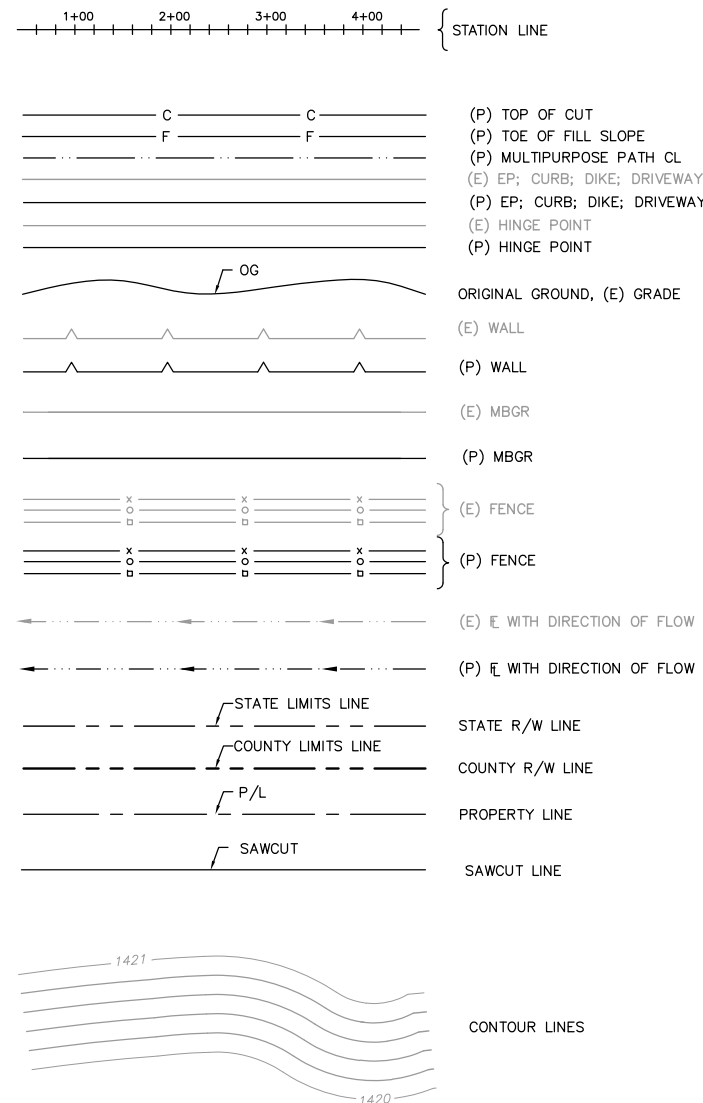


STANDARD ABBREVIATIONS

AB	aggregate base	G	gas	S	slope
ABN	abandon	GA	gage	SAE	structural approach embankment
ABUT	abutment	GAL	gallon	SALV	salvage
AC	asphalt concrete	GALV	galvanized	SC	spiral to curve
ACB	asphalt concrete base	GB	grade break	SCSP	slotted corrugated steel pipe;
ACP	asbestos cement pipe	GP	grading plane		sacked concrete slope protection
AFES	alternate flared end section	GR	grate; guard railing		storm drain; subgrade drain
AHD	ahead	GSP	galvanized steel pipe	SD	structural section drain;
ADJ	adjust	GV	gate valve, gas valve		section
ALT	alternate	H	height	SEC	separation
AP	alternative pipe	HC	handicap parking space	SEP	subgrade
APC	alternative pipe culvert	HORIZ	horizontal	SG	shoulder
APE	area of potential effects	HMA	hot mix asphalt	SHT	sheet
APP'D	approved	HP	horsepower	SL or S	station line
APU	alternative pipe underdrain	HW	headwall	SPEC(S)	special; specific; specification(s)
ARV	air release valve	HWY	highway	SP's	Special Provisions
AS	aggregate subbase	ID	inside diameter	SPP	slotted plastic pipe
ASRP	aluminum spiral rib pipe	IMP IMP'TS	imported improvements	SQFT	square foot
ASSY	assembly	INFO	information	SQYD	square yard
ATPB	asphalt treated permeable base	INTX	intersection	SS	slope stake
ATPM	asphalt treated permeable material	INV	invert	SSPA	structural steel plate arch
AVE	avenue	IB	irrigation box	SSPP	structural steel plate pipe
		IRR	irrigation	SSPPA	structural steel plate pipe arch
BC	begin horizontal curve	JP	joint pole	SSRP	steel spiral rib pipe
BCR	begin curb return	JS	junction structure	ST	street
BEG	begin	JT	joint	ST	short tangent
BIT CTD	bituminous coated	L	length, line	ST	spiral to tangent
BK	back	LB	pound	STA	station
BKF	backfill	LF	linear foot	STBB	single thrie beam barrier
BLDG	building	LOC	location	STD	standard
BLVD	boulevard	LN	lane	STR	structure
BM	bench mark	LSP	lump sum	SURF	surfacing
BOV	blowoff valve	LT	long tangent	SVC	service
BR	bridge	M	meters	SW	sidewalk; sound wall
BVC	begin vertical curve	MAX	maximum	SWR	sewer
BW	back of walk	MB	metal beam; mail box	T	tangent, telephone
		MBB	metal beam barrier	TAB	tablet
C,G,&SW	curb, gutter, and sidewalk	MBGR	metal beam guard railing	TBB	thrie beam barrier
CAA	cable anchor assembly	MED	median	TBC	top back of curb
CAP	corrugated aluminum pipe	MH	manhole	TBM	temporary bench mark
CAPA	corrugated aluminum pipe arch	MI	mile(s)	TBR	timber
C-C	center to center	MIDPT	midpoint	TBW	top back of walk
CF	cubic foot	MIN	minimum; minutes	TC	top of curb
CHNL	channel	MISC	miscellaneous	TEMP	temporary
CI	cast iron	MM	millimeters	TG	top of grate
CIP	cast iron pipe	MOD	modified; modify	TP	telephone pole
CIPCP	cast-in-place concrete pipe	MON	monument	TPB	treated permeable base
CL or	centerline; chain link; class	MP	metal plate	TPM	treated permeable material
		MPGR	metal plate guard rail	TRANS	transition
CLR	clearance	MTL	material	TS	tangent to spiral
CM	centimeters	N	nothing	TS	traffic signal
CO	county	NB	northbound	TYP	typical
COL	column	NID	Nevada Irrigation District	TYP SEC	typical section
COM'L	commercial	NO	number	T UG	telephone underground
CONC	concrete	NTS	not to scale	TV	television, television service
COND	conduit	OD	outside diameter	UXING	undercrossing
CONN	connector	OG	original ground	UD	underdrain
CONST	construct; construction	OGAC	open graded asphalt concrete	UP	underpass
COORD	coordinate	OH	overhead	UT or UTIL	utility
CP	catch point	OXING	overcrossing	V	design speed; valve
CR	creek, circle	PAP	perforated aluminum pipe	VAR	variable; varies
CRSP	concreted rock slope protection	PB	pull box	VC	vertical curve
CSP	corrugated steel pipe	PC	point of curvature	VCP	vitrified clay pipe
CSPA	corrugated steel pipe arch	PCC	point of compound curve	VERT	vertical
CTB	cement treated base	PCC	portland cement concrete	W	width; water; water service
CTR	center	PCP	perforated concrete pipe	WH	weep hole
CTPB	cement treated permeable material	PCVC	point of compound vertical curve	WM	wire mesh, water meter
CULV	culvert	PED	pedestrian	WSP	welded steel pipe
CY	cubic yard	PERM MTL	permeable material	WV	water valve
		PG	profile grade	WW	wing wall
		PI	point of intersection, angle point	WWM	welded wire mesh
		P/L or P/L	property line		
		PL	plate		
		PM	post mile		
		PN	paving notch		
		POB	point of beginning		
		POC	point on horizontal curve		
		POE	point of ending		
		POT	point on tangent		
		POVC	point on vertical curve		
		PP	power pole		
		PPP	perforated plastic pipe		
		PPL	preformed permeable liner		
		PRC	point of reverse curve		
		PRF	pavement reinforcing fabric		
		(P) or PROP	proposed		
		PRVC	point of reverse vertical curve		
		PSI	pounds per square inch		
		PSP	perforated steel pipe		
		PT	point		
		PUE	public utility easement		
		PVC	polyvinyl chloride		
		PVMT	pavement		
		R	radius		
		RCA	reinforced concrete arch		
		RCB	reinforced concrete box		
		RCP	reinforced concrete pipe		
		RCPA	reinforced concrete pipe arch		
		R & D	remove and dispose		
		RD	road		
		RECONST	reconstruct		
		REINF	reinforced; reinforcing		
		REL	relocate		
		REM	remove		
		RET	retaining		
		RP	reference point		
		RR	railroad		
		R & R	remove & replace		
		R & S	remove and salvage		
		RSP	rock slope protection		
		Rt	right		
		RTE	route		
		RW	retaining wall		

CONSTRUCTION AND TOPOGRAPHIC LINES

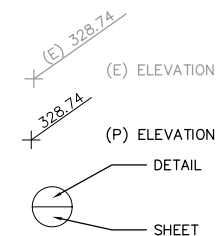
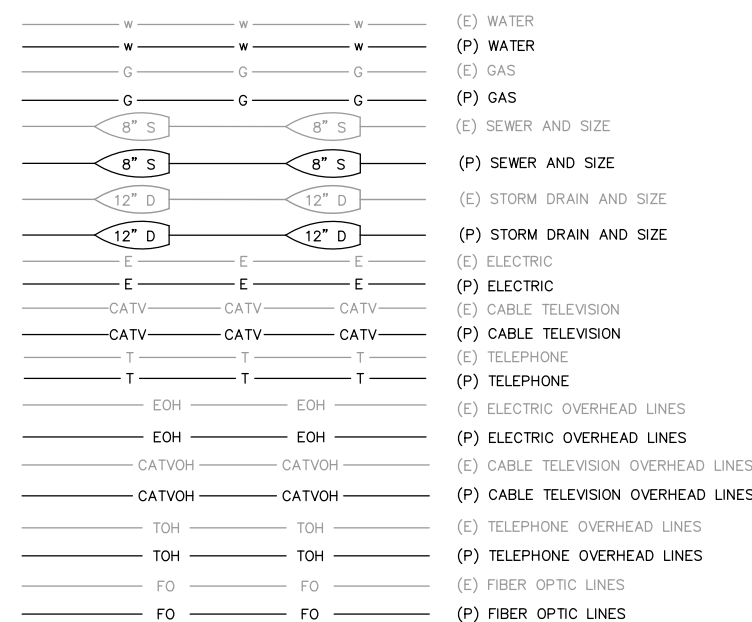


CONSTRUCTION AND TOPOGRAPHIC SYMBOLS

NOTE: SYMBOLS FOR EXISTING ITEMS ARE SHOWN LIGHTER ON THE PLANS.
SYMBOLS FOR PROPOSED ITEMS ARE SHOWN DARKER (AS BELOW) ON THE PLANS.

- DRAINAGE INLET
- ⊗ FIRE HYDRANT
- VAULT; METER, BOX (IRR, WTR, GAS, ELEC, CATV)
- ⊗ IRRIGATION CONTROL; ELECTRIC SERVICE
- MANHOLE (SS, SD, TEL, ELEC)
- SEWER CLEANOUT
- SPRINKLER
- BLOWOFF VALVE
- ⊗ VALVE (GAS, TEL, ARV, WTR)
- ELECTROLIER
- GUY POLE
- GUY WIRE
- ☆ LIGHT POST
- FIBER OPTIC POST
- POLE
- STOP SIGN
- SINGLE POLE SIGN
- DOUBLE POLE SIGN
- STREET NAME SIGN
- BOLLARD
- ⊗ MAILBOX
- TREE
- ⊗ TREE TO BE REMOVED
- SHRUB
- BENCHMARK
- ▲ HORIZONTAL & VERTICAL CONTROL
- △ HORIZONTAL CONTROL
- ⊙ VERTICAL CONTROL; PROPERTY CORNER
- EC'S; BC'S & RADIUS POINTS
- × COORDINATE TICK MARKS

EXISTING AND PROPOSED UNDERGROUND UTILITIES



REVISIONS

NO.	DESCRIPTION	BY	DATE



NEVADA COUNTY
DEPARTMENT OF PUBLIC WORKS
DESIGN/CONSTRUCTION DIVISION

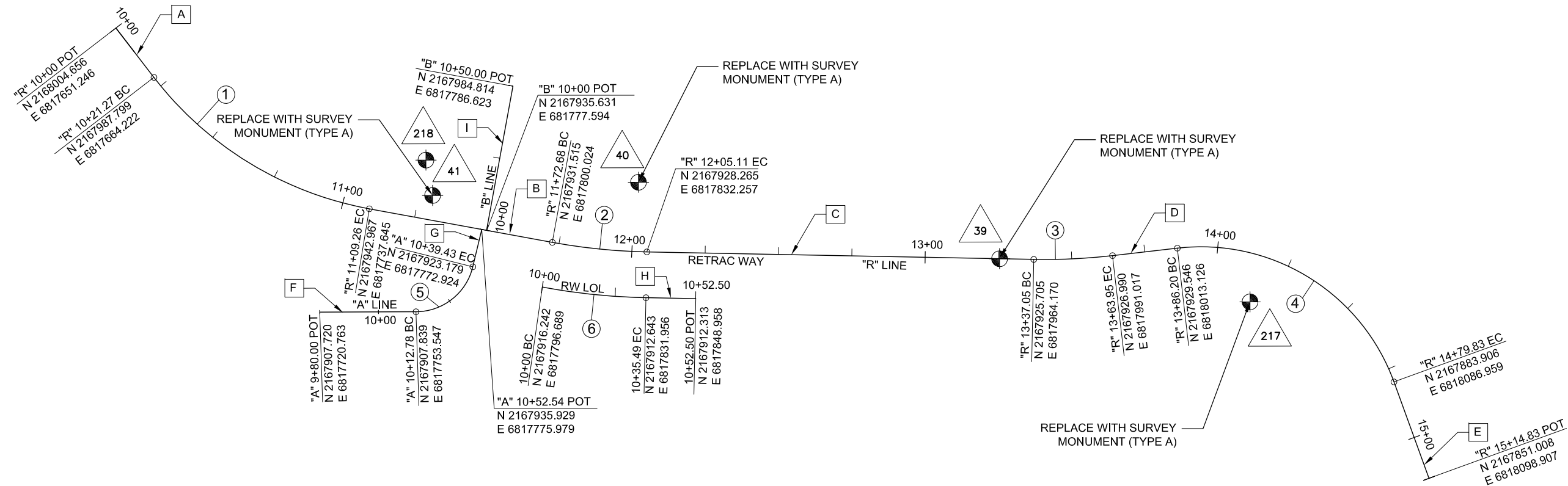


RETRAC WAY BRIDGE
REPLACEMENT PROJECT
GENERAL NOTES

DESIGNED: L.PROCTOR
DRAWN: C.AGUILAR
CHECKED: C.BENSON
JOB NO: 477638
DATE: SEP 30, 2016

NOTES:

- HORIZONTAL AND VERTICAL CONTROL FOR THIS PROJECT IS BASED ON CALIFORNIA STATE PLANE SYSTEM ZONE II NAD 83 & NAVD 88.
- SURVEY CONTROL POINTS PROVIDED BY NEVADA COUNTY.
- CONTRACTOR SHALL PROTECT IN PLACE MONUMENTS OR RESET IF DISTURBED.



PLAN
1"=20'

A	S 37°35'12" E 21.27'	F	N 89°47'34" E 32.78'
B	S 79°35'49" E 63.42'	G	N 13°28'20" E 13.11'
C	S 88°53'17" E 131.94'	H	S 88°53'17" E 17.01'
D	N 83°24'22" E 22.26'	I	N 10°24'10" E 50.00'
E	S 19°57'40" E 35.00'		

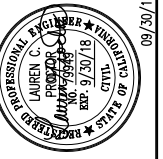
CURVE DATA

NO.	R	Δ	L	T	RADIUS POINT	
					NORTHING	EASTING
①	120'	42°00'37"	87.99'	46.08'	2168060.994	6817759.314
②	200'	09°17'28"	32.43'	16.25'	2168128.227	6817836.138
③	200'	07°42'21"	26.90'	13.47'	2168125.667	6817968.050
④	70'	76°37'58"	93.62'	55.32'	2167860.009	6818021.164
⑤	20'	76°19'13"	26.64'	15.72'	2167927.839	6817753.475
⑥	215.67'	09°25'43"	35.49'	17.79'	2168128.269	6817836.141

SURVEY CONTROL

NO.	N	E	ELEV	DESCRIPTION	"R" STA	OFFSET
39	2167926.404	6817952.509	1560.60'	5/8" REBAR	13+25.39	0.47' Rt
40	2167952.023	6817829.395	1561.22'	5/8" REBAR	12+01.34	23.67' Lt
41	2167947.531	6817759.226	1564.54'	TARGET	11+29.66	8.39' Lt
217	2167911.224	6818037.915	1567.60'	5/8" REBAR	14+16.40	16.11' Rt
218	2167959.599	6817756.959	1568.80'	5/8" REBAR	11+25.25	19.85' Lt

REVISIONS		
NO.	DESCRIPTION	DATE



NEVADA COUNTY
DEPARTMENT OF PUBLIC WORKS
DESIGN/CONSTRUCTION DIVISION



**RETRAC WAY BRIDGE
REPLACEMENT PROJECT
SURVEY CONTROL
DIAGRAM**

DESIGNED: L.PROCTOR
DRAWN: C.AGUILAR
CHECKED: C.BENSON
JOB NO: 477638
DATE: SEP 30, 2016

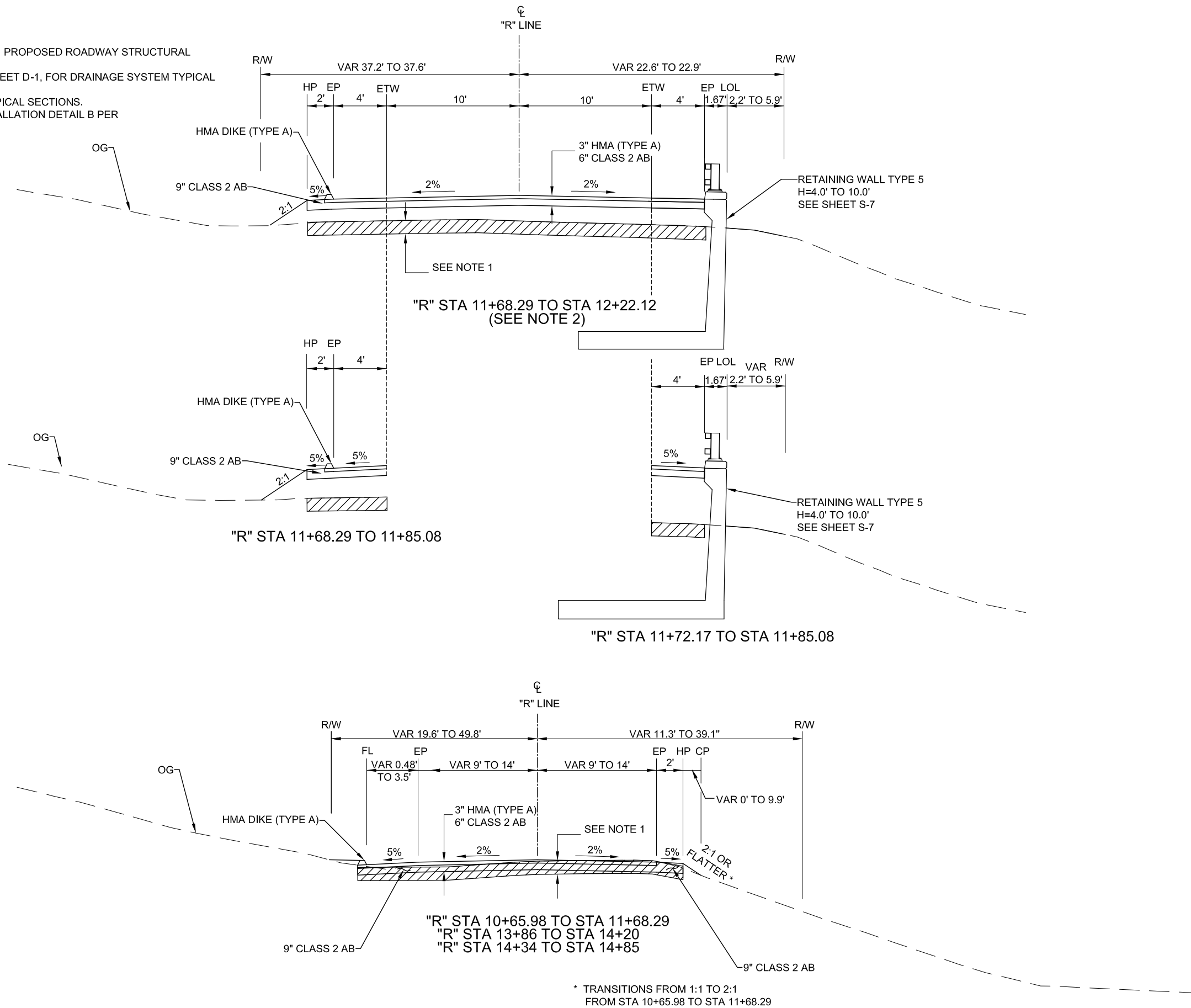
SHEET
SCD-1
3 OF 25 SHEETS

NOTE:

1. SCARIFY MINIMUM 12" DEPTH WITHIN PROPOSED ROADWAY STRUCTURAL SECTION LIMITS.
2. SECTION LIMITS.
3. "R" STA 11+76.74 TO 11+78.24 SEE SHEET D-1, FOR DRAINAGE SYSTEM TYPICAL SECTIONS.
4. SEE SHEET CD-1 FOR DRIVEWAY TYPICAL SECTIONS.
5. REFER TO NARROW ROADWAY INSTALLATION DETAIL B PER RSP STD PLAN A77N3.

LEGEND:

 SCARIFY LIMITS



* TRANSITIONS FROM 1:1 TO 2:1
FROM STA 10+65.98 TO STA 11+68.29

RETRAC WAY
NTS

REVISIONS

NO.	DESCRIPTION	BY	DATE



NEVADA COUNTY
DEPARTMENT OF PUBLIC WORKS
DESIGN/CONSTRUCTION DIVISION



**RETRAC WAY BRIDGE
REPLACEMENT PROJECT**
TYPICAL SECTIONS

DESIGNED: L. PROCTOR
DRAWN: C. AGUILAR
CHECKED: C. BENSON
JOB NO: 477638
DATE: SEP 30, 2016

SHEET
X-1
4 OF 25 SHEETS

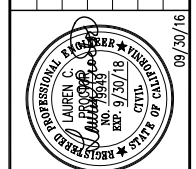
NOTE:

1. SCARIFY 12" MINIMUM DEPTH WITHIN PROPOSED ROADWAY STRUCTURAL SECTION LIMITS.
2. REFER TO NARROW ROADWAY INSTALLATION DETAIL B PER RSP STD PLAN A77N3.


