INDEX OF PLANS

SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
2	CONSTRUCTION AREA SIGNS
3	DETOUR PLAN
4	SUMMARY OF QUANTITIES
5-10	REVISED AND NEW STANDARD PLANS
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11-14	ROUTE 215 BRIDGES

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

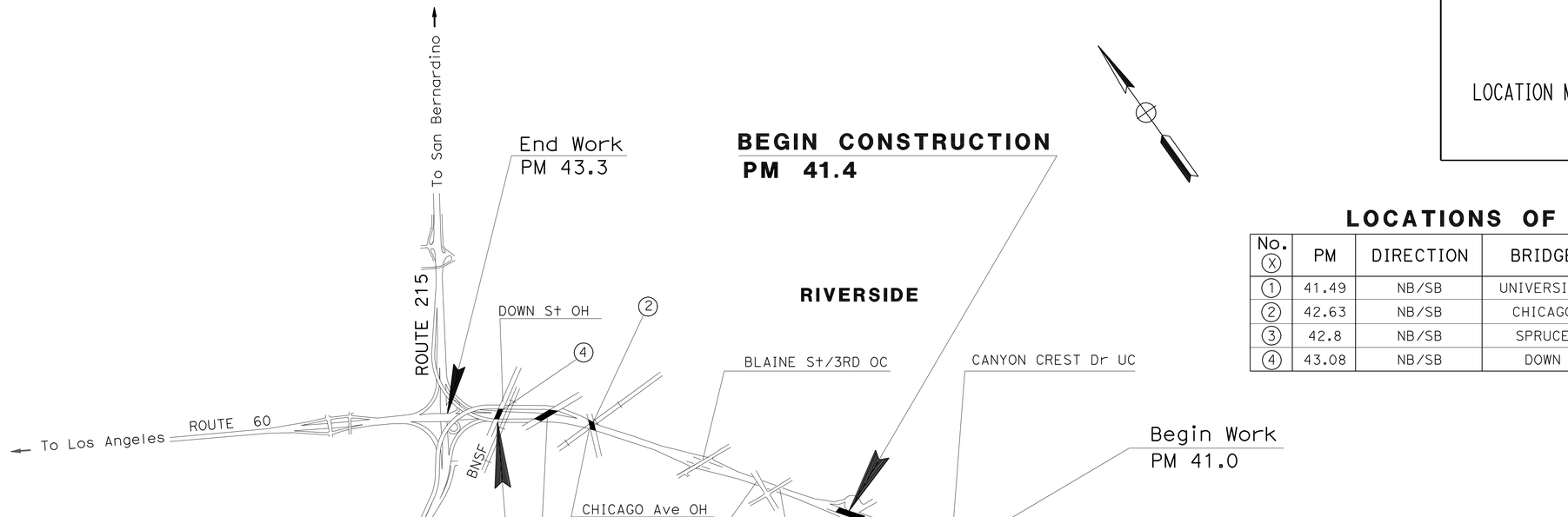
PROJECT PLANS FOR CONSTRUCTION ON

STATE HIGHWAY

IN RIVERSIDE COUNTY
IN RIVERSIDE
AT VARIOUS LOCATIONS
FROM UNIVERSITY AVENUE UNDERCROSSING
TO DOWN STREET OVERHEAD

TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	215	41.4/43.0	1	14



NO SCALE

LOCATIONS OF CONSTRUCTION

No. (X)	PM	DIRECTION	BRIDGE NAME	BRIDGE NUMBER
(1)	41.49	NB/SB	UNIVERSITY AVENUE UC	56-0408
(2)	42.63	NB/SB	CHICAGO AVENUE OH	56-0403
(3)	42.8	NB/SB	SPRUCE STREET UC	56-0399
(4)	43.08	NB/SB	DOWN STREET OH	56-0398

PROJECT ENGINEER
REGISTERED CIVIL ENGINEER

8-25-11
DATE

REGISTERED PROFESSIONAL ENGINEER
IYAD NAMY
No. C74762
Exp. 12-31-11
CIVIL
STATE OF CALIFORNIA

October 17, 2011
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.

PROJECT MANAGER: CATALINO PINING

DESIGN ENGINEER: IYAD NAMY

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

CONTRACT No.	08-0P7004
PROJECT ID	0800020021

LAST REVISION 08-22-11
DATE PLOTTED => 20-OCT-2011
TIME PLOTTED => 15:07

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	215	41.4/43.0	2	14

M.M. Kamgar 8-25-11
REGISTERED CIVIL ENGINEER DATE

10-17-11
PLANS APPROVAL DATE

MEHDI M. KAMGAR No. 58039 Exp. 6/30/12 CIVIL — REGISTERED PROFESSIONAL ENGINEER — 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.

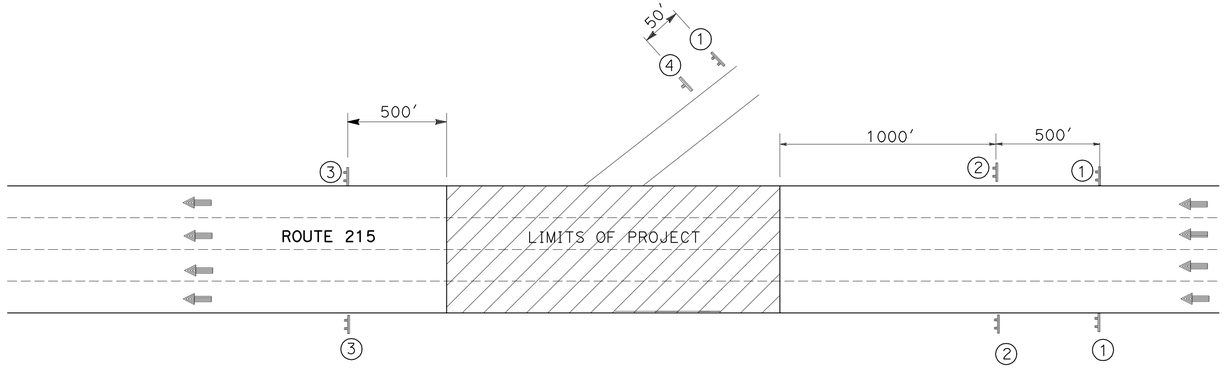
NOTES:

1. LOCATIONS OF CONSTRUCTION AREA APPROXIMATE, EXACT LOCATIONS SHALL BE DETERMINED BY THE ENGINEER.
2. REFER TO STANDARD PLAN T10 FOR LANE CLOSURE REQUIREMENT.
3. MESSAGES IN THE PCMS SIGN SHALL BE DETERMINED BY THE ENGINEER.
4. FOR ADDITIONAL CONSTRUCTION AREA SIGNS, SEE SHEET DE-1.

LEGEND:

ONE POST SIGN

TWO POST SIGN



TYPICAL INSTALLATION OF CONSTRUCTION AREA SIGNS FOR EACH DIRECTION

STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

SIGN No.	SIGN CODE	PANEL SIZE	SIGN MESSAGE	No. OF POST AND SIZE	No. OF SIGNS (S)
①	C40(CA)	72" x 36"	TRAFFIC FINES DOUBLED IN CONSTRUCTION ZONES	2 - 4" x 6"	10
②	W20-1	48" x 48"	BRIDGE WORK AHEAD	2 - 4" x 6"	4
③	G20-2	48" x 18"	END BRIDGE WORK	2 - 4" x 6"	4
④	W20-1	36" x 36"	BRIDGE WORK AHEAD	1 - 4" x 6"	6

PORTABLE CHAGEABLE MESSAGE SIGNS (PCMS)

LOCATION	QUANTITY
	EA
VARIOUS	4

THIS PLANS ACCURATE FOR CONSTRUCTION AREA SIGN WORK ONLY.

CONSTRUCTION AREA SIGNS

NO SCALE

CS-1

REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY: MEHDI KAMGAR
CHECKED BY: LARRY SARTORI
FUNCTIONAL SUPERVISOR: BILL WASSER

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® TRAFFIC DESIGN

LAST REVISION 08-22-11 | DATE PLOTTED => 20-OCT-2011 | TIME PLOTTED => 15:34

BORDER LAST REVISED 7/2/2010 | USERNAME => s128843 | DGN FILE => 80p700ld001.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 2285 | PROJECT NUMBER & PHASE 0800020021

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	215	41.4/43.0	3	14

M.M. Kamgar Haghighi 8-25-11
REGISTERED CIVIL ENGINEER DATE

10-17-11
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
MEHDI M. KAMGAR
No. 58039
Exp. 6/30/12
CIVIL
STATE OF CALIFORNIA

