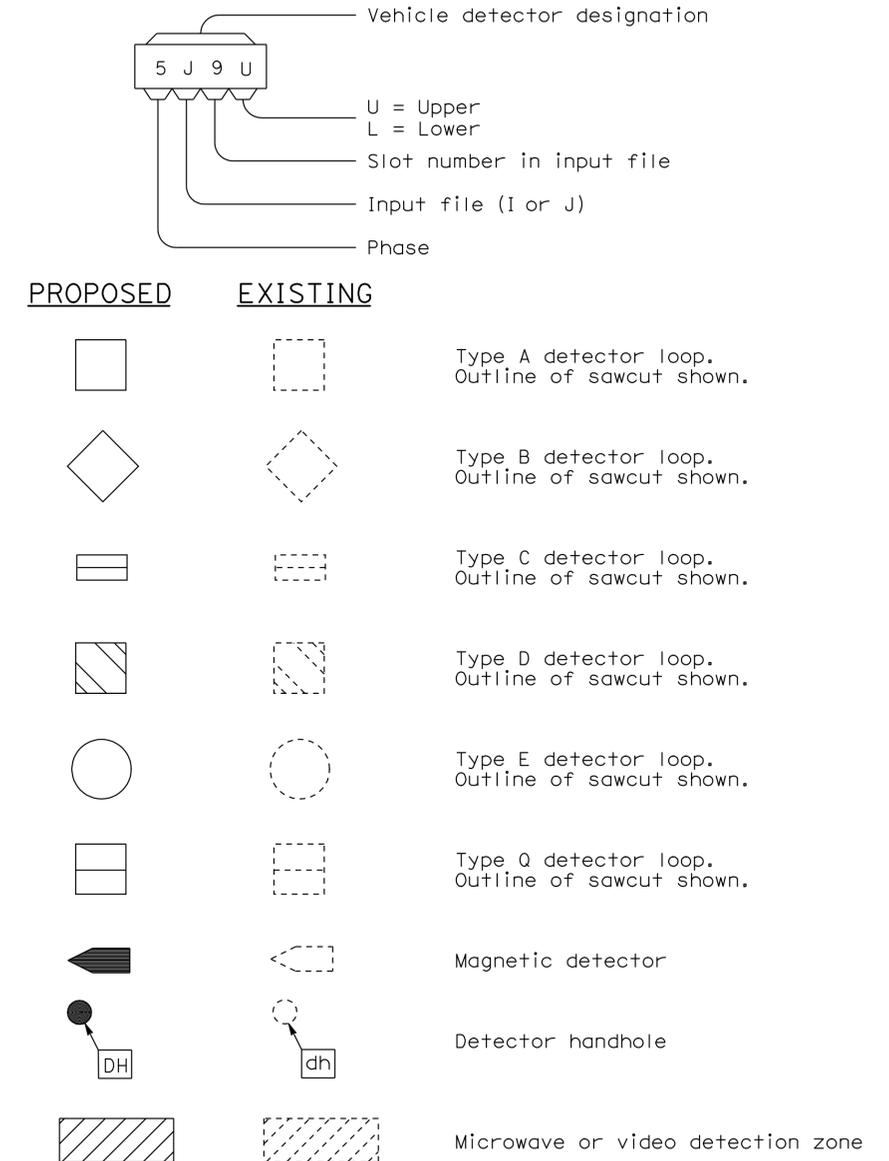
WIRING DIAGRAM LEGEND

- | | |
|---------------------------------|----------------------------|
| P Pole | ---- External conductor |
| CB Circuit breaker | — Conductor or bus |
| A Ampere | • Tie point |
| V Volt | ~ Contactor coil |
| M Metered | — — Contactor, Contact NO |
| UM Unmetered | ⊗ Terminal blocks |
| NB Neutral bus | — /— Contactor, Contact NC |
| GB Ground bus | ≡ Enclosure bond |
| G Equipment grounding conductor | ⋮ Grounding electrode |
| N Grounded conductor (Neutral) | ⊕ Circuit breaker |
| | Ⓜ Receptacle |

