Draft Project Report

I-10 Corridor Project

ATTACHMENT E

Structure Advance Planning Studies

ALTERNATIVE 2

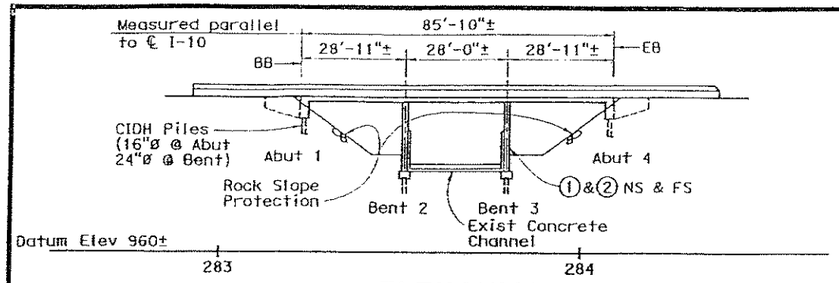
Advance Planning Studies (APSs) were prepared and approved in 2008 and 2009 for major structure modifications proposed under the HOV Alternative and are attached herein. However, a considerable change has been made to the HOV Alternative design since the APS development as a result of the policy change from buffer-separated HOV facility to continuous access. As such, the APS general plans may not be representative of the current structure improvements for the HOV Alternative.

PREPARED FOR THE STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

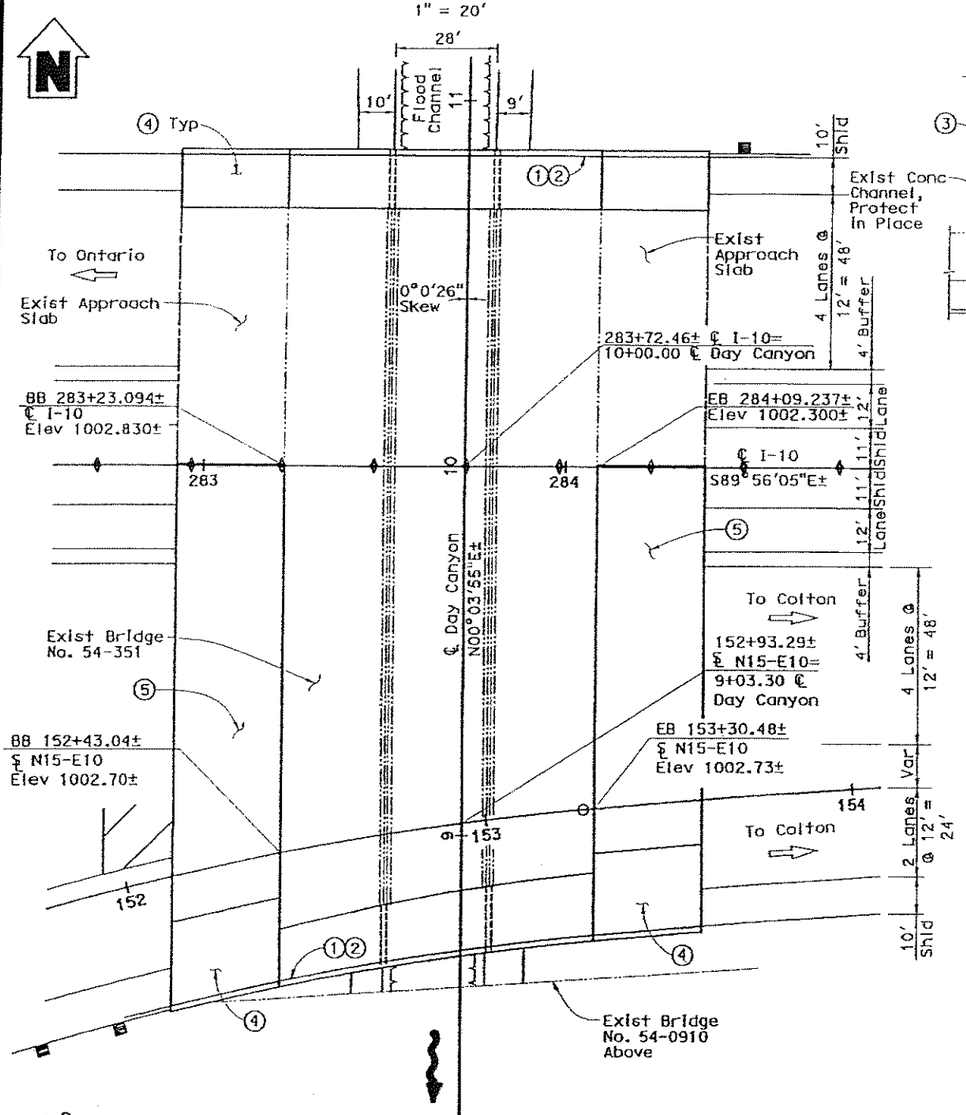
DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT
8	SBd	10	3.20/33.43

SAN BERNARDINO ASSOCIATED GOVERNMENTS — 1170 W Third St 2nd Floor San Bernardino CA 92410

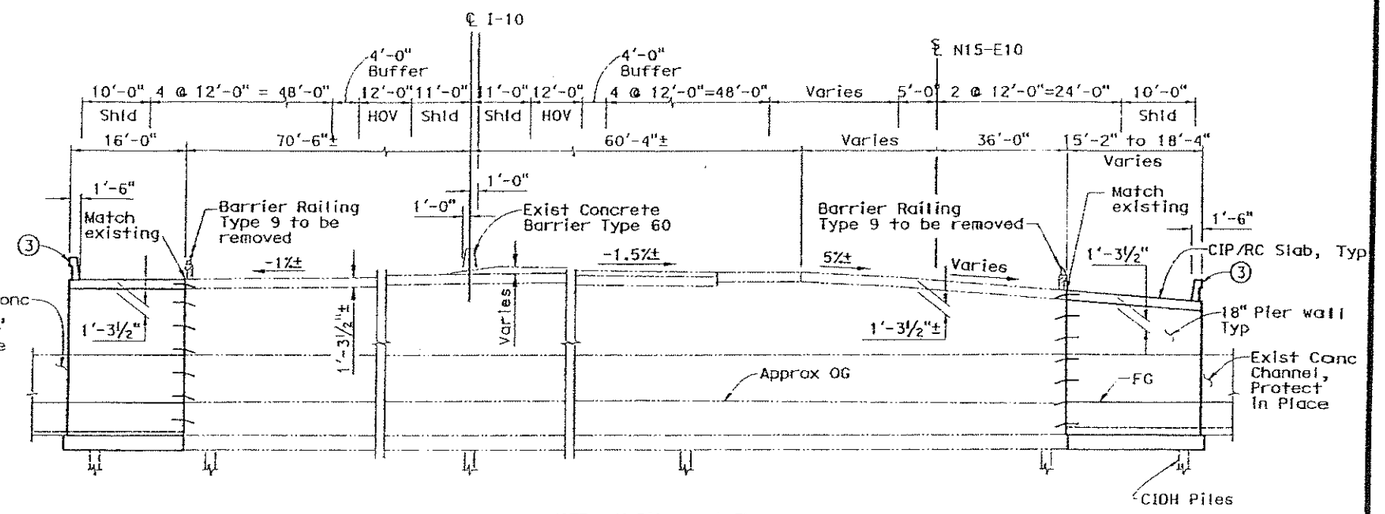
PARSONS — 2201 DUPONT DRIVE SUITE 200 IRVINE, CA 92612



ELEVATION
1" = 20'



PLAN
1" = 20'



NOTE: All Piles not Shown

TYPICAL SECTION
1" = 10'

North Bridge		
DATE OF ESTIMATE	=	6/20/08
BRIDGE REMOVAL	=	N/A
STRUCTURE DEPTH	=	1'-3½"
LENGTH	=	85'-10"
WIDTH	=	16'-0"
AREA	=	1376 SF
COST/SF INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	$333
PRELIM SEISMIC RETROFIT	=	$150,000
TOTAL COST	=	$700,000

South Bridge		
DATE OF ESTIMATE	=	6/20/08
BRIDGE REMOVAL	=	N/A
STRUCTURE DEPTH	=	1'-3½"
LENGTH	=	85'-10"
WIDTH	=	15'-2" to 18'-4"
AREA	=	1764 SF
COST/SF INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	$420
PRELIM SEISMIC RETROFIT	=	$150,000
TOTAL COST	=	$900,000

Notes:
1. Paint "Br No. 54-0351"
2. Paint "Day Canyon Channel Bridge"
3. Concrete Barrier Type 736
4. Structure Approach, Type N(30S)
5. Structure Approach, Type R(30D)

LEGEND:
- Direction of Travel
- Bridge Removal (Portion)
- Direction of Flow
- MBGR

X _____ DESIGN OVERSIGHT
X 9/12/08 SIGN OFF DATE

ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 2/25/05)

DESIGNED BY	J. LE	DATE	6/20/08
DRAWN BY	A. SEGURA	DATE	6/20/08
CHECKED BY	U. SANDIRA	DATE	6/20/08
APPROVED	M. MOHSENI	DATE	6/20/08

Mohsen Mohseni — PROJECT ENGINEER

PLANNING STUDY

DAY CANYON CHANNEL BRIDGE (WIDEN)

BRIDGE NO. 54-0351	CU 08224
SCALE: AS SHOWN	EA 0C2500

FILE => c:\pw_working_sa\prg\p0038016\dgn10434\54-351-a-gp01.dgn

USERNAME => p0038016 DATE PLOTTED => 8/29/2008 TIME PLOTTED => 2:59:14 PM

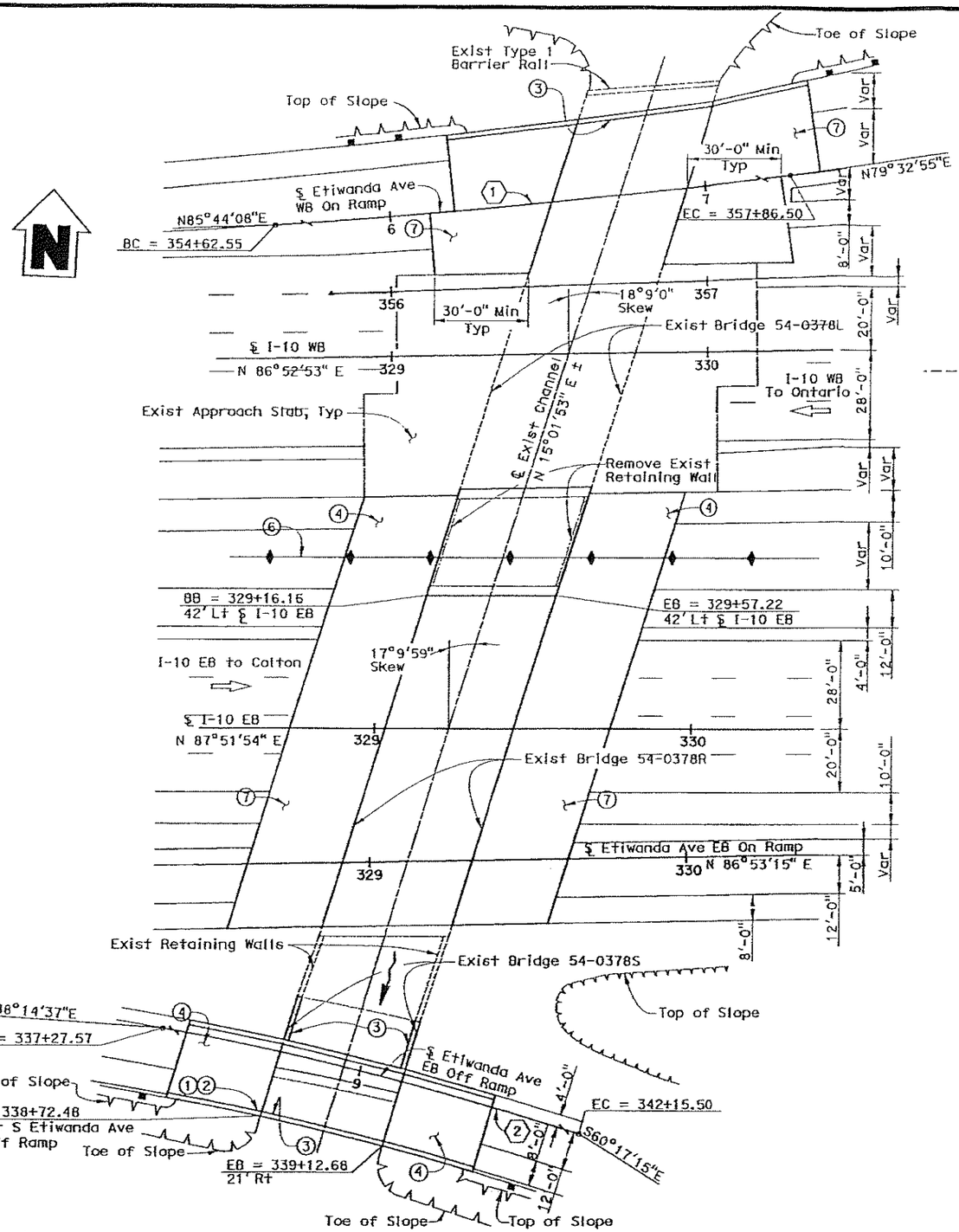
HOV ALTERNATIVE

PREPARED FOR THE STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT
8	SBd	10	3.20/33.43

SAN BERNARDINO ASSOCIATED GOVERNMENTS — 1170 W Third St 2nd Floor San Bernardino CA 92410

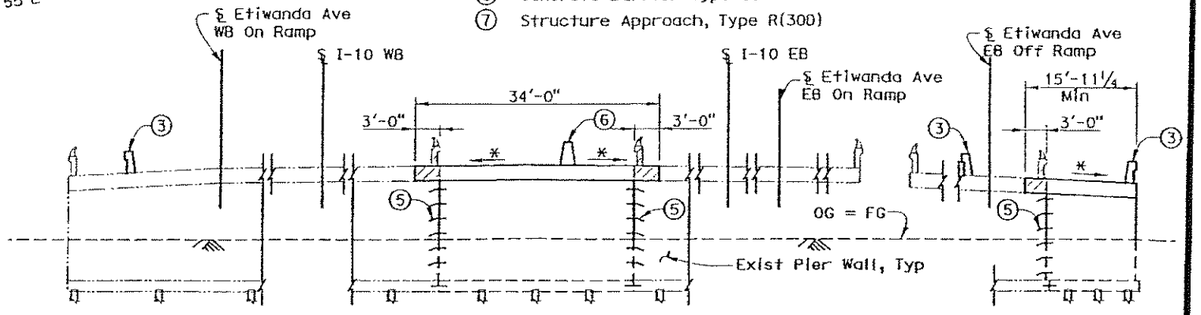
PARSONS — 2201 DUPONT DRIVE SUITE 200 IRVINE, CA 92612



PLAN
1" = 20'

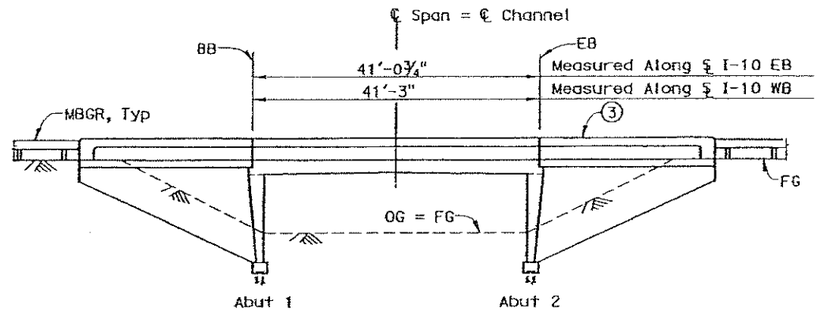
LEGEND:
- Direction of Travel
- Bridge Removal (Portion)
- MBGR

Notes:
1. Paint "Br No. 54-378"
2. Paint "Etiwanda Wash"
3. Concrete Barrier Type 736
4. Structure Approach, Type N(300)
5. Drill and Bond Dowels
6. Concrete barrier Type 60
7. Structure Approach, Type R(300)



* Match Exist Slope

TYPICAL SECTION
1" = 10'



ELEVATION
1" = 10'

DATE OF ESTIMATE	=	6/20/08
BRIDGE REMOVAL	=	N/A
STRUCTURE DEPTH	=	1'-9" ~ 2'-0"
LENGTH	=	41'-0"
WIDTH	=	16'-0"
AREA	=	2066 SF
COST/SF INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	$370 *
PRELIM SEISMIC RETROFIT	=	$100,000
TOTAL COST	=	$1,300,000

* Cost/SF does not include new structure approach on existing bridge.

CURVE DATA (1)
R = 3000'
Δ = 6°11'13"
L = 323.95'
T = 162.13'

CURVE DATA (2)
R = 1000'
Δ = 27°57'21"
L = 487.92'
T = 248.92'

DESIGNED BY U. SANOIRA	DATE 6/24/08	Mohsen Mohseni, PROJECT ENGINEER
DRAWN BY A. SEGURA	DATE 6/24/08	
CHECKED BY M. MOHSENI	DATE 6/24/08	
APPROVED M. MOHSENI	DATE 6/24/08	

PLANNING STUDY
ETIWANDA WASH (WIDEN)

BRIDGE NO. 54-0378 | CU 08224
SCALE: AS SHOWN | EA 0C2500

X Lily Hsu
DESIGN OVERSIGHT 9/12/08
X
SIGN OFF DATE

ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 2/28/05)

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USERNAME => p0036016 DATE PLOTTED => 8/29/2008 TIME PLOTTED => 3:14:28 PM

HOV ALTERNATIVE

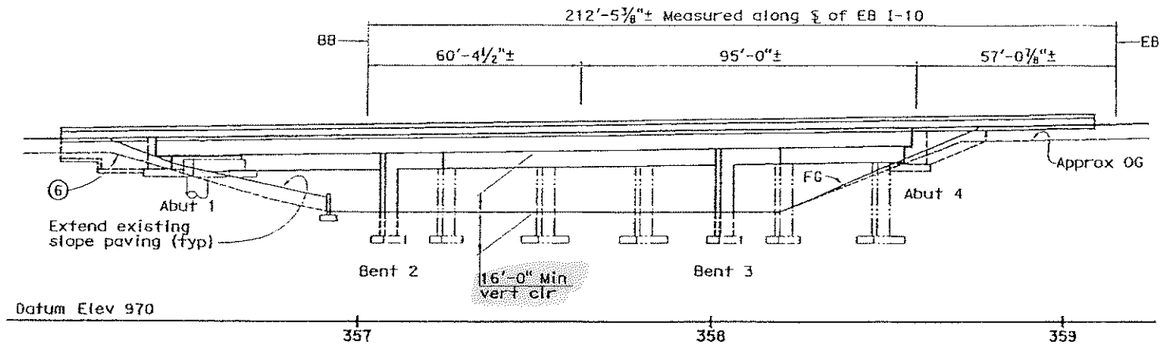
PREPARED FOR THE STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

RECEIVED
SEP 02 2008
OFFICE OF SPECIAL FUNDED PROJECTS

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT
8	SBd	10	R.20/33.43

SAN BERNARDINO ASSOCIATED GOVERNMENTS — 1170 W Third St 2nd Floor San Bernardino CA 92410

PARSONS — 2201 DUPONT DRIVE SUITE 200 IRVINE, CA 92612



ELEVATION
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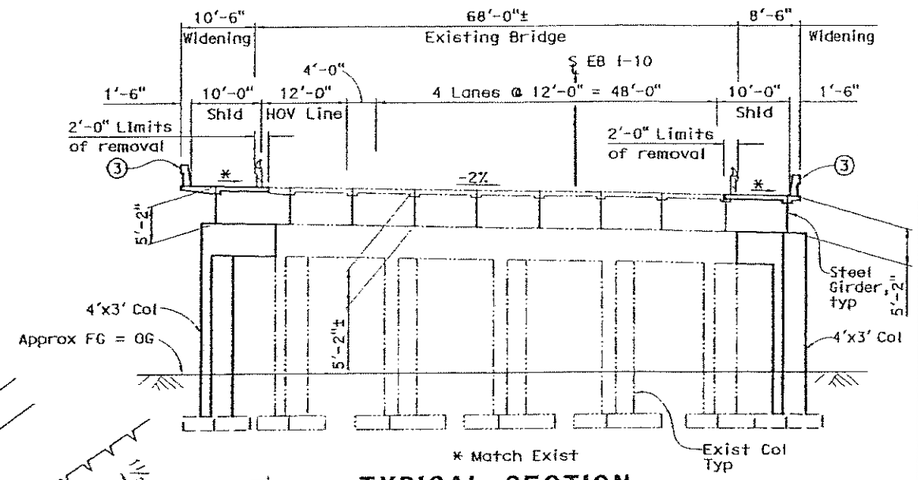
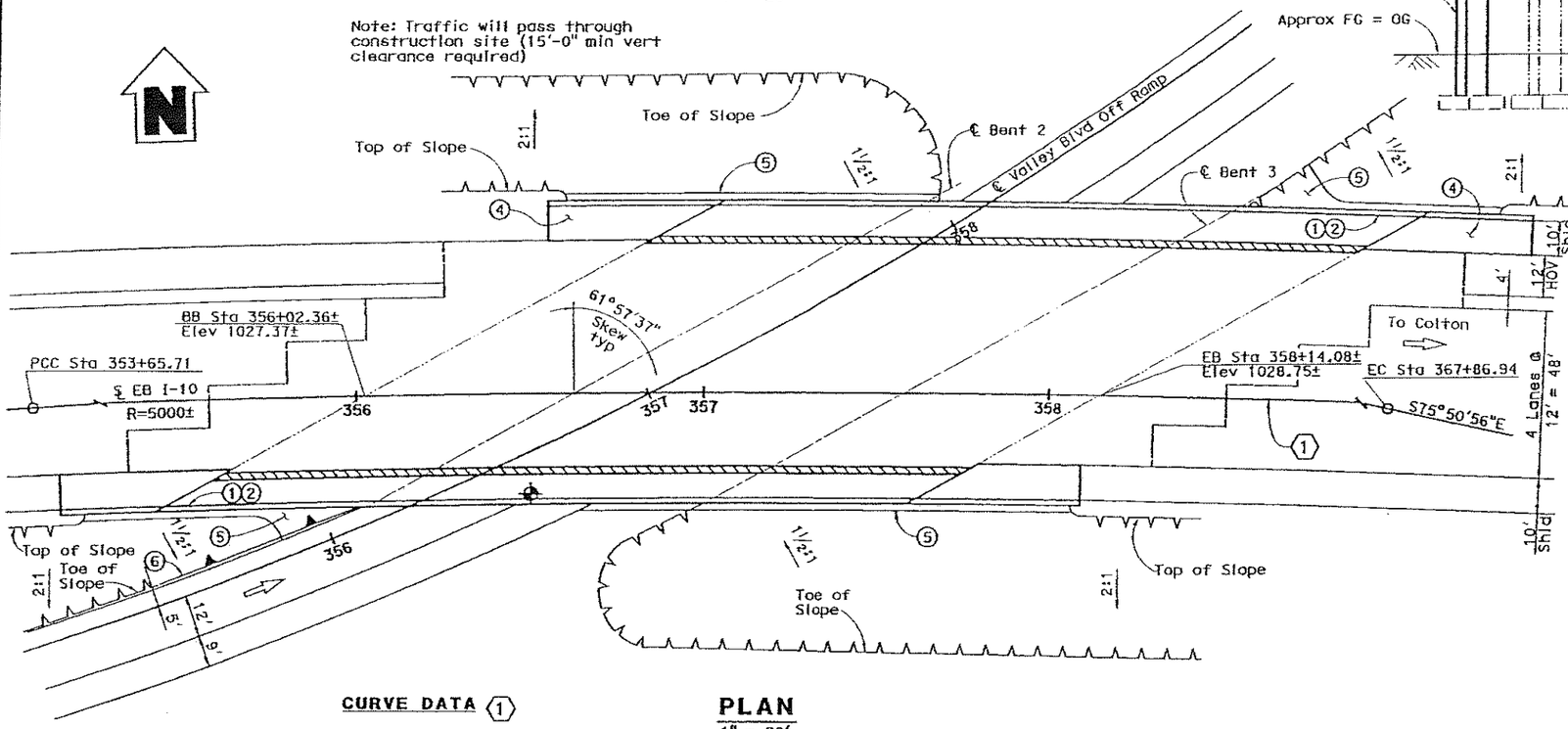


Note: Traffic will pass through construction site (15'-0" min vert clearance required)



PLAN
1" = 20'

CURVE DATA (1)

R = 5000'
△ = 16°17'10"
L = 1421.23'
T = 715.44'

TYPICAL SECTION
1"= 10'

DATE OF ESTIMATE	=	6/24/08
BRIDGE REMOVAL	=	
STRUCTURE DEPTH	=	5'-2"
LENGTH	=	212'-6"
WIDTH	=	19'-0"
AREA	=	4038 SF
COST/SF INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	$194
PRELIM SEISMIC RETROFIT	=	$137,500
TOTAL COST	=	$1,000,000

LEGEND:

- Direction of Travel
- Point of Minimum Vertical clearance
- Indicates Removal (Portion)

Notes:

1. Paint "Br. No. 54-0030R"
2. Paint "Valley Blvd Off-Ramp UC"
3. Concrete Barrier Type 736
4. Structure Approach, Type N(300)
5. Slope Paving
6. Retaining Wall

X Design Oversight
X Sign Off Date 9/12/08

DESIGNED BY	S. OULOR	DATE	6/24/08
DRAWN BY	A. SEGURA	DATE	6/24/08
CHECKED BY	M. MOHSENI	DATE	6/24/08
APPROVED	M. MOHSENI	DATE	6/24/08

Mohsen Mohseni
PROJECT ENGINEER

PLANNING STUDY

VALLEY BLVD OFF-RAMP UC - RIGHT BRIDGE (WIDEN)

BRIDGE NO. 54-0030R	CU 08224
SCALE: AS SHOWN	EA 0C2500

HOV ALTERNATIVE

ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 2/25/05)

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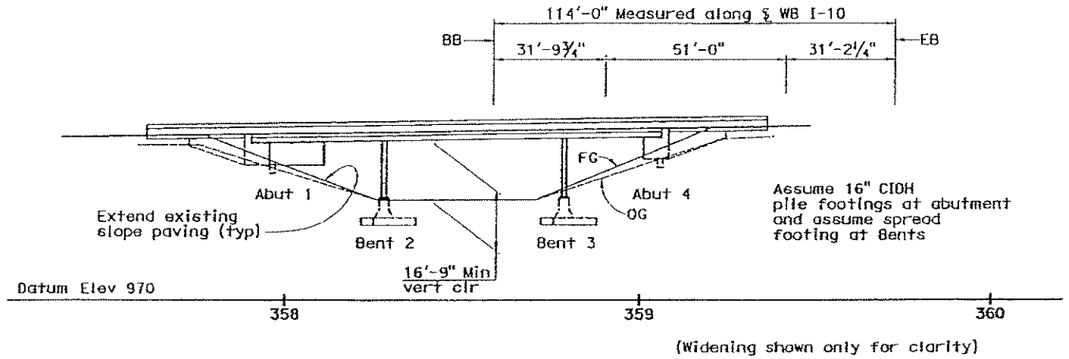
PREPARED FOR THE STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

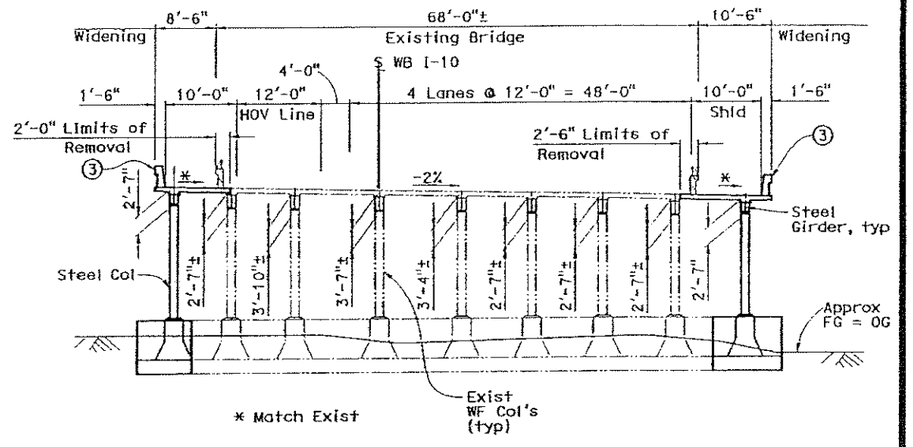
DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT
8	SBd	10	R.20/33.4

SAN BERNARDINO ASSOCIATED GOVERNMENTS — 1170 W Third St 2nd Floor San Bernardino CA 92410

PARSONS — 2201 DUPONT DRIVE SUITE 200 IRVINE, CA 92612



ELEVATION
1" = 20'



TYPICAL SECTION
1"= 10'

DATE OF ESTIMATE	=	6/20/08
BRIDGE REMOVAL	=	
STRUCTURE DEPTH	=	2'-4"
LENGTH	=	114'-0"
WIDTH	=	19'-0"
AREA	=	2,116 SF
COST/SF INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	$269
PRELIM SEISMIC RETROFIT	=	$137,500
BRIDGE MAINTENANCE ITEMS	=	$41,250
TOTAL COST	=	$800,000

LEGEND:

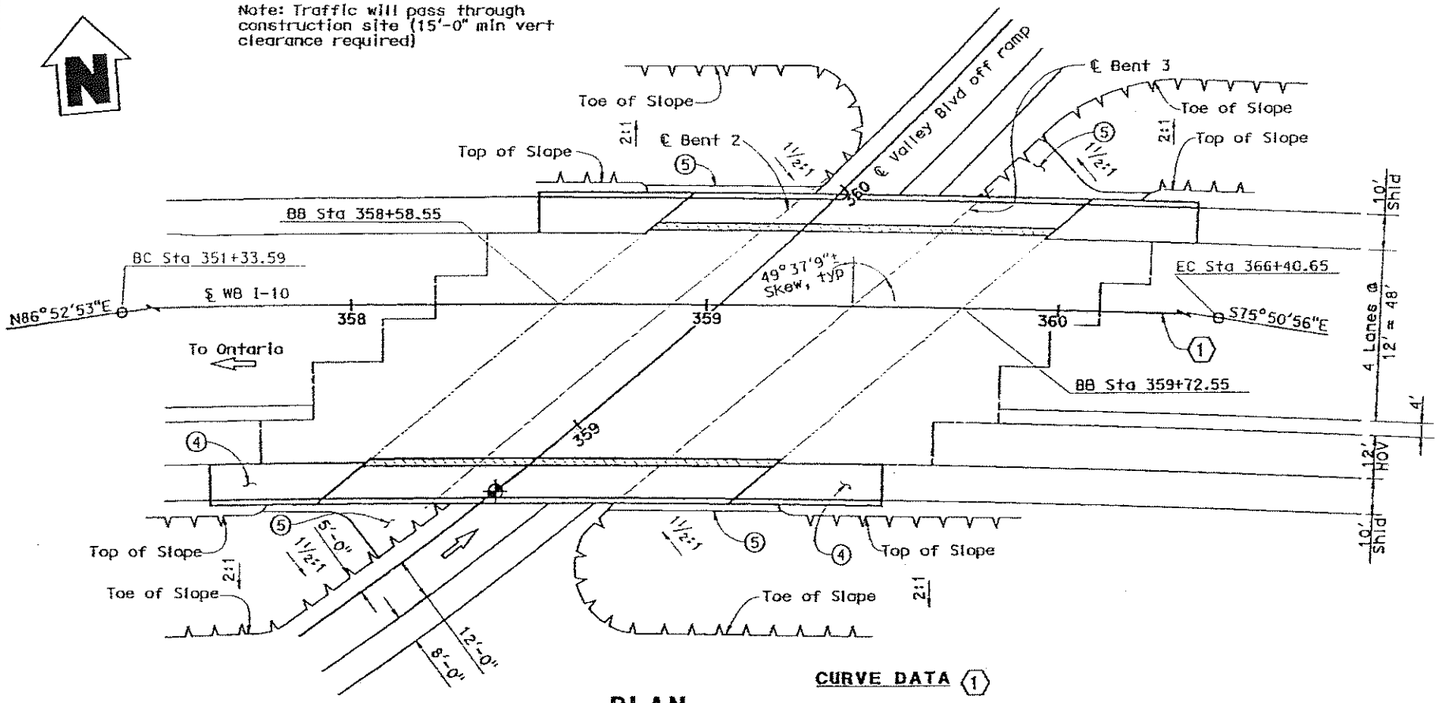
Direction of Travel

Point of Minimum Vertical clearance

Notes:

1. Paint "Br. No. 54-0030L"
2. Paint "Valley Blvd Off-Ramp UC"
3. Concrete Barrier Type 736
4. Structure Approach, Type N(30D)
5. Slope Paving

Note: Traffic will pass through construction site (15'-0" min vert clearance required)



PLAN
1" = 20'

CURVE DATA (1)

R = 5000'
△ = 17°16'11"
L = 1507.06'
T = 759.29'

DESIGNED BY	S. DULOR	DATE 6/20/08
DRAWN BY	A. SEGURA	DATE 6/20/08
CHECKED BY	M. MOHSENI	DATE 6/20/08
APPROVED	M. MOHSENI	DATE 6/20/08

Mohsen Mohseni — PROJECT ENGINEER

X _____ DESIGN OVERSIGHT
X 9/12/08 SIGN OFF DATE

PLANNING STUDY

VALLEY BLVD OFF-RAMP UC - LEFT BRIDGE (WIDEN)

BRIDGE NO. 54-0030L — CU 08224 — SCALE: AS SHOWN — EA 0C2500

ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 2/25/05)

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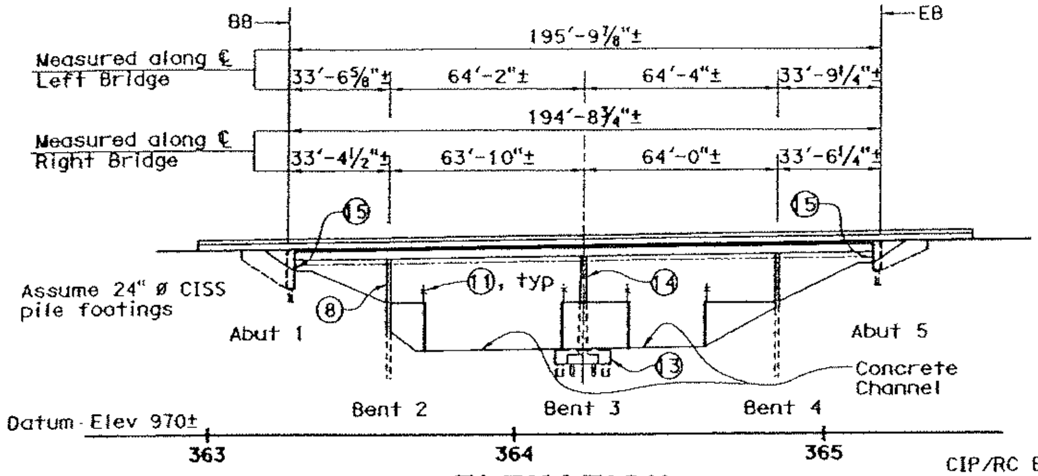
HOV ALTERNATIVE

PREPARED FOR THE STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

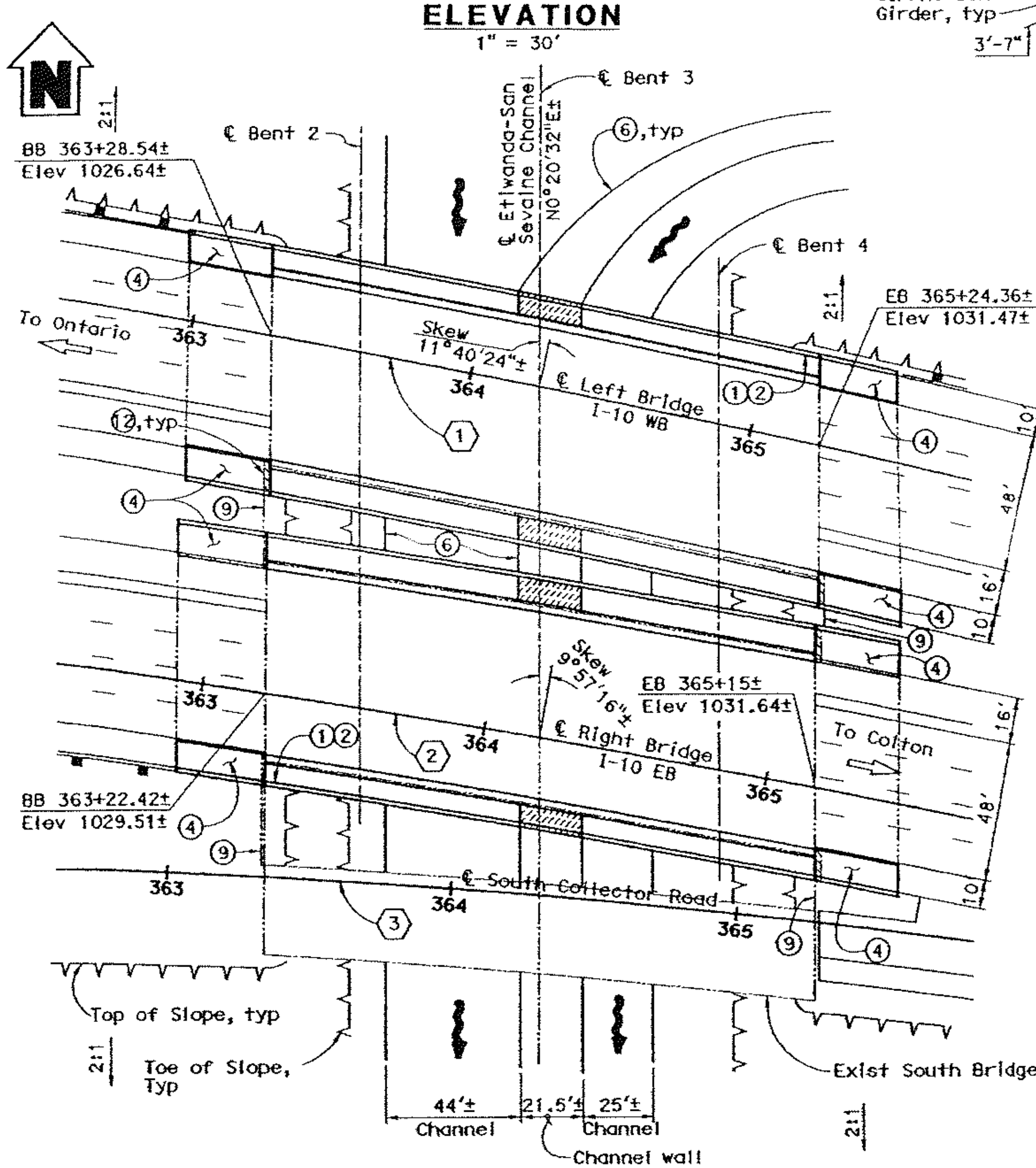
DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT
8	SBd	10	8.20/33.43

PARSONS 2201 DUPONT DRIVE SUITE 200 IRVINE, CA 92612

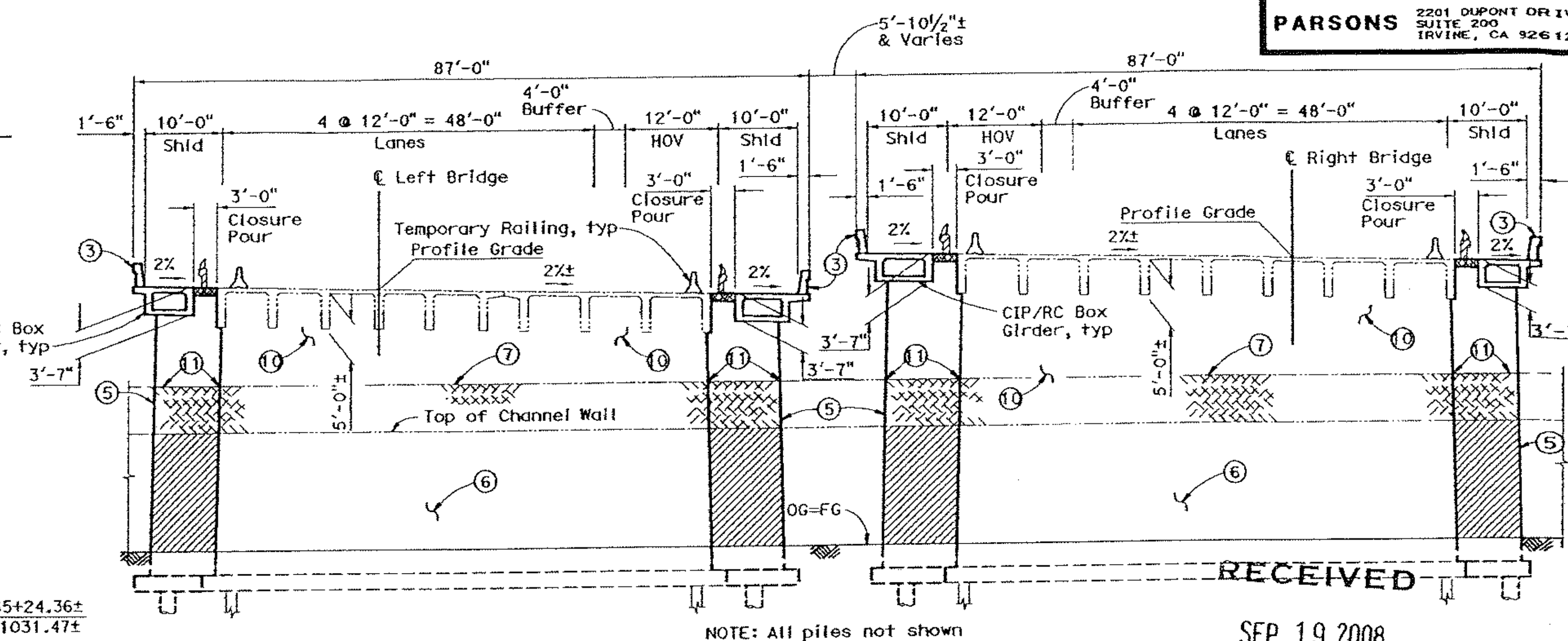
Note:
Traffic will pass through construction site. Stage construction required.
Falsework is not restricted by vertical clearance.



ELEVATION
1" = 30'



PLAN
1" = 30'

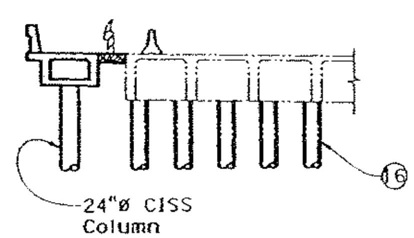


TYPICAL SECTION - BENT 3
1" = 10'

RECEIVED

SEP 19 2008

OFFICE OF SPECIAL FUNDED PROJECTS



NOTE: For information not shown, see "Typical Section - Bent 3"

PART TYPICAL SECTION BENTS 2 & 4
1" = 10'

CURVE DATA (1)

R = 5000'
Δ = 17°16'11"
L = 759.29'
T = 1507.06'

CURVE DATA (2)

R = 5000'
Δ = 16°17'10"
L = 715.44'
T = 1421.23'

CURVE DATA (3)

R = 3190.56'
Δ = 12°56'50"
L = 362.03'
T = 720.98'

Left/Right Bridge

DATE OF ESTIMATE	= 8/1/08
BRIDGE REMOVAL	= N/A
STRUCTURE DEPTH	= 3'-7"
LENGTH	= 195'-10"/194'-9"
WIDTH	= 19'-0"
AREA	= 3721 SF/3700 SF
SEISMIC RETROFIT	= $2,000,000
COST/SF INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	= $929
TOTAL COST	= $6,900,000

NOTE: Cost for Left & Right Structures are approximately equal

LEGEND:

- Direction of Travel
- Channel Wall Remove & Replace
- Retaining Wall Removal
- Direction of Flow
- Chain Link Fencing
- MBGR

Notes:

1. Paint "Br No. 54-0454"
2. Paint "Etiwanda-San Sevaine Flood Control Channel Bridge"
3. Concrete Barrier Type 736
4. Structure Approach, Type R(30S)
5. Pier wall, Widening
6. Channel wall, Exist
7. Chain Link Fence, Exist
8. Bent Column, 24"Ø CISS Pile
9. Retaining Wall, Exist
10. Pier Wall, Exist
11. Chain Link Fence Remove & Replace (Portion)
12. Retaining wall Removal (Portion)
13. Bent 3 Footing Retrofit
14. Reinforce Pier wall at Bent 3 Pier Wall (Seismic retrofit)
15. Reinforce Stem wall at Abutments 1 & 5 (Seismic retrofit)
16. Column Steel Casing at Bents 2 & 4 (Seismic retrofit)

DESIGNED BY	B. Deets	DATE	8/1/08
DRAWN BY	A. Segura	DATE	8/1/08
CHECKED BY	M. Mohseni	DATE	8/1/08
APPROVED	M. Mohseni	DATE	8/1/08

Mohsen Mohseni
PROJECT ENGINEER

PLANNING STUDY

ETIWANDA-SAN SEVAINE FLOOD CONTROL CHANNEL (WIDEN)

BRIDGE NO.	54-0454 L/R	CU	08224
SCALE:	AS SHOWN	EA	0C2500

X Lily Sun
DESIGN OVERSIGHT
X 9/23/08
SIGN OFF DATE

ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 2/25/06)

FILE => c:\pw_working\...\ - San Sevaine Channel

USERNAME => p0038016 DATE PLOTTED => 9/12/2008 TIME PLOTTED => 3:17:34 PM

HOV ALTERNATIVE

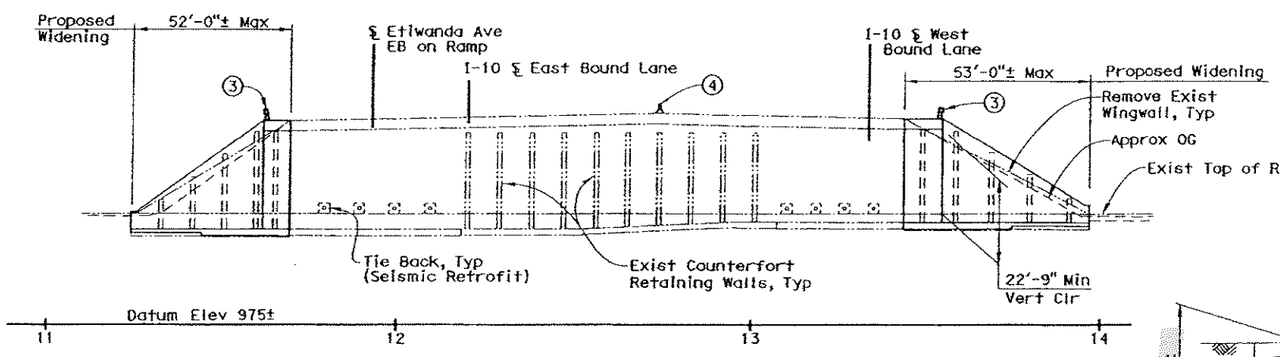
PREPARED FOR THE STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT
8	SBd	10	8.2/33.43

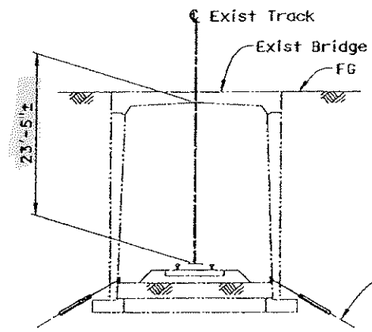
SAN BERNARDINO ASSOCIATED GOVERNMENTS — 1170 W Third St 2nd Floor San Bernardino CA 92410

PARSONS — 2201 DUPONT DRIVE SUITE 200 IRVINE, CA 92612

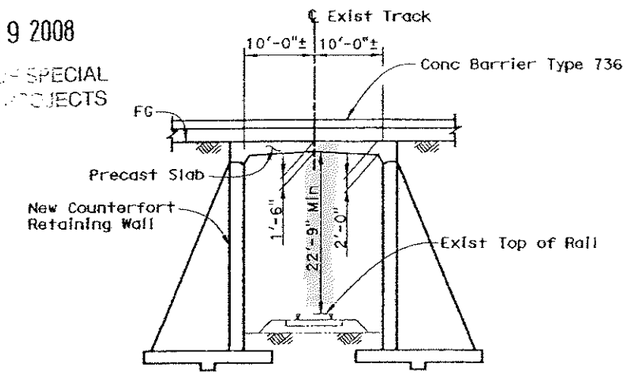
RECEIVED
SEP 19 2008
FOREIGN SPECIAL UNDERCROSSINGS



ELEVATION
1" = 20'

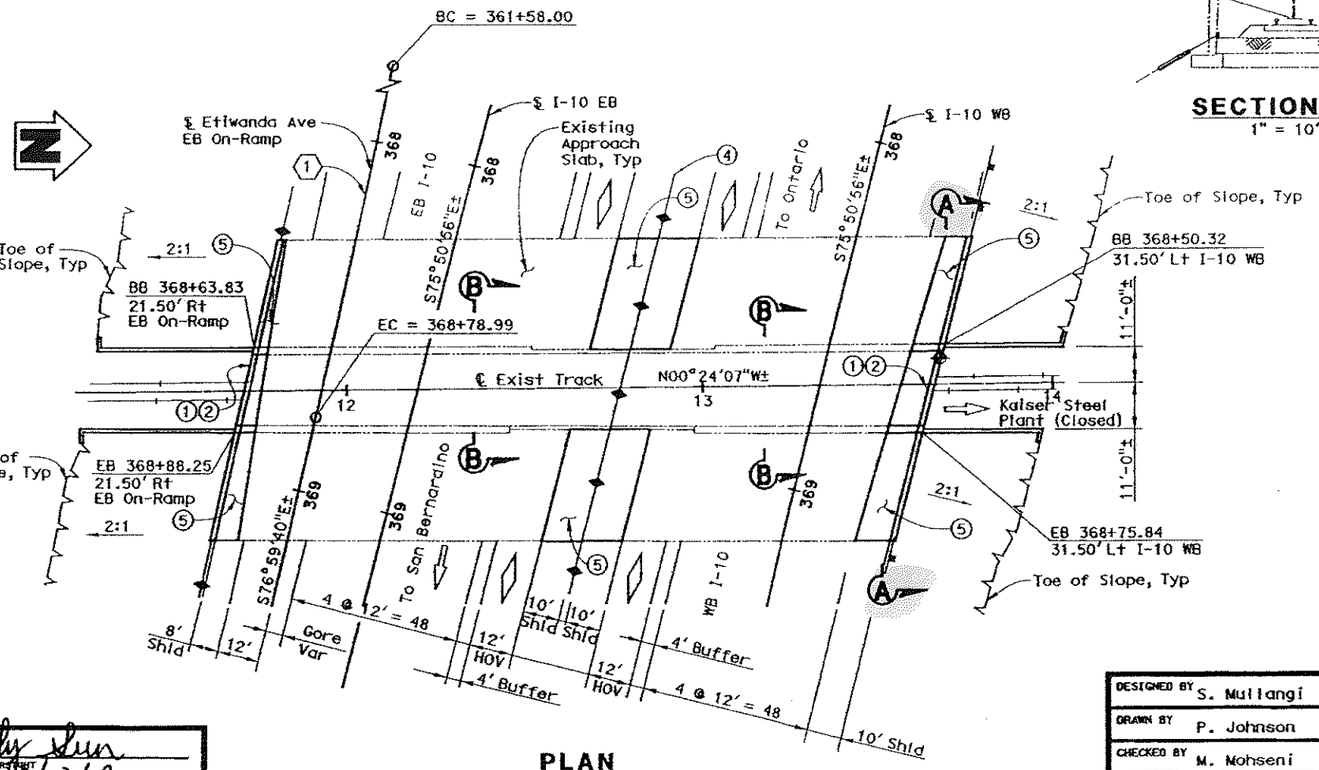


SECTION B-B
1" = 10'



SECTION A-A
1" = 10'

LEGEND:
- Direction of Travel
- Point of Minimum Vertical clearance
- MBGR



PLAN
1" = 20'

CURVE DATA (1)

R = 3190.56'
Δ = 12°56'50"
L = 720.98'
T = 362.03'

NOTES:

1. Paint "Br No. 54-0416"
2. Paint "Kaiser Spur Overhead"
3. Concrete Barrier Type 736
4. Concrete Barrier Type 60
5. Structure Approach, Type R(30S)

Falsework
No Falsework allowed over railroad traffic.

DATE OF ESTIMATE	=	7/31/08
BRIDGE REMOVAL	=	347 CY
STRUCTURE DEPTH	=	1'-6" ~ 2'-0"
LENGTH	=	24'-0"
WIDTH	=	15'-6" ~ 12'-10"
AREA	=	342 SF
COST/SF INCLUDING 10% MOBILIZATION & 25% CONTINGENCY (WITHOUT TIE BACKS)	=	$2,887
RETROFIT COST (INCLUDING TIE BACKS)	=	$250,000
TOTAL COST	=	$1,300,000

DESIGNED BY	S. Mullangi	DATE	7/31/08
DRAWN BY	P. Johnson	DATE	7/31/08
CHECKED BY	M. Mohseni	DATE	7/31/08
APPROVED	M. Mohseni	DATE	7/31/08

Mohsen Mohseni
PROJECT ENGINEER

X Lily Lun
DESIGN OVERSIGHT
X 9/23/08
SIGN OFF DATE

ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 2/26/08)

FILE => $REQUEST

PLANNING STUDY
KAISER SPUR OH (WIDEN)

BRIDGE NO. 54-0416	CU 1224
SCALE: As Noted	EA 0C2500

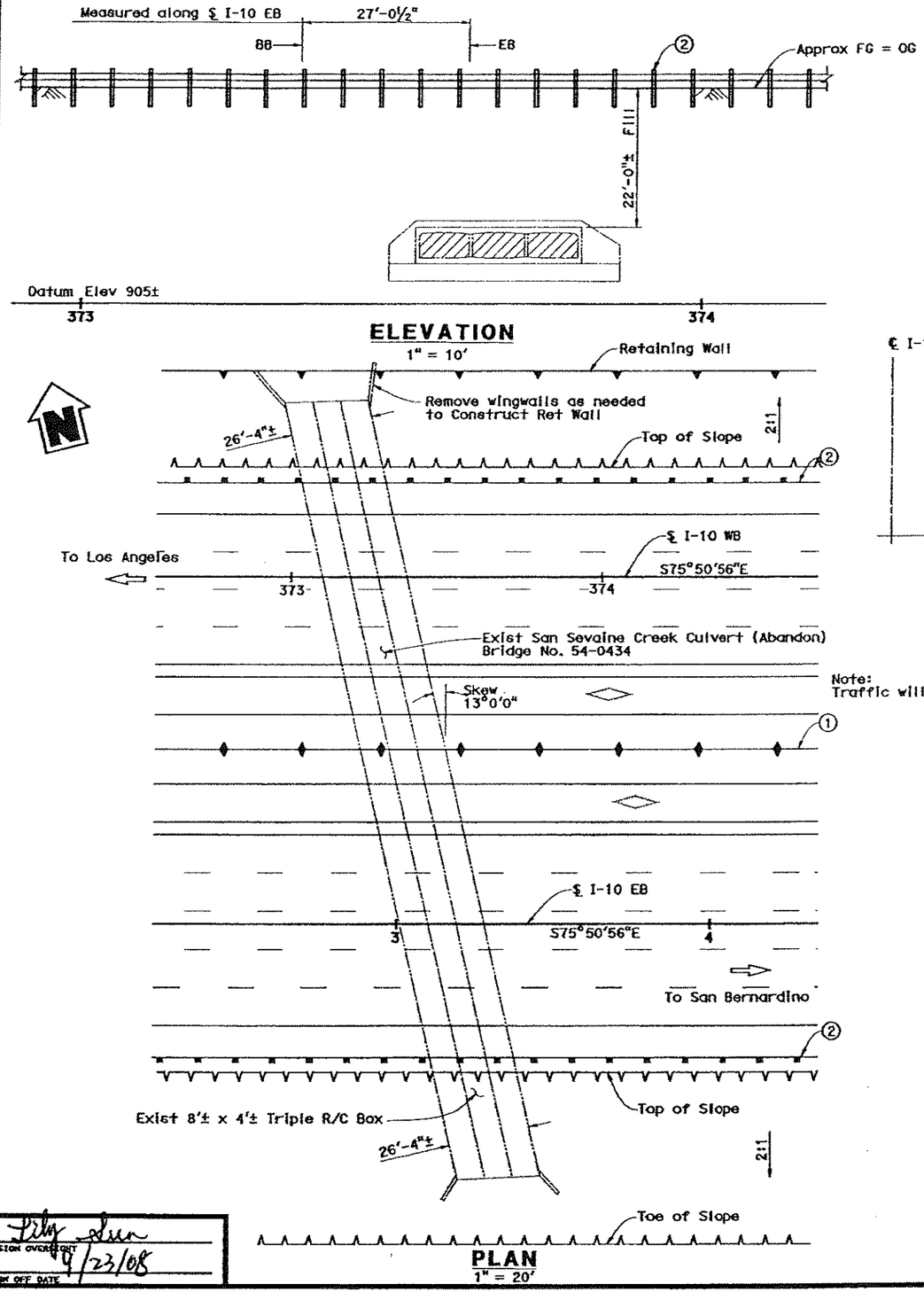
TIME PLOTTED => $TIME
DATE PLOTTED => $DATE
USERNAME => $USER

HOV ALTERNATIVE

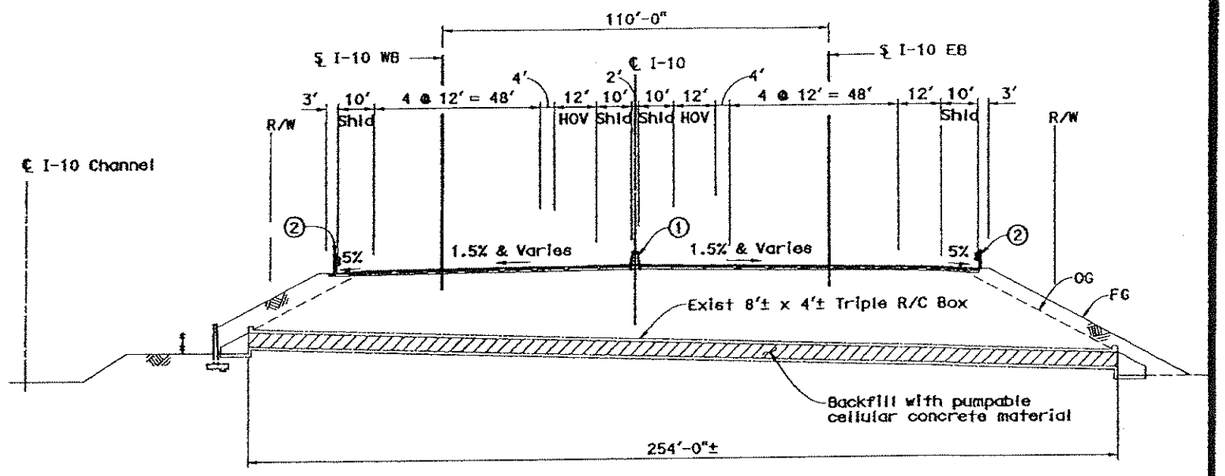
PREPARED FOR THE STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT
8	SBd	10	8.20/33.43

PARSONS 2201 DUPONT DRIVE SUITE 200 IRVINE, CA 92612



Note:
Traffic will pass through construction site.



TYPICAL SECTION

1" = 20'

DATE OF ESTIMATE	=	7/18/08
BRIDGE REMOVAL	=	$27,500
STRUCTURE DEPTH	=	N/A
LENGTH	=	26'-4"
WIDTH	=	254'-0"
AREA	=	6,688 SF
COST/SF INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	$45
TOTAL COST	=	$300,000

NOTES:

① Concrete Barrier Type 60C
② MBGR

LEGEND:

⇨ Direction of Travel
◇ HOV Lane

DESIGNED BY S. DULOR	DATE 7/18/08	Mohsen Mohseni PROJECT ENGINEER	PLANNING STUDY
DRAWN BY A. SEGURA	DATE 7/18/08		SAN SEVAINE CREEK (ABANDON)
CHECKED BY M. MOHSENI	DATE 7/18/08		BRIDGE NO. 54-0434 / CU
APPROVED M. MOHSENI	DATE 7/18/08		SCALE: AS SHOWN / EA 0C2500

X Toby Lum
DESIGN OVERSIGHT
X 9/23/08
SIGN OFF DATE

ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 2/25/08)

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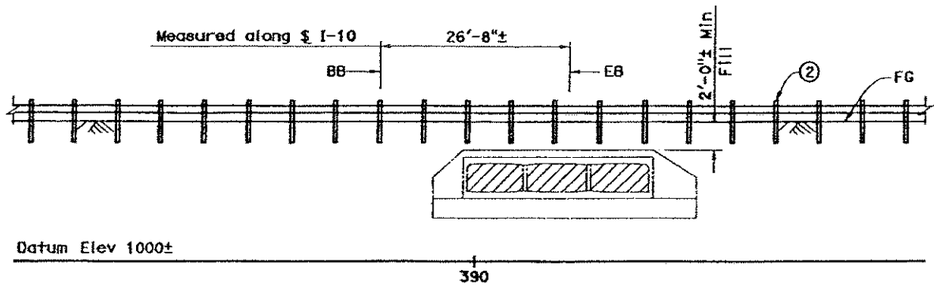
USERNAME => p0038016 DATE PLOTTED => 9/22/2008 TIME PLOTTED => 2120108 PM

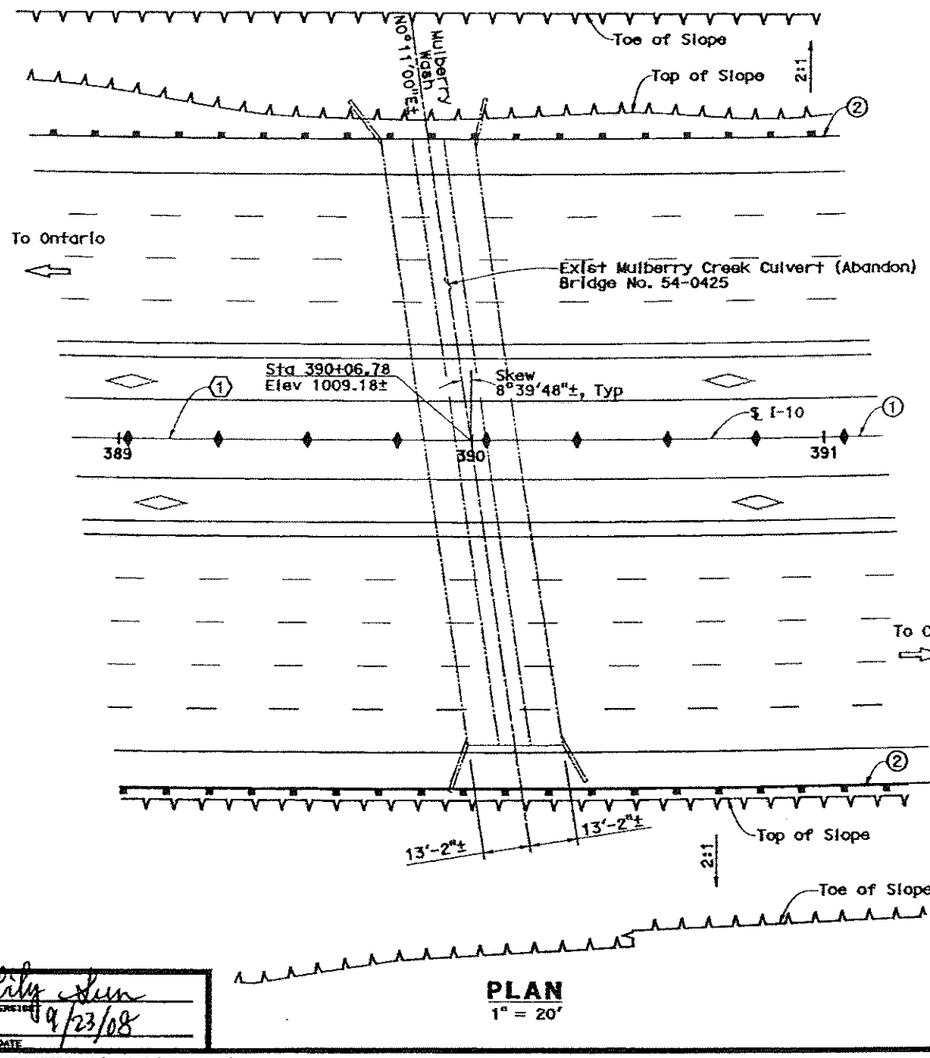
HOV ALTERNATIVE

PREPARED FOR THE STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

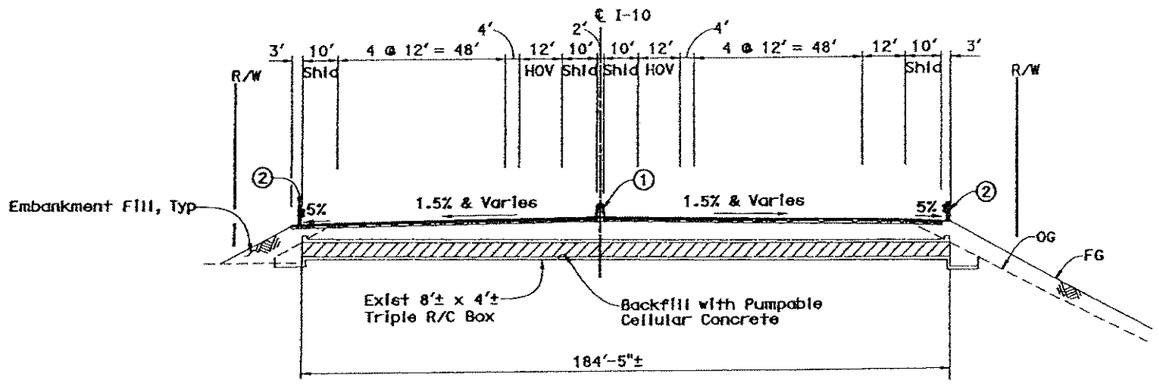
DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT
8	SBd	10	8.20/33.43



