

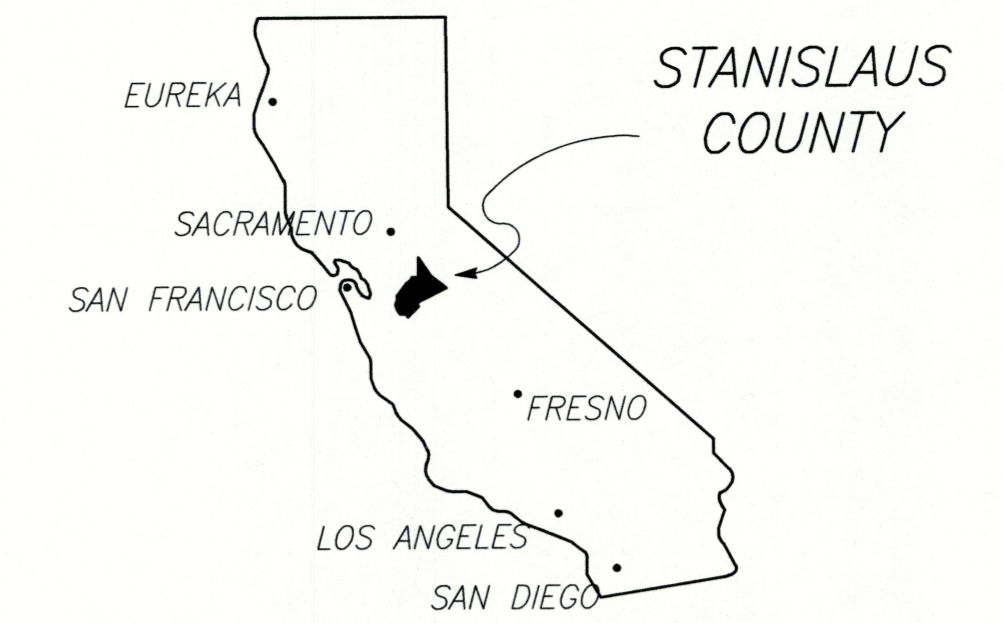
INDEX OF SHEETS

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STRUCTURE PLANS	
42-70	CROWS LANDING ROAD BRIDGE Br No. 38C-0339

STANISLAUS COUNTY
DEPARTMENT OF PUBLIC WORKS

PLANS FOR THE CONSTRUCTION OF
CROWS LANDING ROAD/SAN JOAQUIN RIVER
BRIDGE REPLACEMENT PROJECT



STATE OF CALIFORNIA

DESIGN DESIGNATION

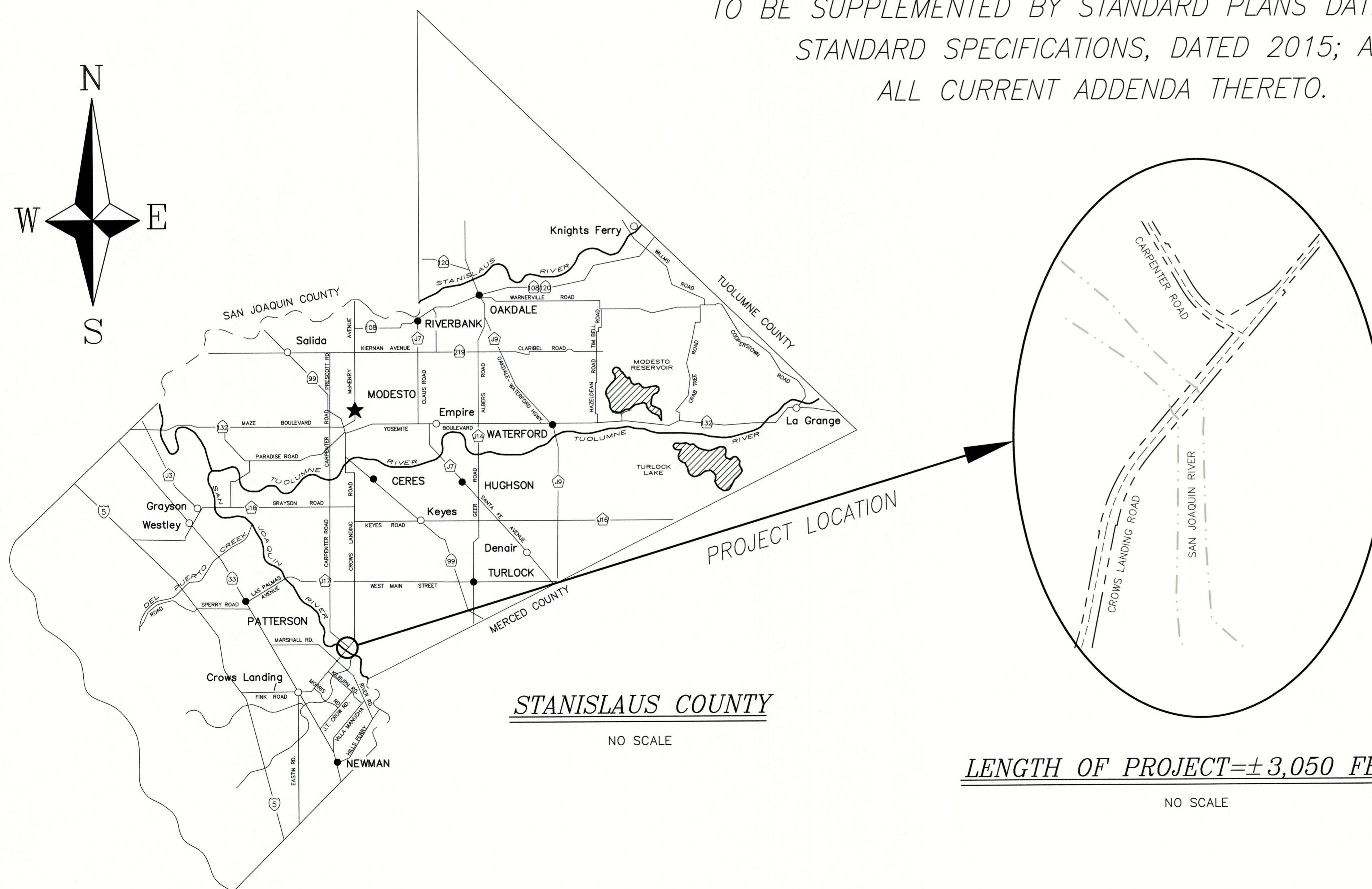
CROWS LANDING ROAD - N & S

ADT (2010) = 6,236
ADT (2029) = 7,334
TI = 11
V = 55 MPH

CARPENTER ROAD - N & S

ADT (2006) = 1,561
ADT (2029) = 1,900
TI = 10

FEDERAL FUNDED PROJECT: STPLZ-5938(076)
TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2015;
STANDARD SPECIFICATIONS, DATED 2015; AND
ALL CURRENT ADDENDA THERETO.



STANISLAUS COUNTY

NO SCALE

LENGTH OF PROJECT = ± 3,050 FEET

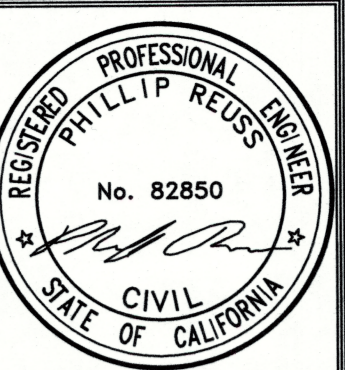
NO SCALE

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

COUNTY OF STANISLAUS

David A. Leamon 6/25/2020
DAVID A. LEAMON, PE
DIRECTOR OF PUBLIC WORKS
RCE 60434

Phillip Reuss 6/24/2020
PHILLIP REUSS, PE
RCE 82850
NV5, INC.



NO.	DESCRIPTIONS	DATE	APPROVED

STANISLAUS COUNTY
DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND OPERATIONS DIVISION
1716 MORRAN ROAD - MODESTO, CA 95358



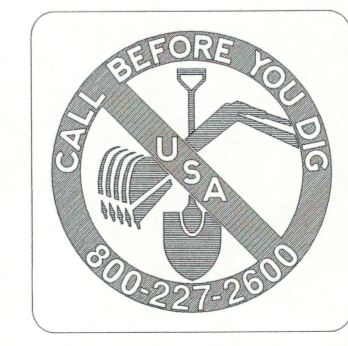
CROWS LANDING ROAD/SAN JOAQUIN RIVER
BRIDGE REPLACEMENT PROJECT
TITLE SHEET

JOB NO. 226217-68
DATE 6/24/2020
DR BY PR
CK BY JW
SCALE N/A

SHEET NUMBER
T-1
1 OF 70 SHEETS



2525 NATOMAS PARK DRIVE, SUITE 300 SACRAMENTO, CA 95833
916.641.8100 TEL 916.641.8222 FAX WWW.NV5.COM



CONSTRUCTION NOTES

A. MISCELLANEOUS

- ALL WORK SHALL BE IN ACCORDANCE WITH THE 2015 EDITION OF STANDARD SPECIFICATIONS, STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, REFERRED TO AS "STANDARD SPECIFICATIONS" AND WITH STANISLAUS COUNTY SPECIFICATIONS AND IMPROVEMENT STANDARDS. ALL IMPROVEMENTS ARE SUBJECT TO THE INSPECTION AND APPROVAL OF THE PUBLIC WORKS DEPARTMENT.
- CONTRACTOR SHALL ONLY USE EQUIPMENT PROVIDED WITH A SPARK ARRESTOR DEVICE TO REDUCE A POTENTIAL FIRE HAZARD.
- THE CONTRACTOR SHALL TAKE PRECAUTIONARY MEASURES TO PROTECT ALL UTILITIES. THE CONTRACTOR SHALL DO NO EXCAVATION UNTIL ALL UTILITY AGENCIES AND THE STANISLAUS COUNTY DEPARTMENT OF PUBLIC WORKS HAVE BEEN NOTIFIED AND HAVE BEEN GIVEN THE OPPORTUNITY TO MARK THEIR FACILITIES IN THE FIELD. THE CONTRACTOR SHALL CALL U.S.A. AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO DOING ANY EXCAVATING.
- CONTRACTOR SHALL PRESERVE ALL SURROUNDING PROPERTY BY CONFINING OPERATIONS WITHIN THE "LIMITS OF WORK".
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE OSHA REGULATIONS.
- THESE PLANS HAVE BEEN CHECKED BY THE STANISLAUS COUNTY DEPARTMENT OF PUBLIC WORKS AND/OR AUTHORIZED REPRESENTATIVE, BUT SUCH CHECKING AND/OR APPROVAL DOES NOT RELIEVE THE CONTRACTOR FROM HIS/HER RESPONSIBILITY TO CORRECT ERRORS, OMISSIONS OR MAKE CHANGES REQUIRED BY CONDITIONS DISCOVERED IN THE FIELD DURING COURSE OF CONSTRUCTION.
- THE CONTRACTOR SHALL CONTROL DUST AT ALL TIMES. DUST CONTROL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE IMPLEMENTED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL GUIDELINES (INCLUDING, BUT NOT LIMITED TO THE SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT).
- CONSTRUCTION STAKING FOR STORM DRAINS, WATER LINES, FIRE HYDRANTS, ELECTROLIERS, ETC. SHALL BE DONE UNDER THE DIRECTION OF A REGISTERED CIVIL ENGINEER OR LICENSED LAND SURVEYOR.
- UNLESS OTHERWISE APPROVED, HOUSE SERVICES, FIRE HYDRANT LATERALS, GAS AND TELEPHONE LINES, AND ALL OTHER UNDERGROUND UTILITIES SHALL BE INSTALLED PRIOR TO CONSTRUCTION AND ROAD PAVING.
- ALL LINES ABANDONED DURING CONSTRUCTION SHALL BE REMOVED.
- ALL INDEPENDENT LABORATORY INSPECTION REQUESTED BY THE COUNTY ENGINEER SHALL BE PAID FOR BY THE CONTRACTOR.
- STREET STRIPING SHALL INCLUDE STOP BARS, CENTERLINE STRIPING, AND LANE LINE MARKERS AND ALL OTHER MARKINGS REQUIRED BY THE ENGINEER. STRIPING SHALL BE DONE WITH THERMOPLASTIC AND REFLECTIVE MARKERS.
- ALL TRENCHES SHALL BE BACK FILLED IN ACCORDANCE WITH STANISLAUS COUNTY SPECIFICATIONS AND IMPROVEMENTS STANDARDS.
- WHEN WIDENING THE PAVEMENT ON AN EXISTING ROAD, THE EXISTING PAVEMENT SHALL BE CUT (SAW) TO A NEAT LINE AND REMOVED BACK TO AN EXISTING ADEQUATE STRUCTURAL SECTION, OR TO THE ORIGINAL ROAD SECTION. AN EXPLORATORY TRENCH, OR POT-HOLING, MAY BE REQUIRED TO DETERMINE THE LIMITS OF PAVEMENT REMOVAL.
- EXISTING ROADSIDE FACILITIES WITHIN THE PROJECT LIMITS THAT ARE DAMAGED OR DISPLACED, EVEN THOUGH THEY WERE NOT TO BE REMOVED, SHALL BE REPAIRED OR REPLACED PER STANISLAUS COUNTY STANDARDS EVEN IF DAMAGE OR DISPLACEMENT OCCURRED PRIOR TO ANY WORK PERFORMED BY THE CONTRACTOR.
- ASBESTOS CEMENT PIPE (ACP) OR FITTINGS SHALL NOT BE USED.
- PRIOR TO TRENCHING FOR STORM DRAIN PIPE, THE CONTRACTOR SHALL VERIFY, IN THE FIELD, THE SIZE AND LOCATION OF EXISTING PIPE AT THE POINT OF CONNECTION. ANY DEVIATION FROM THE PLANS SHALL BE RESOLVED BY THE DESIGN ENGINEER AND APPROVED BY THE COUNTY PRIOR TO TRENCHING.
- MANHOLES, VALVES, CLEAN OUTS, ETC. SHALL BE BROUGHT TO FINISH GRADE BY THE CONTRACTOR AFTER THE FINAL PAVING COURSE IS PLACED.
- STORM DRAIN PIPE SIZES SHALL NOT BE CHANGED WITHOUT THE APPROVAL OF STANISLAUS COUNTY.
- ALL TREES TO REMAIN SHALL BE PRESERVED AND PROTECTED BY ERECTING A 48" HIGH ORANGE CONSTRUCTION FENCE AROUND THE TREE TRUNK PRIOR TO STARTING WORK ON THE SITE.
- ALL CONSTRUCTION SITE ACTIVITIES SHALL CONFORM TO THE STATE WATER RESOURCES CONTROL BOARD, NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES), WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES OF STORM WATER RUNOFF ASSOCIATED WITH CONSTRUCTION ACTIVITY.
- AN APPROVED SWPPP SHALL BE SUBMITTED TO THE COUNTY AND MUST BE ON-SITE DURING ALL CONSTRUCTION ACTIVITIES.
- CONTRACTOR'S OPERATIONS SHALL BE PERFORMED IN A MANNER WHICH WILL NOT ALLOW HARMFUL POLLUTANTS TO ENTER SAN JOAQUIN RIVER. CONTRACTOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES (BMP'S) AS INDICATED IN THE SWPPP AND AS REQUIRED BY STANISLAUS COUNTY.
- ALL CONSTRUCTION SITE ACTIVITIES SHALL COMPLY WITH ALL CONDITIONS OF APPROVAL, DEVELOPMENT STANDARDS, AND/OR MITIGATION MEASURES ADOPTED BY THE PLANNING COMMISSION AND/OR BOARD OF SUPERVISORS FOR THE SPECIFIC PROJECT.
- PRIOR TO INITIATING ANY CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THAT ALL NECESSARY FEDERAL, STATE, AND LOCAL PERMITS AND/OR AUTHORIZATIONS HAVE BEEN OBTAINED.
- ALL WORK ADJACENT TO THE KINDER MORGAN PIPELINE SHALL ADHERE TO THE APPLICABLE PROVISIONS ENUMERATED IN THE "GUIDELINES FOR DESIGN AND CONSTRUCTION NEAR KINDER MORGAN HAZARDOUS LIQUID OPERATED FACILITIES" AND INFORMATION BULLETIN #03-001, ISSUED FOR THE OFFICE OF THE STATE FIRE MARSHALL CONCERNING ENCROACHMENTS WITHIN AND ADJACENT TO PIPELINE EASEMENTS.
- NOTIFY KINDER MORGAN RIGHT OF WAY SPECIALIST, MR. MARK ESQUIBEL (510) 672-3329, AT LEAST TWO WEEKS PRIOR TO COMMENCEMENT OF WORK TO ARRANGE FOR A PIPELINE REPRESENTATIVE TO BE PRESENT DURING WORK WITHIN 25 FEET OF THE PIPELINE.

B. DEMOLITION

- DEBRIS GENERATED FROM DEMOLITION WORK TO BE DISPOSED OF OFF-SITE, AT AN APPROVED LOCATION, AT THE CONTRACTOR'S EXPENSE.
- CLEARING AND GRUBBING SHALL CONFORM TO THE PROVISIONS IN SECTION 17-2, "CLEARING AND GRUBBING," OF THE STANDARD SPECIFICATIONS.

C. SITE WORK

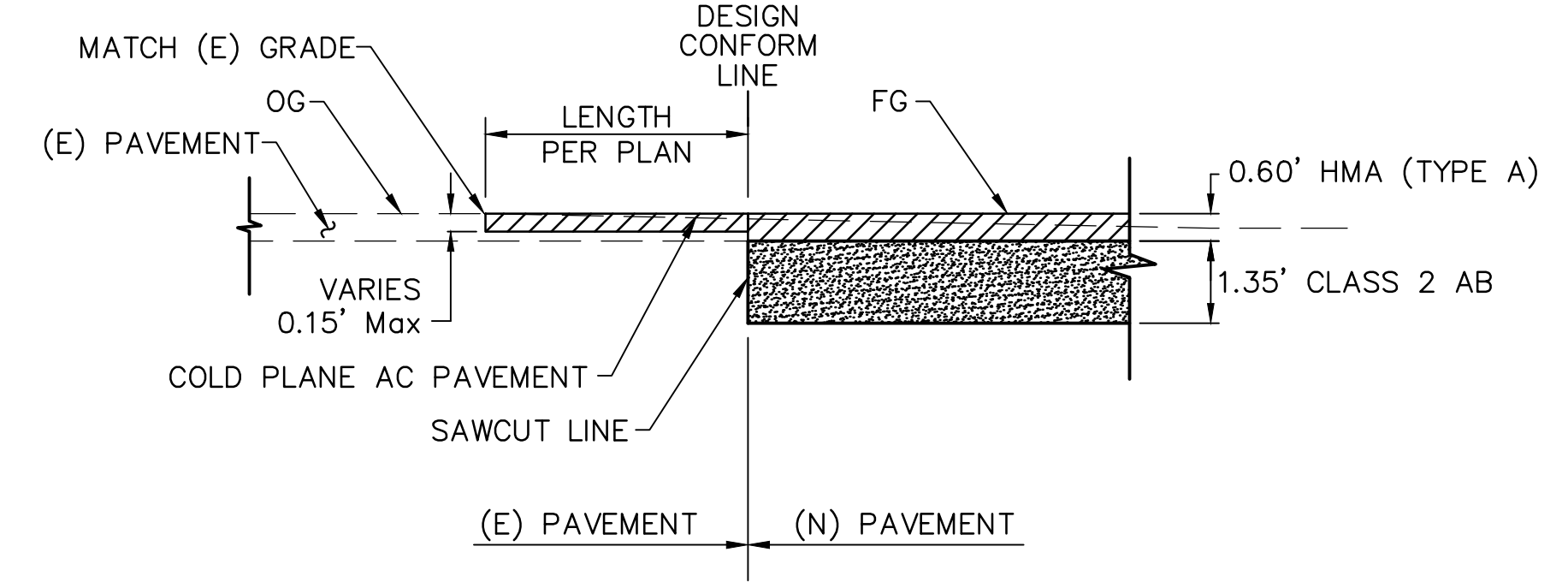
- EARTHWORK SHALL CONFORM TO THE PROVISIONS IN SECTION 19, "EARTHWORK," OF THE STANDARD SPECIFICATIONS. ROADWAY EXCAVATION SHALL CONFORM TO THE PROVISIONS IN SECTION 19-2, "ROADWAY EXCAVATION," OF THE STANDARD SPECIFICATIONS.
- SUBGRADE PREPARATION SHALL BE COMPACTED TO 95% RELATIVE COMPACTION AND CONFORM TO SECTION 26 OF THE STANDARD SPECIFICATIONS.
- HOT MIX ASPHALT SHALL BE TYPE A, 3/4" NORMAL MAXIMUM AGGREGATE CONFORMING TO SECTION 39 OF THE STANDARD SPECIFICATIONS.
- SAWCUT AT ALL PAVEMENT CONFORMS. PROVIDE A NEAT, CLEAN EDGE.
- AGGREGATE BASE SHALL BE CLASS 2, WITH DEPTH AS SPECIFIED PER PLAN AND SHALL CONFORM TO THE PROVISIONS IN SECTION 26, "AGGREGATE BASES," OF THE STANDARD SPECIFICATIONS.
- DEBRIS GENERATED BY CLEARING, GRUBBING, EXCAVATION AND DEMOLITION WORK SHALL BE DISPOSED OF OFF-SITE AT APPROVED DISPOSAL SITES AT THE CONTRACTOR'S EXPENSE.

ABBREVIATIONS

AB	AGGREGATE BASE	EVC	END VERTICAL CURVE	Pt	POINT
AC	ASPHALT CONCRETE	FES	FLARED END SECTION	PVI	POINT OF VERTICAL INTERSECTION
ADA	AMERICANS WITH DISABILITIES ACT	FG	FINISHED GRADE	R	RADIUS
AFTS	ALTERNATIVE FLARED TERMINAL SYSTEM	FL	FLOW LINE	RCP	REINFORCED CONCRETE PIPE
AP	ANGLE POINT	FT	FOOT	Rd	ROAD
APN	ASSESSOR'S PARCEL NUMBER	GB	GRADE BREAK	Rdwy	ROADWAY
AS	AGGREGATE SUBBASE	H	HEIGHT, HORIZONTAL	RSP	ROCK SLOPE PROTECTION
Ave	AVENUE	HDPE	HIGH DENSITY POLYETHYLENE	Rt	RIGHT
BB	BEGIN BRIDGE	HMA	HOT MIX ASPHALT	R/W	RIGHT OF WAY
BC	BEGIN HORIZONTAL CURVE	HP	HIGH POINT, HIGH PRESSURE, HINGE POINT	S	SLOPE, SOUTH
Beg	BEGIN	KM	KINDER MORGAN	SB	SOUTHBOUND
BMP	BEST MANAGEMENT PRACTICE	"LA"	LEVEE ACCESS ROAD CONTROL LINE	S/C	SAW CUT LINE
Bot	BOTTOM	LB	POUND	SDMH	STORM DRAIN MANHOLE
Br	BRIDGE	LF	LINEAR FOOT	SEG	SUBGRADE ENHANCEMENT GEOGRID
BVC	BEGIN VERTICAL CURVE	LP	LOW POINT	Shld	SHOULDER
"CA"	CARPENTER ROAD CONTROL LINE	Lt	LEFT	SQFT	SQUARE FOOT
CL	CENTER LINE	Max	MAXIMUM	SQYD	SQUARE YARD
CI	CLASS	MGS	MIDWEST GUARDRAIL SYSTEM	Sta	STATION
"CL"	CROWS LANDING ROAD CONTROL LINE	Min	MINIMUM	Stl	STEEL
CMP	CORRUGATED METAL PIPE	Mon	MONUMENT	SWPPP	STORM WATER POLLUTION PREVENTION PLAN
Cntl	CONTROL	N	NORTH, NORTHING	TBD	TO BE DETERMINED
CP	CATCH POINT	(N)	NEW	TCE	TEMPORARY CONSTRUCTION EASEMENT
CY	CUBIC YARD	NB	NORTHBOUND	Temp	TEMPORARY
DI	DRAINAGE INLET	No.	NUMBER	TC	TOP OF GRATE
Dia	DIAMETER	NTS	NOT TO SCALE	THVF	TEMPORARY HIGH-VISIBILITY FENCE
E	EAST, EASTING	O/C	ON CENTER	TID	TURLOCK IRRIGATION DISTRICT
(E)	EXISTING	OD	OUTSIDE DIAMETER	Trans	TRANSITION
EA	EACH	OG	ORIGINAL GRADE	TW	TRAVELED WAY
EB	END BRIDGE	OH	OVERHEAD	Typ	TYPICAL
EC	END HORIZONTAL CURVE	(P)	PROPOSED	UON	UNLESS OTHERWISE NOTED
EG	EXISTING GROUND	PCC	POINT OF COMPOUND CURVE	USGS	UNITED STATES GEOLOGICAL SURVEY
Elev	ELEVATION	PCMS	PORTABLE CHANGEABLE MESSAGE SIGN	V	VERTICAL
EP	EDGE OF PAVEMENT	PG	PROFILE GRADE	Var	VARIES
ES	EDGE OF SHOULDER	P/L	PROPERTY LINE	VC	VERTICAL CURVE
ETS	ELECTRONIC TEST STATION	POT	POINT OF TANGENT	W	WEST
ETW	EDGE OF TRAVELED WAY	PRC	POINT OF REVERSE CURVE	WSP	WELDED STEEL PIPE

LEGEND

---	P/L OR R/W		CLASS 2 AB
- - - - -	CUT LINE		HMA (TYPE A)
---F---F---F---	FILL LINE/DAYLIGHT LINE		COLD PLANE AC PAVEMENT
-----	GRADE BREAK		
	MIDWEST GUARDRAIL SYSTEM		
	PROPOSED STORM DRAIN LINE		
	CL OF DRAINAGE SWALE		
---	EXISTING UNDERGROUND IRRIGATION LINE		
---	EXISTING UNDERGROUND PETROLEUM LINE		
---	EXISTING UNDERGROUND TELEPHONE LINE		
---	EXISTING OVERHEAD ELECTRICAL LINE		
---	EXISTING OVERHEAD TELEPHONE LINE		
---	NEW UNDERGROUND TELEPHONE LINE		
---	NEW OVERHEAD ELECTRICAL LINE		
---	NEW OVERHEAD TELEPHONE LINE		
---xx---THVF---xx---	TEMPORARY HIGH-VISIBILITY FENCE		

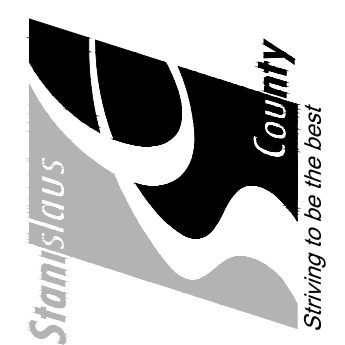


TYPICAL CONFORM DETAIL
NTS



DATE:	APPROVED:
REVISIONS:	DATE:
DESCRIPTIONS:	
NO.	

STANISLAUS COUNTY
DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND OPERATIONS DIVISION
1716 MORGAN ROAD - MODESTO, CA 95358



CROWS LANDING ROAD/SAN JOAQUIN RIVER
BRIDGE REPLACEMENT PROJECT
CONSTRUCTION NOTES & DETAILS

JOB NO. 226217-68
DATE 6/24/2020
DR BY PR
CK BY JW
SCALE AS SHOWN

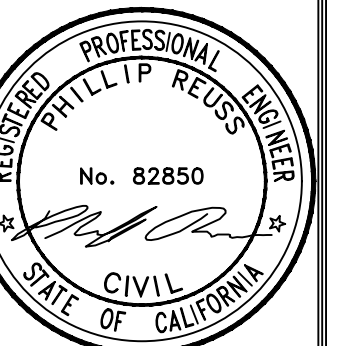
SHEET NUMBER
DT-1
2 OF 70 SHEETS

N|V|5
BEYOND ENGINEERING
2625 NATOMAS PARK DRIVE, SUITE 300 SACRAMENTO, CA 95833
916.641.9100 TEL. 916.641.9222 FAX WWW.NV5.COM



NOTES

1. COORDINATE WORK NEAR LEVEE ROAD WITH STAGE 1 AND STAGE 2 OF PLANNED CONSTRUCTION. SEE STAGE CONSTRUCTION PLANS.
2. FOR PIPE GATE DETAIL, SEE SHEET DT-8.
3. FOR SOUTH LEVEE ACCESS ROAD DETAILS, SEE SHEET DT-4.



NO.	REVISIONS	DATE	APPROVED

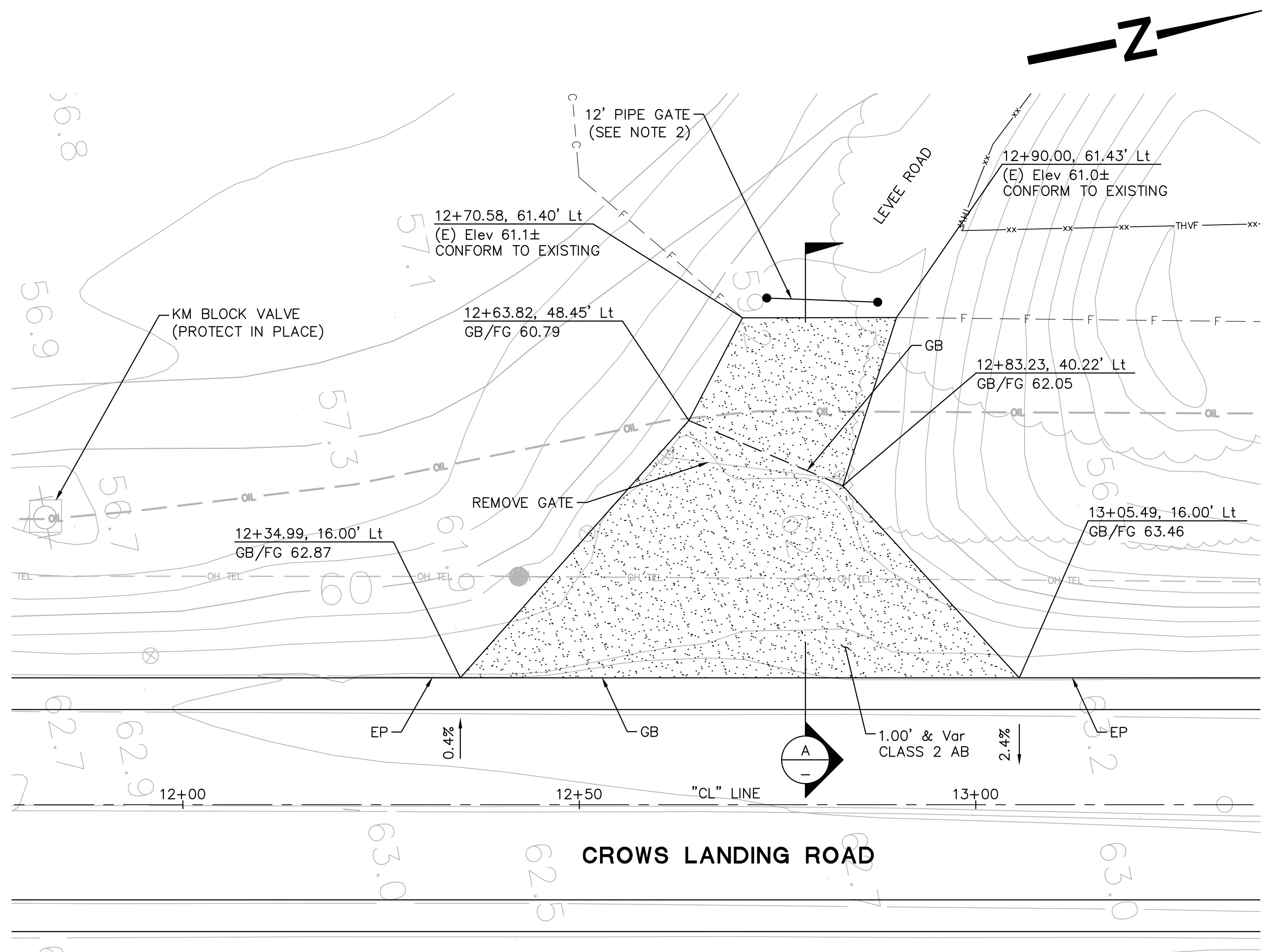
STANISLAUS COUNTY
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ENGINEERING AND OPERATIONS DIVISION
1716 MORGAN ROAD - MODESTO, CA 95358



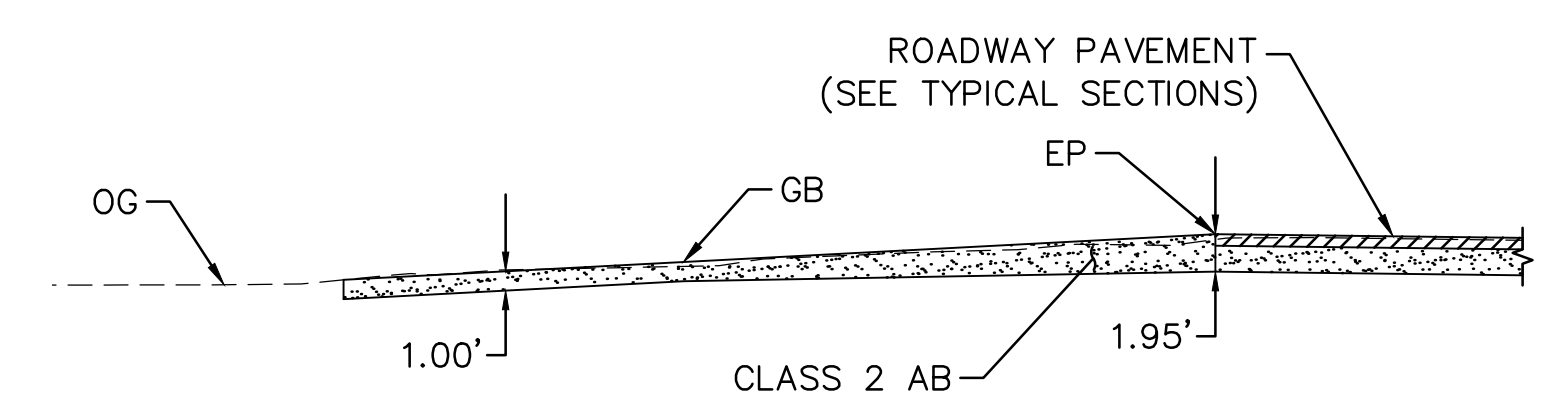
CROWS LANDING ROAD/SAN JOAQUIN RIVER
BRIDGE REPLACEMENT PROJECT
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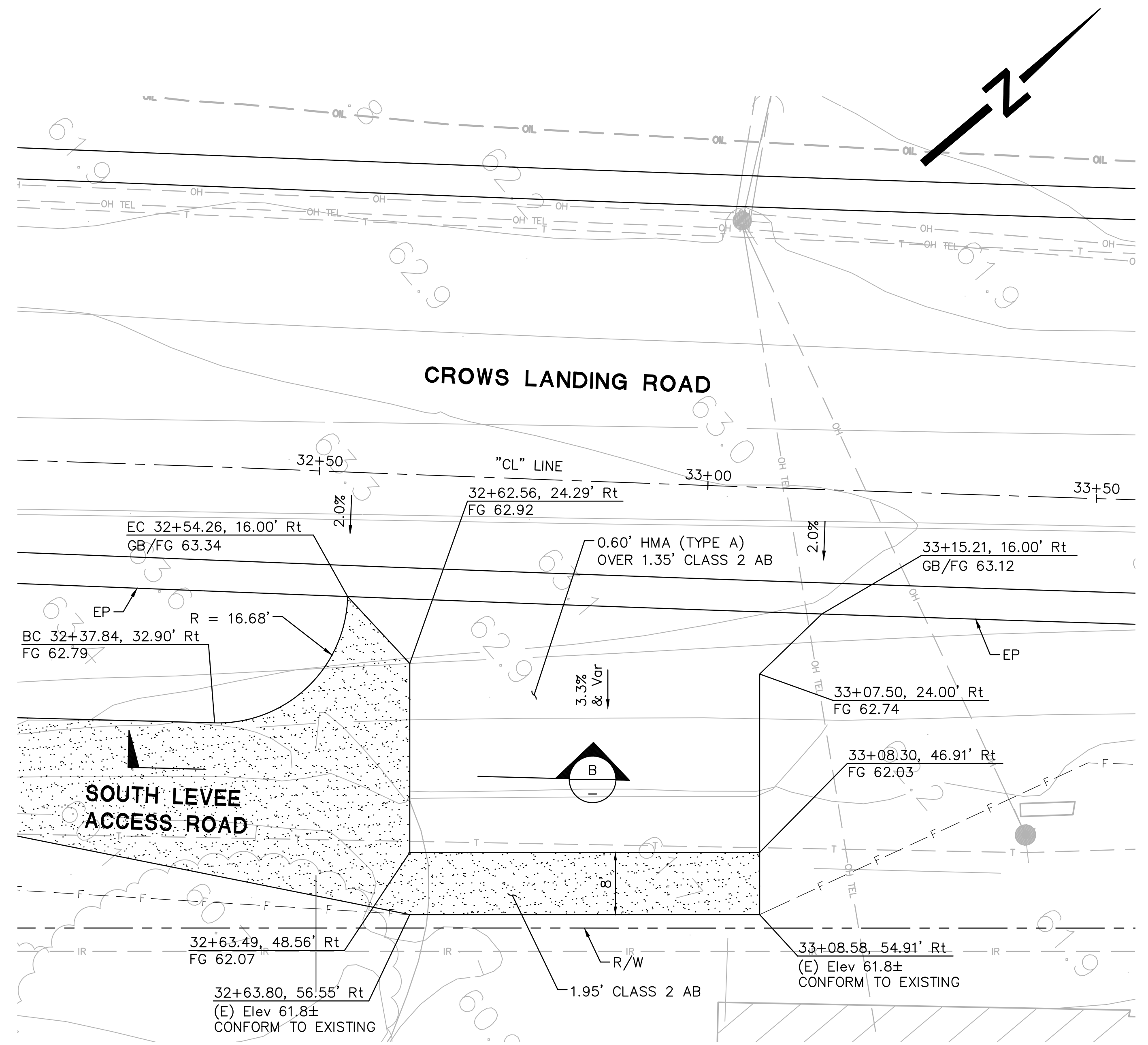
SHEET NUMBER
DT-2
3 OF 70 SHEETS



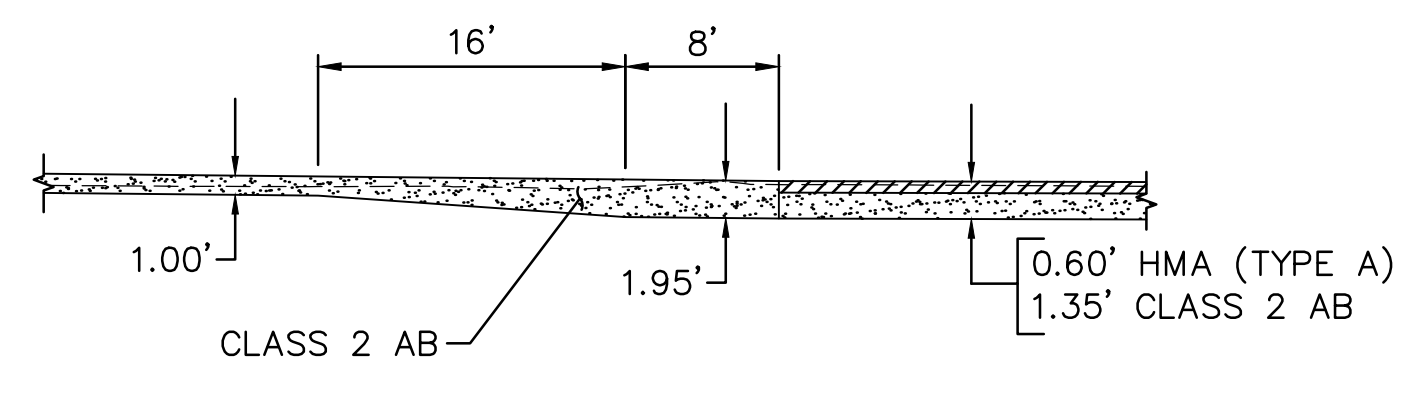
DETAIL 1 - LEVEE ROAD PLAN
SCALE: 1"=10'



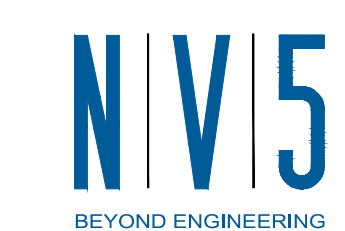
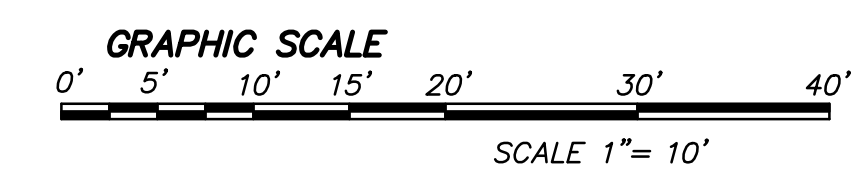
SECTION A
NO SCALE



DETAIL 2 - DRIVEWAY PLAN
SCALE: 1"=10'



SECTION B
NO SCALE



2625 NATOMAS PARK DRIVE, SUITE 300
916.641.9100 TEL. 916.641.9222 FAX
SACRAMENTO, CA 95833
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LEGEND

△ CONTROL POINT

NOTES

1. REMOVE TREES AND ABANDON IRRIGATION FACILITIES WITHIN TEMPORARY CONSTRUCTION EASEMENT AS NEEDED AS PART OF CLEARING AND GRUBBING WORK.