LEGEND:

 SCARIFY LIMITS

REVISIONS	
NO.	DATE



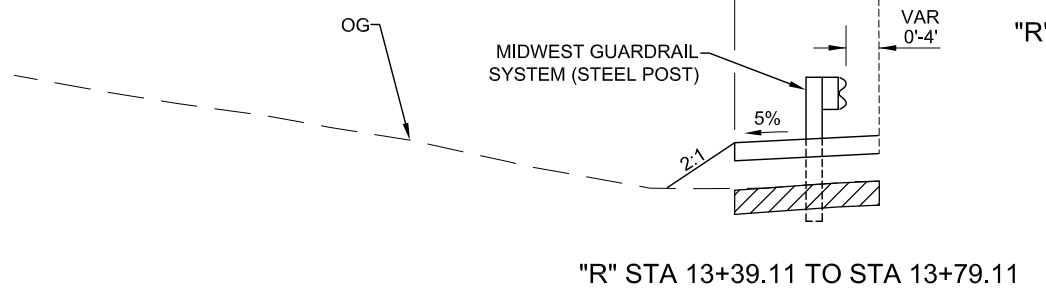
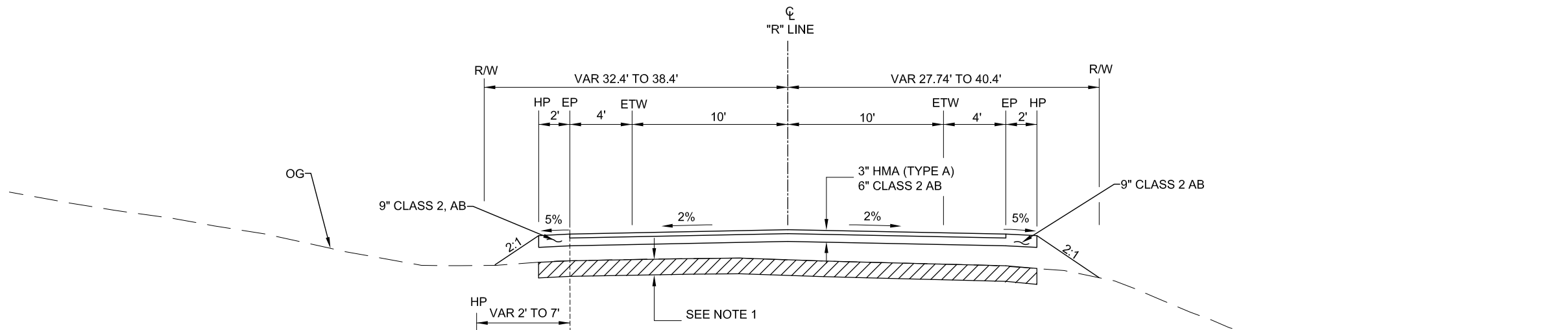
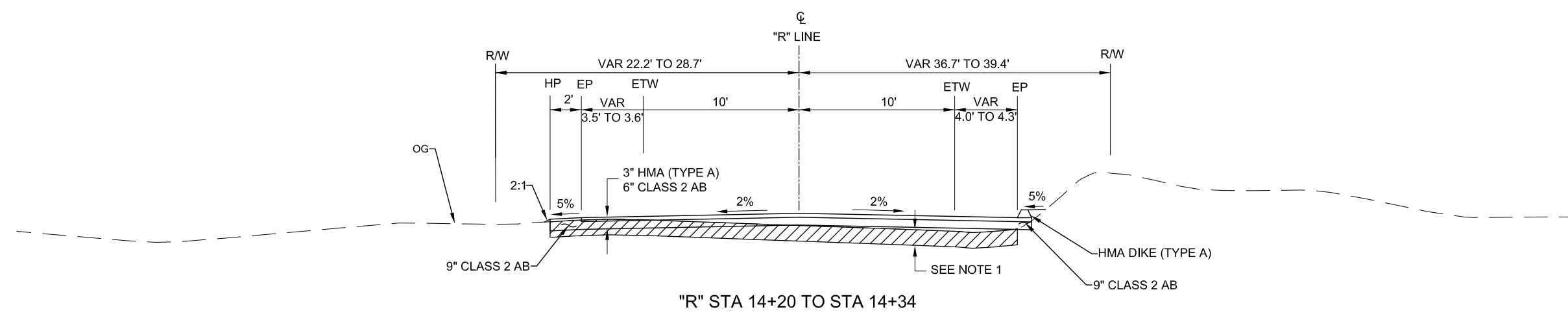
NEVADA COUNTY
 DEPARTMENT OF PUBLIC WORKS
 DESIGN/CONSTRUCTION DIVISION



**RETRAC WAY BRIDGE
 REPLACEMENT PROJECT**
 TYPICAL SECTIONS

DESIGNED: L.PROCTOR
 DRAWN: C.AGUILAR
 CHECKED: C.BENSON
 JOB NO: 477638
 DATE: SEP 30, 2016

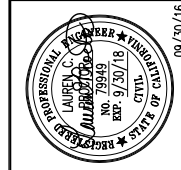
SHEET
X-2
 5 OF 25 SHEETS



RETRAC WAY
NTS

REVISIONS

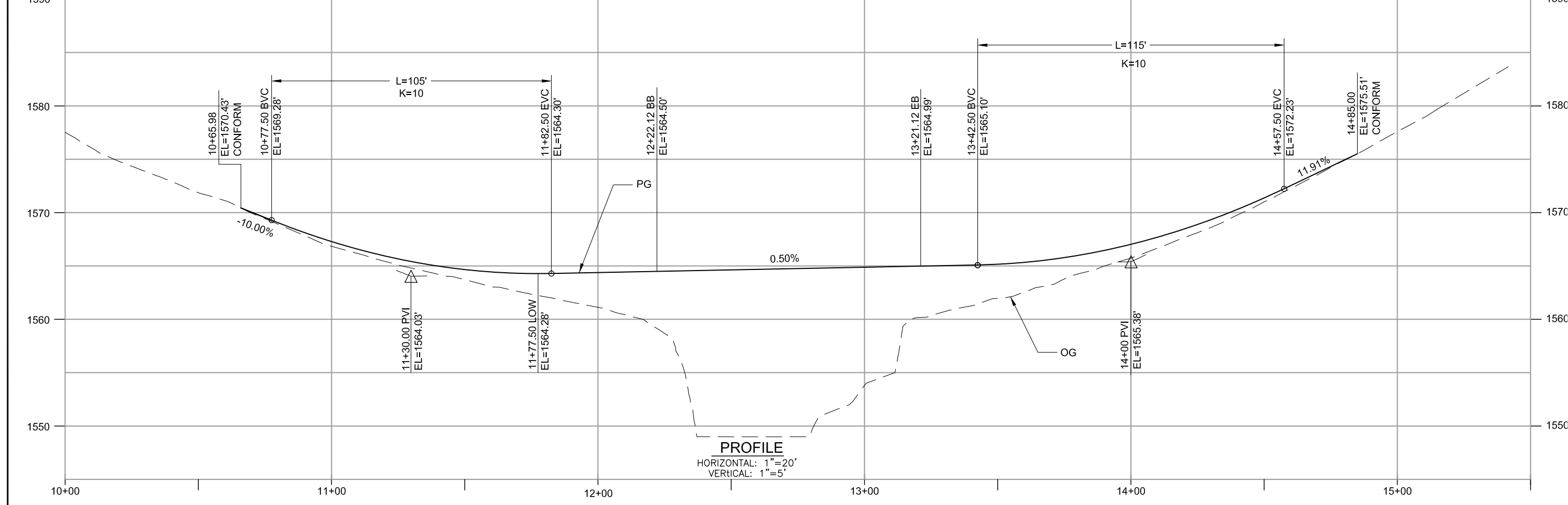
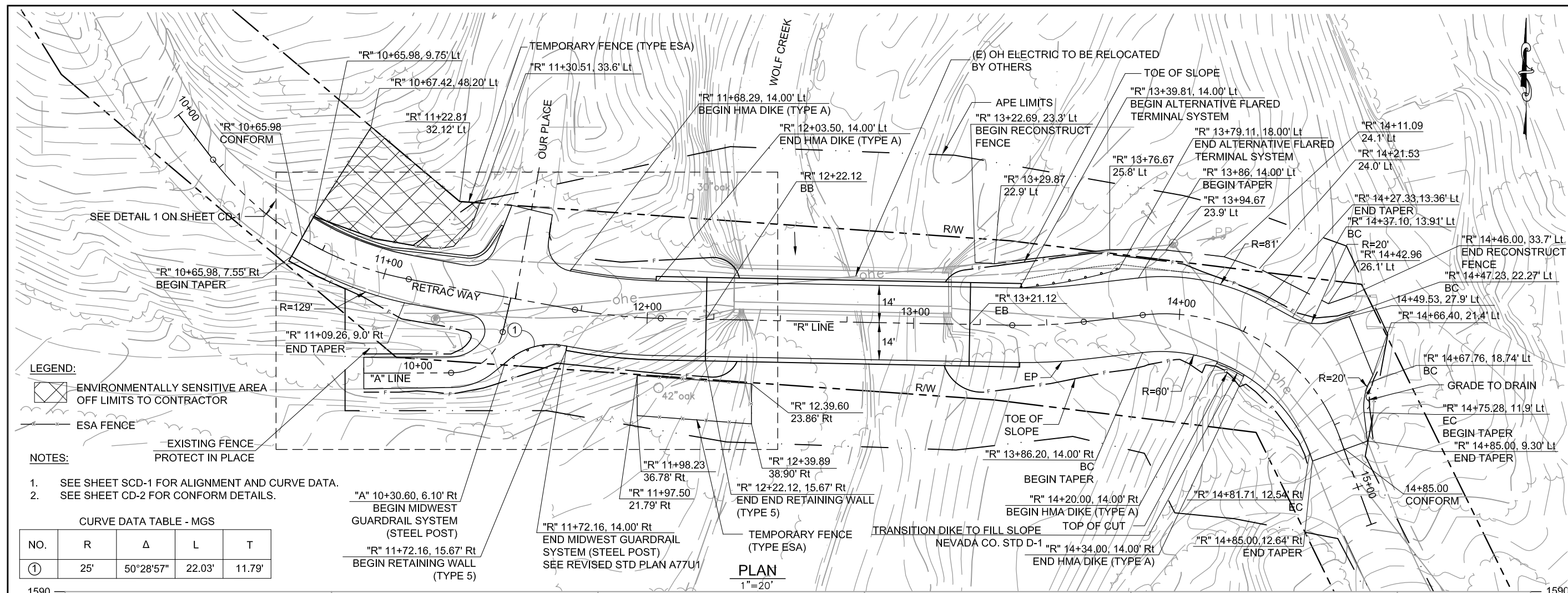
NO.	DESCRIPTION	BY	DATE



NEVADA COUNTY
DEPARTMENT OF PUBLIC WORKS
DESIGN/CONSTRUCTION DIVISION

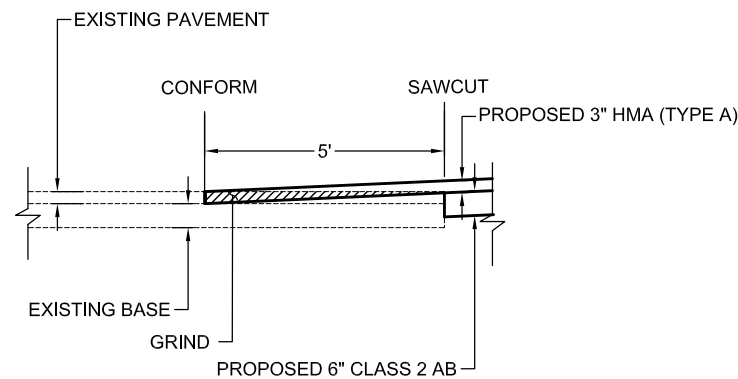
**RETRAC WAY BRIDGE
REPLACEMENT PROJECT
PLAN AND PROFILE**

DESIGNED: L. PROCTOR
DRAWN: C. AGUILAR
CHECKED: C. BENSON
JOB NO: 477638
DATE: SEP 30, 2016

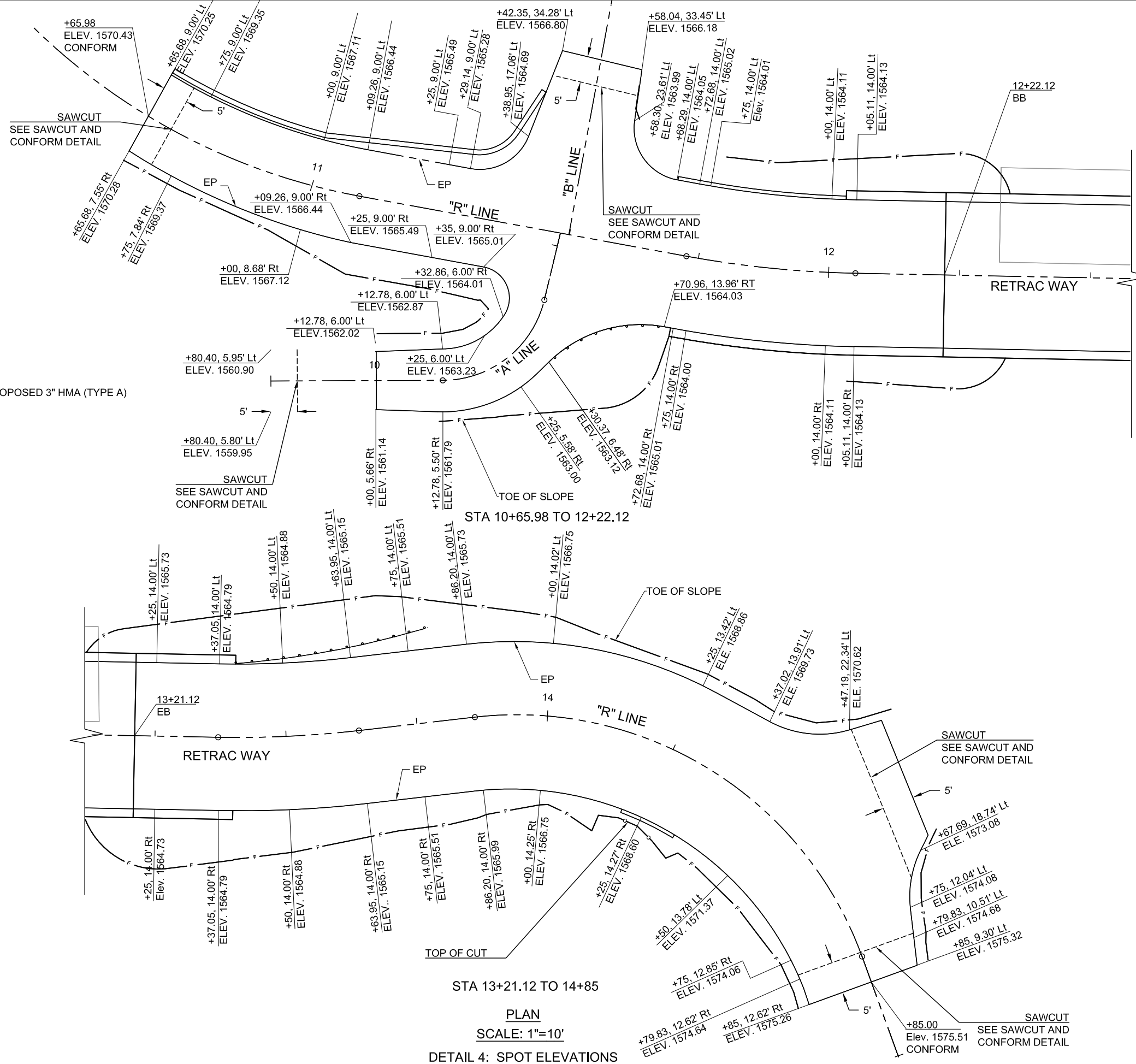


NOTE:

1. SEE SHEET SCD FOR ALIGNMENT DATA.

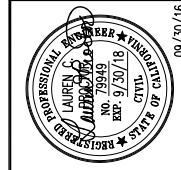


DETAIL 3: SAWCUT AND CONFORM DETAIL NTS



PLAN
SCALE: 1"=10'
DETAIL 4: SPOT ELEVATIONS

REVISIONS		
NO.	DESCRIPTION	DATE



NEVADA COUNTY
DEPARTMENT OF PUBLIC WORKS
DESIGN/CONSTRUCTION DIVISION



RETRAC WAY BRIDGE
REPLACEMENT PROJECT
CONSTRUCTION DETAILS



DESIGNED: L. PROCTOR
DRAWN: C. AGUILAR
CHECKED: C. BENSON
JOB NO: 477638
DATE: SEP 30, 2016

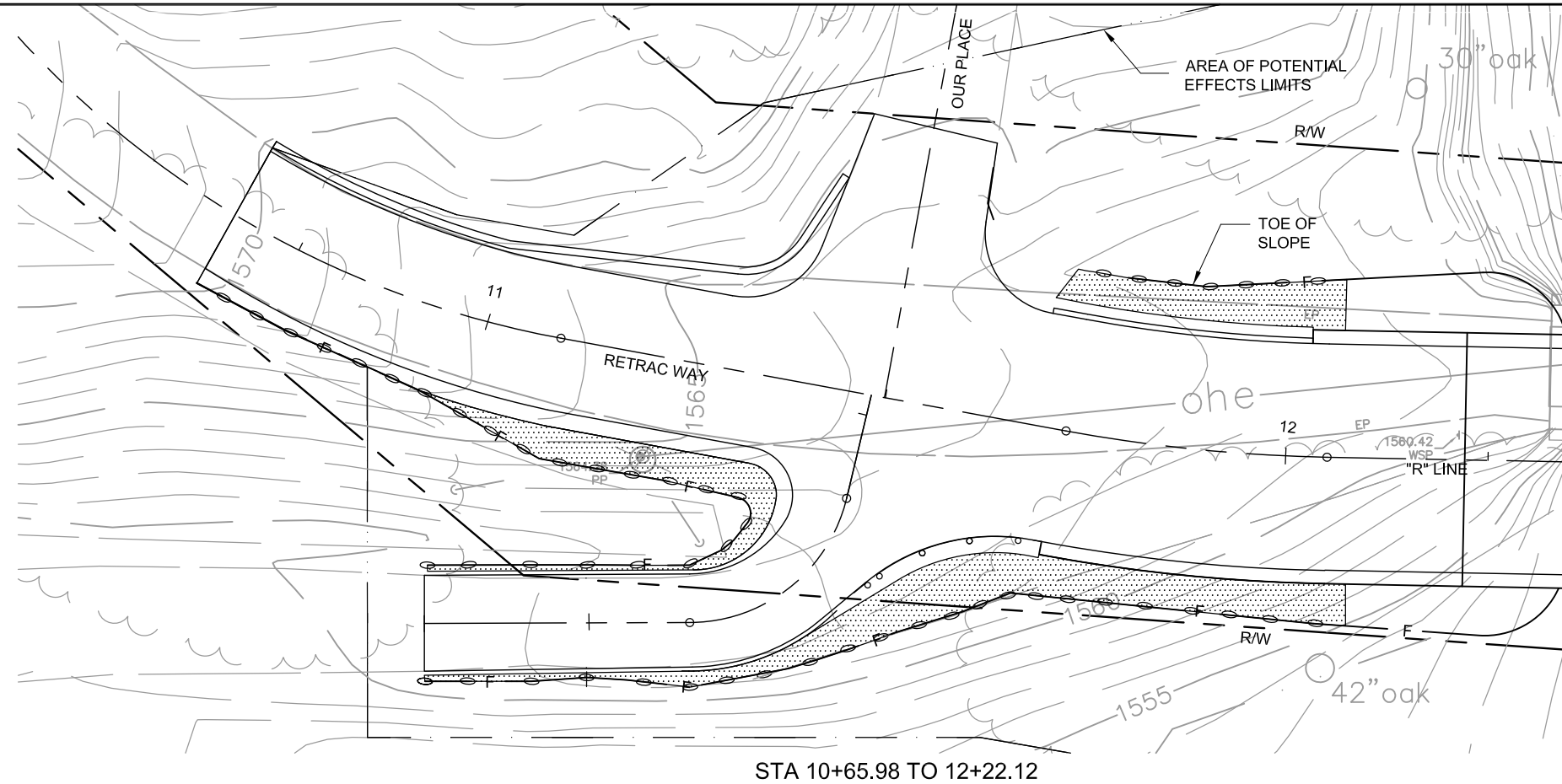
SHEET
CD-2
8 OF 25 SHEETS

NOTE:

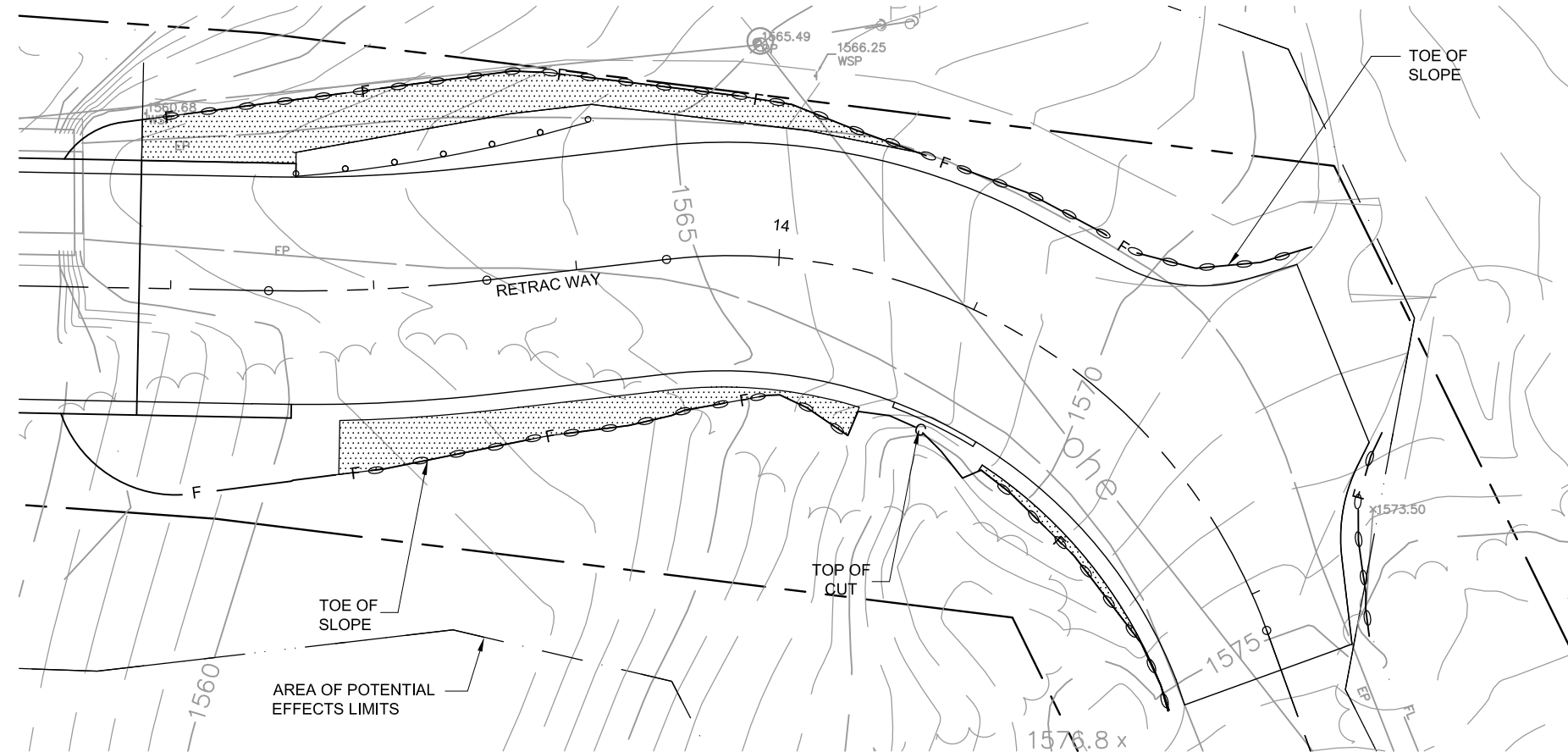
1. APPLY EROSION CONTROL (HYDROSEED) TO DISTURBED SOIL AREAS.