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

Ⓐ 168" x 48" 10" CAP

215 NORTH CONNECTOR
CLOSED USE
60 WEST DETOUR

Ⓑ 168" x 48" 10" CAP

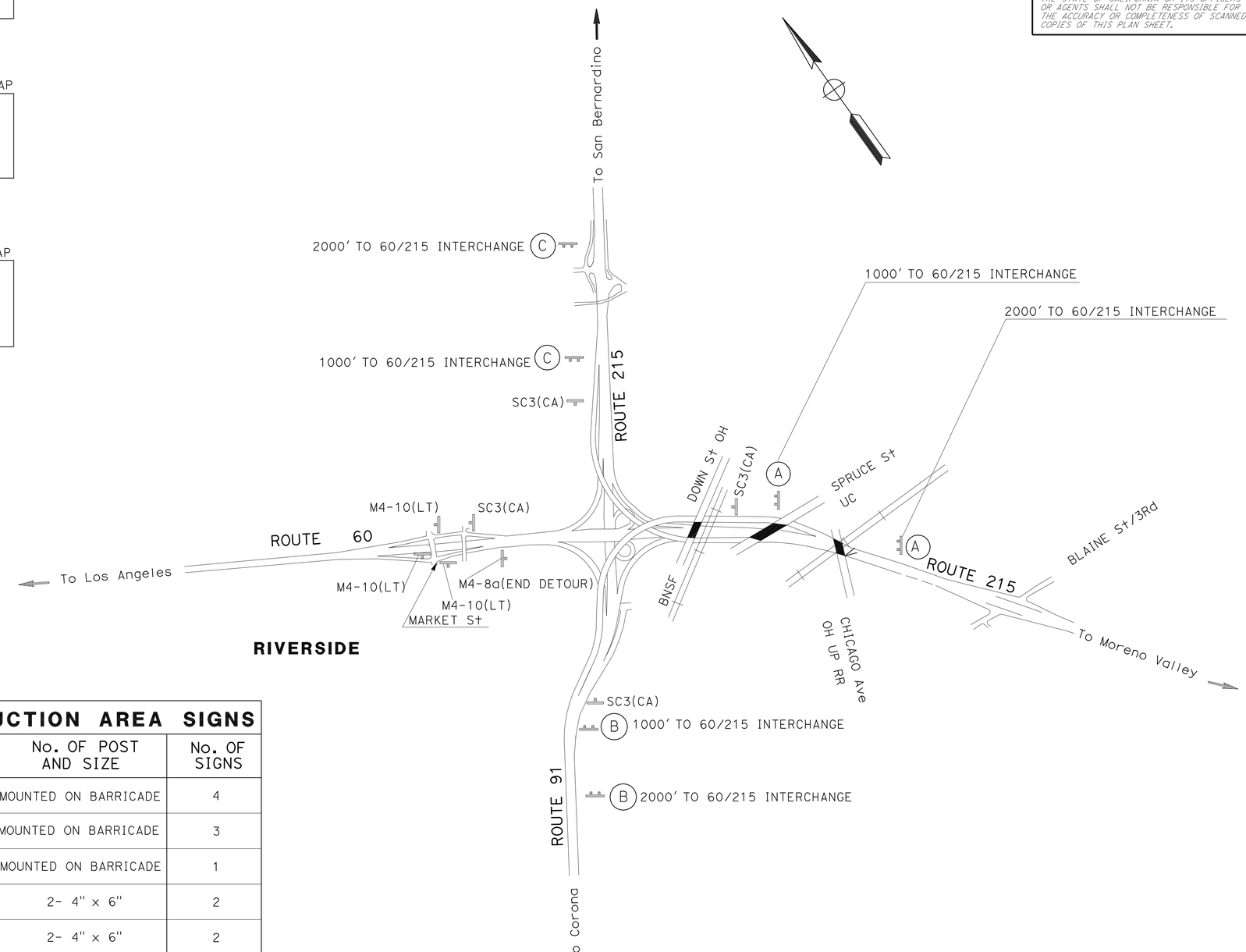
91 EAST TO 215 SOUTH
CONNECTOR CLOSED USE
60 WEST DETOUR

Ⓒ 168" x 48" 10" CAP

91 WEST TO 215 SOUTH
CONNECTOR CLOSED USE
60 WEST DETOUR

TYPE III BARRICADE

LOCATION	QUANTITY
	EA
VARIOUS	8



STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

SIGN CODE	PANEL SIZE	SIGN MESSAGE	No. OF POST AND SIZE	No. OF SIGNS
SC3(CA)	36" x 24"	DETOUR AHEAD	MOUNTED ON BARRICADE	4
M4-10(LT)	36" x 12"	DETOUR LEFT	MOUNTED ON BARRICADE	3
M4-8a	36" x 12"	END DETOUR	MOUNTED ON BARRICADE	1
Ⓐ	168" x 48"	SEE DETAIL	2- 4" x 6"	2
Ⓑ	168" x 48"	SEE DETAIL	2- 4" x 6"	2
Ⓒ	168" x 48"	SEE DETAIL	2- 4" x 6"	2

DETOUR PLAN

NO SCALE

DE-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® TRAFFIC DESIGN
FUNCTIONAL SUPERVISOR: BILL WASSER
CALCULATED-DESIGNED BY: MEHDI KAMGAR
CHECKED BY: LARRY SARTORI
REVISED BY
DATE REVISED

LAST REVISION | DATE PLOTTED => 20-OCT-2011
08-21-11 | TIME PLOTTED => 15:35

BORDER LAST REVISED 7/2/2010
USERNAME => s128843
DGN FILE => 80P700mg01.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 2285
PROJECT NUMBER & PHASE 0800020021

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	215	41.4/43.0	4	14

8-25-11
REGISTERED CIVIL ENGINEER DATE

10-17-11
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
IYAD NAMY
No. C74762
Exp. 12/31/11
CIVIL
STATE OF CALIFORNIA

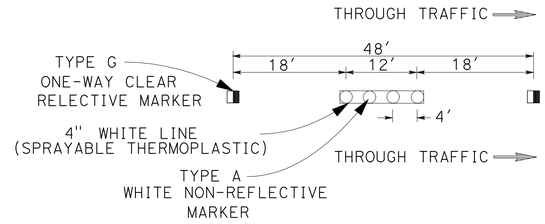
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

PAVEMENT MARKING

LOCATION	DETAIL	THERMOPLASTIC PAVEMENT MARKER	REMOVE THERMOPLASTIC PAVEMENT MARKER
		SQFT	SQFT
CHICAGO BRIDGE	TYPE IV ARROW	84	84
		11	11
SPRUCE BRIDGE	ONLY	22	22
	CAR	20	20
TOTAL		137	137

DETAIL 13 MODIFIED (13M)

INSTALL TYPE A NON-REFLECTIVE MARKER WITH STRIPING DETAIL 13M.
INSTALL TYPE A MARKER BEFORE STRIPING TO GET THE PROPER BONDING



TEMPORARY WATER POLLUTION CONTROL QUANTITIES

DESCRIPTION	QUANTITY
	LF
TEMPORARY FIBER ROLLS	3000

PAVEMENT DELINEATION QUANTITIES

LOCATION	DETAIL No.	PAVEMENT MARKERS				THERMOPLASTIC TRAFFIC STRIPE (SPRAYABLE)		THERMOPLASTIC 8' TRAFFIC STRIPE
		NON REFLECTIVE	RETROREFLECTIVE			4" WHITE	4" YELLOW	WHITE
			TYPE G	TYPE D	TYPE H			
		EA				LF		LF
UNIVERSITY Ave BRIDGE	13M	40	10			440		
	25				6		220	
	27B					220		
	38							
	SUBTOTAL	40	10		6	660	220	
CHICAGO Ave BRIDGE	13M	254	64			3056		
	25				16		764	
	27B					764		
	38		64					1520
	SUBTOTAL	254	128		16	3820	764	1520
SPRUCE St BRIDGE	13M	96	24			1088		
	25				10		408	
	27B					272		
	38	20						440
	SUBTOTAL	116	24		10	1360	408	440
DOWN St BRIDGE	13M	68	18			816		
	25				10		408	
	27B					408		
	38		12					272
	SUBTOTAL	68	30		10	1224	408	272
TOTAL		478	234			8864		2232

REMOVE PAVEMENT DELINEATION

DETAIL No.	PAVEMENT MARKERS				THERMOPLASTIC TRAFFIC STRIPE	YELLOW THERMOPLASTIC TRAFFIC STRIPE (HAZARDOUS WASTE)
	NON REFLECTIVE	RETROREFLECTIVE				
		TYPE G	TYPE D	TYPE H		
	EA				LF	LF
13M	40	10			440	
25				6		220
27B					220	
38						
SUBTOTAL	40	10		6	660	220
13M	254	64			3056	
25				16		764
27B					764	
38		64			3040	
SUBTOTAL	254	128		16	6860	764
13M	96	24			1088	
25				10		408
27B					272	
38	20				880	
SUBTOTAL	116	24		10	2240	408
13M	68	18			816	
25				10		408
27B					408	
38		12			544	
SUBTOTAL	68	30		10	1768	408
TOTAL	712				11528	1800

SUMMARY OF QUANTITIES

Q-1

REVISED BY | DATE REVISED
IYAD NAMY | KEVIN H. CHEN
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR: KEVIN CHEN
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® MAINTENANCE DESIGN

LAST REVISION | DATE PLOTTED => 20-OCT-2011 | TIME PLOTTED => 15:35
08-22-11

BORDER LAST REVISED 7/2/2010 | USERNAME => s128843 | DGN FILE => 80p700pa001.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 2343 | PROJECT NUMBER & PHASE 0800020021

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	215	41.4/43.0	5	14

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

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

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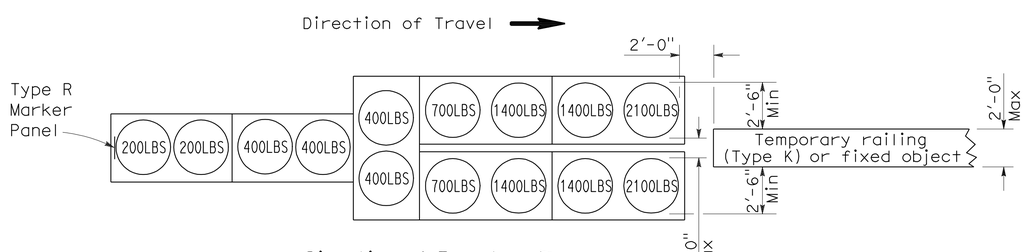
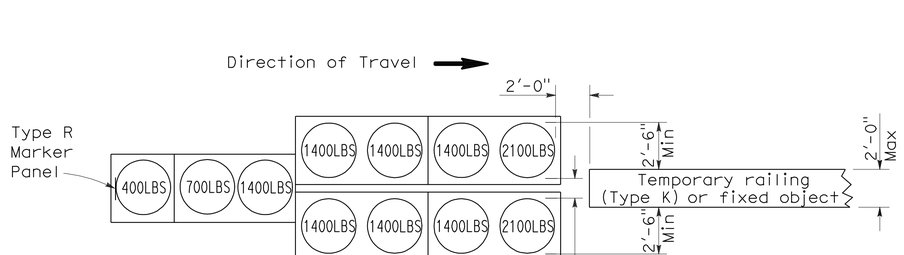
To accompany plans dated 10-17-11