PROCEDURES OF SURVEY:

2. STATIC OBSERVATION OF POINT #1 WAS USED TO ESTABLISH THIS SURVEY. FINAL LOCATION OF POINT #1 WAS DERIVED FROM OPUS AND POST PROCESSED BASELINES.

BASIS OF COORDINATES:

3. THE COORDINATES ARE REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 AND ARE EXPRESSED IN TERMS OF THE CALIFORNIA COORDINATE SYSTEM 1983, ZONE 3, AT EPOCH 2002, AND ARE BASED ON CORS POINT CMOD PER NGS PID DE6246, AND CORS POINT MHCN PER NGS PID AF9702. SAID GRID COORDINATES ARE AS FOLLOWS:

CMOD = N - 2056373.10 E - 6416907.74
 MHCN = N - 1948852.80 E - 6229522.76
 #1 = N - 1979271.54 E - 6412109.59

BASIS OF BEARINGS:

4. BEARINGS ARE REFERENCED TO GRID NORTH AS DEFINED BY THE CALIFORNIA COORDINATE SYSTEM 1983, ZONE 3 AND ARE BASED ON THE OBSERVED LINE FROM CMOD TO MHCN SAID BEARING = S 60°09'11" W.

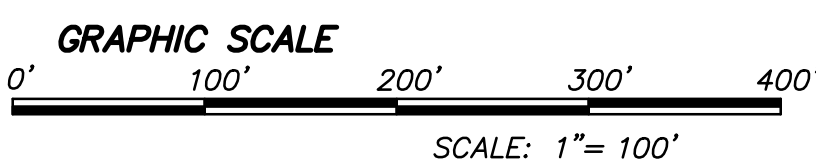
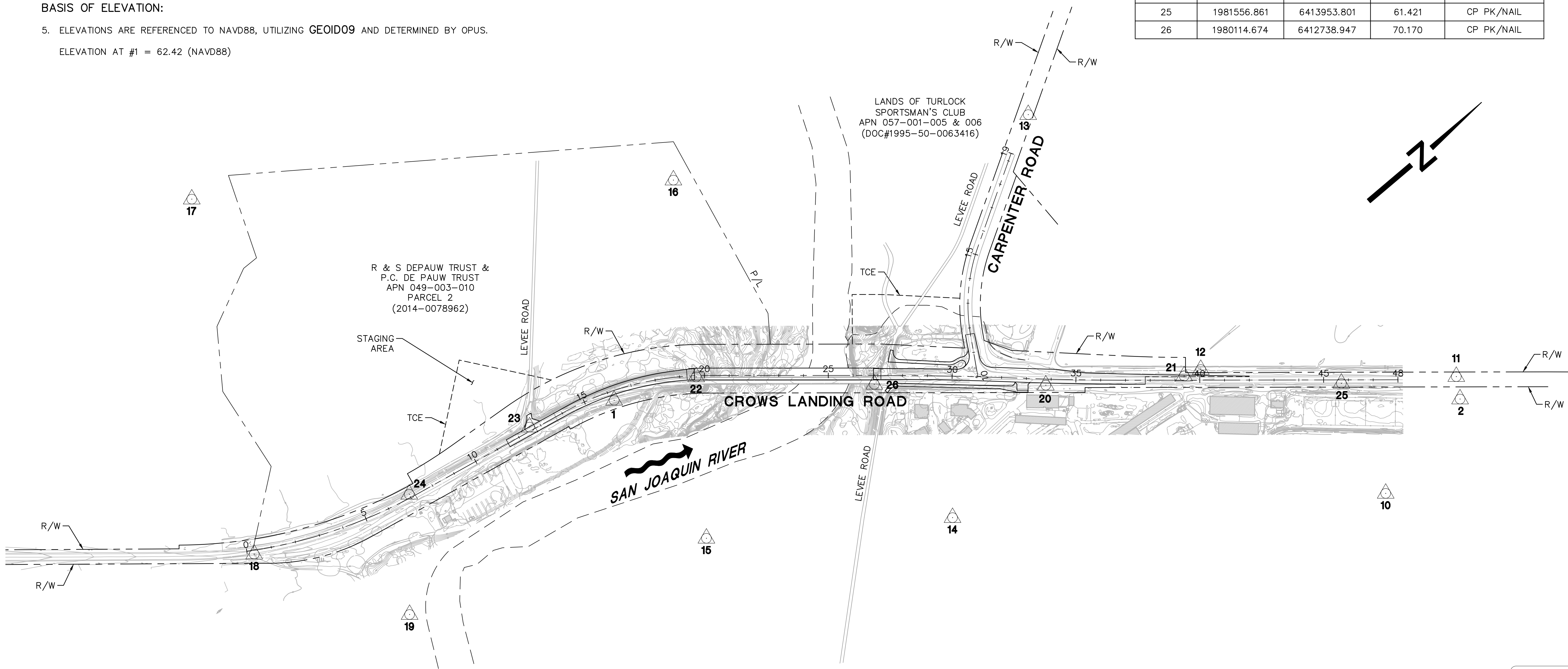
BASIS OF ELEVATION:

5. ELEVATIONS ARE REFERENCED TO NAVD88, UTILIZING GEOID09 AND DETERMINED BY OPUS.

ELEVATION AT #1 = 62.42 (NAVD88)

SURVEY CONTROL TABLE

POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	1979271.540	6412109.590	62.418	CP 5/8/RBR/CAP
2	1981881.631	6414311.879	58.482	CP SCRIBED X
10	1981406.706	6414408.449	62.049	FX 9/60D/NAIL
11	1981928.566	6414232.760	61.071	FX 10/PK/NAIL
12	1981159.502	6413544.705	59.872	FX 8/5/8/RBR
13	1981292.096	6412309.647	60.960	FX 6/PK/NAIL
14	1980008.584	6413353.387	59.732	FX 7/1/2/RBR
15	1979196.273	6412775.147	54.111	FX 4/5/8/RBR
16	1980028.048	6411585.973	55.246	FX 5/60D/NAIL
17	1978494.086	6410388.647	59.919	FX 1/1/2/RBR
18	1977761.173	6411644.874	61.722	FX 2/PK/NAIL
19	1978082.846	6412235.862	58.133	FX 3/5/8/RBR
20	1980641.122	6413188.660	62.345	CP PK/NAIL
21	1981091.330	6413521.182	61.887	CP PK/NAIL
22	1979585.123	6412251.578	68.234	CP RBR/W/CAP
23	1978940.833	6411971.370	63.179	CP PK/NAIL
24	1978395.257	6411864.720	62.634	CP PK/NAIL
25	1981556.861	6413953.801	61.421	CP PK/NAIL
26	1980114.674	6412738.947	70.170	CP PK/NAIL



PLAN
SCALE: 1"=200'



PREPARED UNDER THE DIRECTION OF:

NO.	DESCRIPTIONS	DATE	APPROVED

STANISLAUS COUNTY
 DEPARTMENT OF PUBLIC WORKS
 ENGINEERING AND OPERATIONS DIVISION
 1716 MORGAN ROAD - MODESTO, CA 95358



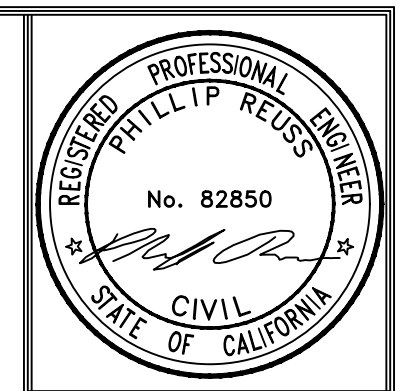
CROW'S LANDING ROAD/SAN JOAQUIN RIVER
 BRIDGE REPLACEMENT PROJECT
 CONSTRUCTION DETAILS
 PROJECT CONTROL

JOB NO. 226217-68
 DATE 6/24/2020
 DR BY PR
 CK BY JW
 SCALE AS SHOWN

SHEET NUMBER
DT-3
 4 OF 70 SHEETS

N|V|5
 BEYOND ENGINEERING
 2625 NATOMAS PARK DRIVE, SUITE 300 SACRAMENTO, CA 95833
 916.641.9100 TEL. 916.641.9222 FAX WWW.NV5.COM





DATE: _____

REVISIONS

NO.	DATE	APPROVED	DESCRIPTIONS

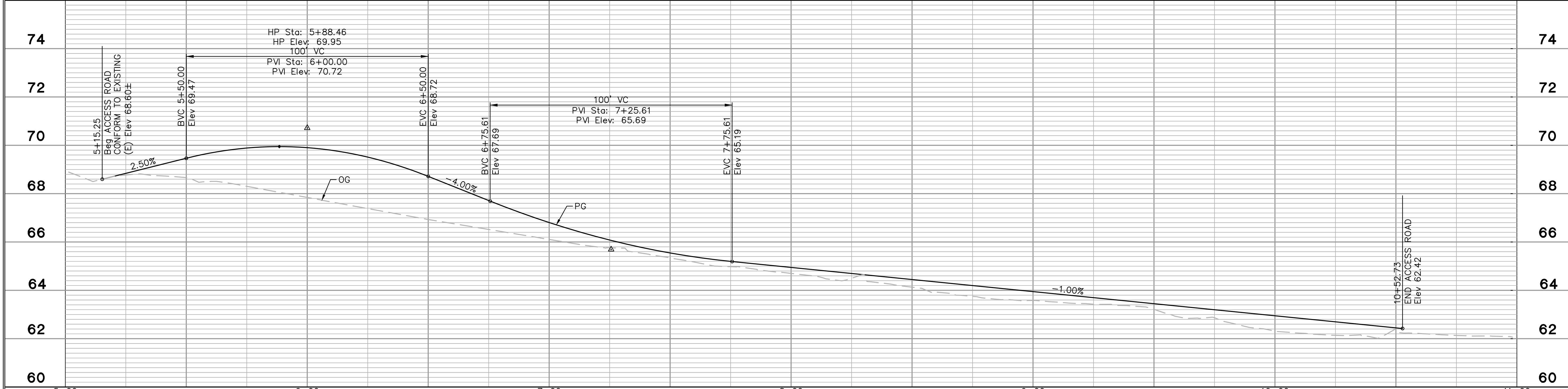
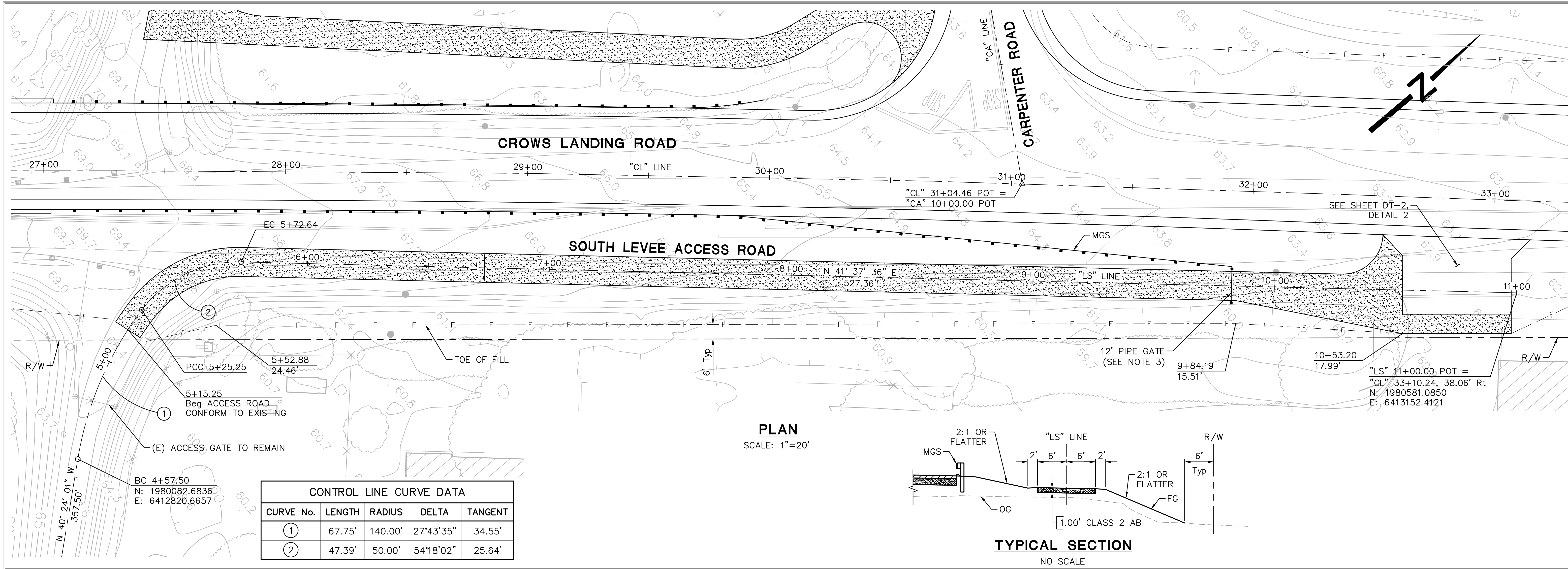
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 1716 MORGAN ROAD - MODESTO, CA 95358



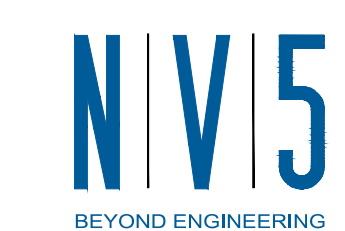
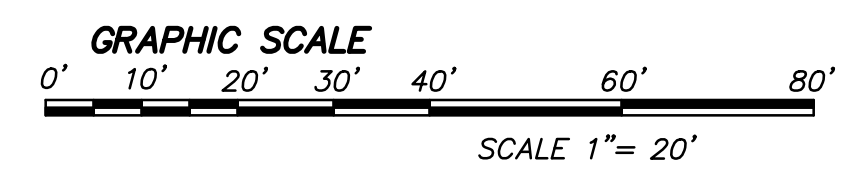
CROWS LANDING ROAD/SAN JOAQUIN RIVER
 BRIDGE REPLACEMENT PROJECT
 CONSTRUCTION DETAILS
 SOUTH LEVEE ACCESS ROAD

JOB NO. 226217-68
 DATE 6/24/2020
 DR BY PR
 CK BY JW
 SCALE AS SHOWN

SHEET NUMBER
DT-4
 5 OF 70 SHEETS

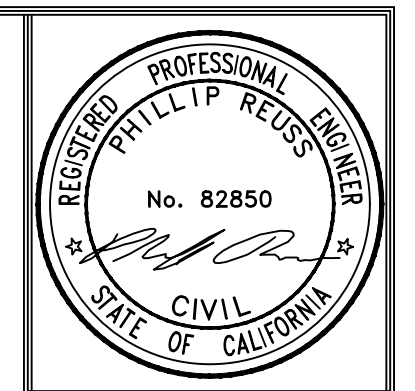


- NOTES**
- FOR NOTES, LEGEND AND LIST OF ABBREVIATIONS, SEE SHEET DT-1.
 - ALL STATION AND OFFSET CALLOUTS ARE BASED ON THE "LS" LINE, UNLESS OTHERWISE NOTED.
 - FOR PIPE GATE DETAILS, SEE SHEET DT-8.



2625 NATOMAS PARK DRIVE, SUITE 300
 916.641.9100 TEL. 916.641.9222 FAX
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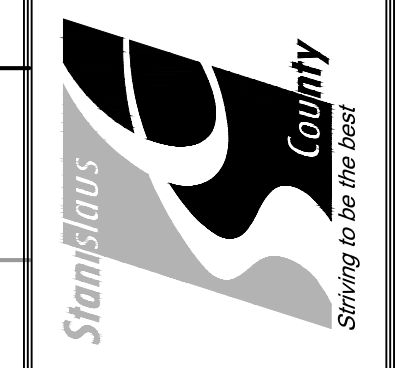




PREPARED UNDER THE DIRECTION OF:

NO.	REVISIONS	DATE	APPROVED

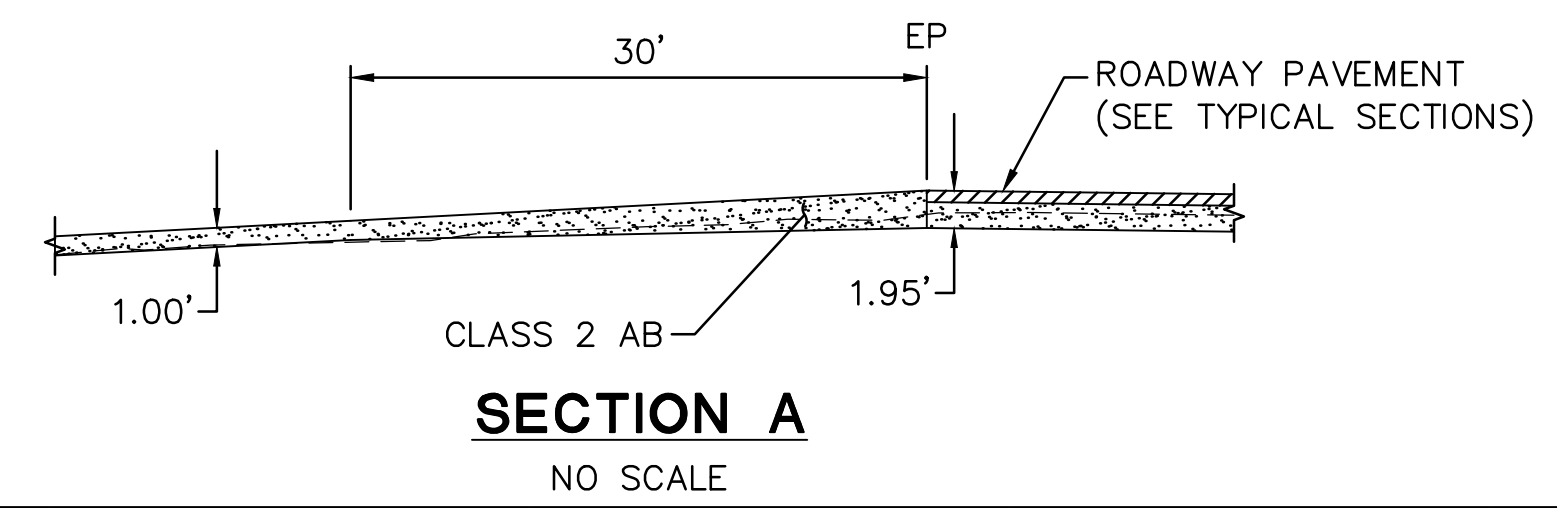
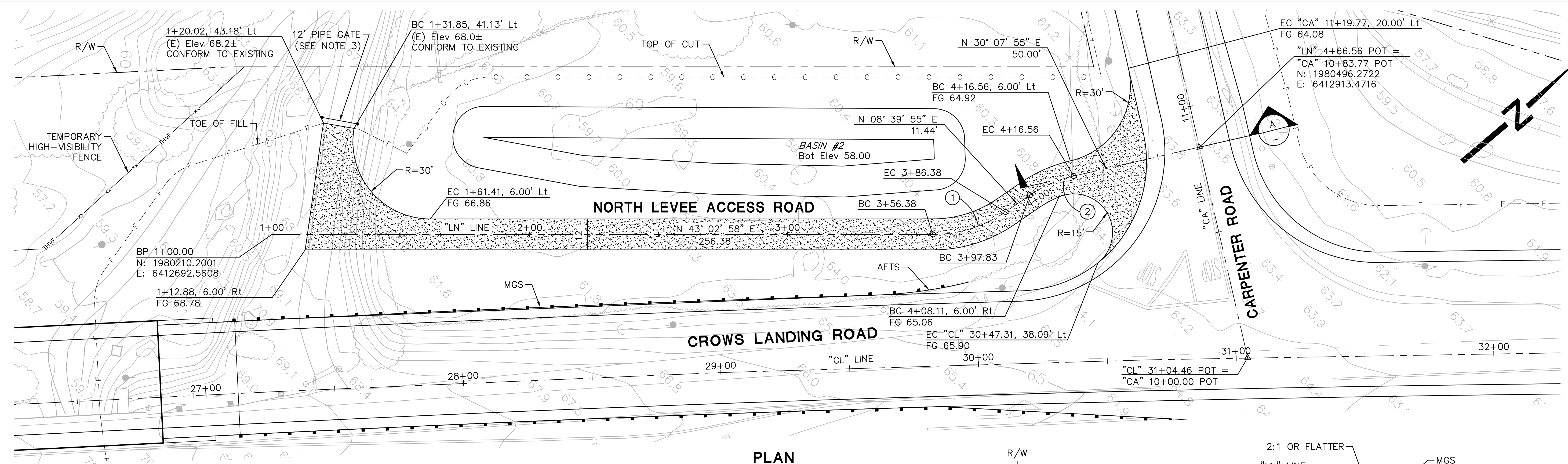
STANISLAUS COUNTY
 DEPARTMENT OF PUBLIC WORKS
 ENGINEERING AND OPERATIONS DIVISION
 1716 MORGAN ROAD - MODESTO, CA 95358



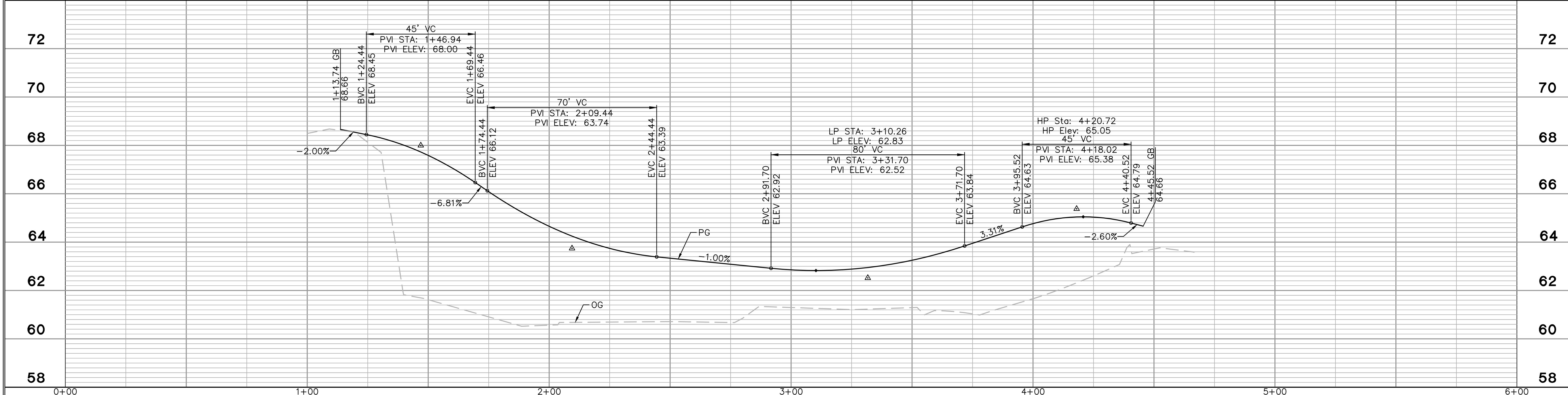
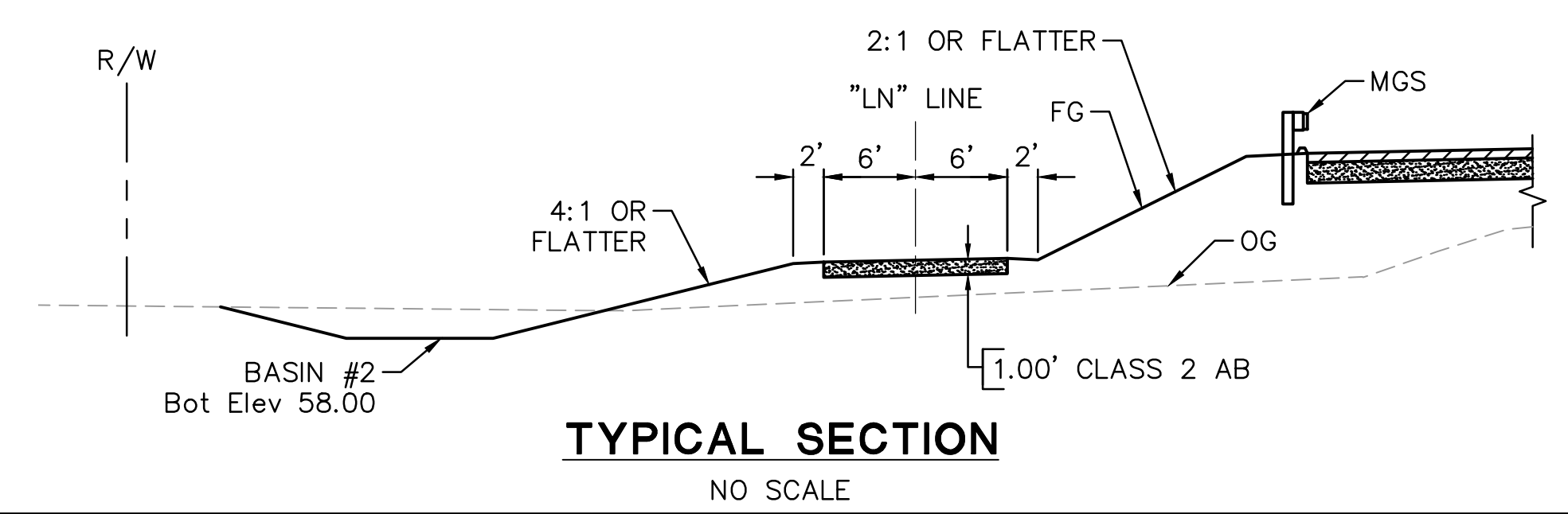
CROWS LANDING ROAD/SAN JOAQUIN RIVER
 BRIDGE REPLACEMENT PROJECT
 CONSTRUCTION DETAILS
 NORTH LEVEE ACCESS ROAD

JOB NO. 226217-68
 DATE 6/24/2020
 DR BY PR
 CK BY JW
 SCALE AS SHOWN

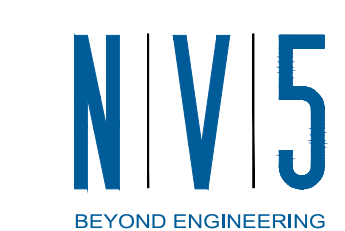
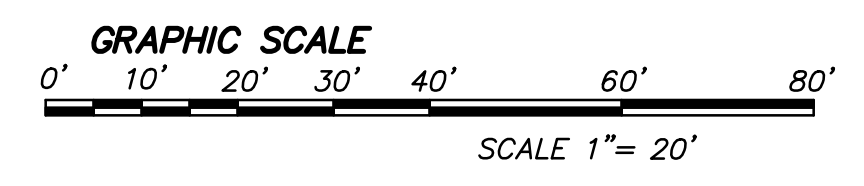
SHEET NUMBER
DT-5
 6 OF 70 SHEETS



CONTROL LINE CURVE DATA				
CURVE No.	LENGTH	RADIUS	DELTA	TANGENT
①	30.01'	50.00'	34°23'03"	15.47'
②	18.73'	50.00'	21°28'00"	9.48'



- NOTES**
- FOR NOTES, LEGEND AND LIST OF ABBREVIATIONS, SEE SHEET DT-1.
 - ALL STATION AND OFFSET CALLOUTS ARE BASED ON THE "LN" LINE, UNLESS OTHERWISE NOTED.
 - FOR PIPE GATE DETAILS, SEE SHEET DT-8.




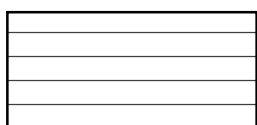
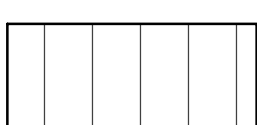
2625 NATOMAS PARK DRIVE, SUITE 300
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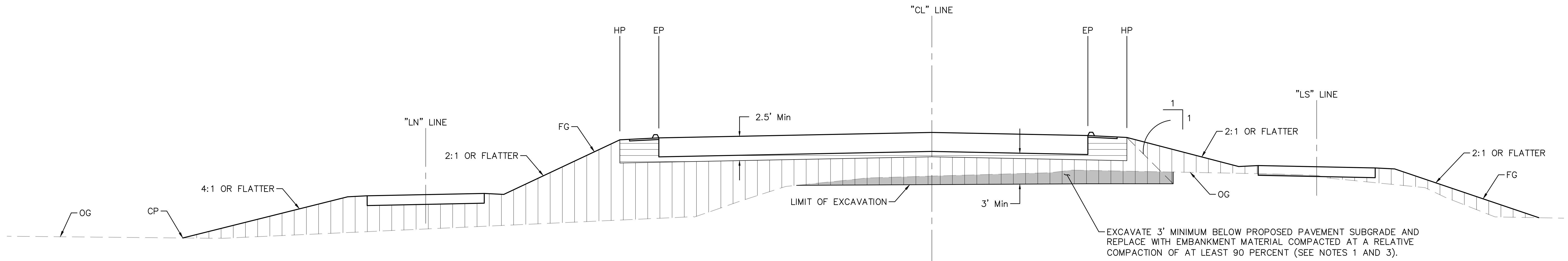


NOTES:

- EXCAVATED MATERIAL TO BE USED AS EMBANKMENT AND PLACED AT LOCATIONS WHERE THE EMBANKMENT IS TO BE COMPACTED AT 90 PERCENT RELATIVE COMPACTION.
- DO NOT CONTINUE EXCAVATION BELOW ELEVATIONS WHERE AREAS OF WET, PUMPING ALLUVIUM ARE ENCOUNTERED.
- COMPACT THE FULL WIDTH AND DEPTH OF THE EMBANKMENT WITHIN 150 FEET OF EACH BRIDGE ABUTMENT TO AT LEAST 95 PERCENT RELATIVE COMPACTION PER STANDARD SPECIFICATION SECTION 19-5.

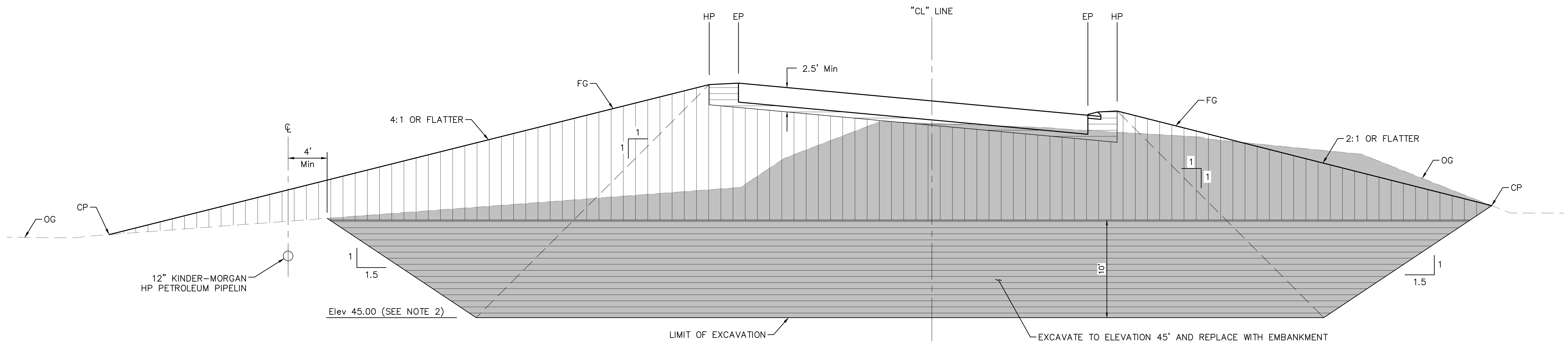
LEGEND:

-  ROADWAY EXCAVATION
-  EMBANKMENT (95% RELATIVE COMPACTION)
-  EMBANKMENT (90% RELATIVE COMPACTION) (SEE NOTE 3)



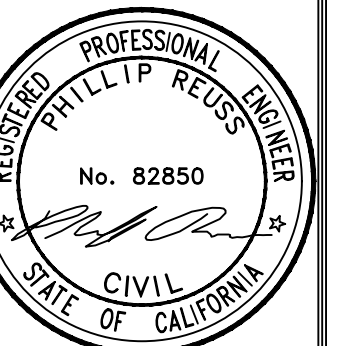
DETAIL 2 - NORTH APPROACH EMBANKMENT

"CL" Sta: 26+82.52 TO 30+17.33
NO SCALE



DETAIL 1 - SOUTH APPROACH EMBANKMENT

"CL" Sta: 13+25 TO 19+59.52
NO SCALE



NO.	DESCRIPTIONS	DATE	APPROVED

STANISLAUS COUNTY
DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND OPERATIONS DIVISION
1716 MORGAN ROAD - MODESTO, CA 95358



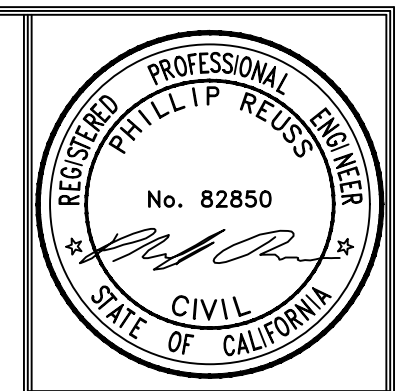
CROWS LANDING ROAD/SAN JOAQUIN RIVER
BRIDGE REPLACEMENT PROJECT
CONSTRUCTION DETAILS

JOB NO. 226217-68
DATE 6/24/2020
DR BY PR
CK BY JW
SCALE NO SCALE

SHEET NUMBER
DT-6
7 OF 70 SHEETS

N|V|5
BEYOND ENGINEERING
2625 NATOMAS PARK DRIVE, SUITE 300 SACRAMENTO, CA 95833
916.641.9100 TEL. 916.641.9222 FAX WWW.NV5.COM

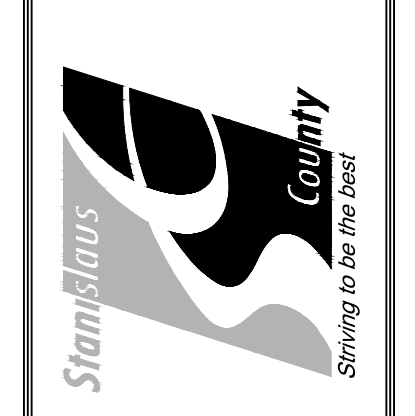




PREPARED UNDER THE DIRECTION OF:

NO.	DESCRIPTIONS	DATE	APPROVED

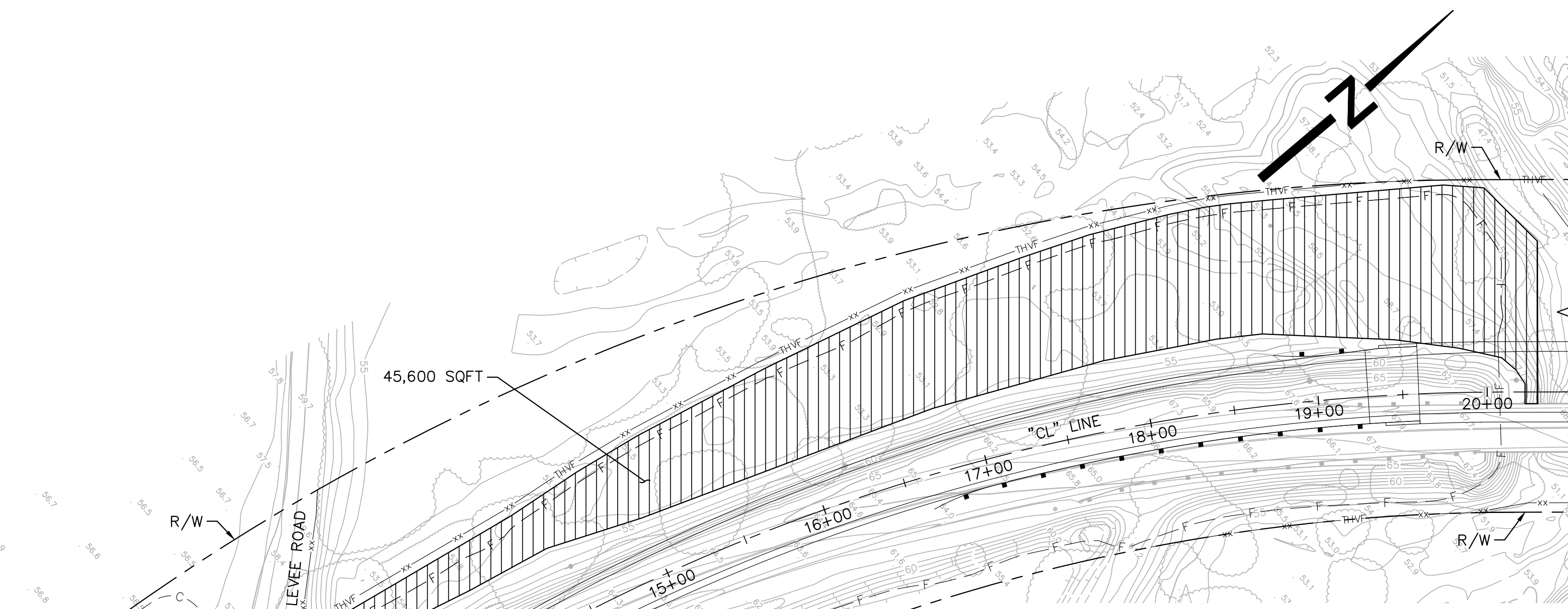
STANISLAUS COUNTY
 DEPARTMENT OF PUBLIC WORKS
 ENGINEERING AND OPERATIONS DIVISION
 1716 MORGAN ROAD - MODESTO, CA 95358



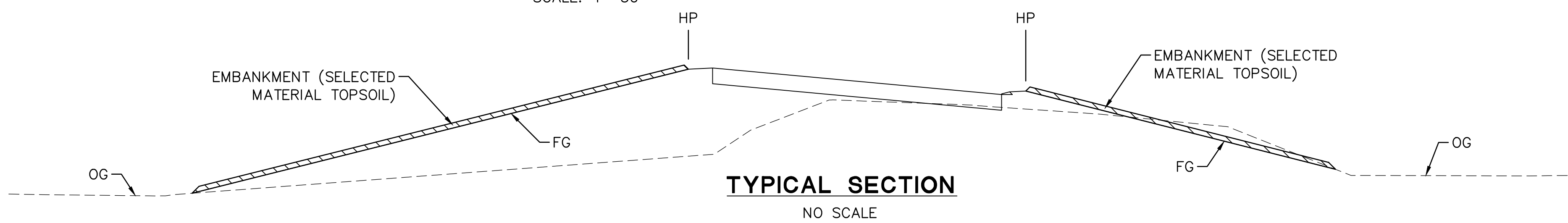
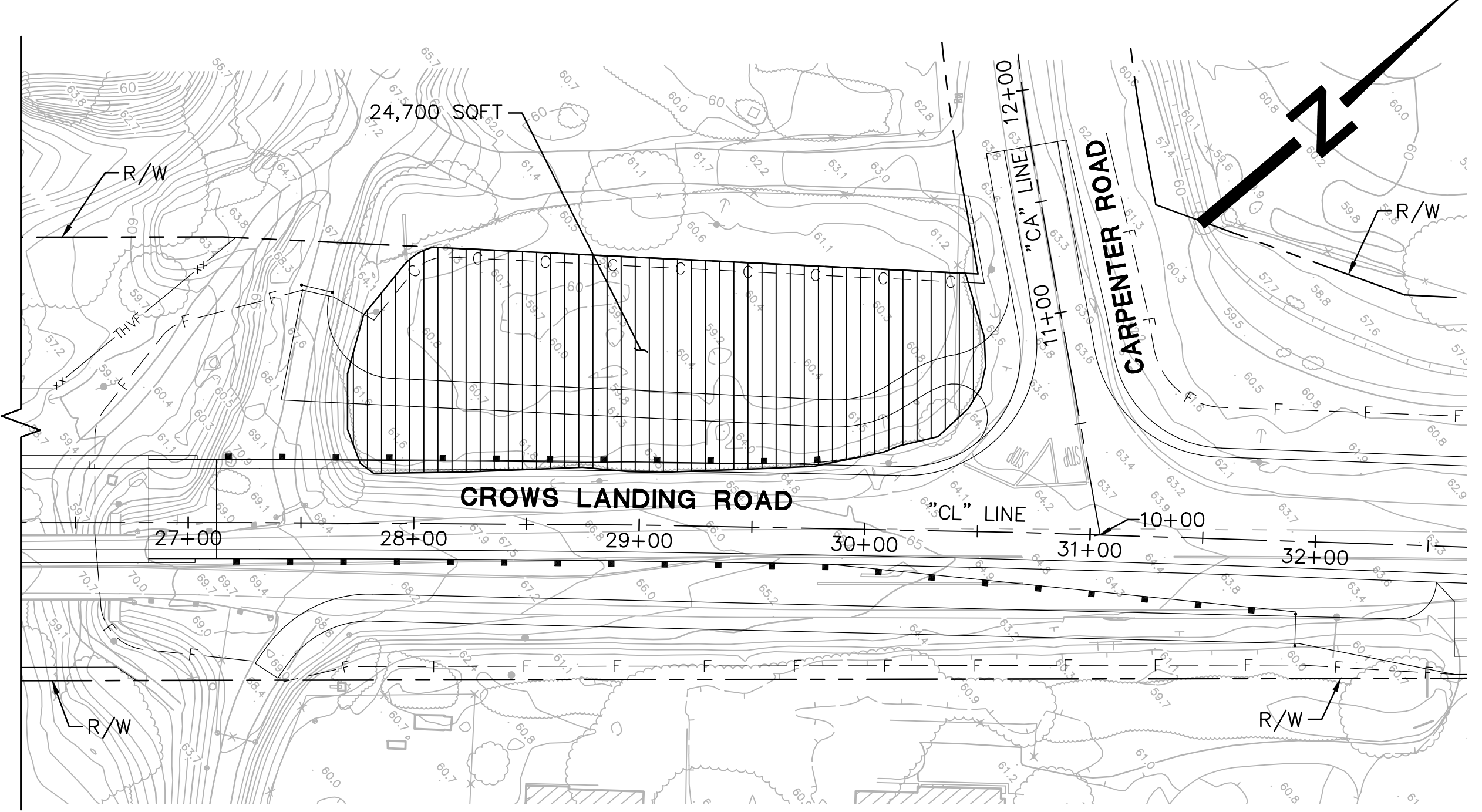
CROWS LANDING ROAD/SAN JOAQUIN RIVER
 BRIDGE REPLACEMENT PROJECT
 CONSTRUCTION DETAILS
 TOPSOIL EXCAVATION