LEGEND

-  EROSION CONTROL (HYDROSEED)
-  FIBER ROLLS (TYPE 2)



STA 10+65.98 TO 12+22.12



STA 13+21.12 TO 14+85.00
PLAN
 1"=10'

REVISIONS		
NO.	DESCRIPTION	DATE



NEVADA COUNTY
 DEPARTMENT OF PUBLIC WORKS
 DESIGN/CONSTRUCTION DIVISION

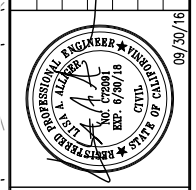


**RETRAC WAY BRIDGE
 REPLACEMENT PROJECT
 PERMANENT
 EROSION CONTROL**

DESIGNED: L.PROCTOR
 DRAWN: C.AGUILAR
 CHECKED: C.BENSON
 JOB NO: 477638
 DATE: SEP 30, 2016

SHEET
EC-1
 9 OF 25 SHEETS

REVISIONS	
NO.	DESCRIPTION

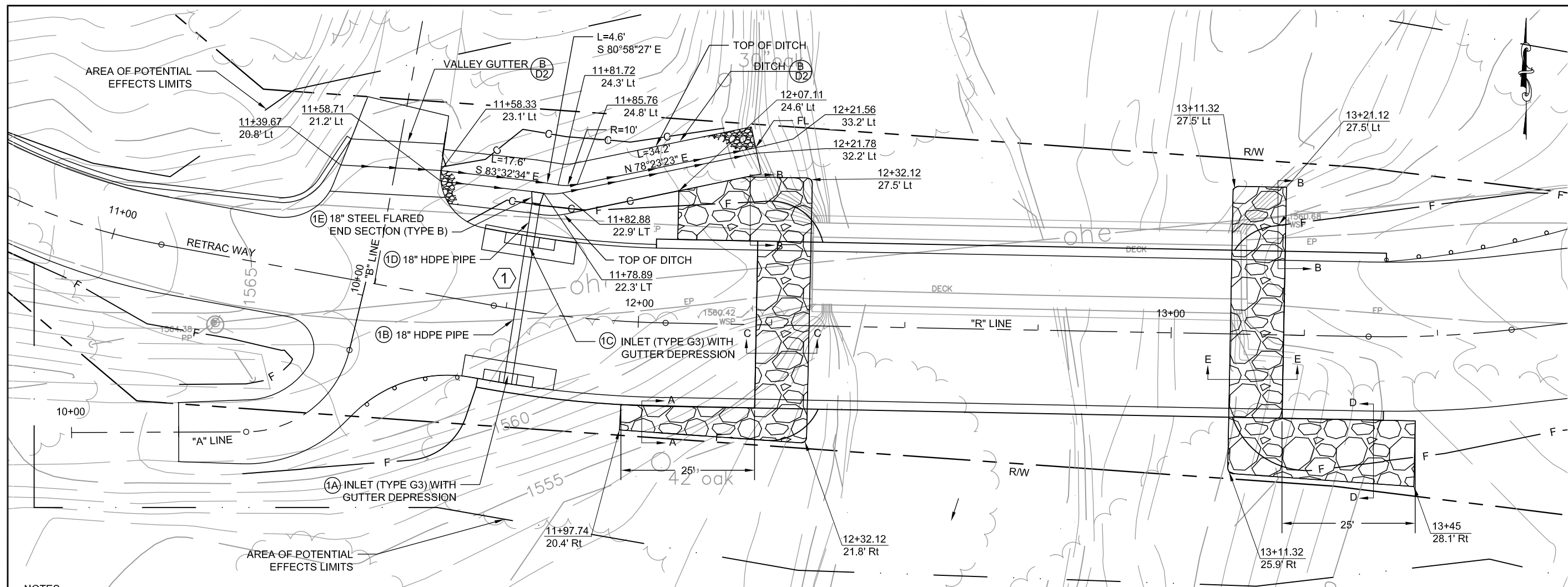


NEVADA COUNTY
 DEPARTMENT OF PUBLIC WORKS
 DESIGN/CONSTRUCTION DIVISION

**RETRAC WAY BRIDGE
 REPLACEMENT PROJECT
 DRAINAGE PLAN**

DESIGNED: C. AGUILAR
 DRAWN: C. AGUILAR
 CHECKED: E. HENDERSON
 JOB NO: 477638
 DATE: SEP 30, 2016

SHEET
D-1
 10 OF 25 SHEETS

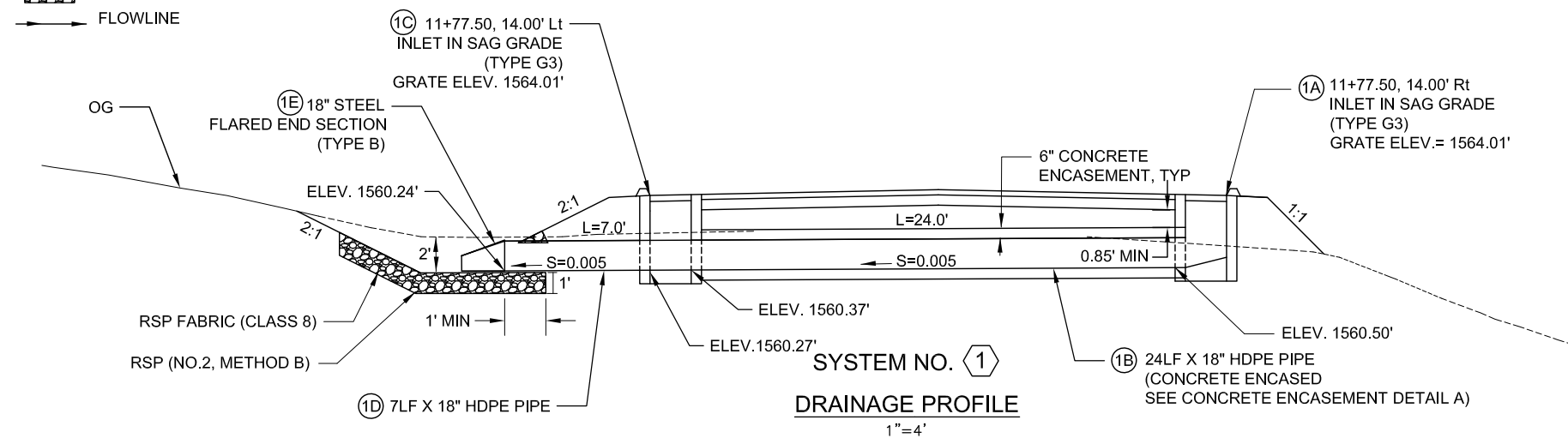


PLAN
 1"=10'

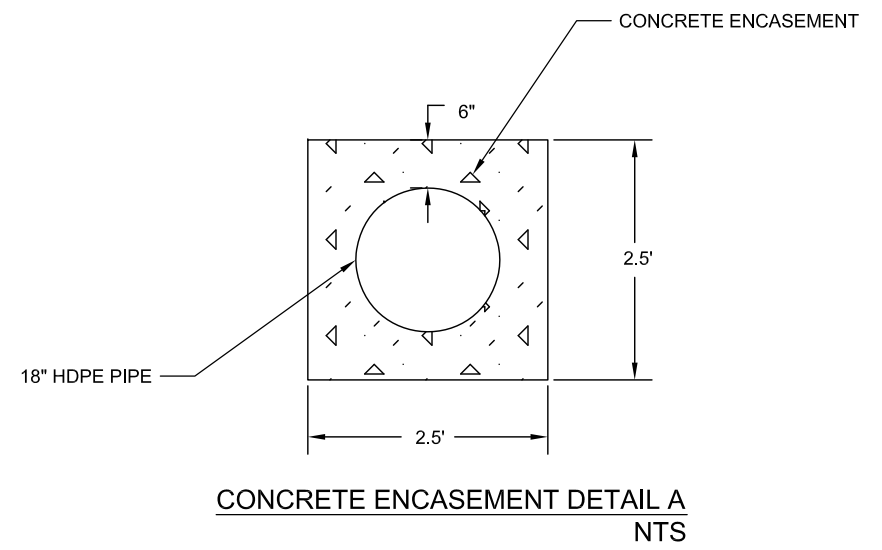
- NOTES:**
- STA/OFFSET FOR INLETS IS GIVEN TO CENTER OF GRATE AT FLOWLINE.
 - SEE SHEET D2 FOR RSP DETAILS AND SECTIONS.

LEGEND

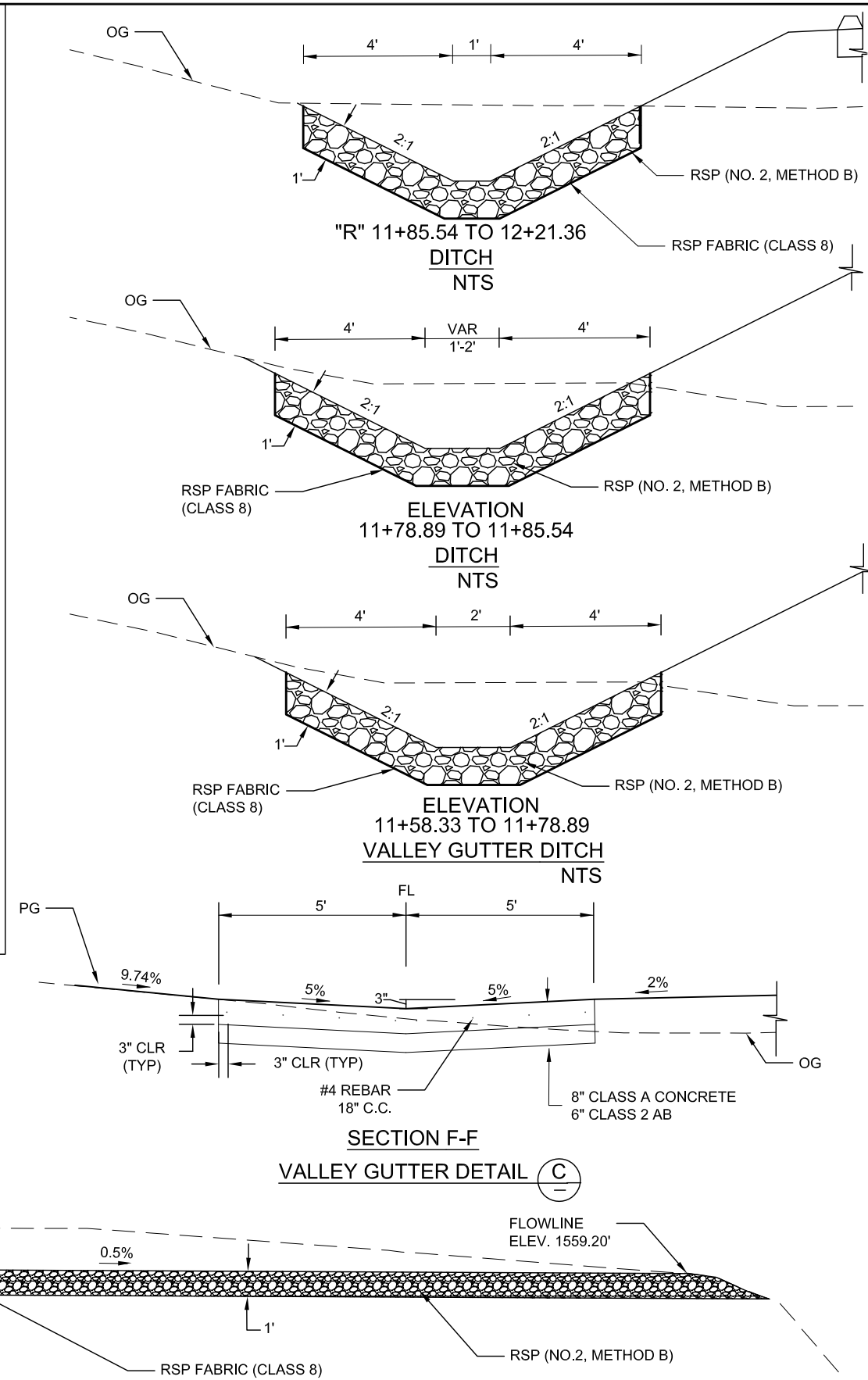
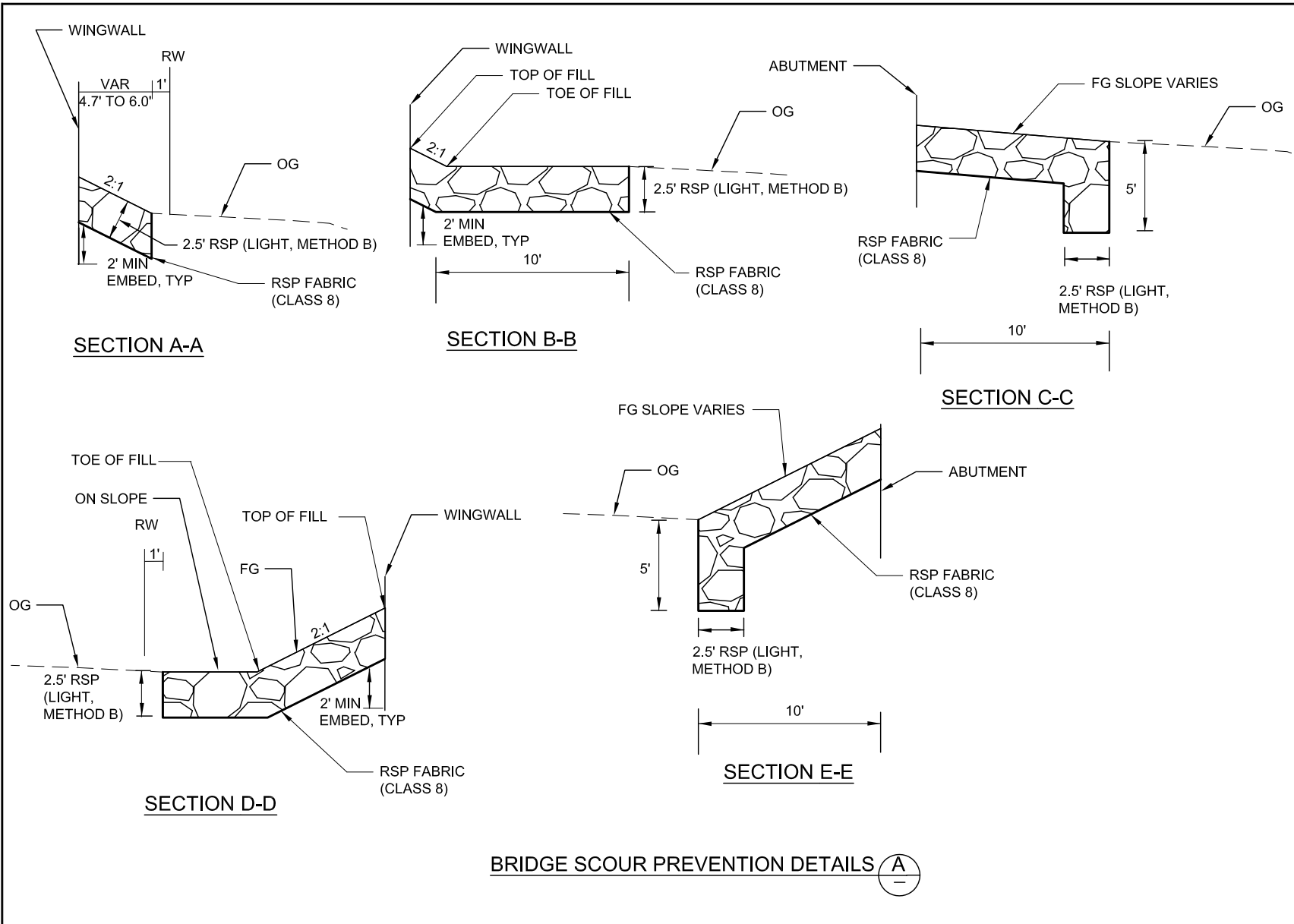
- RSP (LIGHT CLASS, METHOD B)
- RSP (NO. 2, METHOD B)
- FLOWLINE



SYSTEM NO. 1
DRAINAGE PROFILE
 1"=4'

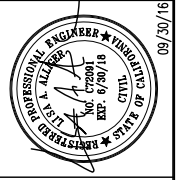


CONCRETE ENCASEMENT DETAIL A
 NTS



VALLEY GUTTER AND DITCH DETAILS (B)

REVISIONS	
NO.	DESCRIPTION



NEVADA COUNTY
 DEPARTMENT OF PUBLIC WORKS
 DESIGN/CONSTRUCTION DIVISION

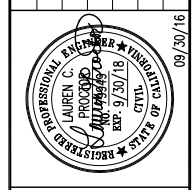


RETRAC WAY BRIDGE REPLACEMENT PROJECT
 DRAINAGE DETAILS

DESIGNED: C. AGUILAR
 DRAWN: C. AGUILAR
 CHECKED: E. HENDERSON
 JOB NO: 477638
 DATE: SEP 30, 2016

REVISIONS

NO.	DESCRIPTION	BY	DATE



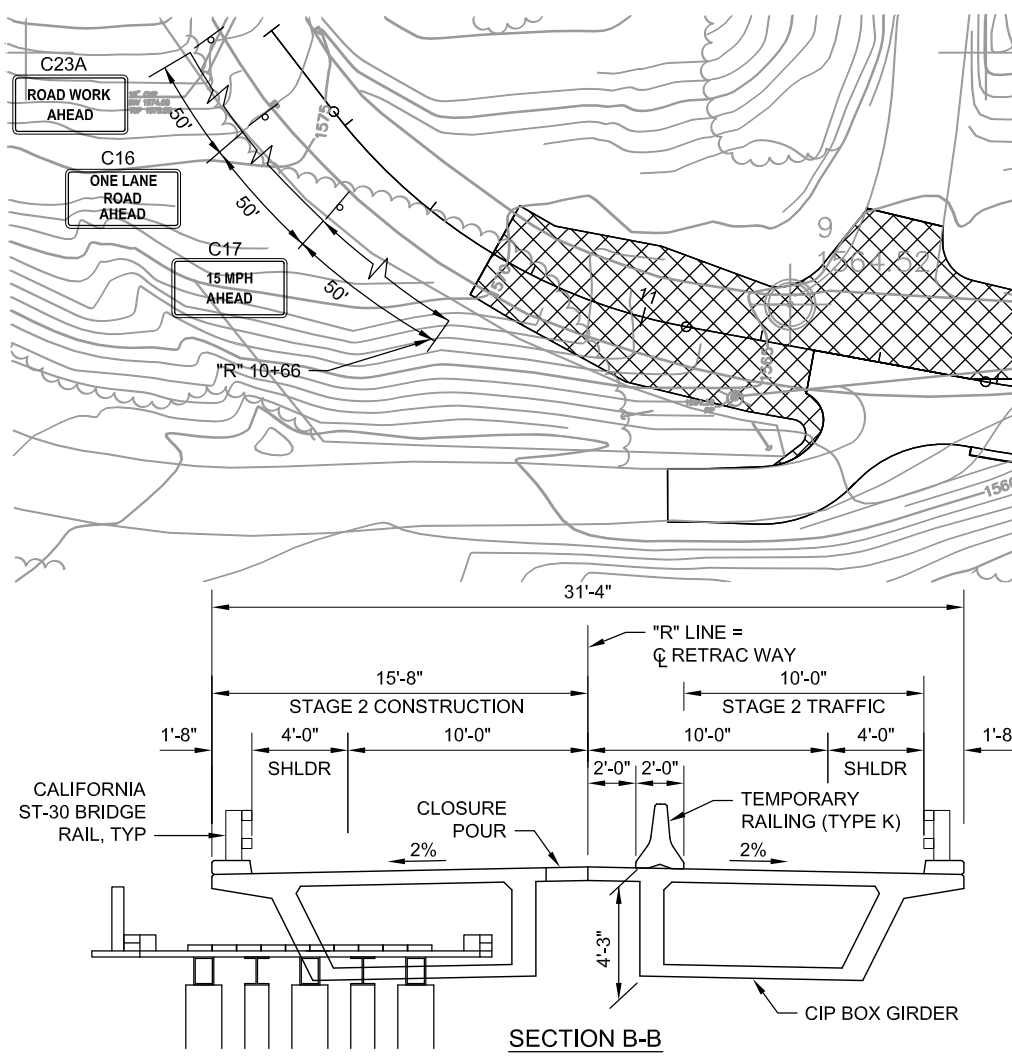
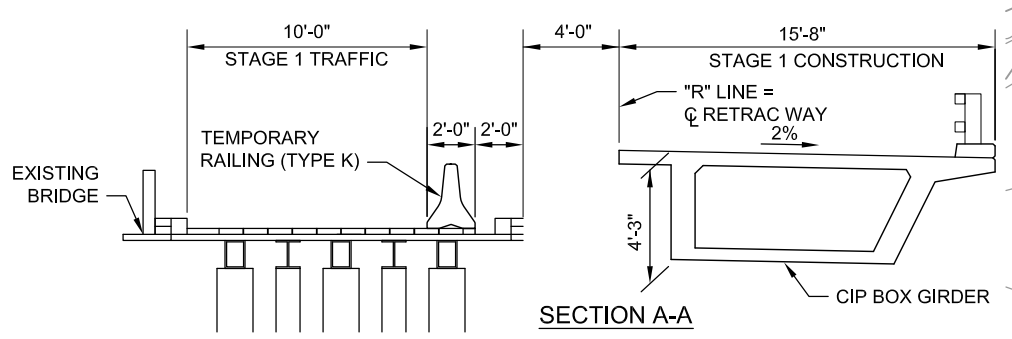
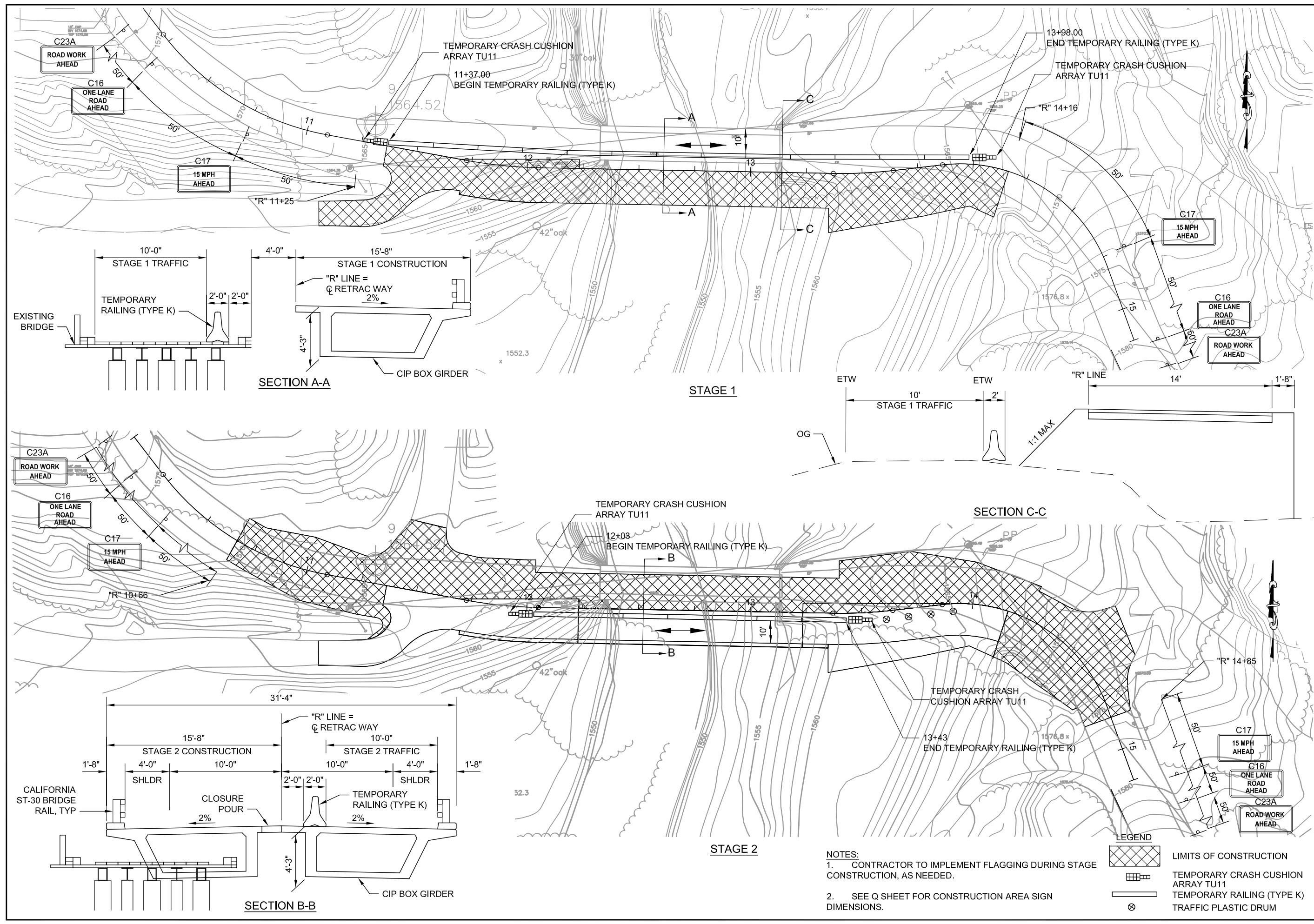
NEVADA COUNTY
DEPARTMENT OF PUBLIC WORKS
DESIGN/CONSTRUCTION DIVISION