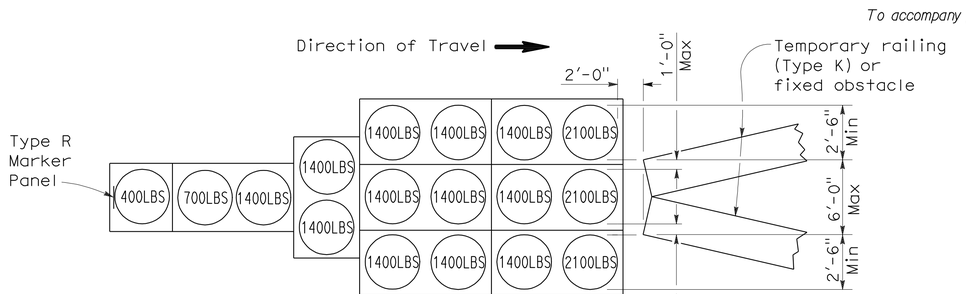
ARRAY 'TU14'

Approach speed 45 mph or more



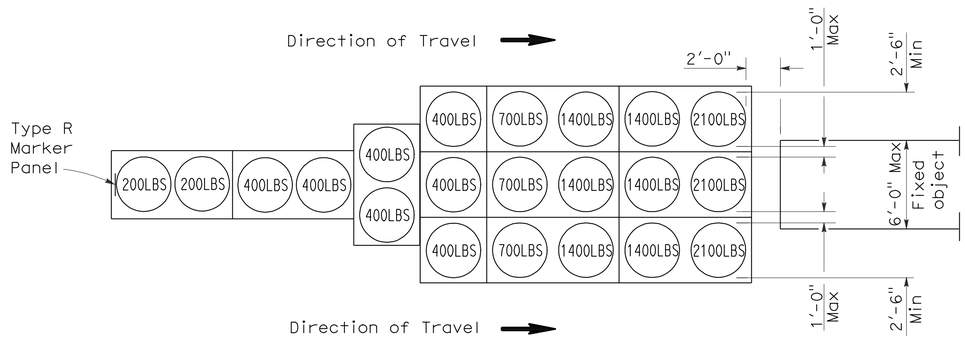
ARRAY 'TU11'

Approach speed less than 45 mph



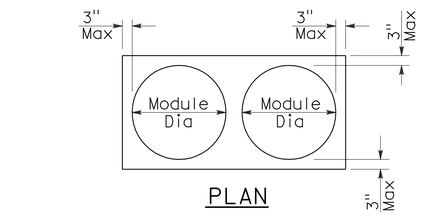
ARRAY 'TU17'

Approach speed less than 45 mph

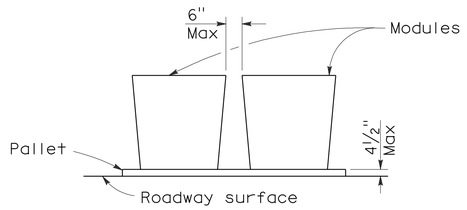


ARRAY 'TU21'

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
08	Riv	215	41.4/43.0	6	14

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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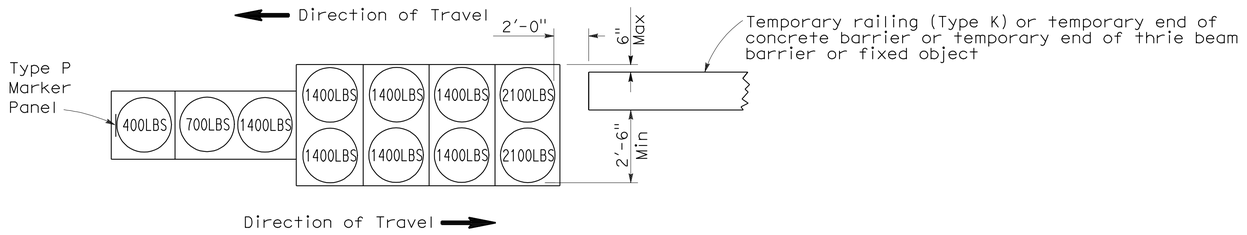
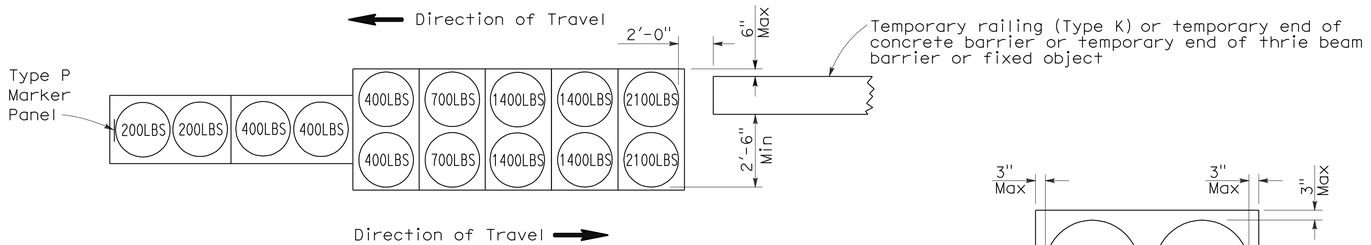
To accompany plans dated 10-17-11



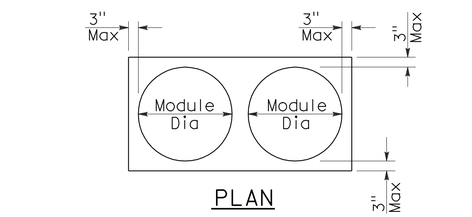
ARRAY 'TB11'

Approach speed less than 45 mph

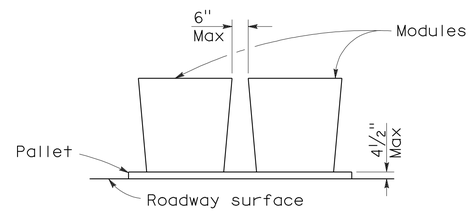


ARRAY 'TB14'

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
08	Riv	215	41.4/43.0	7	14

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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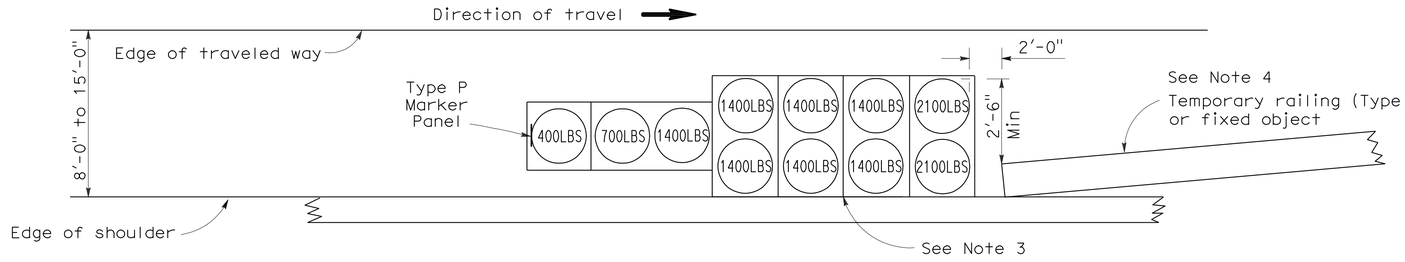
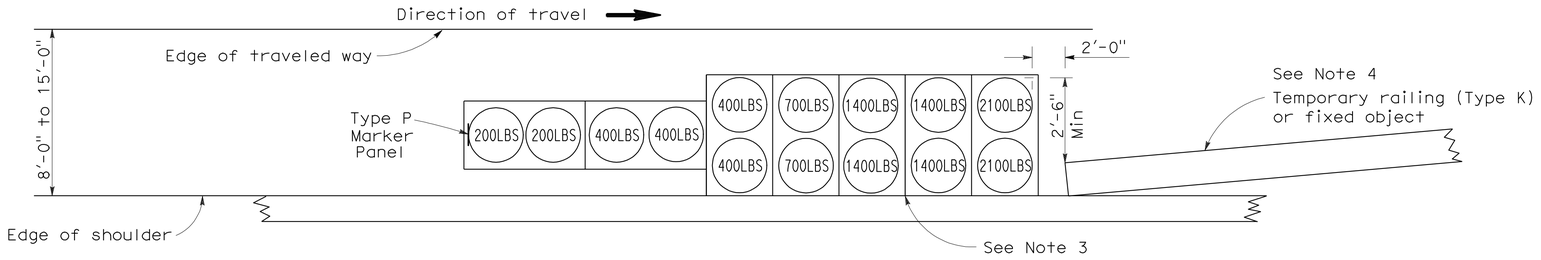
To accompany plans dated 10-17-11



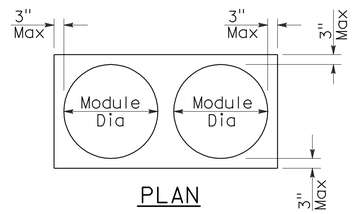
ARRAY 'TS11'