JOB NO. 226217-68
 DATE 6/24/2020
 DR BY PR
 CK BY JW
 SCALE AS SHOWN

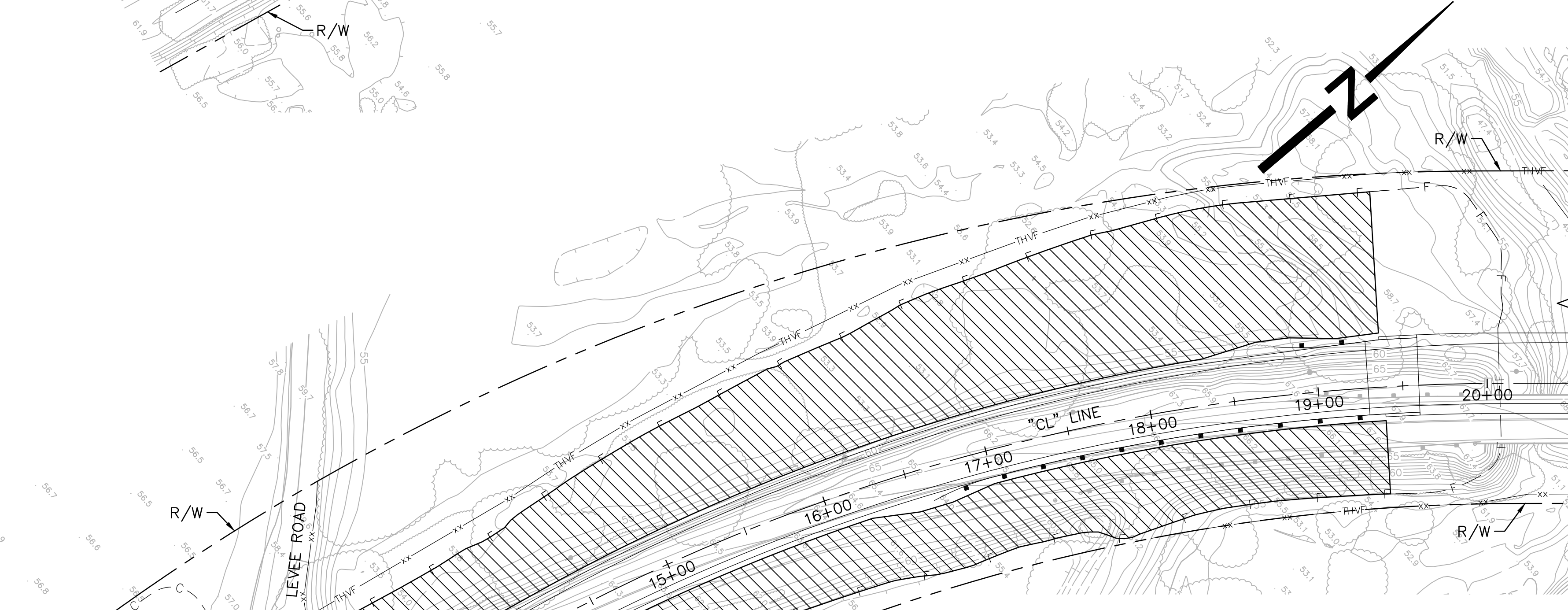
SHEET NUMBER
DT-7
 8 OF 70 SHEETS



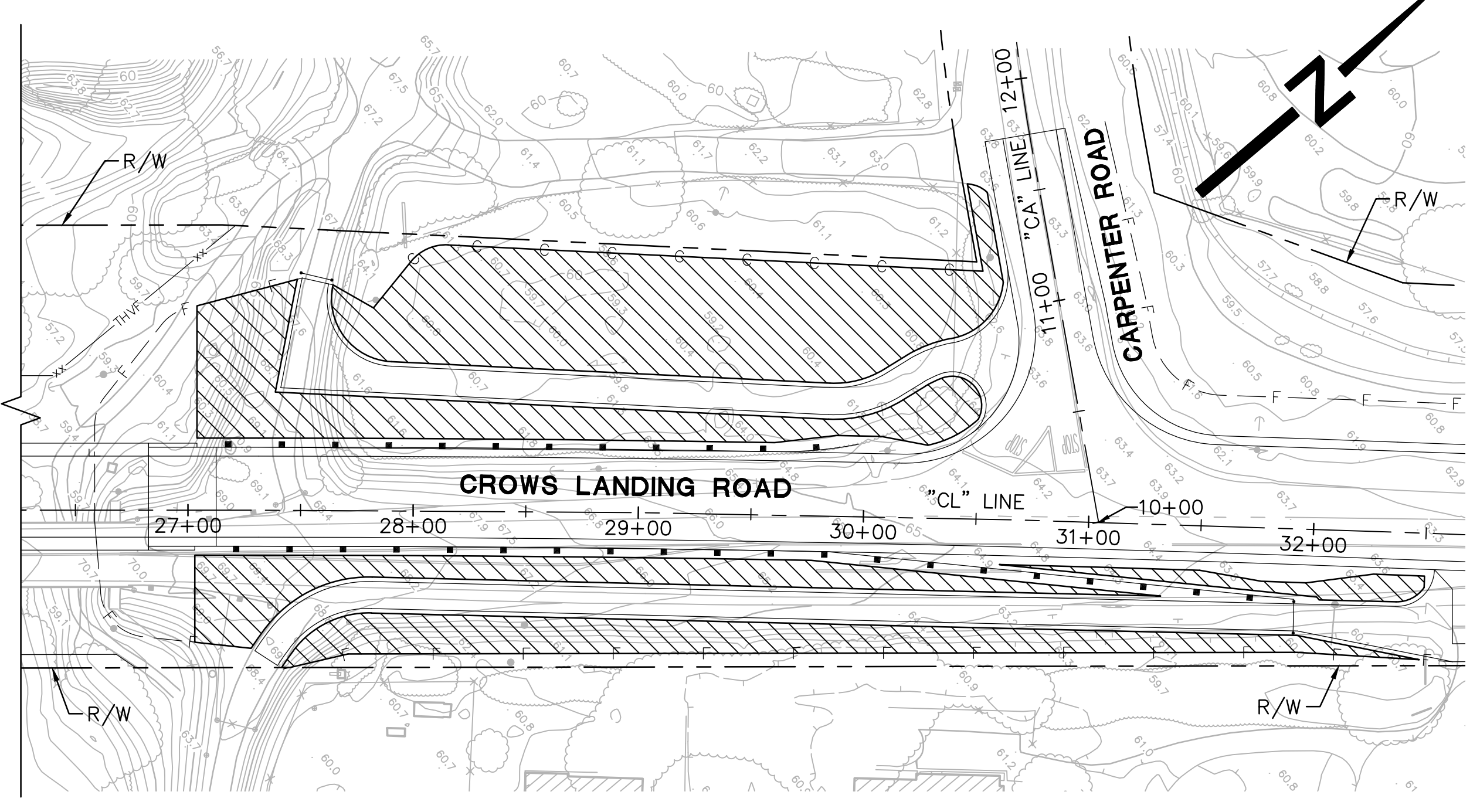
PLAN
 SCALE: 1"=50'



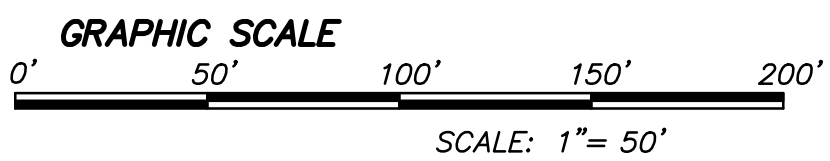
TYPICAL SECTION
 NO SCALE



PLAN
 SCALE: 1"=50'



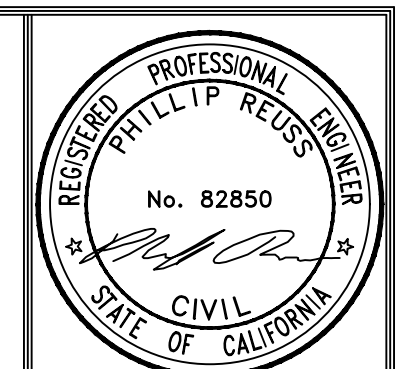
- NOTES**
- FOR NOTES, LEGEND AND LIST OF ABBREVIATIONS, SEE SHEET DT-1.
 - PLACE EMBANKMENT (SELECTED MATERIAL TOPSOIL) AFTER ALL OTHER EARTHWORK IN AN AREA IS COMPLETE TO COVER ALL DISTURBED SOIL AREA.



- LEGEND**
- ROADWAY EXCAVATION (SELECTED MATERIAL TOPSOIL) DEPTH OF EXCAVATION 4"
 - EMBANKMENT (SELECTED MATERIAL TOPSOIL) DEPTH OF COVER 1" Min

N|V|5
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NO.	REVISIONS	DATE	APPROVED

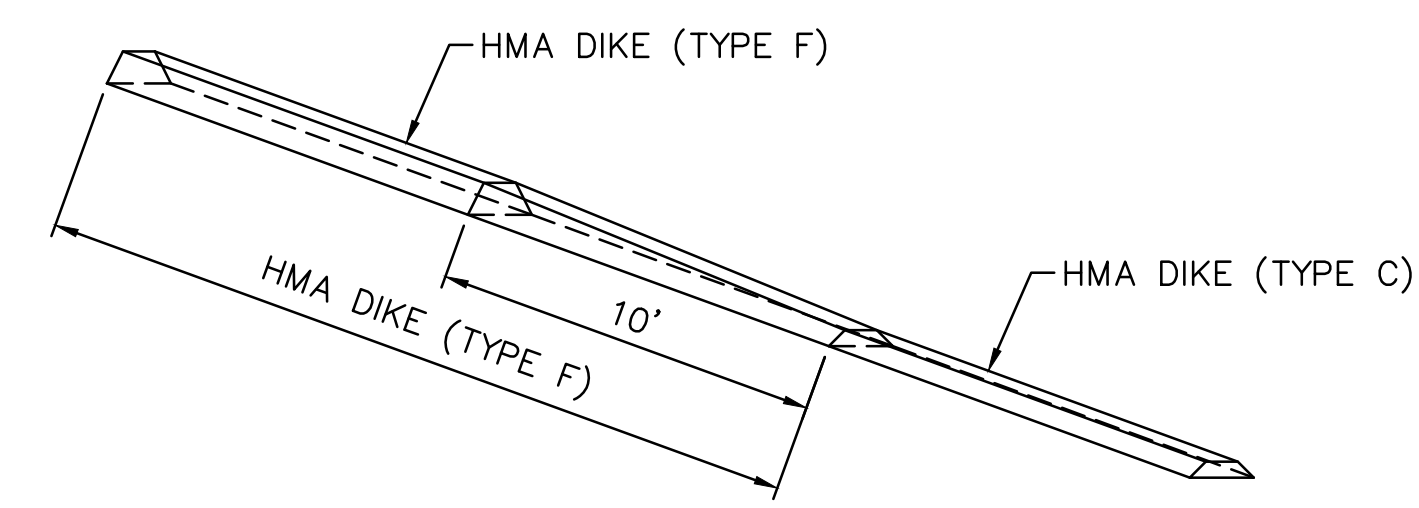
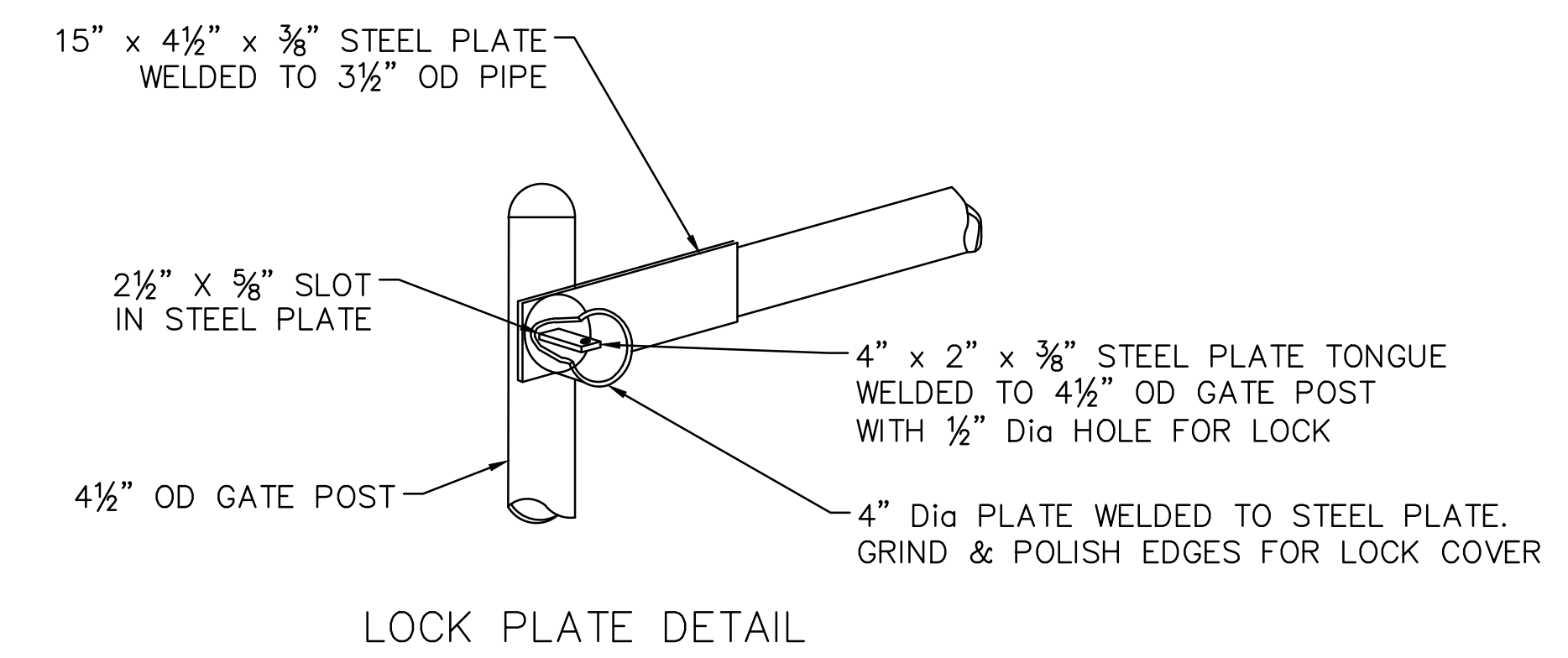
STANISLAUS COUNTY
 DEPARTMENT OF PUBLIC WORKS
 ENGINEERING AND OPERATIONS DIVISION
 1716 MORGAN ROAD - MODESTO, CA 95358



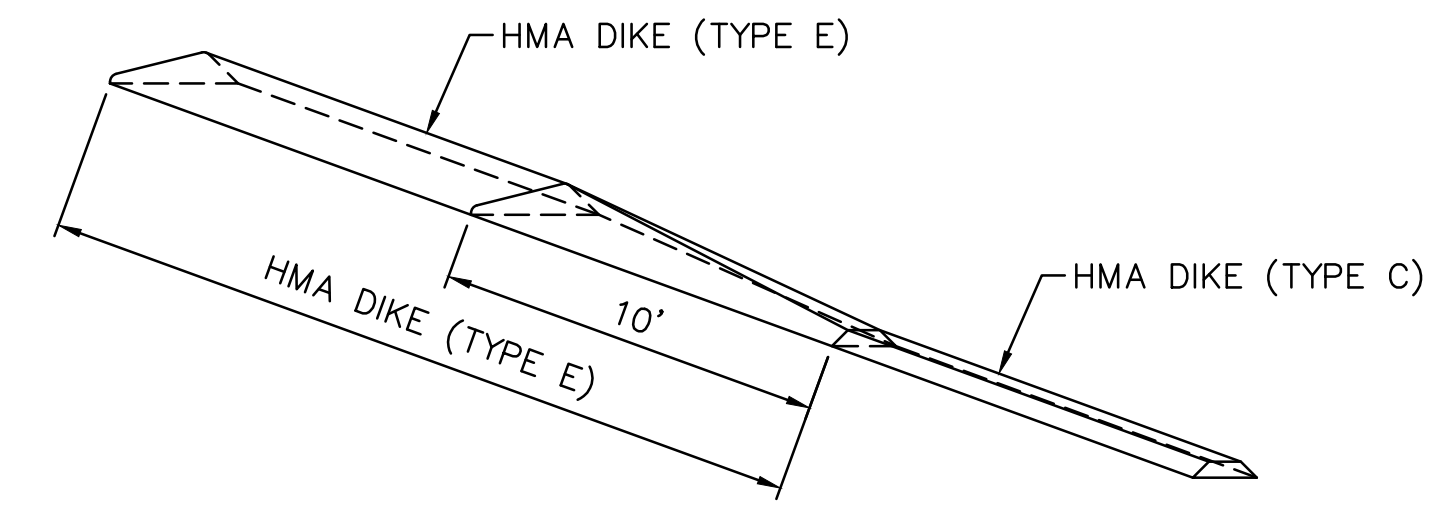
CROWS LANDING ROAD/SAN JOAQUIN RIVER
 BRIDGE REPLACEMENT PROJECT
 CONSTRUCTION DETAILS

JOB NO. 226217-68
 DATE 6/24/2020
 DR BY PR
 CK BY JW
 SCALE NO SCALE

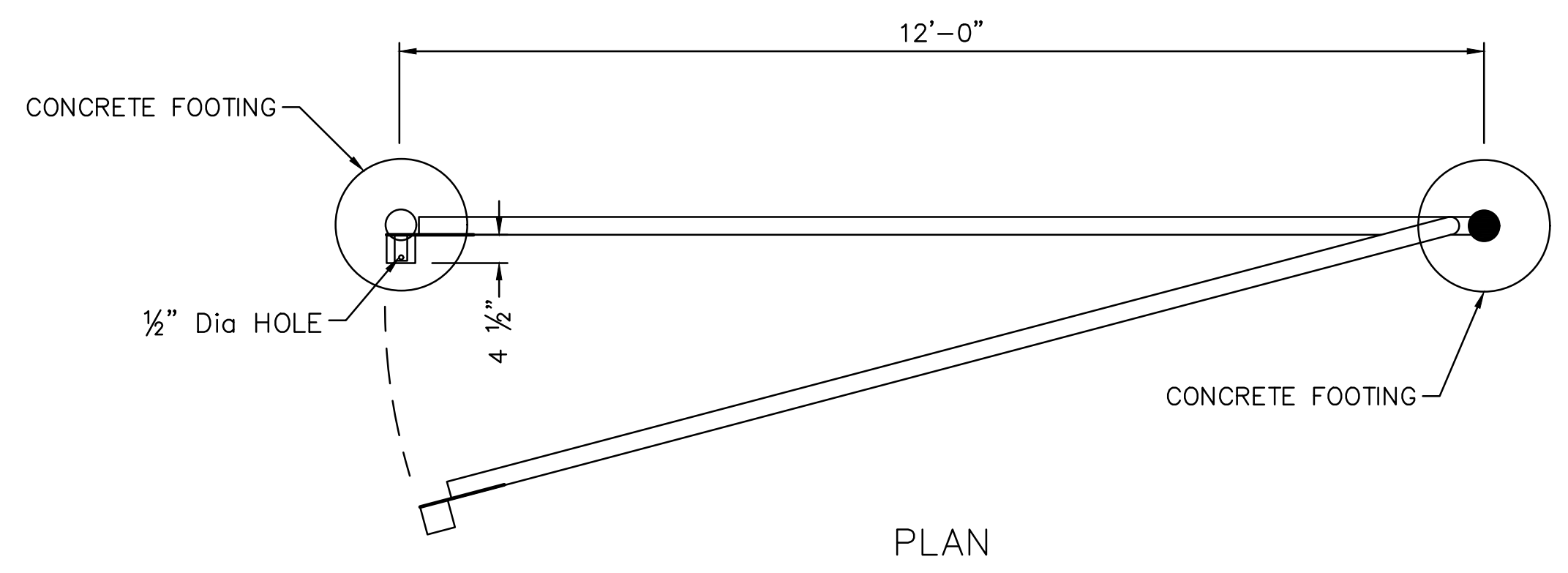
SHEET NUMBER
DT-8
 9 OF 70 SHEETS



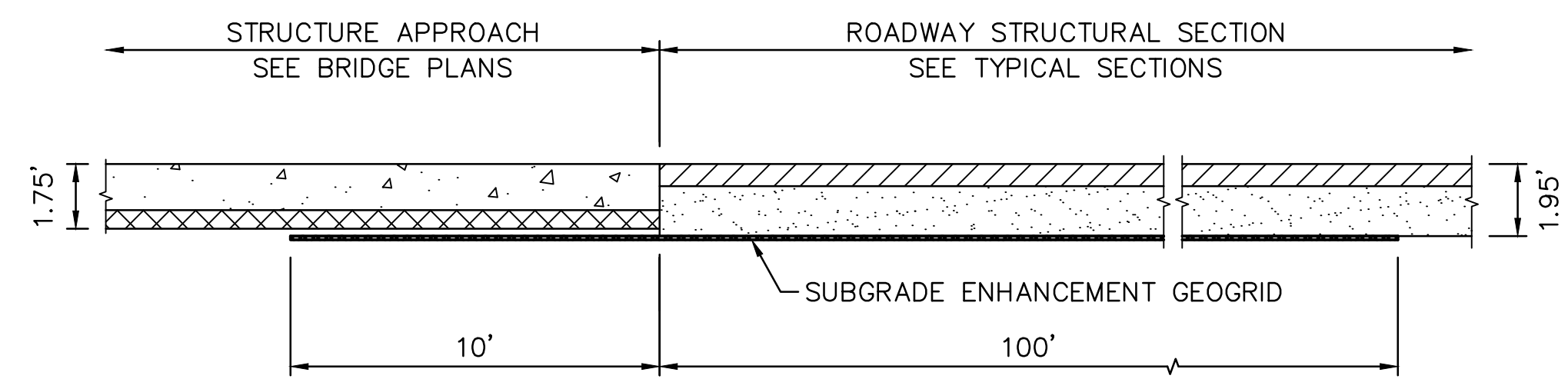
**HMA DIKE TRANSITION
 (FROM TYPE C TO TYPE F)**
 NO SCALE



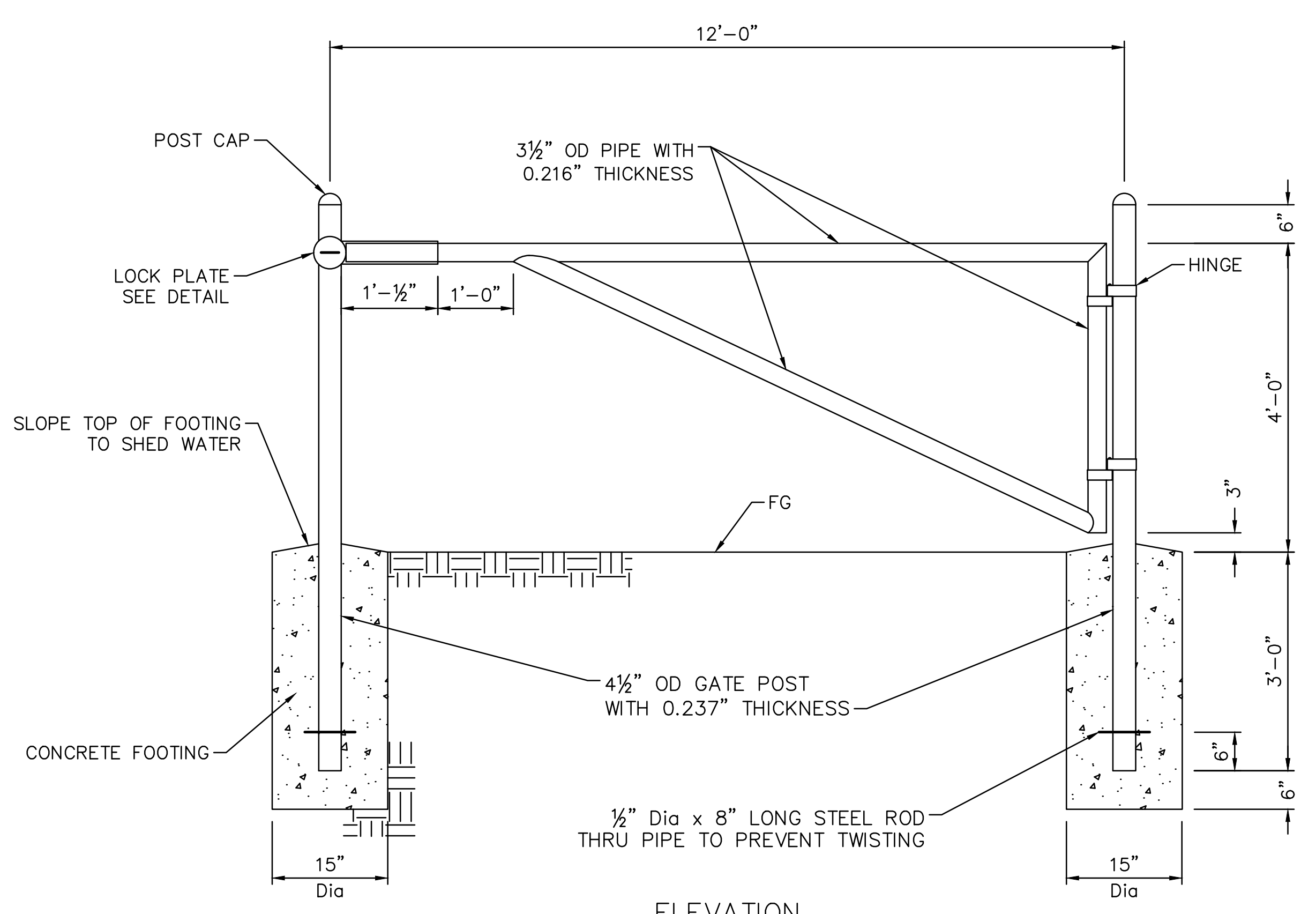
**HMA DIKE TRANSITION
 (FROM TYPE C TO TYPE E)**
 NO SCALE



PLAN

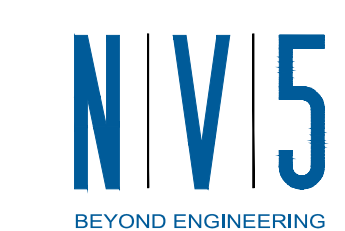


SUBGRADE ENHANCEMENT GEOGRID
 NO SCALE



12' PIPE GATE
 NO SCALE

12' PIPE GATE
 NO SCALE



2625 NATOMAS PARK DRIVE, SUITE 300 SACRAMENTO, CA 95833
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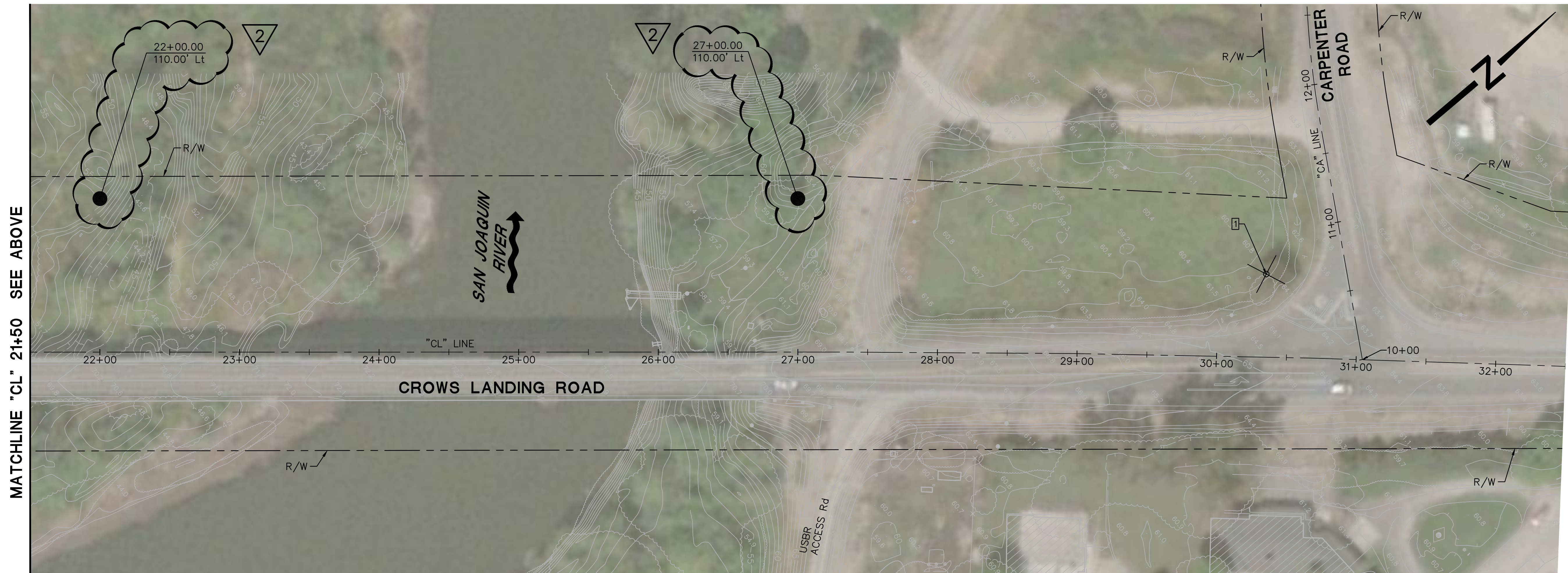
TREE REMOVAL LIST

TREE #	SPECIES	Dia (in)*	NORTHING	EASTING	"CL" Sta	OFFSET
1	<i>Eucalyptus sp.</i>	17	1980441	6412895	30+34	59' Lt
2	<i>Populus fremontii</i>	40	1979005	6411939	13+14	60' Lt
3	<i>Populus fremontii</i>	26	1979118	6411979	14+32	42' Lt
4	<i>Populus fremontii</i>	39	1979209	6412023	15+28	24' Lt
5	<i>Populus fremontii</i>	38	1979293	6412046	16+13	28' Lt
6	<i>Fraxinus latifolia</i>	18	1979450	6412032	17+43	107' Lt
7	<i>Populus fremontii</i>	42	1979413	6412083	17+35	44' Lt
8	<i>Salix goodingii</i>	10	1979567	6412193	19+17	30' Lt
9	<i>Salix goodingii</i>	13	1979579	6412206	19+34	28' Lt
10	<i>Salix goodingii</i>	6	1979579	6412193	19+26	38' Lt
11	<i>Populus fremontii</i>	30	1979627	6412179	19+55	78' Lt
12	<i>Populus fremontii</i>	11	1979643	6412218	19+90	57' Lt
13	<i>Salix goodingii</i>	15	1979677	6412289	20+61	24' Lt
14	<i>Salix goodingii</i>	16	1979696	6412276	20+67	46' Lt
15	<i>Salix goodingii</i>	16	1979702	6412302	20+89	31' Lt
16	<i>Salix goodingii</i>	22	1979717	6412315	21+08	31' Lt
18	<i>Quercus lobata</i>	15	1979433	6412192	18+04	42' Rt
19	<i>Acer negundo</i>	13	1979088	6412064	14+20	47' Rt
20	<i>Populus fremontii</i>	25	1978975	6412041	13+04	47' Rt

*: LARGEST MEASURED STEM DIAMETER

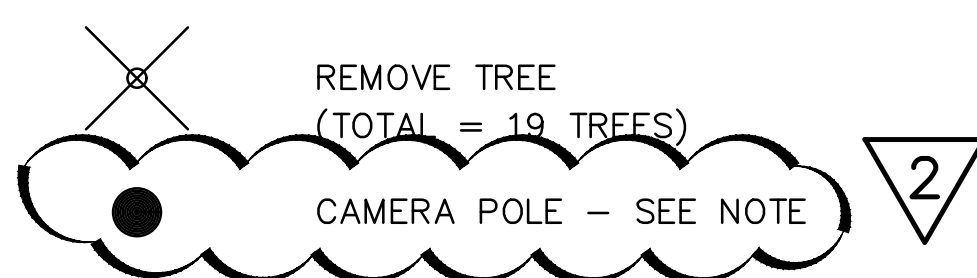


PLAN
SCALE: 1"=40'



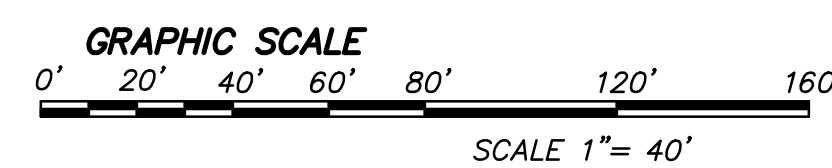
PLAN
SCALE: 1"=40'

LEGEND

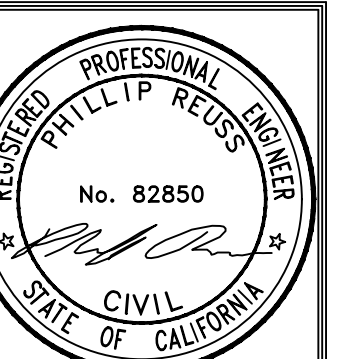


NOTE:

LOCATIONS ARE APPROXIMATE. COORDINATE WITH COUNTY TO PROVIDE ACCESS. POLE AND CAMERA SYSTEM EQUIPMENT TO BE INSTALLED BY COUNTY.