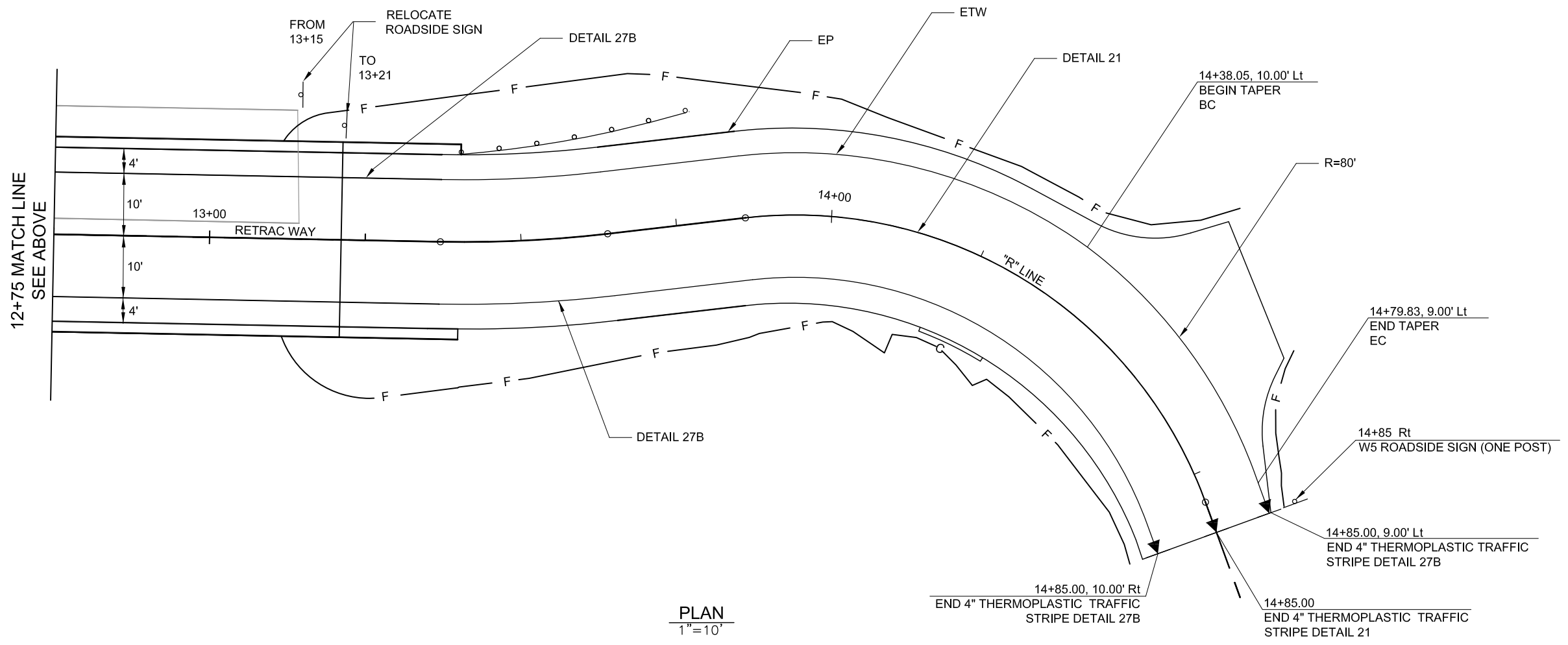
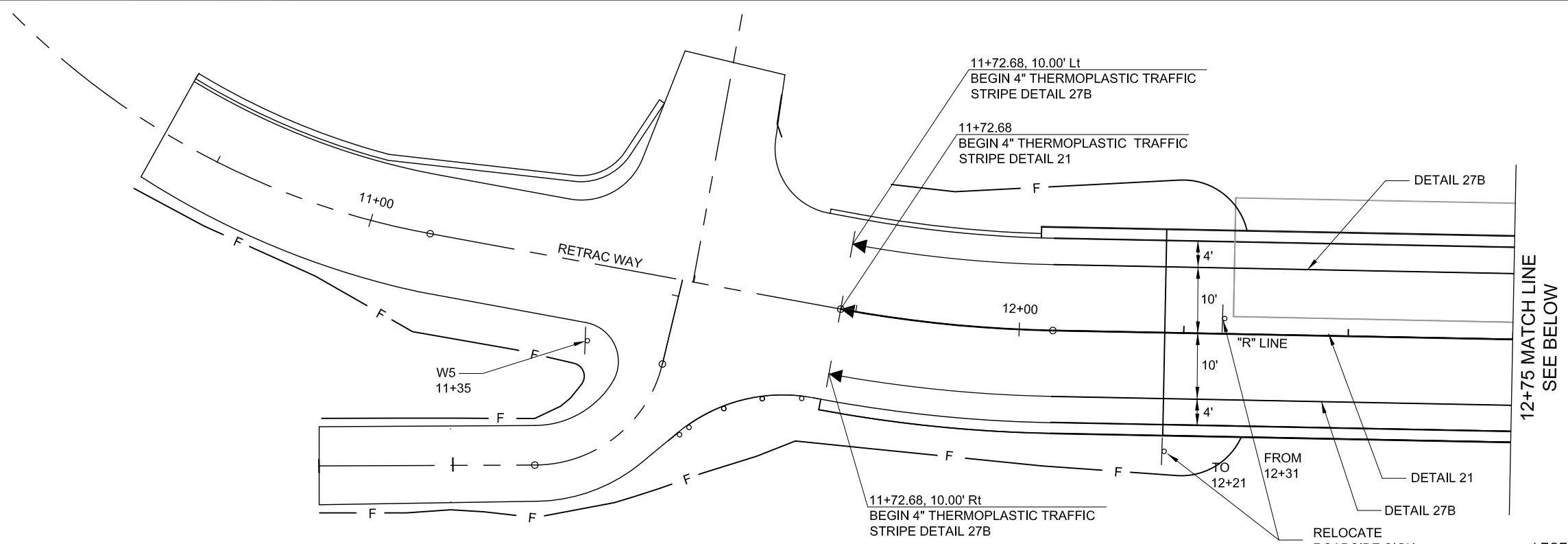
RETRAC WAY BRIDGE
REPLACEMENT PROJECT
TRAFFIC HANDLING

DESIGNED: L.PROCTOR
DRAWN: C.AGUILAR
CHECKED: C.BENSON
JOB NO: 477638
DATE: SEP 30, 2016

SHEET
TH-1
12 OF 25 SHEETS



- NOTES:
1. CONTRACTOR TO IMPLEMENT FLAGGING DURING STAGE CONSTRUCTION, AS NEEDED.
2. SEE Q SHEET FOR CONSTRUCTION AREA SIGN DIMENSIONS.
- LEGEND:
 LIMITS OF CONSTRUCTION
 TEMPORARY CRASH CUSHION ARRAY TU11
 TEMPORARY RAILING (TYPE K)
 TRAFFIC PLASTIC DRUM



PLAN
1"=10'

REVISIONS		
NO.	DESCRIPTION	DATE



NEVADA COUNTY
DEPARTMENT OF PUBLIC WORKS
DESIGN/CONSTRUCTION DIVISION



RETRAC WAY BRIDGE
REPLACEMENT PROJECT
PAVEMENT DELINEATION
AND SIGNS

DESIGNED: L. PROCTOR
DRAWN: C. AGUILAR
CHECKED: C. BENSON
JOB NO: 477638
DATE: SEP 30, 2016

SHEET
PD-1
13 OF 25 SHEETS

LEGEND

- ▲ LIMIT OF TRAFFIC STRIPE
- ROADSIDE SIGN ONE POST

NOTES:

1. EXACT LOCATION AND POSITION OF ROADSIDE SIGNS SHALL BE DETERMINED BY THE ENGINEER.
2. POST LENGTHS GIVEN ARE APPROXIMATE. EXACT LENGTHS TO BE DETERMINED BY THE ENGINEER
3. "C" DIM = VERTICAL CLEARANCE FROM EP TO THE BOTTOM OF SIGN PANEL.

ROADWAY ITEMS

STATION LIMITS	DIRECTION	TEMPORARY FENCE (TYPE ESA)	ROADWAY EXCAVATION	EMBANKMENT	CLASS 2 AGGREGATE BASE	HOT MIX ASPHALT (TYPE A)	PLACE HMA DIKE (TYPE A)
	Rt/Lt	LF	CY	CY	CY	TON	LF
"A" 10+00.00 TO "A" 10+40.00			4.92	12.06			
"R" 10+65.98 TO "R" 12+22.12			88.96	621.06	100.00	88.62	
"R" 10+65.98 TO "R" 11+30.51							
"R" 10+65.98 TO DWY @ 11+41.7	Lt						
"R" 10+65.98 TO "A" LINE	Rt						
"A" LINE TO 11+72.00	Rt						
"R" DWY @ 11+50 TO BB WW	Lt		2.13				
"R" 10+65.98 TO "R" 11+41.00	Lt					2.18	79.66
"R" 11+58.04 TO "R" 11+68.29	Lt						
"R" 11+68.29 TO "R" 12+03.50	Lt					0.88	32.35
"R" 13+21.22 TO "R" 14+85.00			72.30	535.60	102.64	90.28	
"R" 14+20.00 TO "R" 14+34.00	Rt					0.30	11.15
EB WW TO 14+85.00	Lt						
EB WW TO 14+85.00	Rt						
OAK TREE		116.06					
TOTAL		277.33	168.31	1168.72	202.54	182.26	123.16

PERMANENT EROSION CONTROL

STATION LIMITS	DIRECTION	EROSION CONTROL (HYDROSEED)	FIBER ROLLS
	Rt/Lt	SF	LF
"R" 10+65.98 TO "R" 11+37.98	Rt	280.83	118.01
"R" 11+58.04 TO "A" 10+00.00		228.06	33.33
"A" 10+00.00 TO "R" 11+72.00		566.60	115.73
"R" 13+39.80 TO "R" 14+26.56	Lt	595.36	160.18
"R" 13+35.46 TO "R" 14+15.00	Rt	235.63	175.26
"R" 14+75.00 TO "R" 14+85.00	Lt		75.65
"R" 14+37.15 TO "R" 14+85.00	Rt	97.60	38.06
TOTAL		2004.08	666.22

DRAINAGE

STATION LIMITS	DITCH EXCAVATION	MINOR CONCRETE	MINOR CONCRETE (MINOR STRUCTURE)	BAR REINFORCING STEEL	18" HDPE PIPE	18" METAL FLARED END SECTION	INLET DEPRESSION	ROCK SLOPE PROTECTION LIGHT, METHOD B)	ROCK SLOPE PROTECTION NO. 2, METHOD B)	ROCK SLOPE PROTECTION FABRIC	INLET FRAME AND GRATE
	CY	CY	CY	LB	LF	EA	EA	CY	CY	SY	EA
SYSTEM 1		3.91	2.28	104	31.00	1	2				2
VALLEY GUTTER		5.88									
DITCH	2.13							23.29	70.92		
ABUT 1								75.36	142.92		
ABUT 2								97.55	154.30		
TOTAL	2.13	9.79	2.28	104	31.00	1	2	172.91	23.29	368.14	2

BARRIER ITEMS

STATION LIMITS	DIRECTION	MIDWEST GUARDRAIL SYSTEM (STEEL POST)	ALTERNATIVE FLARED TERMINAL SYSTEM END TREATMENT	RECONSTRUCT FENCE
	Rt/Lt	LF	EA	LF
"A" 10+31.30 TO "R" 11+97.63	Rt	25		
"R" 13+40.10	Lt		1	
"R" 13+22.69 TO "R" 14+46.00	Lt			146
TOTAL		25	1	146

PAVEMENT DELINEATION

LOCATION	DIRECTION	PAINT TRAFFIC STRIPE	
		21	27B
	Rt/Lt	LF	LF
"R" 11+72.68 TO "R" 14+85.00	Lt		322.43
"R" 11+72.68 TO "R" 14+85.00	Rt		301.91
		312.32	
TOTAL		312.32	624.34

TRAFFIC HANDLING

STATION LIMITS	DIRECTION	TEMPORARY RAILING (TYPE K)
	Rt/Lt	LF
STAGE 1		260'
STAGE 2		
TOTAL		260

ROADSIDE SIGNS

SIGN CODE		PANEL SIZE (IN)	"C" DIM IN FEET	(WOOD POST)				RELOCATE ROADSIDE SIGN (EA)
FEDERAL	CALIFORNIA			4in X 4in	4in X 6in	6in X 6in	ONE POST (EA)	
W1-2	W5	30 X 30	7	12.5			2	
TOTAL							2	2

CONSTRUCTION AREA SIGNS

SIGN CODE		PANEL SIZE (IN)	"C" DIM IN FEET	(WOOD POST)			ONE POST (EA)	TWO POST (EA)
FEDERAL	CALIFORNIA			4in X 4in	4in X 6in	6in X 6in		
	C17	18 X 24	7	12.5			2	
W20-4	C16	18 X 24	7	12.5			2	
	C23A	18 X 24	7	12.5			2	
TOTAL							6	

REVISIONS

NO.	DESCRIPTION	BY	DATE



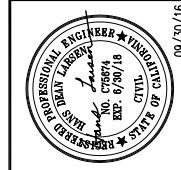
NEVADA COUNTY
DEPARTMENT OF PUBLIC WORKS
DESIGN/CONSTRUCTION DIVISION



RETRAC WAY BRIDGE REPLACEMENT PROJECT
SUMMARY OF QUANTITIES

DESIGNED: L.PROCTOR
DRAWN: C.AGUILAR
CHECKED: C.BENSON
JOB NO: 477638
DATE: SEP 30, 2016

REVISIONS	
NO.	DESCRIPTION



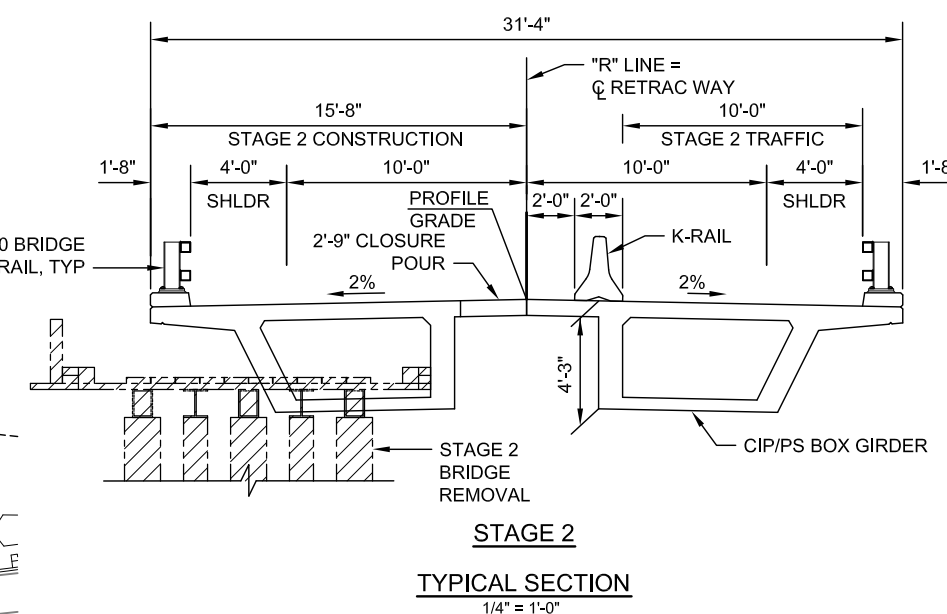
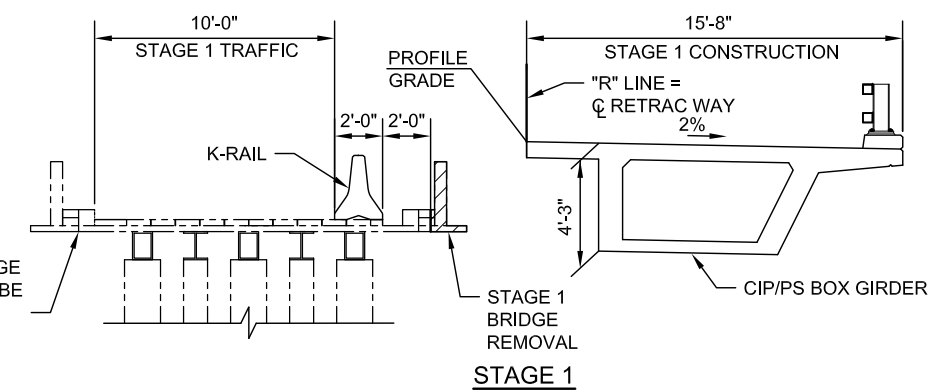
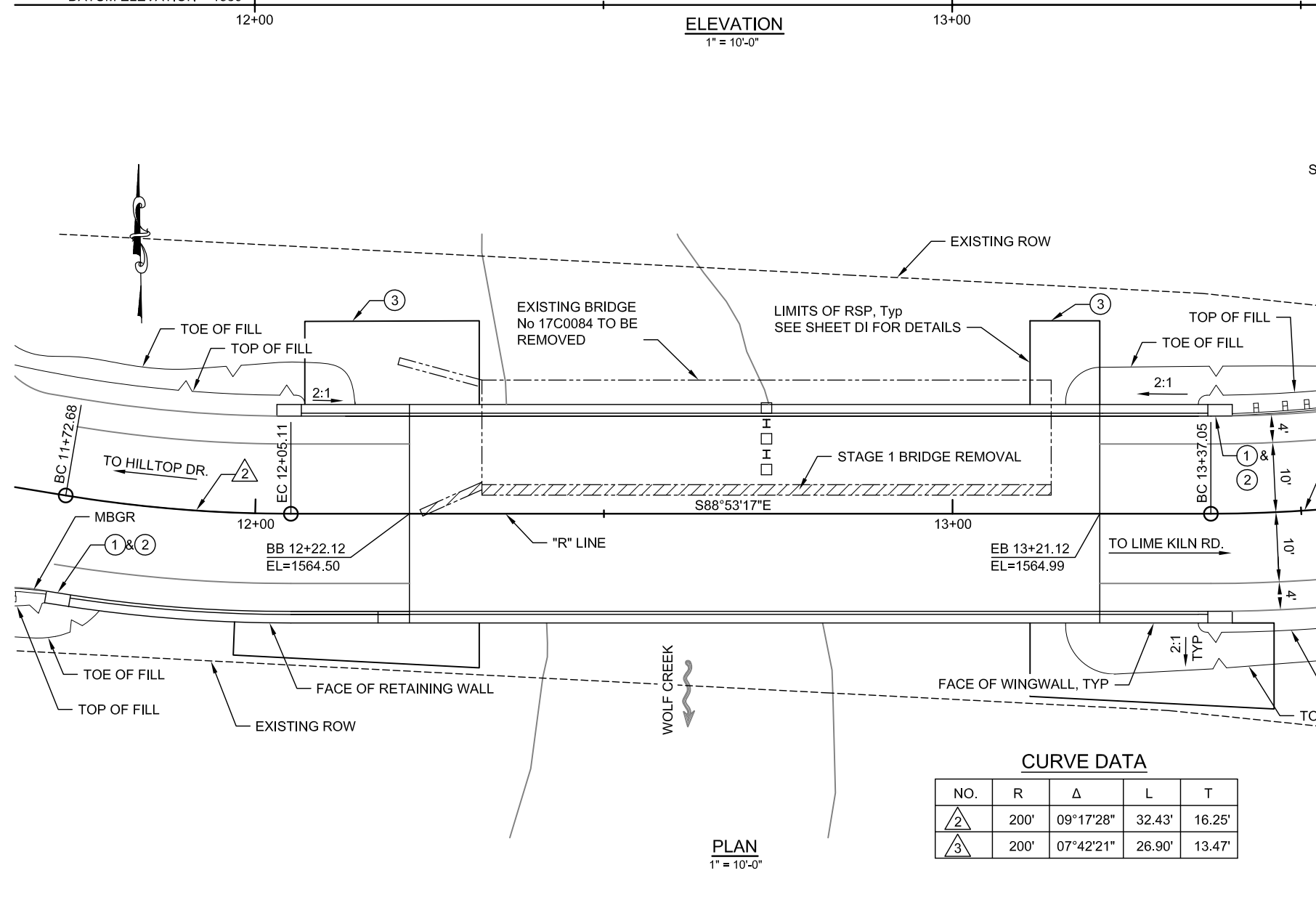
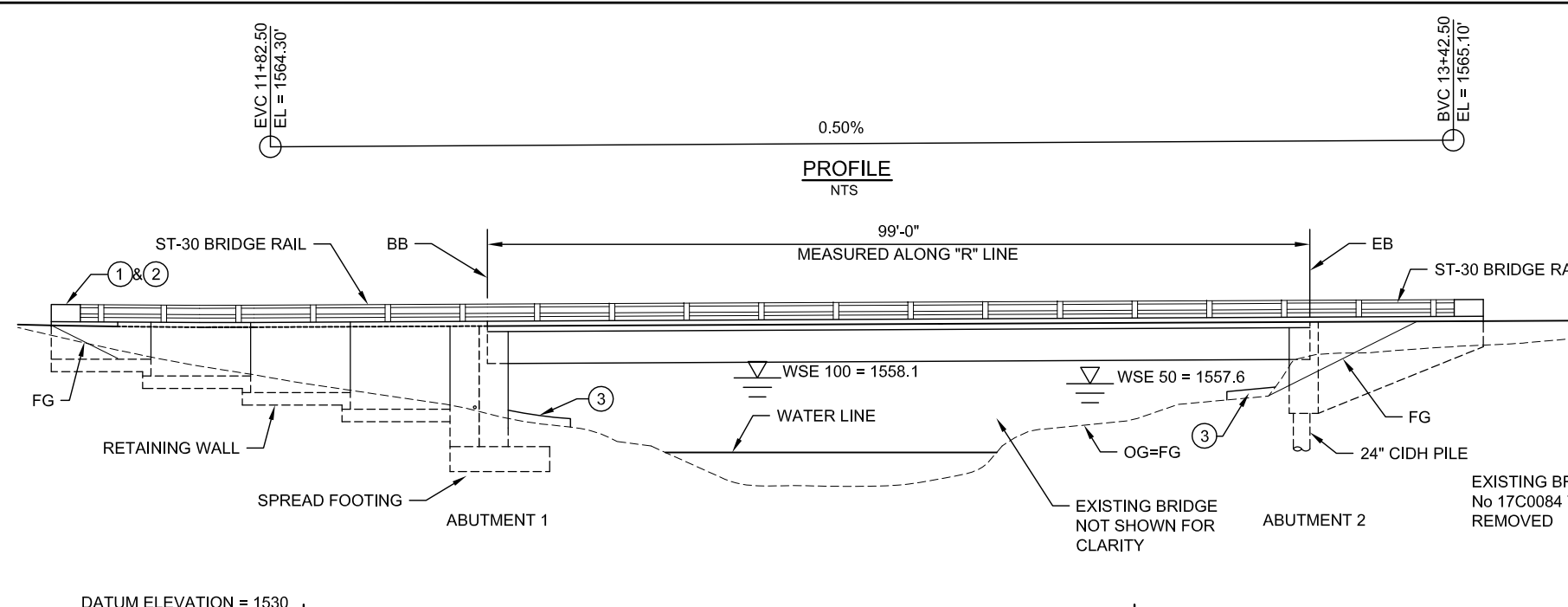
NEVADA COUNTY
DEPARTMENT OF PUBLIC WORKS
DESIGN/CONSTRUCTION DIVISION