ELEVATION
1" = 10'



PLAN
1" = 20'



TYPICAL SECTION
1" = 20'

DATE OF ESTIMATE	=	7/18/08
BRIDGE REMOVAL	=	0
STRUCTURE DEPTH	=	N/A
LENGTH	=	26'-4"
WIDTH	=	184'-5"±
AREA	=	4,855 SF
COST/SF INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	¢41
TOTAL COST	=	¢200,000

CURVE DATA

(1) R = 7000.00'
Δ = 16°05'00"
T = 989.37'
L = 1965.73'

NOTES:

(1) Concrete Barrier Type 60C
(2) MBGR

LEGEND:

- Direction of Travel
- Cellular Concrete
- HOV Lane

X Lily Sun 9/23/08
DESIGN OVERSIGHT
X
SIGN OFF DATE

ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 2/25/05)

DESIGNED BY	J. LE	DATE	7/18/08
DRAWN BY	A. SEGURA	DATE	7/18/08
CHECKED BY	M. MOHSENI	DATE	7/18/08
APPROVED	M. MOHSENI	DATE	7/18/08

Mohsen Mohseni
PROJECT ENGINEER

PLANNING STUDY

MULBERRY CREEK (ABANDON)

BRIDGE NO. 54-0425	CU 08224
SCALE: AS SHOWN	EA 0C2500

FILE => c:\pw_working_xm\pfg\p0038016\dmo17062\54-0425-a-gp01.dgn

USERNAME => p0038016 DATE PLOTTED => 9/22/2008 TIME PLOTTED => 2116:35 PM

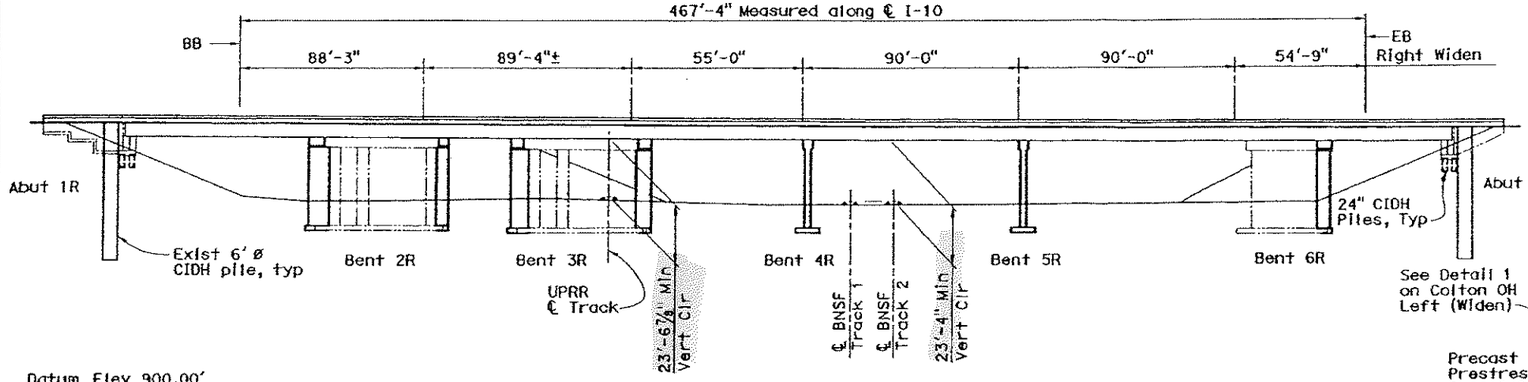
HOV ALTERNATIVE

PREPARED FOR THE STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT
08	SBd	10	8.20/33.43

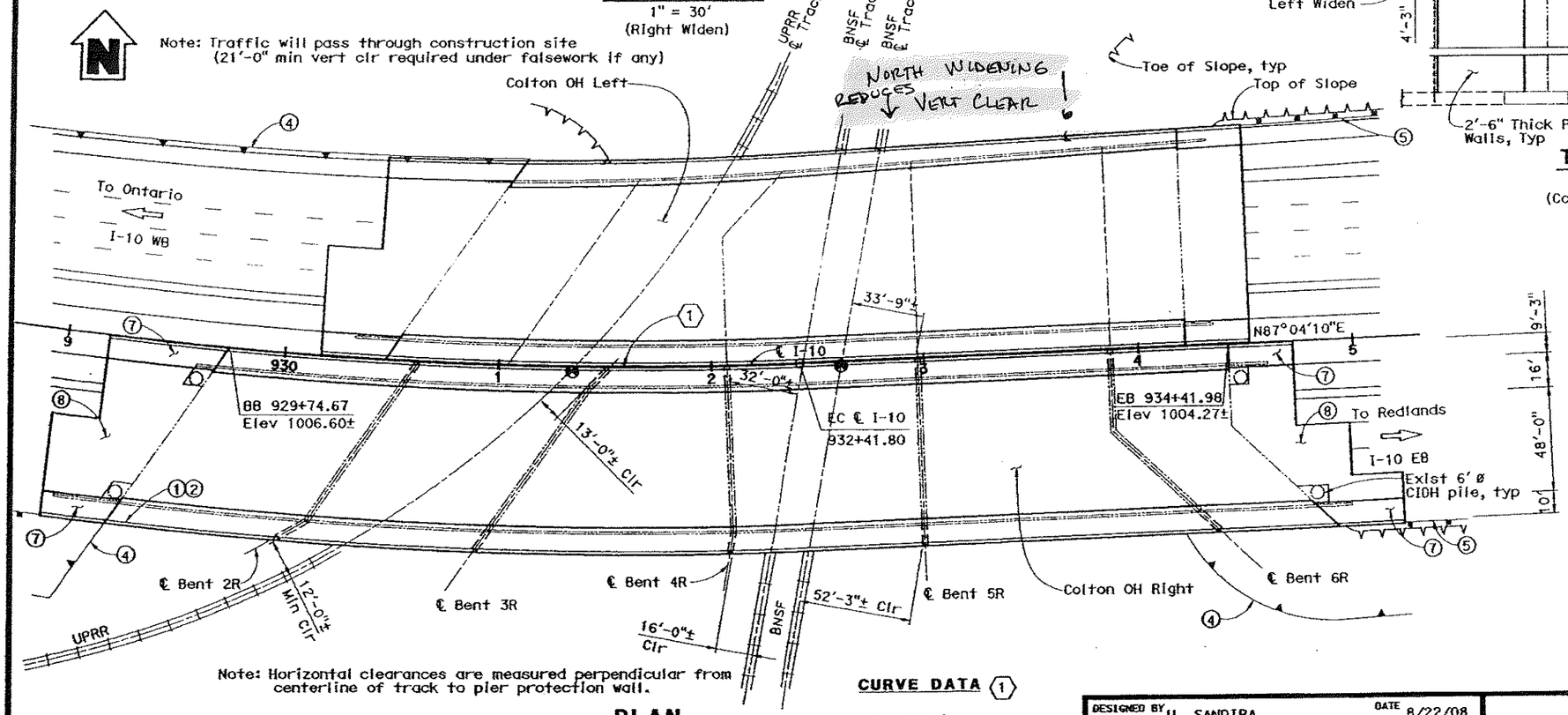
SAN BERNARDINO ASSOCIATED GOVERNMENTS — 1170 W Third St 2nd Floor San Bernardino CA 92410

PARSONS — 2201 DUPONT DRIVE SUITE 200 IRVINE, CA 92612



ELEVATION

1" = 30'
(Right Widen)



Note: Horizontal clearances are measured perpendicular from centerline of track to pier protection wall.

PLAN

1" = 30'

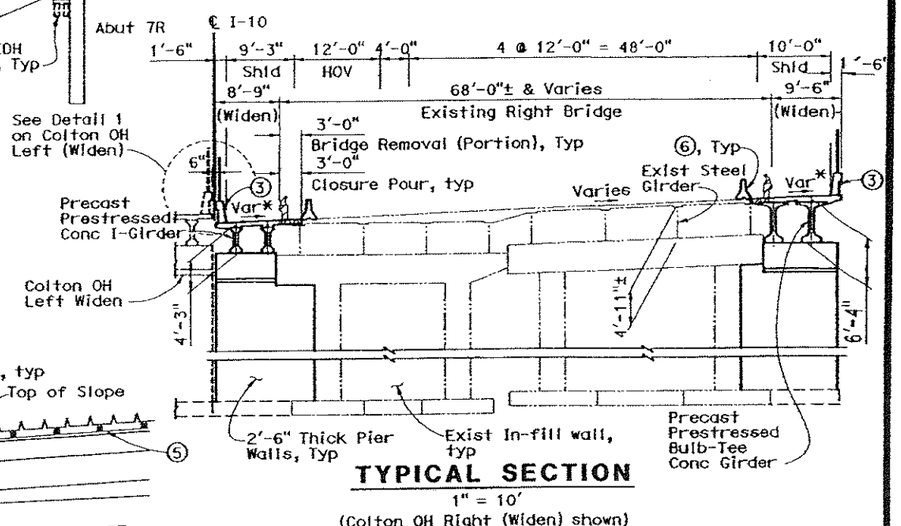
CURVE DATA (1)

R = 2000'
△ = 12°16'26"
T = 215.04'
L = 428.44'

NOTES:

1. Paint "Br No. 54-0464R"
2. Paint "Colton OH Bridge"
3. Concrete Barrier Type 736 with Chain Link Railing Type 7
4. Retaining Wall, See "Road Plans"
5. MBGR, See "Road Plans"
6. Temporary Railing Type K
7. Structure Approach Type N(30S)
8. Structure Approach Type R(30S)

* Match existing cross slope



TYPICAL SECTION

1" = 10'
(Colton OH Right (Widen) shown)

RIGHT STRUCTURE

DATE OF ESTIMATE	=	8/22/08
BRIDGE REMOVAL	=	166 SF
STRUCTURE DEPTH	=	4'-3"/6'-4"
LENGTH	=	480'-2"
WIDTH	=	18'-3"
AREA	=	8764 SF
COST/SF INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	$319/SF
TOTAL COST	=	$3,000,000

LEGEND:

- Direction of Travel
- MBGR
- Indicates Existing Structure
- Indicates New Structure
- Indicates Removal Structure
- UPRR Union Pacific Railroad
- BNSF Burlington Northern Santa Fe Railway
- Indicates Minimum Vertical Clearance

X Lily Shu
DESIGN OVERSIGHT
X 11/10/08
SIGN OFF DATE

DESIGNED BY	U. SANDIRA	DATE	8/22/08
DRAWN BY	A. SEGURA	DATE	8/22/08
CHECKED BY	M. MOHSENI	DATE	X
APPROVED	M. MOHSENI	DATE	X

Mohsen Mohseni
PROJECT ENGINEER

PLANNING STUDY

COLTON OH RIGHT (WIDEN)

BRIDGE NO. 54-0464R	CU 08224
SCALE: As Noted	EA 0C2500

HOV ALTERNATIVE

ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 2/25/05)

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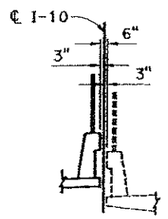
USERNAME => p0038016 DATE PLOTTED => 11/3/2008 TIME PLOTTED => 21:13:35 PM

PREPARED FOR THE STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

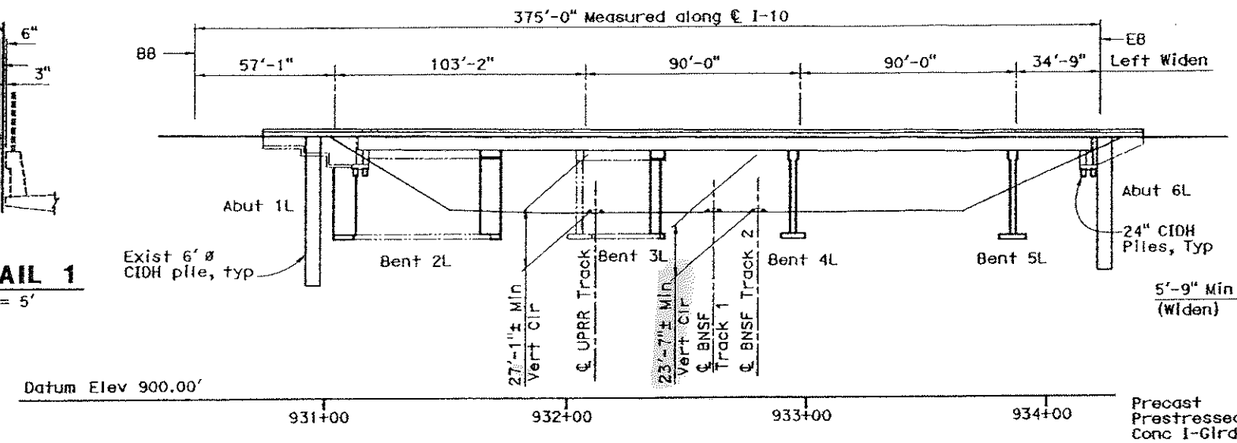
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT
08	SBd	10	9.20/33.43

SAN BERNARDINO ASSOCIATED GOVERNMENTS — 1170 W Third St 2nd Floor San Bernardino CA 92410

PARSONS — 2201 DUPONT DRIVE SUITE 200 IRVINE, CA 92612



DETAIL 1
1" = 5'

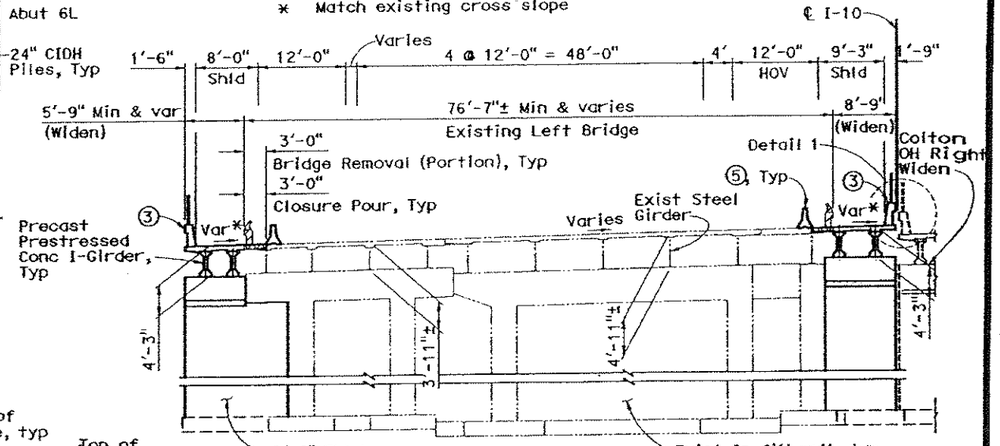


MIRRORED ELEVATION
1" = 30'
(Left Widen)

NOTES:

1. Paint "Br No. 54-0464L"
2. Paint "Colton OH Bridge"
3. Concrete Barrier Type 736 with Chain Link Railing Type 7
4. MBGR, See "Road Plans"
5. Temporary Railing Type K
6. Retaining Wall, See "Road Plans"
7. Structure Approach Type N(30S)
8. Structure Approach Type R(30S)

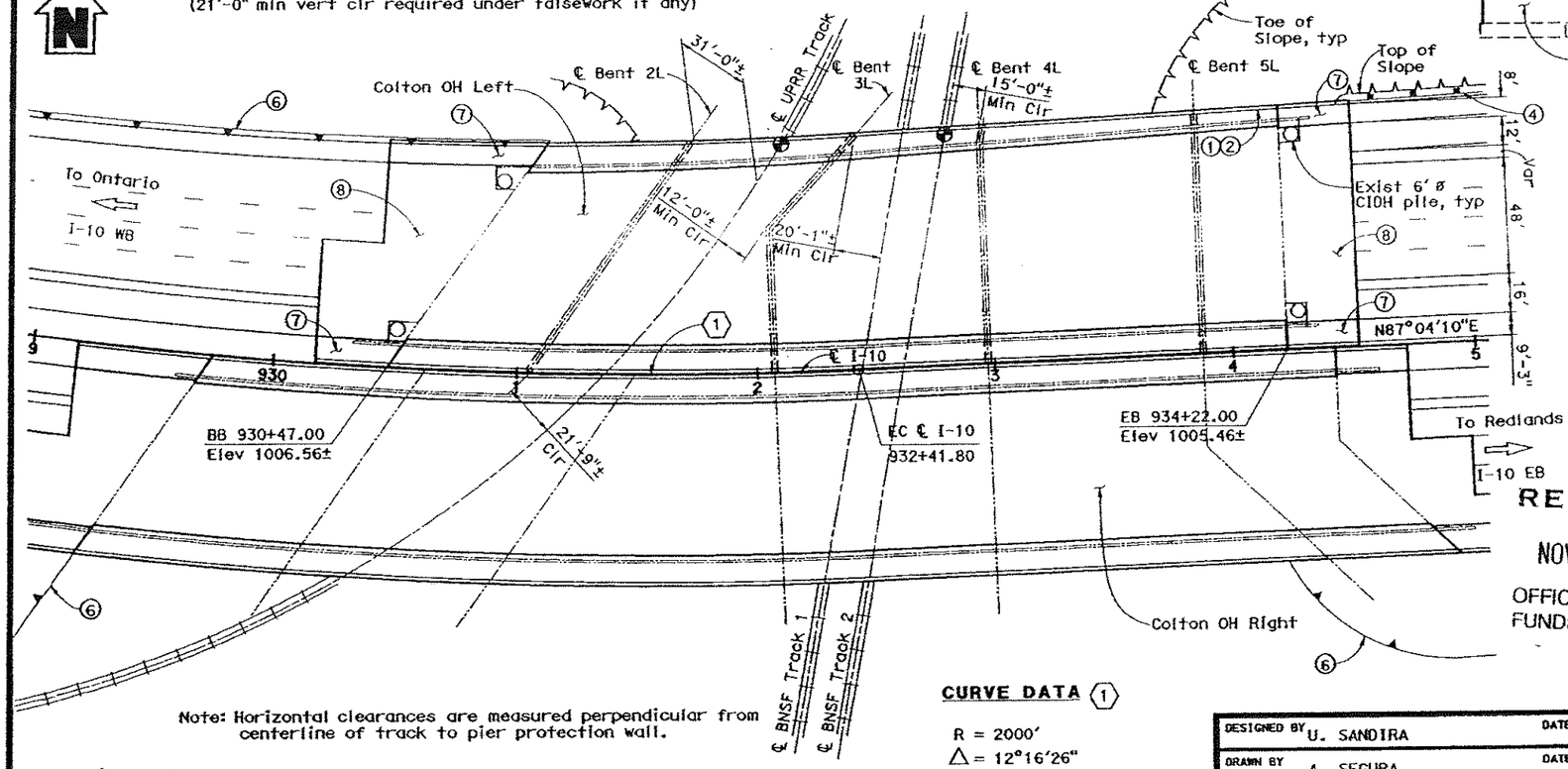
* Match existing cross slope



TYPICAL SECTION
1" = 10'
(Colton OH Left (Widen) shown)
LEFT STRUCTURE

DATE OF ESTIMATE	=	8/22/08
BRIDGE REMOVAL	=	74 SF
STRUCTURE DEPTH	=	4'-3"
LENGTH	=	362'-2"
WIDTH	=	14'-6" Min & Var
AREA	=	5795 SF
COST/SF INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	$355/SF
TOTAL COST	=	$4,700,000

Note: Traffic will pass through construction site (21'-0" min vert clr required under falsework if any)



PLAN
1" = 30'

Note: Horizontal clearances are measured perpendicular from centerline of track to pier protection wall.

CURVE DATA (1)

R = 2000'
△ = 12°16'26"
T = 215.04'
L = 428.44'

RECEIVED
NOV 05 2008
OFFICE OF SPECIAL FUNDED PROJECTS

LEGEND:

- Direction of Travel
- MBGR
- Indicates Existing Structure
- Indicates New Structure
- Indicates Removal Structure
- Min Vert Clr
- UPRR Union Pacific Railroad
- BNSF Burlington Northern Santa Fe Railroad

DESIGNED BY	U. SANDIRA	DATE	8/22/08
DRAWN BY	A. SEGURA	DATE	8/22/08
CHECKED BY	M. MOHSENI	DATE	X
APPROVED	M. MOHSENI	DATE	X

Mohsen Mohseni
PROJECT ENGINEER

PLANNING STUDY

COLTON OH LEFT (WIDEN)

BRIDGE NO. 54-0464L	CU 08224
SCALE: As Noted	EA 0C2500

X Lily Shen
DESIGN OVERSIGHT
X 11/10/08
SIGN OFF DATE

ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 2/28/06)

FILE => c:\pw_working_xm\ptg\p0036016\dms17525\54-0464l-a-gp02.dgn

USERNAME => p0036016 DATE PLOTTED => 11/3/2008 TIME PLOTTED => 2:06:23 PM

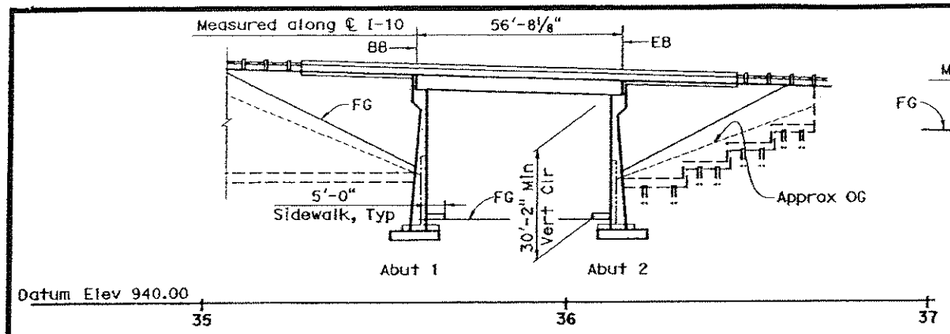
HOV ALTERNATIVE

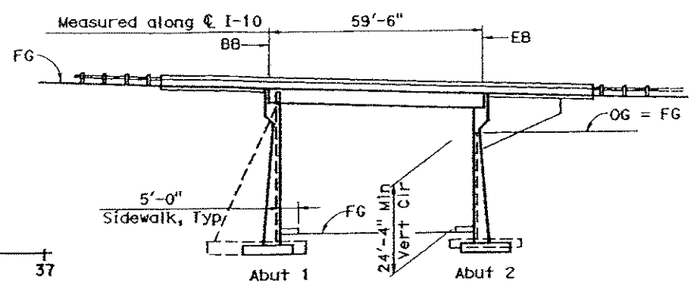
PREPARED FOR THE STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT
08	SBd	10	8.20/33.43

SAN BERNARDINO ASSOCIATED GOVERNMENTS — 1170 W Third St 2nd Floor San Bernardino CA 92410

PARSONS — 2201 DUPONT DRIVE SUITE 200 IRVINE, CA 92612

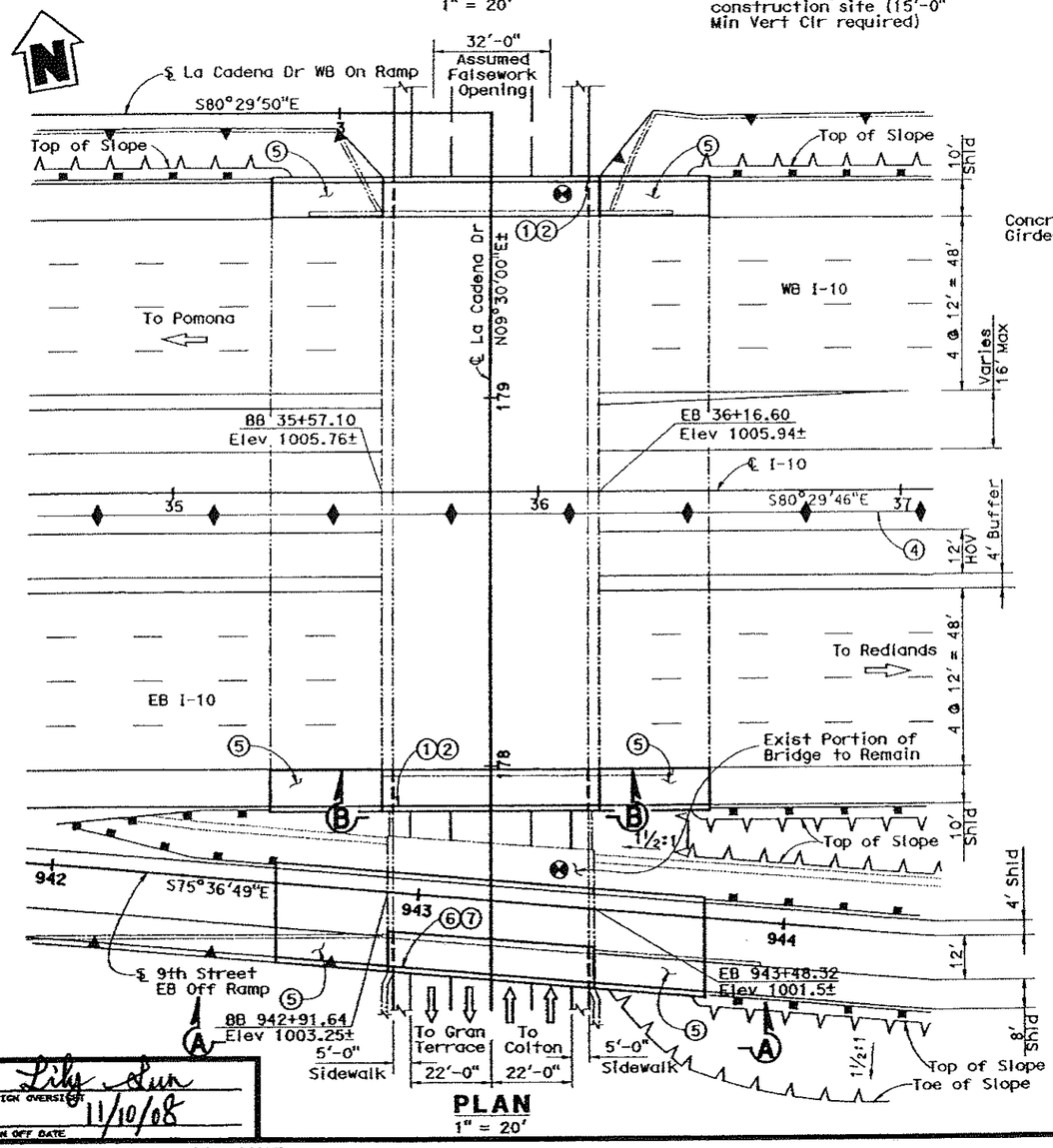




ELEVATION A-A

1" = 20'

Note:
Traffic will pass through construction site (15'-0" Min Vert Clr required)

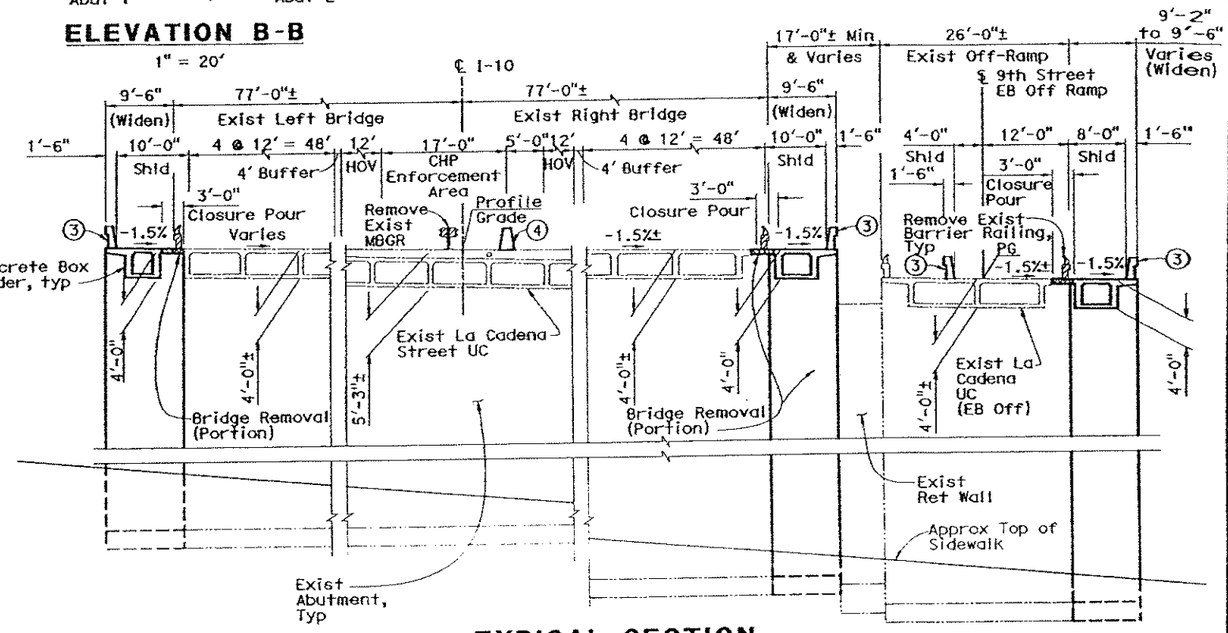


PLAN

1" = 20'

ELEVATION B-B

1" = 20'



TYPICAL SECTION

1" = 10'

LEGEND:

- Direction of Travel
- MBGR, See "Road Plans"
- Min Vert Clr
- Retaining Wall, See "Road Plans"
- Closure Pour
- Bridge Removal (Portion)

NOTES:

1. Paint "Br No. 54-0462"
2. Paint "La Cadena Undercrossing"
3. Concrete Barrier Type 736
4. Concrete Barrier Type 60
5. Structure Approach
6. Paint "Br No. 54-0462S"
7. Paint "La Cadena Undercrossing (EB Off)"

DATE OF ESTIMATE	=	8/22/08
BRIDGE REMOVAL	=	$6,475
STRUCTURE DEPTH	=	4'-0"
LENGTH	=	59'-6"
WIDTH	=	28'-2" to 28'-6"
AREA	=	1696 SF
COST/SF INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	$780
PRELIMINARY SEISMIC RETROFIT	=	$100,000*
TOTAL COST	=	$1,500,000**

* Key to protect pin at the abutment footing & catcher block at the abutment seat.