PULL BOXES



VEHICLE DETECTORS



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

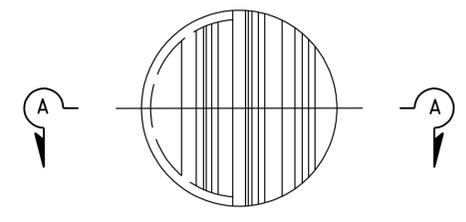
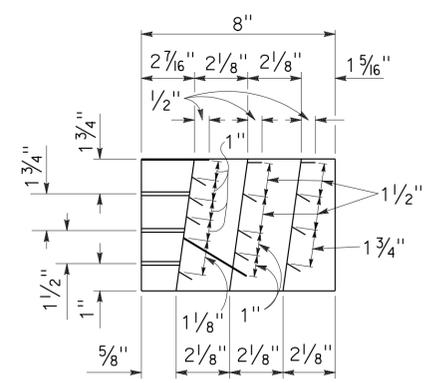
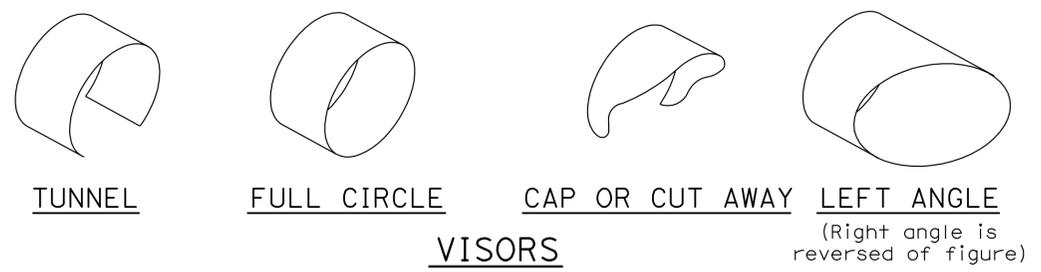
2006 REVISED STANDARD PLAN RSP ES-1C

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
01	Hum	36	20.9	31	32

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

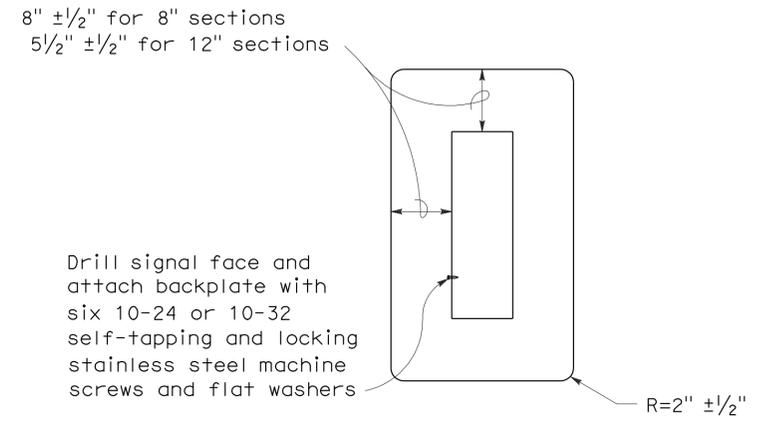
June 6, 2008
 PLANS APPROVAL DATE

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.



DIRECTIONAL LOUVER

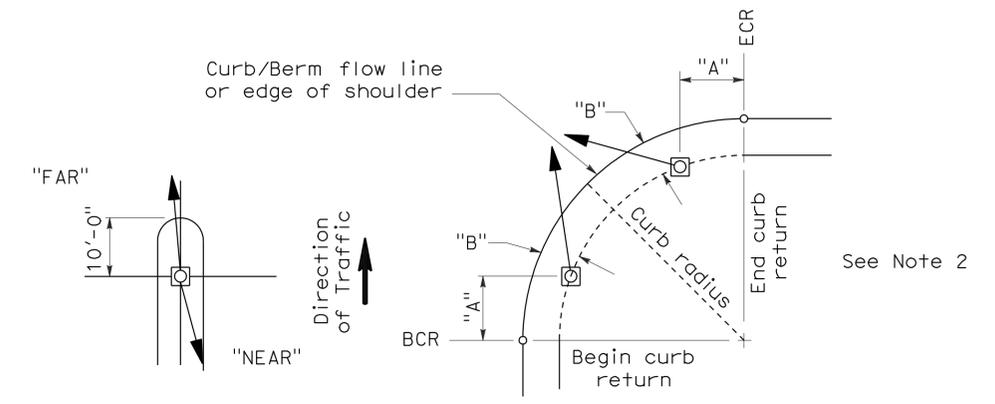
Directional louvers shall be oriented as directed by the Engineer and secured in place with one plated brass machine screw and nut.