RETRAC WAY BRIDGE
REPLACEMENT PROJECT
GENERAL PLAN

DRAWING:
DESIGNED: H. LARSEN
DRAWN: P. WALKER
CHECKED: J. ELWOOD
JOB NO: 477638
DATE: SEP 30, 2016

SHEET
S-1
15 OF 25 SHEETS



- LEGEND**
- ① PAINT "RETRAC WAY"
 - ② PAINT "BR. NO. 17C0104"
 - ③ ROCK SLOPE PROTECTION
 - BRIDGE REMOVAL

INDEX TO PLANS

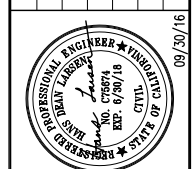
SHEET No.	TITLE
S-1	GENERAL PLAN
S-2	DECK CONTOURS
S-3	FOUNDATION PLAN
S-4	ABUTMENT No. 1 LAYOUT
S-5	ABUTMENT No. 2 LAYOUT
S-6	ABUTMENT DETAILS
S-7	RETAINING WALL LAYOUT
S-8	TYPICAL SECTION
S-9	GIRDER LAYOUT
S-10	LOG OF TEST BORINGS (1 OF 2)
S-11	LOG OF TEST BORINGS (2 OF 2)

- NOTES:**
- For "General Notes", "Pile Data Table" and "Footing Data Table" see "Foundation Plan" sheet.
 - For Hydrologic Summary, see "Foundation Plan" sheet.
 - Water line shown was observed on December 2012.

PLOT DATE: 09-29-16 13:33:20 477638_A_GP.dwg

REVISIONS

NO.	DESCRIPTION	BY	DATE



NEVADA COUNTY
 DEPARTMENT OF PUBLIC WORKS
 DESIGN/CONSTRUCTION DIVISION

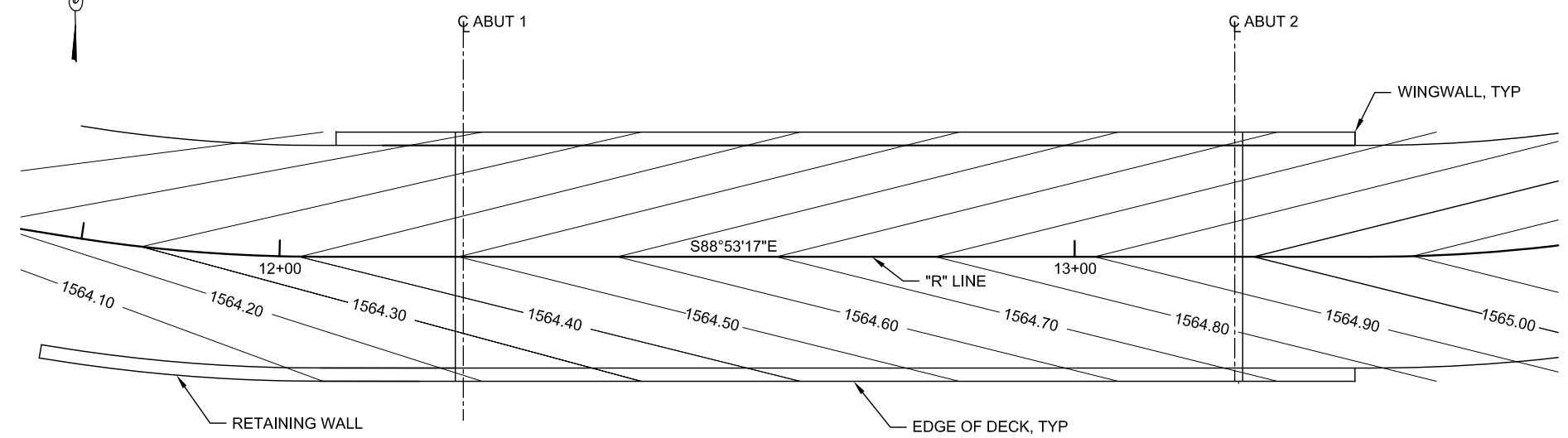
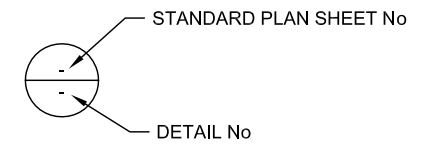
**RETRAC WAY BRIDGE
 REPLACEMENT PROJECT
 DECK CONTOURS**

DRAWING:
 DESIGNED: H. LARSEN
 DRAWN: P. WALKER
 CHECKED: J. ELWOOD
 JOB NO: 477638
 DATE: SEP 30, 2016

SHEET
S-2
 16 OF 25 SHEETS

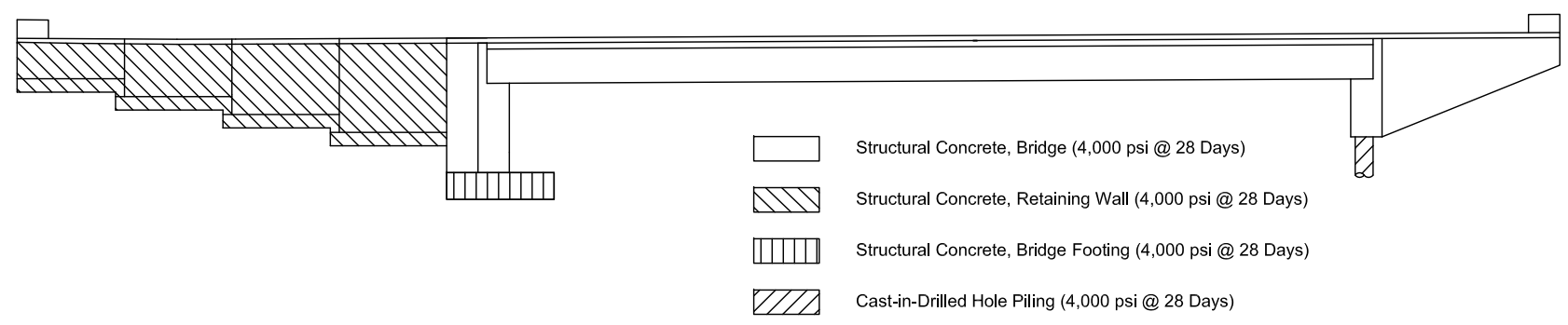
STANDARD PLANS
DATED MAY 2010

- RSP A10A ABBREVIATIONS (SHEET 1 OF 2)
- RSP A10B ABBREVIATIONS (SHEET 2 OF 2)
- A10C LINES AND SYMBOLS (SHEET 1 OF 3)
- A10D LINES AND SYMBOLS (SHEET 2 OF 3)
- A10E LINES AND SYMBOLS (SHEET 3 OF 3)
- A10F LEGEND - SOIL (SHEET 1 OF 2)
- A10G LEGEND - SOIL (SHEET 2 OF 2)
- A10H LEGEND - ROCK, PLAN
- A62C LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL - BRIDGE
- B0-1 BRIDGE DETAILS
- B0-3 BRIDGE DETAILS
- B0-5 BRIDGE DETAILS
- B0-13 BRIDGE DETAILS
- B2-3 16" AND 24" CAST-IN-DRILLED-HOLE CONCRETE PILE
- RSP B3-4A RETAINING WALL TYPE 1 (CASE 1)
- RSP B6-21 JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")
- B7-1 BOX GIRDER DETAILS
- RSP B8-5 CAST-IN-PLACE PRESTRESSED GIRDER DETAILS
- RSP B11-65 CALIFORNIA ST-30 BRIDGE RAIL



- NOTES:**
1. Contours do not include camber.
 2. Contour interval is 0.10 feet.

PLAN
 1" = 10'-0"



CONCRETE STRENGTH AND TYPE LIMITS
 1" = 10'-0"

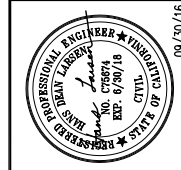
QUANTITIES

ITEM DESCRIPTION	UNIT	QUANTITY
TEMPORARY STREAM DIVERSION	LS	1
BRIDGE REMOVAL	LS	1
STRUCTURE EXCAVATION (BRIDGE)	CY	227
STRUCTURE EXCAVATION (RETAINING WALL)	CY	76
STRUCTURE BACKFILL (BRIDGE)	CY	163
STRUCTURE BACKFILL (RETAINING WALL)	CY	87
24" CAST-IN-DRILLED-HOLE PILING	LF	140
PRESTRESSING CAST-IN-PLACE CONCRETE	LS	1
STRUCTURAL CONCRETE, BRIDGE FOOTING	CY	45
STRUCTURAL CONCRETE, BRIDGE	CY	297
STRUCTURAL CONCRETE, RETAINING WALL	CY	36
JOINT SEAL (MR = 1")	LF	63
REINFORCING STEEL (BRIDGE)	LB	75,600
CALIFORNIA ST-30 BRIDGE RAIL	LF	308

PLOT DATE: 09-29-16 13:34:35 477638_B_DC.dwg

REVISIONS

NO.	DESCRIPTION	BY	DATE



NEVADA COUNTY
DEPARTMENT OF PUBLIC WORKS
DESIGN/CONSTRUCTION DIVISION



RETRAC WAY BRIDGE
REPLACEMENT PROJECT
FOUNDATION PLAN

DRAWING:
DESIGNED: H. LARSEN
DRAWN: P. WALKER
CHECKED: J. ELWOOD
JOB NO: 477638
DATE: SEP 30, 2016

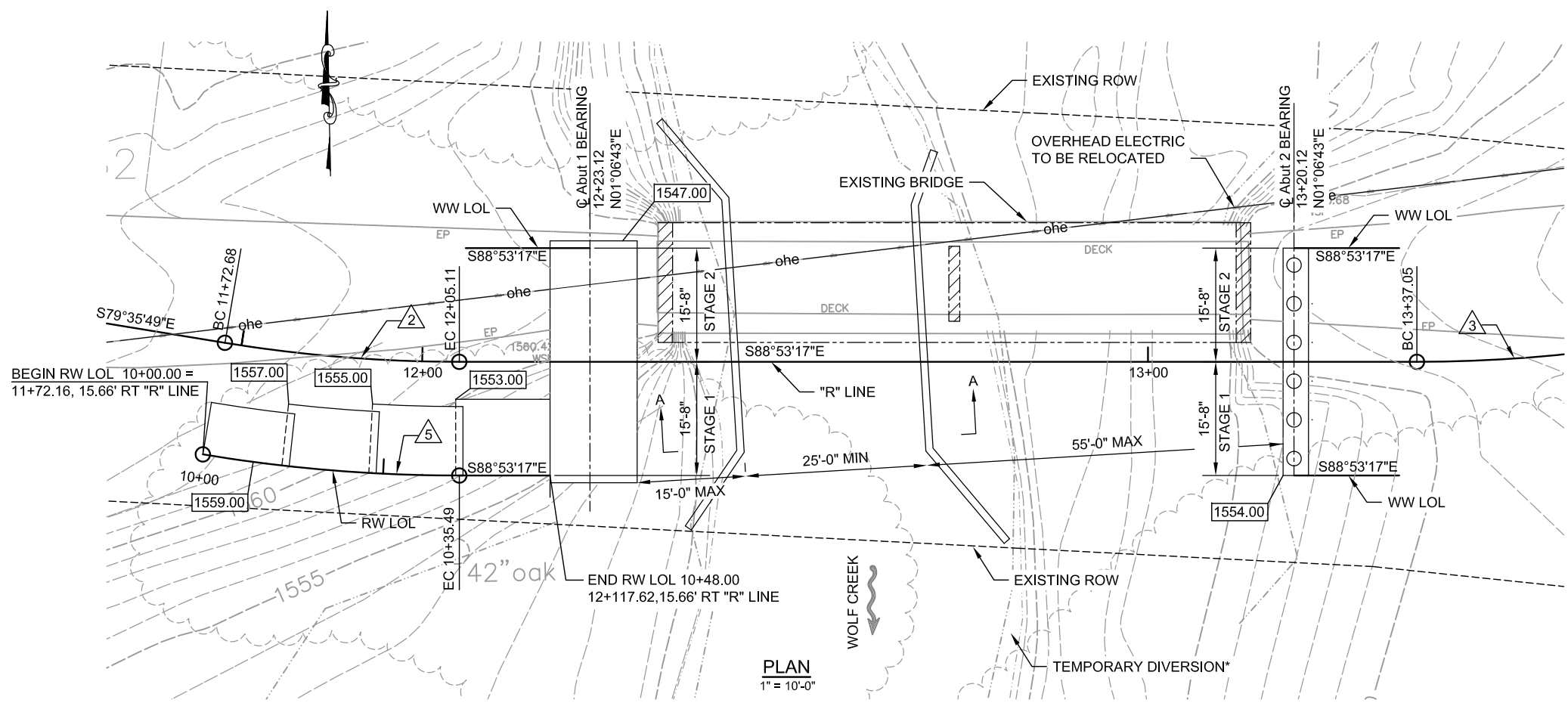
SHEET
S-3

LEGEND

- XXXX INDICATES BOTTOM OF FOOTING ELEVATION
- NEW CONSTRUCTION
- - - EXISTING BRIDGE
- 24" CIDH PILE
- ▨ BRIDGE REMOVAL

CURVE DATA

NO.	R	Δ	L	T
2	200'	09°17'28"	32.43'	16.25'
3	200'	07°42'21"	26.90'	13.47'
5	215.67'	09°25'43"	35.49'	17.79'



ABUTMENT 1 FOOTING DATA TABLE

LOCATION	SERVICE PERMISSIBLE NET CONTACT STRESS (SETTLEMENT)	STRENGTH FACTORED GROSS NOMINAL BEARING RESISTANCE $\psi_b = 0.45$ (ksf)	EXTREME EVENT FACTORED GROSS NOMINAL BEARING RESISTANCE $\psi_b = 1.00$ (ksf)
ABUT 1	6.4	22.0	26.5

SCOUR DATA TABLE

SUPPORT No.	LONG TERM (DEGRADATION AND CONTRACTION) SCOUR ELEVATION (ft)	SHORT TERM (LOCAL) SCOUR DEPTH (ft)
* ABUT 1	1542.40	6.0
ABUT 2	1542.40	12.1

* THE TOTAL SCOUR ELEVATION IS LOWER THAN THE SCOUR-RESISTANT GRANITE ROCK ELEVATION, IDENTIFIED IN THE GEOTECHNICAL BORINGS. THE MAXIMUM SCOUR DEPTHS ARE NOT EXPECTED TO EXTEND BEYOND THE GRANITE ROCK LAYER.

GENERAL NOTES
LOAD AND RESISTANCE FACTOR DESIGN

- Design: AASHTO LRFD Bridge Design Specifications, 6th Edition with Caltrans Amendments, dated January 2014
- Seismic Design: Caltrans Seismic Design Criteria (SDC) Version 1.7, April 2013
- Dead Load: Includes 35 psf for future wearing surface.
- Live Load: HL93 and Permit Design Vehicle
- Seismic Load: Design Acceleration Response Spectrum, Soil "Profile B"

ABUTMENT 2 PILE DATA TABLE

LOCATION	PILE TYPE	NOMINAL RESISTANCE (kips)		DESIGN TIP ELEVATIONS (ft) ¹	SPECIFIED TIP ELEVATION (ft)
		COMPRESSION	TENSION		
ABUT 2	24" CIDH	300	0	1531.00	1531.00

¹DESIGN TIP ELEVATIONS ARE CONTROLLED BY: (a) COMPRESSION, (b) SETTLEMENT, (c) LATERAL LOAD.

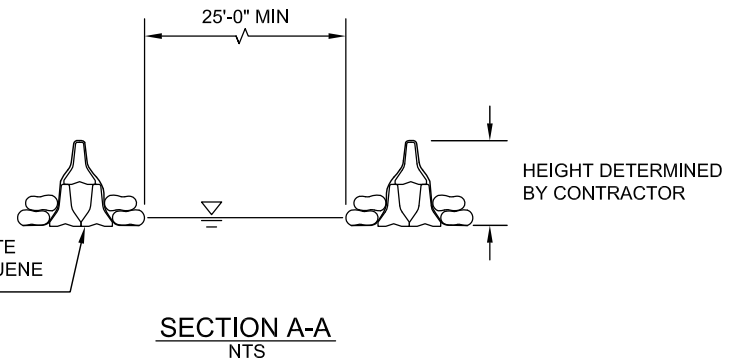
BENCHMARKS

B.M. #7407
BRASS DISK 14.01' RT. STA 15+16.24 ELEV 1579.18

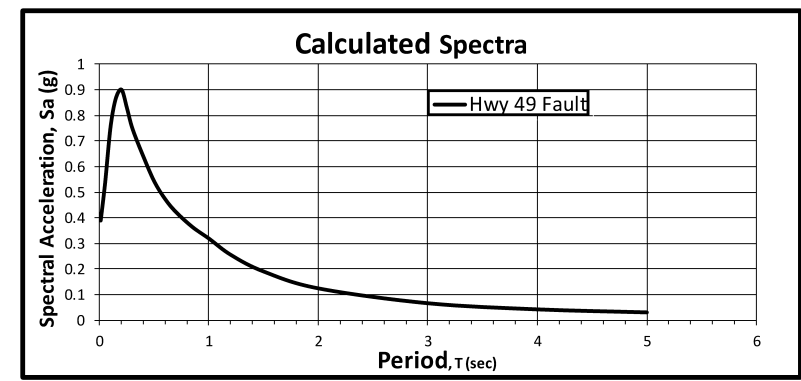
HYDRAULIC SUMMARY

DRAINAGE AREA:	32	SQUARE MILES	
FREQUENCY (YEARS)	50 YEAR	DESIGN FLOOD:	
		BASE FLOOD:	
		OVERTOPPING FLOOD:	
DISCHARGE (CUBIC FEET PER SECOND)	8,080	100 YEAR	13,500
WATER SURFACE (ELEVATION AT BRIDGE)	1557.6	1558.1	1564.5

FLOOD PLAN DATA ARE BASED UPON INFORMATION AVAILABLE WHEN THE PLANS WERE PREPARED AND ARE SHOWN TO MEET FEDERAL REQUIREMENTS. THE ACCURACY OF SAID INFORMATION IS NOT WARRANTED BY COUNTY AND INTERESTED OR AFFECTED PARTIES SHOULD MAKE THEIR OWN INVESTIGATION.



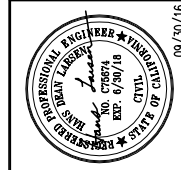
* The diversion plan shown is conceptual and may be revised by the Contractor. Diversion is required for foundation removal and may be utilized for falsework supports, if necessary, within the limits shown. Temporary diversion is only allowed during specified construction windows. See Special Provisions.