** Retaining wall cost is not included.

X Lily Sun
DESIGN OVERSIGHT
X 11/10/08
SIGN OFF DATE

DESIGNED BY	S. Mullangi	DATE	8/22/08
DRAWN BY	A. Segura	DATE	8/22/08
CHECKED BY	M. Mohseni	DATE	8/22/08
APPROVED	M. Mohseni	DATE	8/22/08

Mohsen Mohseni
PROJECT ENGINEER

PLANNING STUDY

LA CADENA DRIVE UC (WIDEN)

BRIDGE NO. 54-0462/0462S	CU 08224
SCALE: As Noted	EA 0C2500

HOV ALTERNATIVE

ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 2/25/05)

FILE => c:\pw_working_xm\ptg\p0038016\dms17526\54-0462-a-gp01.dgn

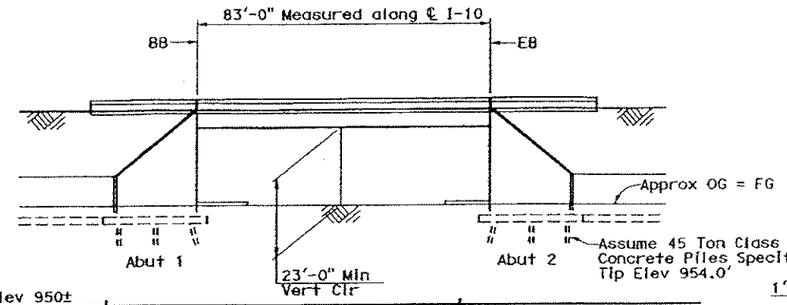
USERNAME => p0038016 DATE PLOTTED => 10/29/2008 TIME PLOTTED => 4:01:26 PM

PREPARED FOR THE STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT
8	SBd	10	8.20/33.43

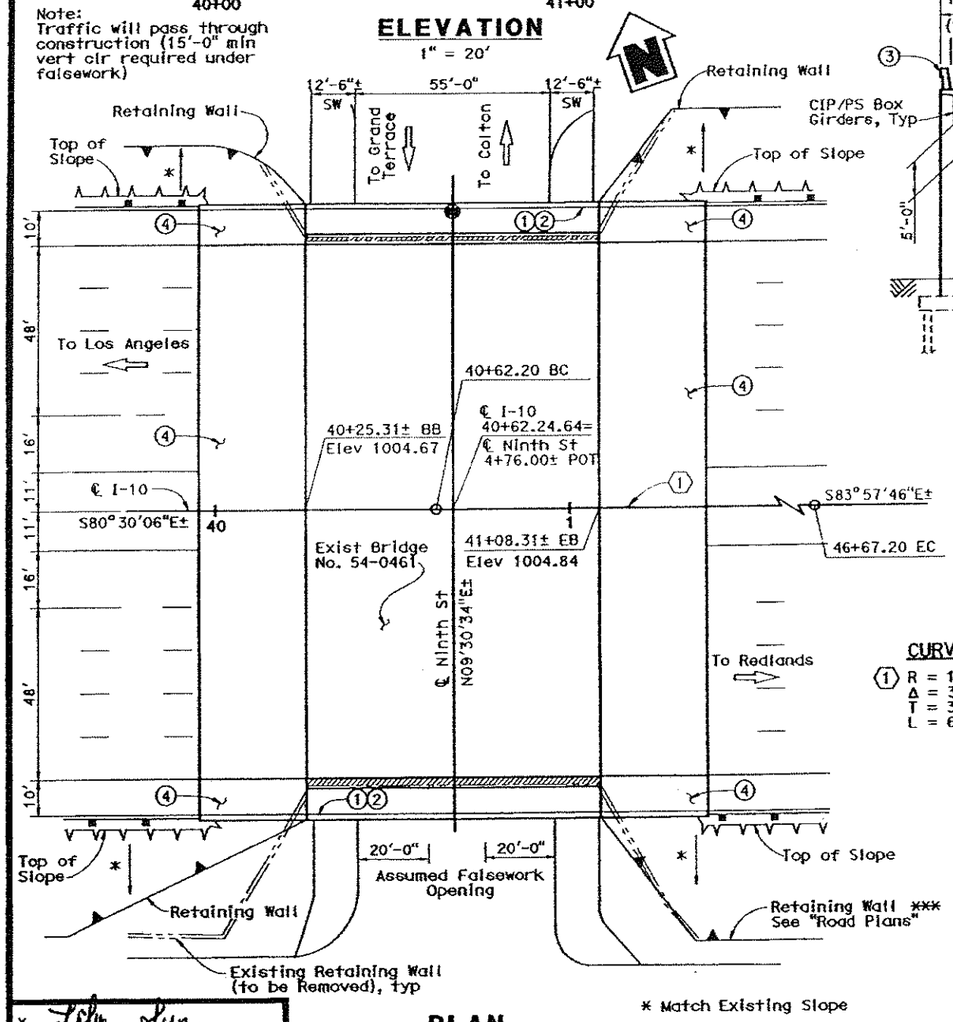
SAN BERNARDINO ASSOCIATED GOVERNMENTS — 1170 W Third St, 2nd Floor, San Bernardino, CA 92410

PARSONS — 2201 DUPONT DRIVE, SUITE 200, IRVINE, CA 92612

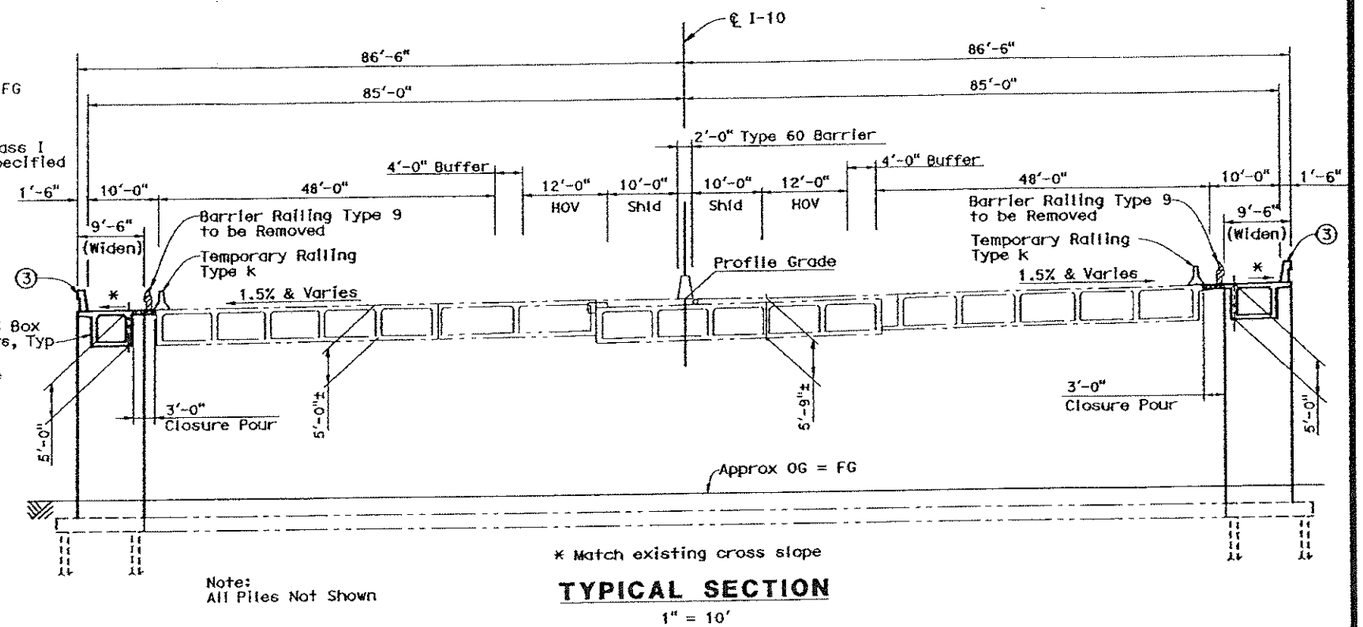


Note:
Traffic will pass through construction (15'-0" min vert clr required under falsework)

ELEVATION
1" = 20'



PLAN
1" = 20'



Note:
All Piles Not Shown

TYPICAL SECTION
1" = 10'

North Bridge Widen

DATE OF ESTIMATE	=	9/11/08
BRIDGE REMOVAL	=	83 SF
STRUCTURE DEPTH	=	5'-0"
LENGTH	=	83'-0"
WIDTH	=	9'-6"
AREA	=	788'-6"
COST/SF INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	$507
TOTAL COST **	=	$400,000

South Bridge Widen

DATE OF ESTIMATE	=	9/11/08
BRIDGE REMOVAL	=	249 SF
STRUCTURE DEPTH	=	5'-0"
LENGTH	=	83'-0"
WIDTH	=	9'-6"
AREA	=	788'-6"
COST/SF INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	$507
TOTAL COST **	=	$400,000

** $25,000 Seismic Retrofit cost has been included for both bridges.

Notes:
1. Paint "Br. No. 54-0461"
2. Paint "Ninth Street UC"
3. Concrete Barrier Type 736
4. Structure Approach

*** Retaining wall cost is not included in Cost Estimate.

CURVE DATA
(1) R = 10000.00'
Δ = 3°27'59"
T = 302.59'
L = 605.00'

LEGEND:
- Direction of Travel
- Bridge Removal (Portion)
- MBGR
- Indicates Exist Structure
- Indicates Minimum Vertical Clearance

DESIGNED BY J. Le	DATE 9/11/08	Mohsen Mohseni, PROJECT ENGINEER
DRAWN BY O. Sandoval/A. Segura	DATE 9/11/08	
CHECKED BY U. Sandira	DATE 9/11/08	
APPROVED M. Mohseni	DATE 9/11/08	

PLANNING STUDY
NINTH STREET UC (WIDEN)

BRIDGE NO. 54-461	CU 08224
SCALE: As Noted	EA 0C2500

X Lily Lun
DESIGN OVERSIGHT
X 11/10/08
SIGN OFF DATE

ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 2/25/05)

FILE => c:\pw_working_xm\pfg\p0035324\dms10436\54-0461-a-gp01.dgn

USERNAME => p0035324 DATE PLOTTED => 10/28/2008 TIME PLOTTED => 4:05:24 PM

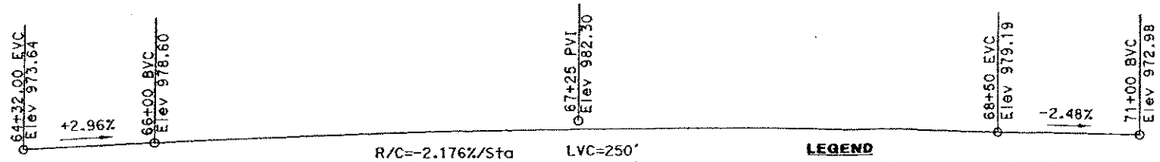
HOV ALTERNATIVE

PREPARED FOR THE STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT
8	SBd	10	8.20/33.43

SAN BERNARDINO ASSOCIATED GOVERNMENTS — 1170 W Third St, 2nd Floor, San Bernardino, CA 92410

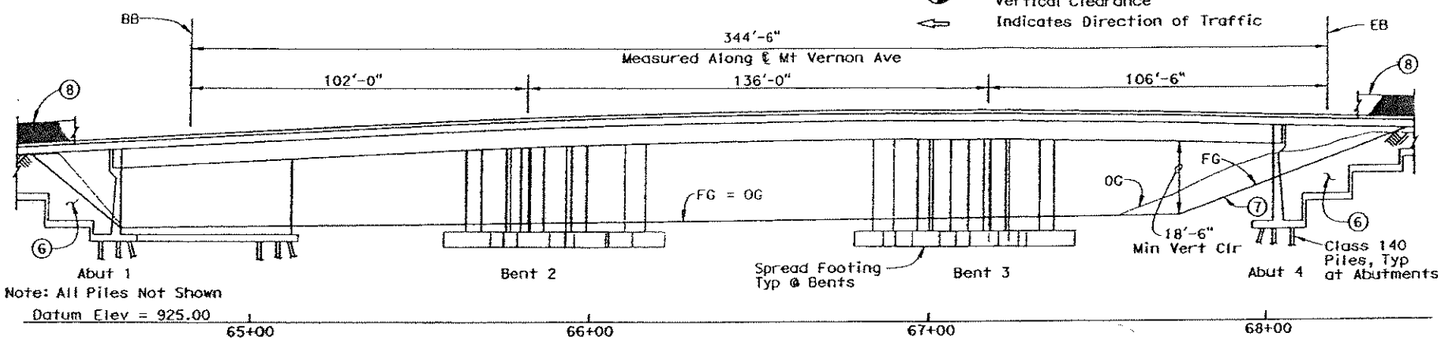
PARSONS — 2201 DUPONT DRIVE, SUITE 200, IRVINE, CA 92612



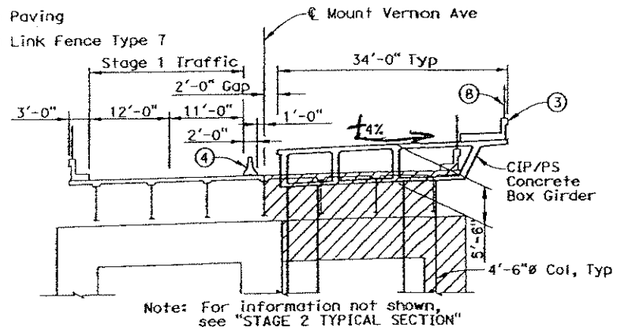
PROFILE
No Scale

LEGEND
- Denotes New Structure
- Denotes Existing Structure
- Denotes Removal
- Closure Pour
- Indicates Point of Minimum Vertical Clearance
- Indicates Direction of Traffic

NOTES:
1. Paint "Br No. 54-0459"
2. Paint "Mt. Vernon Ave OC"
3. Concrete Barrier Type 26
4. Temporary Railing Type K
5. Structure Approach Type N (30S)
6. Type 1 RW
7. Slope Paving
8. Chain Link Fence Type 7



ELEVATION
1" = 20'



Note: For information not shown, see "STAGE 2 TYPICAL SECTION"

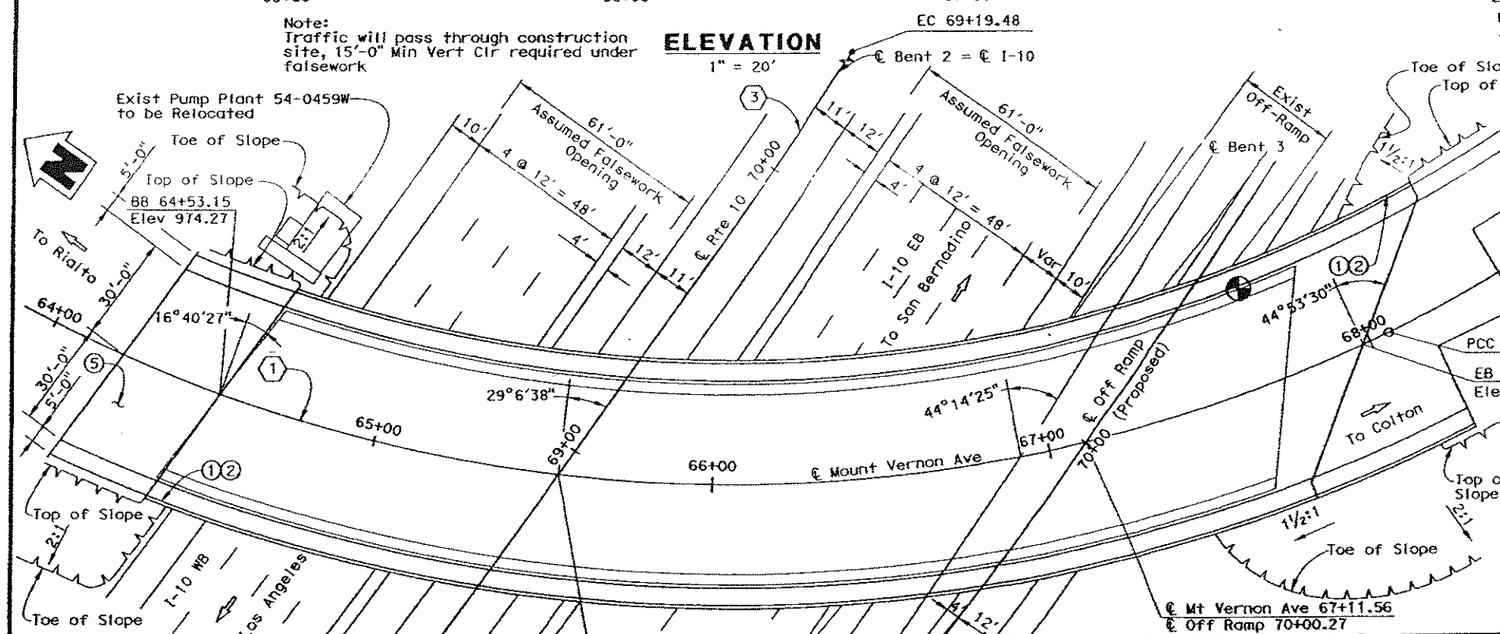
TYPICAL SECTION - STAGE CONSTRUCTION 1
1" = 10'

CURVE DATA (1)
R = 450'
Δ = 59°40'27"
L = 468.68'
T = 258.10'

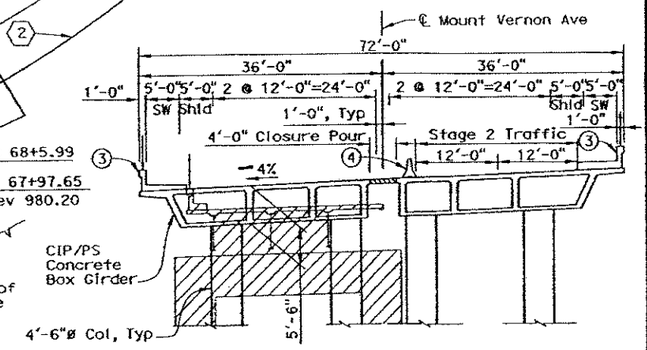
CURVE DATA (2)
R = 400'
Δ = 16°15'22"
L = 113.49'
T = 57.13'

CURVE DATA (3)
R = 4599.98'
Δ = 10°48'51"
L = 868.21'
T = 435.40'

DATE OF ESTIMATE	=	11/18/08
BRIDGE REMOVAL	=	$371,200
STRUCTURE DEPTH	=	5'-6"
LENGTH	=	344'-6"
WIDTH	=	72'-0"
AREA	=	24804 SF
COST/SF INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	$254
TOTAL COST	=	$6,300,000



PLAN
1" = 20'



TYPICAL SECTION - STAGE CONSTRUCTION 2
1" = 10'

Lily Sun
DESIGN OVERSIGHT
2/9/09
SIGN OFF DATE

DESIGNED BY	J. Fix	DATE	1/20/09
DRAWN BY	P. Johnson	DATE	1/20/09
CHECKED BY	M. Mohseni	DATE	1/20/09
APPROVED	M. Mohseni	DATE	1/20/09

Mohsen Mohseni
PROJECT ENGINEER

PLANNING STUDY

MOUNT VERNON AVE OC(REPLACE)

BRIDGE NO. 54-0459	OU 08224
SCALE: AS SHOWN	EA 0C2500

ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 2/25/05)

FILE => $REQUEST

TIME PLOTTED => $TIME
DATE PLOTTED => $DATE
USERNAME => $USER

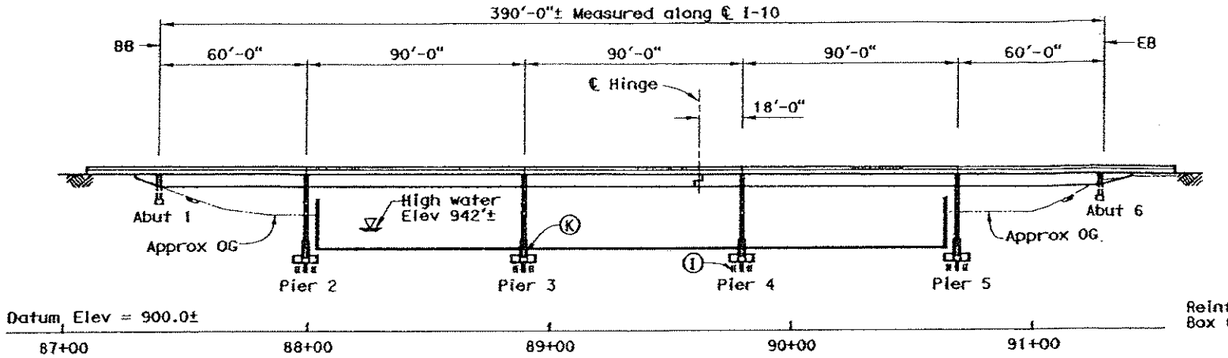
HOV ALTERNATIVE

PREPARED FOR THE STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

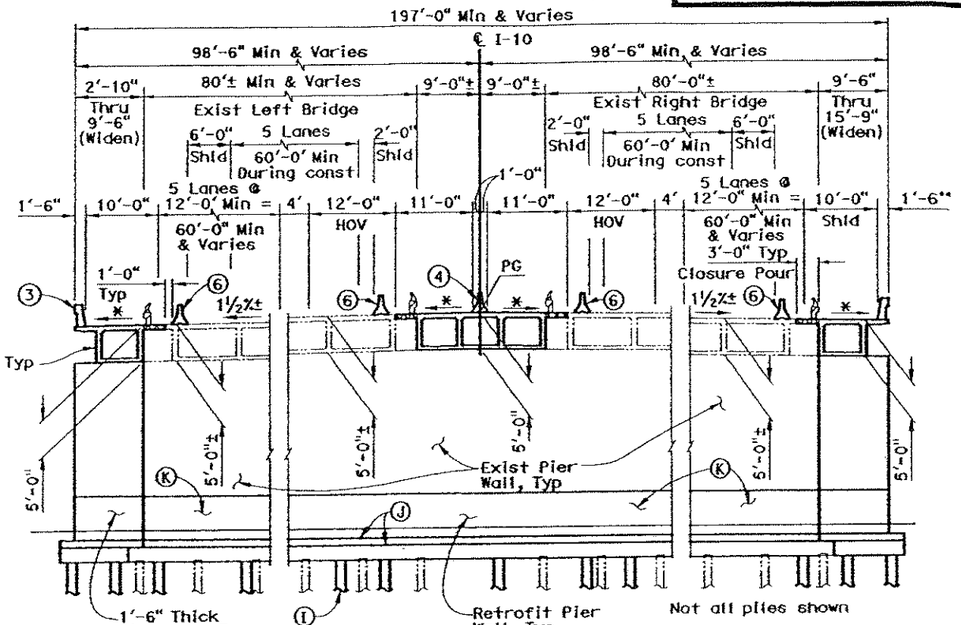
DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT
08	SBd	10	3.20/33.43

SAN BERNARDINO ASSOCIATED GOVERNMENTS — 1170 W Third St 2nd Floor San Bernardino CA 92410

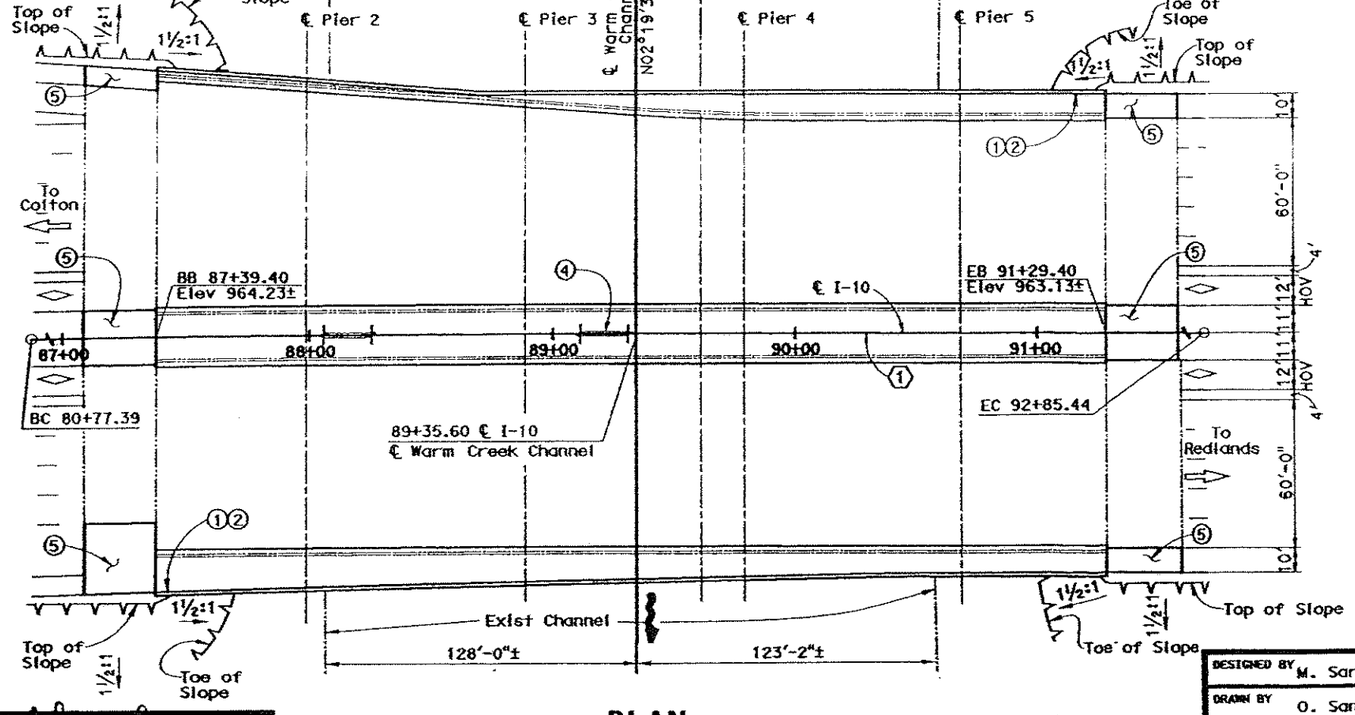
PARSONS — 2201 DUPONT DRIVE SUITE 200 IRVINE, CA 92612



ELEVATION
1" = 30'



TYPICAL SECTION
1" = 10'



PLAN
1" = 30'

NOTES:

1. Paint "Br. No. 54-0830"
2. Paint "Warm Creek Bridge"
3. Concrete Barrier Type 736
4. Median Concrete Barrier Type 60A
5. Structure Approach Type N(300)
6. Temporary Railing Type K

* Match existing cross slope

SEISMIC RETROFIT:

- (I) Add 24" CIDH Piles
- (J) Footing Retrofit
- (K) Partial Pier Wall Retrofit

CURVE DATA (1)

R = 20 000'
Δ = 03°27'39"
T = 604.21'
L = 1208.05'

DATE OF ESTIMATE	=	10/30/08
BRIDGE REMOVAL	=	4680 SF
STRUCTURE DEPTH	=	5'-0"
LENGTH	=	390'-0"
WIDTH	=	36'-7" thru 37'-0"
AREA	=	16,701 SF
COST/SF INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	$261/SF (Widen)
DECK REHAB	=	$7,562,500
TOTAL COST	=	$11,800,000

LEGEND:

- Direction of Travel
- Indicates Direction of Flow
- Indicates Bridge Removal (Portion)
- Indicates Closure Pour
- Indicates HOV Lanes
- Denotes New Structure
- Denotes Existing Structure

DESIGN OVERSIGHT Lilly Lum 2/9/09
SIGN OFF DATE

DESIGNED BY	M. Sarraf	DATE	11/14/08
DRAWN BY	O. Sandoval	DATE	11/20/08
CHECKED BY	M. Mohseni	DATE	11/20/08
APPROVED	M. Mohseni	DATE	12/03/08

Mohsen Mohseni
PROJECT ENGINEER

PLANNING STUDY
WARM CREEK (WIDEN)

BRIDGE NO. 540830	CU 08224
SCALE: AS SHOWN	EA 0C2500

HOV ALTERNATIVE

ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 2/25/06)

FILE => c:\pw_working_xm\ptg\p0038016\dms18515\54-0830-A-GP01.dgn

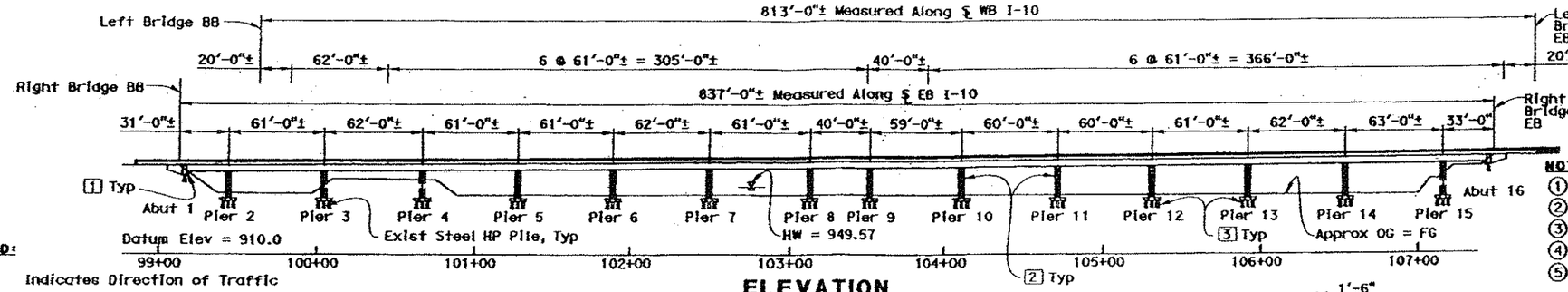
USERNAME => p0038016 DATE PLOTTED => 1/28/2009 TIME PLOTTED => 3:20:15 PM

PREPARED FOR THE STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT
8	SBd	10	8.20/33.43

SAN BERNARDINO ASSOCIATED GOVERNMENTS — 1170 W Third St 2nd Floor San Bernardino CA 92410

PARSONS — 2201 DUPONT DRIVE SUITE 200 IRVINE, CA 92612



NOTES:

1. Paint "Br. No. 54-0292R/L"
2. Paint "Santa Ana River Bridge"
3. Concrete Barrier Type 736
4. Structure Approach Type N (30S)
5. Concrete Barrier Type 60

LEGEND:

- Indicates Direction of Traffic
- Indicates 3'-0" Closure Pour
- Limits of Bridge Removal (Portion)
- Direction of Flow
- MBGR, see "Road Plans"
- Indicates New Structure
- Indicates Exist Structure
- Barrier, Type 60

RETROFIT NOTES:

[1] Abutment Retrofit
[2] Pier Wall Retrofit (Thicken)
[3] Footing Retrofit (CIDH Piles)

Bridge

DATE OF ESTIMATE	=	11/21/08
BRIDGE REMOVAL	=	9314 SF
STRUCTURE DEPTH	=	3'-9"
LENGTH	=	Lt Br.-813'; Rt Br.-837'
WIDTH	=	33'-6" to 42'-0"
AREA	=	31,142 SF
COST/SF INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	$ 391
PRELIMINARY SEISMIC RETROFIT 25% CONTINGENCY	=	$ 8,500,000
TOTAL COST	=	$ 20,700,000

CURVE DATA (1)

R = 4988.53'
Δ = 9°8'28"
L = 795.88'
T = 398.79'

CURVE DATA (2)

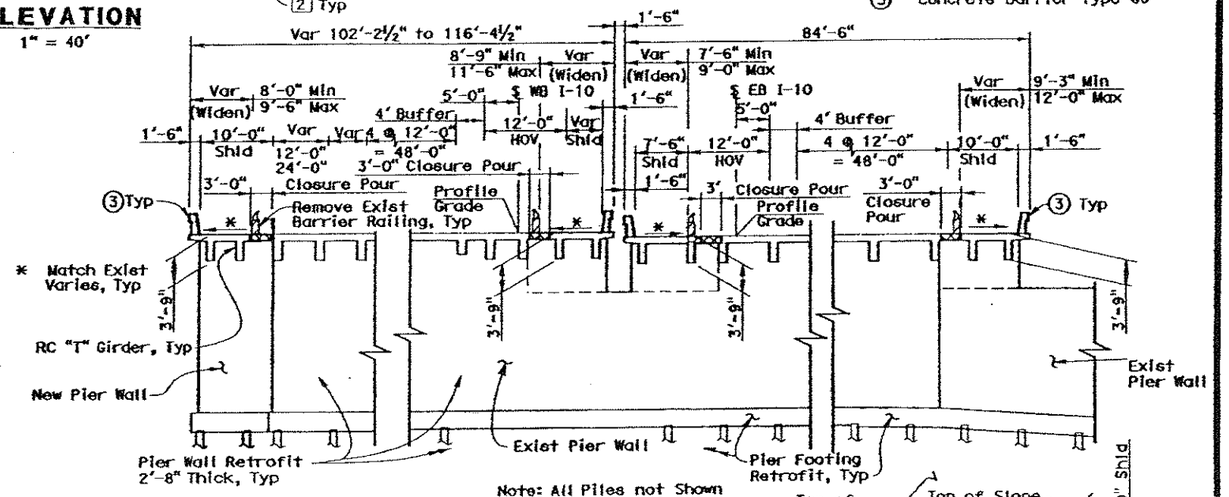
R = 5202.85'
Δ = 9°26'43"
L = 857.70'
T = 429.82'

Notes:

1. Traffic will pass through construction site.
2. For Traffic during construction, refer to "Planing Study 2 of 2" sheet.