8" AND 12" SECTIONS

BACKPLATE

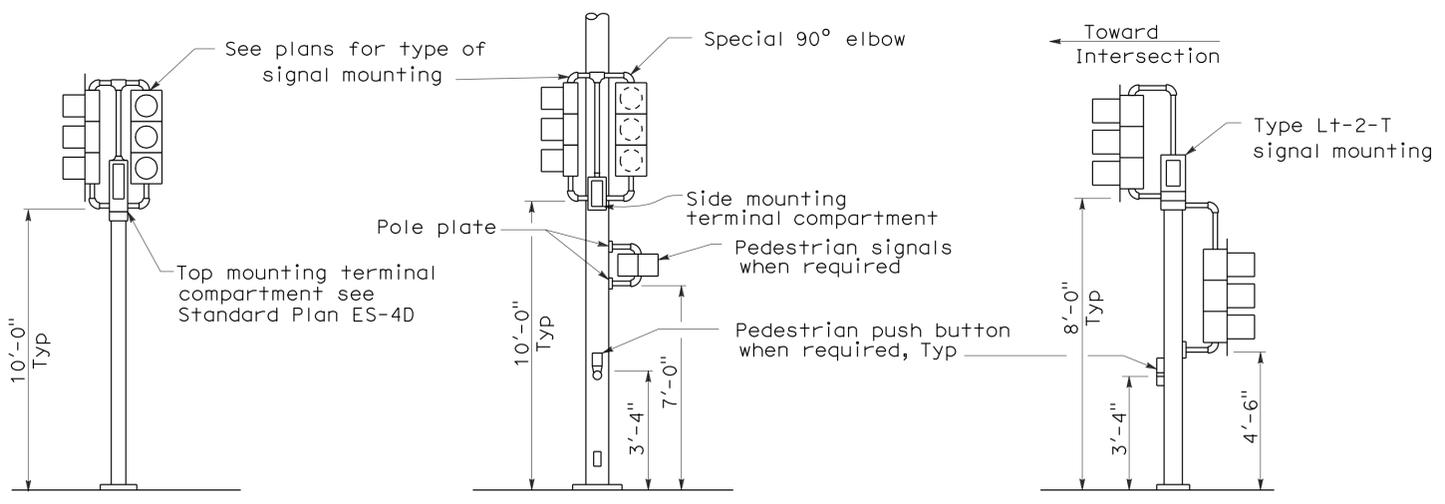
1/16" minimum thickness
 3001-14 aluminum, or plastic when specified



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.

SIGNAL STANDARD PLACEMENT DIMENSIONS AND EQUIPMENT LOCATIONS



TOP MOUNTED SIGNALS (TV)

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

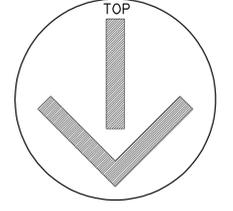
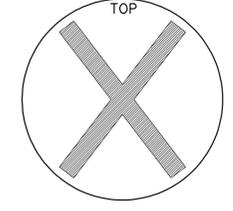
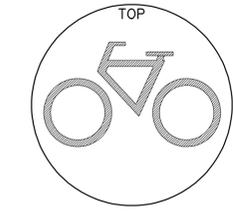
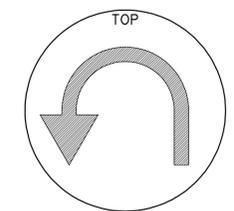
SIDE MOUNTED SIGNALS (SV AND SP)