Reinforced Concrete: $f_y = 60,000$ psi
 $f'_c = 4,000$ psi
 $n = 8$
Prestressing Steel: See "Prestressing Notes" on Girder Layout" sheet

PLOT DATE: 10-17-16 13:29:29 477638_C_FP.dwg

REVISIONS		
NO.	DESCRIPTION	DATE



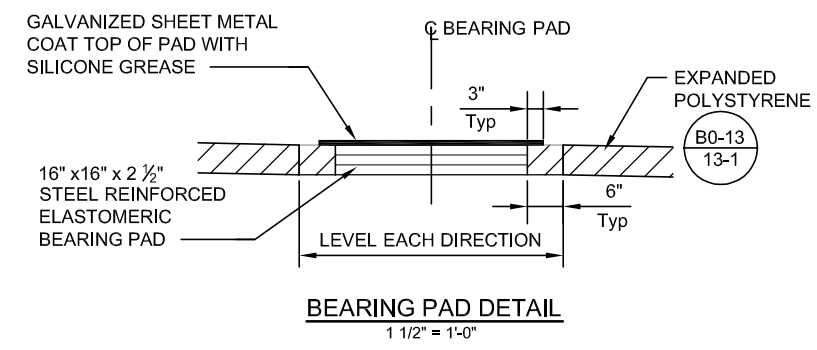
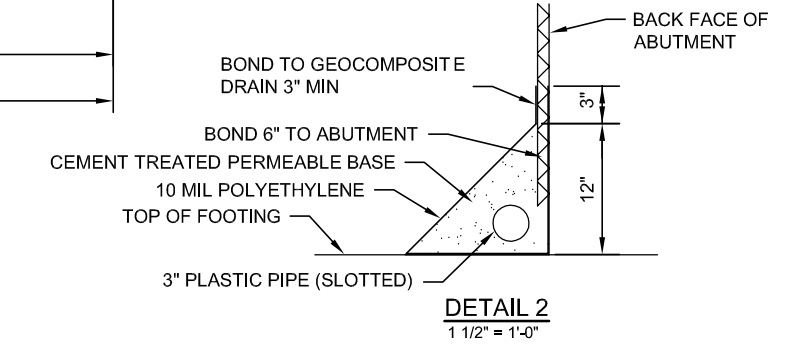
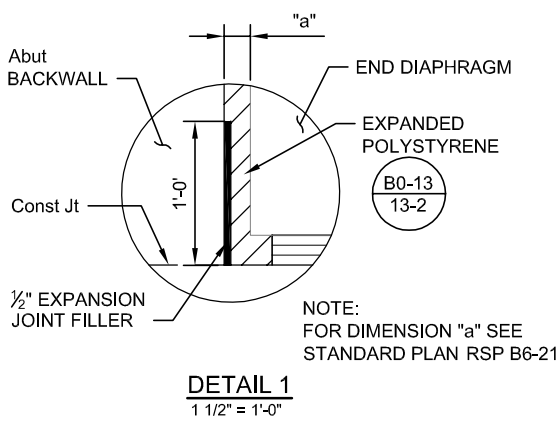
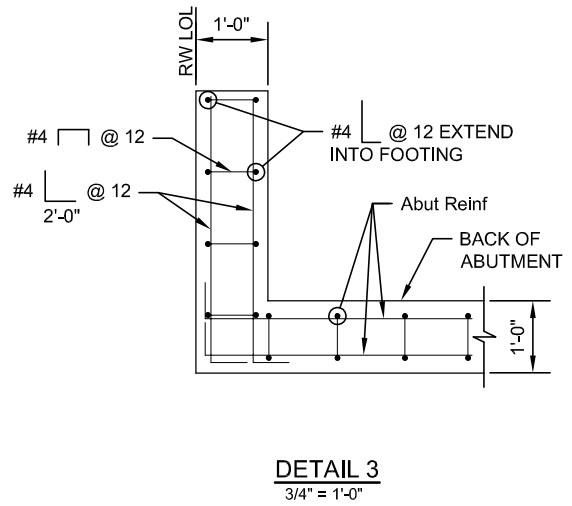
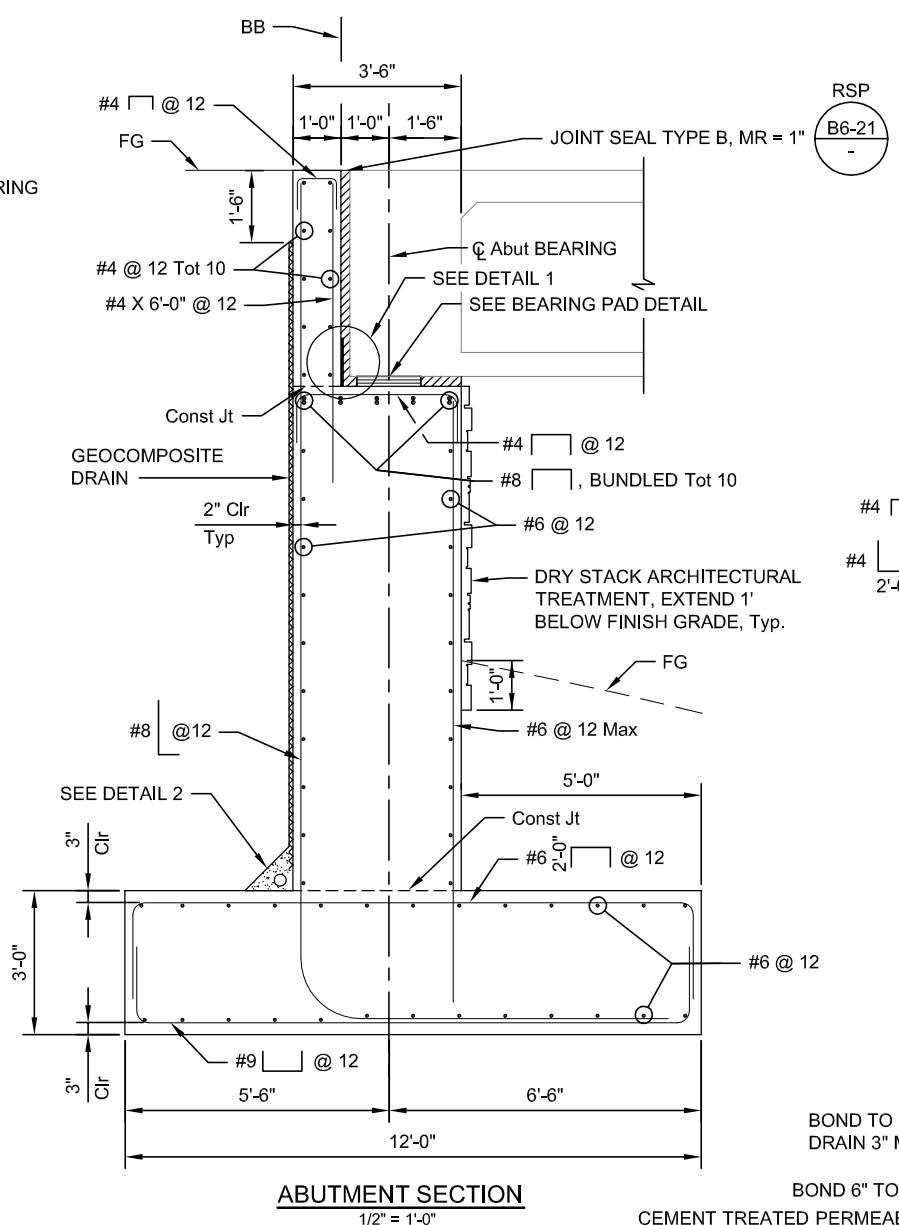
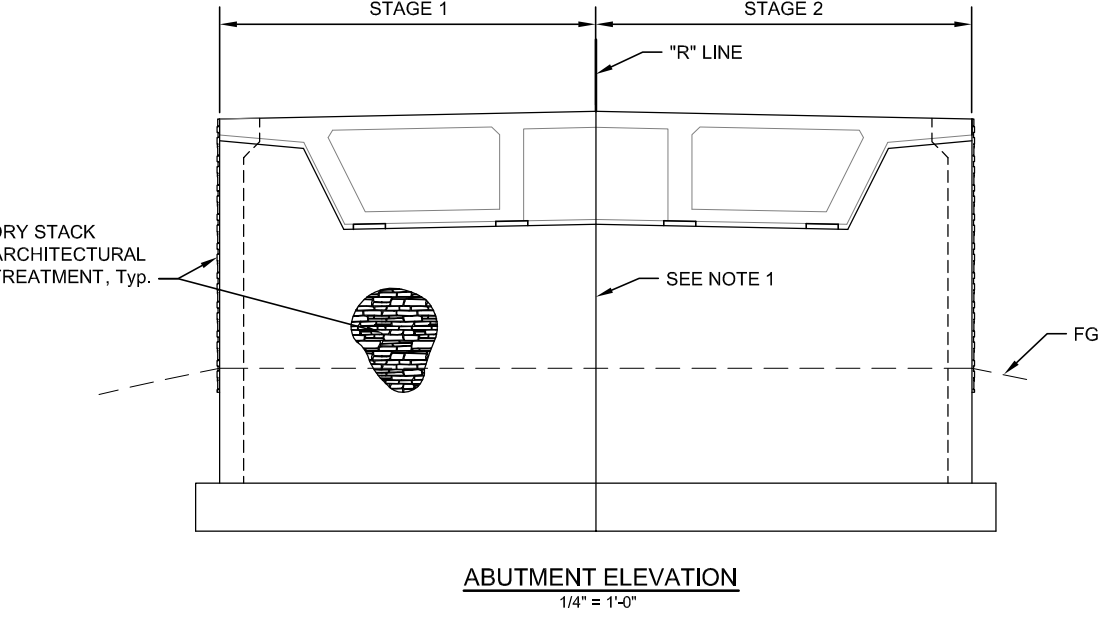
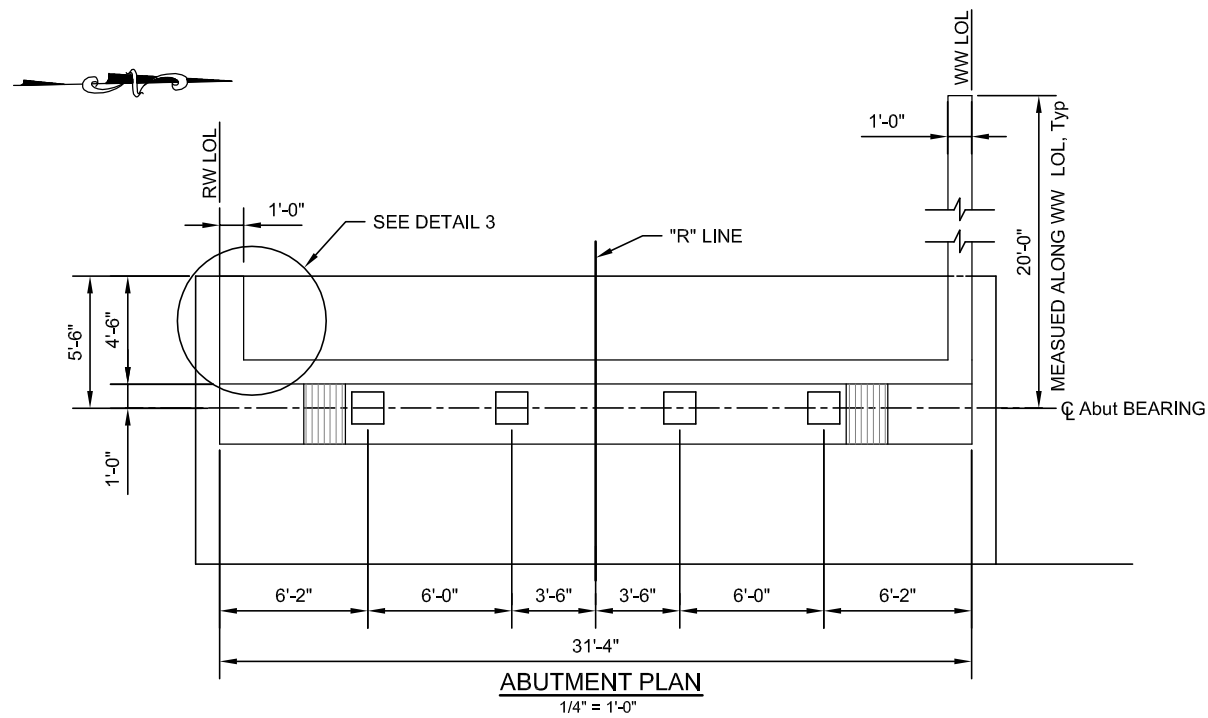
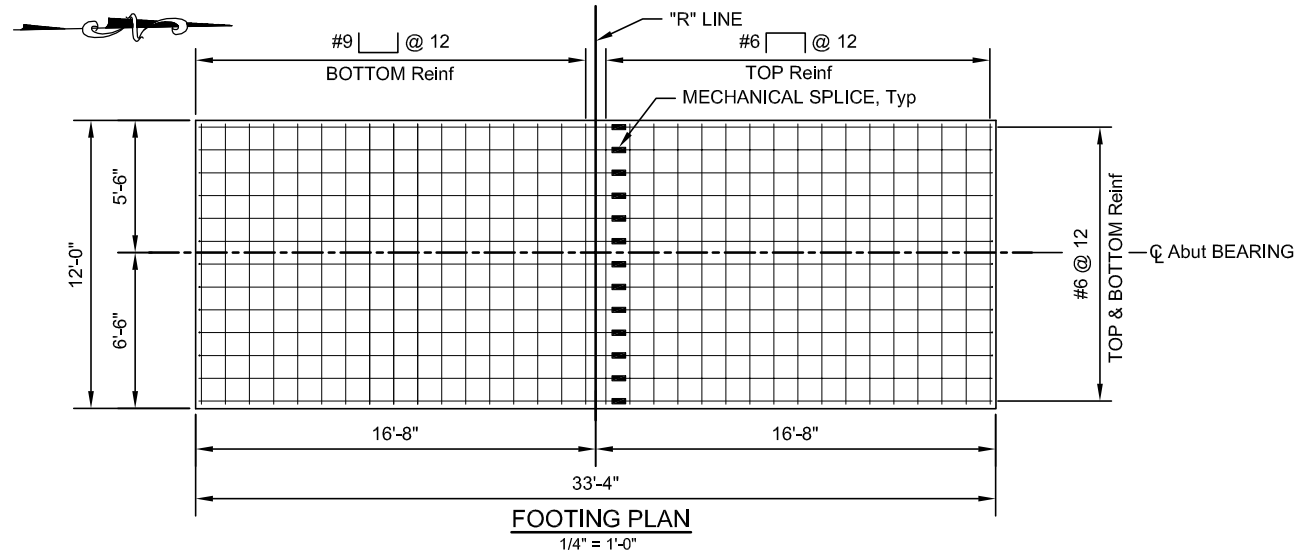
NEVADA COUNTY
DEPARTMENT OF PUBLIC WORKS
DESIGN/CONSTRUCTION DIVISION



RETRAC WAY BRIDGE
REPLACEMENT PROJECT
ABUTMENT No. 1 LAYOUT

DRAWING:
DESIGNED: H. LARSEN
DRAWN: P. WALKER
CHECKED: J. ELWOOD
JOB NO: 477638
DATE: SEP 30, 2016

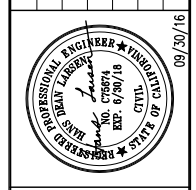
SHEET
S-4
18 OF 25 SHEETS



- NOTES:**
- Shoring to be provided as needed for stage 1 construction.
 - For Shear Key and Wingwall Details see "ABUTMENT DETAILS" Sheet.

PLOT DATE: 09-29-16 13:37:22 477638_D_A01.dwg

REVISIONS	
NO.	DESCRIPTION

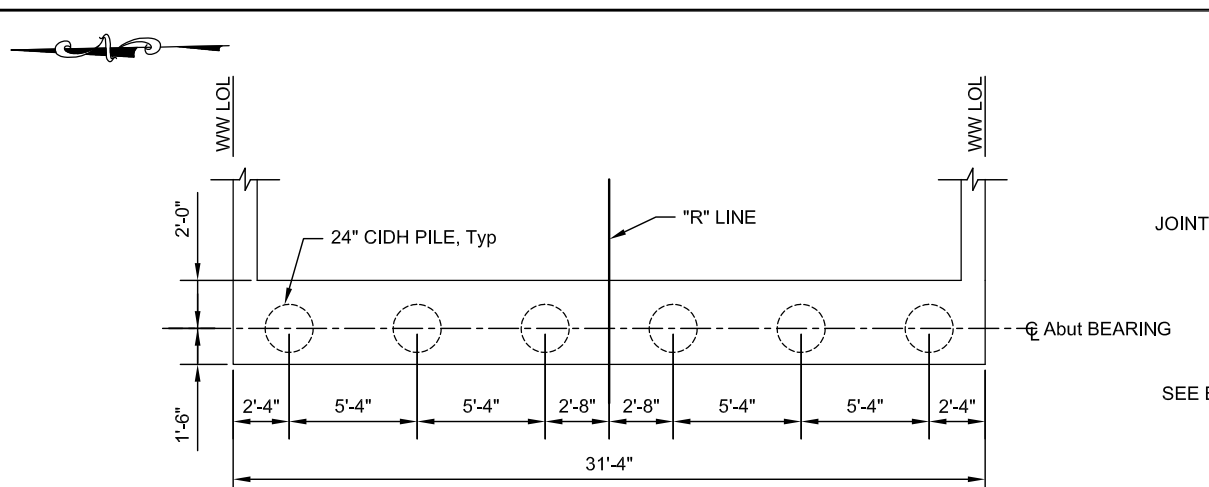


NEVADA COUNTY
DEPARTMENT OF PUBLIC WORKS
DESIGN/CONSTRUCTION DIVISION

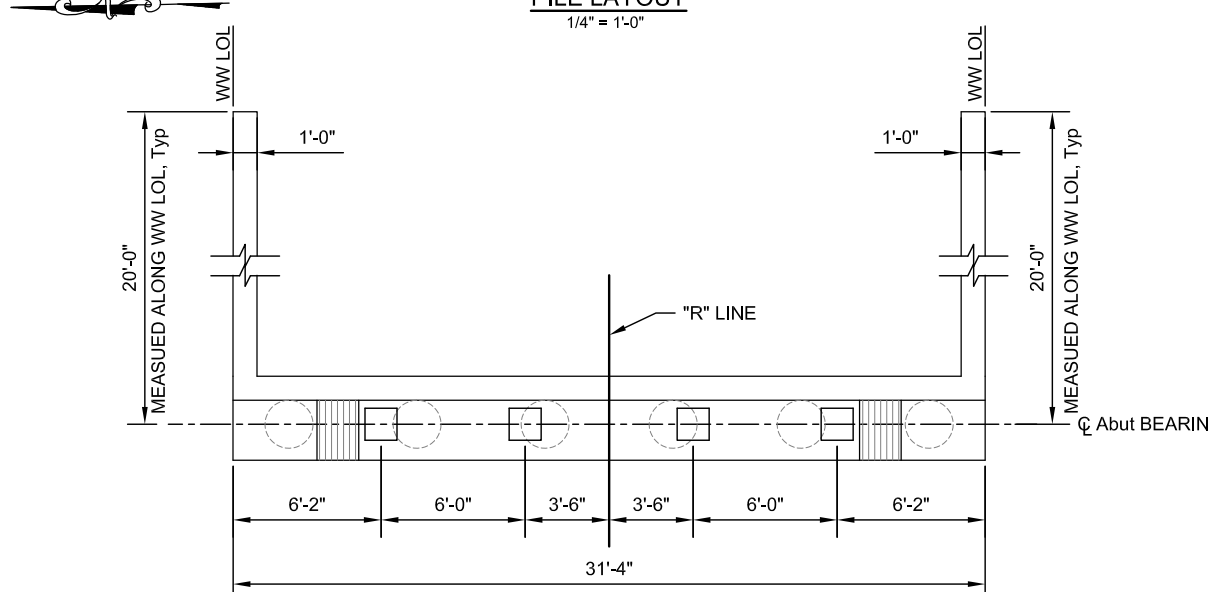
**RETRAC WAY BRIDGE
REPLACEMENT PROJECT
ABUTMENT No. 2 LAYOUT**

DRAWING:
DESIGNED: H. LARSEN
DRAWN: P. WALKER
CHECKED: J. ELWOOD
JOB NO: 477638
DATE: SEP 30, 2016

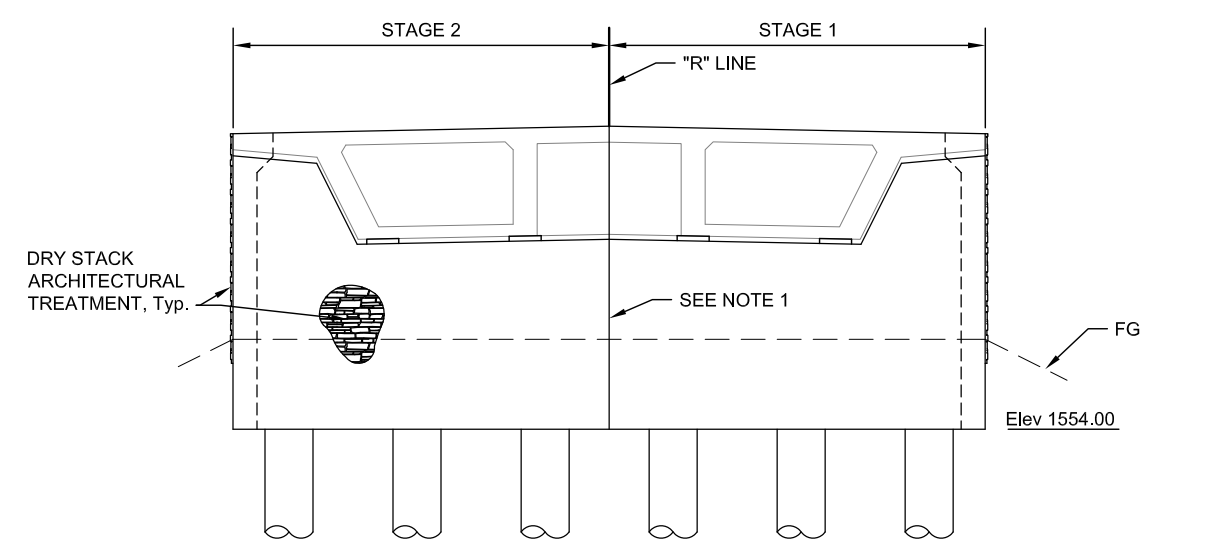
SHEET
S-5
19 OF 25 SHEETS



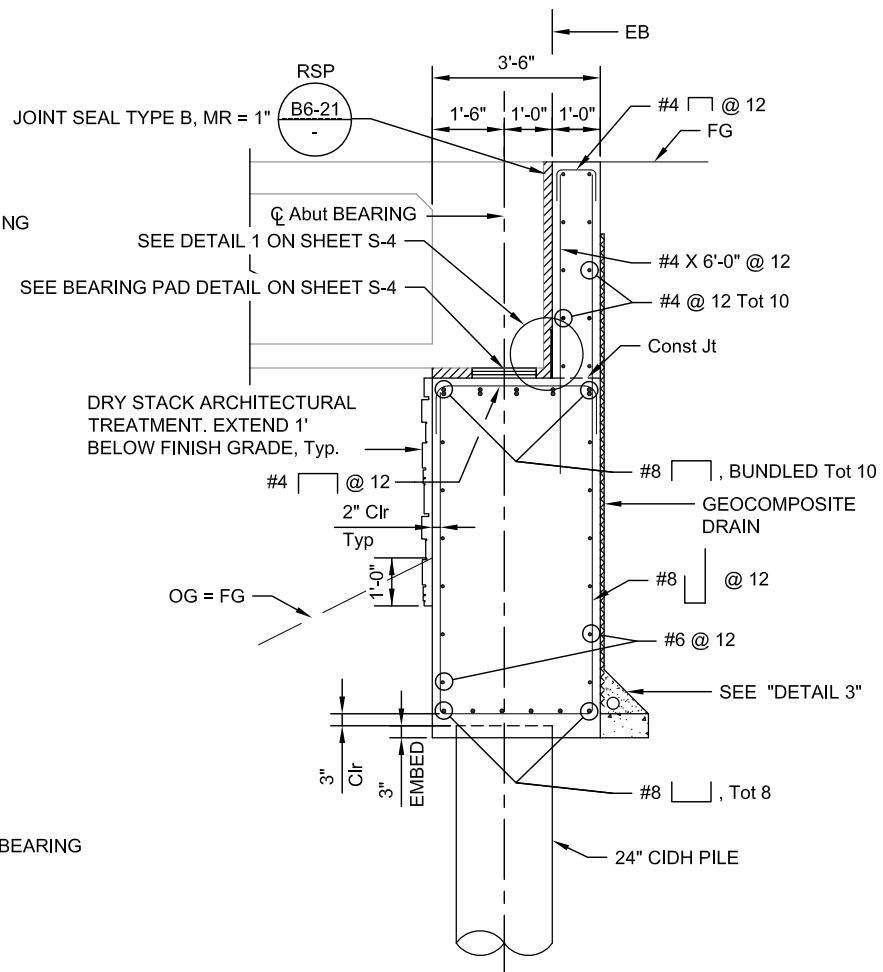
PILE LAYOUT
1/4" = 1'-0"