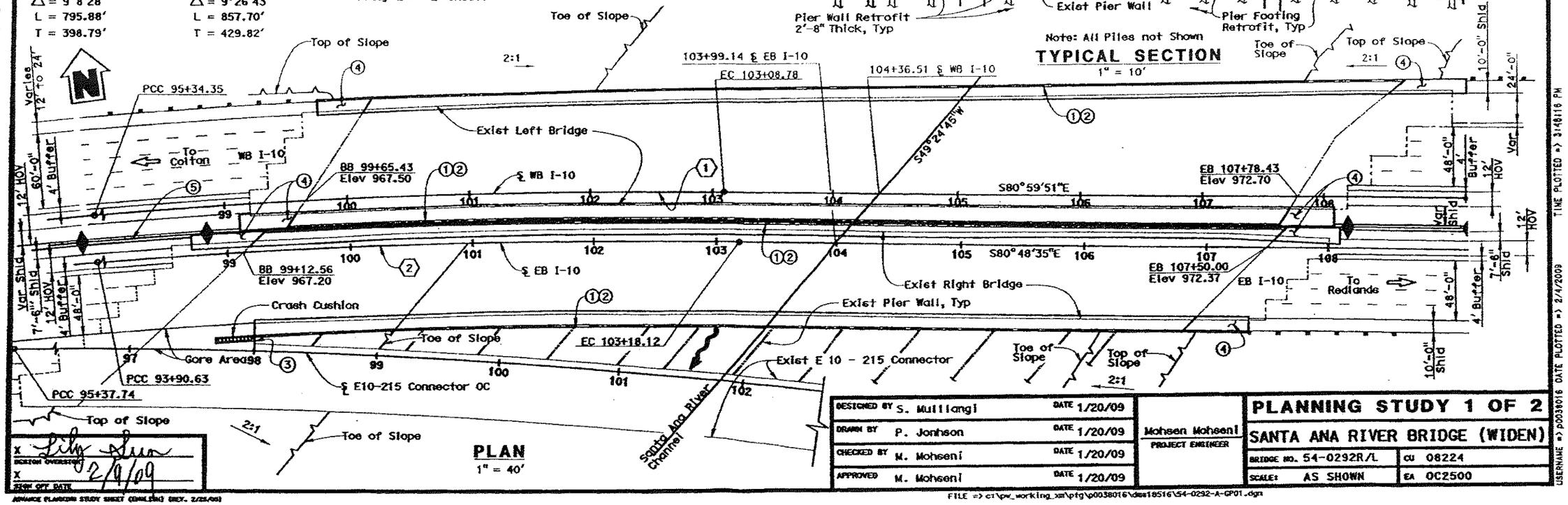
ELEVATION

1" = 40'



TYPICAL SECTION

1" = 10'



PLAN

1" = 40'

DESIGNED BY	S. Mullangi	DATE	1/20/09
DRAWN BY	P. Jonhson	DATE	1/20/09
CHECKED BY	M. Mohseni	DATE	1/20/09
APPROVED	M. Mohseni	DATE	1/20/09

Mohsen Mohseni
PROJECT ENGINEER

X Lily Shen 2/9/09
DISTRICT DIVISION CHIEF DATE

X
HQ OFF DATE

PLANNING STUDY 1 OF 2

SANTA ANA RIVER BRIDGE (WIDEN)

BRIDGE NO.	54-0292R/L	CU	08224
SCALE:	AS SHOWN	EA	0C2500

ADVANCE PLANNING STUDY SHEET (ENGLISH) REV. 2/25/05

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USERNAME => p00380016 DATE PLOTTED => 2/4/2009 TIME PLOTTED => 3:14:16 PM

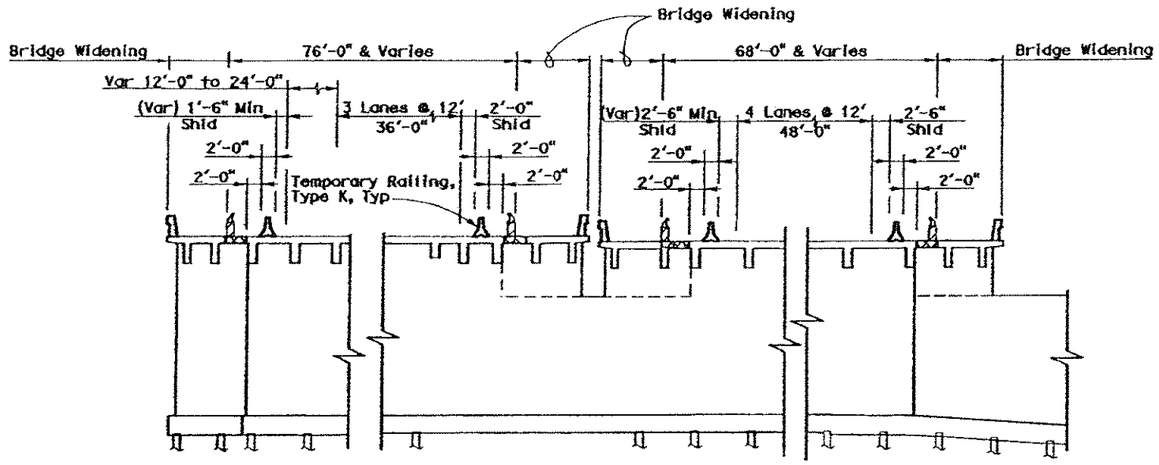
HOV ALTERNATIVE

PREPARED FOR THE STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT
8	SBd	10	8.20/33.43

SAN BERNARDINO ASSOCIATED GOVERNMENTS — 1170 W Third St, 2nd Floor, San Bernardino, CA 92410

PARSONS — 2201 DUPONT DRIVE, SUITE 200, IRVINE, CA 92612



Note:
For information not shown refer to "Typical Section" on "Planing Study 1 of 2" sheet.

TYPICAL SECTION DURING CONSTRUCTION

1" = 10'

x Lily Shen
DESIGN OVERSIGHT
x 2/9/09
STAFF OFF DATE

ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 2/25/05)

DESIGNED BY	S. Mullangi	DATE	1/20/09
DRAWN BY	P. Jonhson	DATE	1/20/09
CHECKED BY	M. Mohseni	DATE	1/20/09
APPROVED	M. Mohseni	DATE	1/20/09

Mohsen Mohseni
PROJECT ENGINEER

PLANNING STUDY 2 OF 2

SANTA ANA RIVER BRIDGE (WIDEN)

BRIDGE NO. 54-0292R/L	OU 08224
SCALE: AS SHOWN	EA 0C2500

FILE => c:\pw_working_xm\ptg\p0038016\dias18516\54-0292-A-GP02.dgn

USERNAME => p0038016 DATE PLOTTED => 2/4/2009 TIME PLOTTED => 3:52:06 PM

HOV ALTERNATIVE

PREPARED FOR THE STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

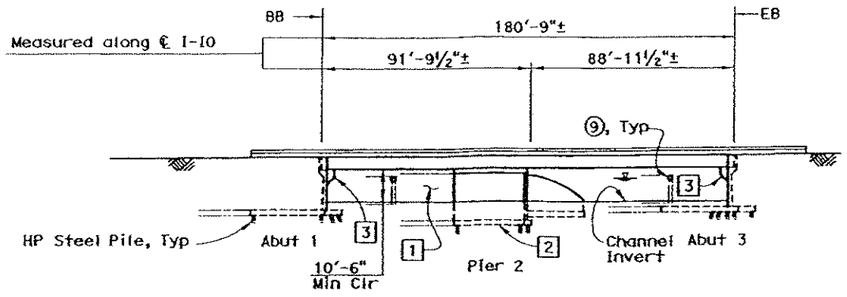
DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT
8	SBd	10	8.20/33.43

SAN BERNARDINO ASSOCIATED GOVERNMENTS — 1170 W Third St 2nd Floor San Bernardino CA 92410

PARSONS — 2201 DUPONT DRIVE SUITE 200 IRVINE, CA 92612

RETROFIT LEGEND:

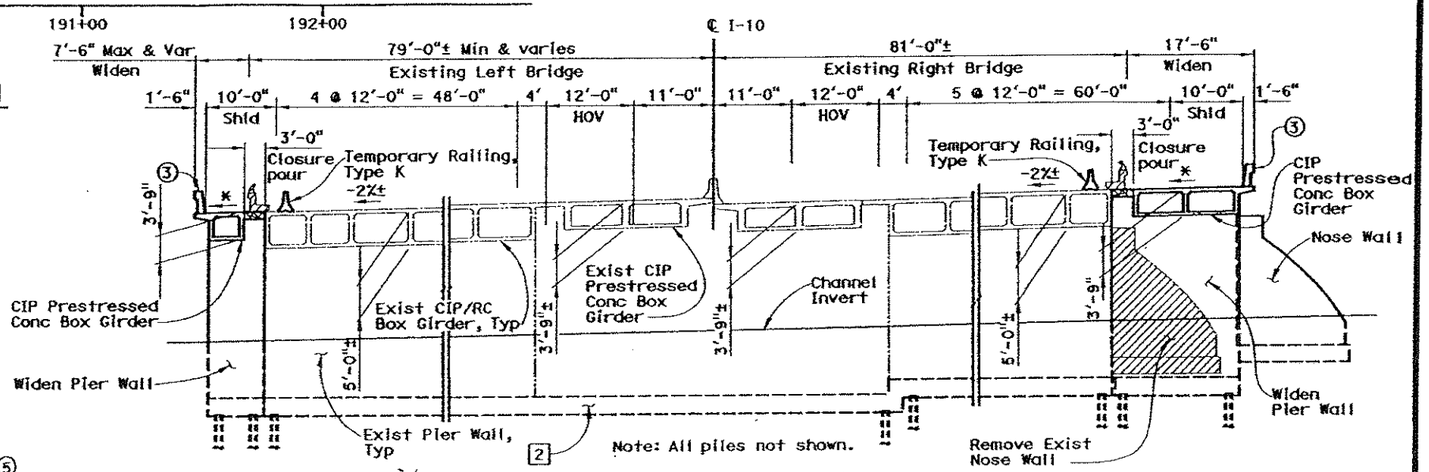
[1] Thicken exist pier wall.
[2] Retrofit exist pile cap and add piles.
[3] Add Abut Catcher blocks.



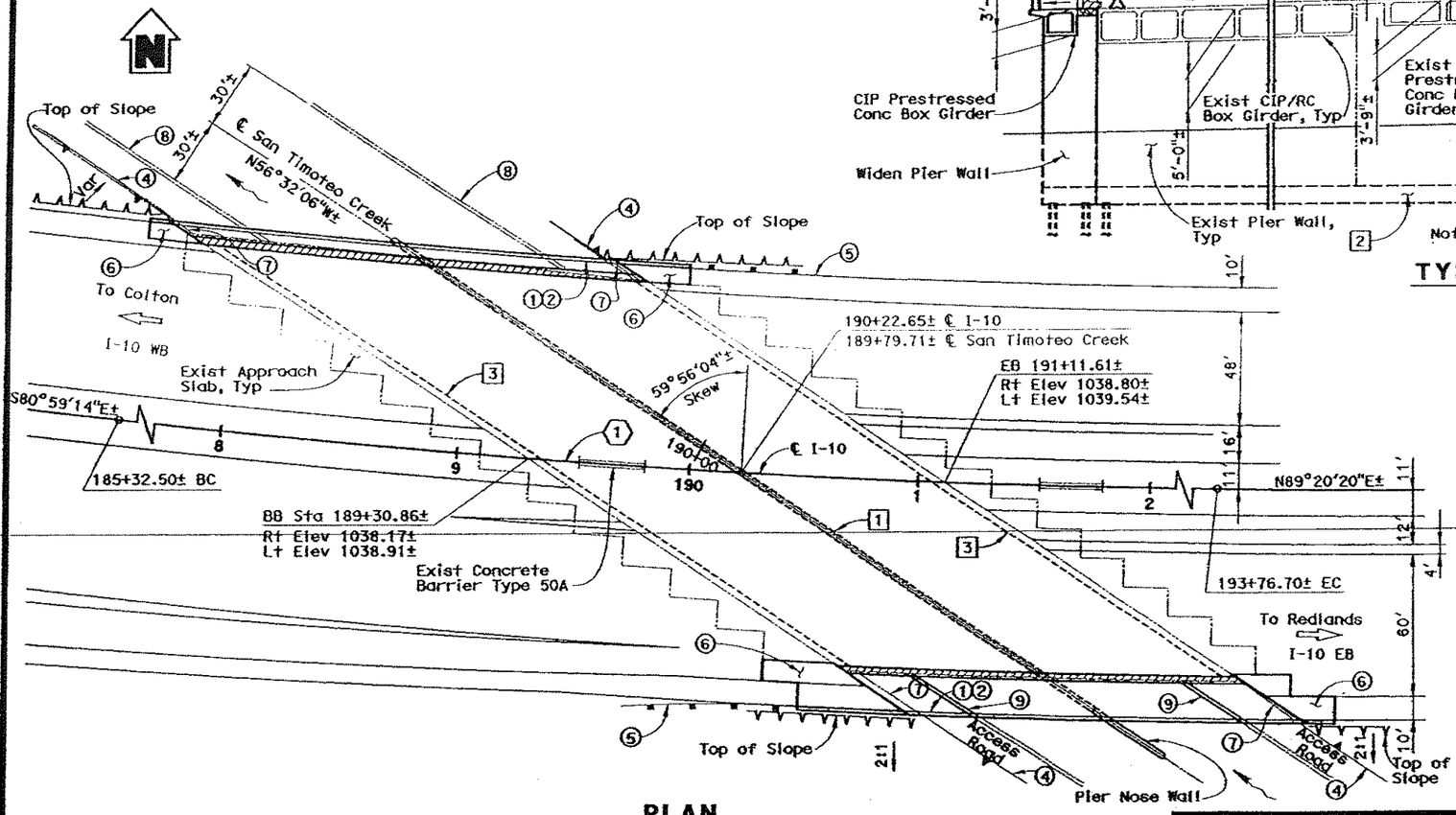
ELEVATION
1" = 30'

NOTES:

① Paint "Br No. 54-0599"
② Paint "San Timoteo Creek Bridge"
③ Concrete Barrier Type 736
④ Retaining Wall, See "Road Plans"
⑤ MBGR, See "Road Plans"
⑥ Structure Approach Type R(30S)
⑦ Remove Exist wingwall
⑧ Exist Channel Wall
⑨ Channel Wall Retrofit
⑩ Exist Pier Wall
* Match existing cross slope



TYPICAL SECTION
1" = 10'



PLAN
1" = 30'

CURVE DATA (1)

R = 4999.96'
Δ = 9°40'26"
T = 423.11'
L = 844.20'

BRIDGE

DATE OF ESTIMATE	=	05/20/09
BRIDGE REMOVAL	=	1085 SF
STRUCTURE DEPTH	=	3'-9"
LENGTH	=	180'-9"
WIDTH	=	27'-6"
AREA	=	4971 SF
COST/SF INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	$ 300/SF **
PRELIMINARY SEISMIC RETROFIT	=	$ 200,000
TOTAL COST	=	$ 1,500,000

** Cost doesn't include seismic retrofit

LEGEND:

⇨ Direction of Travel
MBGR
Indicates Existing Structure
Indicates New Structure
Indicates limits of Bridge Removal

Lily Lun
DESIGN OVERSIGHT
6/18/09
DESIGN OFF DATE

DESIGNED BY	U. Sandira	DATE	5/20/09
DRAWN BY	A. Segura	DATE	5/20/09
CHECKED BY	M. Mohseni	DATE	5/20/09
APPROVED	M. Mohseni	DATE	5/20/09

Mohsen Mohseni
PROJECT ENGINEER

PLANNING STUDY

SAN TIMOTEO CREEK BRIDGE (WIDEN)

BRIDGE NO. 54-0599	CU 08224
SCALE: AS SHOWN	EA 0C2500

HOV ALTERNATIVE

ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 2/25/05)

FILE => &REQUEST

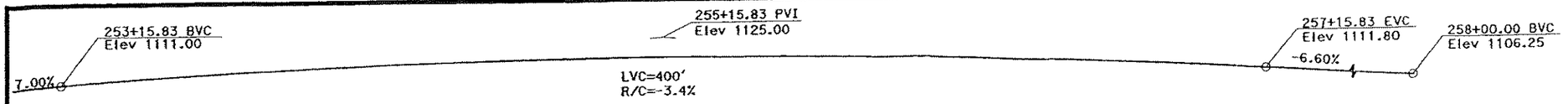
TIME PLOTTED => &TIME
DATE PLOTTED => &DATE
USERNAME => &USER

PREPARED FOR THE STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

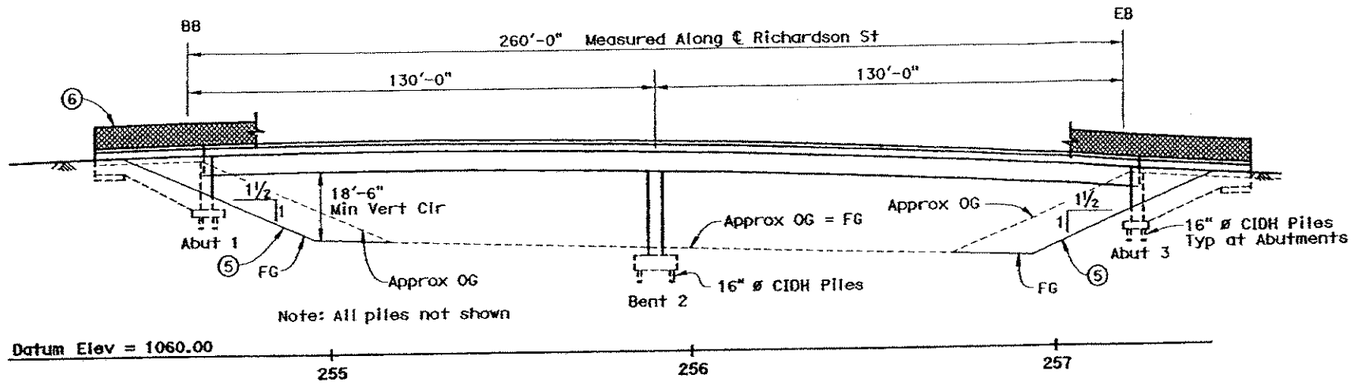
DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT
8	SBd	10	8.20/33.43

SAN BERNARDINO ASSOCIATED GOVERNMENTS — 1170 W Third St 2nd Floor San Bernardino CA 92410

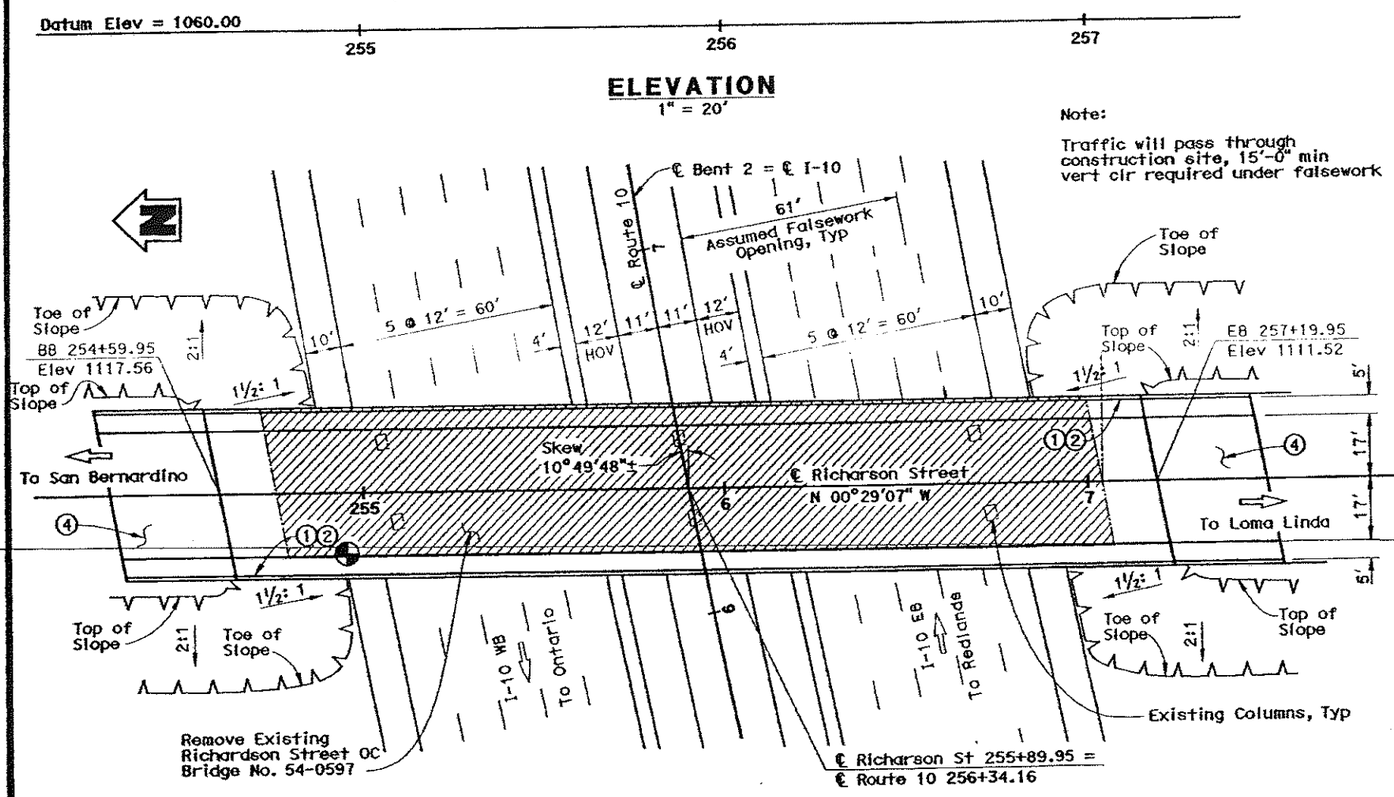
PARSONS — 2201 DUPONT DRIVE SUITE 200 IRVINE, CA 92612



PROFILE
No Scale



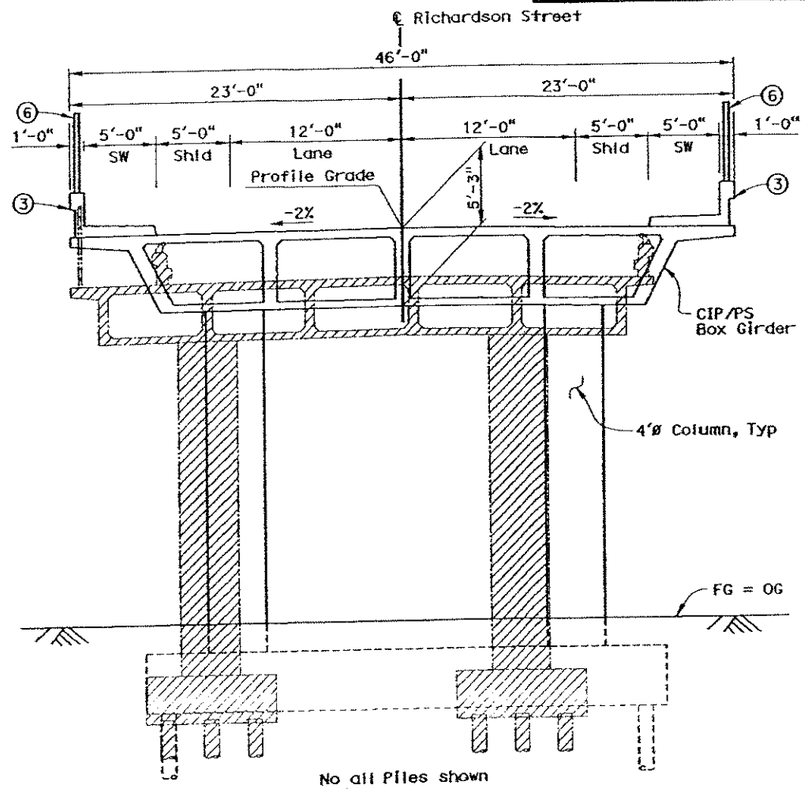
ELEVATION
1" = 20'



PLAN
1" = 20'

Note:

Traffic will pass through construction site, 15'-0" min vert clr required under falsework



TYPICAL SECTION
1" = 5'

NOTES:

1. Paint "Br No. 54-0597"
2. Paint "Richarson Street OC"
3. Concrete Barrier Type 26
4. Structure Approach Type N(30S)
5. Slope Paving
6. Chain Link Railing (Type 7)

LEGEND:

- Direction of Traffic
- Indicates Existing Structure
- Point of Minimum Vertical Clearance
- Indicates Bridge Removal

BRIDGE

DATE OF ESTIMATE	=	12/10/08
BRIDGE REMOVAL	=	9,202 SF
STRUCTURE DEPTH	=	5'-3"
LENGTH	=	260'-0"
WIDTH	=	46'-0"
AREA	=	11,960 SF
COST/SF INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	$226/SF
TOTAL COST	=	$2,700,000

DESIGNED BY M. Ruvalcaba	DATE 12/16/08	Mohsen Mohseni PROJECT ENGINEER	PLANNING STUDY
DRAWN BY P. Johnson/N. Morcillo	DATE 12/17/08		RICHARDSON STREET OC (REPLACE)
CHECKED BY M. Mohseni	DATE 3/9/09		BRIDGE NO. 54-0597 / CU 08224
APPROVED M. Mohseni	DATE 3/20/09		SCALE: AS SHOWN / EA 0C2500

DESIGN OVERSIGHT Lily Shen 6/18/09 SIGN OFF DATE

ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 2/25/05)

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USERNAME => p0021213 DATE PLOTTED => 6/29/2009 TIME PLOTTED => 11:24:27 PM

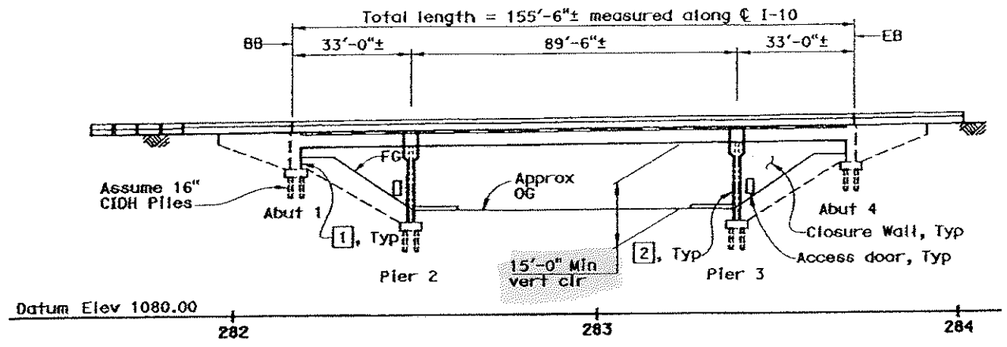
HOV ALTERNATIVE

PREPARED FOR THE STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT
8	SBd	10	8.20/33.43

SAN BERNARDINO ASSOCIATED GOVERNMENTS — 1170 W Third St 2nd Floor San Bernardino CA 92410

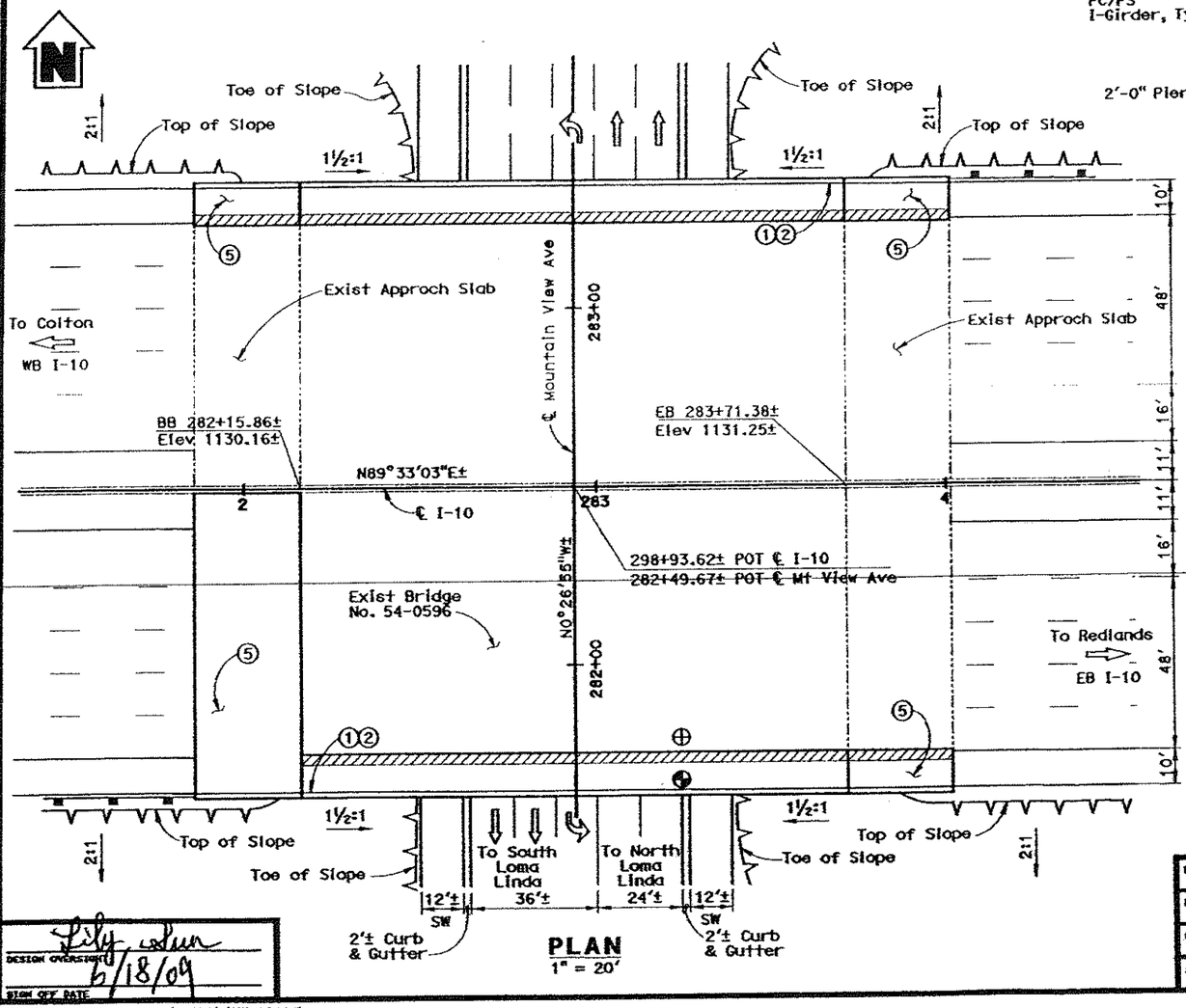
PARSONS — 2201 DUPONT DRIVE SUITE 200 IRVINE, CA 92612



ELEVATION

1" = 20'

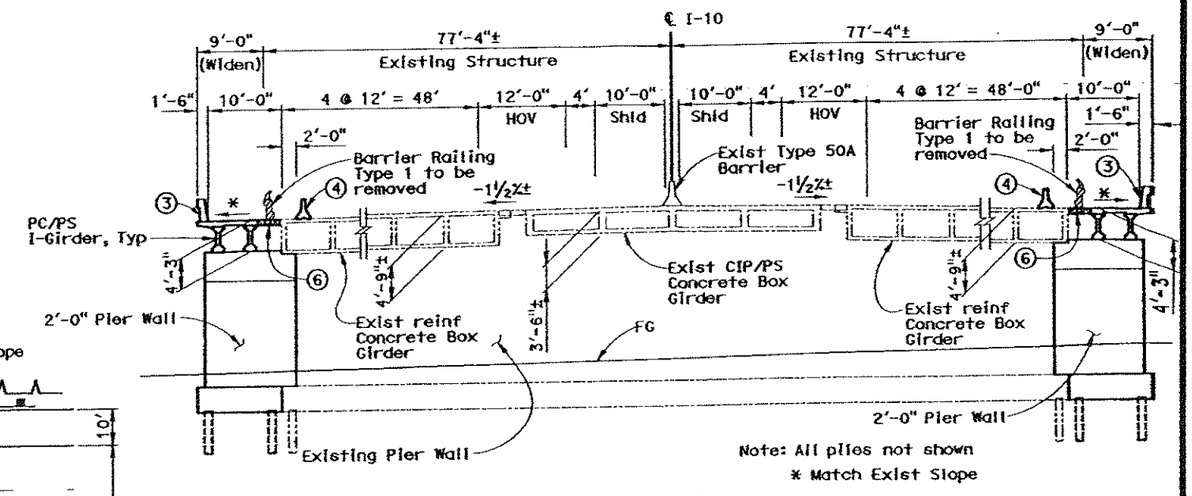
Note:
Traffic will pass through construction site (15'-0" Min Vert Clr required).