2 REVISED PER ADDENDUM NO. 2 DATED AUGUST 7, 2020



PREPARED UNDER THE DIRECTION OF:

NO.	DESCRIPTIONS	DATE	APPROVED
1	ADDED CAMERA POLE LOCATIONS	8-7-20	PR

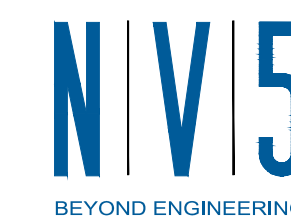
STANISLAUS COUNTY
DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND OPERATIONS DIVISION
1716 MORGAN ROAD - MODESTO, CA 95358



CROWS LANDING ROAD/SAN JOAQUIN RIVER
BRIDGE REPLACEMENT PROJECT
CONSTRUCTION DETAILS
TREE REMOVAL PLAN

JOB NO. 226217-68
DATE 8/7/2020
DR BY PR
CK BY JW
SCALE AS SHOWN

SHEET NUMBER
DT-9
10 OF 70 SHEETS



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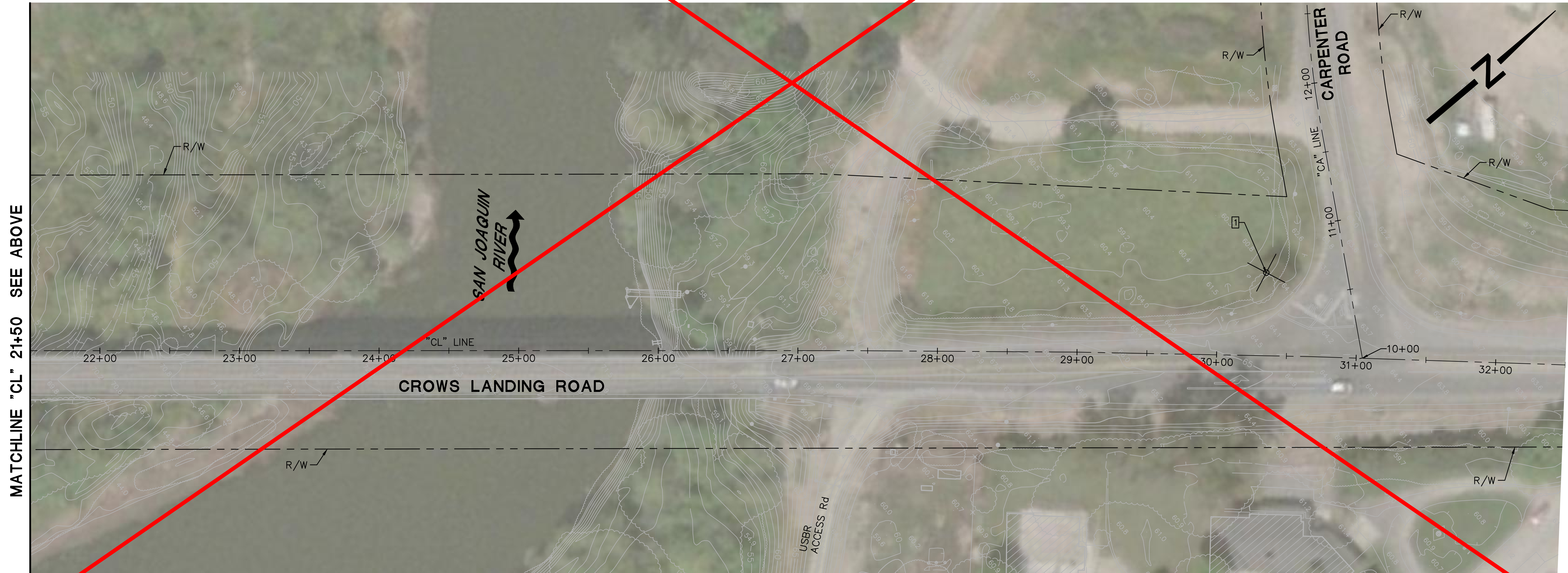
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10	<i>Salix goodingii</i>	6	1979579	6412193	19+26	38' Lt
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*: LARGEST MEASURED STEM DIAMETER

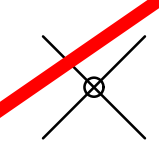


PLAN
SCALE: 1"=40'

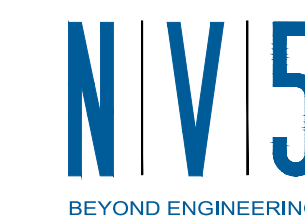
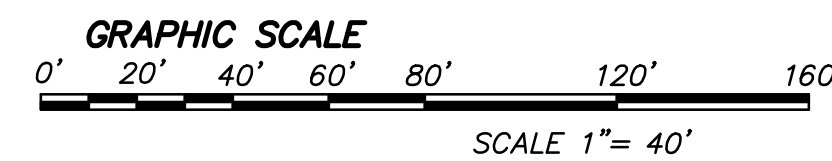


PLAN
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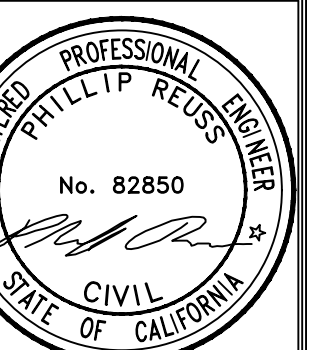
LEGEND

-  REMOVE TREE
(TOTAL = 19 TREES)

SUPERCEDED



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NO.	REVISIONS	DATE	APPROVED

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DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND OPERATIONS DIVISION
1716 MORGAN ROAD - MODESTO, CA 95358

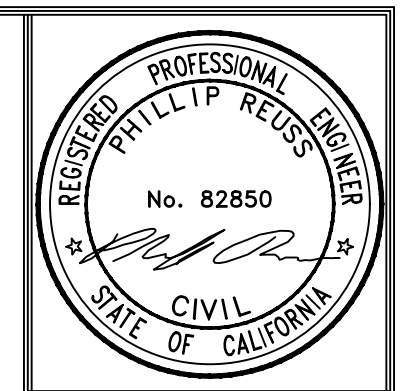


CROWS LANDING ROAD/SAN JOAQUIN RIVER
BRIDGE REPLACEMENT PROJECT
CONSTRUCTION DETAILS
TREE REMOVAL PLAN

JOB NO. 226217-68
DATE 6/24/2020
DR BY PR
CK BY JW
SCALE AS SHOWN

SHEET NUMBER
DT-9

10 OF 70 SHEETS



PREPARED UNDER THE DIRECTION OF:

NO.	REVISIONS	DATE	APPROVED

STANISLAUS COUNTY
 DEPARTMENT OF PUBLIC WORKS
 ENGINEERING AND OPERATIONS DIVISION
 1716 MORGAN ROAD - MODESTO, CA 95358

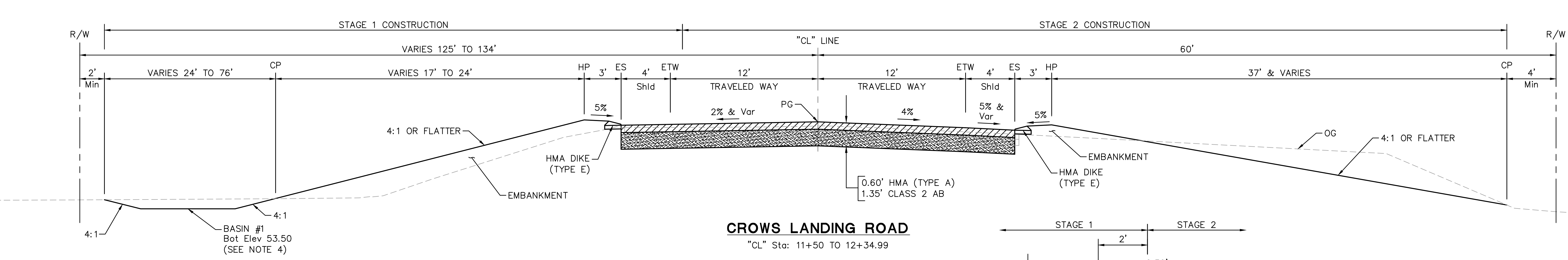
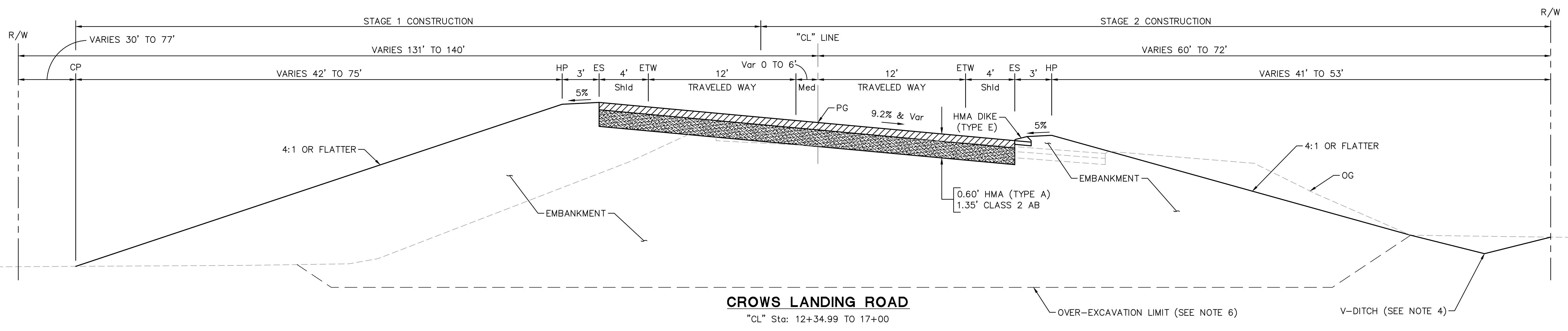
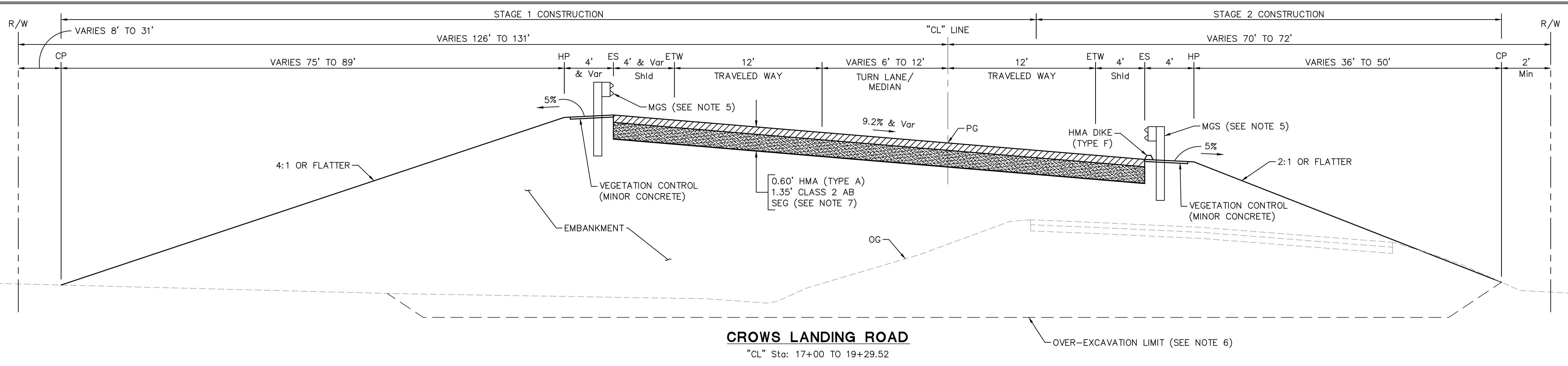


**CROWS LANDING ROAD/SAN JOAQUIN RIVER
 BRIDGE REPLACEMENT PROJECT**

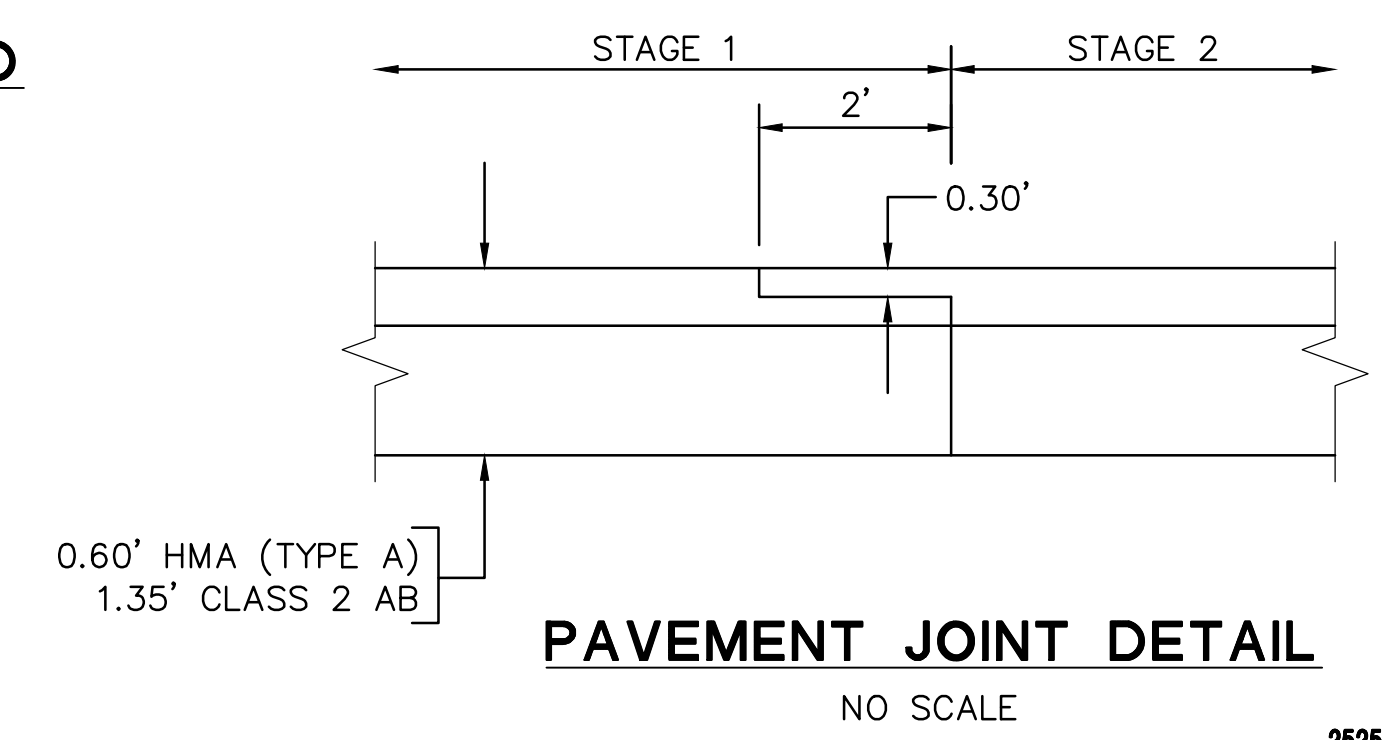
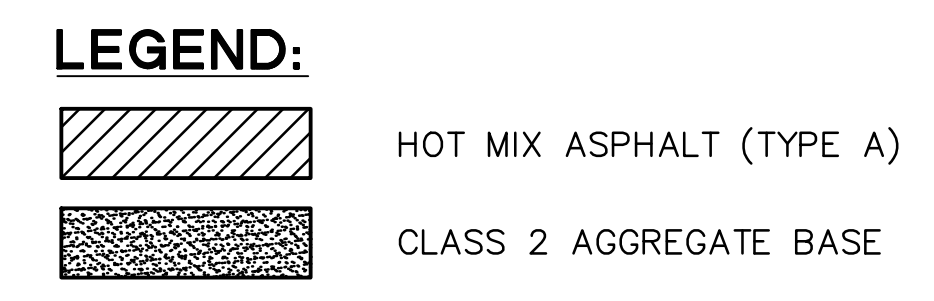
TYPICAL SECTIONS

JOB NO. 226217-68
 DATE 6/24/2020
 DR BY PR
 CK BY JW
 SCALE NO SCALE

SHEET NUMBER
X-1
 11 OF 70 SHEETS



- NOTES:**
- FOR GENERAL NOTES & ABBREVIATIONS, SEE SHEET DT-1.
 - COMPACT UPPER 0.5' OF SUBGRADE SOIL BELOW PAVEMENT SECTION TO 95% RELATIVE COMPACTION PER STANDARD SPECIFICATION SECTION 19-5.
 - R VALUE OF IMPORTED BORROW SOIL SHALL BE A MINIMUM OF 30.
 - FOR LIMITS AND DETAILS OF BASIN AND V-DITCH, SEE CONTOUR GRADING AND DRAINAGE PLANS.
 - LOCATION OF MGS AND HMA DIKE WILL VARY WHERE TERMINAL SYSTEM ENDS. SEE PLAN AND PROFILE SHEETS FOR EXACT LOCATIONS OF MGS AND HMA DIKE.
 - FOR LIMITS AND DETAILS OF OVER-EXCAVATION, SEE SHEET DT-6.
 - FOR LIMITS OF SUBGRADE ENHANCEMENT GEOGRID, SEE SHEET DT-8.

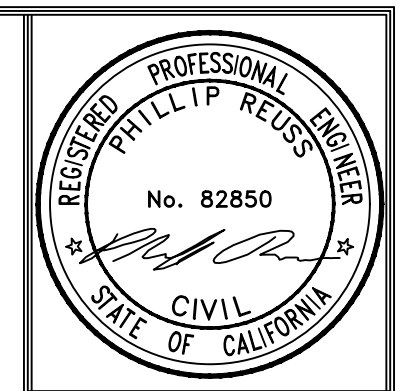


N|V|5
 BEYOND ENGINEERING

2625 NATOMAS PARK DRIVE, SUITE 300
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SACRAMENTO, CA 95833
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DATE:	
REVISIONS	DATE APPROVED
DESCRIPTIONS	
NO	

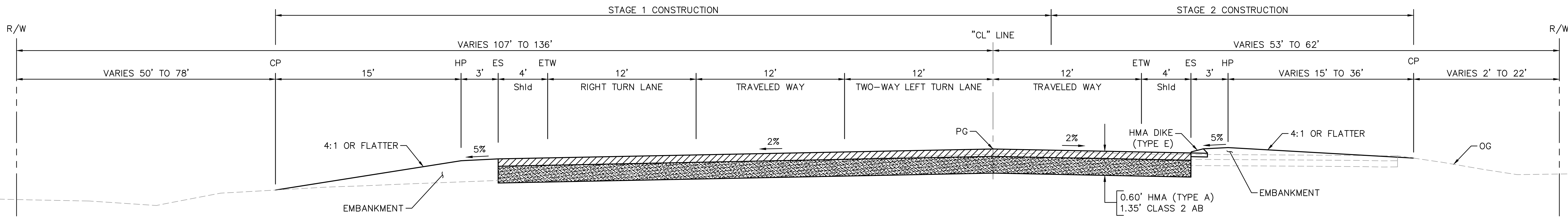
STANISLAUS COUNTY
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 ENGINEERING AND OPERATIONS DIVISION
 1716 MORGAN ROAD - MODESTO, CA 95338

CROWS LANDING ROAD/SAN JOAQUIN RIVER
 BRIDGE REPLACEMENT PROJECT

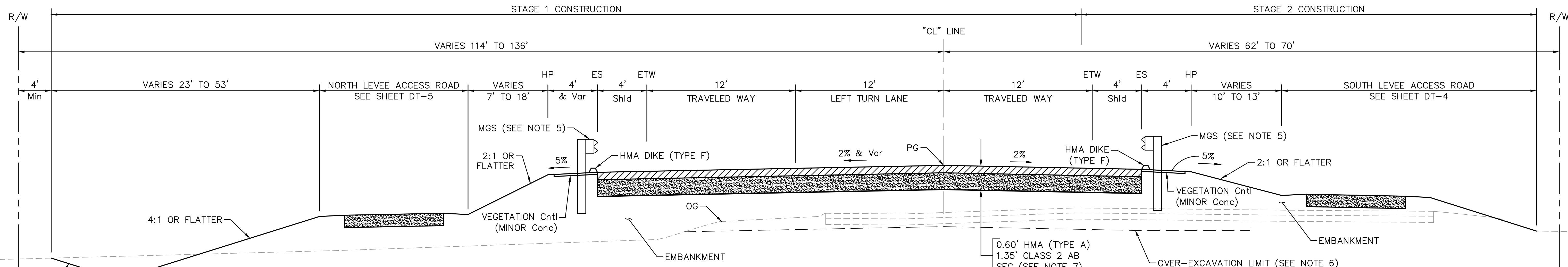
TYPICAL SECTIONS

JOB NO. 226217-68
 DATE 6/24/2020
 DR BY PR
 CK BY JW
 SCALE NO SCALE

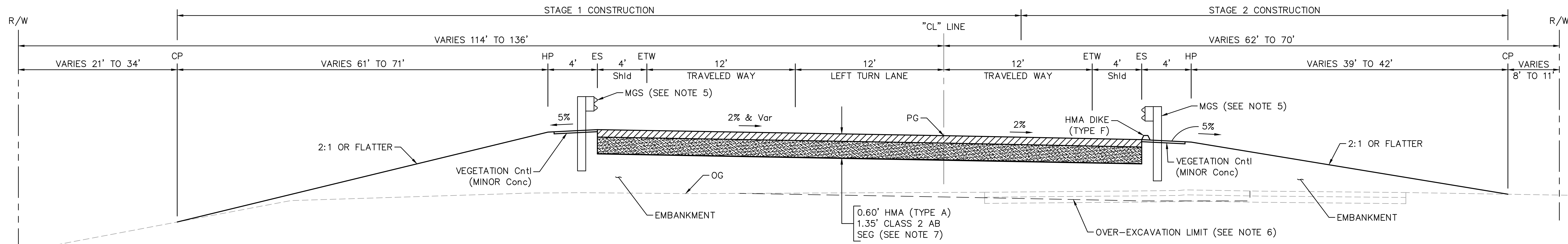
SHEET NUMBER
X-2
 12 OF 70 SHEETS



CROWS LANDING ROAD
 "CL" Sta: 31+56.90 TO 34+20



CROWS LANDING ROAD
 "CL" Sta: 27+92 TO 31+56.90

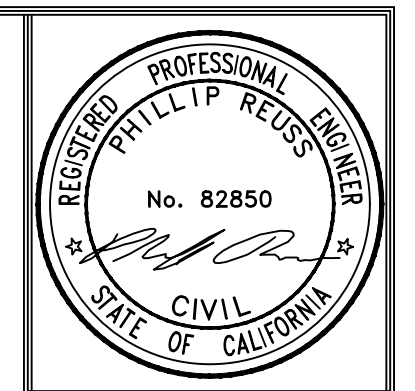


CROWS LANDING ROAD
 "CL" Sta: 27+12.52 TO 27+92

NOTE:
 1. FOR NOTES AND LEGEND, SEE SHEET X-1.

N|V|5
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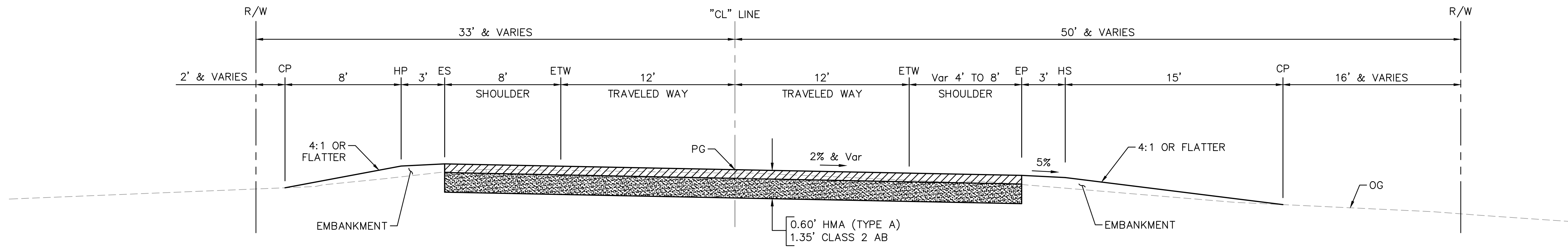
STANISLAUS COUNTY
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 ENGINEERING AND OPERATIONS DIVISION
 1716 MORGAN ROAD - MODESTO, CA 95358

CROWS LANDING ROAD/SAN JOAQUIN RIVER
 BRIDGE REPLACEMENT PROJECT

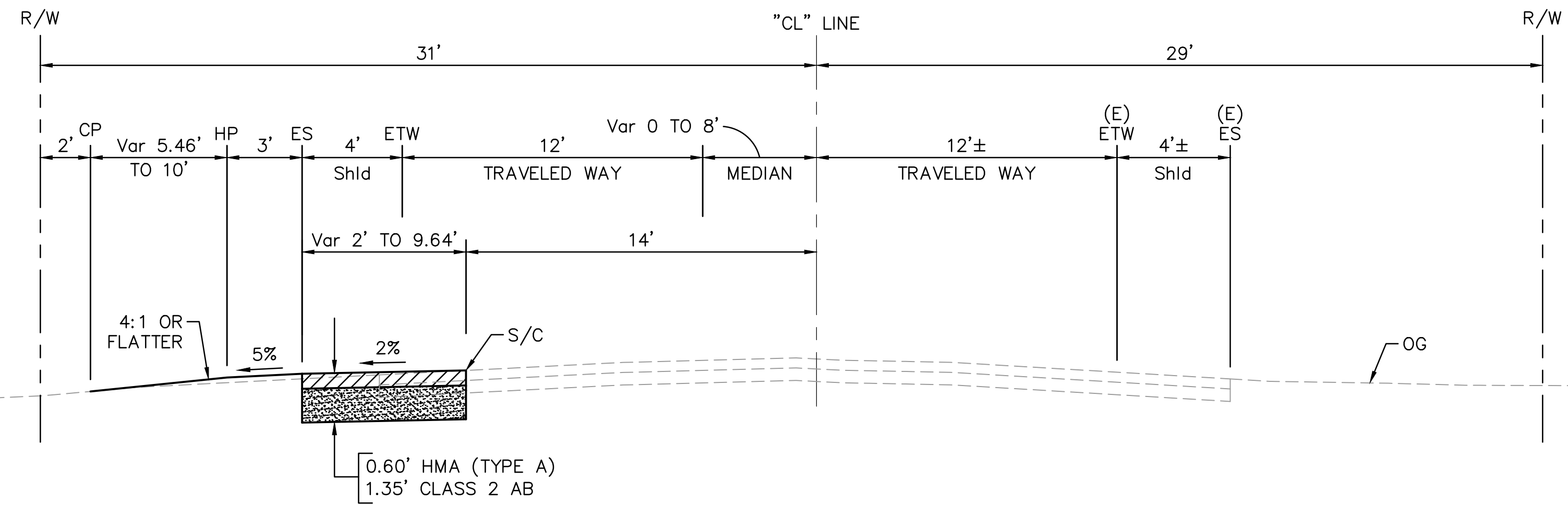
TYPICAL SECTIONS

JOB NO. 226217-68
 DATE 6/24/2020
 DR BY PR
 CK BY JW
 SCALE NO SCALE

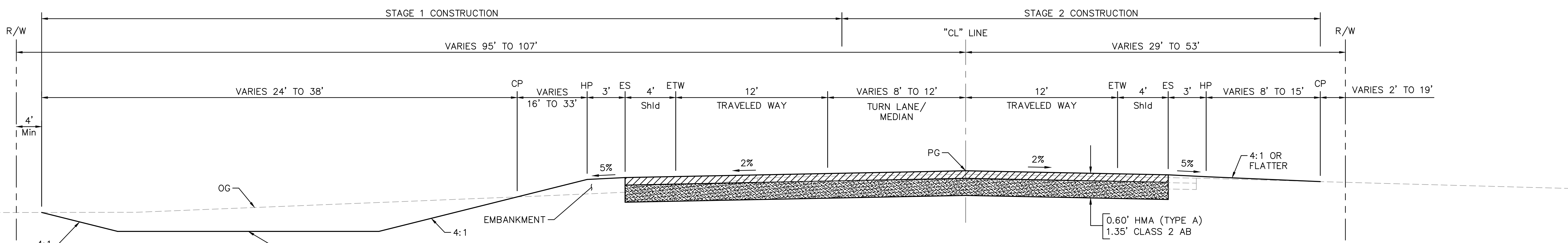
SHEET NUMBER
X-3
 13 OF 70 SHEETS



CARPENTER ROAD
 "CL" Sta: 10+00 TO 11+75



CROWS LANDING ROAD
 "CL" Sta: 37+80 TO 42+00

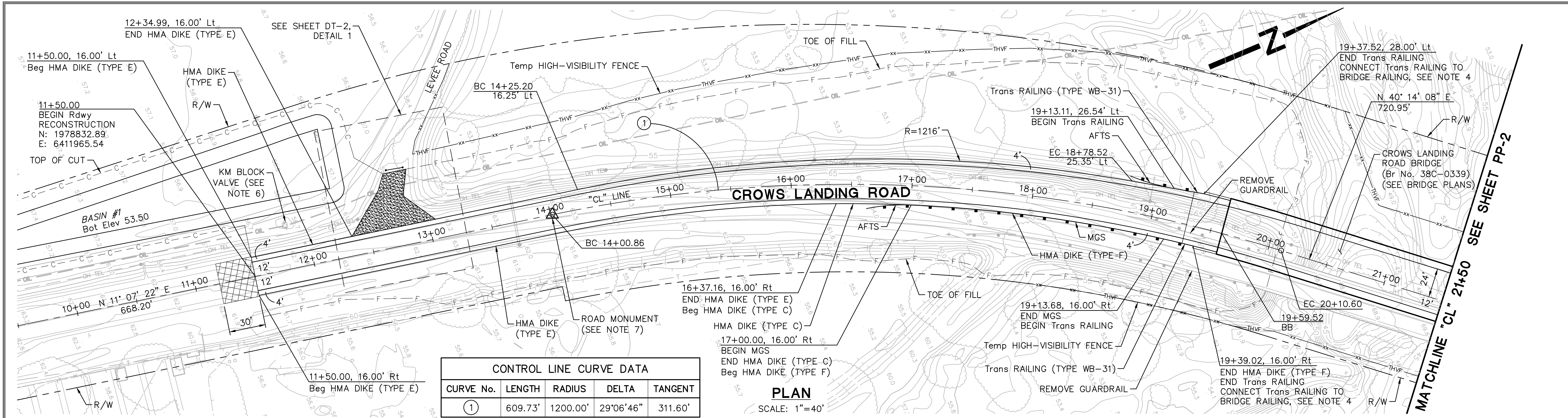


CROWS LANDING ROAD
 "CL" Sta: 34+20 TO 37+80

NOTE:
 1. FOR NOTES AND LEGEND, SEE SHEET X-1.

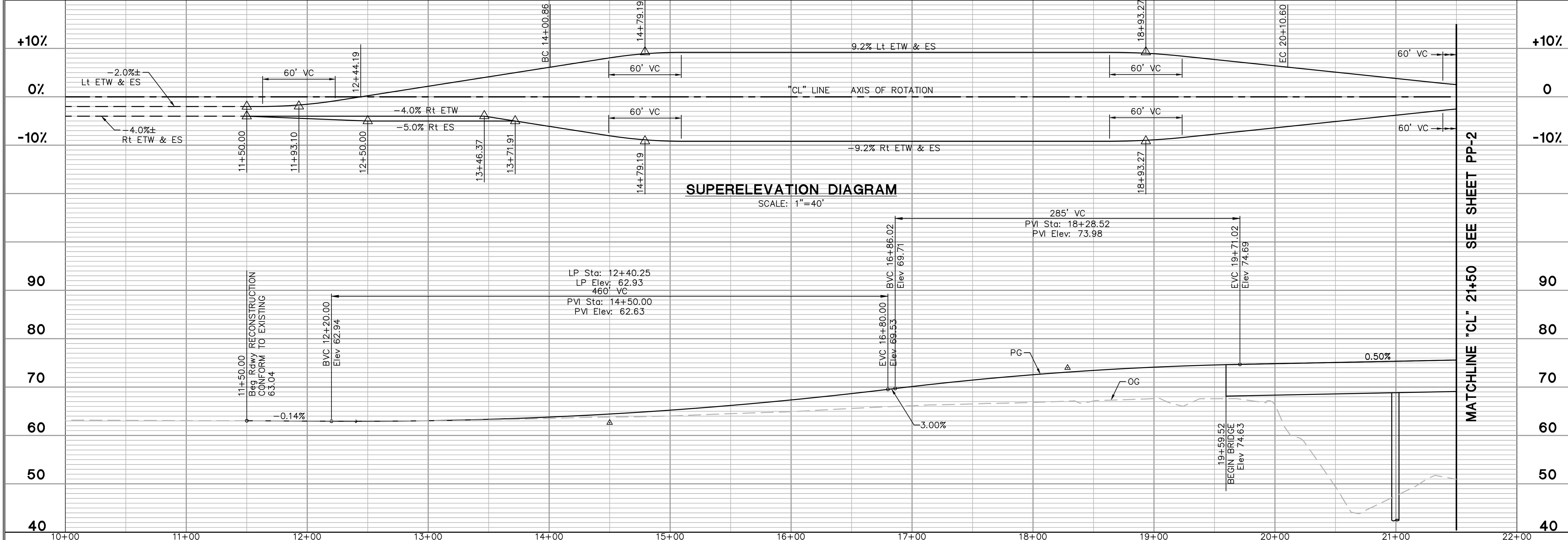
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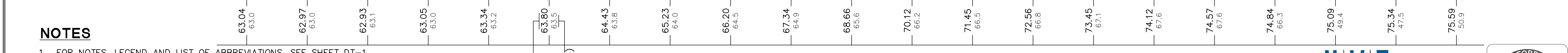


CONTROL LINE CURVE DATA				
CURVE No.	LENGTH	RADIUS	DELTA	TANGENT
①	609.73'	1200.00'	29°06'46"	311.60'

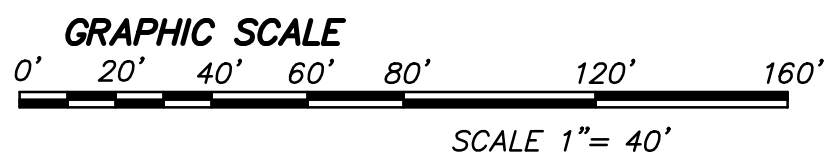
PLAN
SCALE: 1"=40'



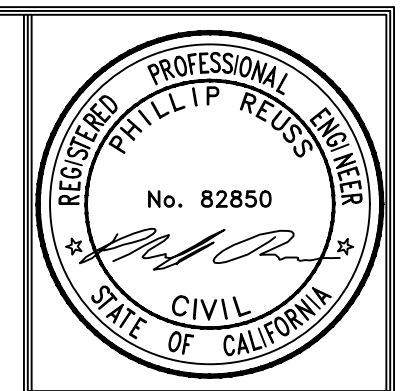
SUPERELEVATION DIAGRAM
SCALE: 1"=40'



PROFILE - "CL" LINE
SCALE H: 1"=40'
V: 1"=10'



- NOTES**
- FOR NOTES, LEGEND AND LIST OF ABBREVIATIONS, SEE SHEET DT-1.
 - ALL STATION AND OFFSET CALLOUTS ARE BASED ON THE "CL" LINE, UNLESS OTHERWISE NOTED.
 - CONFORM NEW ROAD TO EXISTING PER TYPICAL CONFORM DETAIL, SHEET DT-1.
 - CONNECT MGS TO BRIDGE RAILING PER CALTRANS STD PLAN RSP A77U1.
 - FOR MGS TRANSITION RAILING (TYPE WB-31) DETAILS, SEE CALTRANS STD PLAN RSP A77U4.
 - PROTECT IN PLACE. FOR ADDITIONAL REQUIREMENTS REGARDING WORK ADJACENT TO KINDER MORGAN FACILITIES, SEE SHEET DT-1.
 - FOR ROAD MONUMENT DETAILS, COUNTY STANDARD PLANS 1-E1 AND 1-E2.



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1716 MORGAN ROAD - MODESTO, CA 95338



CROWS LANDING ROAD/SAN JOAQUIN RIVER
BRIDGE REPLACEMENT PROJECT
PLAN, PROFILE & SUPERELEVATION DIAGRAM
CROWS LANDING ROAD

JOB NO. 226217-68
DATE 6/24/2020
DR BY PR
CK BY JW
SCALE AS SHOWN

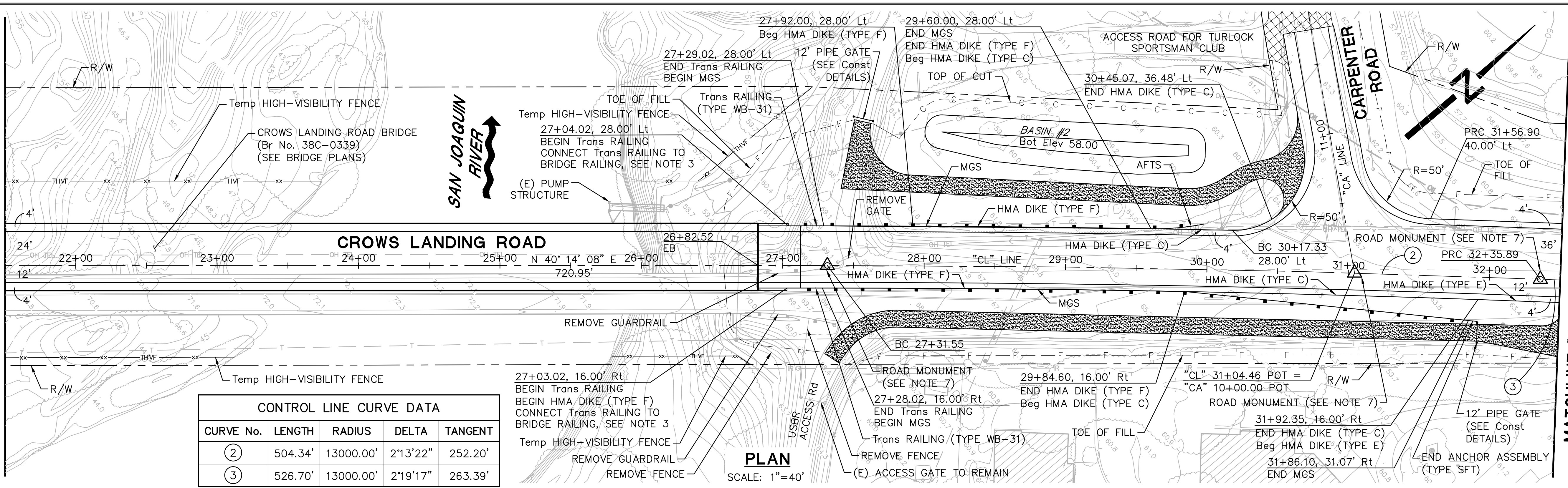
SHEET NUMBER
PP-1
14 OF 70 SHEETS

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MATCHLINE "CL" 21+50 SEE SHEET PP-1

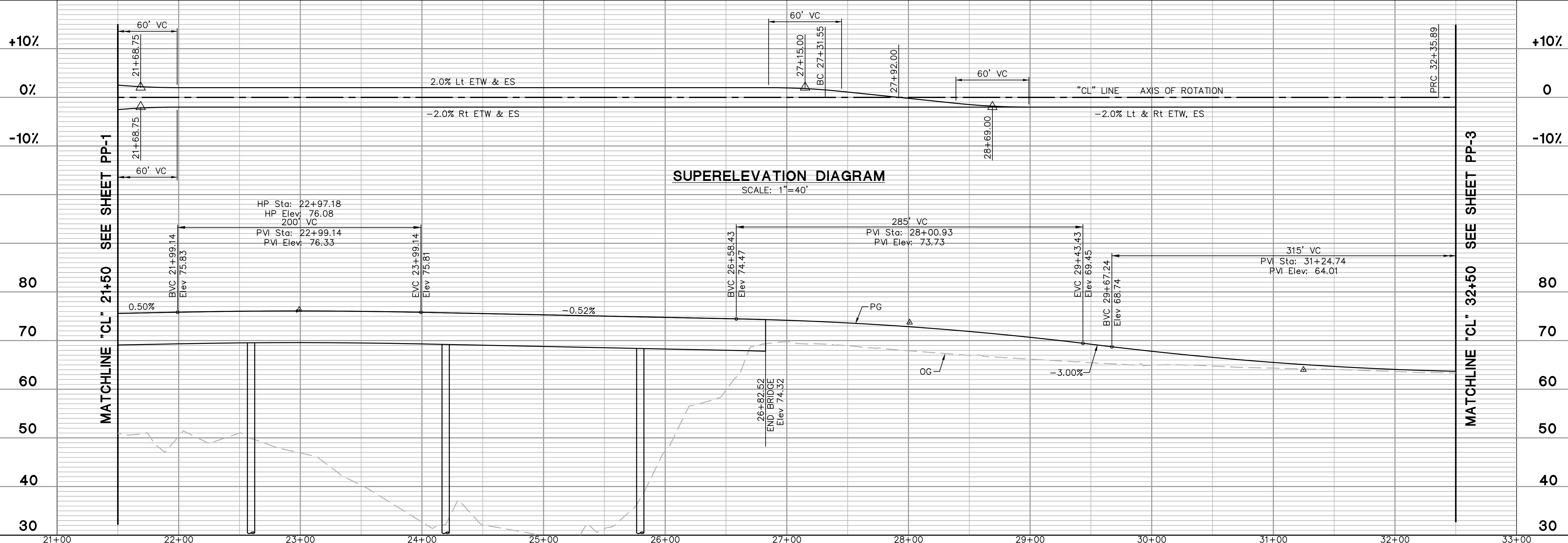
MATCHLINE "CL" 32+50 SEE SHEET PP-3



CONTROL LINE CURVE DATA				
CURVE No.	LENGTH	RADIUS	DELTA	TANGENT
②	504.34'	13000.00'	2°13'22"	252.20'
③	526.70'	13000.00'	2°19'17"	263.39'

MATCHLINE "CL" 21+50 SEE SHEET PP-1

MATCHLINE "CL" 32+50 SEE SHEET PP-3

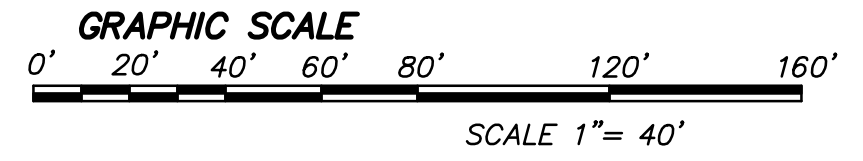


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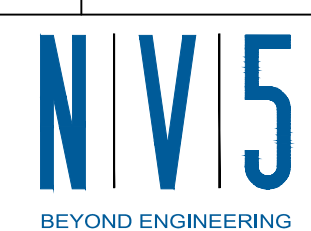
- FOR NOTES, LEGEND AND LIST OF ABBREVIATIONS, SEE SHEET DT-1.
- ALL STATION AND OFFSET CALLOUTS ARE BASED ON THE "CL" LINE, UNLESS OTHERWISE NOTED.
- CONNECT MGS TO BRIDGE RAILING PER CALTRANS STD PLAN RSP A77U1.
- FOR MGS TRANSITION RAILING (TYPE WB-31) DETAILS, SEE CALTRANS STD PLAN RSP A77U4.
- FOR CARPENTER ROAD IMPROVEMENTS, SEE SHEET PP-4.
- FOR LEVEE ACCESS ROAD DETAILS, SEE SHEETS DT-4 AND DT-5.
- FOR ROAD MONUMENT DETAILS, SEE COUNTY STANDARD PLANS 1-E1 AND 1-E2.