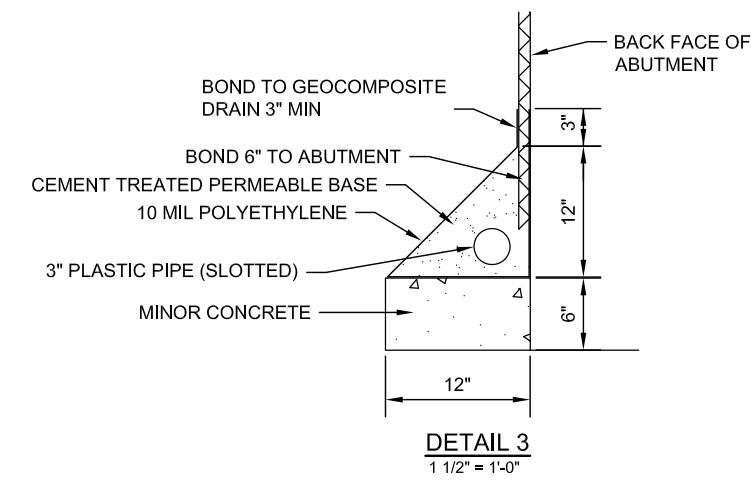
ABUTMENT PLAN
1/4" = 1'-0"



ABUTMENT ELEVATION
1/4" = 1'-0"

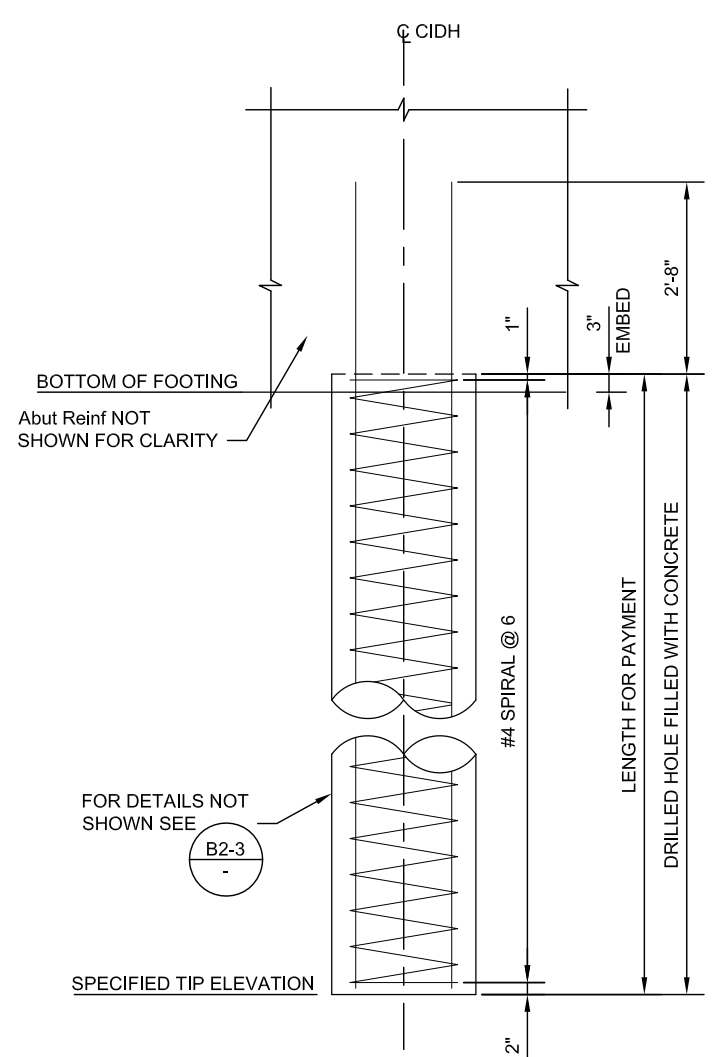


ABUTMENT SECTION
1/2" = 1'-0"

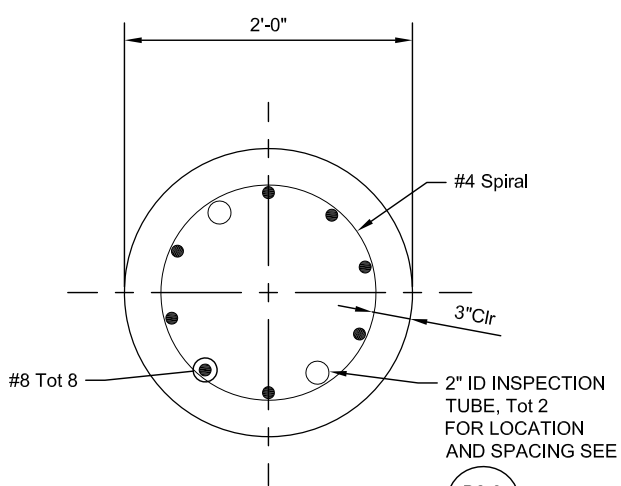


DETAIL 3
1 1/2" = 1'-0"

- NOTES:**
- Shoring to be provided as needed for stage 1 construction.
 - For Shear Key and Wingwall Details see (ABUTMENT DETAILS) Sheet.



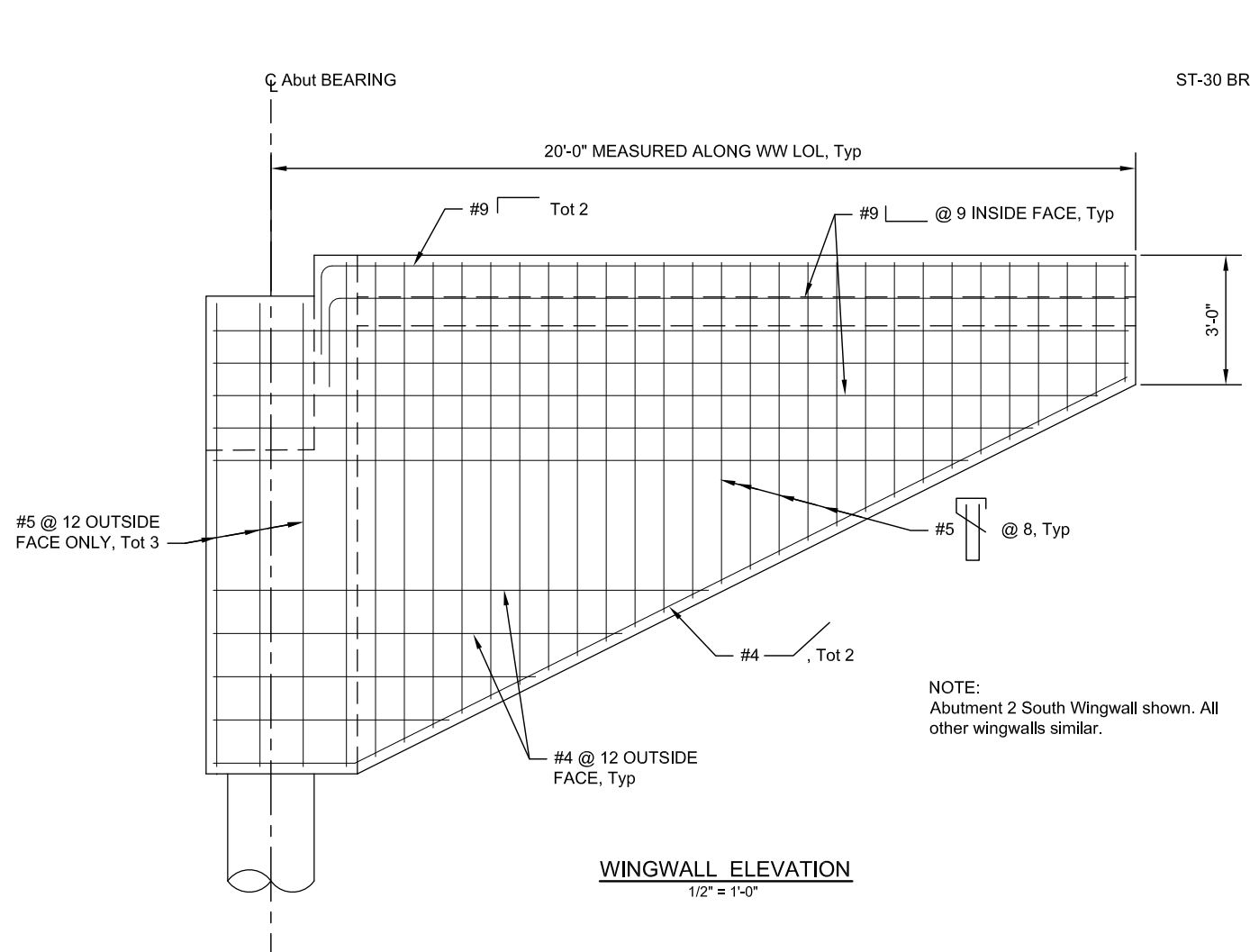
24" CIDH PILE ELEVATION
3/4" = 1'-0"



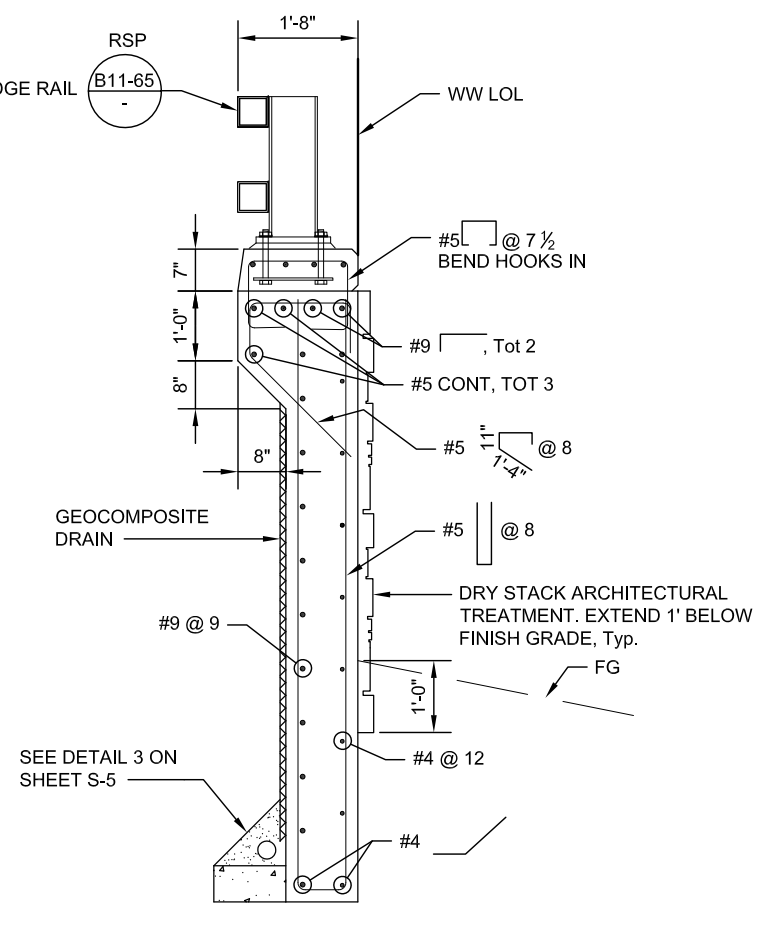
24" CIDH PILE SECTION
1 1/2" = 1'-0"

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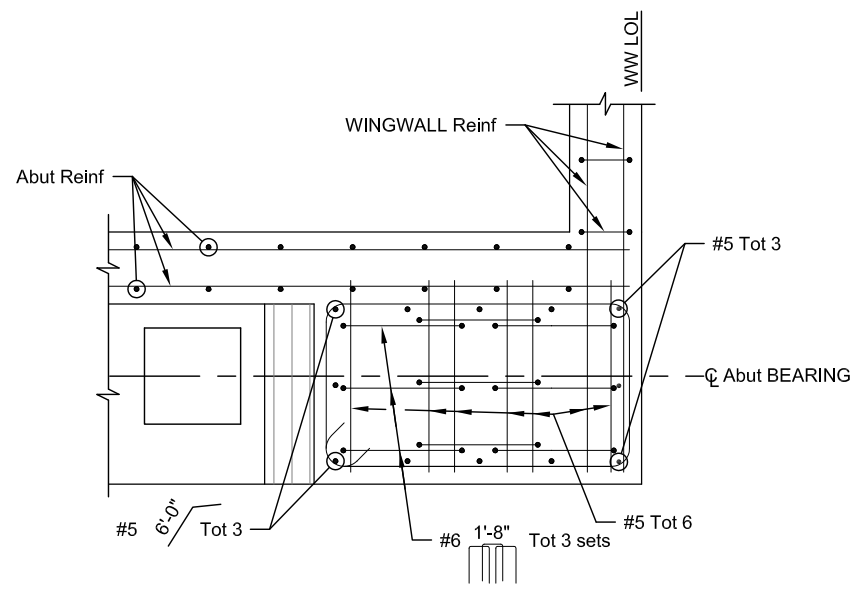
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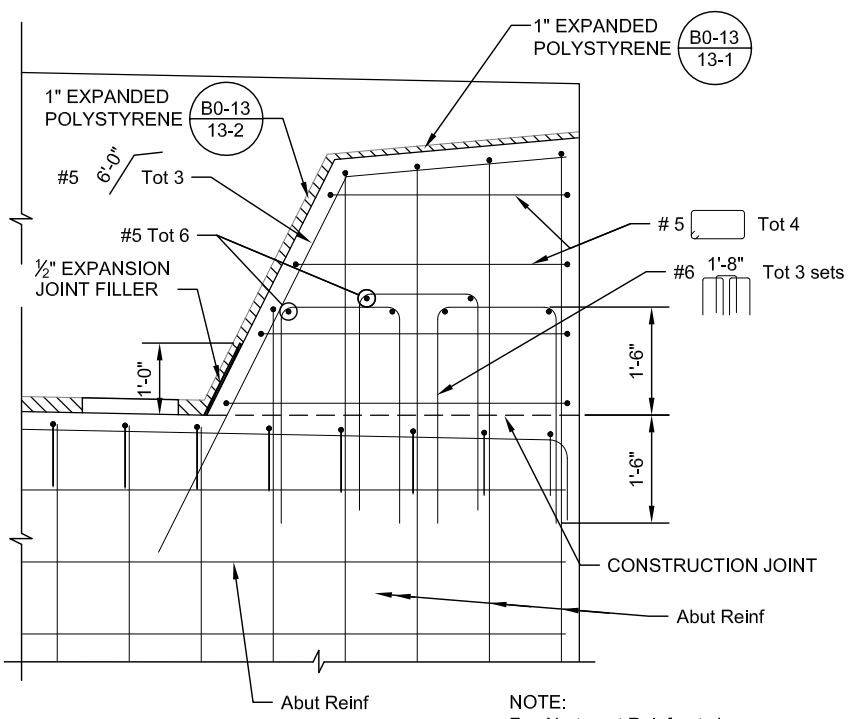
WINGWALL ELEVATION
1/2" = 1'-0"



WINGWALL SECTION
3/4" = 1'-0"

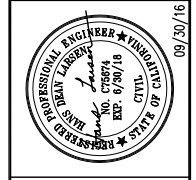


SHEAR KEY PLAN
3/4" = 1'-0"



SHEAR KEY SECTION
3/4" = 1'-0"

REVISIONS		
NO.	DESCRIPTION	DATE



NEVADA COUNTY
DEPARTMENT OF PUBLIC WORKS
DESIGN/CONSTRUCTION DIVISION



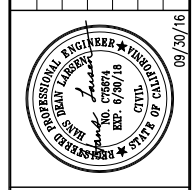
**RETRAC WAY BRIDGE
REPLACEMENT PROJECT
ABUTMENT DETAILS**

DRAWING:
DESIGNED: H.LARSEN
DRAWN: P.WALKER
CHECKED: J. ELWOOD
JOB NO: 477638
DATE: SEP 30, 2016

SHEET
S-6
20 OF 25 SHEETS

REVISIONS

NO.	DESCRIPTION	BY	DATE



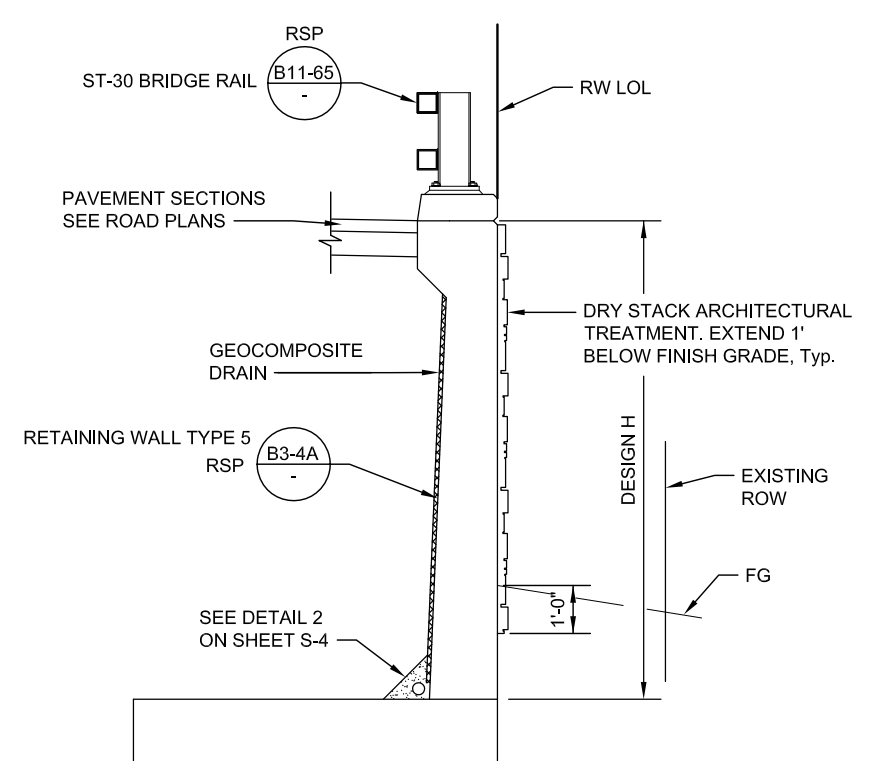
NEVADA COUNTY
DEPARTMENT OF PUBLIC WORKS
DESIGN/CONSTRUCTION DIVISION



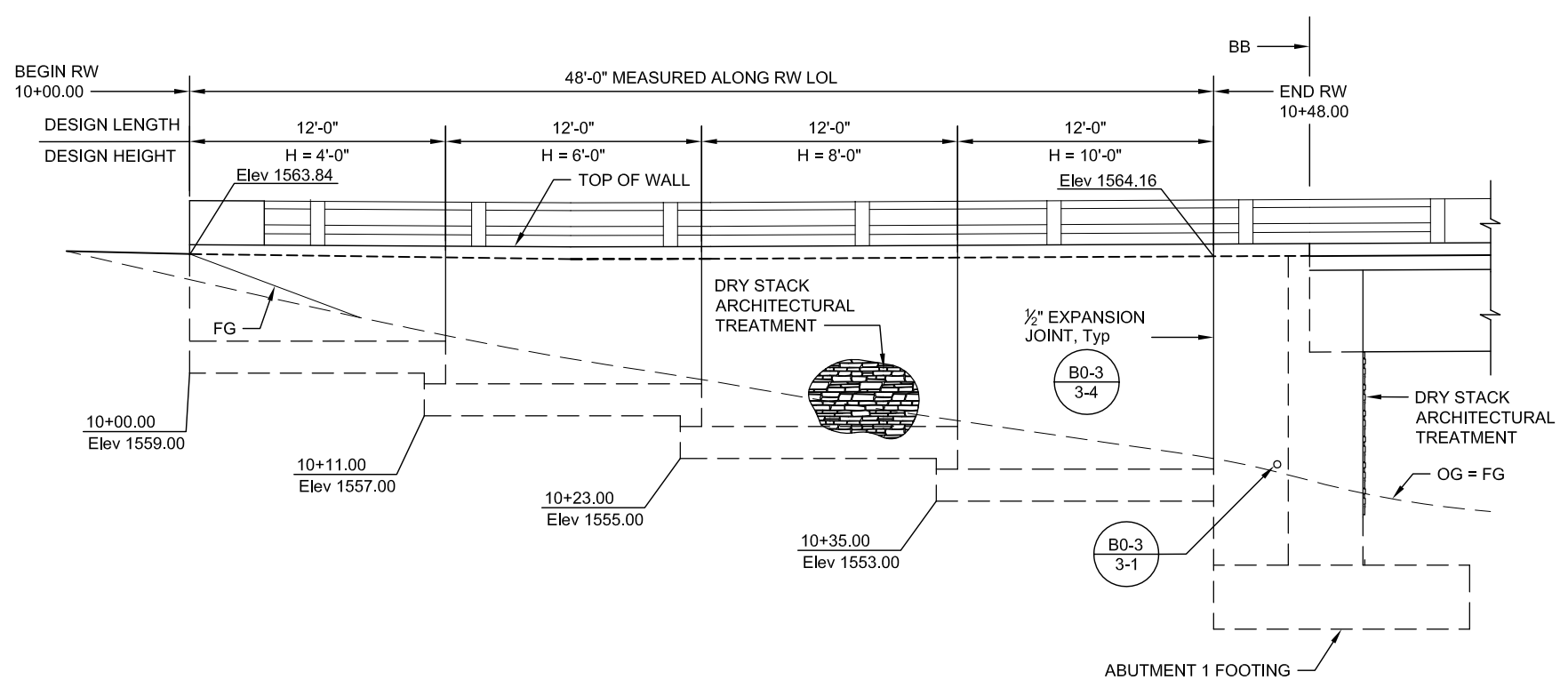
RETRAC WAY BRIDGE
REPLACEMENT PROJECT
RETAINING WALL LAYOUT

DRAWING:
DESIGNED: H. LARSEN
DRAWN: P. WALKER
CHECKED: J. ELWOOD
JOB NO: 477638
DATE: SEP 30, 2016

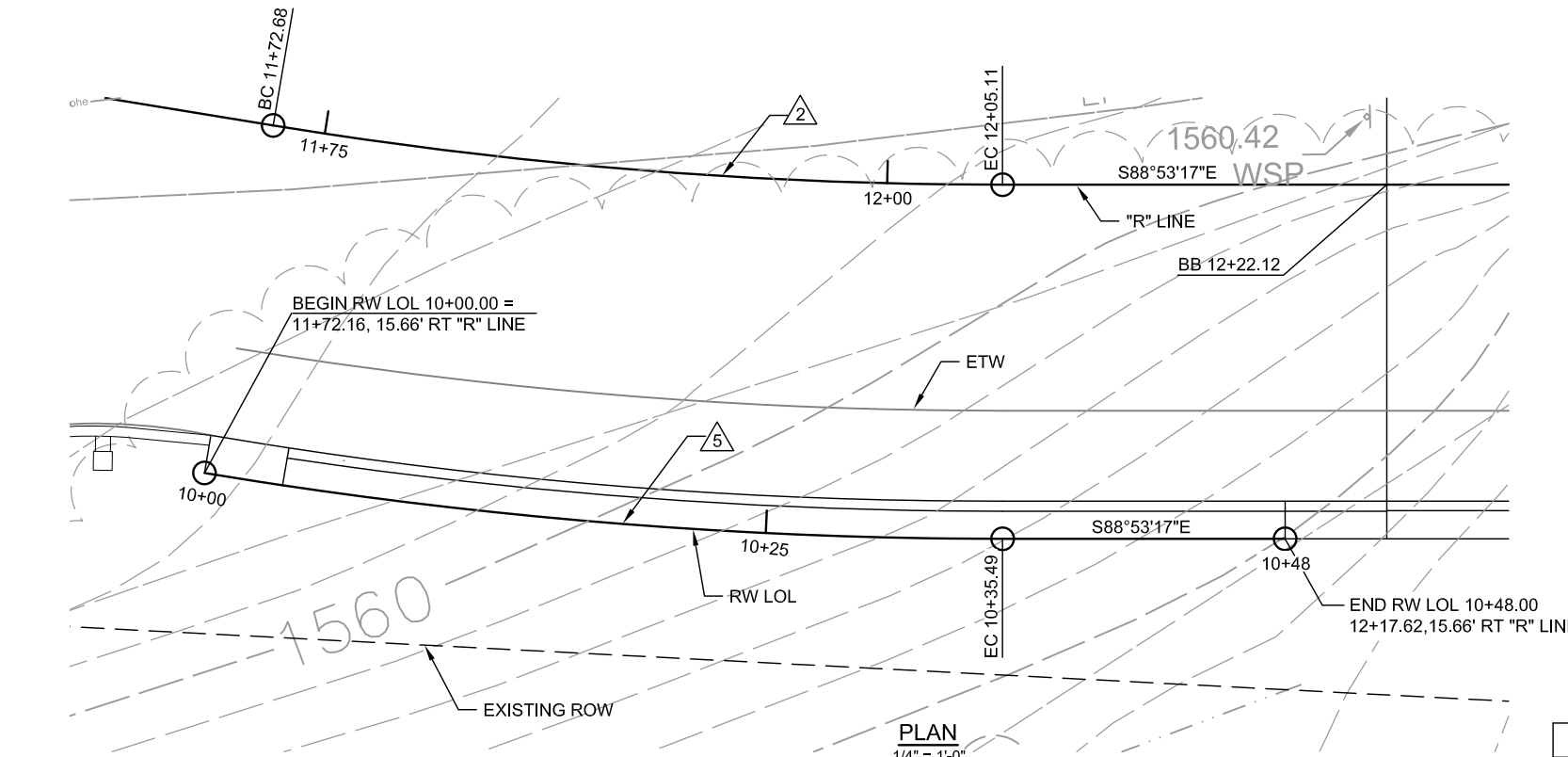
SHEET
S-7
21 OF 25 SHEETS



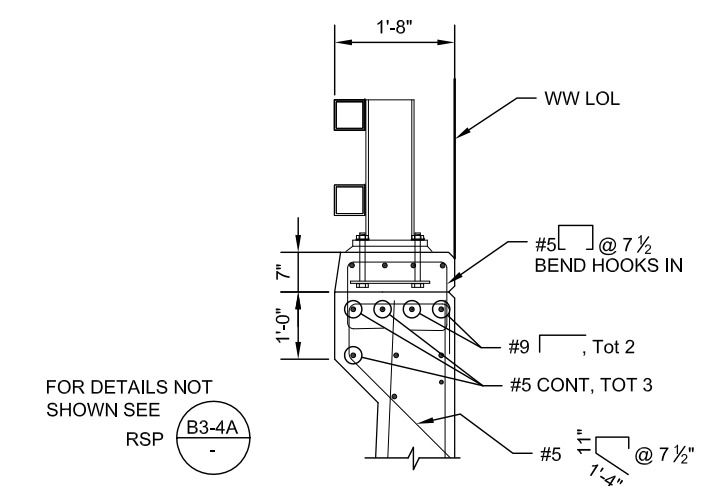
TYPICAL SECTION
1/2" = 1'-0"