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



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

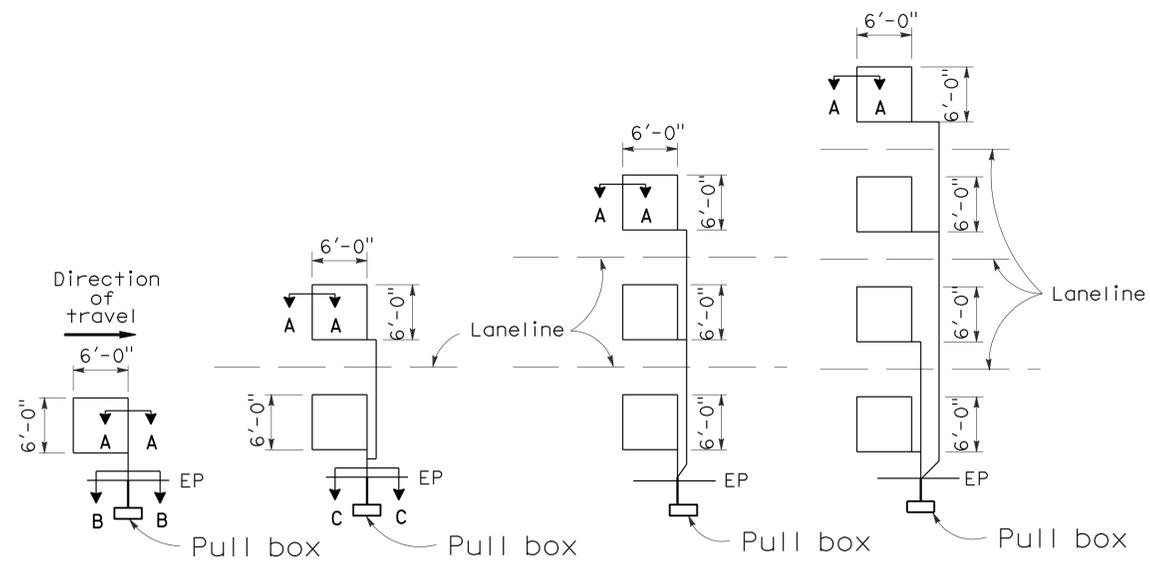
2006 REVISED STANDARD PLAN RSP ES-4C

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
01	Hum	36	20.9	32	32

Jeffrey G. McRae
 REGISTERED ELECTRICAL ENGINEER
 October 5, 2007
 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
 Jeffrey G. McRae
 No. E14512
 Exp. 6-30-08
 ELECTRICAL
 STATE OF CALIFORNIA

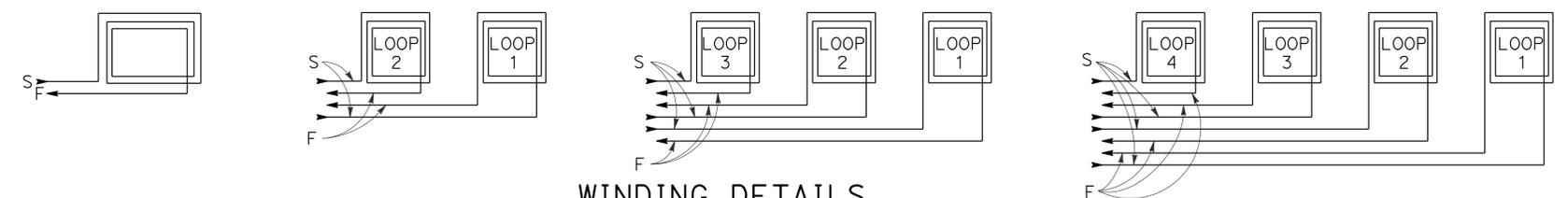
LOOP INSTALLATION PROCEDURE

- Loops shall be centered in lanes.
- Saw slots in pavement for loop conductors as shown in details.
- Distance between side of loop and a lead-in saw cut from adjacent detectors shall be 2'-0" minimum. Distance between lead-in saw cuts shall be 6" minimum.
- Bottom of saw slot shall be smooth with no sharp edges.
- Slots shall be washed until clean, blown out and thoroughly dried before installing loop conductors.
- Adjacent loops on the same sensor unit channel shall be wound in opposite directions.
- Identify and tag loop circuit pairs in the pull box with loop number, start (S) and finish (F) of conductor. Identify and tag lead-in-cable with sensor number and phase.
- Install loop conductor in slot using a 3/16" to 1/4" thick wood paddle. Hold loop conductors with wood paddles (at the bottom of the sawed slot) during sealant placement.
- No more than 2 twisted pairs shall be installed in one sawed slot.
- Allow additional 5'-0" of slack length of conductor for the lead-in run to pull box.
- The additional length of each conductor for each loop shall be twisted together into a pair (6 turns per 3'-4" minimum) before being placed in the slot and conduit leading to pull box.
- Test each loop circuit for continuity, circuit resistance and insulation resistance at the pull box before filling slots.
- Fill slots as shown in details.
- Splice loop conductors to lead-in-cable. Splices shall be soldered.
- End of lead-in-cable and Type 2 loop conductor shall be waterproofed prior to installing in conduit to prevent moisture from entering the cable.
- Lead-in-cable shall not be spliced between the pull box and the controller cabinet terminals.
- Test each loop circuit for continuity, circuit resistance and insulation resistance at the controller cabinet location.
- Where loop conductors are not to be spliced to a lead-in-cable, the ends of the conductors shall be taped and waterproofed with electrical insulating coating.