PROFILE - "CL" LINE

SCALE H: 1"=40'
SCALE V: 1"=10'



PROPOSED Elev (Typ)	EXISTING Elev (Typ)
75.59 50.9	75.03 31.3
75.84 50.3	74.77 47.3
76.02 51.0	74.51 59.8
76.08 46.9	74.18 69.8
76.01 40.3	73.63 68.9
75.81 32.7	72.86 67.9
75.55 32.1	71.87 67.0
75.29 28.2	70.67 66.2
	69.25 65.4
	67.80 64.9
	66.55 64.8
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	64.69 64.1
	64.08 63.7
	63.68 63.3

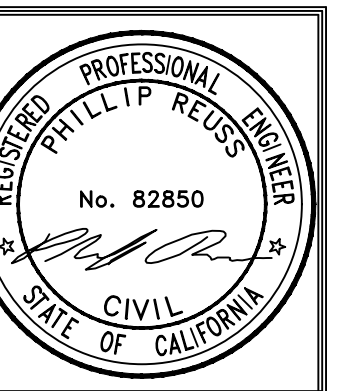


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SHEET NUMBER
PP-2

15 OF 70 SHEETS



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ENGINEERING AND OPERATIONS DIVISION
1716 MORGAN ROAD - MODESTO, CA 95358



CROWS LANDING ROAD/SAN JOAQUIN RIVER
BRIDGE REPLACEMENT PROJECT

PLAN, PROFILE & SUPERELEVATION DIAGRAM
CROWS LANDING ROAD

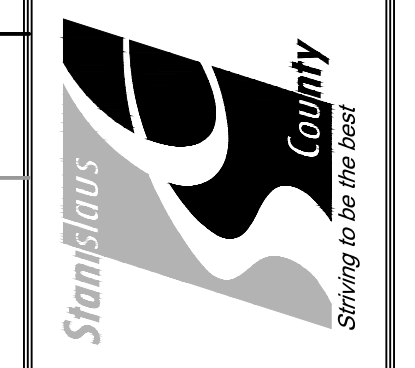
JOB NO. 226217-68
DATE 6/24/2020
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CK BY JW
SCALE AS SHOWN



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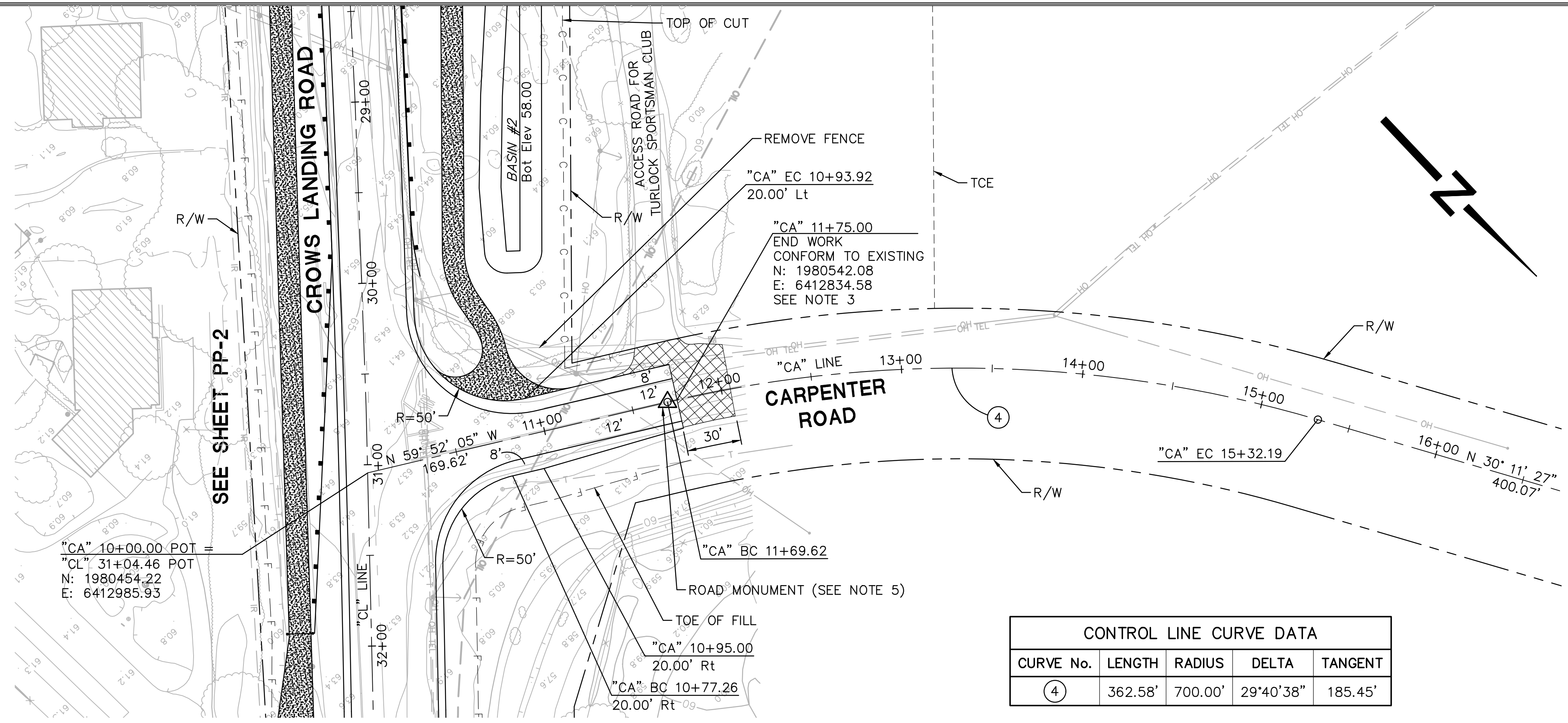
STANISLAUS COUNTY
 DEPARTMENT OF PUBLIC WORKS
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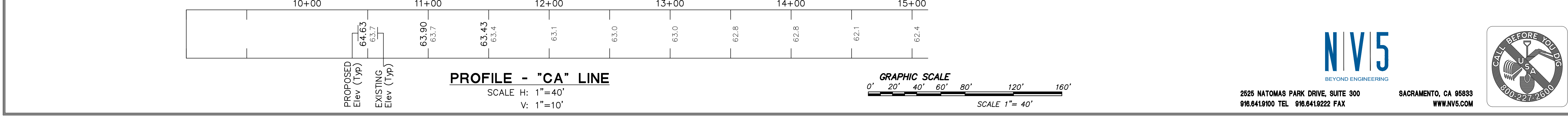
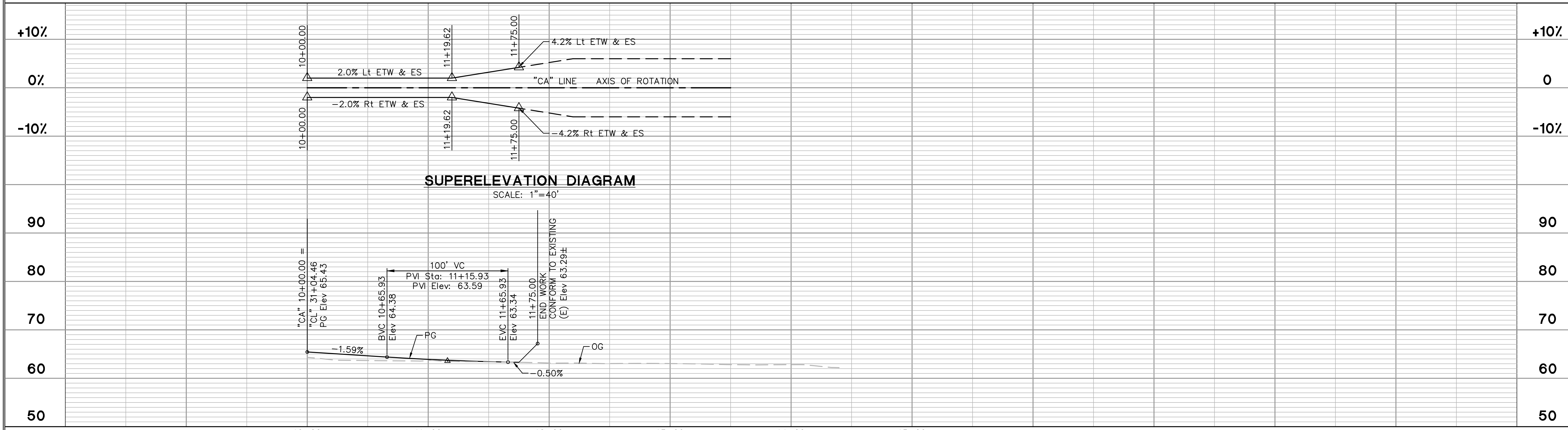
CROWS LANDING ROAD/SAN JOAQUIN RIVER
 BRIDGE REPLACEMENT PROJECT
 PLAN PROFILE & SUPERELEVATION DIAGRAM
 CARPENTER ROAD

JOB NO. 226217-68
 DATE: 6/24/2020
 DR BY: PR
 CK BY: JW
 SCALE: AS SHOWN

SHEET NUMBER
PP-4
 17 OF 70 SHEETS



- NOTES**
- FOR NOTES, LEGEND AND LIST OF ABBREVIATIONS, SEE SHEET DT-1.
 - FOR CROWS LANDING ROAD IMPROVEMENTS, SEE SHEETS PP-1 TO PP-3.
 - CONFORM NEW ROAD TO EXISTING PER TYPICAL CONFORM DETAIL, SHEET DT-1.
 - FOR NORTH LEVEE ACCESS ROAD DETAILS, SEE SHEET DT-5.
 - FOR ROAD MONUMENT DETAILS, SEE COUNTY STANDARD PLANS 1-E1 AND 1-E2.



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EROSION CONTROL

SEQUENCE	ITEM	MATERIAL		APPLICATION RATE
		DESCRIPTION	TYPE	
STEP 1	HYDROSEED	SEED	MIX	42.5 LB/ACRE
		FIBER	CELLULOSE	1,000 LB/ACRE
		FERTILIZER	ORGANIC	100 LB/ACRE
STEP 2	HYDROMULCH	FIBER	CELLULOSE	1,000 LB/ACRE
		TACKIFIER	PSYLLIUM	100 LB/ACRE

EROSION CONTROL QUANTITIES

SHEET	DESCRIPTION	HYDROSEED	HYDROMULCH	FIBER ROLLS
		SQFT	SQFT	LF
EC-1	EROSION CONTROL	103,620	103,620	
	FIBER ROLLS			6,082
EC-2	EROSION CONTROL	78,224	78,224	
	FIBER ROLLS			4,341
	TOTAL	181,844	181,844	10,423

SEED MIX

BOTANICAL NAME (COMMON NAME)	PERCENT PURITY (MINIMUM)	PERCENT GERMINATION (MINIMUM)	POUNDS PURE LIVE SEED PER ACRE (SLOPE MEASUREMENT)
WESTERN YARROW (ACHILLEA MILLEFOLIUM)	98	85	0.5
MUGWORT (ARTEMISIA DOUGLASIANA)	15	40	1.5
NARROW LEAF MILKWEED (ASCLEPIAS FASCICULARIS)	90	65	7.0
INLAND SALTGRASS (DISTICHLIS SPICATA)	90	75	2.5
BEARDLESS WILDRYE (ELYMUS TRITICOIDES)	90	80	7.0
CALIFORNIA POPPY (ESCHSCHOLZIA CALIFORNICA)	98	80	3.0
CALIFORNIA BARLEY (HORDEUM BRACHYANTHERUM)	90	80	5.0
BICOLOR LUPINE (LUPINUS BICOLOR)	98	85	5.0
PURPLE NEEDLEGRASS (STIPA PULCHRA)	90	75	7.0
SMALL FESCUE (VULPIA MICROSTACHYS)	90	80	4.0

FIBER ROLLS

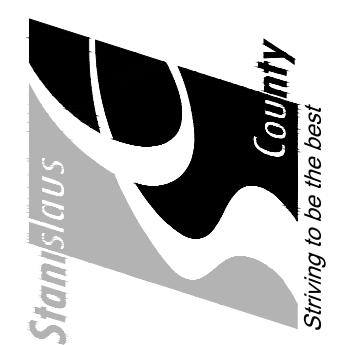
SEQUENCE	ITEM	MATERIAL		REMARKS
		DESCRIPTION	TYPE	
IN EC AREAS FIBER ROLLS MUST BE INSTALLED BEFORE HYDROSEED.	FIBER ROLLS	FIBER ROLL	8" TO 10" Dia	TYPE 1 FIBER ROLL INSTALLATION



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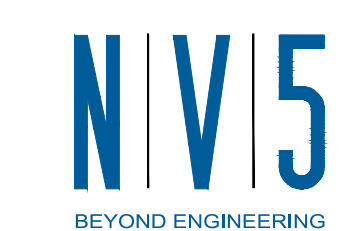
STANISLAUS COUNTY
 DEPARTMENT OF PUBLIC WORKS
 ENGINEERING AND OPERATIONS DIVISION
 1716 MORGAN ROAD - MODESTO, CA 95358



CROWS LANDING ROAD/SAN JOAQUIN RIVER
 BRIDGE REPLACEMENT PROJECT
 EROSION CONTROL LEGEND & QUANTITIES
 CROWS LANDING ROAD

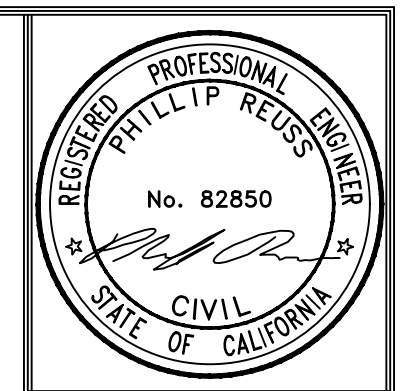
JOB NO. 226217-68
 DATE 6/24/2020
 DR BY PR
 CK BY JW
 SCALE AS SHOWN

SHEET NUMBER
ECL-1
 18 OF 70 SHEETS



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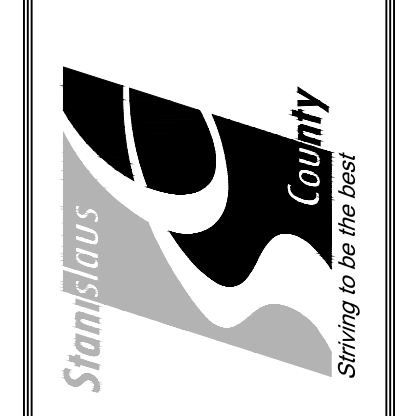




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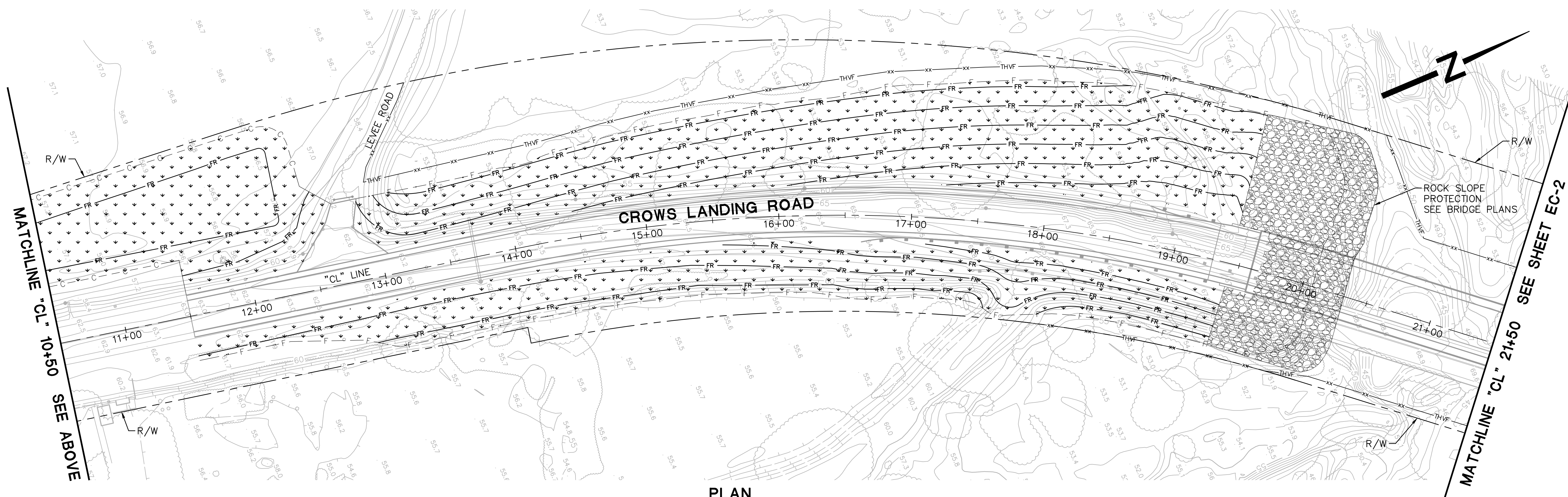
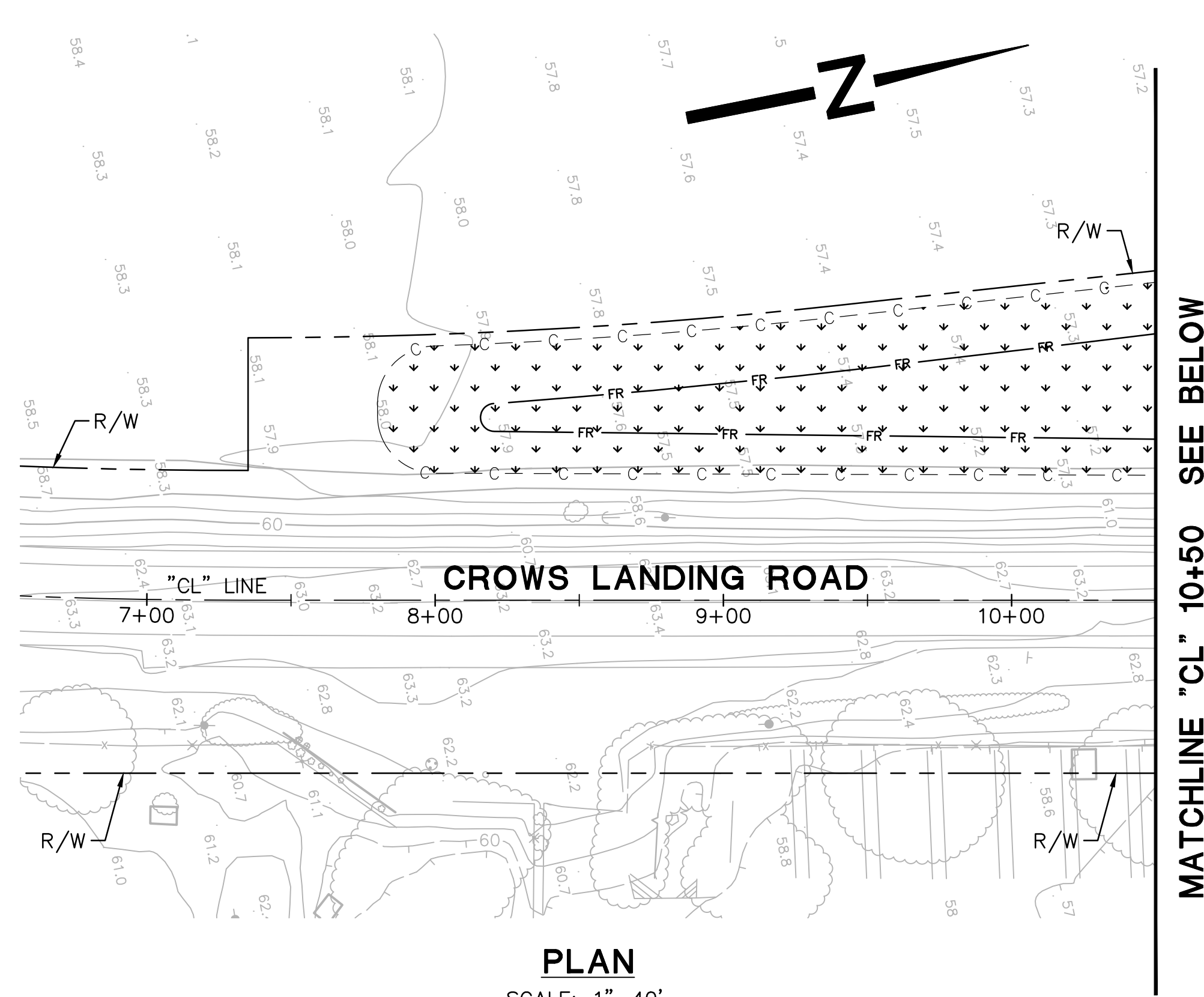
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 1716 MORGAN ROAD - MODESTO, CA 95358



CROWS LANDING ROAD/SAN JOAQUIN RIVER
 BRIDGE REPLACEMENT PROJECT
 EROSION CONTROL PLAN
 CROWS LANDING ROAD

JOB NO. 226217-68
 DATE 6/24/2020
 DR BY PR
 CK BY JW
 SCALE AS SHOWN

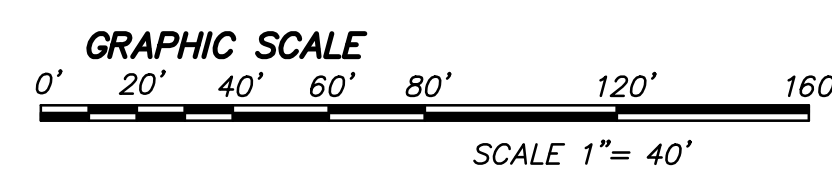
SHEET NUMBER
EC-1
 19 OF 70 SHEETS



- NOTES**
- FOR NOTES, LEGEND AND LIST OF ABBREVIATIONS, SEE SHEET DT-1.
 - PLACE EROSION CONTROL AND FIBER ROLLS UPON COMPLETION OF GROUND DISTURBING ACTIVITIES.
 - FOR TEMPORARY BMP, SEE TEMPORARY WATER POLLUTION CONTROL PLANS IN THE SWPPP.
 - FOR FIBER ROLL DETAILS, SEE CALTRANS REVISED STANDARD PLAN RSP H51.

LEGEND

	EROSION CONTROL
	FIBER ROLL

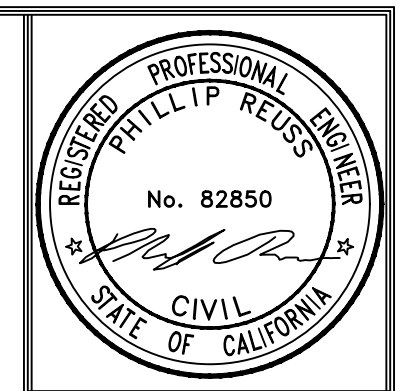


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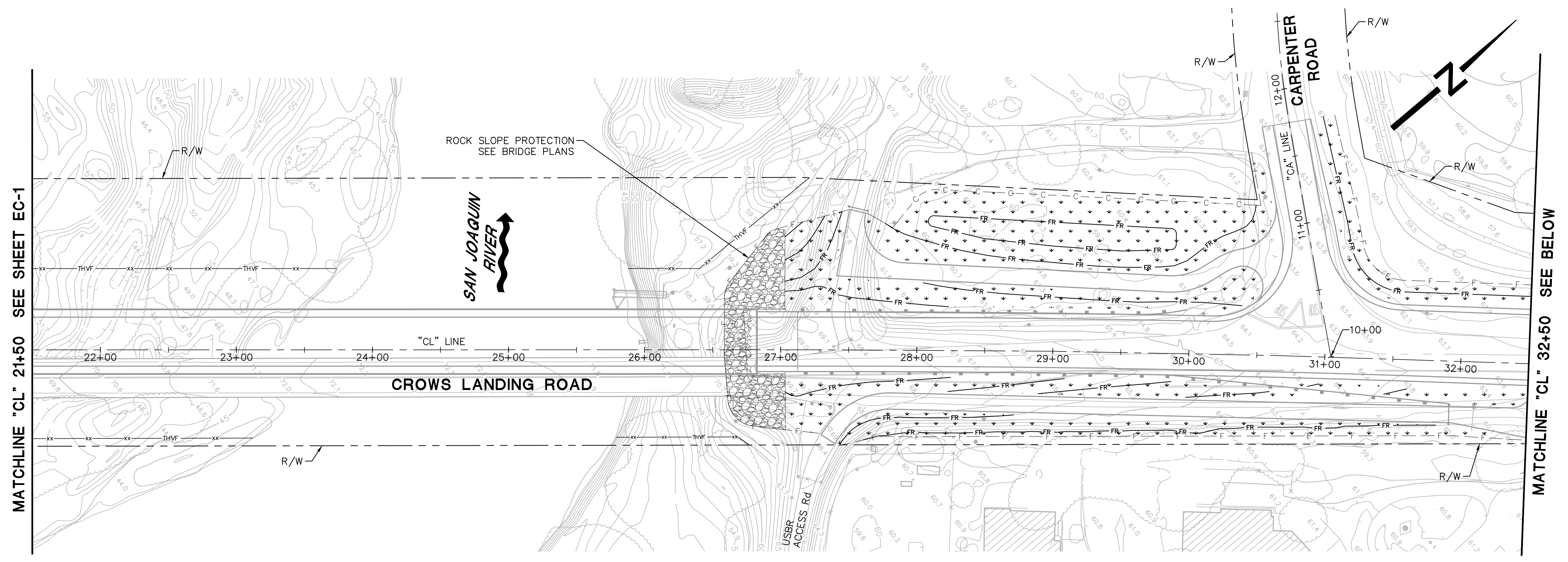
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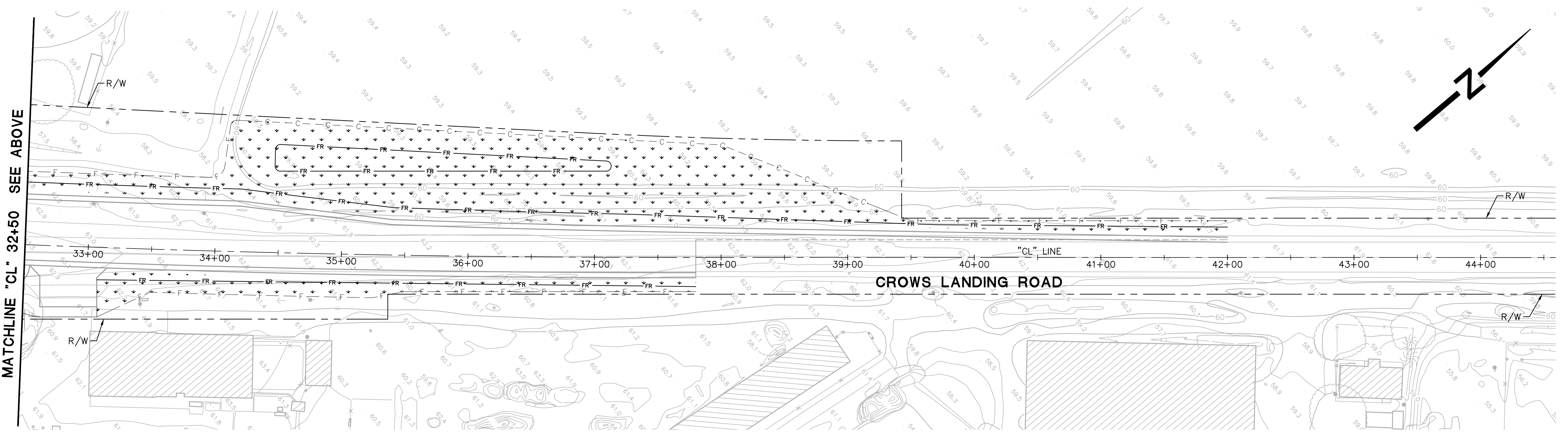
**CROWS LANDING ROAD/SAN JOAQUIN RIVER
 BRIDGE REPLACEMENT PROJECT**
 EROSION CONTROL PLAN
 CROWS LANDING ROAD

JOB NO. 226217-68
 DATE 6/24/2020
 DR BY PR
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 SCALE AS SHOWN

SHEET NUMBER
EC-2
 20 OF 70 SHEETS

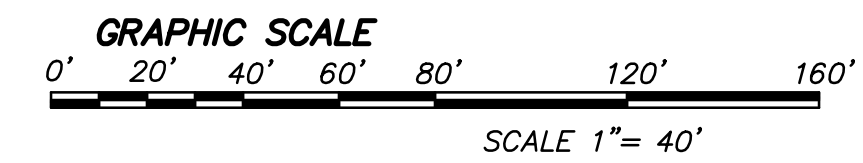


PLAN
 SCALE: 1"=40'



PLAN
 SCALE: 1"=40'

NOTE:
 1. FOR NOTES AND LEGEND, SEE SHEET EC-1.



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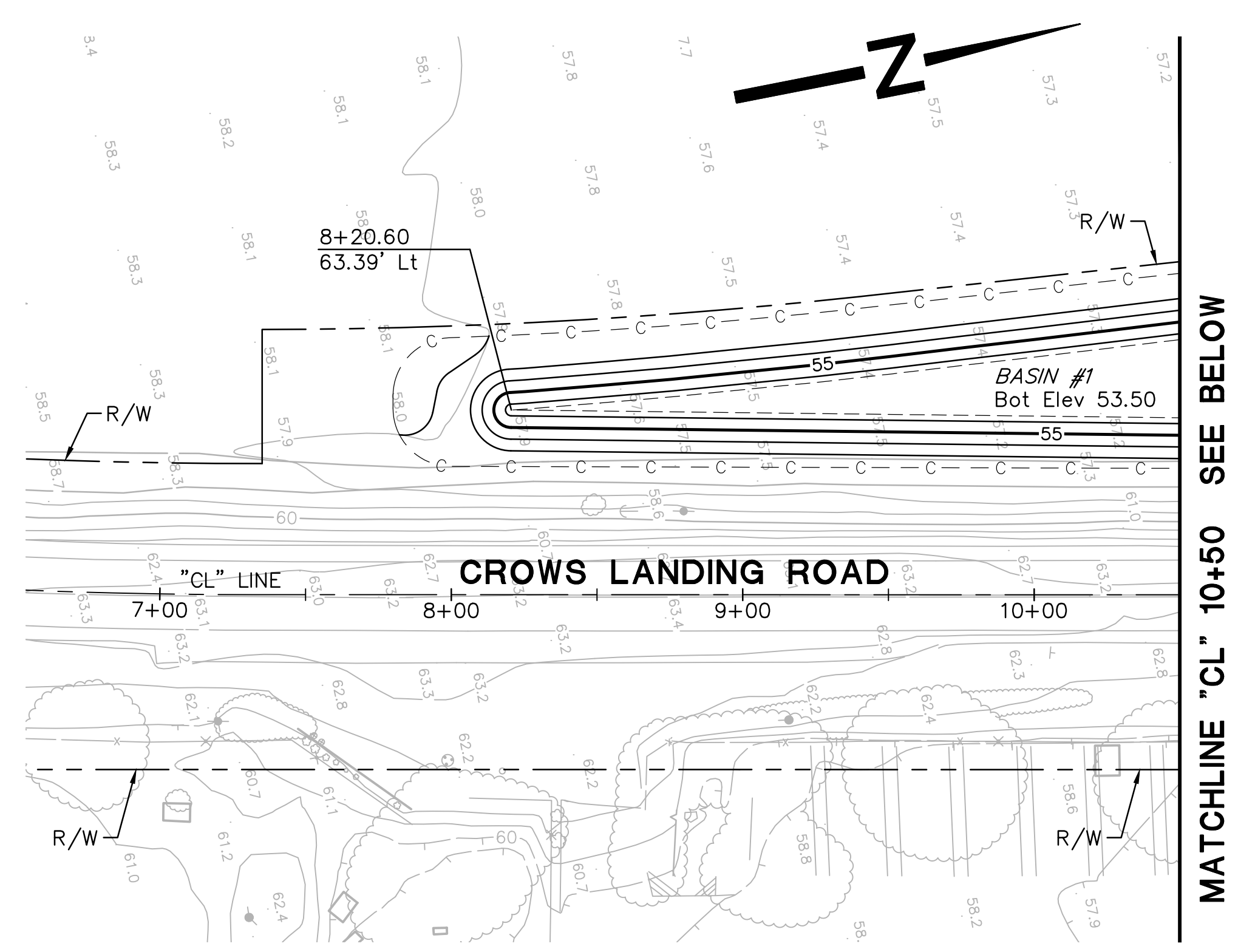
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 1716 MORGAN ROAD - MODESTO, CA 95358



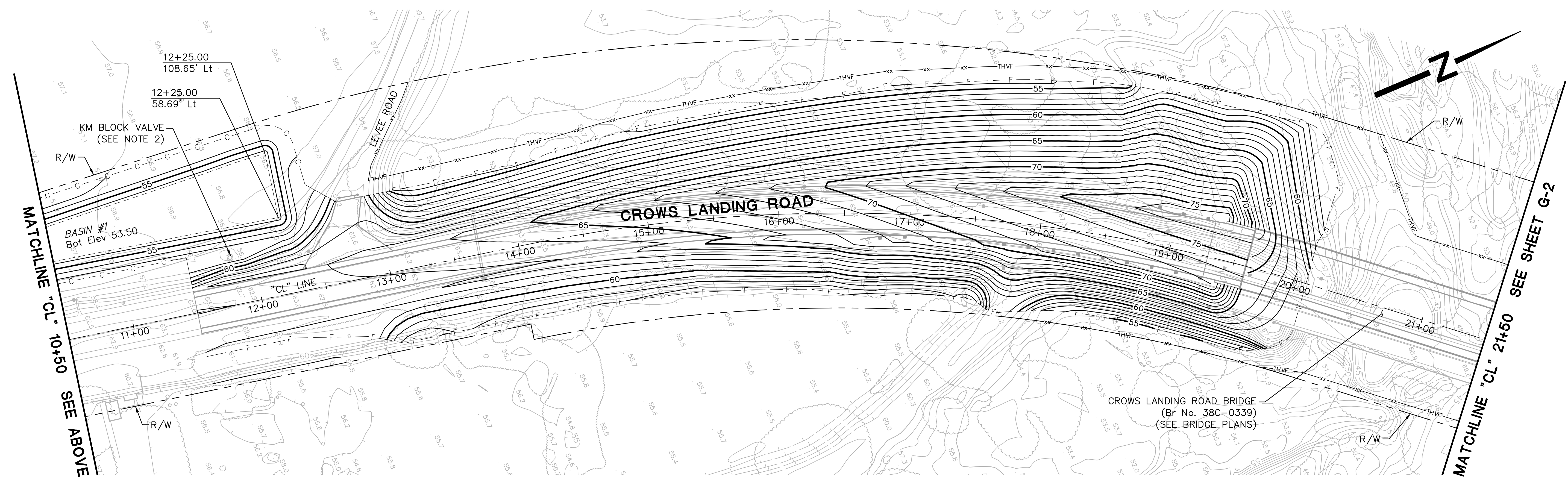
CROWS LANDING ROAD/SAN JOAQUIN RIVER
 BRIDGE REPLACEMENT PROJECT
 CONTOUR GRADING
 CROWS LANDING ROAD

JOB NO. 226217-68
 DATE 6/24/2020
 DR BY PR
 CK BY JW
 SCALE AS SHOWN

SHEET NUMBER
G-1
 21 OF 70 SHEETS

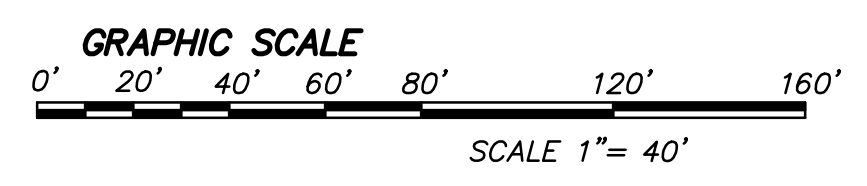


PLAN
 SCALE: 1"=40'



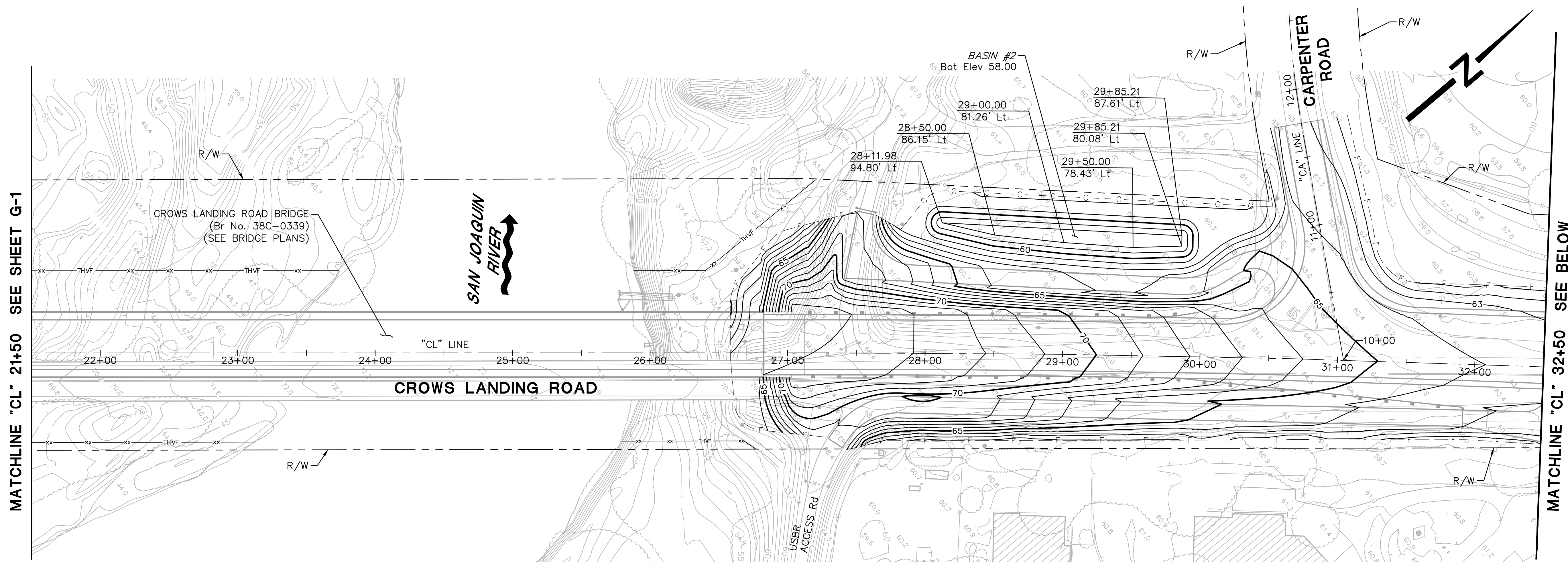
PLAN
 SCALE: 1"=40'

- NOTES**
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 - PROTECT IN PLACE. FOR ADDITIONAL REQUIREMENTS REGARDING WORK ADJACENT TO KINDER MORGAN FACILITIES, SEE SHEET DT-1.