PLAN

1" = 20'

Notes:
1. Paint "Br. No. 54-0596"
2. Paint "Mountain View Ave UC"
3. Concrete Barrier Type 736
4. Temporary Railing (Type K)
5. Structure Approach, Type R(30S)
6. 3'-0" Closure Pour



Note: All plies not shown
* Match Exist Slope

TYPICAL SECTION

1" = 10'

DATE OF ESTIMATE	=	03/20/09
BRIDGE REMOVAL	=	936 SF
STRUCTURE DEPTH	=	4'-3"
LENGTH	=	155'-6"
WIDTH	=	18'-0"
AREA	=	2802 SF
COST/SF INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	$ 500
** PRELIM SEISMIC RETROFIT	=	$ 200,000
TOTAL COST	=	$ 1,400,000

** Seismic retrofit included in total cost

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JUN 11 2009
OFFICE OF SPECIAL FUNDED PROJECTS

RETROFIT NOTES:

[1] Abutment Retrofit
[2] Pier wall Retrofit (Thicken)

LEGEND:

Direction of Travel
Bridge Removal (Portion)
MBGR
Point of Minimum Vertical Clearance
Point of Existing Minimum Vertical Clearance (15'-0" Per Caltrans Bridge Inspection Report)

DESIGNED BY	J. Le	DATE	3/20/09
DRAWN BY	A. Segura	DATE	3/20/09
CHECKED BY	U. Sandira	DATE	3/20/09
APPROVED	M. Mohseni	DATE	3/20/09

Mohsen Mohseni
PROJECT ENGINEER

DESIGN OVERSIGHT 6/18/09
SIGN OFF DATE

PLANNING STUDY

MOUNTAIN VIEW AVE UC (WIDEN)

BRIDGE NO. 54-0596	CU 08224
SCALE: AS SHOWN	EA 0C2500

HOV ALTERNATIVE

FILE => c:\pw_working_xm\ptg\p0038016\dgn10443\54-0596-a-gp01.dgn

USERNAME => p0038016 DATE PLOTTED => 5/20/2009 TIME PLOTTED => 10:49:28 AM

ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 2/25/08)

PREPARED FOR THE STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

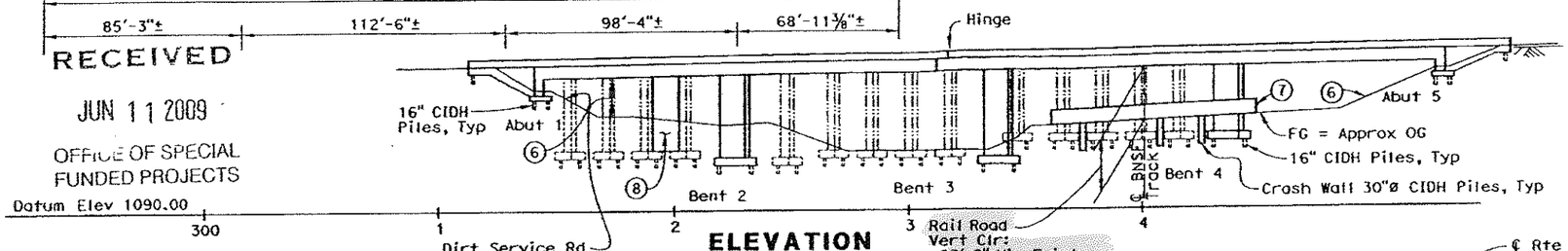
DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT
08	SBd	10	8.20/33.43

SAN BERNARDINO ASSOCIATED GOVERNMENTS — 1170 W Third St 2nd Floor San Bernardino CA 92410

PARSONS — 2201 DUPONT DRIVE SUITE 200 IRVINE, CA 92612

BB 376'-3⅛"± Right Widening Measured Along WB ETW EB
85'-3"± | 112'-6"± | 98'-4"± | 80'- 2⅛"±

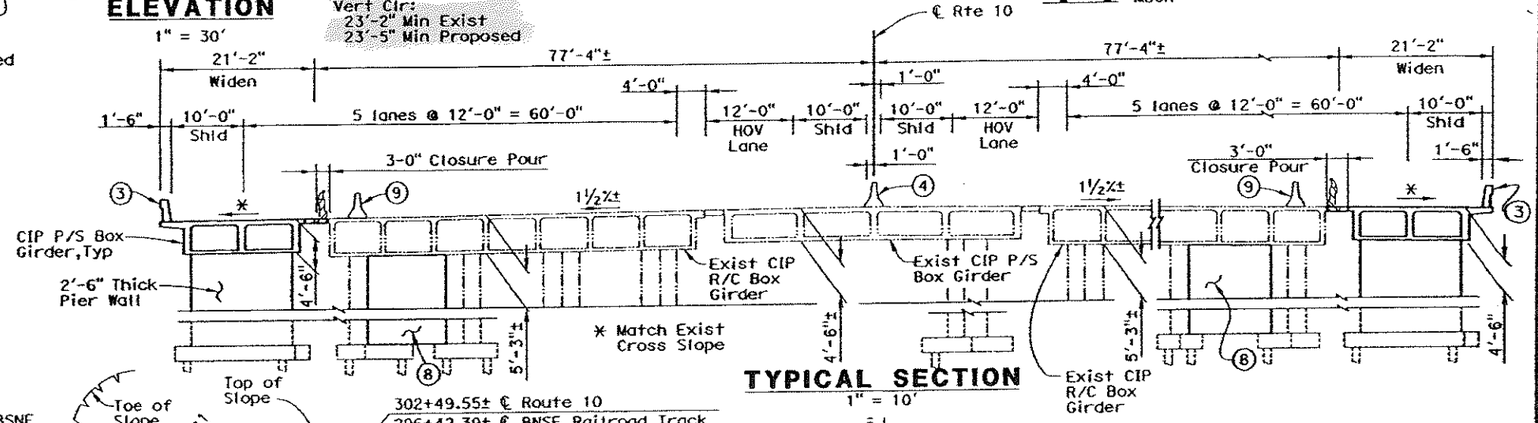
BB 365'-0⅜"± Left Widening Measured Along ETW EB
85'-3"± | 112'-6"± | 98'-4"± | 68'-11⅜"±



ELEVATION
1" = 30'

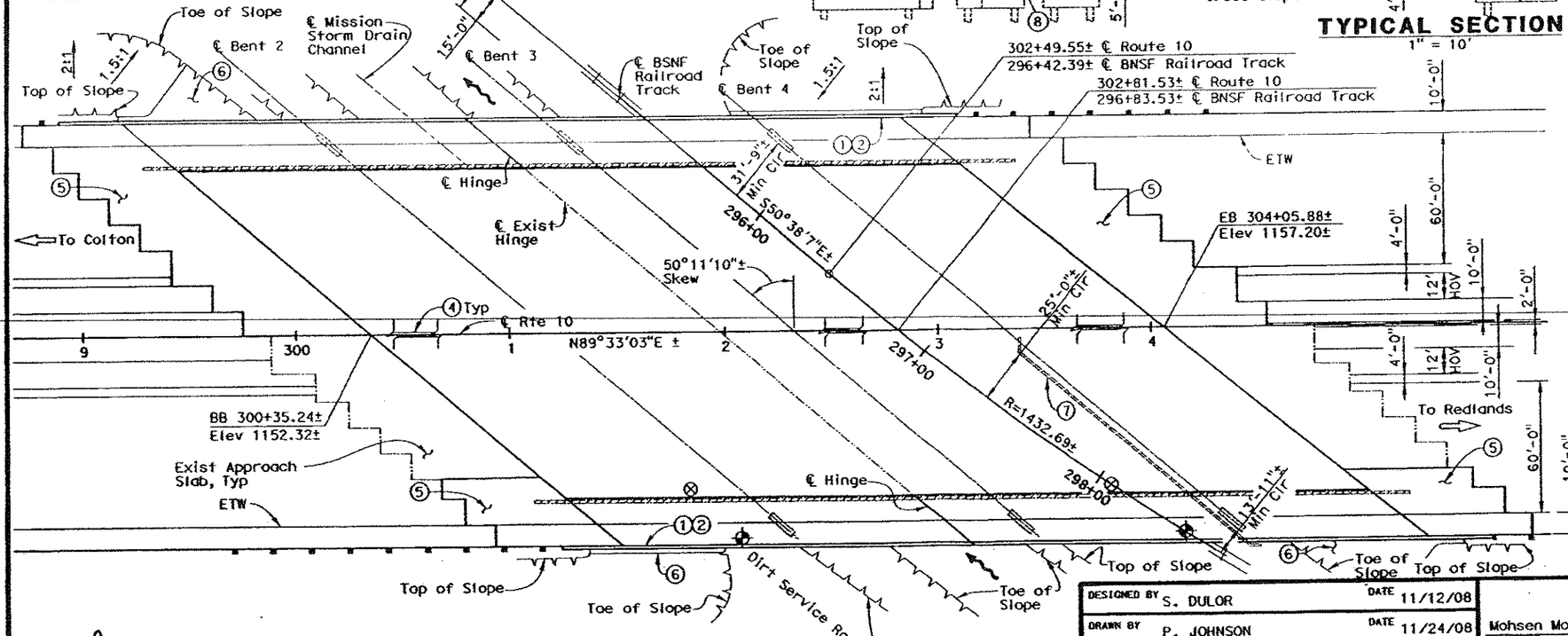
NOTES:

① Paint "Br No. 54-570"
② Paint " West Redlands Overhead"
③ Concrete Barrier, Type 736
④ Concrete Barrier, Type 60A
⑤ Structure Approach, Type N(30D)
⑥ Slope Protection (Grouted rip rap)
⑦ Crash Wall
⑧ 1'-6" Thick Infill Wall (Seismic Retrofit)
⑨ Temporary Railing, Type "K"



TYPICAL SECTION
1" = 10'

Note:
Railroad traffic will pass through construction site (21'-0" minimum vertical clearance required over tracks)



PLAN
1" = 30'

DATE OF ESTIMATE	3/16/09
BRIDGE REMOVAL	$9,075
STRUCTURE DEPTH	4'-6"
LENGTH	371'-0"
WIDTH	19'-0"
AREA	16,821 SF
PRELIM SEISMIC RETROFIT	$285,000
COST/SF INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	$226
MAINTENANCE ITEMS	$655,000
RAILROAD ITEMS	$157,000
TOTAL COST	$4,600,000

Lily Sun
DESIGN OVERSIGHT
6/18/09
SIGN OFF DATE

DESIGNED BY	S. DULOR	DATE 11/12/08
DRAWN BY	P. JOHNSON	DATE 11/24/08
CHECKED BY	M. MOHSENI	DATE 11/26/08
APPROVED	M. MOHSENI	DATE 12/5/08

Mohsen Mohseni
PROJECT ENGINEER

PLANNING STUDY
WEST REDLANDS OH (WIDEN)

BRIDGE NO. 54-570	CU 08224
SCALE: As Noted	EA 0C2500

HOV ALTERNATIVE

ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 2/25/05)

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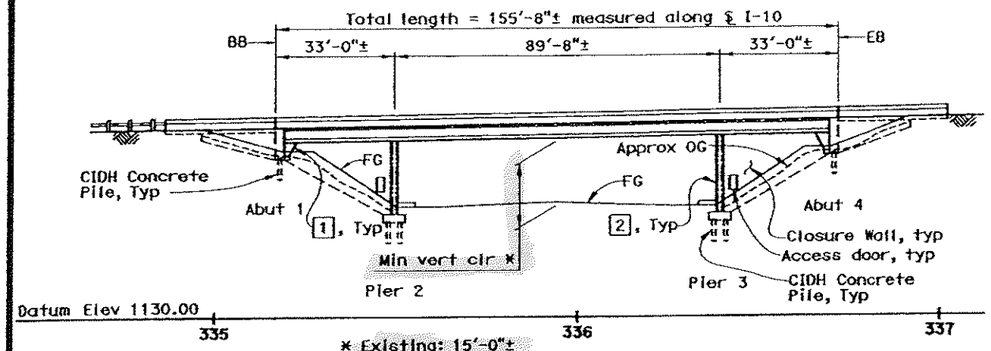
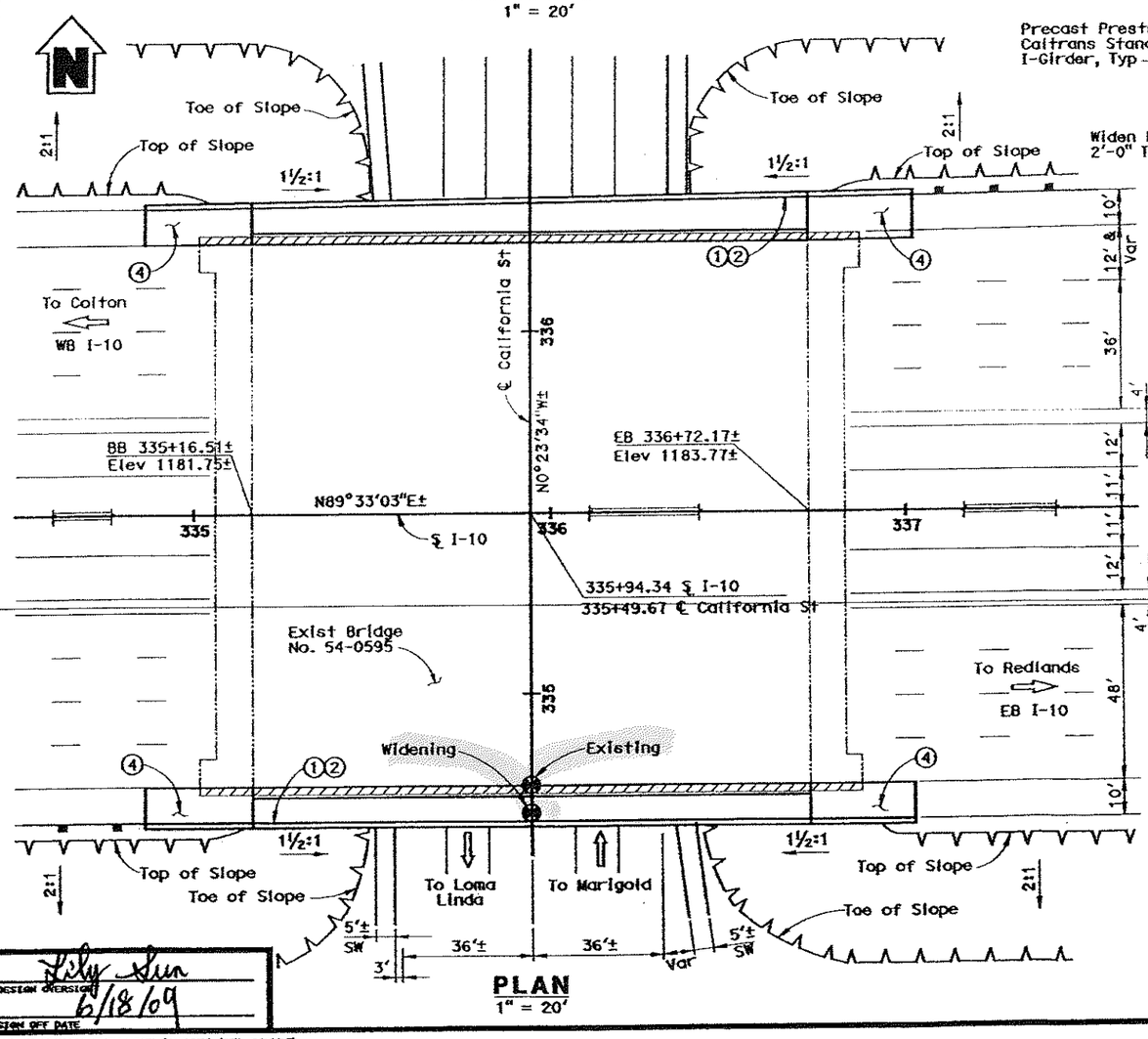
TIME PLOTTED => $TIME
USERNAME => $USER

PREPARED FOR THE STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION



Note:
Traffic will pass through construction site (15'-0" Min Vert Clr required).

ELEVATION
1" = 20'



PLAN
1" = 20'

Notes:
① Paint "Br No. 54-0595"
② Paint "California Street UC"
③ Concrete Barrier Type 736
④ Structure Approach

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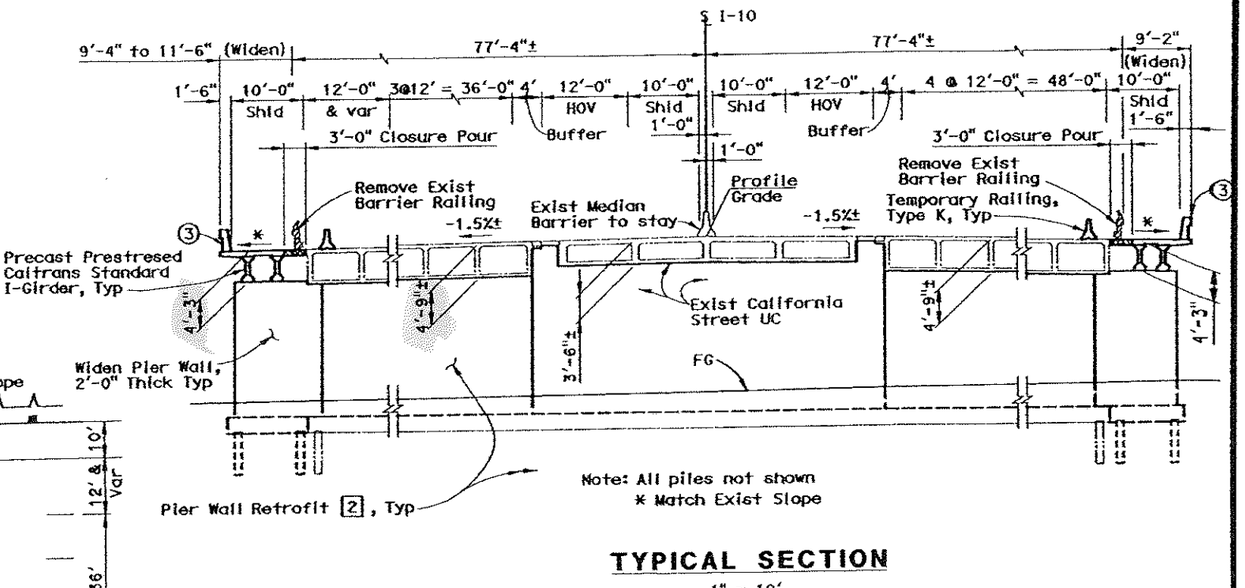
OFFICE OF SPECIAL FUNDED PROJECTS

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT
8	SBd	10	8.20/33 - 43

SAN BERNARDINO ASSOCIATED GOVERNMENTS — 1170 W Third St 2nd Floor San Bernardino CA 92410
PARSONS — 2201 DUPONT DRIVE SUITE 200 IRVINE, CA 92612



Note: All piles not shown
* Match Exist Slope

TYPICAL SECTION
1" = 10'

DATE OF ESTIMATE	=	3/27/09
BRIDGE REMOVAL	=	676 SF
STRUCTURE DEPTH	=	4'-3"
LENGTH	=	155'-8"
WIDTH	=	18'-6" to 20'-8"
AREA	=	3048 SF
COST/SF INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	$ 382
PRELIM SEISMIC RETROFIT	=	$ 494,000
TOTAL COST	=	$ 1,700,000

RETROFIT NOTES:

1 Abutment Retrofit
2 Pier wall Retrofit (Thicken)

LEGEND:

Direction of Travel
Bridge Removal (Portion)
MBGR
Indicates Point of min vert clr

DESIGNED BY S. Mullangi	DATE 3/27/09	Mohsen Mohseni PROJECT ENGINEER	PLANNING STUDY
DRAWN BY A. Segura	DATE 3/27/09		CALIFORNIA STREET UC (WIDEN)
CHECKED BY M. Mohseni	DATE 3/27/09		BRIDGE NO. 54-0595 — CU 08224
APPROVED M. Mohseni	DATE 3/27/09		SCALE: AS SHOWN — EA 0C2500

DESIGN OVERSIGHT Lily Sun 6/18/09
SIGN OFF DATE

ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 2/25/05)

FILE => c:\pw_working_xm\prfg\p0004202\dms10441\54-0595-d-gp01.dgn

USERNAME => p0004202 DATE PLOTTED => 6/18/2009 TIME PLOTTED => 11:18:58 AM

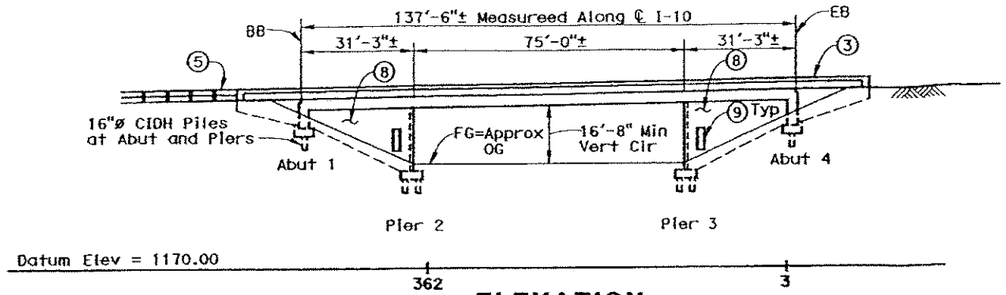
HOV ALTERNATIVE

PREPARED FOR THE STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT
8	SBd	10	8.20/33.43

SAN BERNARDINO ASSOCIATED GOVERNMENTS — 1170 W Third St 2nd Floor San Bernardino CA 92410

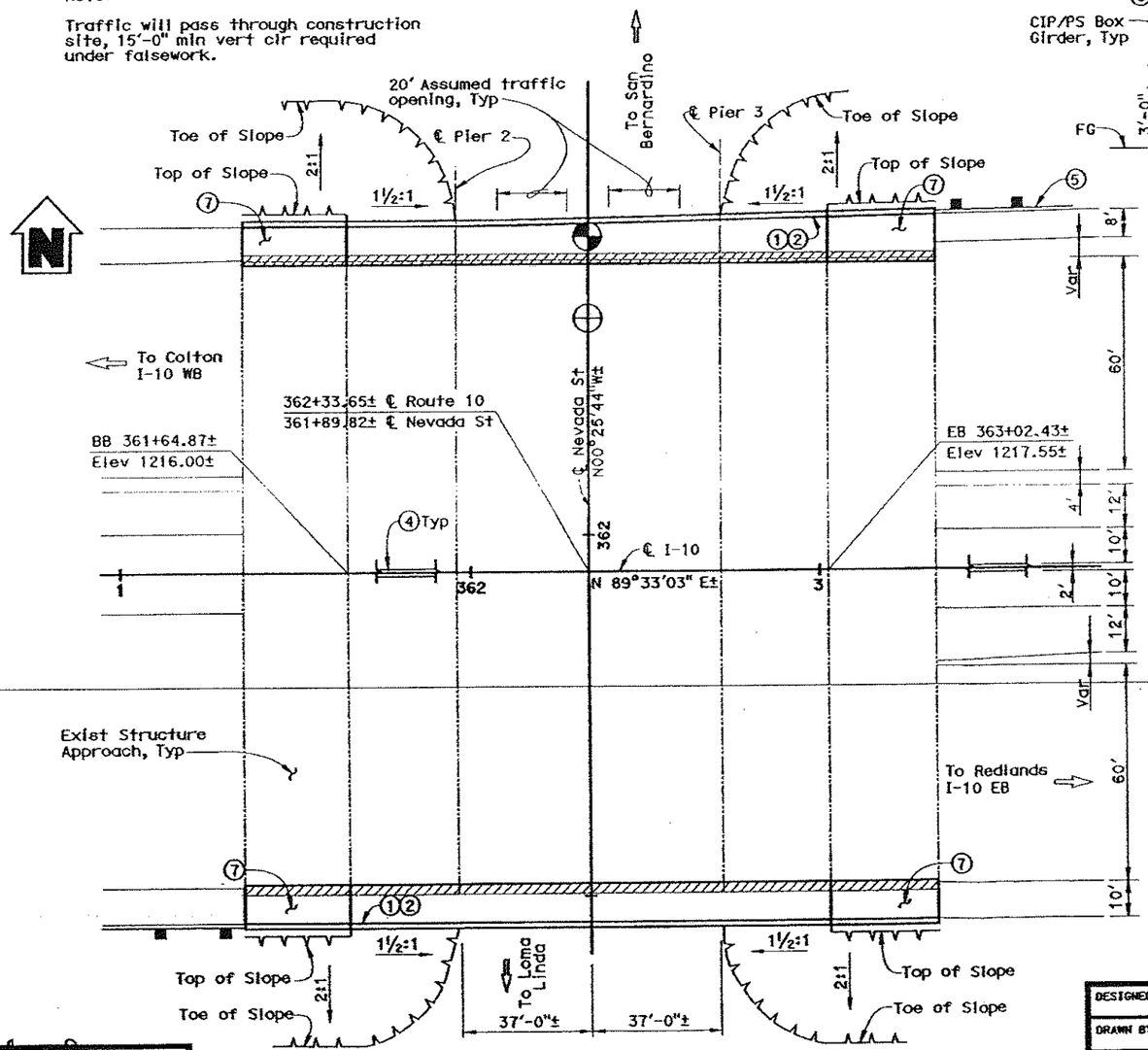
PARSONS — 2201 DUPONT DRIVE SUITE 200 IRVINE, CA 92612



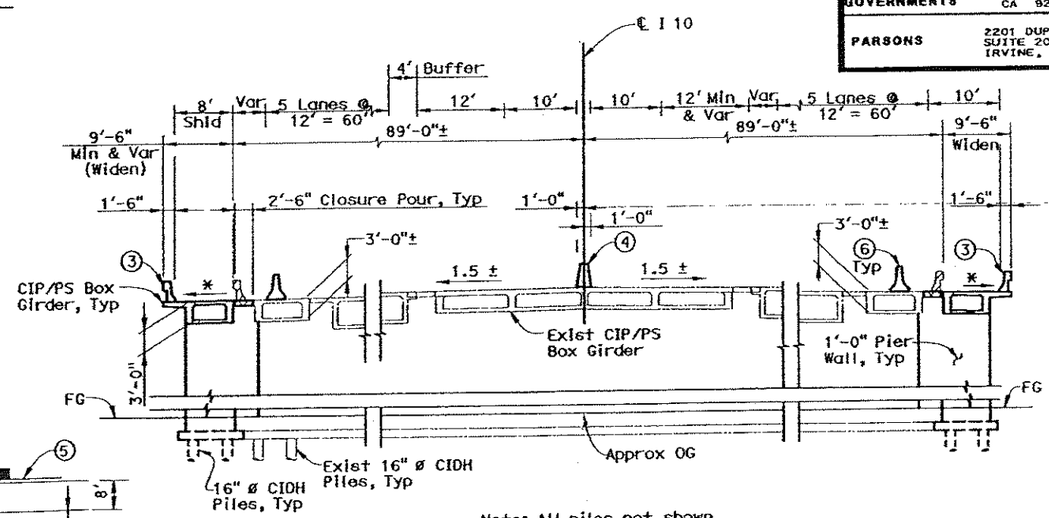
ELEVATION
1" = 20'

Note:

Traffic will pass through construction site, 15'-0" min vert clr required under falsework.



PLAN
1" = 20'



Note: All piles not shown
* Match Exist Slope

TYPICAL SECTION
1" = 10'

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NOTES:

1. Paint "Br No. 54-0594"
2. Paint "Nevada Street UC"
3. Concrete Barrier Type 736
4. Concrete Barrier Type 60A
5. Metal Beam Guard Rail, see "Road Plans"
6. Temporary Railing Type K
7. Structure Approach Type N (300)
8. Closure Wall
9. Access Door

LEGEND:

- Direction of Traffic
- MBGR
- Limits of Bridge Removal
- Point of Minimum Vertical Clearance
- Point of Existing Minimum Vertical Clearance (15'-9" Per Caltrans Bridge Inspection Report)

BRIDGE

DATE OF ESTIMATE	=	12/3/08
BRIDGE REMOVAL	=	758 SF
STRUCTURE DEPTH	=	3'-0"
LENGTH	=	137'-6"
WIDTH	=	9'-6" Min & Var
AREA	=	3525 SF
COST/SF INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	$218/SF
TOTAL COST	=	$770,000

DESIGNED BY	M. Ruvalcaba	DATE	12/17/08
DRAWN BY	P. Johnson/N. Morcillo	DATE	12/28/08
CHECKED BY	M. Mohseni	DATE	3/09/09
APPROVED	M. Mohseni	DATE	3/20/09

Mohsen Mohseni — PROJECT ENGINEER

DESIGN OVERSIGHT Lily Shun — SIGN OFF DATE 6/18/09

PLANNING STUDY

NEVADA STREET UNDERCROSSING(WIDEN)

BRIDGE NO. 54-594	CU 08224
SCALE: AS SHOWN	EA 0C2500

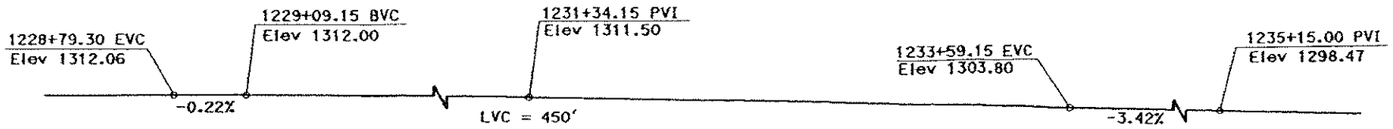
HOV ALTERNATIVE

ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 2/25/05)

FILE => c:\pw_working_xm\ptg\p0021213\dms10433\54-0594-a-gp01.dgn

USERNAME => p0021213 DATE PLOTTED => 6/9/2009 TIME PLOTTED => 5:56:25 PM

PREPARED FOR THE STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION



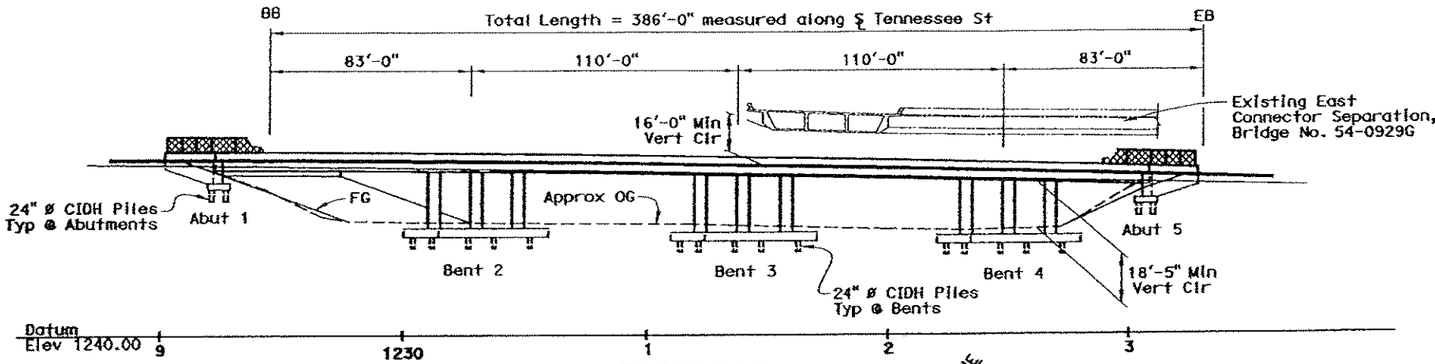
PROFILE
No Scale

DATE OF ESTIMATE		7-20-09
BRIDGE REMOVAL	=	27,250 SF
STRUCTURE DEPTH	=	4'-6"
LENGTH	=	386'-0"
WIDTH	=	78'-6"
AREA	=	30,301 SF
COST/SF INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	$254
TOTAL COST	=	$7,700,000

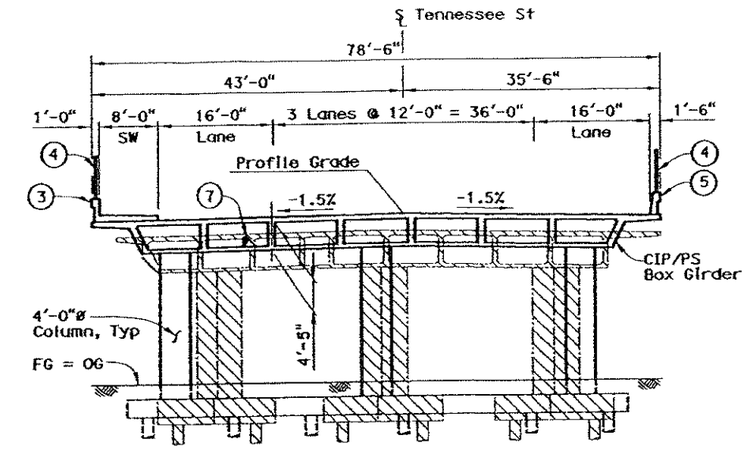
DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT
8	SBd	10	8.20/33.43

SAN BERNARDINO ASSOCIATED GOVERNMENTS — 1170 W Third St 2nd Floor San Bernardino CA 92410

PARSONS — 2201 DUPONT DRIVE SUITE 200 IRVINE, CA 92612

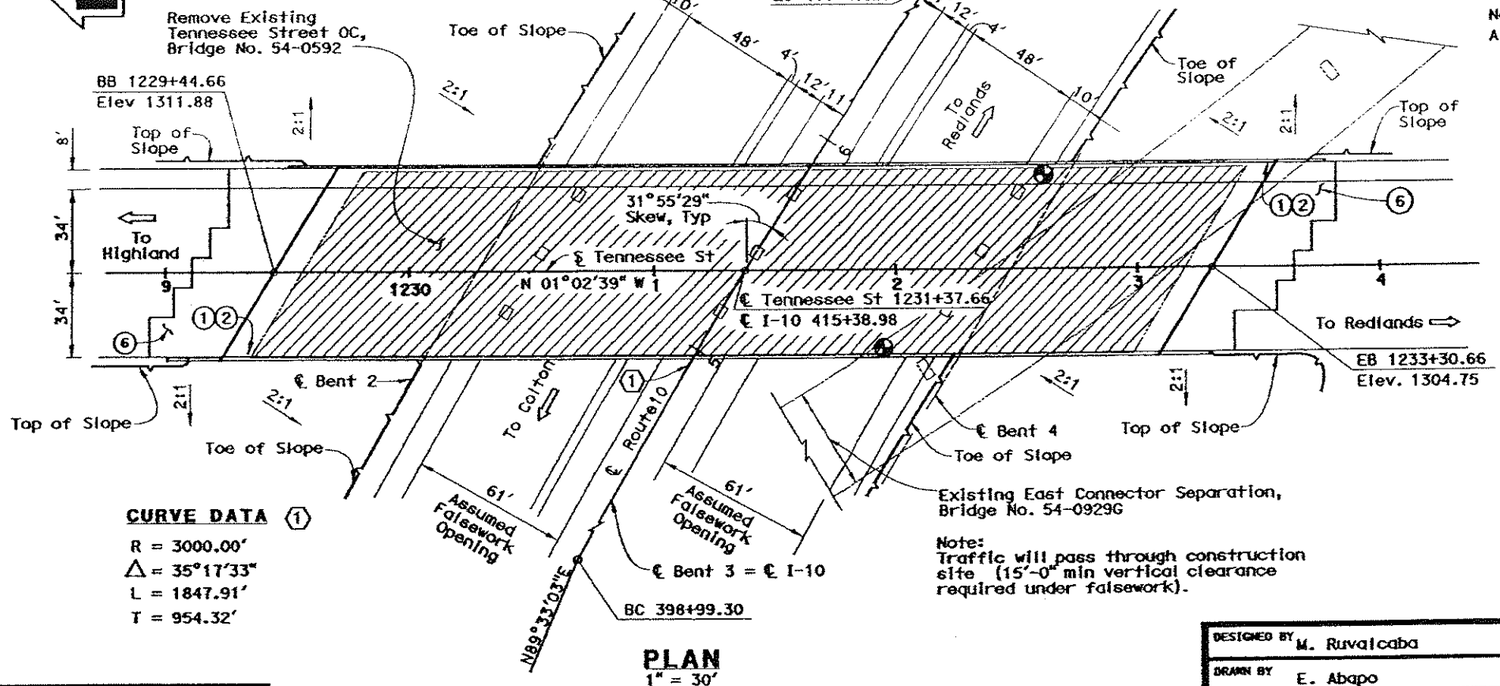


ELEVATION
1" = 30'



Note:
All Piles not Shown

TYPICAL SECTION
1" = 10'



CURVE DATA (1)
R = 3000.00'
△ = 35°17'33"
L = 1847.91'
T = 954.32'

Note:
Traffic will pass through construction site (15'-0" min vertical clearance required under falsework).