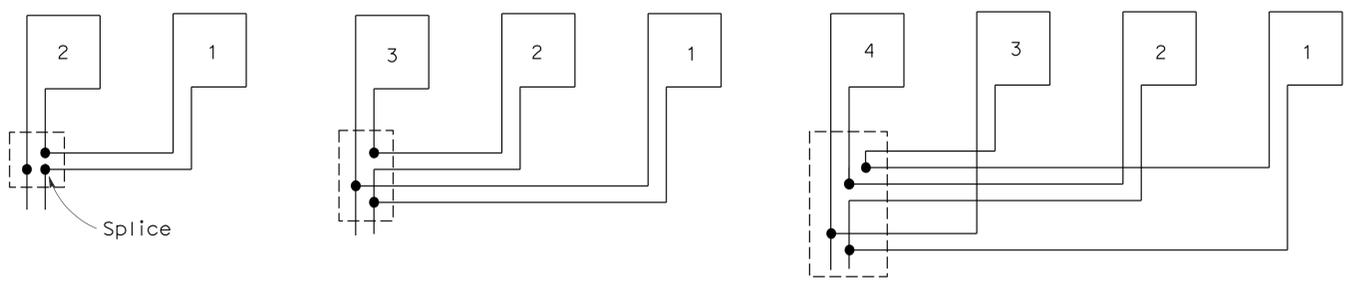
TYPE 1A INSTALLATION TYPE 2A INSTALLATION TYPE 3A INSTALLATION TYPE 4A INSTALLATION
SAWCUT DETAILS
 (Type A loop detector configurations illustrated)

- 1A thru 4A = 1 Type A loop configuration in each lane.
 - 1B thru 4B = 1 Type B loop configuration in each lane.
 - 1C = 1 Type C loop configuration entering lanes as required.
 - 1D thru 4D = 1 Type D loop configuration in each lane.
 - 1E thru 4E = 1 Type E loop configuration in each lane.
 - 1Q thru 4Q = 1 Type Q loop configuration in each lane.
- (Use Type A, B, C, D, E or Q loop detector configurations only when specified or shown on plans)



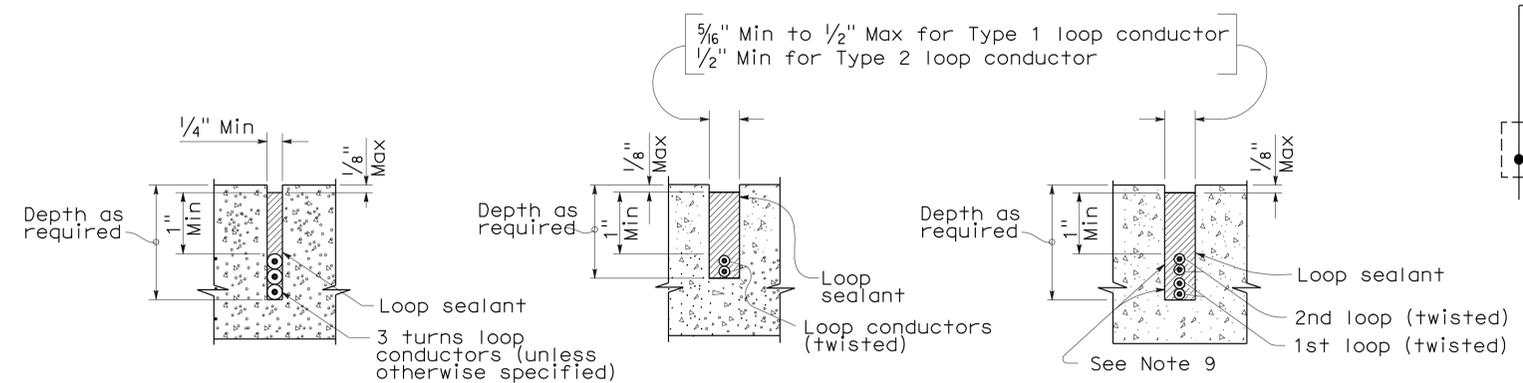
WINDING DETAILS

See Notes 6 and 7



TYPICAL LOOP CONNECTIONS

(Dashed lines represent the pull box)



SECTION A-A SECTION B-B SECTION C-C
SLOT DETAILS - TYPE 1 AND TYPE 2 LOOP CONDUCTOR

ELECTRICAL SYSTEMS (DETECTORS)

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

NO SCALE

RSP ES-5A DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-5A DATED MAY 1, 2006 - PAGE 423 OF THE STANDARD PLANS BOOK DATED MAY 2006.

2006 REVISED STANDARD PLAN RSP ES-5A