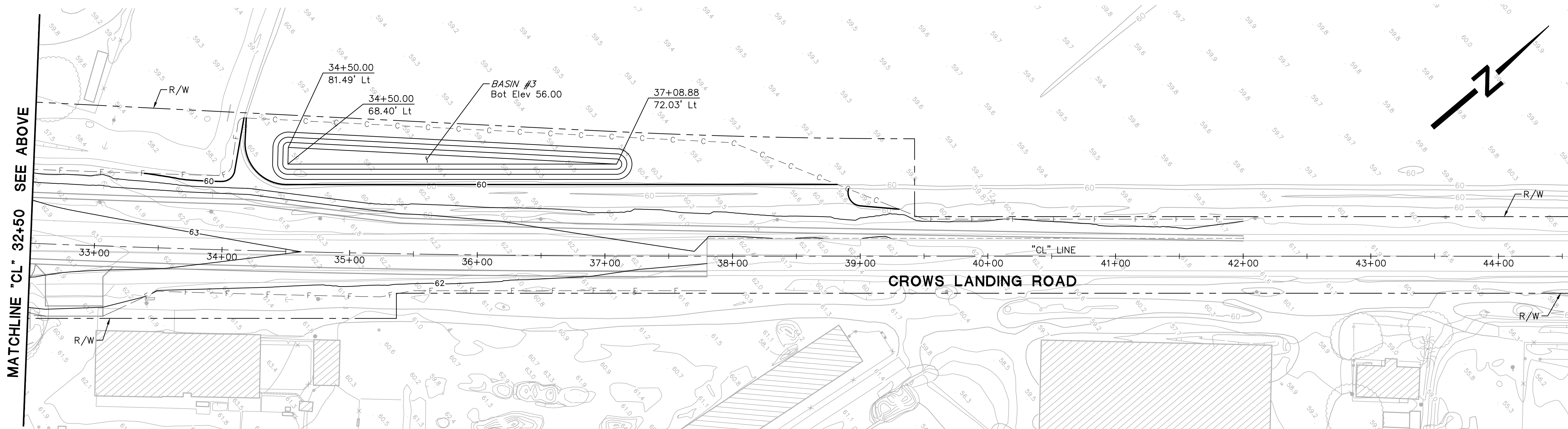


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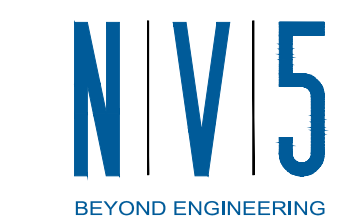
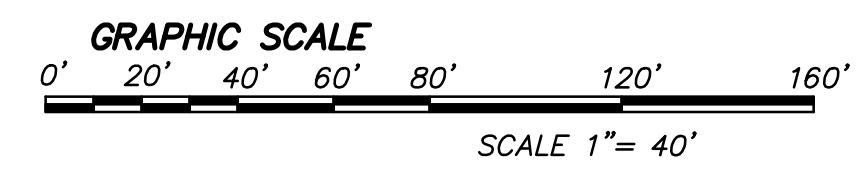
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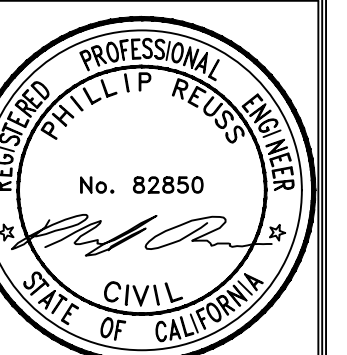
PLAN
SCALE: 1"=40'

NOTE:

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CROWS LANDING ROAD/SAN JOAQUIN RIVER
BRIDGE REPLACEMENT PROJECT
CONTOUR GRADING
CROWS LANDING ROAD

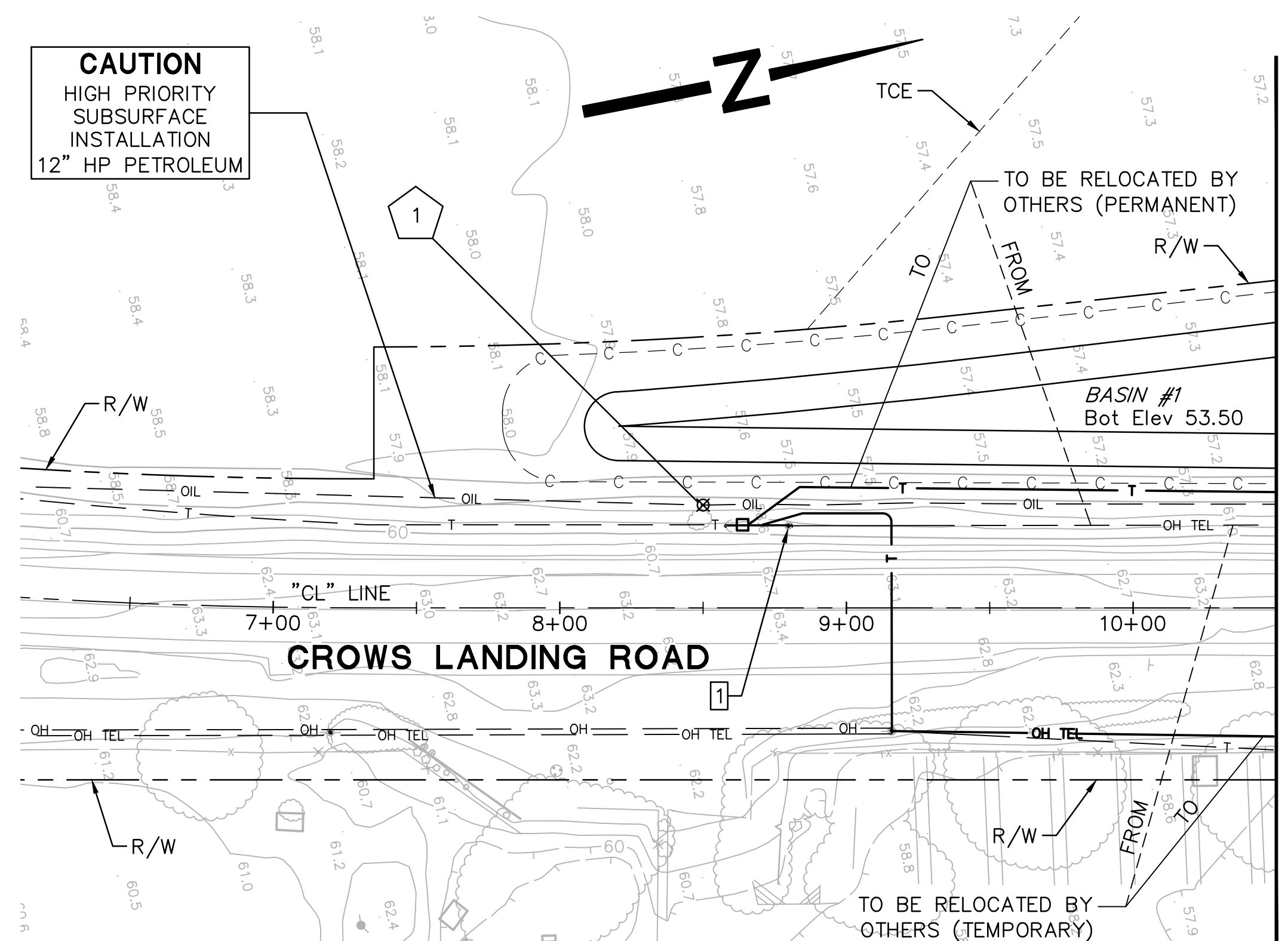
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DR BY PR
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SHEET NUMBER
G-2
22 OF 70 SHEETS

POSITIVE LOCATION INFORMATION

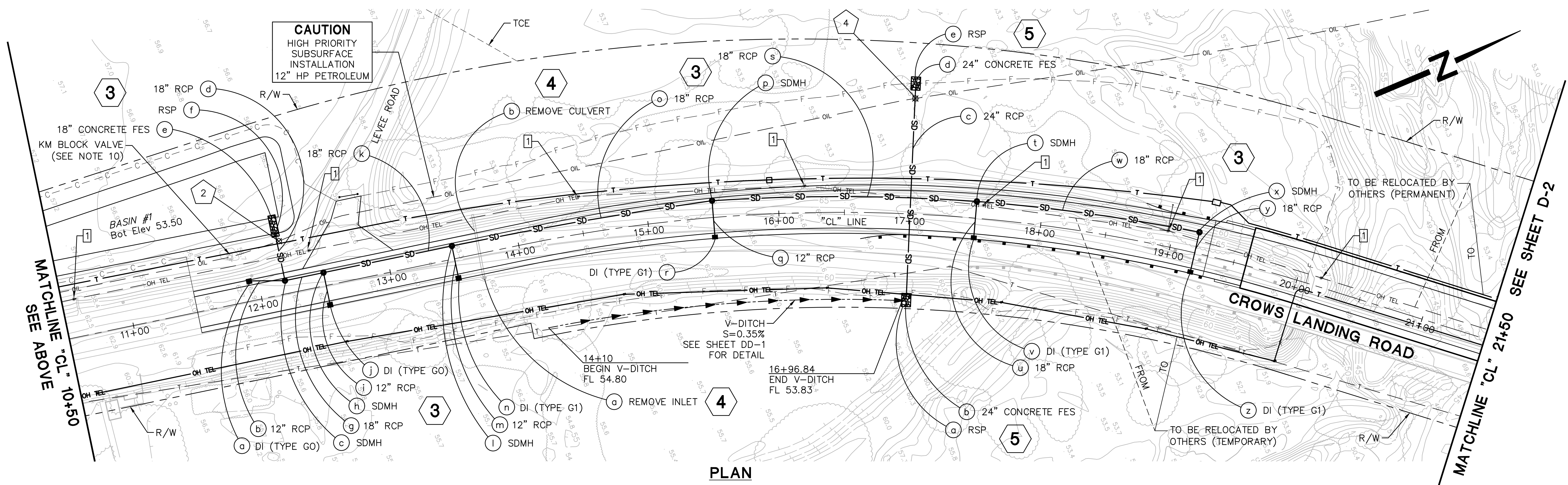
No.	UTILITY	LOCATION	NORTHING	EASTING	DEPTH	OG Elev	METHOD
1	OIL	35.9' Lt "CL" 8+50.0	1978545.43	6411872.48	4.08	58.05	TEST HOLE
2	OIL	40.4' Lt "CL" 12+21.6	1978910.89	6411939.73	4.58	57.73	TEST HOLE
4	OIL	88.1' Lt "CL" 17+00.1	1979400.29	6412027.94	6.00	53.35	TEST HOLE

CAUTION
HIGH PRIORITY
SUBSURFACE
INSTALLATION
12" HP PETROLEUM



PLAN
SCALE: 1"=40'

MATCHLINE "CL" 10+50 SEE BELOW



PLAN
SCALE: 1"=40'

MATCHLINE "CL" 21+50 SEE SHEET D-2

NOTES

- FOR NOTES, LEGEND AND LIST OF ABBREVIATIONS, SEE SHEET DT-1.
- ALL STATION AND OFFSET CALLOUTS ARE BASED ON THE "CL" LINE, UNLESS OTHERWISE NOTED.
- FOR DRAINAGE INLET (TYPE G0) DETAILS, SEE CALTRANS REVISED STANDARD PLAN D72E.
- FOR DRAINAGE INLET (TYPE G1) DETAILS, SEE CALTRANS REVISED STANDARD PLAN D72B.
- FOR DRAINAGE INLET (TYPE OCP) DETAILS, SEE CALTRANS STANDARD PLAN D75B.
- FOR CONCRETE FLARED END SECTION DETAILS, SEE CALTRANS STANDARD PLAN D94B.
- FOR STORM DRAIN MANHOLE DETAILS, SEE COUNTY STANDARD PLAN 4F-1.
- FOR OTHER DRAINAGE DETAILS, SEE SHEET DD-1.
- ALL UTILITY POLES TO BE RELOCATED BY OTHERS SHALL BE COMPLETE PRIOR TO BEGINNING OF CONSTRUCTION SCHEDULE.
- PROTECT IN PLACE. FOR ADDITIONAL REQUIREMENTS REGARDING WORK ADJACENT TO KINDER MORGAN FACILITIES, SEE SHEET DT-1.
- UTILITY OWNERSHIP:

ELECTRICAL - TURLOCK IRRIGATION DISTRICT (209) 883-8676
OIL - KINDER MORGAN (510) 672-3329
TELEPHONE - AT&T (209) 549-5847

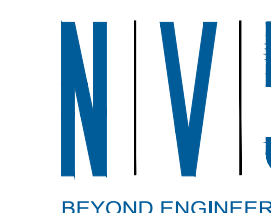
LEGEND

- | | | | |
|--|------------------------|--|---|
| | DRAINAGE SYSTEM SYMBOL | | POSITIVE LOCATION SYMBOL IDENTIFYING THE POTHOLING NUMBER |
| | DRAINAGE UNIT SYMBOL | | POTHOLING SYMBOL MARKING THE EXACT LOCATION |
| | DRAINAGE INLET | | |
| | STORM DRAIN MANHOLE | | |
| | FLARED END SECTION | | |
| | ROCK SLOPE PROTECTION | | |



UTILITY RELOCATION NOTES

- UTILITY POLE TO BE REMOVED BY OTHERS
- UTILITY POLE TO BE REPLACED BY OTHERS
- OVERHEAD LINE TO BE REMOVED BY OTHERS



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SACRAMENTO, CA 95833
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NO.	REVISIONS	DATE	APPROVED
	DESCRIPTIONS		

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DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND OPERATIONS DIVISION
1716 MORGAN ROAD - MODESTO, CA 95358



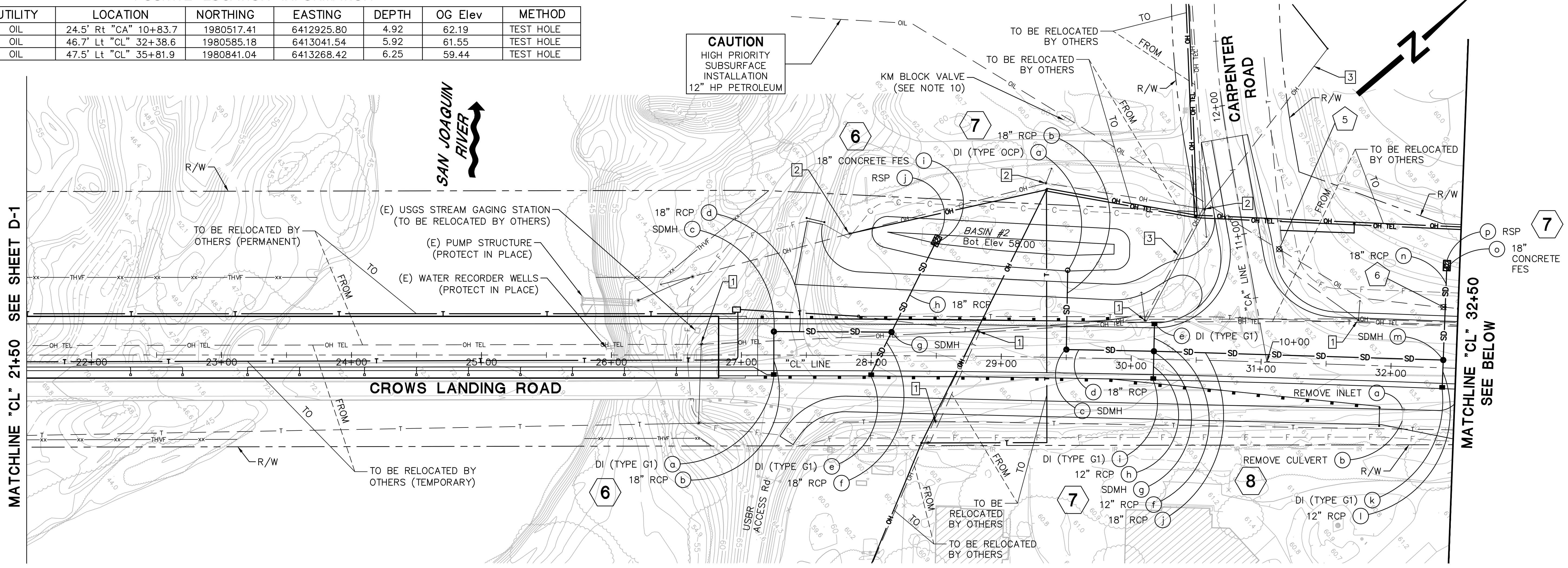
CROWS LANDING ROAD/SAN JOAQUIN RIVER
BRIDGE REPLACEMENT PROJECT
DRAINAGE & UTILITY PLAN
CROWS LANDING ROAD

JOB NO. 226217-68
DATE 6/24/2020
DR BY PR
CR BY JW
SCALE AS SHOWN

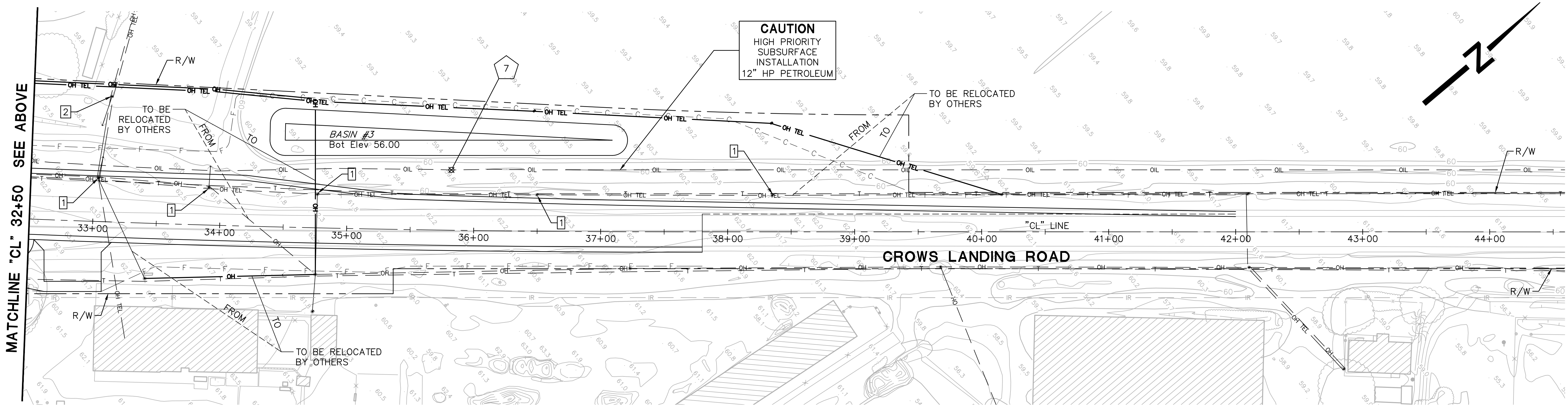
SHEET NUMBER
D-1
23 OF 70 SHEETS

POSITIVE LOCATION INFORMATION

No.	UTILITY	LOCATION	NORTHING	EASTING	DEPTH	OG Elev	METHOD
5	OIL	24.5' Rt "CA" 10+83.7	1980517.41	6412925.80	4.92	62.19	TEST HOLE
6	OIL	46.7' Lt "CL" 32+38.6	1980585.18	6413041.54	5.92	61.55	TEST HOLE
7	OIL	47.5' Lt "CL" 35+81.9	1980841.04	6413268.42	6.25	59.44	TEST HOLE

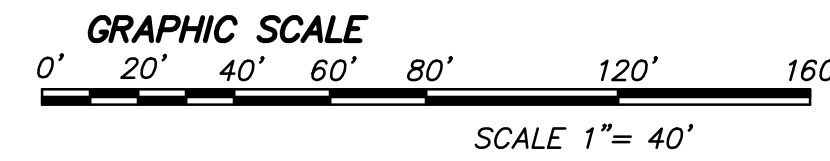


PLAN
SCALE: 1"=40'

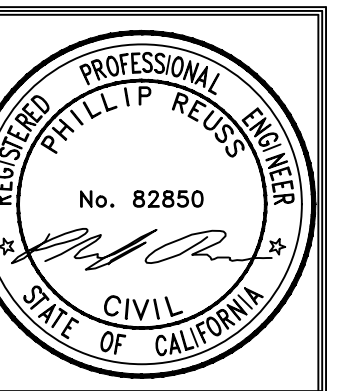


PLAN
SCALE: 1"=40'

NOTE:
1. FOR NOTES AND LEGEND, SEE SHEET D-1.



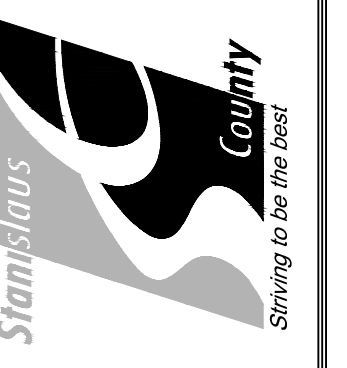
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1716 MORGAN ROAD - MODESTO, CA 95358



CROWS LANDING ROAD/SAN JOAQUIN RIVER
BRIDGE REPLACEMENT PROJECT
DRAINAGE & UTILITY PLAN
CROWS LANDING ROAD

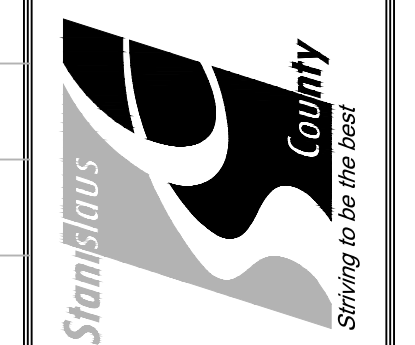
JOB NO. 226217-68
DATE 6/24/2020
DR BY PR
CK BY JW
SCALE AS SHOWN

SHEET NUMBER
D-2
24 OF 70 SHEETS



NO.	REVISIONS	DATE	APPROVED

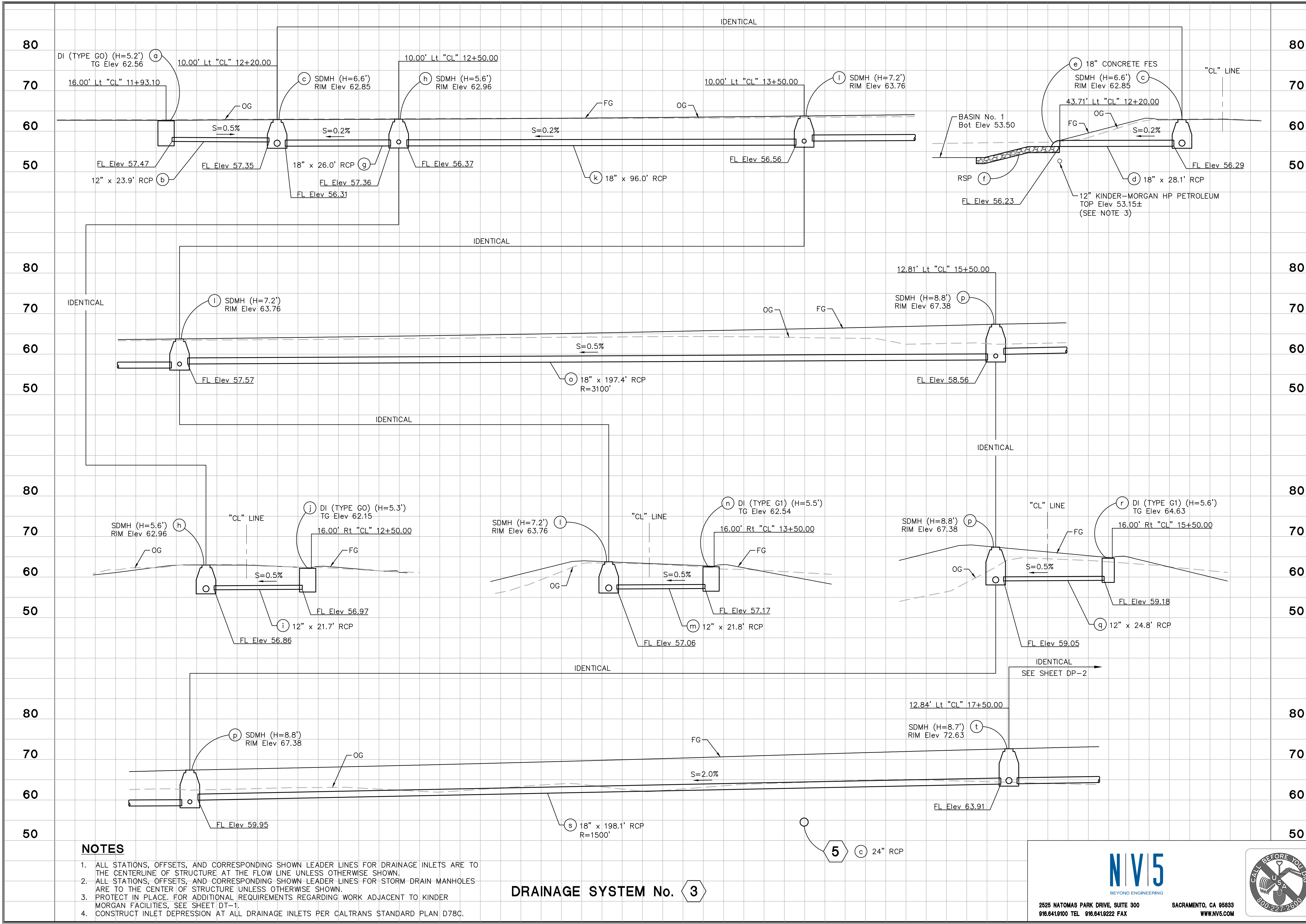
STANISLAUS COUNTY
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CROWS LANDING ROAD/SAN JOAQUIN RIVER
 BRIDGE REPLACEMENT PROJECT
 DRAINAGE PROFILES
 CROWS LANDING ROAD

JOB NO. 226217-68
 DATE 6/24/2020
 DR BY PR
 CK BY JW
 SCALE 1"=10'

SHEET NUMBER
DP-1
 25 OF 70 SHEETS



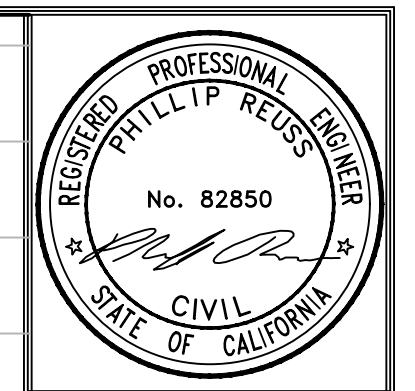
NOTES

1. ALL STATIONS, OFFSETS, AND CORRESPONDING SHOWN LEADER LINES FOR DRAINAGE INLETS ARE TO THE CENTERLINE OF STRUCTURE AT THE FLOW LINE UNLESS OTHERWISE SHOWN.
2. ALL STATIONS, OFFSETS, AND CORRESPONDING SHOWN LEADER LINES FOR STORM DRAIN MANHOLES ARE TO THE CENTER OF STRUCTURE UNLESS OTHERWISE SHOWN.
3. PROTECT IN PLACE. FOR ADDITIONAL REQUIREMENTS REGARDING WORK ADJACENT TO KINDER MORGAN FACILITIES, SEE SHEET DT-1.
4. CONSTRUCT INLET DEPRESSION AT ALL DRAINAGE INLETS PER CALTRANS STANDARD PLAN D78C.

DRAINAGE SYSTEM No. 3

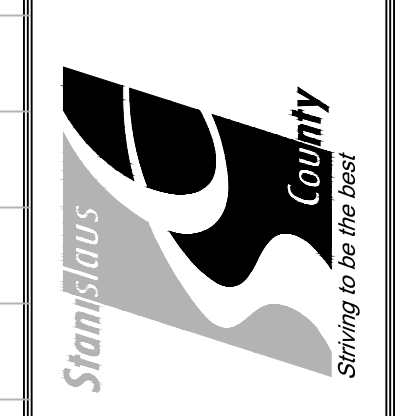
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NO.	DATE	APPROVED

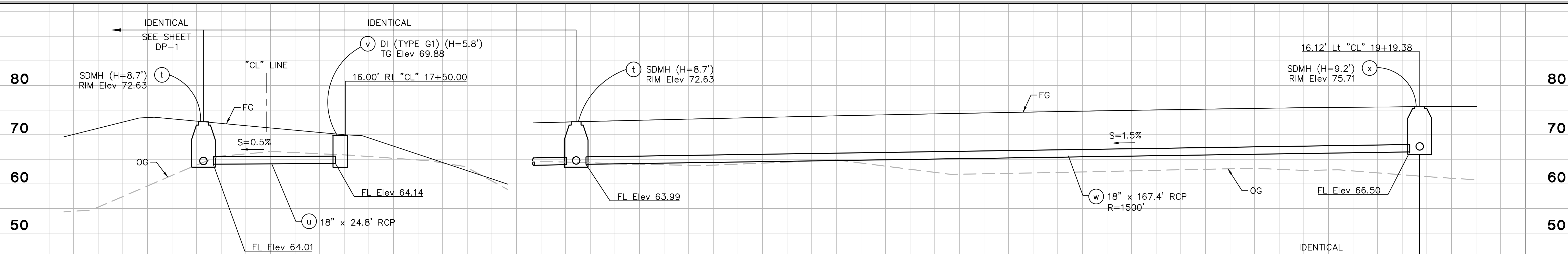
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 1716 MORGAN ROAD - MODESTO, CA 95358



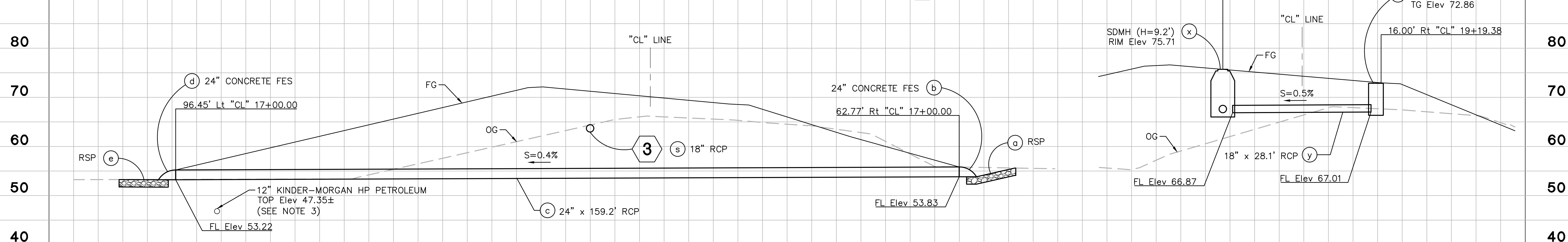
CROWS LANDING ROAD/SAN JOAQUIN RIVER
 BRIDGE REPLACEMENT PROJECT
 DRAINAGE PROFILES
 CROWS LANDING ROAD

JOB NO. 226217-68
 DATE 6/24/2020
 DR BY PR
 CK BY JW
 SCALE 1"=10'

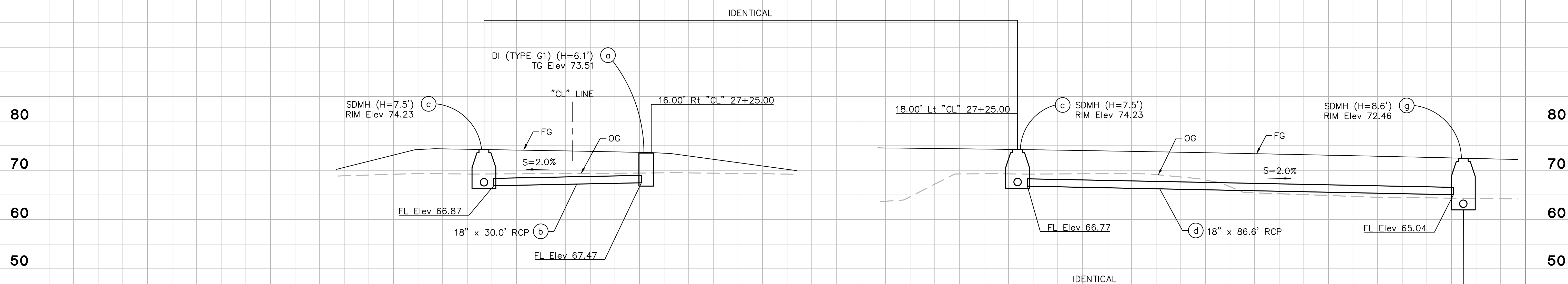
SHEET NUMBER
DP-2
 26 OF 70 SHEETS



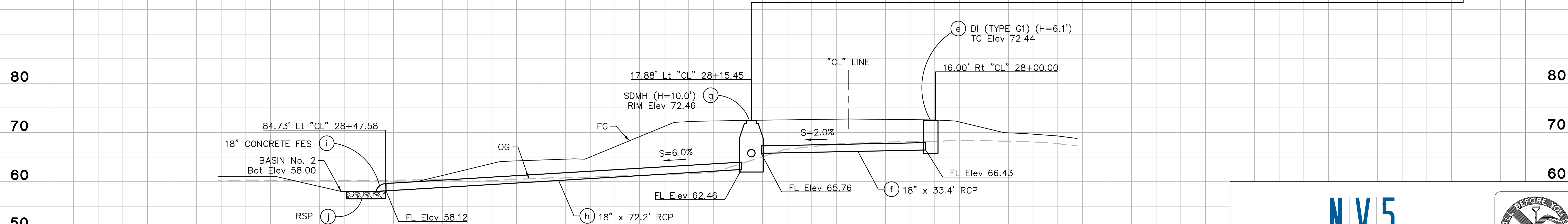
DRAINAGE SYSTEM No. 3 CONTINUED



DRAINAGE SYSTEM No. 5



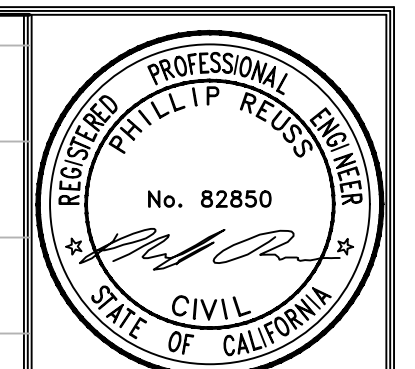
DRAINAGE SYSTEM No. 6



NOTE:
 1. FOR NOTES, SEE SHEET DP-1.

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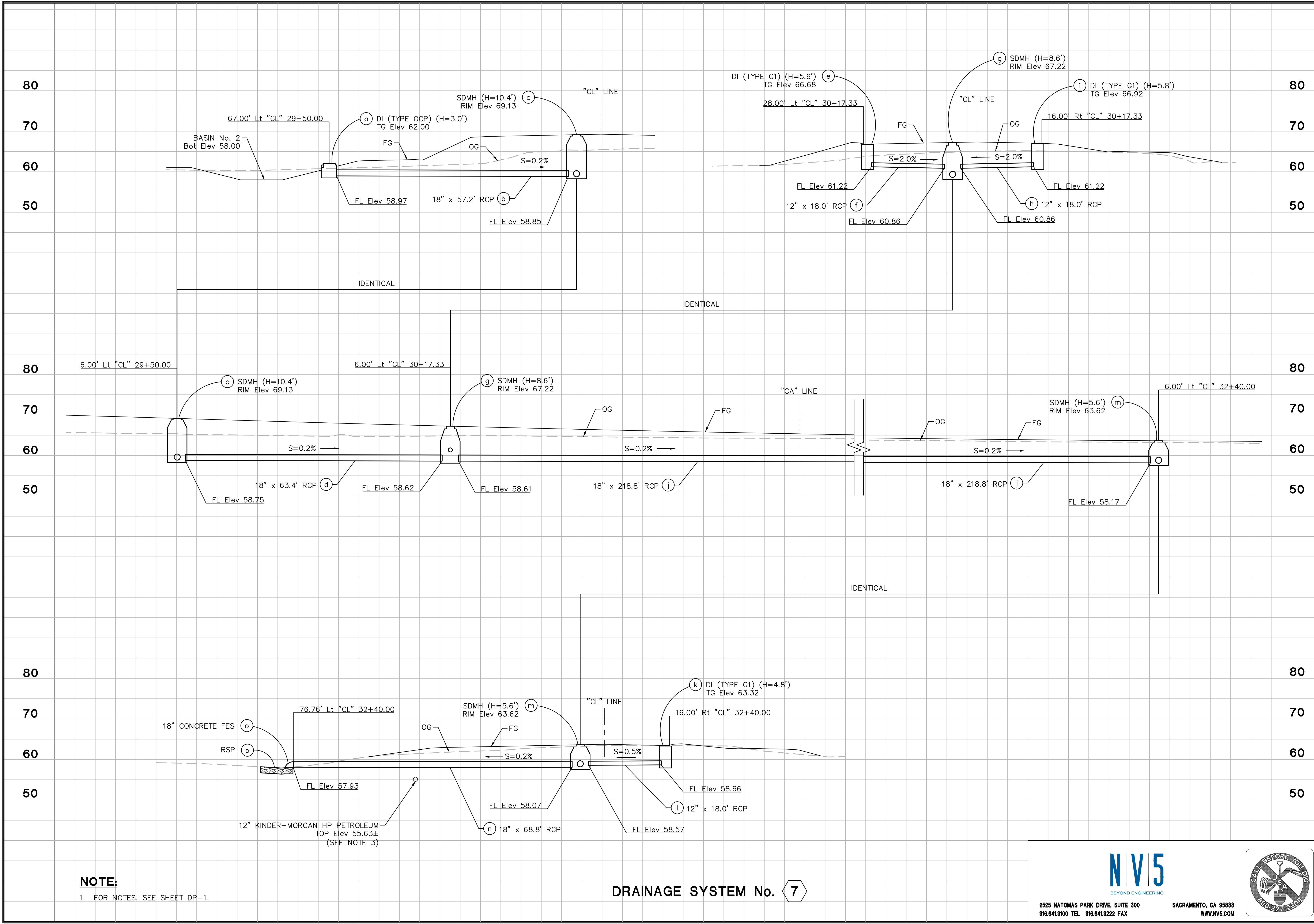
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CROWS LANDING ROAD/SAN JOAQUIN RIVER
 BRIDGE REPLACEMENT PROJECT
 DRAINAGE PROFILES
 CROWS LANDING ROAD

JOB NO. 226217-68
 DATE 6/24/2020
 DR BY PR
 CK BY JW
 SCALE 1"=10'

SHEET NUMBER
DP-3
 27 OF 70 SHEETS



NOTE:
 1. FOR NOTES, SEE SHEET DP-1.

DRAINAGE SYSTEM No. 7

N|V|5
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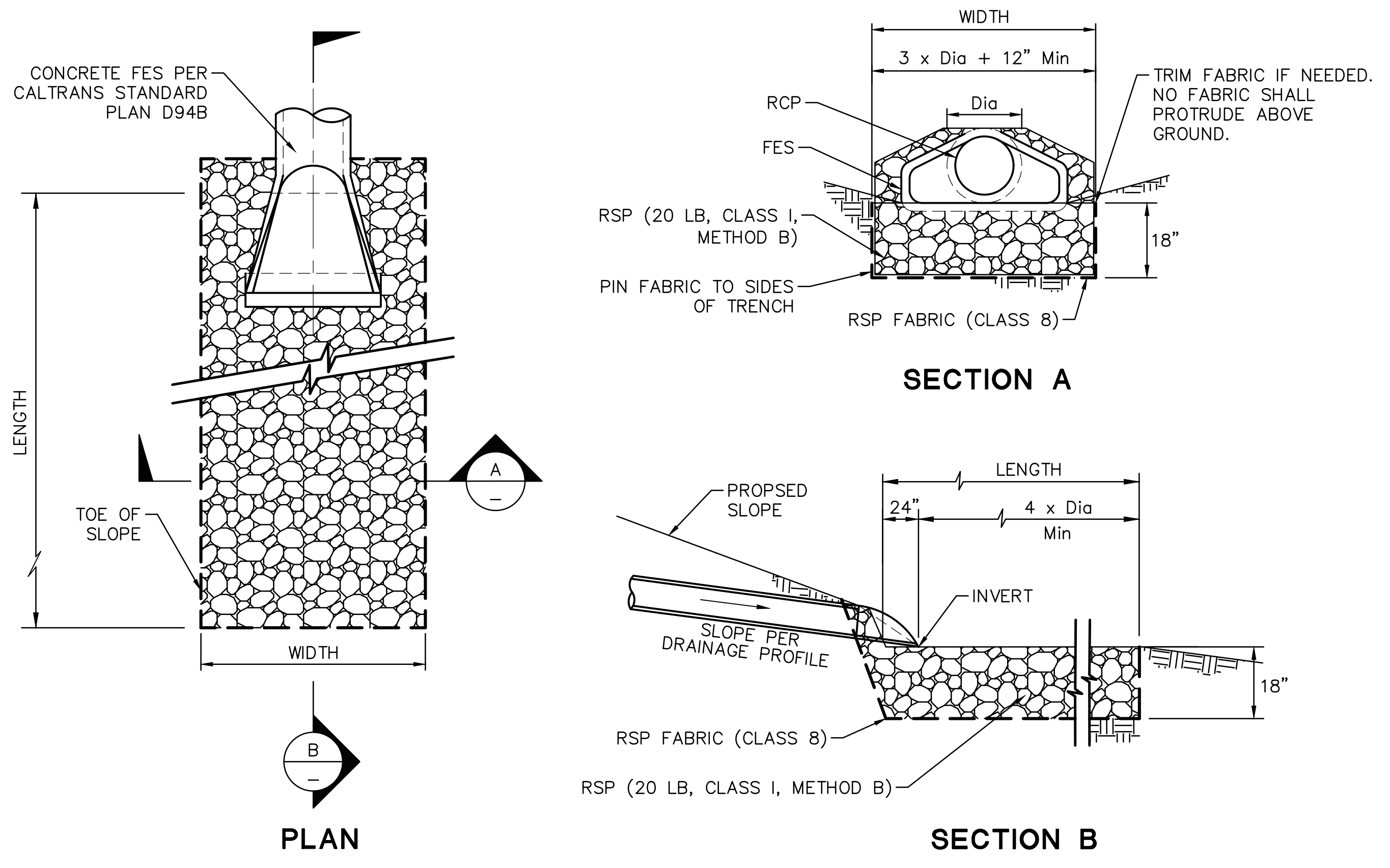
STANISLAUS COUNTY
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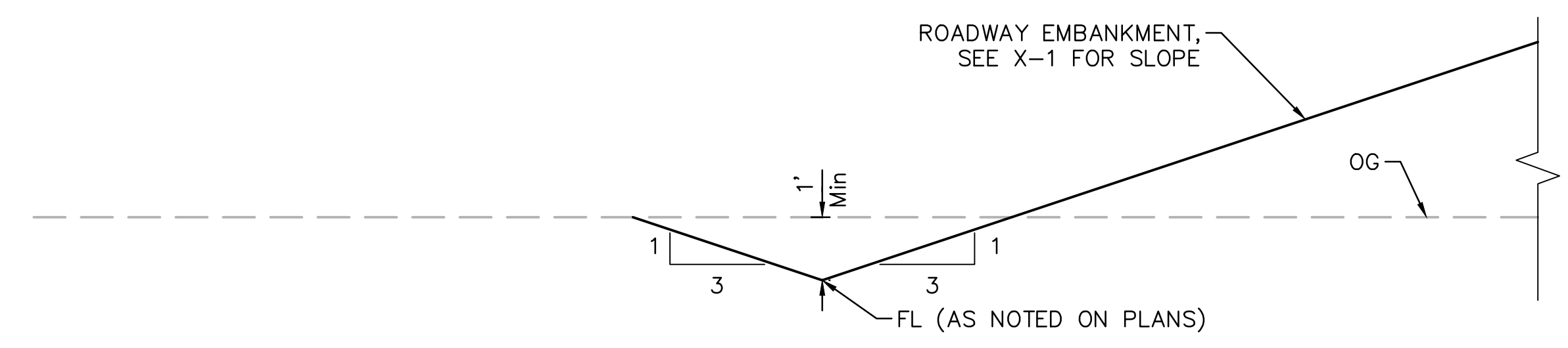
CROWS LANDING ROAD/SAN JOAQUIN RIVER
 BRIDGE REPLACEMENT PROJECT
 DRAINAGE DETAILS
 CROWS LANDING ROAD

JOB NO. 226217-68
 DATE 6/24/2020
 DR BY PR
 CK BY JW
 SCALE AS SHOWN

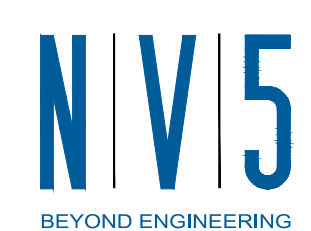
SHEET NUMBER
DD-1
 28 OF 70 SHEETS



ROCK SLOPE PROTECTION AT FLARED END SECTION
 NTS



V-DITCH
 NTS



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NOTES:

1. ALL JOINTS ARE STANDARD JOINT TYPE.

DRAINAGE QUANTITIES

DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	STRUCTURAL CONCRETE, DRAINAGE INLET	12" REINFORCED CONCRETE PIPE	18" REINFORCED CONCRETE PIPE	24" REINFORCED CONCRETE PIPE	18" CONCRETE FLARED END SECTION	24" CONCRETE FLARED END SECTION	36" PRECAST CONCRETE PIPE INLET	REMOVE CULVERT	REMOVE INLET	ROCK SLOPE PROTECTION (20 LB, CLASS I, METHOD B)	ROCK SLOPE PROTECTION FABRIC (CLASS 8)	MISCELLANEOUS IRON AND STEEL	STORM DRAIN MANHOLE	FRAME AND COVER (N)	MAXIMUM COVER (N)	HEIGHT OF INLET/MANHOLE, 'H' (N)	DESCRIPTION	STATION	DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT		
			CY	LF	LF	LF	EA	EA	LF	LF	EA	CY	SQYD	LB	EA	EA	FT	FT							
D-1	3	a	1.80											188				5.2	GO DI, GRATE TYPE 24-13	"CL" 11+93.10, 16.00' Lt	D-1	3	a		
		b		23.9														4.3	12" RCP				b		
		c													435	1	1		6.6	SDMH			"CL" 12+20.00, 10.00' Lt	c	
		d				28.1													5.3	18" RCP				d	
		e						1															18" CONCRETE FES	"CL" 12+20.00, 43.71' Lt	e
		f												5.0	17.3								RSP		f
		g					26.0												4.9	18" RCP				g	
		h														435	1	1		5.6			SDMH	"CL" 12+50.00, 10.00' Lt	h
		i					21.7												4.9	12" RCP				i	
		j		1.82												188				5.3			GO DI, GRATE TYPE 24-13	"CL" 12+50.00, 16.00' Rt	j
		k						96.0												5.5			18" RCP		k
		l														435	1	1		7.2			SDMH	"CL" 13+50.00, 10.00' Lt	l
		m					21.8													5.5			12" RCP		m
		n		1.50												188				5.5			G1 DI, GRATE TYPE 24-13	"CL" 13+50.00, 16.00' Rt	n
		o						197.4												7.1			18" RCP		o
		p														435	1	1		8.8			SDMH	"CL" 15+50.00, 12.81' Lt	p
		q					24.8													7.0			12" RCP		q
		r		1.52												188				5.6			G1 DI, GRATE TYPE 24-13	"CL" 15+50.00, 16.00' Rt	r
		s						198.1												7.0			18" RCP		s
		t														435	1	1		8.7			SDMH	"CL" 17+50.00, 12.84' Lt	t
		u						24.8												6.7			18" RCP		u
		v		1.57												188				5.8			G1 DI, GRATE TYPE 24-13	"CL" 17+50.00, 16.00' Rt	v
		w						167.4												7.7			18" RCP		w
		x														435	1	1		9.2			SDMH	"CL" 19+19.38, 16.12' Lt	x
		y						28.1												6.9			18" RCP		y
		z		1.61												188				6.0			G1 DI, GRATE TYPE 24-13	"CL" 19+19.38, 16.00' Rt	z
D-1	4	a									1									REMOVE INLET	"CL" 13+69.29, 18.72' Rt	D-1	4	a	
		b									49.0										REMOVE CULVERT				b
D-1	5	a										3.9	13.4							RSP		D-1	5	a	
		b						1													24" CONCRETE FES			"CL" 17+00.00, 62.77' Rt	b
		c																16.4			24" RCP				c
		d						1													24" CONCRETE FES			"CL" 17+00.00, 96.45' Lt	d
e											3.9	13.4								RSP		e			
			9.82	92.2	765.9	159.2	1	2		49.0	1	12.8	44.1	3,738	6					TOTAL (THIS SHEET)					

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NO.	DATE	APPROVED

STANISLAUS COUNTY
 DEPARTMENT OF PUBLIC WORKS
 ENGINEERING AND OPERATIONS DIVISION
 1716 MORGAN ROAD - MODESTO, CA 95358

CROWS LANDING ROAD/SAN JOAQUIN RIVER
 BRIDGE REPLACEMENT PROJECT

DRAINAGE QUANTITIES
 CROWS LANDING ROAD

JOB NO. 226217-68
 DATE 6/24/2020
 DR BY PR
 CK BY JW
 SCALE AS SHOWN

SHEET NUMBER
DQ-1
 29 OF 70 SHEETS

2625 NATOMAS PARK DRIVE, SUITE 300 SACRAMENTO, CA 95833
 916.641.9100 TEL. 916.641.9222 FAX WWW.NV5.COM

NOTES:

1. ALL JOINTS ARE STANDARD JOINT TYPE.

DRAINAGE QUANTITIES

DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	STRUCTURAL CONCRETE, DRAINAGE INLET	12" REINFORCED CONCRETE PIPE	18" REINFORCED CONCRETE PIPE	24" REINFORCED CONCRETE PIPE	18" CONCRETE FLARED END SECTION	24" CONCRETE FLARED END SECTION	36" PRECAST CONCRETE PIPE INLET	REMOVE CULVERT	REMOVE INLET	ROCK SLOPE PROTECTION (20 LB, CLASS I, METHOD B)	ROCK SLOPE PROTECTION FABRIC (CLASS 8)	MISCELLANEOUS IRON AND STEEL	STORM DRAIN MANHOLE	FRAME AND COVER (N)	MAXIMUM COVER (N)	HEIGHT OF INLET/MANHOLE, 'H' (N)	DESCRIPTION	STATION	DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	
			CY	LF	LF	LF	EA	EA	LF	LF	EA	CY	SQYD	LB	EA	EA	FT	FT						
D-2	6	a	1.63											188				6.1	G1 DI, GRATE TYPE 24-13	"CL" 27+25.00, 16.00' Rt	D-2	6	a	
		b			30.0													5.6	18" RCP				b	
		c													435	1	1	7.5	SDMH	"CL" 27+25.00, 18.00' Lt			c	
		d				86.6												5.8	18" RCP				d	
		e	1.63												188			6.1	G1 DI, GRATE TYPE 24-13	"CL" 28+00.00, 16.00' Rt			e	
		f				33.4												5.0	18" RCP				f	
		g													435	1	1	10.0	SDMH	"CL" 28+15.45, 17.88' Lt			g	
		h					72.2											8.8	18" RCP				h	
		i							1											18" CONCRETE FES			"CL" 28+47.58, 84.73' Lt	i
		j											2.4	9.4						RSP				j
D-2	7	a							3.5					112				3.0	OCP DI, PLATE COVER	"CL" 29+50.00, 67.00' Lt	D-2	7	a	
		b				57.2											8.5	18" RCP		b				
		c													435	1	1	10.4	SDMH	"CL" 29+50.00, 6.00' Lt			c	
		d				63.4												8.6	18" RCP				d	
		e	1.52												188			5.6	G1 DI, GRATE TYPE 24-13	"CL" 30+17.33, 28.00' Lt			e	
		f		18.0													5.1	12" RCP		f				
		g													435	1	1	8.6	SDMH	"CL" 30+17.33, 6.00' Lt			g	
		h		18.0														5.2	12" RCP				h	
		i	1.57												188			5.8	G1 DI, GRATE TYPE 24-13	"CL" 30+17.33, 16.00' Rt			i	
		j				218.8												6.8	18" RCP				j	
D-2	8	a	1.35											188			4.8	G1 DI, GRATE TYPE 24-13	"CL" 32+40.00, 16.00' Rt	D-2	8	a		
		b		18.0													4.0	12" RCP				b		
		c													435	1	1	5.6	SDMH			"CL" 32+40.00, 6.00' Lt	c	
		d				68.8											3.8	18" RCP				d		
		e						1														18" CONCRETE FES	"CL" 32+40.00, 76.76' Lt	e
		f										2.4	9.4									RSP		f
		g										1										REMOVE INLET	"CL" 32+10.67, 33.10' Rt	g
		h										18.0										REMOVE CULVERT		h
		i	7.70	54.0	630.4		2		3.5	18.0	1	4.8	18.8	3,227	5							SUBTOTAL (THIS SHEET)		i
		j	9.82	92.2	765.9	159.2	1	2		49.0	1	12.8	44.1	3,738	6							DQ-1 SUBTOTAL		j
TOTAL	17.52	146.2	1396.3	159.2	3	2	3.5	67.0	2	17.6	62.9	6,965	11					TOTAL		TOTAL				

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STANISLAUS COUNTY
 DEPARTMENT OF PUBLIC WORKS
 ENGINEERING AND OPERATIONS DIVISION
 1716 MORGAN ROAD - MODESTO, CA 95358

CROWS LANDING ROAD/SAN JOAQUIN RIVER
 BRIDGE REPLACEMENT PROJECT

DRAINAGE QUANTITIES
 CROWS LANDING ROAD

JOB NO. 226217-68
 DATE 6/24/2020
 DR BY PR
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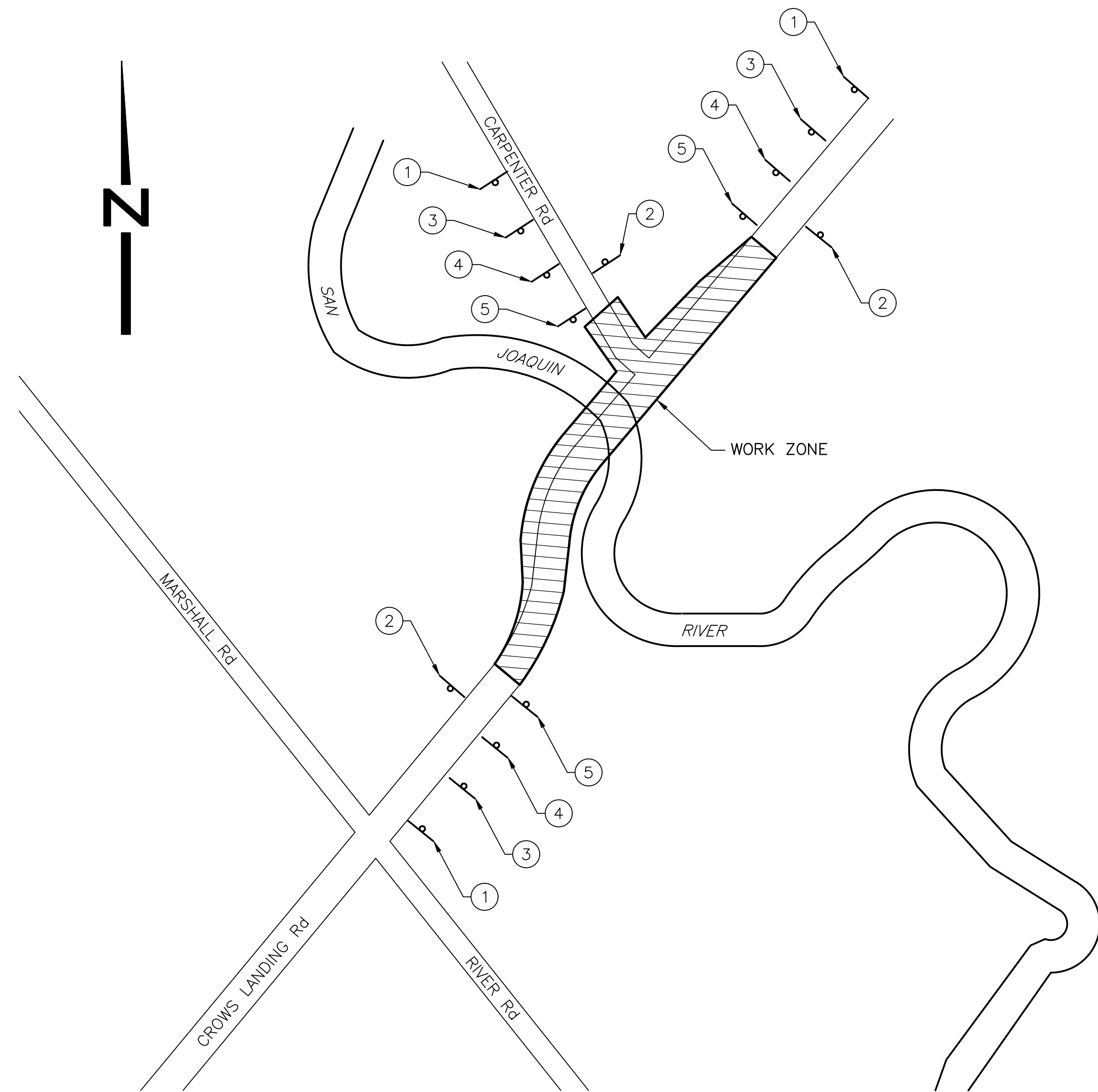
SHEET NUMBER
DQ-2
 30 OF 70 SHEETS

2625 NATOMAS PARK DRIVE, SUITE 300 SACRAMENTO, CA 95833
 916.641.9100 TEL. 916.641.9222 FAX WWW.NV5.COM



CONSTRUCTION AREA SIGNS SUMMARY						
LOCATION NUMBER	SIGN CODE	PANEL SIZE	No. OF POSTS & SIZE	(N) EA	EA	MESSAGE
①	W20-1	48"x48"	1-4"x4"	5	-	ROAD WORK AHEAD
②	G20-2	48"x24"	1-4"x4"	3	-	END ROAD WORK
③	C24 (CA)	48"x48"	1-4"x4"	3	-	SHOULDER WORK AHEAD
④	SC20 (CA)	54"x48"	1-4"x4"	3	-	SLOW FOR THE CONE ZONE
⑤	PCMS	N/A	N/A	-	3	-

(N) - NOT A PAY ITEM, FOR INFORMATION ONLY.



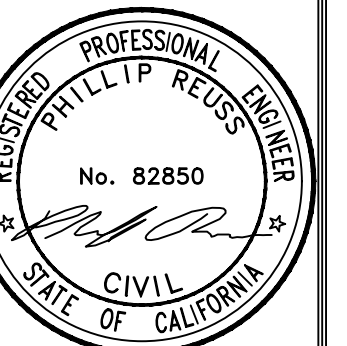
DETAIL
NO SCALE



PLAN
NO SCALE

NOTES:

1. LOCATION OF CONSTRUCTION AREA SIGNS ARE APPROXIMATE. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER.
2. CARPENTER ROAD WILL BE CLOSED TEMPORARILY FOR A PERIOD OF 60 DAYS MAXIMUM. SEE SHEET DE-1 FOR DETOUR SIGNS.



NO.	REVISIONS DESCRIPTIONS	DATE	APPROVED

STANISLAUS COUNTY
DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND OPERATIONS DIVISION
1716 MORGAN ROAD - MODESTO, CA 95358



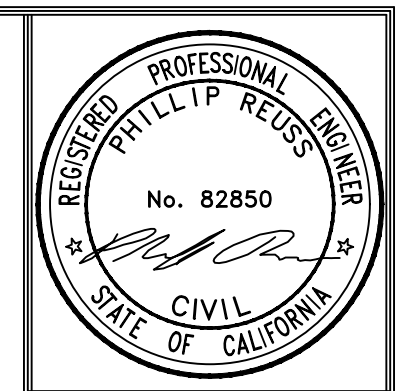
CROWS LANDING ROAD/SAN JOAQUIN RIVER
BRIDGE REPLACEMENT PROJECT
CONSTRUCTION AREA SIGNS

JOB NO. 226217-68
DATE 6/24/2020
DR BY PR
CK BY JW
SCALE AS SHOWN

SHEET NUMBER
CAS-1
31 OF 70 SHEETS

N|V|5
BEYOND ENGINEERING
2625 NATOMAS PARK DRIVE, SUITE 300 SACRAMENTO, CA 95833
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DATE:	
REVISIONS	DATE
DESCRIPTIONS	APPROVED
NO	

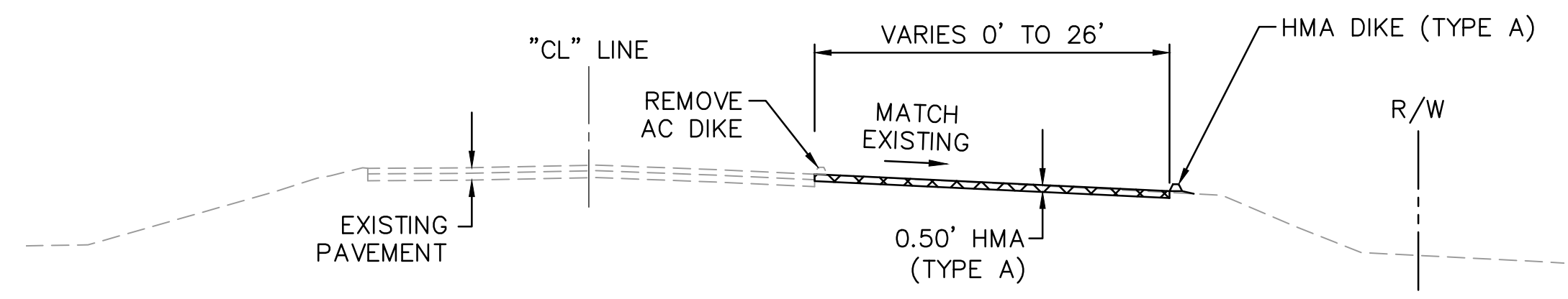
STANISLAUS COUNTY
 DEPARTMENT OF PUBLIC WORKS
 ENGINEERING AND OPERATIONS DIVISION
 1716 MORGAN ROAD - MODESTO, CA 95358

CROWS LANDING ROAD/SAN JOAQUIN RIVER
 BRIDGE REPLACEMENT PROJECT

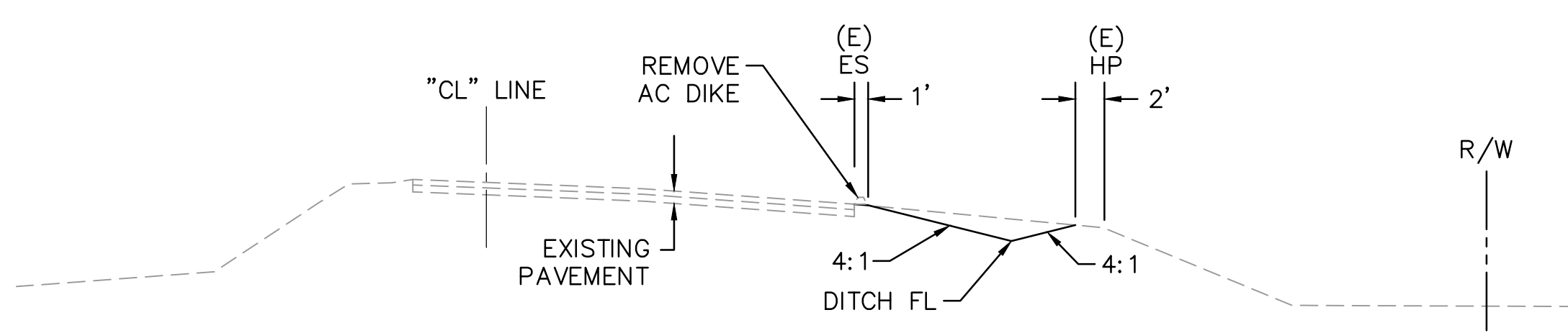
STAGE CONSTRUCTION PLAN
 CROWS LANDING ROAD

JOB NO. 226217-68
 DATE 6/24/2020
 DR BY PR
 CK BY JW
 SCALE AS SHOWN

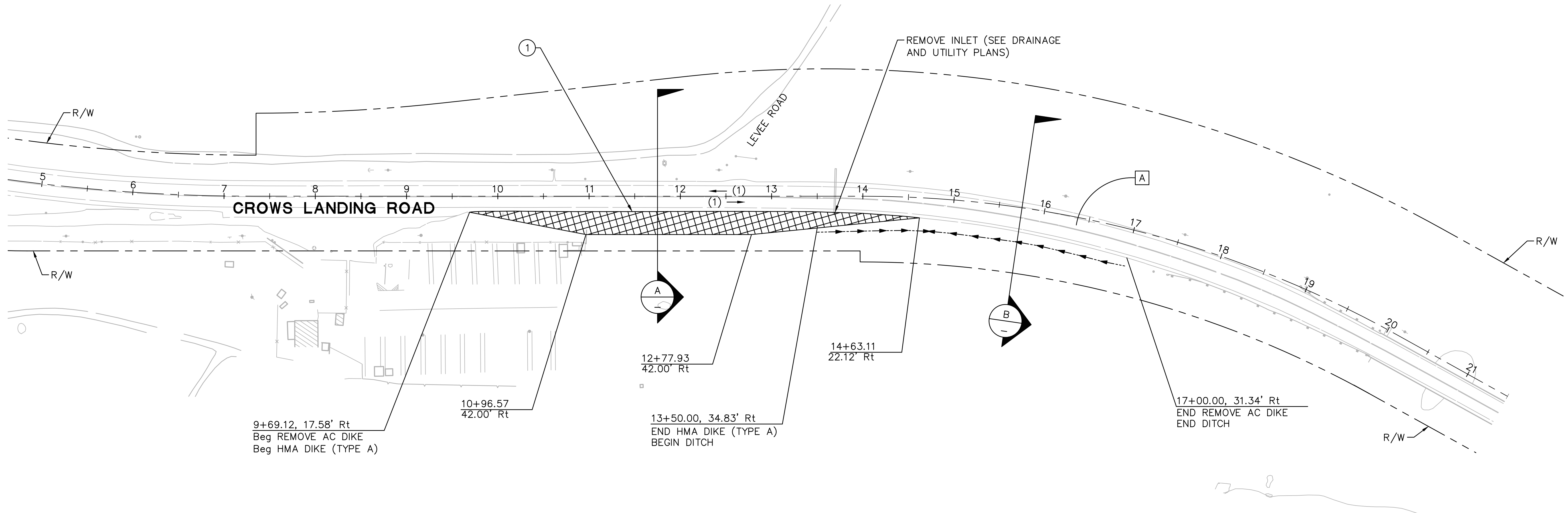
SHEET NUMBER
SC-1
 32 OF 70 SHEETS



SECTION A
NO SCALE



SECTION B
NO SCALE



PLAN
SCALE: 1"=60'

STAGE 1

CONSTRUCTION - PHASE 1:

- ① CONSTRUCT TEMPORARY PAVEMENT.
- ② REMOVE AC DIKE AND CONSTRUCT DITCH.

TRAFFIC - PHASE 1:

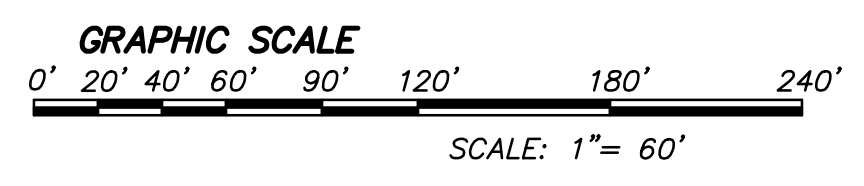
- [A] CROWS LANDING ROAD TRAFFIC REMAINS ON EXISTING PAVEMENT.

LEGEND:

- (#) → DIRECTION OF TRAVEL AND NUMBER OF TRAVEL LANES (11' Min TRAVEL LANES)
- [Diagonal Hatching] CONSTRUCTION AT THIS STAGE - PHASE 1
- [Diagonal Hatching] CONSTRUCTION AT THIS STAGE - PHASE 2
- [Cross-hatching] CONSTRUCTION AT THIS STAGE - PHASE 3
- [Grid Pattern] TEMPORARY PAVEMENT
- [Diagonal Hatching] BRIDGE REMOVAL
- [Dashed Line] TEMPORARY RAILING (TYPE K)
- [Dashed Line] TEMPORARY ALTERNATIVE CRASH CUSHION SYSTEM
- [XX] TEMPORARY PAVEMENT DELINEATION (PAINT) DETAIL PER CALTRANS REVISED STANDARD PLANS RSP A20A TO RSP A20E
- [+] SIGN
- [STOP] "STOP" PAVEMENT MARKING (PER CALTRANS STANDARD PLAN A24D)

NOTES:

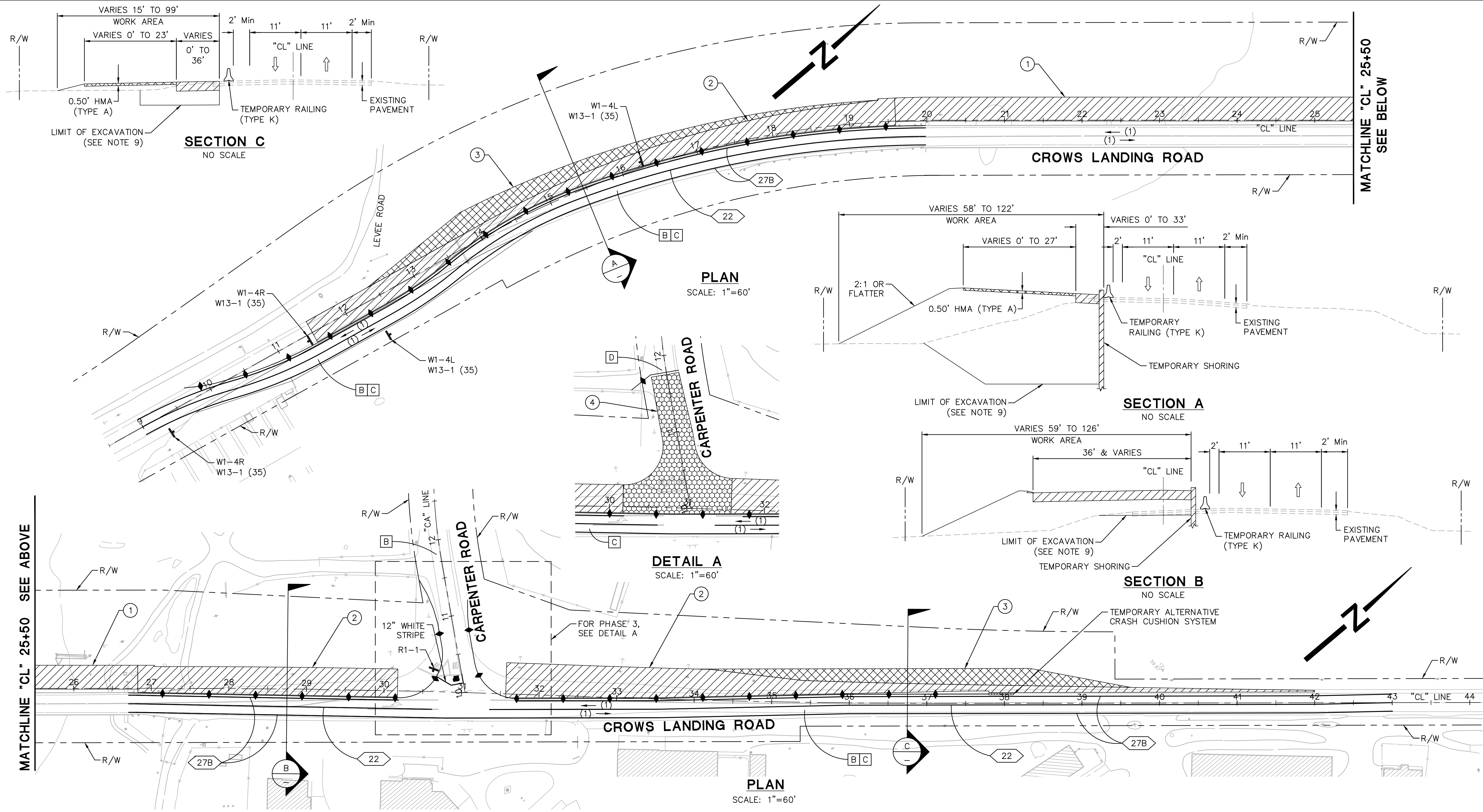
1. FOR NOTES, LEGEND AND LIST OF ABBREVIATIONS, SEE SHEET DT-1.
2. STAGE CONSTRUCTION PLANS ACCURATE FOR STAGE CONSTRUCTION & TRAFFIC HANDLING WORK ONLY.
3. SHEETS SC-1 THROUGH SC-3 ARE INTENDED TO SHOW STAGED ORDER OF WORK AND MAJOR ELEMENTS THEREOF. MINOR ELEMENTS OF WORK REQUIRED TO MAINTAIN OPERATIONS THROUGHOUT CONSTRUCTION AS REQUIRED BY THE SPECIAL PROVISIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO IDENTIFY AND INCORPORATE IN THE PROJECT APPROPRIATELY.
4. REFER TO SPECIAL PROVISIONS FOR SPECIFIC REQUIREMENTS FOR STAGING OPERATIONS. THE STAGING SHOWN ON THE PLANS ARE GUIDELINES. ACTUAL SEQUENCE OF OPERATIONS WITHIN EACH PHASE SHALL BE DETERMINED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.
5. PROVIDE POSITIVE DRAINAGE FROM ALL ROADWAY AREAS AT ALL TIMES. ADDITIONAL ITEMS SHALL BE IDENTIFIED BY THE CONTRACTOR AND CONSTRUCTED AT THE APPROPRIATE TIMES TO MEET THE REQUIREMENTS.
6. FOR THOSE ITEMS OF WORK NOT SHOWN ON THE 'SC' SHEETS, CONTRACTOR MAY CONSTRUCT DURING ANY STAGE PRIOR TO WHEN THE ITEM OF WORK IS REQUIRED FOR THE OPERATION OF THE ROADWAY WITH THE ENGINEER'S APPROVAL.
7. COMPLY WITH THE PROJECT SPECIAL PROVISIONS SECTION 5, "CONTROL OF WORK."
8. OBTAIN APPROVAL OF COUNTY PRIOR TO LAYING MATERIALS AND EQUIPMENT WITHIN PROPOSED STAGING AREA.
9. FOR LIMITS OF OVER-EXCAVATION, SEE SHEETS X-1 AND DT-6.



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STAGE 1

CONSTRUCTION – PHASE 2:

- ① CONSTRUCT PORTION OF NEW BRIDGE.
- ② CONSTRUCT CROWS LANDING ROAD OUTSIDE LIMITS OF EXISTING ROADWAY. USE TEMPORARY SHORING IN ORDER TO CONSTRUCT MAXIMUM ROADWAY.
- ③ CONSTRUCT TEMPORARY PAVEMENT AT NORTHERN AND SOUTHERN ENDS OF CROWS LANDING ROAD FOR STAGE 2 TRAFFIC.

TRAFFIC – PHASE 2:

- A CROWS LANDING ROAD SHIFTS TO TEMPORARY PAVEMENT.
- B CROWS LANDING ROAD AND CARPENTER ROAD TRAFFIC REMAINS ON EXISTING PAVEMENT.

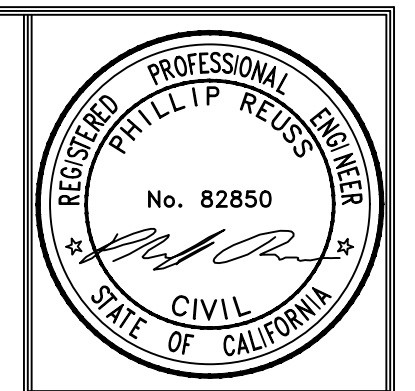
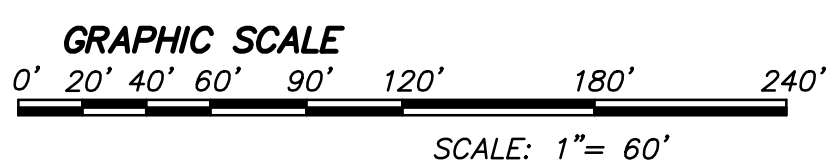
CONSTRUCTION – PHASE 3:

- ④ CONSTRUCT CARPENTER ROAD, INCLUDING INTERSECTION WITH CROWS LANDING ROAD.

TRAFFIC – PHASE 3:

- C CROWS LANDING ROAD TRAFFIC REMAINS ON EXISTING PAVEMENT.
- D DETOUR CARPENTER ROAD TRAFFIC TO RUBLE ROAD AND CROWS LANDING ROAD. SEE DETOUR PLAN, SHEET DE-1 FOR DETAILS.

NOTE:
FOR NOTES AND LEGEND, SEE SHEET SC-1.



DATE:	APPROVED:
REVISIONS:	DATE:
DESCRIPTIONS:	APPROVED:
NO:	DATE:

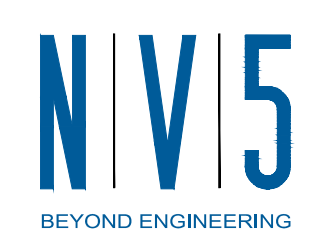
STANISLAUS COUNTY
DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND OPERATIONS DIVISION
1716 MORGAN ROAD – MODESTO, CA 95358



CROWS LANDING ROAD/SAN JOAQUIN RIVER
BRIDGE REPLACEMENT PROJECT
STAGE CONSTRUCTION PLAN - STAGE 1
CROWS LANDING ROAD

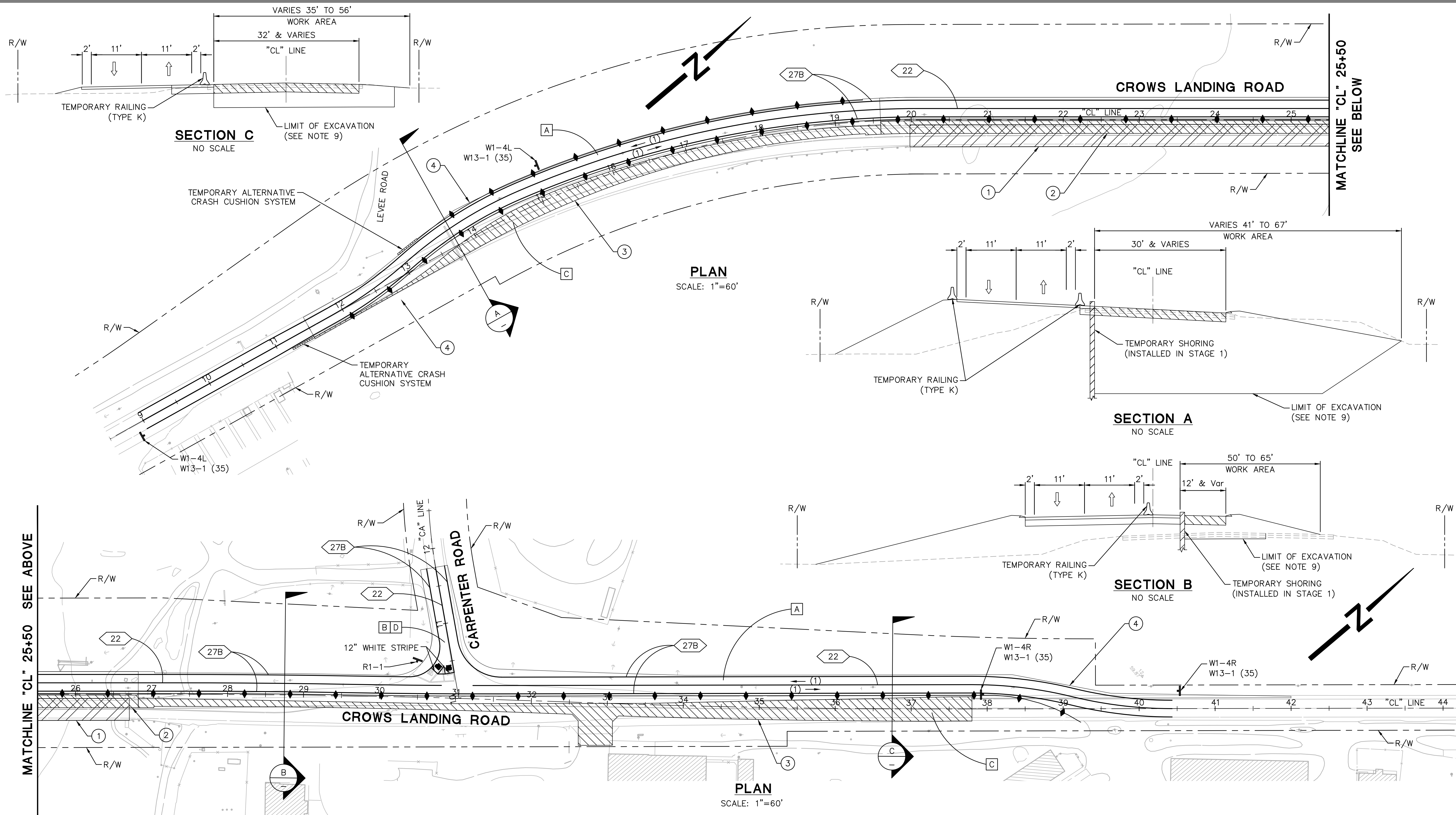
JOB NO. 226217-68
DATE 6/24/2020
DR BY PR
CK BY JW
SCALE AS SHOWN

SHEET NUMBER
SC-2
33 OF 70 SHEETS



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MATCHLINE "CL" 25+50 SEE ABOVE

MATCHLINE "CL" 25+50 SEE BELOW

STAGE 2

CONSTRUCTION - PHASE 1:

- ① REMOVE EXISTING BRIDGE.
- ② CONSTRUCT REMAINDER OF NEW BRIDGE.
- ③ CONSTRUCT REMAINDER OF CROWS LANDING ROAD AT NORTH AND SOUTH CONFORM AREAS.

TRAFFIC - PHASE 1:

- A CROWS LANDING ROAD TRAFFIC SHIFTS TO TEMPORARY AND NEW PAVEMENT AND CROSSES NEW BRIDGE.
- B CARPENTER ROAD TRAFFIC IS NO LONGER DETOURED AND SHIFTS TO ULTIMATE ALIGNMENT.

CONSTRUCTION - PHASE 2:

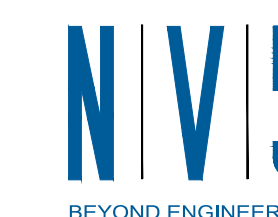
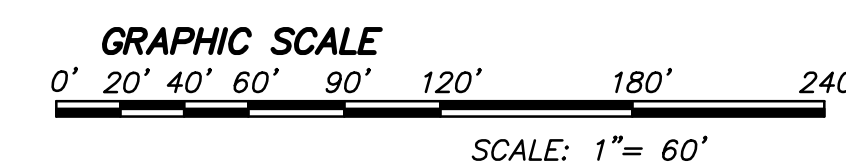
- ④ REMOVE TEMPORARY PAVEMENT ALONG CROWS LANDING ROAD AT NORTH AND SOUTH CONFORM AREAS AND CONSTRUCT FINAL GRADING.

TRAFFIC - PHASE 2:

- C CROWS LANDING ROAD TRAFFIC SHIFTS TO ULTIMATE ROADWAY ALIGNMENT.
- D CARPENTER ROAD TRAFFIC REMAINS ON ULTIMATE ALIGNMENT.

NOTE:

FOR NOTES AND LEGEND, SEE SHEET SC-1.