PLAN
1" = 30'

LEGEND:
- Denotes Existing Structure
- Limits of Concrete Removal
- Direction of Travel
- Indicates Point of Minimum Vertical Clearance

NOTES:
1. Paint "Br. No. 54-XXXX"
2. Paint "Tennessee Street OC"
3. Concrete Barrier Type 26
4. Chain Link Railing, Type 7
5. Concrete Barrier Type 736
6. Structure Approach Type N(30S)
7. Proposed Supply Line

DESIGNED BY	M. Ruvalcaba	DATE	7/16/09
DRAWN BY	E. Abapo	DATE	7/22/09
CHECKED BY	M. Mohseni	DATE	8/6/09
APPROVED	M. Mohseni	DATE	8/12/09

M. Mohseni
PROJECT ENGINEER

PLANNING STUDY

TENNESSEE STREET OC (REPLACE)

BRIDGE NO. 54-XXXX	CU 08224
SCALE: AS SHOWN	EA 0C2500

HOV ALTERNATIVE

DESIGN OVERSIGHT

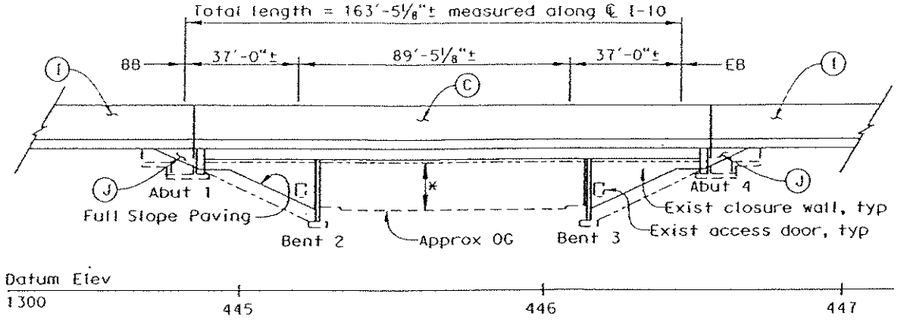
SIGN OFF DATE

ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 2/25/08)

FILE => *REQUEST

TIME PLOTTED => *TIME
DATE PLOTTED => *DATE
USERNAME => *USER

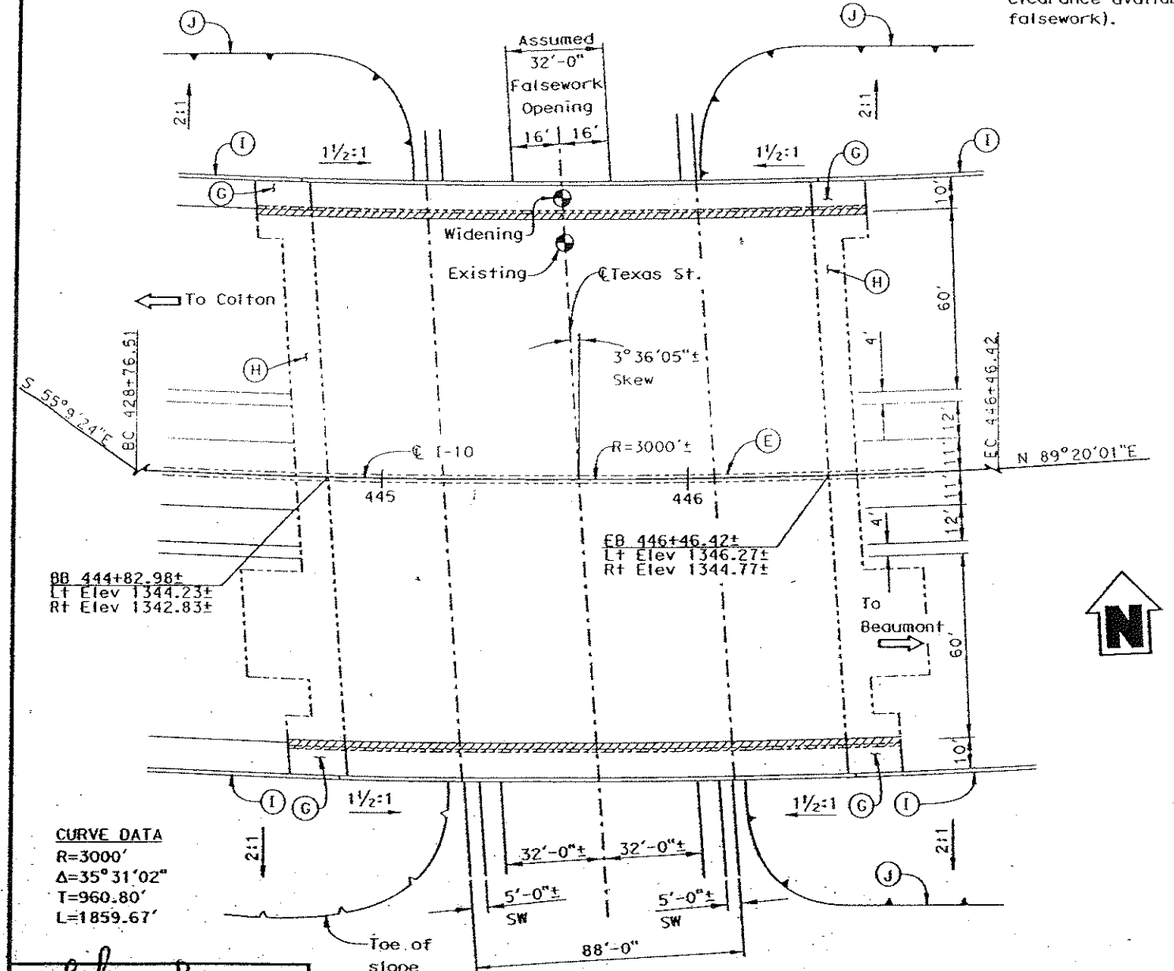
PREPARED FOR THE STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION



* Min vert clr = 16'-8" @ existing and 16'-9" @ widening

ELEVATION
1" = 50'

Note:
Traffic will pass through construction site (14'-6" min vertical sub-standard clearance available under falsework).



PLAN
1" = 50'

DATE OF ESTIMATE	8-27-2008
BRIDGE REMOVAL	=
STRUCTURE DEPTH	= 3'-6"
LENGTH	= 163'-5⅛"
WIDTH	= 12'-1" Lt & Rt
AREA	= 3950 SF
COST/ CFT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	= $230
PRELIM SEISMIC RETROFIT	= $461,000
TOTAL COST	= $1,370,000

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT
08	SBd	10	8.20/33.43

SANBAG
1170 W. 3rd St, 2nd Floor
San Bernardino, CA 92410

David Evans and Associates, Inc.
1544 Eureka Road Suite 200
Roseville, CA 95661

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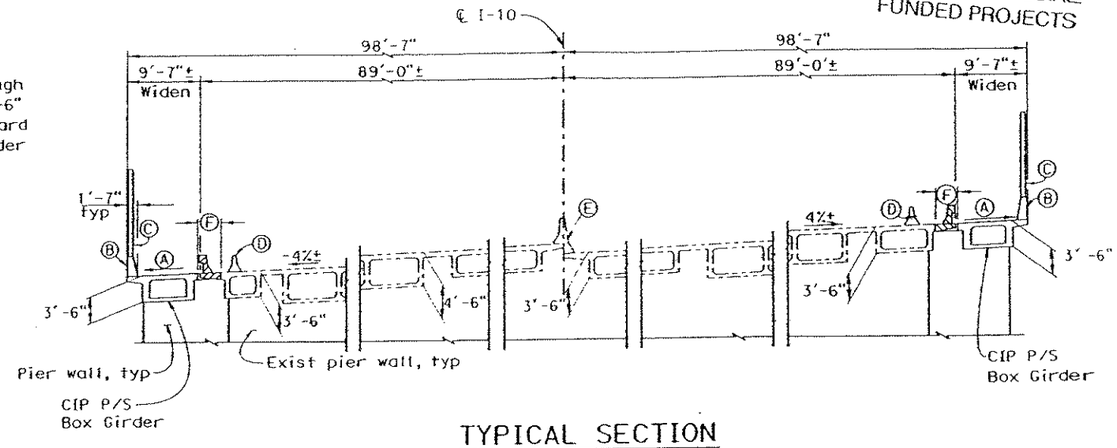


TYPICAL SECTION
1" = 20'

LEGEND:

- Indicates point of min. vertical clearance
- Limits of concrete removal
- ----- Denotes existing structure
- (A) Match existing profile grade and superelevation
- (B) Concrete Barrier Type 736 (Mod)
- (C) Soundwall - Masonry Block (H=14'-4")
- (D) Temporary Railing Type K
- (E) Existing concrete barrier
- (F) 3'-0" Closure pour
- (G) Structure approach, type N(30D)
- (H) Existing structure approach
- (I) Sound wall, see "Road Plans"
- (J) Retaining wall, see "Road Plans"

Lily Sun 12/3/08
DESIGN OVERSIGHT SIGN OFF DATE

DESIGNED BY	Kent Cordtz	DATE	9/12/08
DRAWN BY	Kyle Chiodo	DATE	9/12/08
CHECKED BY	Brian Hansen	DATE	9/12/08
APPROVED	Brian Hansen	DATE	9/12/08

B. Hansen
PROJECT ENGINEER

PLANNING STUDY
TEXAS STREET UC (WIDEN)

BRIDGE NO. 54-0583	CU
SCALE: AS SHOWN	EA 0C2500

HOV ALTERNATIVE

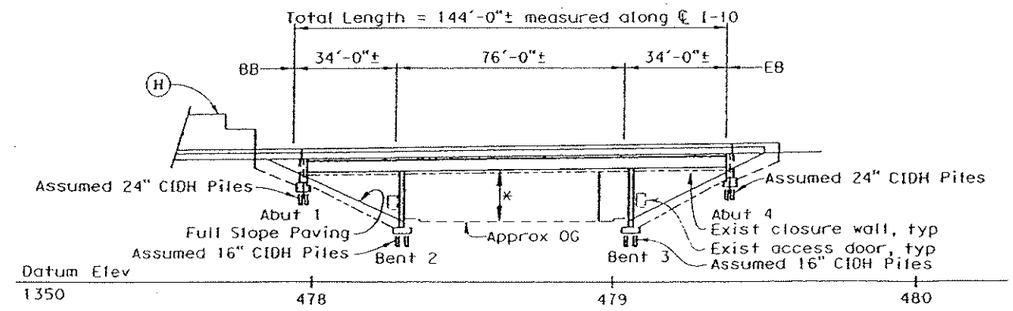
PREPARED FOR THE STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

DATE OF ESTIMATE		9-12-08
BRIDGE REMOVAL	=	
STRUCTURE DEPTH	=	3'-0"
LENGTH	=	144'-0"
WIDTH	=	11'-3" Lt & Rt
AREA	=	3240 SF
COST/ SQFT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	$335
TOTAL COST	=	$1,090,000

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT
08	SBd	10	8.20/33.43

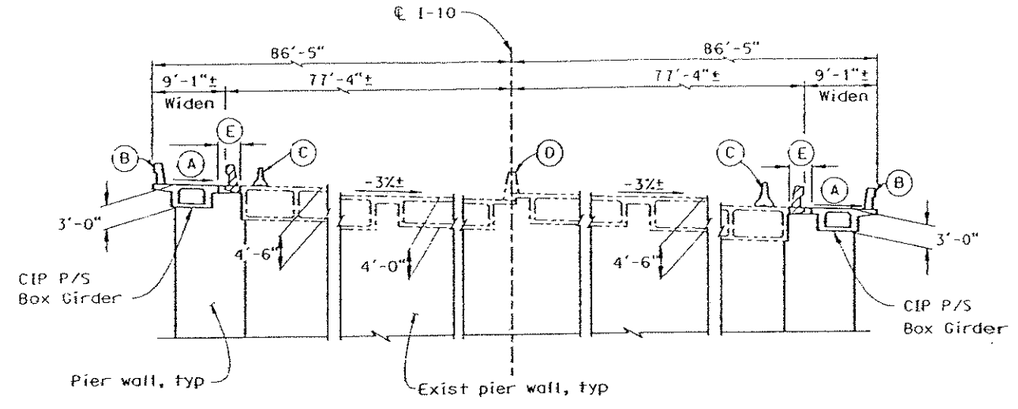
SANBAG
1170 W. 3rd St, 2nd Floor
San Bernardino, CA 92410

David Evans and Associates, Inc.
1544 Eureka Road Suite 200
Roseville, CA 95661

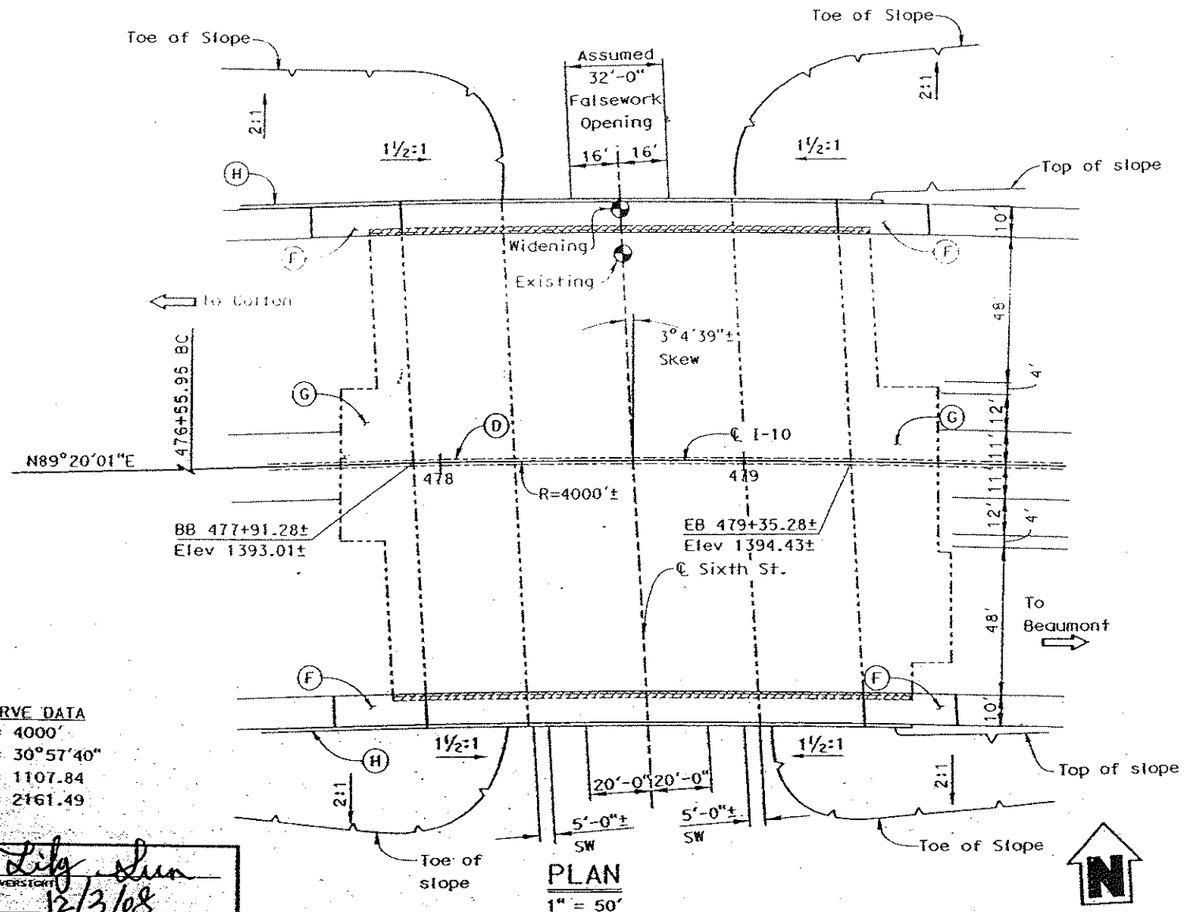


* Min vert clr = 15'-6" @ existing and 16'-9" @ widening

ELEVATION
1" = 50'



TYPICAL SECTION
1" = 20'



PLAN
1" = 50'

Note:
Traffic will pass through construction site (14'-6" min vertical sub-standard clearance available under falsework).

LEGEND:

- ◔ Indicates point of min. vertical clearance
- ▨ Limits of concrete removal
- ----- Denotes existing structure
- (A) Match existing profile grade and superelevation
- (B) Concrete Barrier Type 732 (Mod)
- (C) Temporary Railing Type K
- (D) Existing concrete barrier
- (E) 3'-0" Closure pour
- (F) Structure approach, type N(30D)
- (G) Existing structure approach
- (H) Sound wall, see "Road Plans"

CURVE DATA
R= 4000'
Δ= 30°57'40"
T= 1107.84
L= 2161.49

DESIGN OVERSIGHT Lily Lun
SIGN OFF DATE 12/3/08

DESIGNED BY	Brian Hansen	DATE	9/12/08
DRAWN BY	Kyle Chiodo	DATE	9/12/08
CHECKED BY	Kent Cordtz	DATE	9/12/08
APPROVED	Brian Hansen	DATE	9/12/08

B. Hansen
PROJECT ENGINEER

PLANNING STUDY
SIXTH STREET UC (WIDEN)

BRIDGE NO. 54-0579	CU
SCALE: AS SHOWN	EA 0C2500

FILE => $REQUEST

USERNAME => $USER DATE PLOTTED => $DATE TIME PLOTTED => $TIME

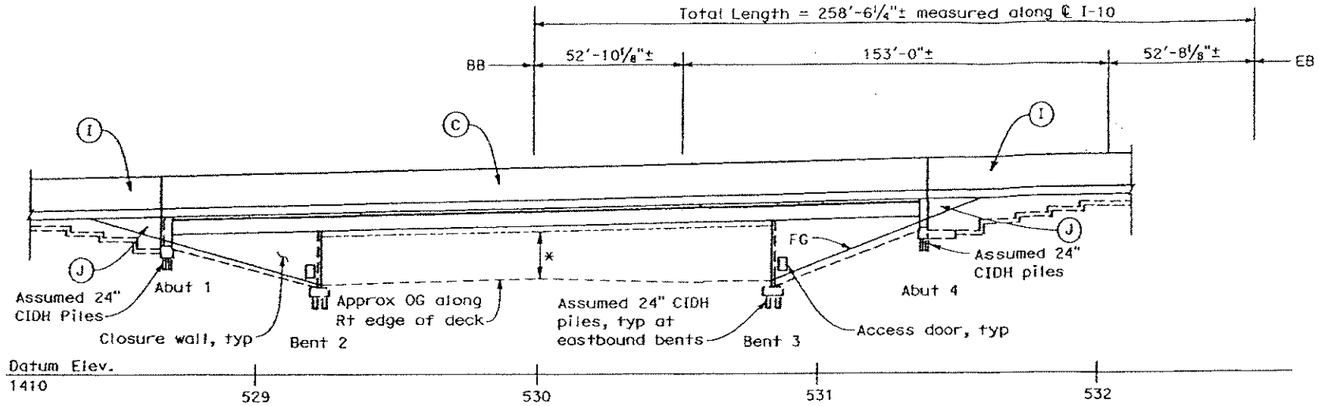
ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 2/25/05)

PREPARED FOR THE STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT
08	SBd	10	8.20/33.43

SANBAG
1170 W. 3rd St, 2nd Floor
San Bernardino, CA 92410

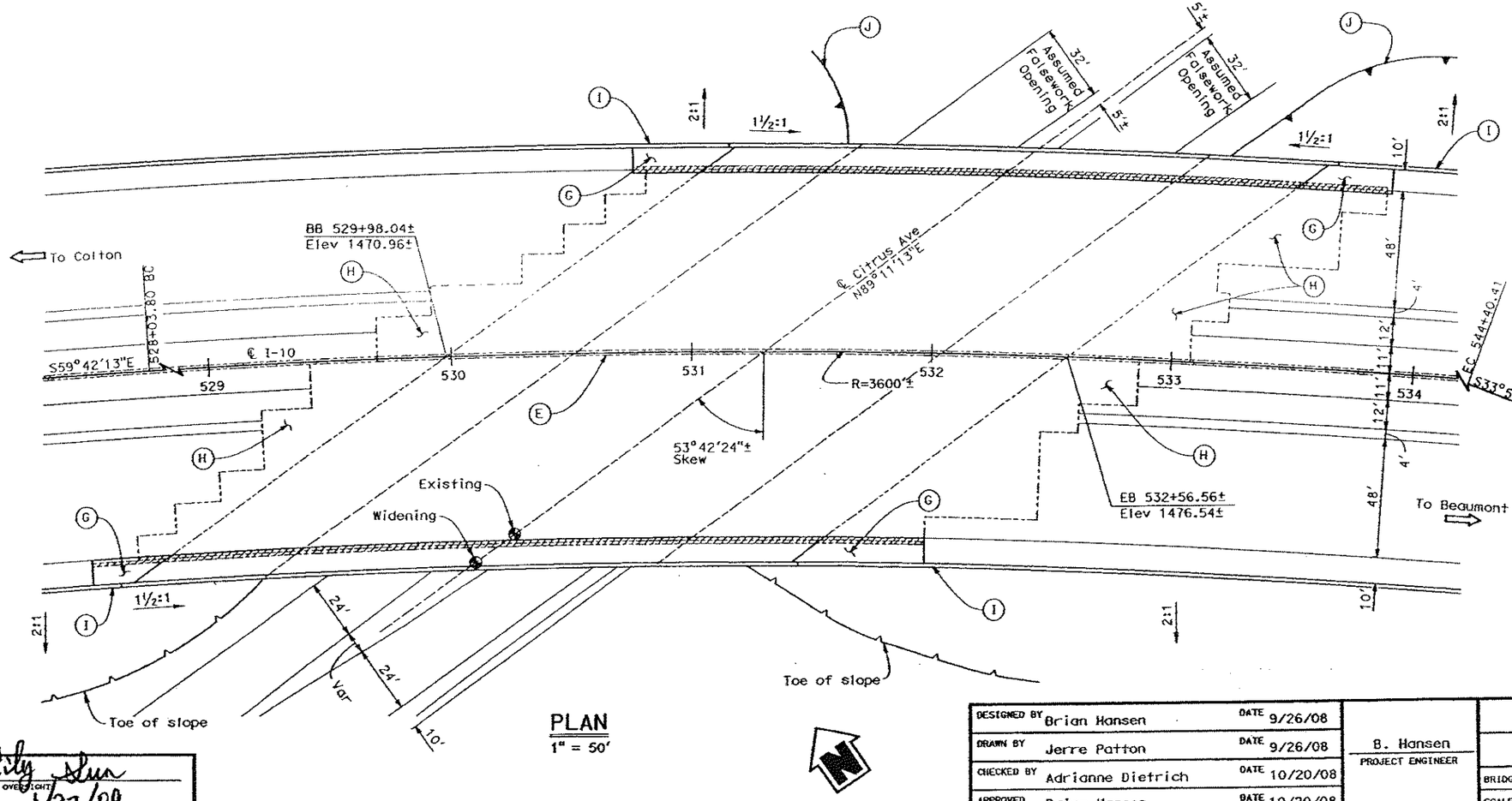
David Evans and Associates, Inc.
1544 Eureka Road Suite 200
Roseville, CA 95661



ELEVATION
1" = 50'

* Min vert clr = 16'-1" @ existing and 18'-4" @ widening

Note:
Traffic will pass through construction site (15'-0" min vertical clearance required under falsework).



PLAN
1" = 50'

Curve Data

R = 3600'
Δ = 25°48'09"
T = 824.59'
L = 1621.22'

NOTE:
See Sheet 2 for TYPICAL SECTION, ESTIMATED COST, LEGEND and other notes.

Sheet 1 of 2

DESIGNED BY	Brian Hansen	DATE	9/26/08
DRAWN BY	Jerre Patton	DATE	9/26/08
CHECKED BY	Adrianne Dietrich	DATE	10/20/08
APPROVED	Brian Hansen	DATE	10/20/08

B. Hansen
PROJECT ENGINEER

PLANNING STUDY

CITRUS AVE UC (WIDEN)

BRIDGE NO. 54-0584	CU 08224
SCALE: AS SHOWN	EA 0C2500

Lily Lun
DESIGN OVERSIGHT
SIGN OFF DATE 1/27/09

ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 2/25/05)

FILE => #REQUEST

USERNAME => #USER DATE PLOTTED => #DATE TIME PLOTTED => #TIME

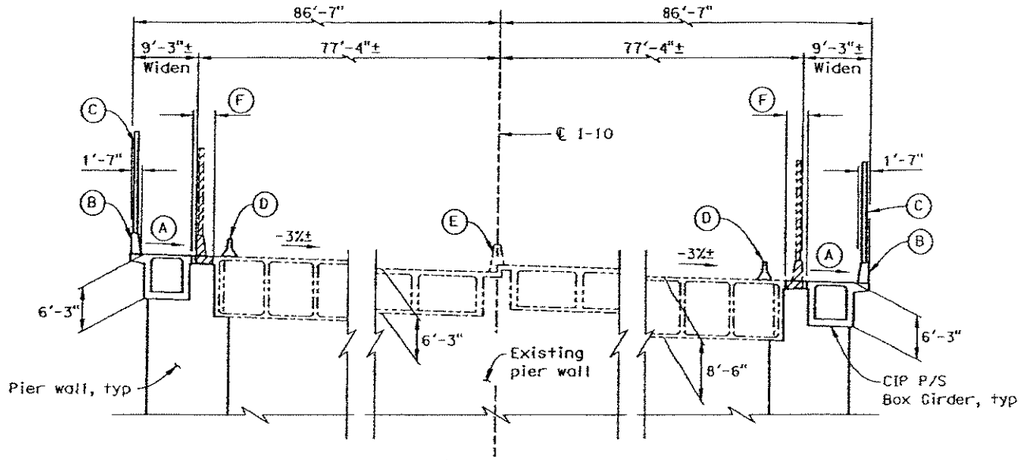
HOV ALTERNATIVE

PREPARED FOR THE STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT
08	SBd	10	8.20/33.43

SANBAG
1170 W. 3rd St, 2nd Floor
San Bernardino, CA 92410

David Evans and Associates, Inc.
1544 Eureka Road Suite 200
Roseville, CA 95661



TYPICAL SECTION

1" = 20'

DATE OF ESTIMATE		10-20-08
BRIDGE REMOVAL	=	———
STRUCTURE DEPTH	=	6'-3"
LENGTH	=	258'-6¼"
WIDTH	=	11'-5"
AREA	=	5903
COST/ ☐FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	$367
TOTAL COST	=	$2,170,000

LEGEND:

- Indicates point of Min vertical clearance
- Limits of concrete removal
- – – – Denotes existing structure
- (A) Match existing profile grade and superelevation
- (B) Concrete Barrier Type 736 (Mod)
- (C) Sound wall - Masonry Block (H=14'-4")
- (D) Temporary Railing Type K
- (E) Existing concrete barrier
- (F) 3'-0" Closure pour
- (G) Structure approach, type N(30D)
- (H) Existing structure approach
- (I) Sound wall, see "Road Plans"
- (J) Retaining wall, see "Road Plans"

NOTE:
See Sheet 1 for PLAN and ELEVATION

Sheet 2 of 2

DESIGN OVERSIGHT Lily Shun 1/27/09
SIGN OFF DATE

ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 2/25/05)

DESIGNED BY	Brian Hansen	DATE	9/26/08
DRAWN BY	Jerre Patton	DATE	9/26/08
CHECKED BY	Adrianne Dietrich	DATE	10/20/08
APPROVED	Brian Hansen	DATE	10/20/08

B. Hansen
PROJECT ENGINEER

FILE => #REQUEST

PLANNING STUDY

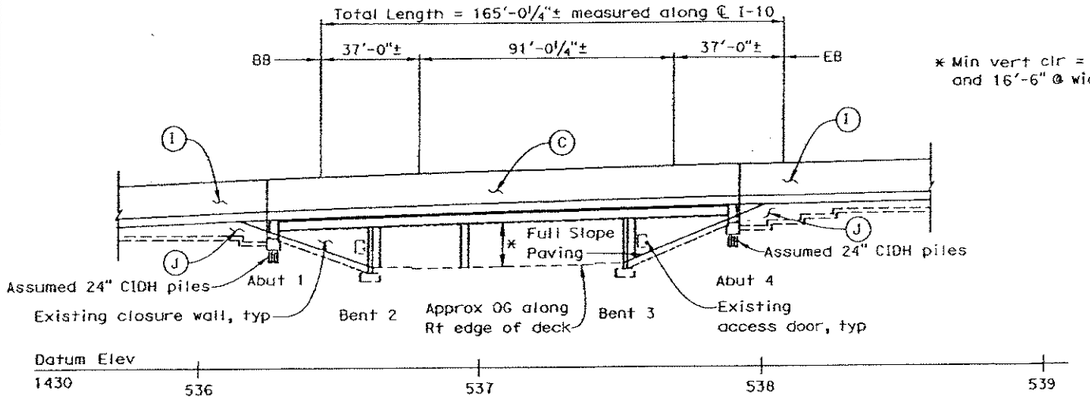
CITRUS AVE UC (WIDEN)