DATUM ELEVATION = 1540.00
DEVELOPED ELEVATION
1/4" = 1'-0"



PLAN
1/4" = 1'-0"



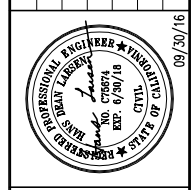
STEM HAUNCH DETAIL
3/4" = 1'-0"

CURVE DATA

NO.	R	Δ	L	T
2	200'	09°17'28"	32.43'	16.25'
5	215.67'	09°25'43"	35.49'	17.79'

PLOT DATE: 09-29-16 13:41:46 477638_G_RW01.dwg

REVISIONS	
NO.	DESCRIPTION

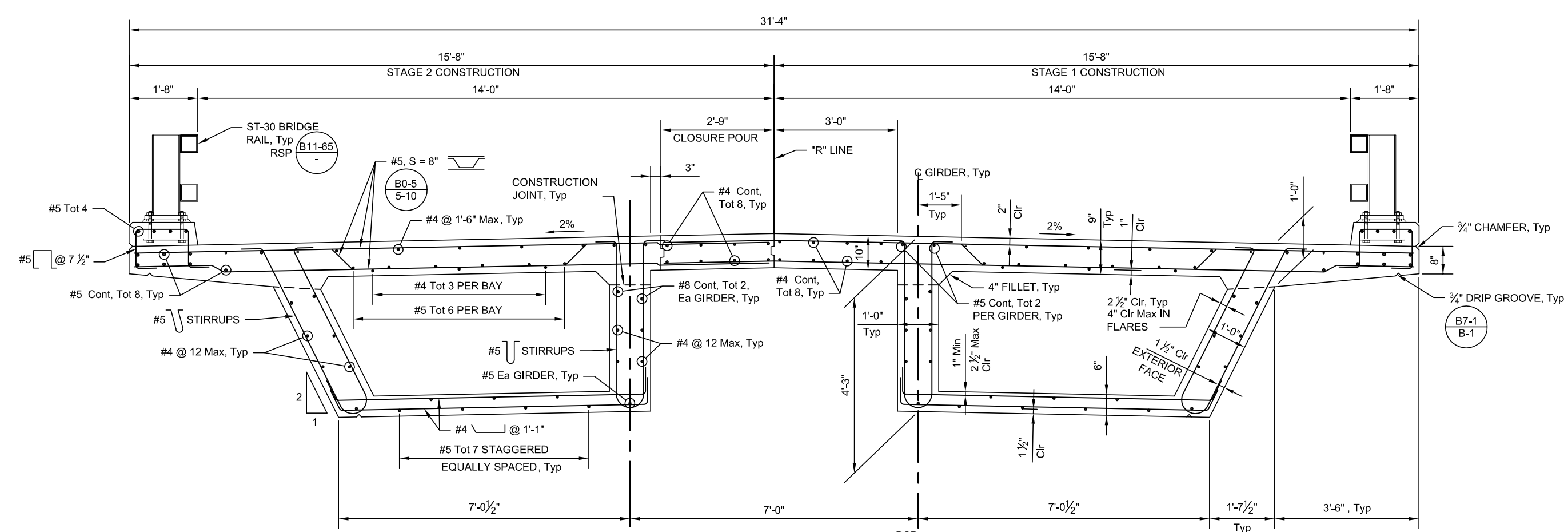


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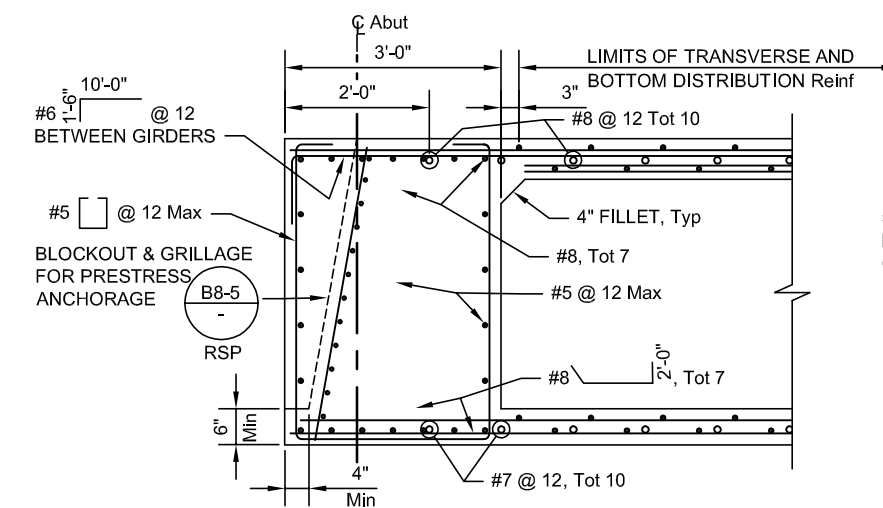
RETRAC WAY BRIDGE
 REPLACEMENT PROJECT
 TYPICAL SECTION

DRAWING:	
DESIGNED:	H. LARSEN
DRAWN:	P. WALKER
CHECKED:	J. ELWOOD
JOB NO:	477638
DATE:	SEP 30, 2016

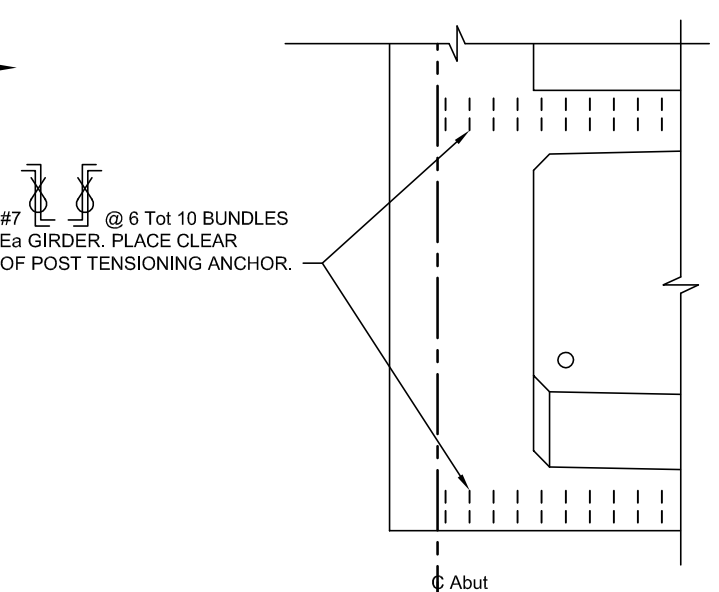
SHEET
S-8
 22 OF 25 SHEETS



TYPICAL SECTION
 3/4" = 1'-0"



END DIAPHRAGM DETAIL
 3/4" = 1'-0"

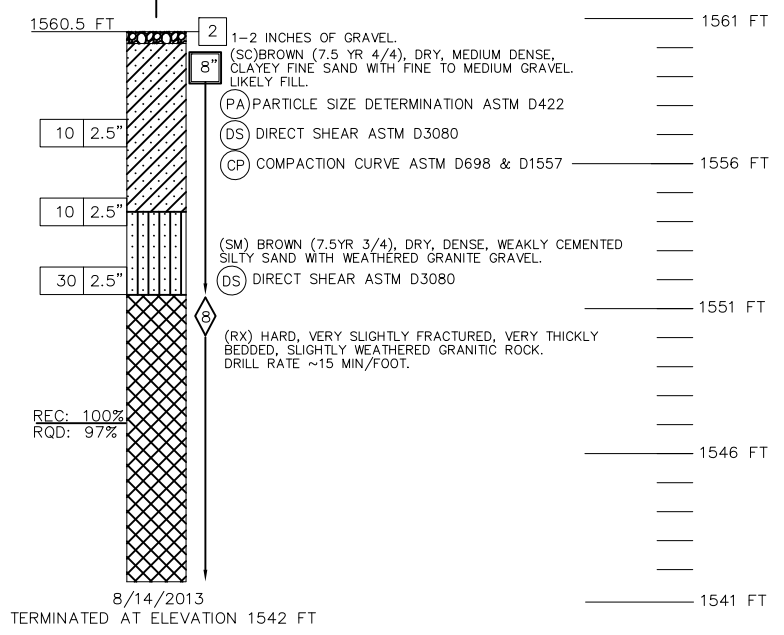
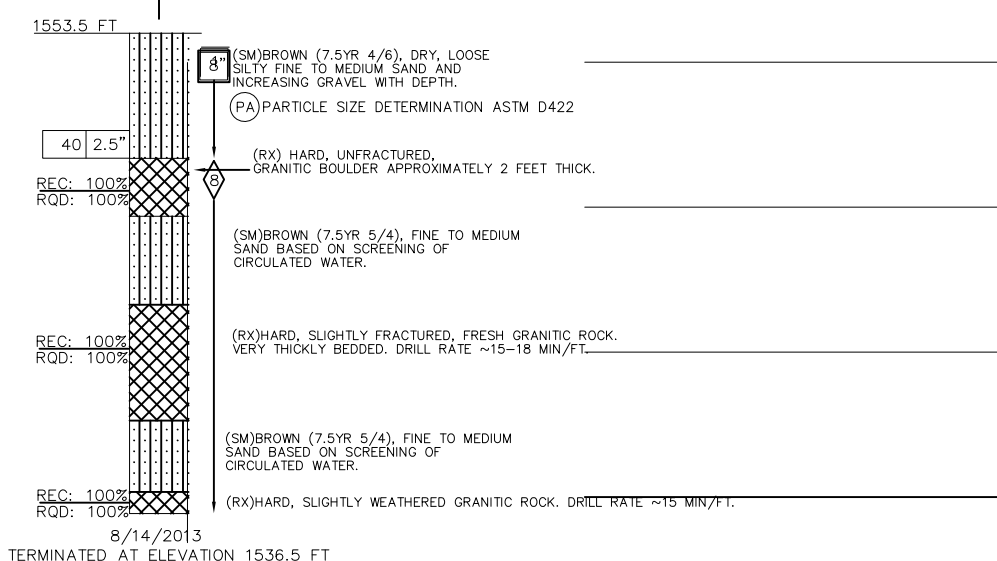
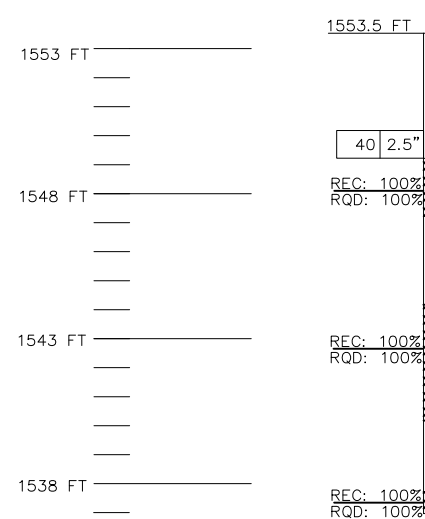
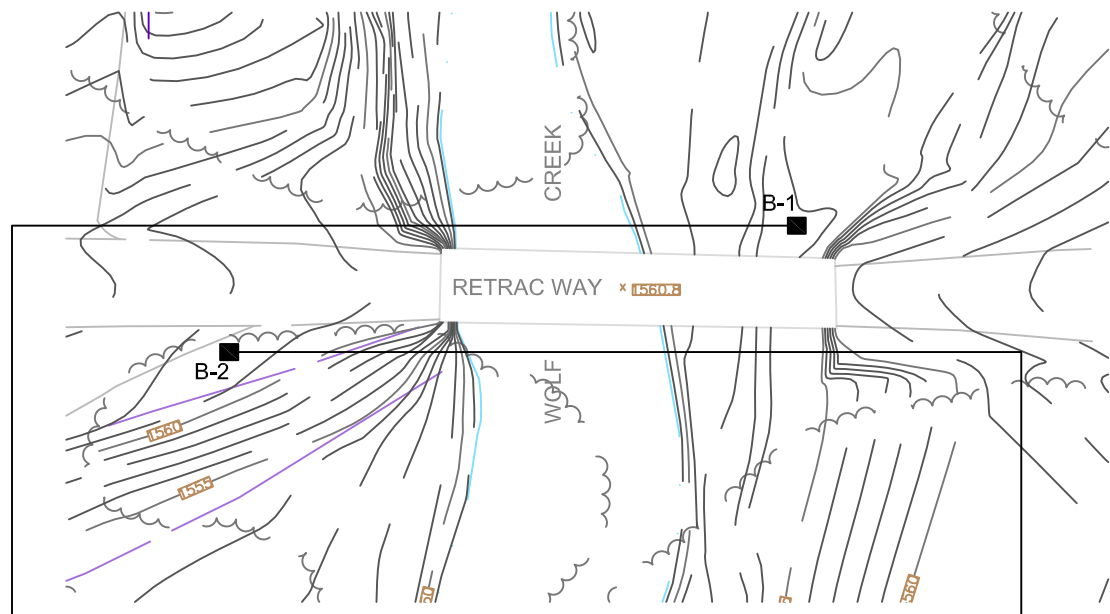


END GIRDER DETAIL
 1/2" = 1'-0"

NOTES:
 1. Transverse joints are not permitted unless approved by Engineer.

PLOT DATE: 09-29-16 13:42:32 477638_H_TS.dwg

SCALE 1" = 40'



REVISIONS			
NO.	DESCRIPTION	BY	DATE

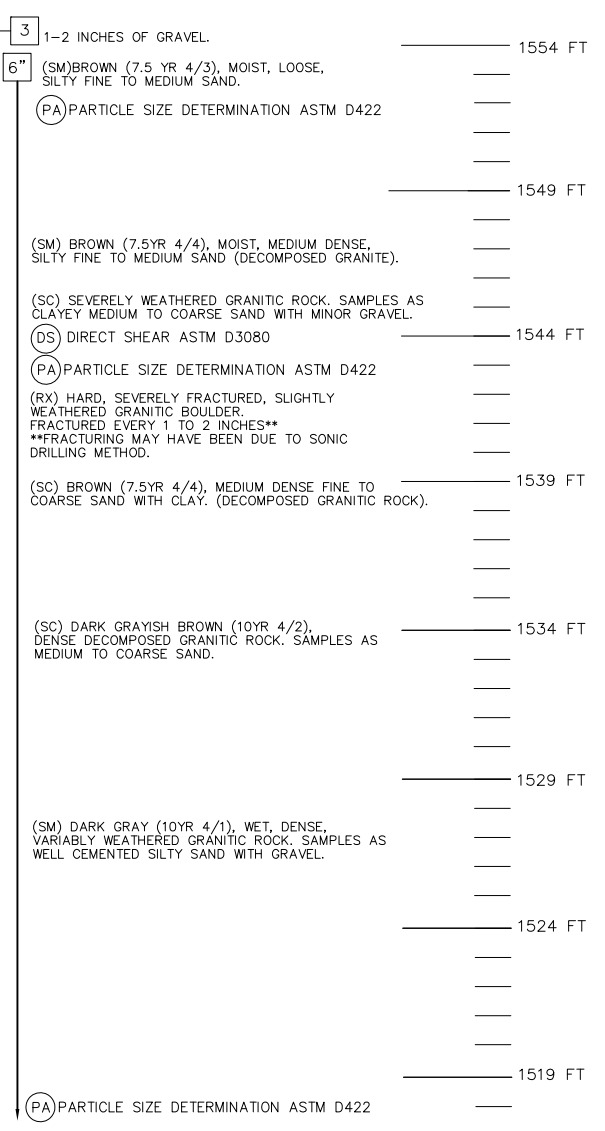
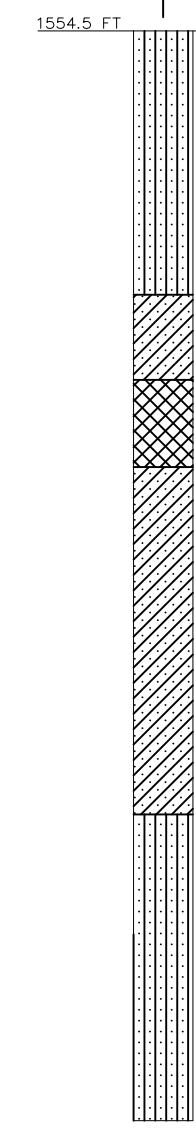
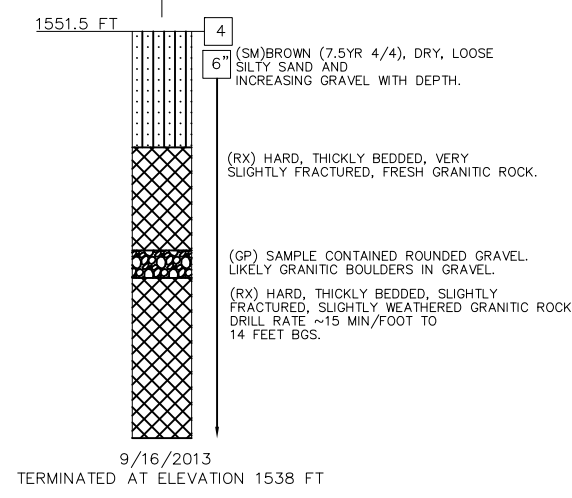
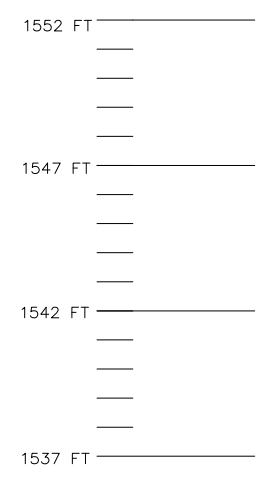
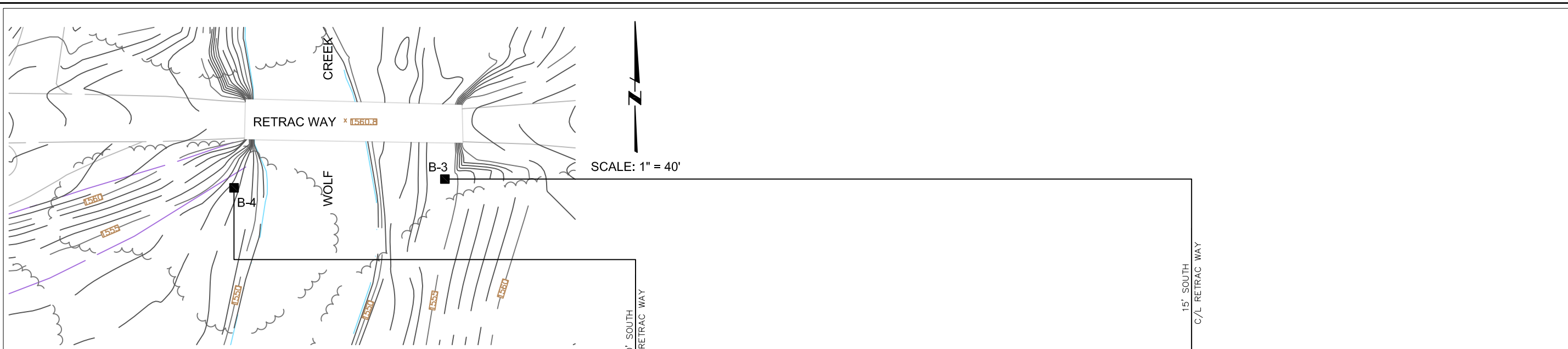


NEVADA COUNTY
 DEPARTMENT OF PUBLIC WORKS
 DESIGN/CONSTRUCTION DIVISION



RETRAC WAY BRIDGE
 REPLACEMENT PROJECT
 No. 17C0084

DRAWING:
 DESIGNED: C. DIEZ
 DRAWN: C. DIEZ
 CHECKED: C. KULL
 JOB NO:
 DATE: 04-28-2016



REVISIONS			
NO.	DESCRIPTION	BY	DATE



NEVADA COUNTY
DEPARTMENT OF PUBLIC WORKS
DESIGN/CONSTRUCTION DIVISION



RETRAC WAY BRIDGE
REPLACEMENT PROJECT
No. 17C0084

DRAWING:	C. DIEZ
DESIGNED:	C. DIEZ
DRAWN:	C. DIEZ
CHECKED:	C. KULL
JOB NO:	
DATE:	04-28-2016
SHEET	