Approach speed less than 45 mph
See Note 9

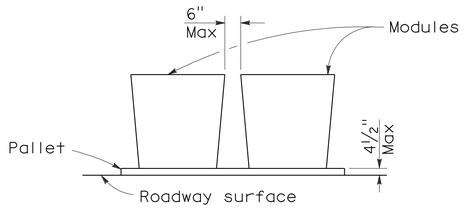


ARRAY 'TS14'

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
08	Riv	215	41.4/43.0	8	14

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

May 20, 2011
PLANS APPROVAL DATE

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

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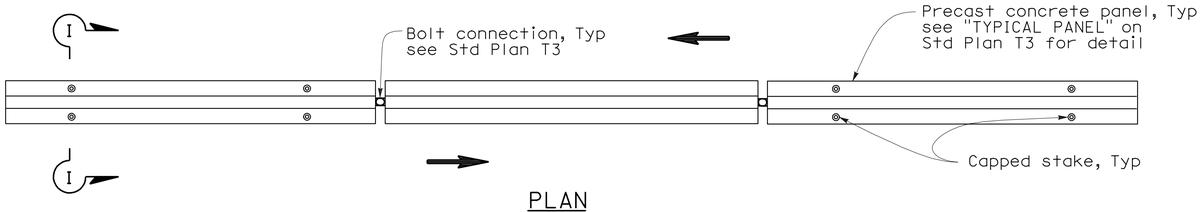
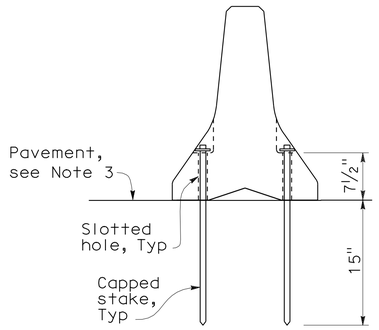
To accompany plans dated 10-17-11



PLAN

RAILING STAKING CONFIGURATION FOR TWO-WAY TRAFFIC

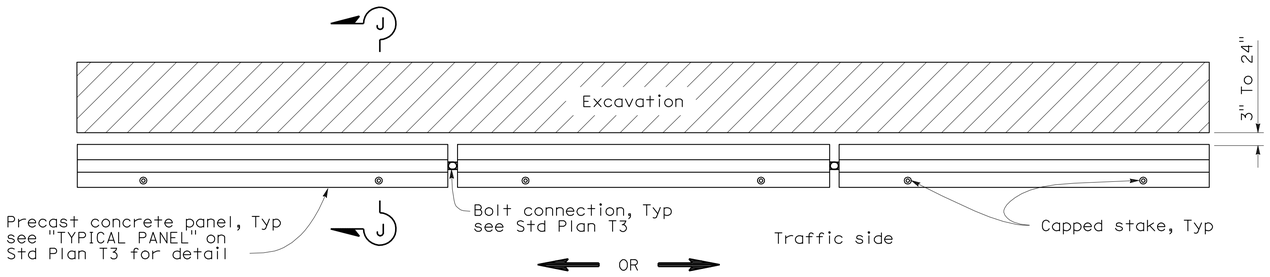
See Note 1



SECTION I-I

NOTES:

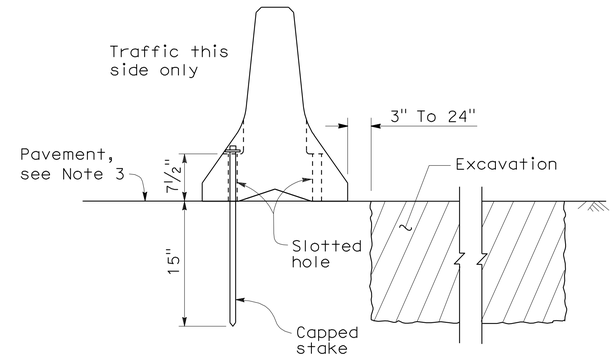
1. Where Type K Temporary Railing is placed as a temporary or long term barrier in two-way traffic on highways with less than 24" from the edge of traveled way, use four capped stakes per every other panel with end panels staked.
2. Where Type K Temporary Railing is placed 3" to 24" from the edge of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



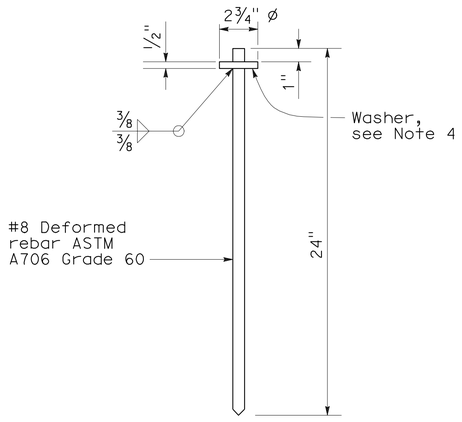
PLAN

RAILING STAKING CONFIGURATION ADJACENT TO AN EXCAVATION

See Note 2



SECTION J-J



CAPPED STAKE DETAIL

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TEMPORARY RAILING (TYPE K)

NO SCALE

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

NEW STANDARD PLAN NSP T3A

2006 NEW STANDARD PLAN NSP T3A

8-31-10

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	215	41.4/43.0	9	14

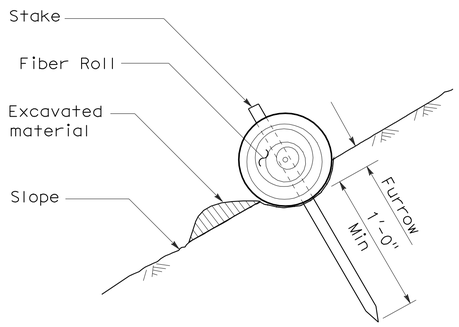
Robert B Schott
LICENSED LANDSCAPE ARCHITECT

April 3, 2009
PLANS APPROVAL DATE

LICENSED LANDSCAPE ARCHITECT — Robert B. Schott 3035 — Registration Expiration 11-30-10 Renewal Date 2-25-09 Date — STATE OF CALIFORNIA

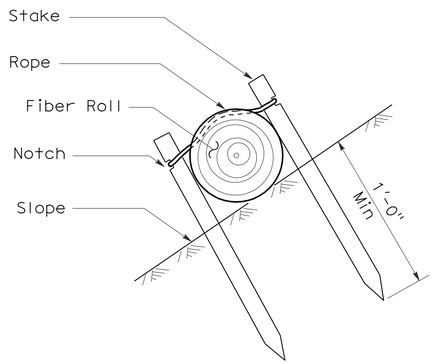
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

To accompany plans dated 10-17-11

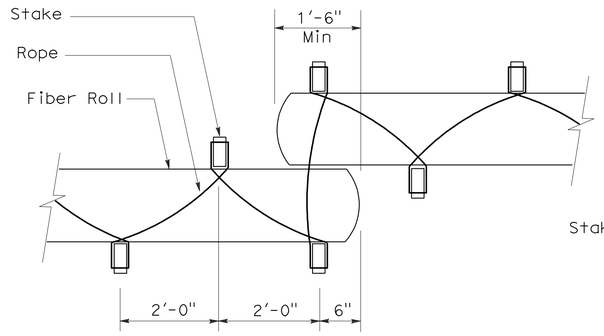


SECTION

TEMPORARY FIBER ROLL (TYPE 1)

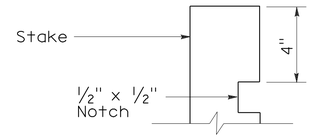


SECTION



PLAN

TEMPORARY FIBER ROLL (TYPE 2)