BRIDGE NO. 54-0584	CU 08224
SCALE: AS SHOWN	EA 0C2500

TIME PLOTTED => #TIME
DATE PLOTTED => #DATE
USERNAME => #USER

HOV ALTERNATIVE

PREPARED FOR THE STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION



* Min vert clr = 16'-0" @ existing and 16'-6" @ widening

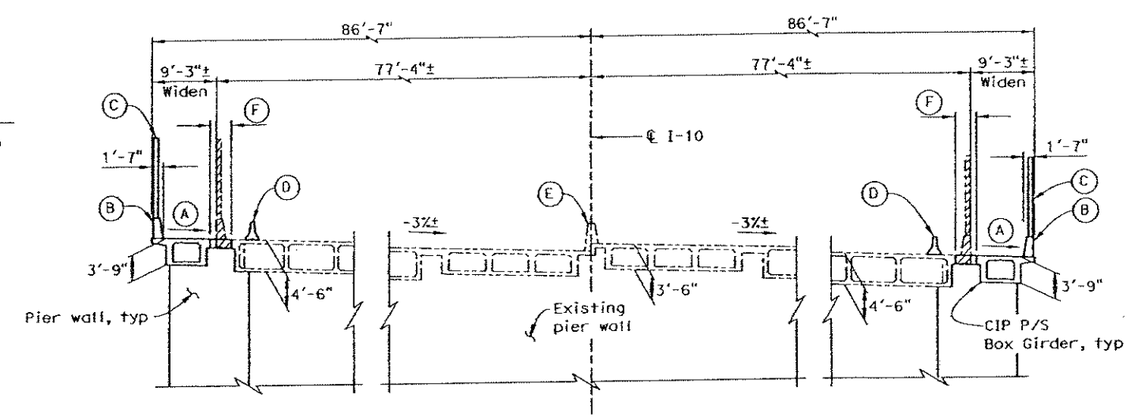
ELEVATION
1" = 50'

DATE OF ESTIMATE		10/20/08
BRIDGE REMOVAL	=	
STRUCTURE DEPTH	=	3'-9"
LENGTH	=	165'-0¼"
WIDTH	=	11'-5"
AREA	=	3768
COST/ ☐FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	$315
TOTAL COST	=	$1,190,000

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT
08	SBd	10	8.20/33.43

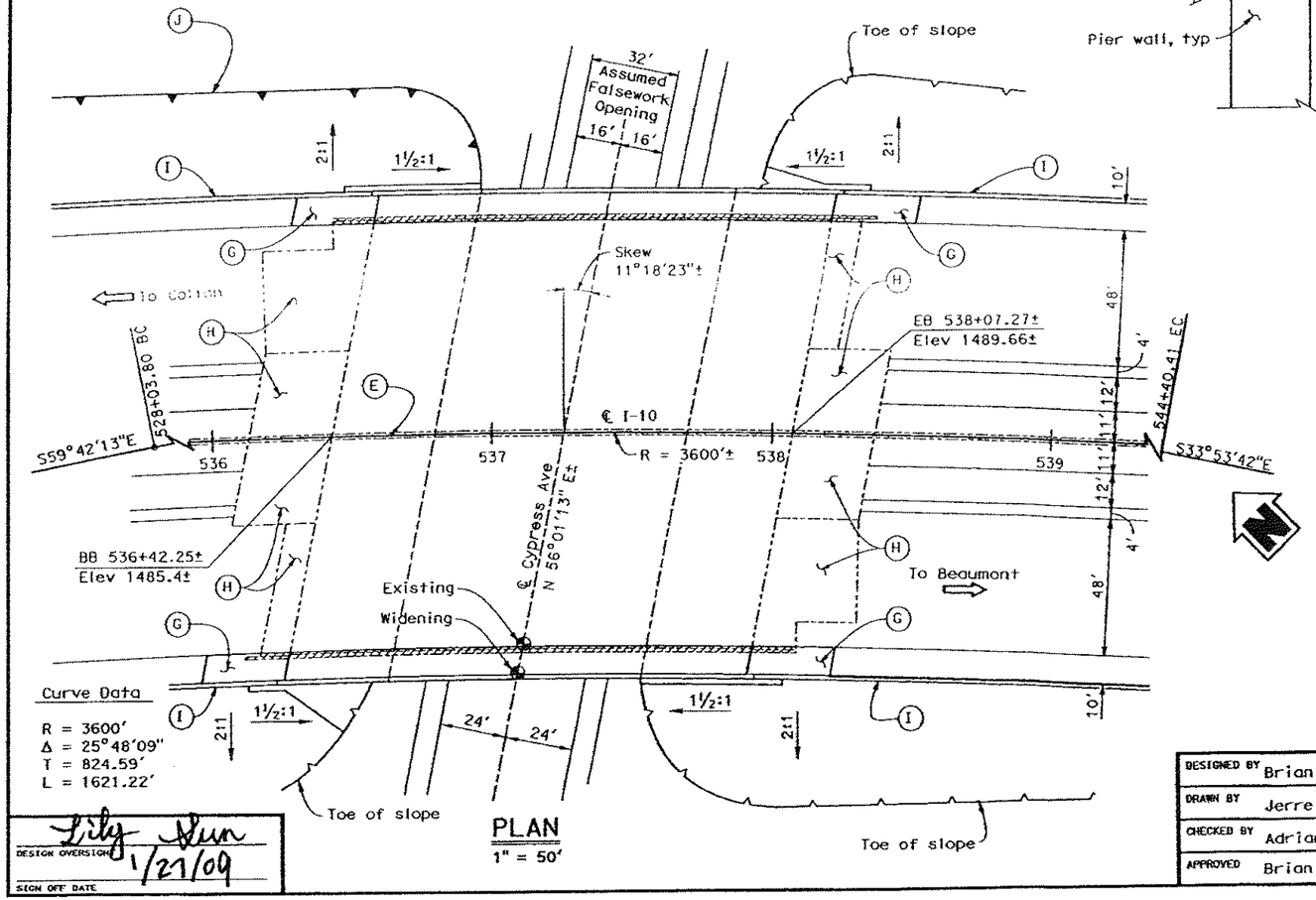
SANBAG
1170 W. 3rd St, 2nd Floor
San Bernardino, CA 92410

David Evans and Associates, Inc.
1544 Eureka Road Suite 200
Roseville, CA 95661



TYPICAL SECTION
1" = 20'

Note:
Traffic will pass through construction site (14'-6" min vertical sub-standard clearance available under falsework).



PLAN
1" = 50'

LEGEND:

- Indicates point of Min vertical clearance
- Limits of concrete removal
- ------ Denotes existing structure
- (A) Match existing profile grade and superelevation
- (B) Concrete Barrier Type 736 (Mod)
- (C) Sound wall - Masonry Block (H=14'-4")
- (D) Temporary Railing Type K
- (E) Existing concrete barrier
- (F) 3'-0" Closure pour
- (G) Structure approach, type N(30D)
- (H) Existing structure approach
- (I) Sound wall, see "Road Plans"
- (J) Retaining wall, see "Road Plans"

DESIGNED BY	Brian Hansen	DATE	10/15/08
DRAWN BY	Jerre Patton	DATE	10/15/08
CHECKED BY	Adrianne Dietrich	DATE	10/20/08
APPROVED	Brian Hansen	DATE	10/20/08

B. Hansen
PROJECT ENGINEER

PLANNING STUDY

CYPRESS AVE UC (WIDEN)

BRIDGE NO. 54-0585	CU 08224
SCALE: AS SHOWN	EA 0C2500

Lily Hsu
DESIGN OVERSIGHT 1/27/09
SIGN OFF DATE

ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 2/25/05)

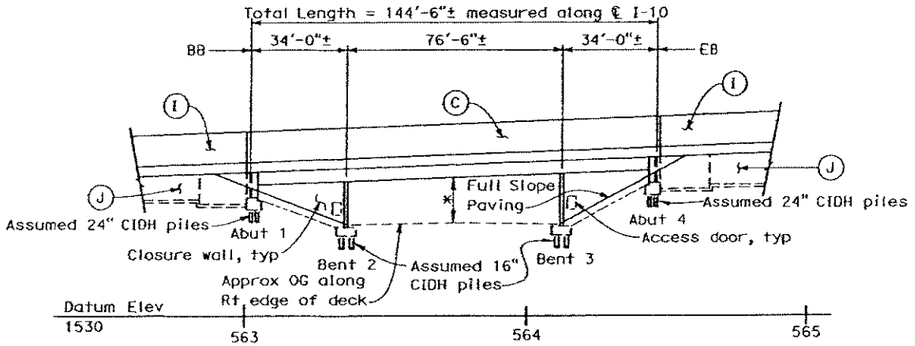
FILE =› #REQUEST

USERNAME =› #USER DATE PLOTTED =› #DATE TIME PLOTTED =› #TIME

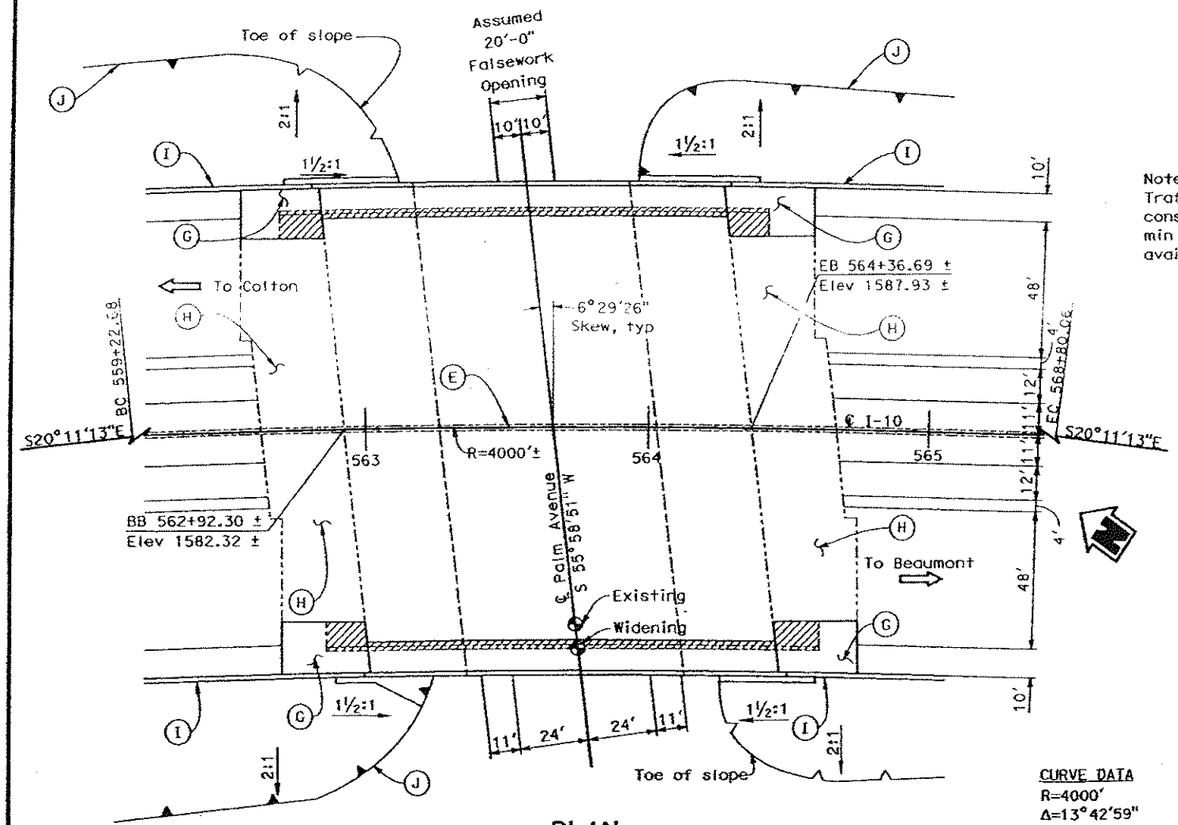
HOV ALTERNATIVE

PREPARED FOR THE STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

* Min vert clr = 15'-6" @ existing and 16'-9" @ widening



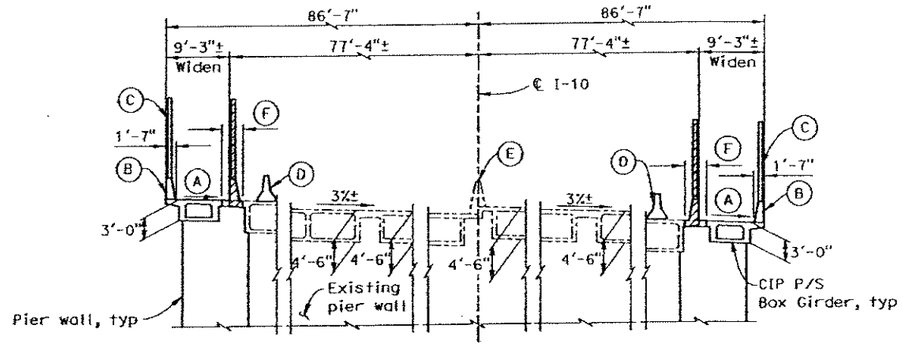
ELEVATION
1" = 50'



PLAN
1" = 50'

CURVE DATA
R=4000'
Δ=13°42'59"
T=481.09
L=957.58

DATE OF ESTIMATE	10-20-08
BRIDGE REMOVAL =	—
STRUCTURE DEPTH =	3'-0"
LENGTH =	144'-6"
WIDTH =	11'-5"
AREA =	3300 SF
COST/ ☐FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY =	$327
TOTAL COST =	$1,080,000



TYPICAL SECTION
1" = 20'

Note:
Traffic will pass through construction site (15'-0" min vertical clearance available under falsework).

LEGEND:
- Indicates point of Min vertical clearance
- Limits of concrete removal
- ----- Denotes existing structure
- (A) Match existing profile grade and superelevation
- (B) Concrete Barrier Type 736 (Mod)
- (C) Soundwall - Masonry Block (H=14'-4")
- (D) Temporary Railing Type K
- (E) Existing concrete barrier
- (F) 3'-0" Closure pour
- (G) Structure approach, type N(300)
- (H) Existing structure approach
- (I) Sound wall, see "Road Plans"
- (J) Retaining wall, see "Road Plans"

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT
08	SBd	10	8.20/33.43

SANBAG
1170 W. 3rd St, 2nd Floor
San Bernardino, CA 92410

David Evans and Associates, Inc.
1544 Eureka Road Suite 200
Roseville, CA 95661

Lily Sun
DESIGN OVERSIGHT
1/27/09
SIGN OFF DATE

DESIGNED BY	Bryan Carter	DATE	10/20/08
DRAWN BY	Kyle Chiodo	DATE	10/20/08
CHECKED BY	Brian Hansen	DATE	10/20/08
APPROVED	Brian Hansen	DATE	10/20/08

B. Hansen
PROJECT ENGINEER

PLANNING STUDY
HIGHLAND AVE UC (WIDEN)

BRIDGE NO. 54-0587	CU 08224
SCALE: AS SHOWN	EA 0C2500

HOV ALTERNATIVE

ADVANCE PLANNING STDDT SHEET (ENGLISH) (REV. 2/25/05)

FILE => &REQUEST

USERNAME => &USER DATE PLOTTED => &DATE TIME PLOTTED => &TIME

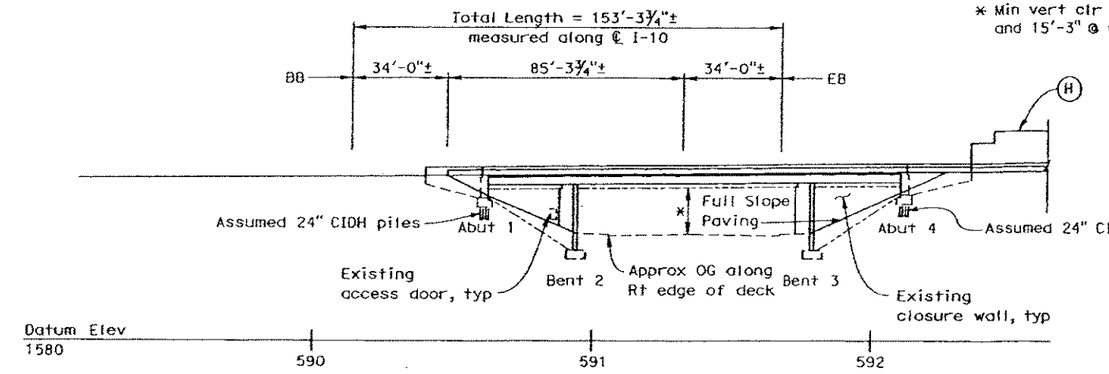
PREPARED FOR THE STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT
08	SBd	10	8.20/33.43

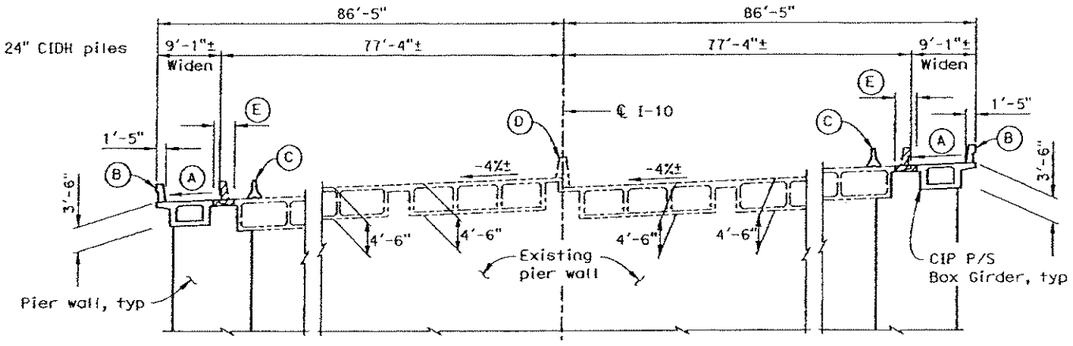
SANBAG
1170 W. 3rd St, 2nd Floor
San Bernardino, CA 92410

David Evans and Associates, Inc.
1544 Eureka Road Suite 200
Roseville, CA 95661

DATE OF ESTIMATE		10/20/08
BRIDGE REMOVAL	=	———
STRUCTURE DEPTH	=	3'-6"
LENGTH	=	153'-3¾"
WIDTH	=	11'-3"
AREA	=	3450
COST/ SQFT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	$304
TOTAL COST	=	$1,050,000

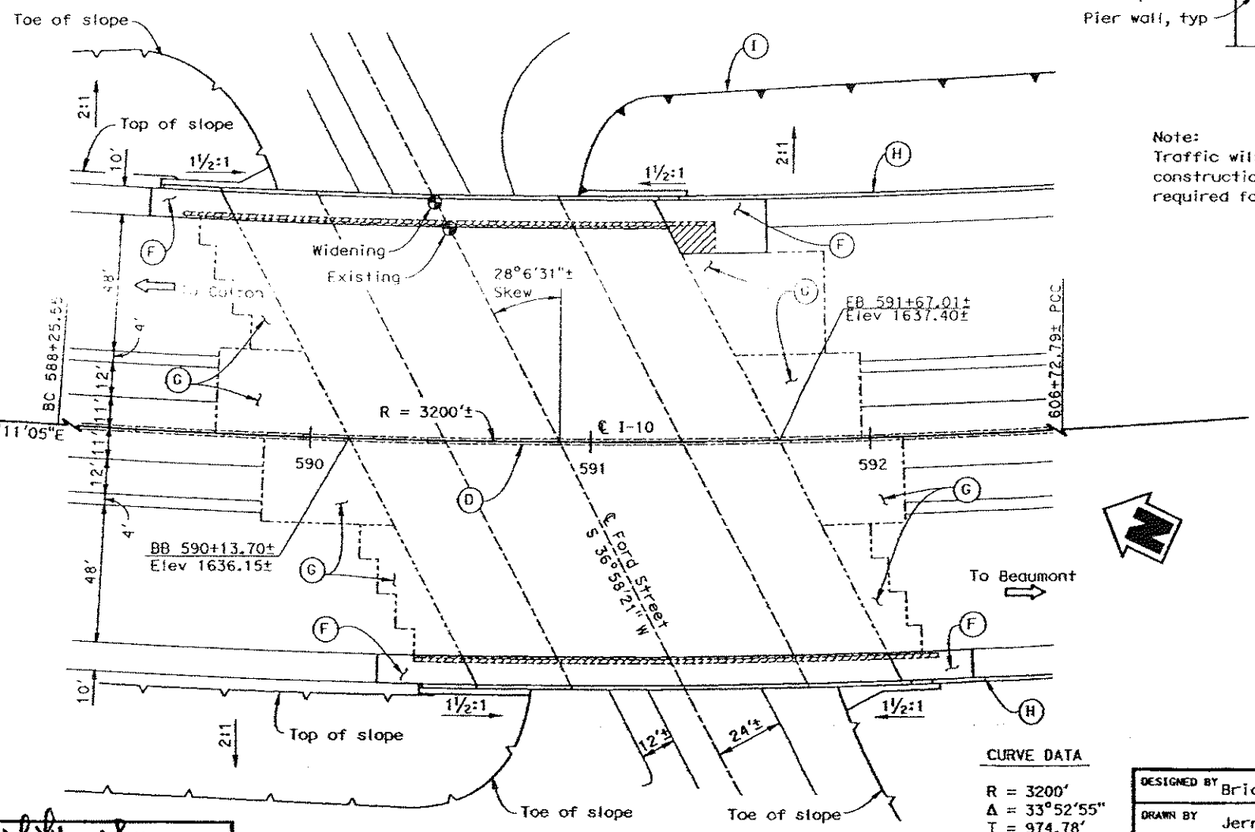


ELEVATION
1" = 50'



TYPICAL SECTION
1" = 20'

Note:
Traffic will not pass through construction site. Detour required for traffic on Ford Street.



PLAN
1" = 50'

CURVE DATA
R = 3200'
Δ = 33°52'55"
T = 974.78'
L = 1892.37'

LEGEND:
- Indicates point of Min vertical clearance
- Limits of concrete removal
- ------ Denotes existing structure
- (A) Match existing profile grade and superelevation
- (B) Concrete Barrier Type 732
- (C) Temporary Railing Type K
- (D) Existing concrete barrier
- (E) 3'-0" Closure pour
- (F) Structure approach, type N(30D)
- (G) Existing structure approach
- (H) Sound wall, see "Road Plans"
- (I) Retaining wall, see "Road Plans"

DESIGN OVERSIGHT Lily Shen 1/27/09
SIGN OFF DATE

ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 2/25/05)

DESIGNED BY	Brian Hansen	DATE	10/20/08
DRAWN BY	Jerre Patton	DATE	10/20/08
CHECKED BY	Adrianne Dietrich	DATE	10/20/08
APPROVED	Brian Hansen	DATE	10/20/08

B. Hansen
PROJECT ENGINEER

PLANNING STUDY
FORD STREET UC (WIDEN)

BRIDGE NO. 54-0588	CU 08224
SCALE: AS SHOWN	EA 0C2500

FILE => &REQUEST

DATE PLOTTED => &DATE
TIME PLOTTED => &TIME
USERNAME => &USER

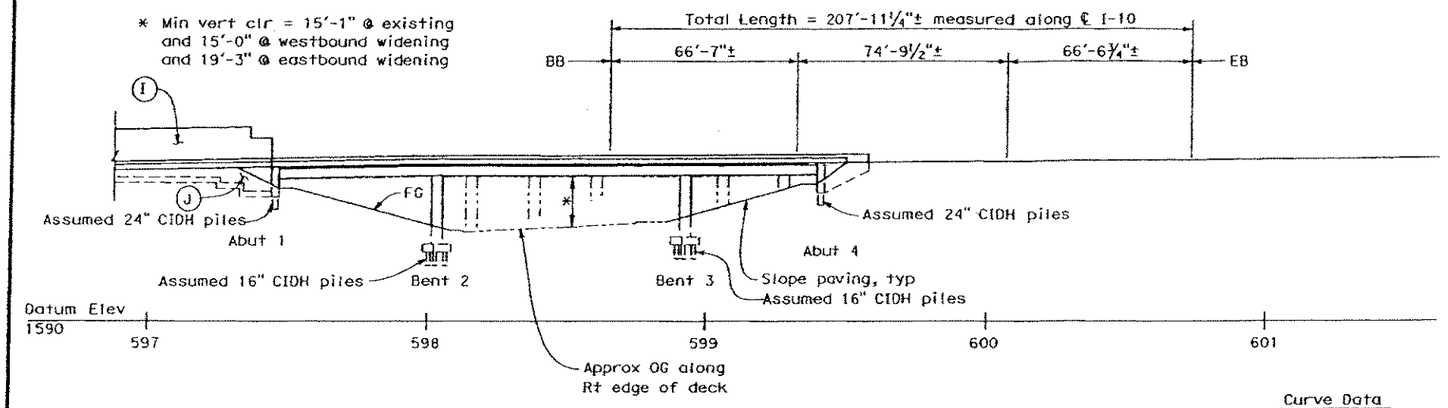
HOV ALTERNATIVE

PREPARED FOR THE STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT
08	SBd	10	8.20/33.43

SANBAG
1170 W. 3rd St, 2nd Floor
San Bernardino, CA 92410

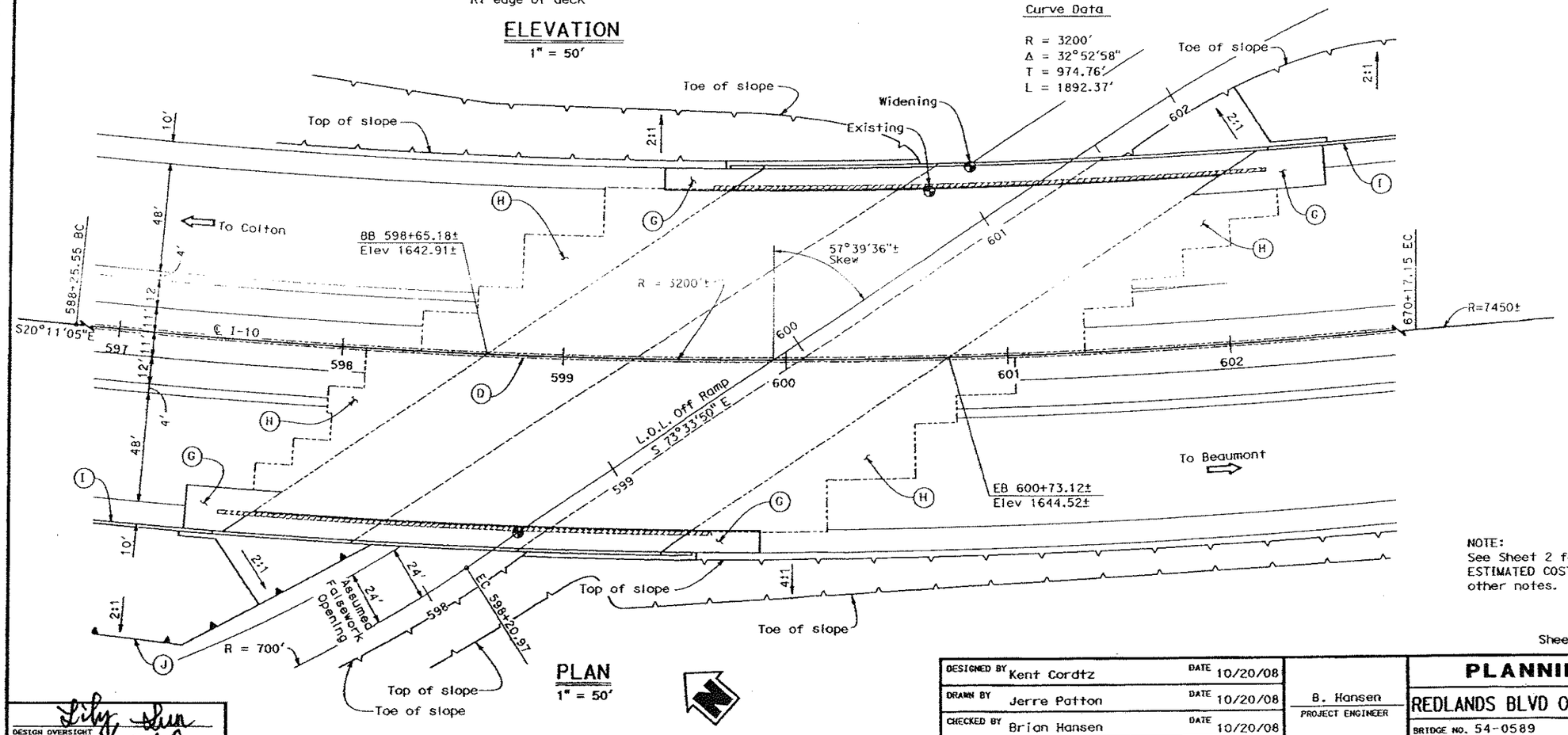
David Evans and Associates, Inc.
1544 Eureka Road Suite 200
Roseville, CA 95661



ELEVATION
1" = 50'

Note:
Traffic will pass through construction site (15'-0" min vertical clearance required under falsework).

Curve Data
R = 3200'
Δ = 32°52'58"
T = 974.76'
L = 1892.37'



PLAN
1" = 50'

NOTE:
See Sheet 2 for TYPICAL SECTION, ESTIMATED COST, LEGEND and other notes.

DESIGN OVERSIGHT Lily Lun
SIGN OFF DATE 1/27/09

ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 2/25/05)

DESIGNED BY	Kent Cordtz	DATE	10/20/08
DRAWN BY	Jerre Patton	DATE	10/20/08
CHECKED BY	Brian Hansen	DATE	10/20/08
APPROVED	Brian Hansen	DATE	10/20/08

B. Hansen
PROJECT ENGINEER

FILE => $REQUEST

PLANNING STUDY

REDLANDS BLVD OFF-RAMP UC (WIDEN)

BRIDGE NO. 54-0589	CU 08224
SCALE: As Shown	EA 0C2500

DATE PLOTTED => $DATE
TIME PLOTTED => $TIME
USERNAME => $USER

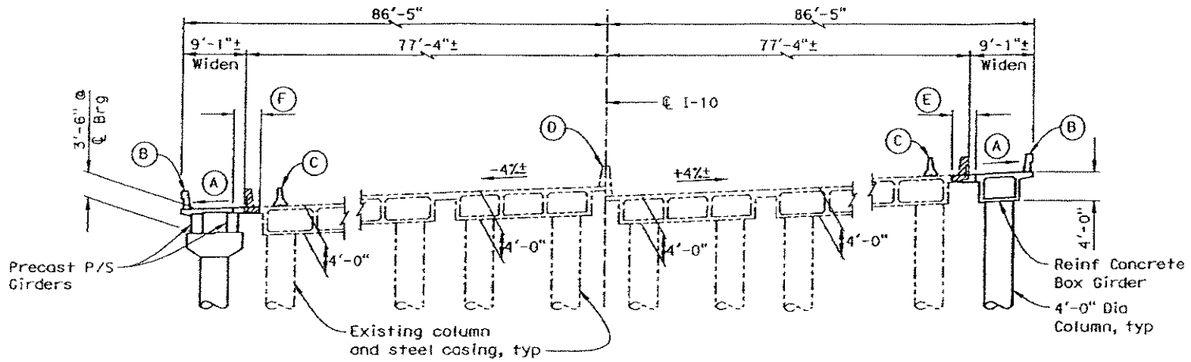
HOV ALTERNATIVE

PREPARED FOR THE STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT
08	SBd	10	8.20/33.43

SANBAG
1170 W. 3rd St, 2nd Floor
San Bernardino, CA 92410

David Evans and Associates, Inc.
1544 Eureka Road Suite 200
Roseville, CA 95661



TYPICAL SECTION

1" = 20'

DATE OF ESTIMATE		10/20/08
BRIDGE REMOVAL	=	
STRUCTURE DEPTH	=	3'-6" Lt, 4'-0" Rt
LENGTH	=	207'-11¼"
WIDTH	=	11'-3"
AREA	=	4701
COST/ SQFT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	$311
TOTAL COST	=	$1,460,000

LEGEND:

- Indicates point of Min vertical clearance
- Limits of concrete removal
- — Denotes existing structure
- (A) Match existing profile grade and superelevation
- (B) Concrete Barrier Type 732
- (C) Temporary Railing Type K
- (D) Existing concrete barrier
- (E) 3'-0" Closure pour
- (F) 3'-9" Closure pour
- (G) Structure approach, type N(30D)
- (H) Existing structure approach
- (I) Soundwall, see "Road Plans"
- (J) Retaining wall, see "Road Plans"

NOTE:
See Sheet 1 for PLAN and ELEVATION.

Lily Lun
DESIGN OVERSIGHT 1/27/09
SIGN OFF DATE

DESIGNED BY	Kent Cordtz	DATE	10/20/08
DRAWN BY	Jerre Patton	DATE	10/20/08
CHECKED BY	Brian Hansen	DATE	10/20/08
APPROVED	Brian Hansen	DATE	10/20/08

B. Hansen
PROJECT ENGINEER

PLANNING STUDY

REDLANDS BLVD OFF-RAMP UC (WIDEN)

BRIDGE NO. 54-0589	CU 08224
SCALE: As Shown	EA 0C2500

TIME PLOTTED => #TIME
DATE PLOTTED => #DATE
USERNAME => #USER

ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 2/25/05)

FILE => #REQUEST

HOV ALTERNATIVE