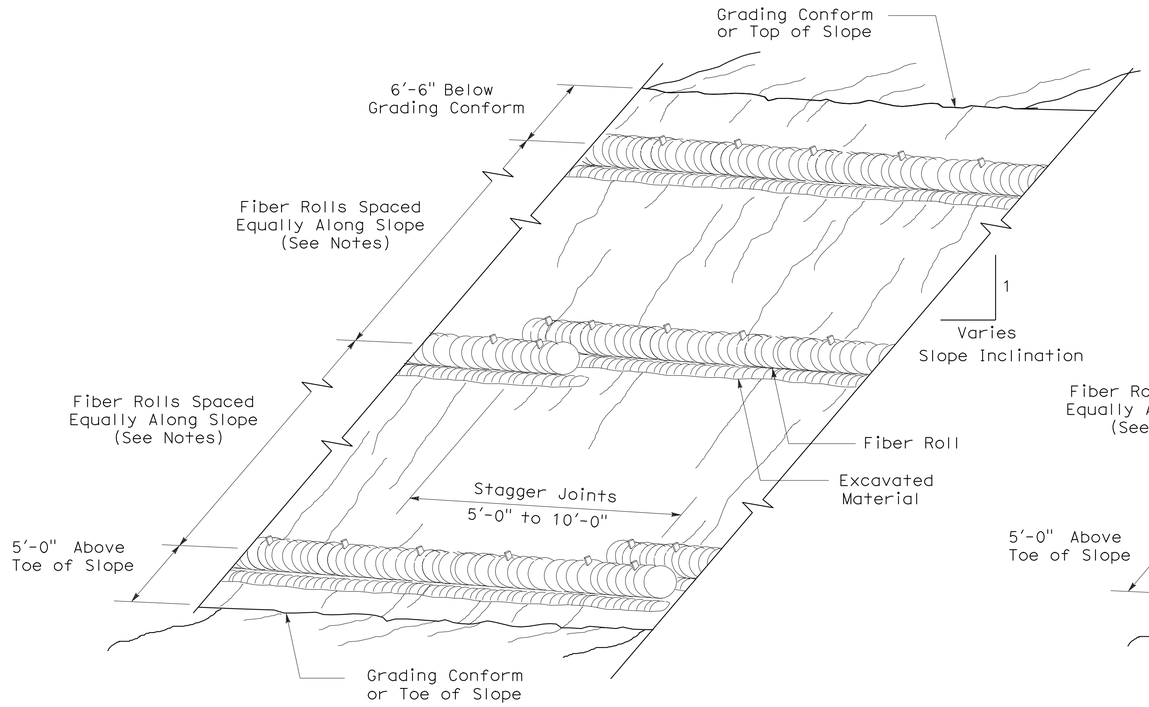


ELEVATION

STAKE NOTCH DETAIL

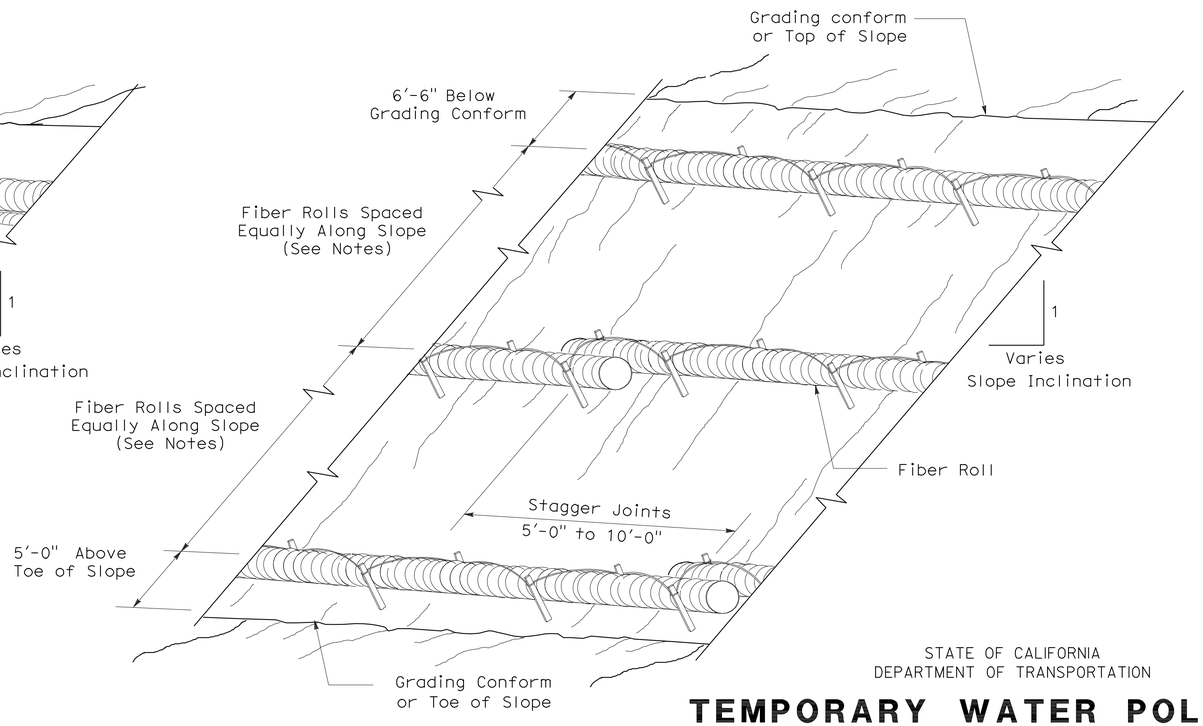
NOTES:

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.



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

2-23-09

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	215	41.4/43.0	10	14

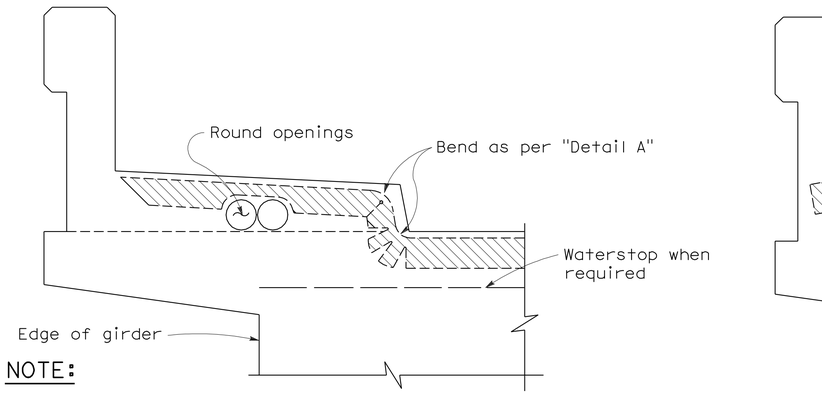
REGISTERED CIVIL ENGINEER

Efthymios Delis
No. C51434
Exp. 6-30-08
CIVIL
REGISTERED PROFESSIONAL ENGINEER
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.

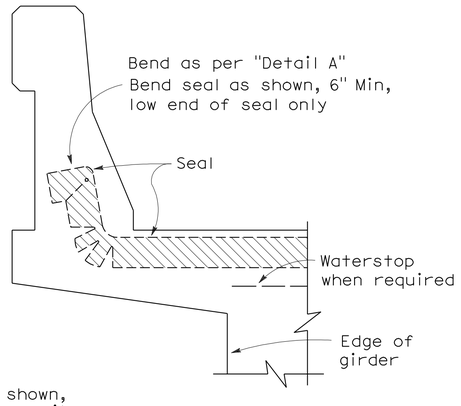
To accompany plans dated 10-17-11



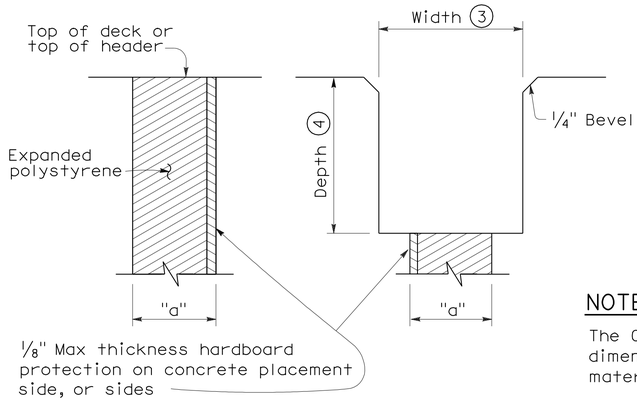
NOTE:

Type "B" seal shown. Type "A" seals to comform to the general path of seal shown, cuts for bending not required. Bend Type "A" seals 3" up into curb or barrier rail on only the low end of the seal.

CONCRETE BARRIER AND SIDEWALK



CONCRETE BARRIER

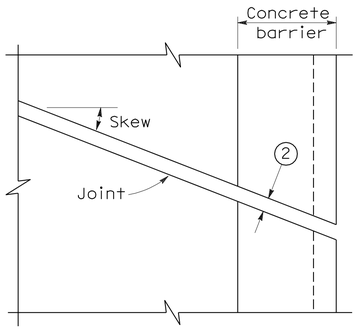


FORMING DETAIL SAWCUT DETAIL

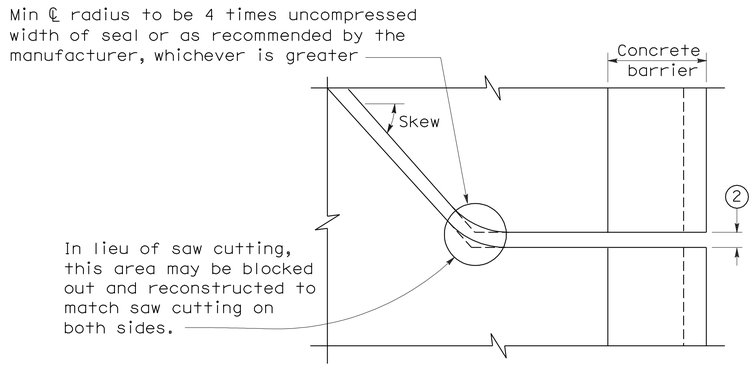
NOTE:

The Contractor shall verify all controlling field dimensions before ordering or fabricatiing any material.

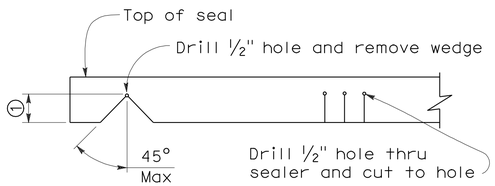
JOINT SEALS DETAILS

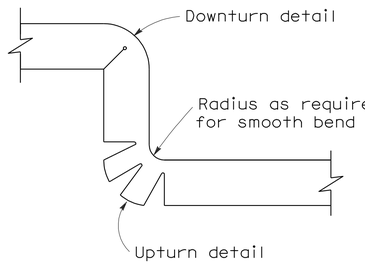


PLAN OF JOINT (SKEW ≤ 20°)



PLAN OF JOINT (SKEW > 20°)





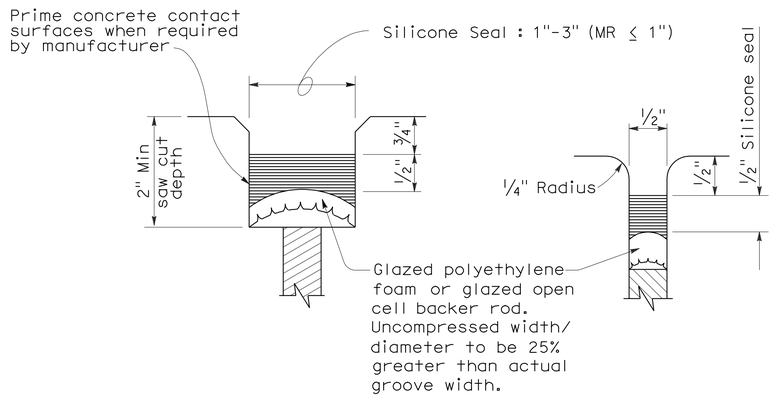
DETAIL A

NOTES:

1. Make smooth cuts from the bottom of seal to 1½" clear of top leaving at least one complete cell between the top of the cut and top of the seal. When necessary cut back of seal to clear conduit and round openings.
2. Opening in barrier to match width of sawn deck joint.
3. Sawcut groove widths shall be as ordered by the Engineer.
4. Depth of sawcut: Type A - Depth to be 2" minimum.
   Type B - Depth to be equal to or greater than the depth of seal measured along the contact surface, when compressed to minimum width position (W_2) plus dimensions shown.
5. MR (movement rating) as shown on other plan sheets.
6. Other depths must be approved by the Engineer.

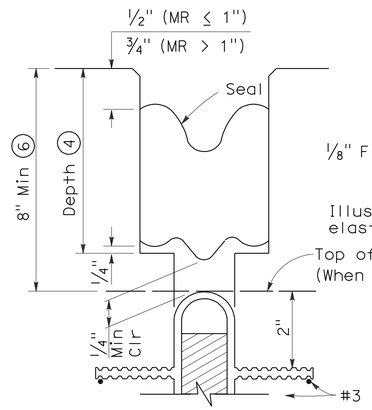
DIMENSIONS "a" OF JOINT REQUIRED

Movement Rating (MR) (5)	Bridge Type	"a" Dimension Deck Concrete Placed		
		Winter	Fall-Spring	Summer
2"	All except CIP/PS	1½"	1¼"	¾"
	CIP/PS	1¼"	1"	½"
1½"	All except CIP/PS	1¼"	1"	½"
	CIP/PS	1"	¾"	½"
1"	All except CIP/PS	1"	¾"	½"
	CIP/PS	¾"	½"	½"
½"	All except CIP/PS	¾"	¾"	½"
	CIP/PS	½"	½"	½"

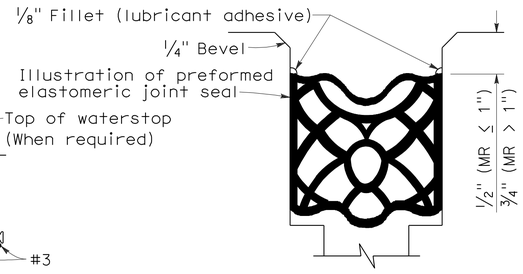


TYPE A SEAL
Movement rating : Silicone = 1" Max

TYPE AL SEAL
Longitudinal joints only



TYPE B JOINT SEAL
IN MINIMUM WIDTH POSITION (W_2)



TYPE B SEAL
Movement Rating ≤ 2"

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")

NO SCALE

RSP B6-21 DATED OCTOBER 5, 2007 SUPERSEDES STANDARD PLAN B6-21 DATED MAY 1, 2006 - PAGE 258 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP B6-21

2006 REVISED STANDARD PLAN RSP B6-21

5-8-07

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	215	41.4/43.0	11	14

Edward Li 01/04/10
REGISTERED CIVIL ENGINEER DATE

10-17-11
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — EDWARD GUOJUN LI — No. C56706 — Exp. 06/30/11 — CIVIL — STATE OF CALIFORNIA

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INDEX TO PLANS

STANDARD PLANS DATED MAY 2006

SHEET No.	TITLE
A10A	ACRONYMS AND ABBREVIATIONS (SHEET 1 OF 2)
A10B	ACRONYMS AND ABBREVIATIONS (SHEET 2 OF 2)
A10C	SYMBOLS (SHEET 1 OF 2)
A10D	SYMBOLS (SHEET 2 OF 2)
RSP B6-21	JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")

STANDARD PLAN SHEET No.

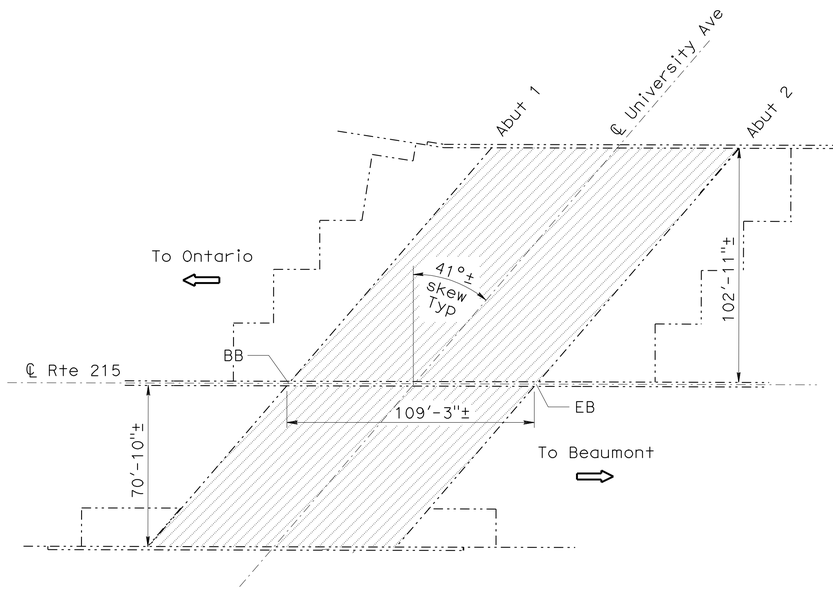
DETAIL No.

LEGEND:

Indicates existing.

Indicates direction of traffic.

Indicates limits of clean and treat existing bridge deck with high molecular weight methacrylate. Prior to bridge deck treatment, remove unsound concrete and patch with rapid setting concrete.



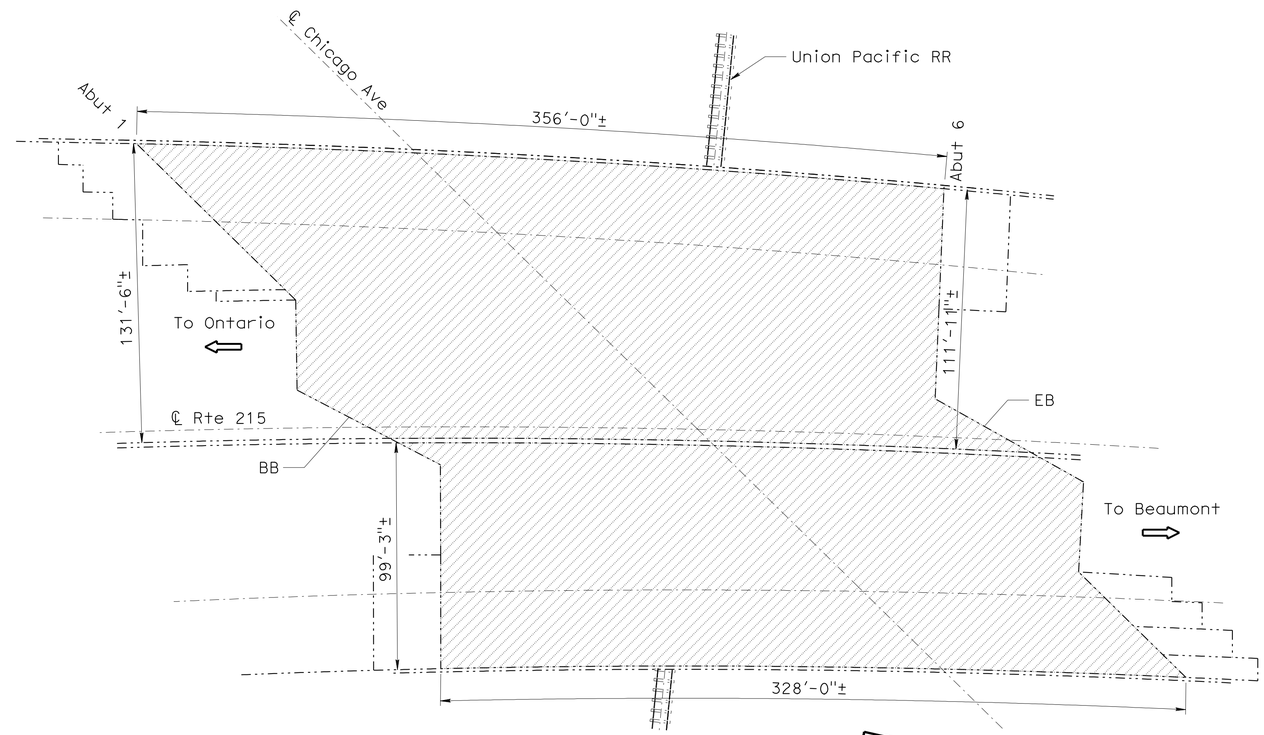
UNIVERSITY AVENUE UC

Br No. 56-0408, Rte 215, PM 41.49
NO SCALE

UNIVERSITY Ave UC 56-0408
QUANTITIES

REMOVE UNSOUND CONCRETE	48	CF
CLEAN BRIDGE DECK	19,000	SQFT
RAPID SETTING CONCRETE (PATCH)	48	CF
TREAT BRIDGE DECK	19,000	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	240	GAL
PUBLIC SAFETY PLAN	LUMP	SUM

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.



CHICAGO AVENUE OH

Br No. 56-0403, Rte 215, PM 42.63
NO SCALE

CHICAGO Ave OH 56-0403
QUANTITIES

REMOVE UNSOUND CONCRETE	164	CF
CLEAN BRIDGE DECK	65,500	SQFT
RAPID SETTING CONCRETE (PATCH)	164	CF
TREAT BRIDGE DECK	65,500	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	820	GAL
PUBLIC SAFETY PLAN	LUMP	SUM

TONY D. BRAKE
DESIGN ENGINEER

DESIGN	BY Edward Li	CHECKED Gerald Joo	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD		
DETAILS	BY Tom Dang	CHECKED Gerald Joo	LAYOUT	BY Tom Dang	CHECKED Edward Li	
QUANTITIES	BY Edward Li	CHECKED Gerald Joo	SPECIFICATIONS	BY Kevin Ellingson	PLANS AND SPECS COMPARED Kevin Ellingson	

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. Various
POST MILE Varies

ROUTE 215 BRIDGES
GENERAL PLAN No. 1

STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: X
PROJECT NUMBER & PHASE: 0800020021 CONTRACT NO.: 08-0P7001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
10-28-10	12-15-10	1-03-11	1-04-11	01	04

FILE => 08-0p7001-a-gp01.dgn

USERNAME => s128843 DATE PLOTTED => 20-OCT-2011 TIME PLOTTED => 15:51

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	215	41.4/43.0	12	14

Edward Li 01/04/10
REGISTERED CIVIL ENGINEER DATE

10-17-11
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — EDWARD GUOJUN LI — No. C56706 — Exp. 06/30/11 — CIVIL — STATE OF CALIFORNIA

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LEGEND:

Indicates existing.

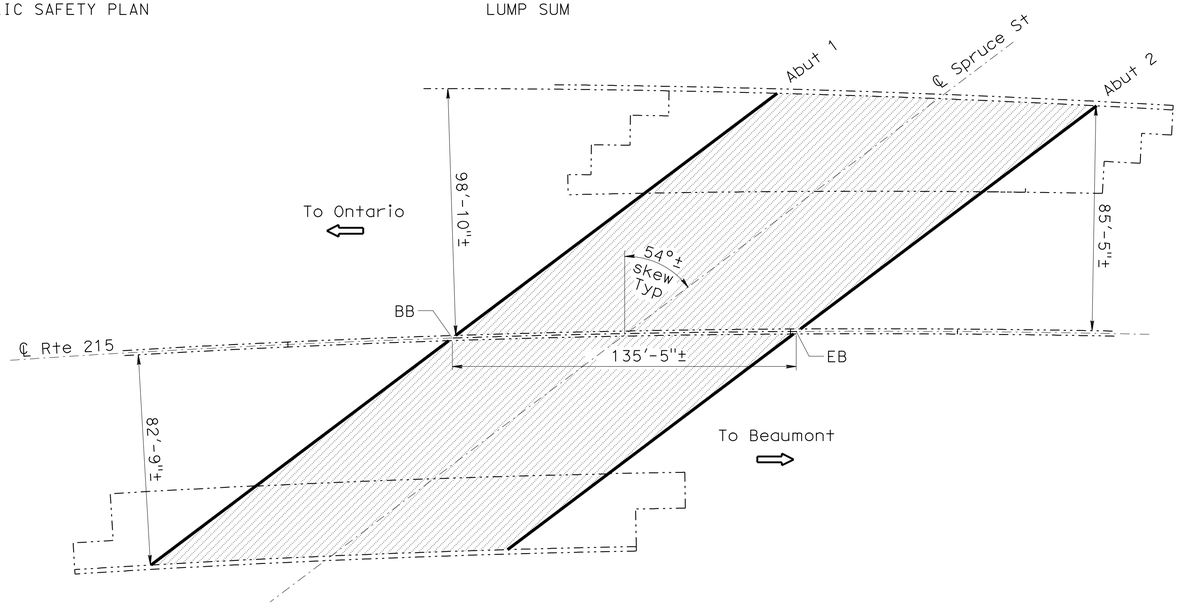
Indicates direction of traffic.

Indicates limits of clean and treat existing bridge deck with high molecular weight methacrylate. Prior to bridge deck treatment, remove unsound concrete and patch with rapid setting concrete.

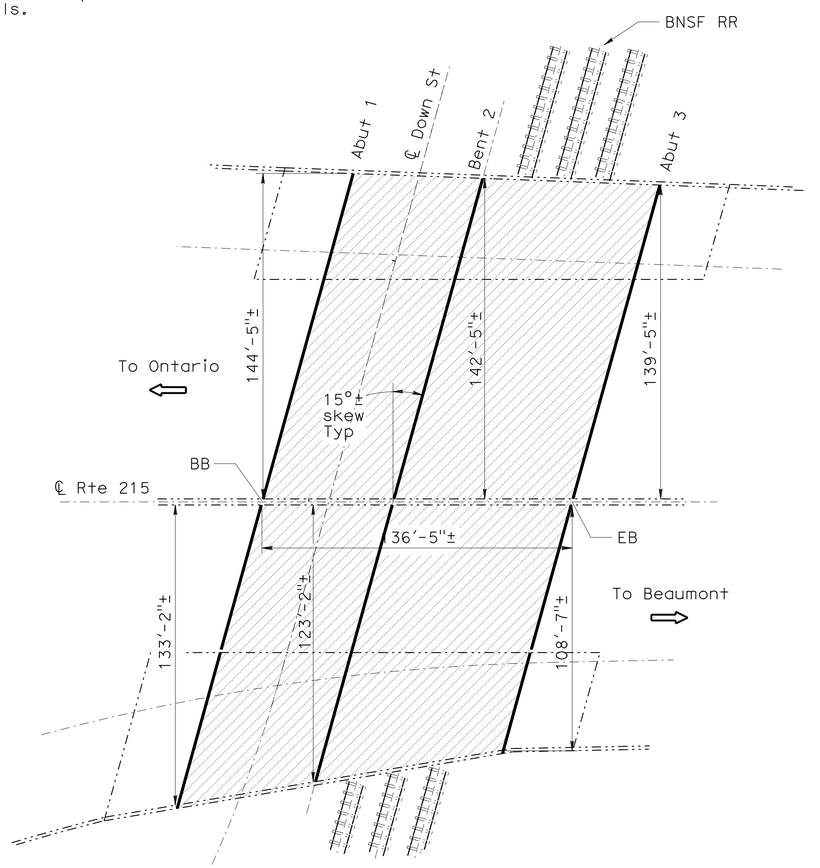
Indicates location of existing joint seal removal and placement of new joint seal. Prior to placement of new joint seal repair joint spalls.

SPRUCE St UC 56-0399
QUANTITIES

REMOVE UNSOUND CONCRETE	60	CF
CLEAN BRIDGE DECK	23,800	SQFT
CLEAN EXPANSION JOINT	600	LF
RAPID SETTING CONCRETE (PATCH)	60	CF
JOINT SEAL (MR 1½")	600	LF
TREAT BRIDGE DECK	23,800	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	298	GAL
PUBLIC SAFETY PLAN	LUMP	SUM



SPRUCE STREET UC
Br No. 56-0399, Rte 215, PM 42.84
NO SCALE



DOWN STREET OH
Br No. 56-0398, Rte 215, PM 43.08
NO SCALE

DOWN St OH 56-0398
QUANTITIES

REMOVE UNSOUND CONCRETE	90	CF
CLEAN BRIDGE DECK	36,000	SQFT
CLEAN EXPANSION JOINT	820	LF
RAPID SETTING CONCRETE (PATCH)	90	CF
JOINT SEAL (MR ½")	275	LF
JOINT SEAL (MR 1½")	545	LF
TREAT BRIDGE DECK	36,000	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	450	GAL
PUBLIC SAFETY PLAN	LUMP	SUM

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

TONY D. BRAKE
DESIGN ENGINEER

	BY	CHECKED
DESIGN	Edward Li	Gerald Joo
DETAILS	Tom Dang	Gerald Joo
QUANTITIES	Edward Li	Gerald Joo

LOAD FACTOR DESIGN — LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD

	BY	CHECKED
LAYOUT	Tom Dang	Edward Li
SPECIFICATIONS	Kevin Ellingson	PLANS AND SPECS COMPARED: Kevin Ellingson

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. Various
POST MILE Varies

ROUTE 215 BRIDGES
GENERAL PLAN No. 2

STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: X
PROJECT NUMBER & PHASE: 0800020021
CONTRACT NO.: 08-0P7001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
10-28-10	12-15-10	1-03-11		02	04

FILE => 08-0p7001-a-gp02.dgn

USERNAME => s128843 DATE PLOTTED => 20-OCT-2011 TIME PLOTTED => 15:51

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	215	41.4/43.0	13	14

Edward Li 01/04/10
REGISTERED CIVIL ENGINEER DATE

10-17-11
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER EDWARD GUOJUN LI No. C56706 Exp. 06/30/11 CIVIL STATE OF CALIFORNIA

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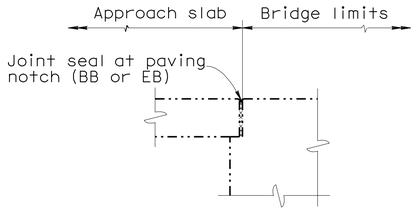
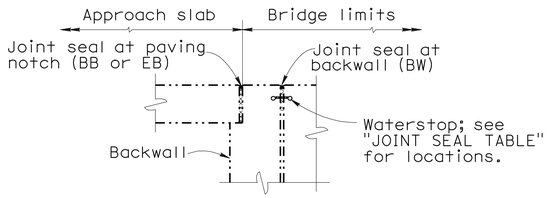
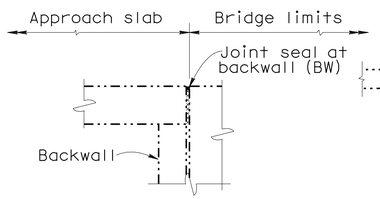


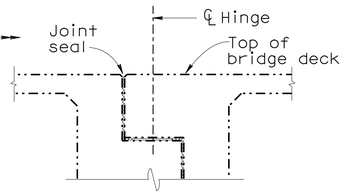
DIAPHRAGM ABUTMENT



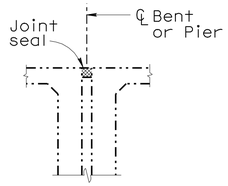
ABUTMENT WITH BACKWALL AND PAVING NOTCH



ABUTMENT WITH BACKWALL



HINGE



BENT OR PIER

JOINT SEAL LOCATION

NO SCALE

JOINT SEAL TABLE

BRIDGE NAME	BRIDGE NUMBER	LOCATION		MINIMUM "MR" (INCHES)	APPROX LENGTH (FT)	EXISTING WATERSTOP	APPROX DEPTH TO CLEAN EXP JOINT (INCHES)	APPROX DEPTH OF JOINT SPALLS (INCHES)	APPROX WIDTH OF JOINT SPALLS (INCHES)	APPROX LENGTH OF JOINT SPALLS (FEET)
SPRUCE STREET UC	56-0399	Abut 1	BW	1½	308	NO	12	3	6	5
		Abut 2	BW	1½	299	NO	12	3	6	5
DOWN STREET OH	56-0398	Abut 1	BW	1½	288	NO	12	3	6	5
		Bent 2	-	½	275	NO	12	3	6	5
		Abut 3	BW	1½	257	NO	12	3	6	5

BW = Backwall

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

NOTES:

The following notes apply to JOINT SEAL TYPE A:

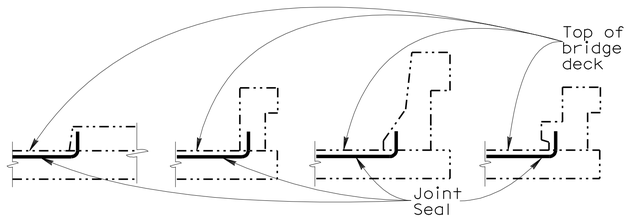
Install Joint Seal (MR = ½") or Silicone Joint Seal 3" up into curb or barrier rail on the low side of the deck where deck joint aligns with curb or barrier rail joint.

For details not shown see RSP B6-21 sheet.

The following notes apply to JOINT SEAL TYPE B:

1) Seal must satisfy both minimum Movement Rating (MR) and minimum W1 requirements.
2) Minimum W1 is the calculated maximum width of the joint based on field measurements. After the joints have been cleaned, minimum W1 is to be recalculated by the Engineer.
3) W1 shall be the smaller of the values determined as follows:
   A) 0.85 times the manufacturer's designed minimum uncompressed width of the seal.
   B) The width of the seal on the third successive test cycle of the pressure deflection test, when compressed to an average pressure of 3.0 PSI.
4) Bend Type B joint seal 6 inches up into curb or rail on the low side of the deck where deck joint matches curb or rail joint.

For details not shown see RSP B6-21 sheet.



BARRIER RAIL

JOINT SEAL AT LOW SIDE OF DECK

Note: Details shown for illustration purposes only.

For use only where deck joint matches the sidewalk, curb or barrier rail joint.

DESIGN	BY Edward Li	CHECKED Gerald Joo	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO. Various
DETAILS	BY Tom Dang	CHECKED Gerald Joo			POST MILE Varies
QUANTITIES	BY Edward Li	CHECKED Gerald Joo			

ROUTE 215 BRIDGES
MISCELLANEOUS DETAILS No. 1

STRUCTURES MAINTENANCE DETAIL SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: X
PROJECT NUMBER & PHASE: 0800020021 CONTRACT NO.: 08-0P7001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
10-28-10	12-16-10	1-03-11		03	04

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USERNAME => s128843 DATE PLOTTED => 20-OCT-2011 TIME PLOTTED => 15:51

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	215	41.4/43.0	14	14

Edward Li 01/04/10
REGISTERED CIVIL ENGINEER DATE

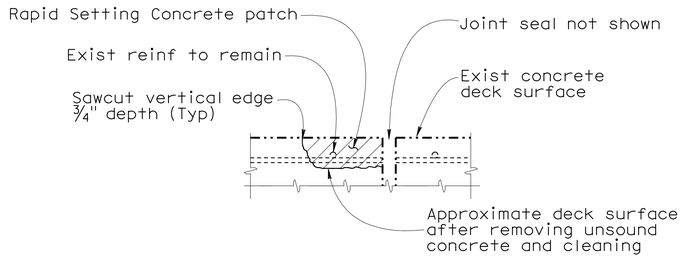
10-17-11
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — EDWARD GUOJUN LI — No. C56706 — Exp. 06/30/11 — CIVIL — STATE OF CALIFORNIA

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

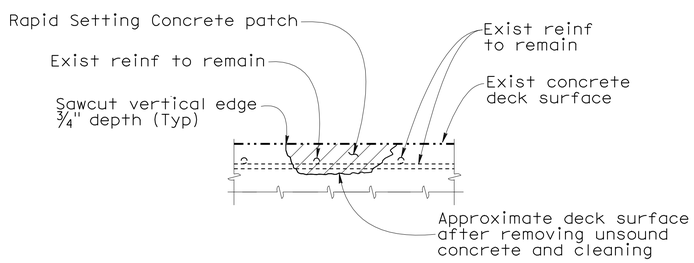
DECK REPAIR TABLE

BRIDGE NAME	BRIDGE NUMBER	APPROXIMATE AREA OF UNSOUND CONCRETE (%)	APPROXIMATE DEPTH OF RAPID SETTING CONCRETE (PATCH) (INCHES)
UNIVERSITY AVENUE UC	56-0408	1	3
CHICAGO AVENUE OH	56-0403	1	3
SPRUCE STREET UC	56-0399	1	3
DOWN STREET OH	56-0398	1	3



JOINT SPALL REPAIR DETAIL

Location will be determined by the Engineer. Reinforcement may be encountered during deck concrete removal and is to remain undamaged.



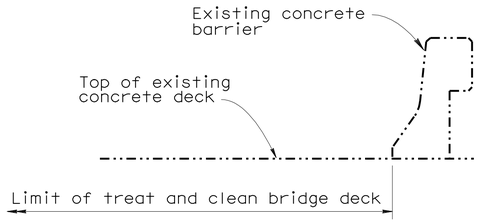
DECK DAMAGE REPAIR DETAIL

Location will be determined by the Engineer. Reinforcement may be encountered during deck concrete removal and is to remain undamaged.

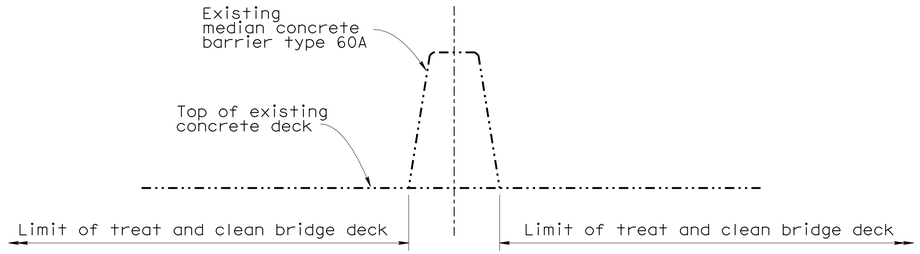
NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

DECK REPAIR NOTES:

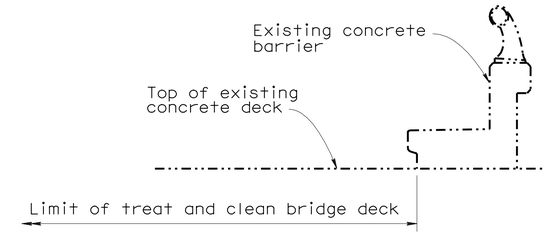
1. Existing reinforcement shall be protected in place during unsound concrete removal and patching operations.
2. It is responsibility of the Contractor to repair any reinforcement that is accidently cut by saw cutting operations.
3. When existing transverse reinforcement is exposed in the deck surface, saw cutting may be waived with the approval of the Engineer.
4. The saw cut depth shall not exceed ¾ inch or the concrete cover over the top steel reinforcing bars, whichever is less.
5. Remove unsound Portland Cement concrete and unsound concrete patches to expose sound, hard concrete substrate. Replace original deck surface with rapid setting concrete patch.



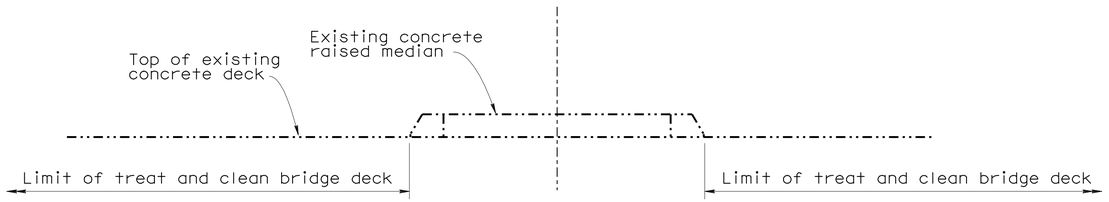
EOD BARRIER



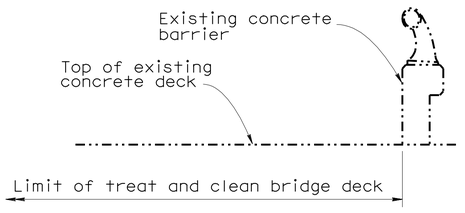
MEDIAN BARRIER



SIDEWALK BARRIER TYPE 2



RAISED MEDIAN



SIDEWALK BARRIER TYPE 1

TYPICAL LIMITS OF DECK WORK

NO SCALE

DESIGN	BY Edward Li	CHECKED Gerald Joo	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO. Various	ROUTE 215 BRIDGES
DETAILS	BY Tom Dang	CHECKED Gerald Joo			POST MILE Varies	MISCELLANEOUS DETAILS No. 2
QUANTITIES	BY Edward Li	CHECKED Gerald Joo				

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