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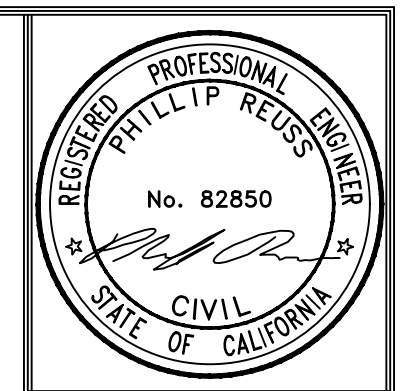
STANISLAUS COUNTY
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CROWS LANDING ROAD/SAN JOAQUIN RIVER
 BRIDGE REPLACEMENT PROJECT
 STAGE CONSTRUCTION PLAN - STAGE 2
 CROWS LANDING ROAD

JOB NO. 226217-68
 DATE 6/24/2020
 DR BY PR
 CK BY JW
 SCALE AS SHOWN

SHEET NUMBER
SC-3
 34 OF 70 SHEETS



PREPARED UNDER THE DIRECTION OF:

NO.	DESCRIPTIONS	REVISIONS	DATE	APPROVED

STAGE CONSTRUCTION QUANTITIES

STAGE	PHASE	TEMPORARY RAILING (TYPE K) LF	TEMPORARY ALTERNATIVE CRASH CUSHION SYSTEM EA	TEMPORARY TRAFFIC STRIPE (PAINT)			TEMPORARY PAVEMENT MARKING (PAINT)		TEMPORARY PAVEMENT MARKER		REMOVE PAVEMENT MARKER EA	REMOVE THERMOPLASTIC TRAFFIC STRIPE LF	REMOVE YELLOW THERMOPLASTIC TRAFFIC STRIPE (HAZARDOUS WASTE) LF	REMOVE THERMOPLASTIC PAVEMENT MARKING SQFT	ROADWAY EXCAVATION CY	DITCH EXCAVATION CY	EMBANKMENT (N) CY	HOT MIX ASPHALT (TYPE A) TON	PLACE HOT MIX ASPHALT DIKE (TYPE A) LF	REMOVE ASPHALT CONCRETE PAVEMENT (CY) CY	REMOVE ASPHALT CONCRETE DIKE LF
				DETAIL 22 LF	DETAIL 27B LF	DETAIL 38B LF	"STOP" SQFT	LIMIT LINE (12" WHITE STRIPE) SQFT	TYPE D EA	TYPE G EA											
1	1													165	154		344	381		731	
1	2	2,337	1	2,662	5,295		22	38	222		200	4,595	2,925	74	2,926		2,926	634			
1	3	240																			
2	1	3,680	2	3,266	6,561	24	44	34	274	4											
2	2																			478	
SUBTOTAL				5,928	11,856	24	66	72	496	4										478	
TOTAL		6,257	3	17,808			138		500		200	4,595	2,925	74	3,091 *	154 *	2,926 *	978 *	381	478	731

(N) - NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY
 * QUANTITY INCLUDED IN SUMMARY OF QUANTITIES

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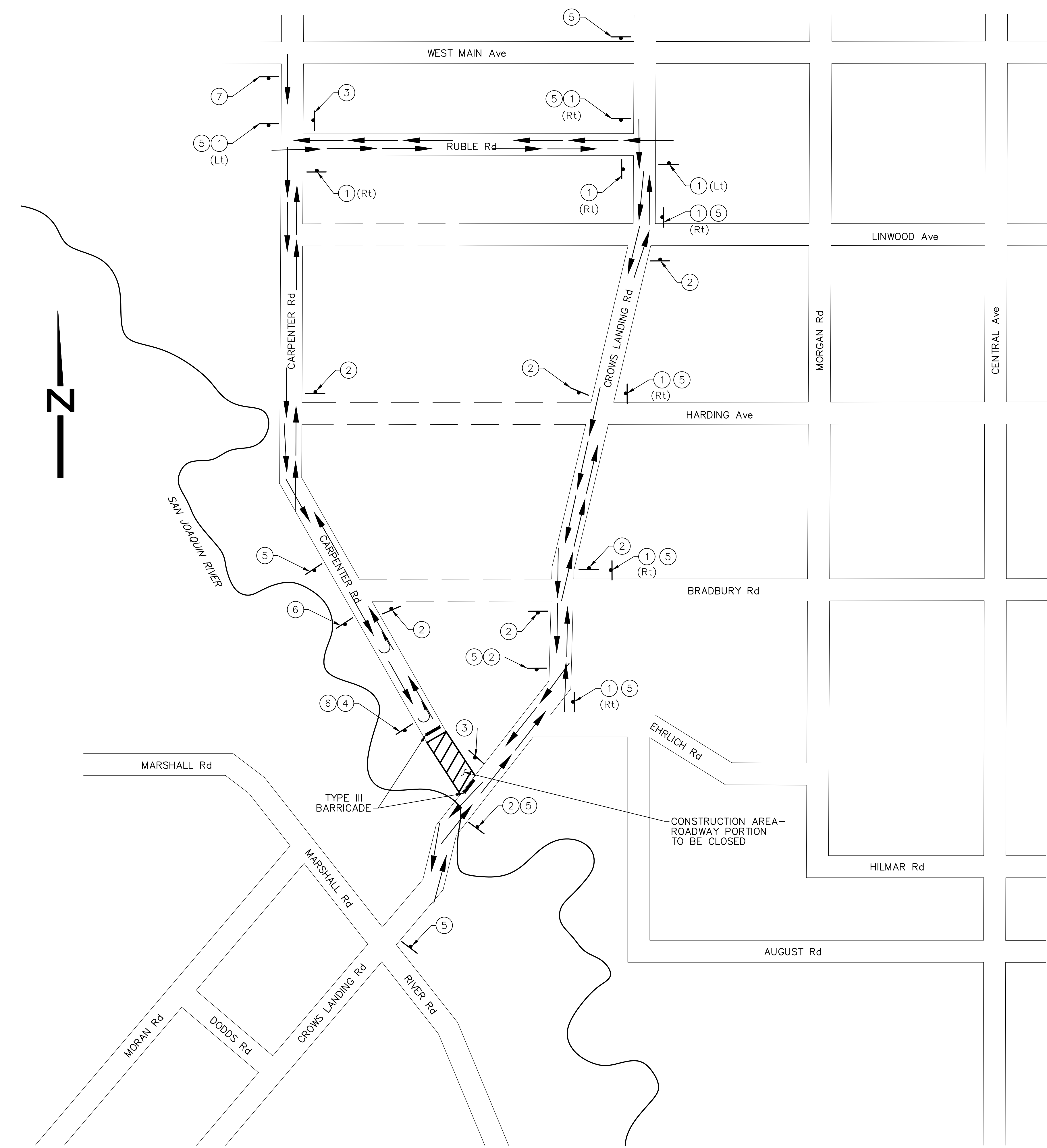
CROWS LANDING ROAD/SAN JOAQUIN RIVER BRIDGE REPLACEMENT PROJECT
 STAGE CONSTRUCTION QUANTITIES
 CROWS LANDING ROAD

JOB NO. 226217-68
 DATE 6/24/2020
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 CK BY JW
 SCALE AS SHOWN

SHEET NUMBER
SCQ-1
 35 OF 70 SHEETS

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PLAN
NO SCALE

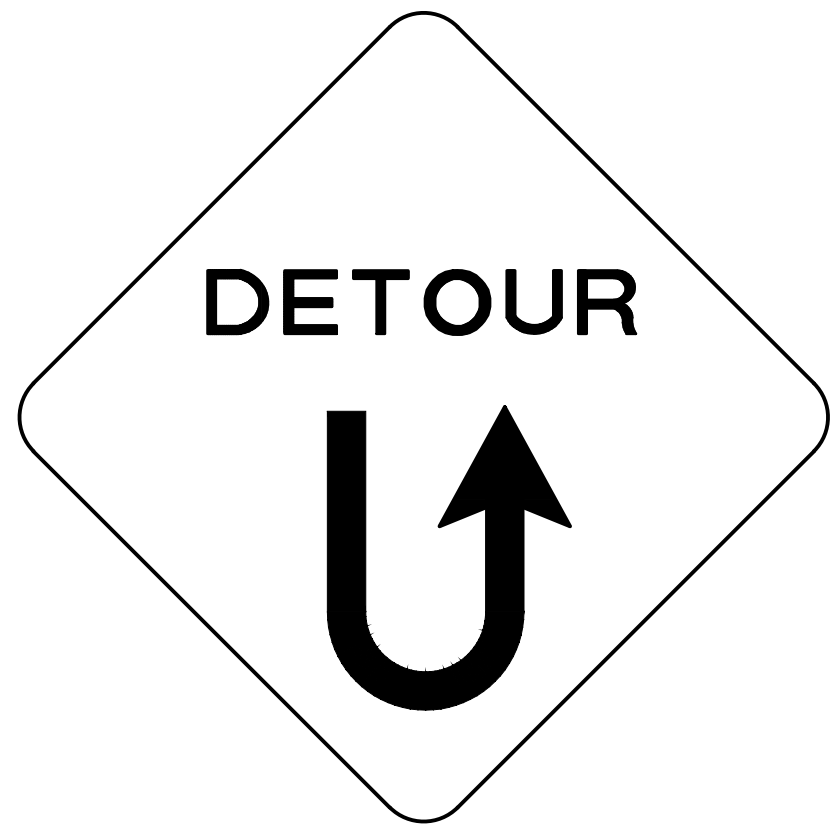
DETOUR SIGNS					
LOCATION NUMBER	SIGN CODE	PANEL SIZE	No. OF POSTS & SIZE	No. OF SIGNS	SIGN MESSAGE
①	M4-10	48"x18"	2-4"x4"	9	DETOUR IN ARROW
②	SC3 (CA)	48"x18"	2-4"x4"	8	DETOUR WITH ARROW AHEAD
③	M4-8a	24"x18"	1-4"x4"	2	END DETOUR
④	W20-3	48"x48"	1-4"x4"	1	ROAD CLOSED AHEAD
⑤	SPECIAL "A"	48"x48"	1-4"x4"	11	CARPENTER ROAD CLOSED AHEAD AT CROWS LANDING ROAD - USE DETOUR
⑥	SPECIAL "B"	48"x48"	1-4"x4"	2	DETOUR WITH U-TURN ARROW
⑦	SPECIAL "C"	60"x30"	2-4"x4"	1	ROAD CLOSED TO THRU TRAFFIC, LOCAL TRAFFIC ONLY

NOTES:

1. DURING CONSTRUCTION OF CARPENTER ROAD, VEHICULAR TRAFFIC SHALL BE DIRECTED TO THE DETOUR AS SHOWN ON THE PLAN FOR A PERIOD OF 60 DAYS MAXIMUM.
2. SIGN LOCATIONS ARE APPROXIMATE. EXACT LOCATIONS TO BE DETERMINED BY THE ENGINEER.
3. FOR TYPE III BARRICADE DETAILS, SEE CALTRANS STANDARD PLAN A73C.
4. COVER OR REMOVE DETOUR SIGNS WHEN NOT IN USE.



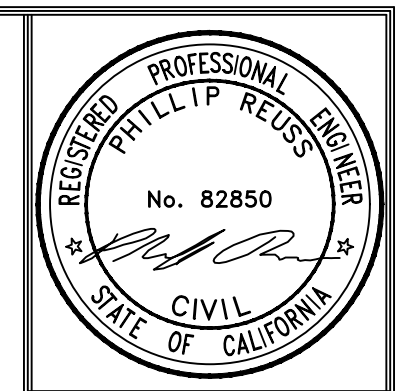
SPECIAL "A"
(BLACK LETTERS ON ORANGE BACKGROUND)



SPECIAL "B"
(BLACK LETTERS ON ORANGE BACKGROUND)



SPECIAL "C"
(BLACK LETTERS ON ORANGE BACKGROUND)



PREPARED UNDER THE DIRECTION OF:

NO.	REVISIONS	DATE	APPROVED
	DESCRIPTIONS	DATE	

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DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND OPERATIONS DIVISION
1716 MORGAN ROAD - MODESTO, CA 95358

CROWS LANDING ROAD/SAN JOAQUIN RIVER
BRIDGE REPLACEMENT PROJECT

DETOUR PLAN
FOR CARPENTER ROAD

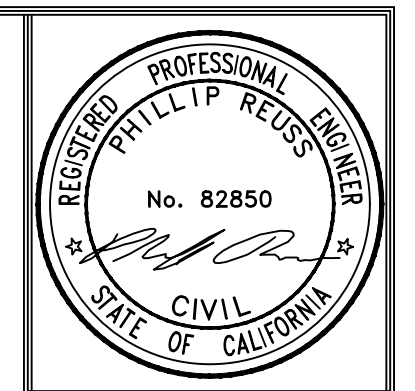
JOB NO. 226217-68
DATE 6/24/2020
DR BY PR
CK BY JW
SCALE NONE

SHEET NUMBER
DE-1
36 OF 70 SHEETS



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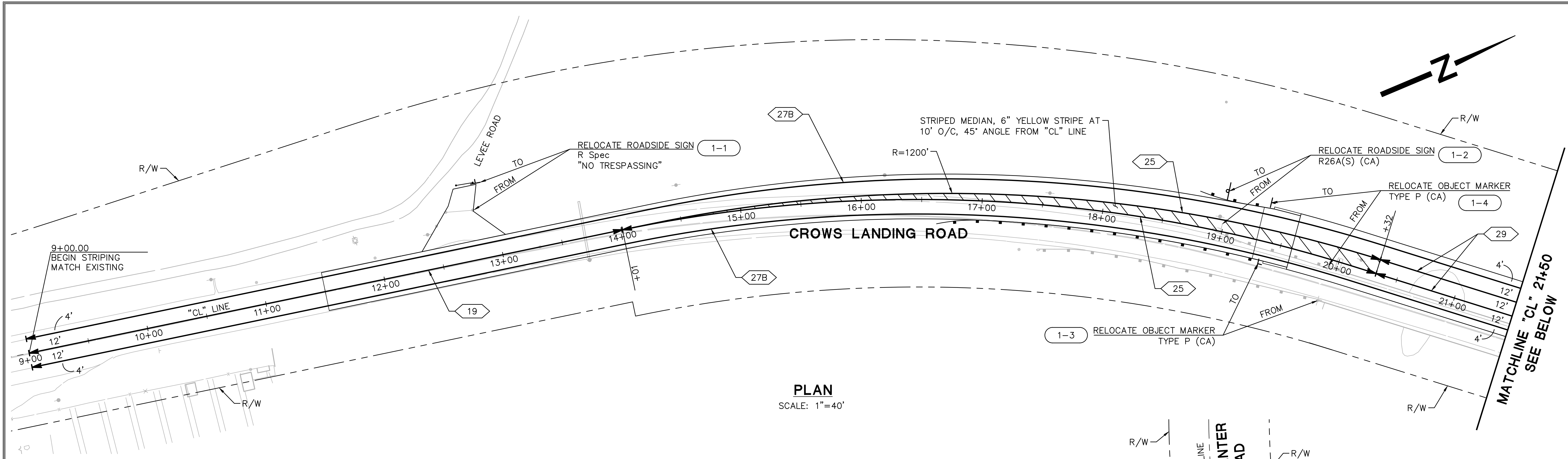
STANISLAUS COUNTY
 DEPARTMENT OF PUBLIC WORKS
 ENGINEERING AND OPERATIONS DIVISION
 1716 MORGAN ROAD - MODESTO, CA 95358



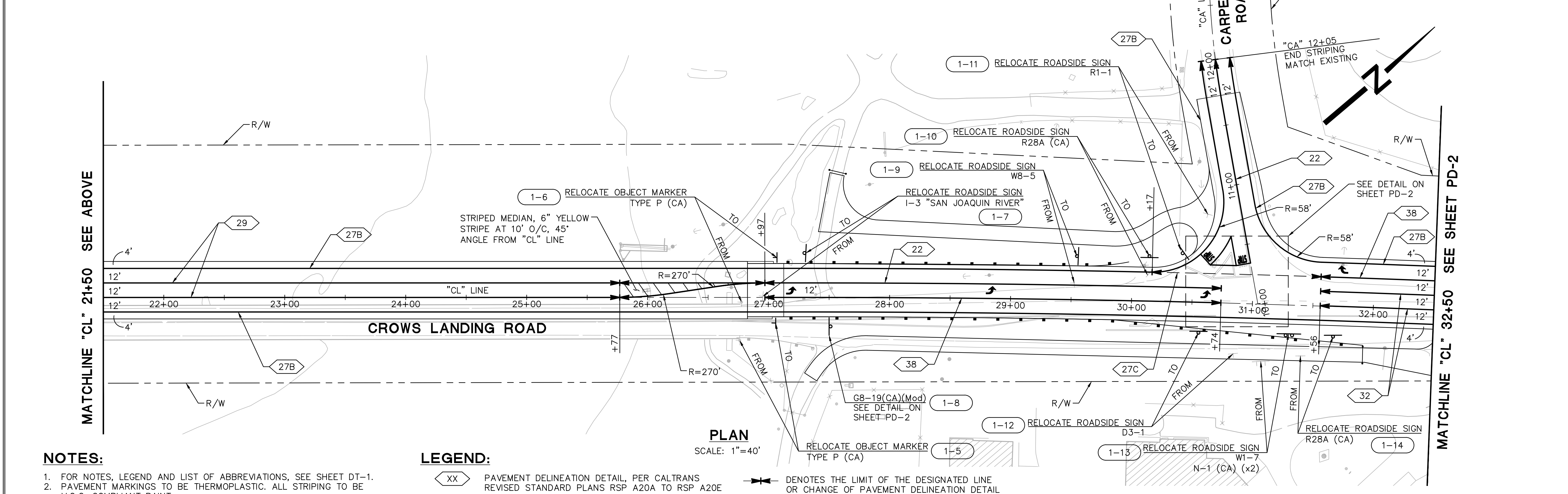
CROWS LANDING ROAD/SAN JOAQUIN RIVER
 BRIDGE REPLACEMENT PROJECT
 PAVEMENT DELINEATION & SIGNING
 CROWS LANDING ROAD

JOB NO. 226217-68
 DATE 6/24/2020
 DR BY PR
 CK BY JW
 SCALE AS SHOWN

SHEET NUMBER
PD-1
 37 OF 70 SHEETS



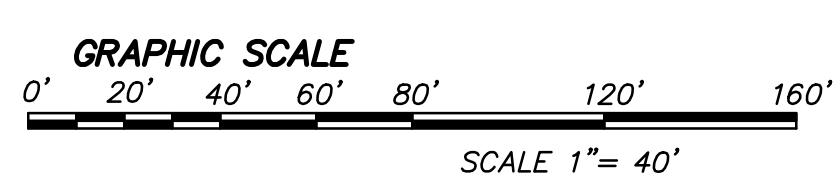
PLAN
 SCALE: 1"=40'



PLAN
 SCALE: 1"=40'

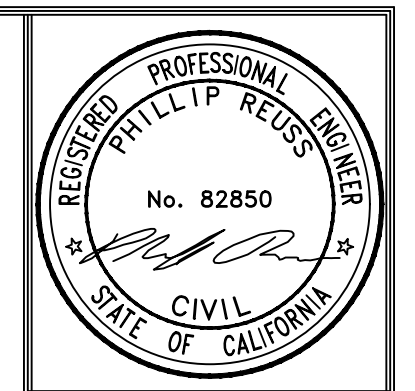
- NOTES:**
- FOR NOTES, LEGEND AND LIST OF ABBREVIATIONS, SEE SHEET DT-1.
 - PAVEMENT MARKINGS TO BE THERMOPLASTIC. ALL STRIPING TO BE V.O.C. COMPLIANT PAINT.
 - REMOVE ALL EXISTING TRAFFIC STRIPES AND PAVEMENT MARKINGS AS NECESSARY TO INSTALL NEW TRAFFIC STRIPES AND PAVEMENT MARKINGS.
 - LOCATION AND POSITION OF NEW AND RELOCATED ROADSIDE SIGNS SHALL BE DETERMINED BY THE ENGINEER.
 - ALL STATION AND OFFSET CALLOUTS ARE BASED ON THE "CL" LINE, UNLESS OTHERWISE NOTED.

- LEGEND:**
- XX PAVEMENT DELINEATION DETAIL, PER CALTRANS REVISED STANDARD PLANS RSP A20A TO RSP A20E
 - 1-1 ROADSIDE SIGN (WITH NUMBER)
 - ROADSIDE SIGN-ONE POST SIGN LOCATION DESIGNATION PER LATEST MUTCD EDITION-CALIFORNIA CODE
 - EXISTING SIGN
 - TYPE III ARROW (PAVEMENT MARKING PER CALTRANS STANDARD PLAN A24B)
 - "STOP" PAVEMENT MARKING PER CALTRANS STANDARD PLAN A24D
 - DENOTES THE LIMIT OF THE DESIGNATED LINE OR CHANGE OF PAVEMENT DELINEATION DETAIL



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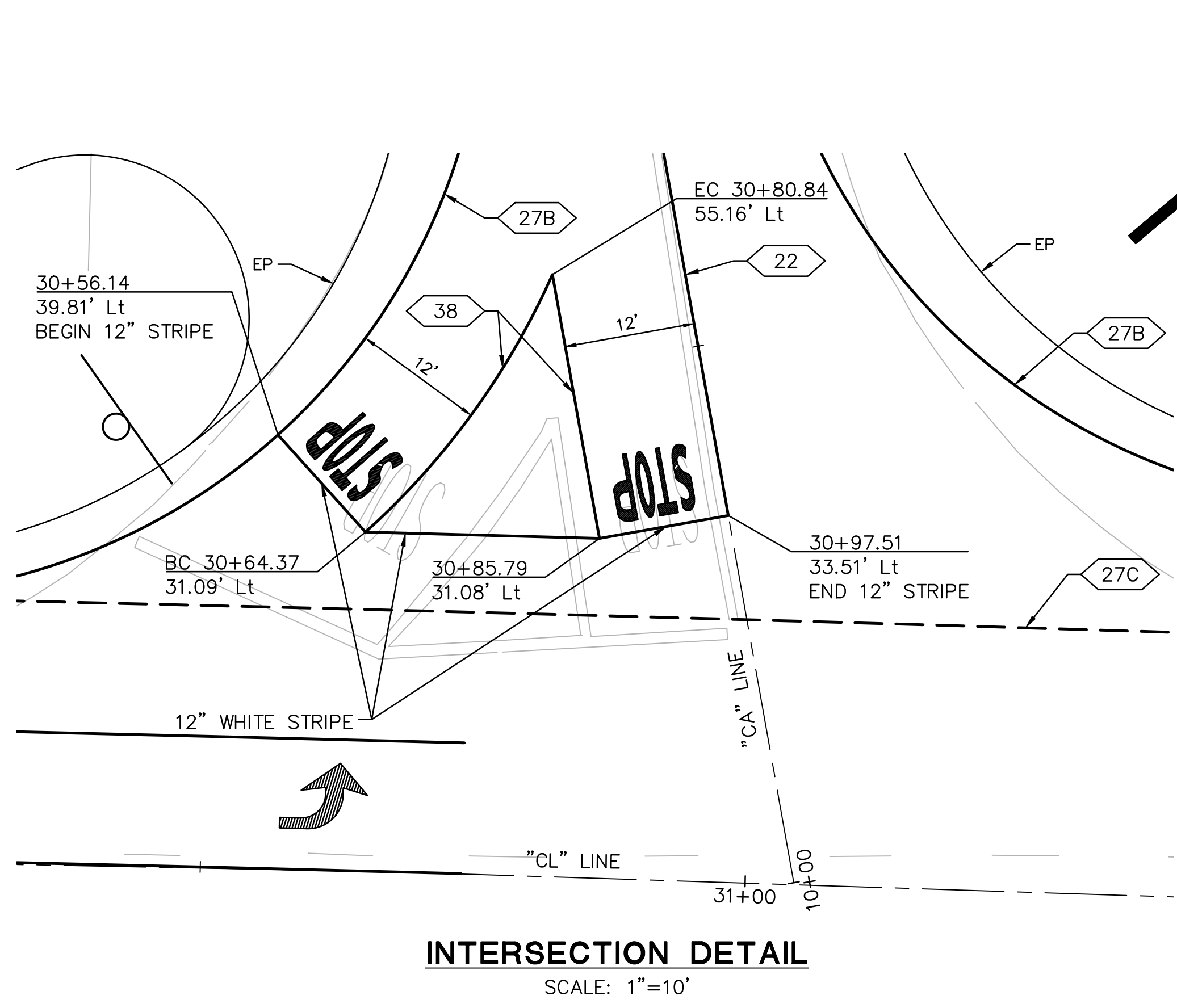
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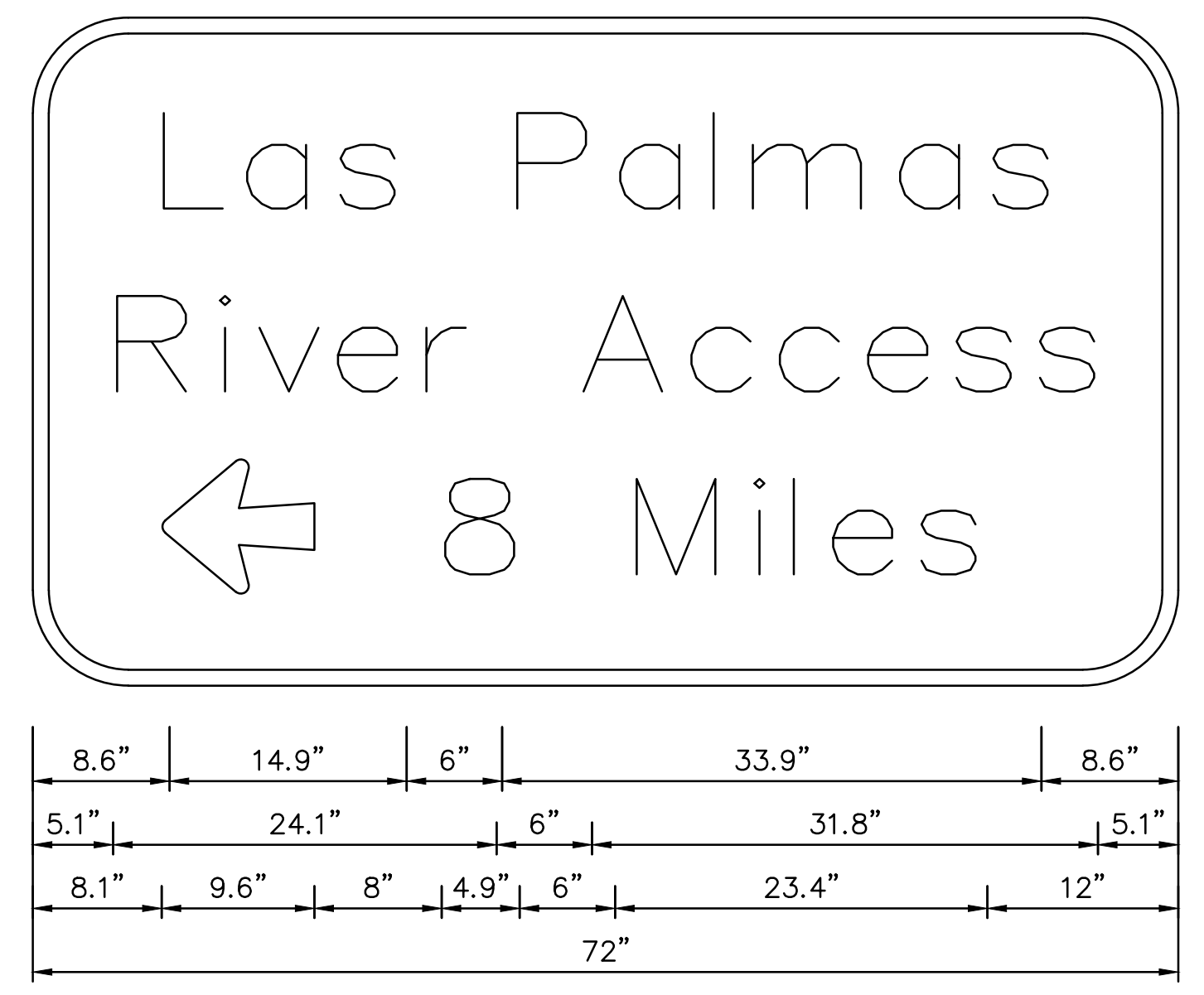
CROWS LANDING ROAD/SAN JOAQUIN RIVER
 BRIDGE REPLACEMENT PROJECT
 PAVEMENT DELINEATION & SIGNING
 CROWS LANDING ROAD

JOB NO. 226217-68
 DATE 6/24/2020
 DR BY PR
 CK BY JW
 SCALE AS SHOWN

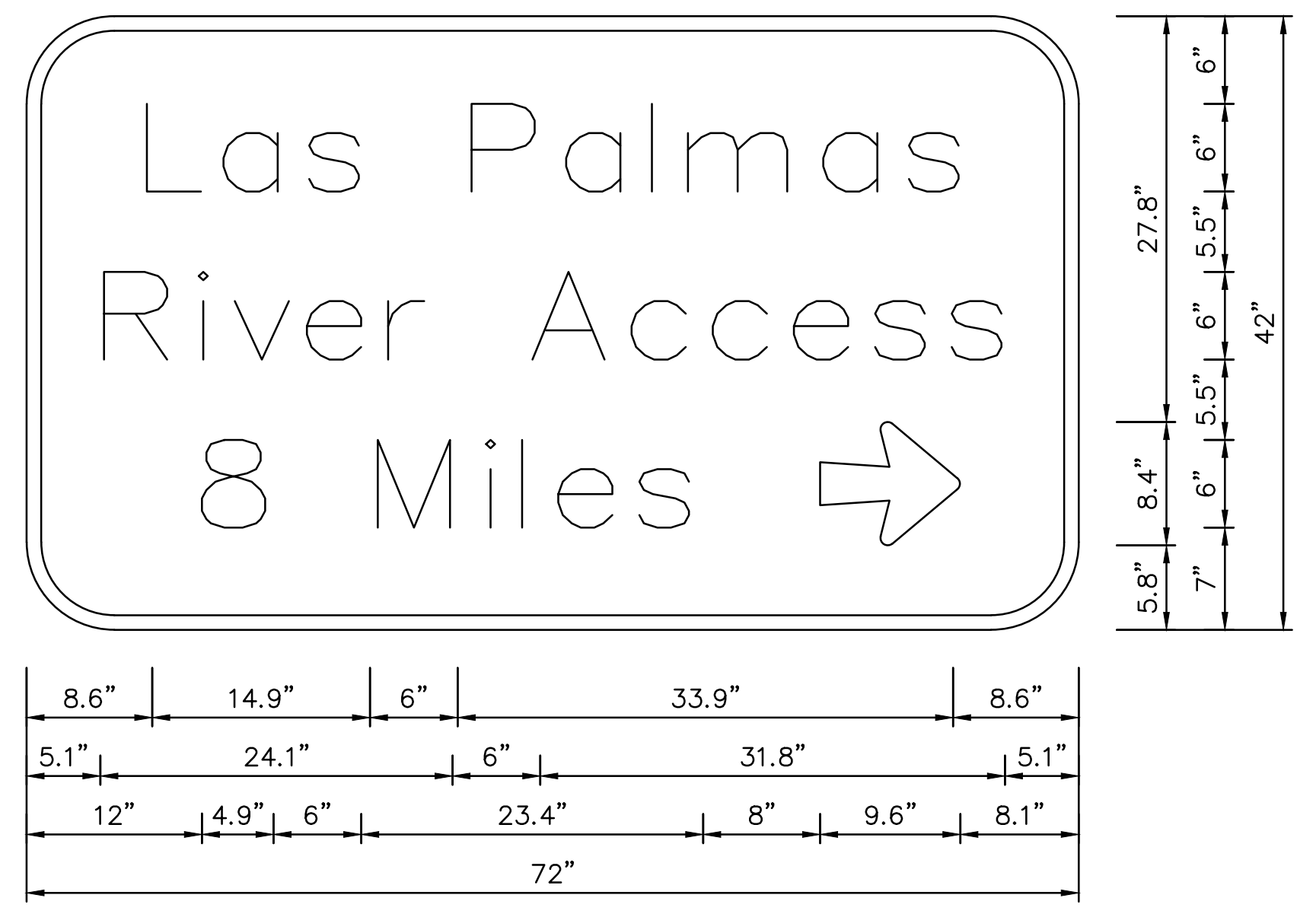
SHEET NUMBER
PD-2
 38 OF 70 SHEETS



INTERSECTION DETAIL
 SCALE: 1"=10'

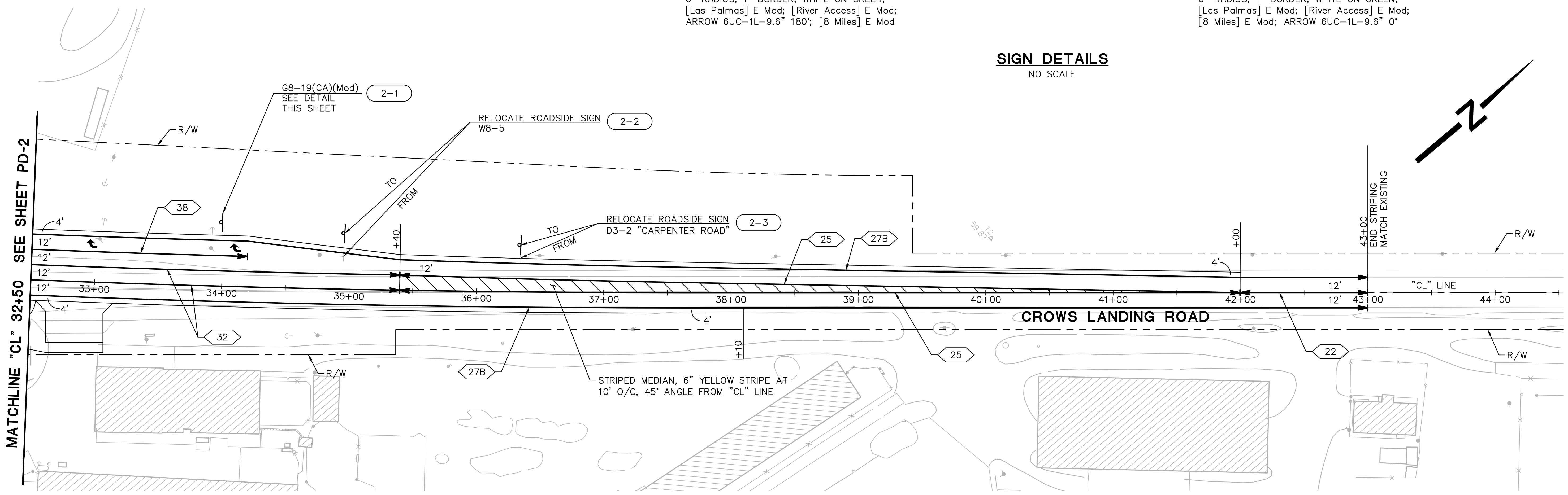


1-8 G8-19(CA)(Mod)
 6" RADIUS, 1" BORDER, WHITE ON GREEN;
 [Las Palmas] E Mod; [River Access] E Mod;
 ARROW 6UC-1L-9.6" 180°; [8 Miles] E Mod



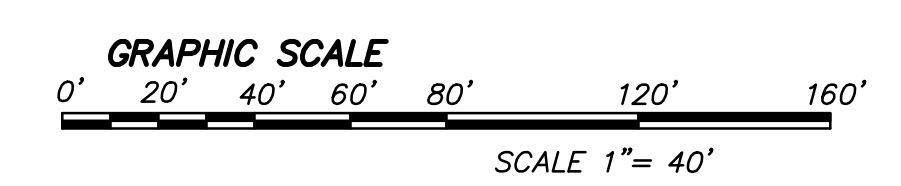
2-1 G8-19(CA)(Mod)
 6" RADIUS, 1" BORDER, WHITE ON GREEN;
 [Las Palmas] E Mod; [River Access] E Mod;
 [8 Miles] E Mod; ARROW 6UC-1L-9.6" 0°

SIGN DETAILS
 NO SCALE



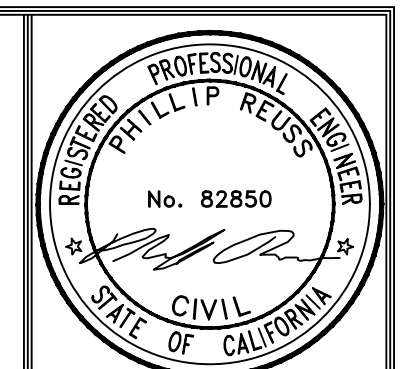
PLAN
 SCALE: 1"=40'

NOTE:
 1. FOR GENERAL NOTES AND LEGEND, SEE SHEET PD-1.



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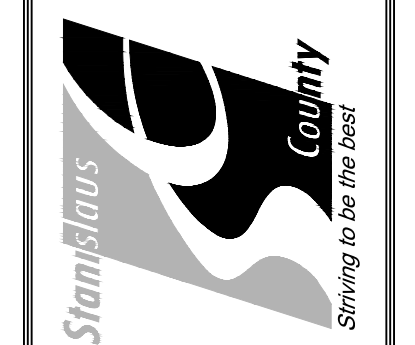


NO.	DESCRIPTIONS	REVISIONS	DATE	APPROVED

PAVEMENT DELINEATION QUANTITIES

SHEET No.	LOCATION/STATION	DIRECTION	THERMOPLASTIC TRAFFIC STRIPE							THERMOPLASTIC PAVEMENT MARKING				PAVEMENT MARKER			
			6" YELLOW				6" WHITE		8" WHITE	TYPE III ARROW	"STOP"	LIMIT LINE (12" WHITE STRIPE)	STRIPED MEDIAN (6" YELLOW STRIPE)	RETROREFLECTIVE			
			DETAIL 19	DETAIL 22	DETAIL 25	DETAIL 29	DETAIL 32	DETAIL 27B	DETAIL 27C					DETAIL 38	TYPE D	TYPE G	TYPE H
			LF	LF	LF	LF	LF	LF	LF					LF	SQFT	SQFT	SQFT
PD-1	"CL" 9+00 TO 14+01		501											11		21	
PD-1	"CL" 9+00 TO 32+50	NB							2,343								
PD-1	"CL" 9+00 TO 30+17	SB							2,126								
PD-1	"CL" 14+01 TO 20+32	NB			631								199			14	
PD-1	"CL" 14+01 TO 20+32	SB			634											14	
PD-1	"CL" 20+32 TO 26+97					1,331							41	56			
PD-1	"CL" 26+97 TO 30+74			377										32			
PD-1	"CL" 26+97 TO 30+74	NB							377	126					16		
PD-1	"CL" 30+17 TO 31+56	SB							140								
PD-1	"CL" 31+56 TO 32+50						188							10			
PD-1	"CL" 31+56 TO 32+50	SB								94	42				4		
PD-1	"CA" 10+34 TO 12+05			171										16			
PD-1	"CA" 10+25 TO 12+05	NB							202								
PD-1	"CA" 10+41 TO 12+05	SB							210								
PD-1	"CA" 10+34 TO 10+59	SB								54		44	45		3		
PD-2	"CL" 32+50 TO 35+40					580								32			
PD-2	"CL" 32+50 TO 43+00	NB							1,050								
PD-2	"CL" 32+50 TO 43+00	SB							1,050								
PD-2	"CL" 32+50 TO 34+20	SB								169	84				8		
PD-2	"CL" 35+40 TO 42+00	NB			660								204			14	
PD-2	"CL" 35+40 TO 42+00	SB			660											14	
PD-2	"CL" 42+00 TO 43+00			100										10			
SUBTOTAL			501	648	2,585	1,331	768	6,981	140	694	252	44	45	444	167	31	77
TOTAL			13,648							785				275			

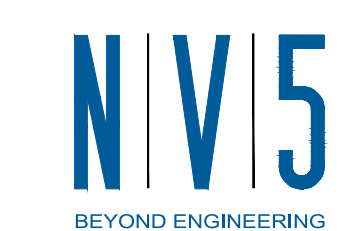
STANISLAUS COUNTY
 DEPARTMENT OF PUBLIC WORKS
 ENGINEERING AND OPERATIONS DIVISION
 1716 MORGAN ROAD - MODESTO, CA 95358



CROWS LANDING ROAD/SAN JOAQUIN RIVER
 BRIDGE REPLACEMENT PROJECT
 PAVEMENT DELINEATION QUANTITIES
 CROWS LANDING ROAD

JOB NO. 226217-68
 DATE 6/24/2020
 DR BY PR
 CK BY JW
 SCALE AS SHOWN

SHEET NUMBER
PDQ-1
 39 OF 70 SHEETS



2625 NATOMAS PARK DRIVE, SUITE 300 SACRAMENTO, CA 95833
 916.641.9100 TEL. 916.641.9222 FAX WWW.NV5.COM



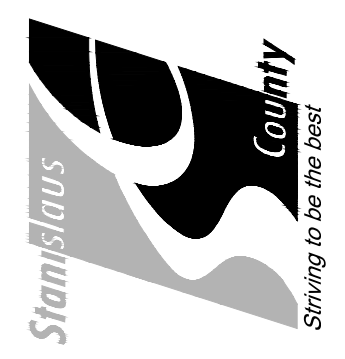
SIGN QUANTITIES

SHEET No.	SIGN No.	SIGN CODE		SIGN MESSAGE/ DESCRIPTION	SIZE PANEL SIZE	POST SIZE AND LENGTH	BACKGROUND		LEGEND		PROTECTIVE OVERLAY		FURNISH SINGLE SHEET ALUMINUM SIGN (0.063" - FRAMED) FOR RETROREFLECTIVE SHEETING (TYPE XI)	RELOCATE OBJECT MARKER	RELOCATE ROADSIDE SIGN	
		FEDERAL	CALIFORNIA		INCHES	4"x6"	SHEETING COLOR	RETROREFLECTIVE ASTM TYPE	SHEETING COLOR	RETROREFLECTIVE ASTM TYPE	PREMIUM	SQFT				SQFT
PD-1	1-1	R Spec		NO TRESPASSING											1	
PD-1	1-2		R26A(S) (CA)	NO STOPPING ANY TIME											1	
PD-1	1-3		TYPE P (CA)	OBJECT MARKER										1		
PD-1	1-4		TYPE P (CA)	OBJECT MARKER										1		
PD-1	1-5		TYPE P (CA)	OBJECT MARKER										1		
PD-1	1-6		TYPE P (CA)	OBJECT MARKER										1		
PD-1	1-7	I-3		SAN JOAQUIN RIVER											1	
PD-1	1-8		G8-19(CA)(Mod)	LAS PALMAS RIVER ACCESS 8 MILES WITH ARROW	72 x 42	16'	GREEN	XI	WHITE	XI	X	21.0	21.0	1		
PD-1	1-9	W8-5		SLIPPERY WHEN WET											1	
PD-1	1-10		R28A (CA)	NO PARKING ANY TIME WITH ARROW											1	
PD-1	1-11	R1-1		STOP											1	
PD-1	1-12	D3-1		CARPENTER Rd/CROWS LANDING Rd											1	
PD-1	1-13	W1-7		TWO DIRECTION LARGE ARROW											1	
			N-1 (CA) (x2)	OBJECT MARKER												1
PD-1	1-14		R28A (CA)	NO PARKING ANY TIME WITH ARROW											1	
PD-2	2-1		G8-19(CA)(Mod)	LAS PALMAS RIVER ACCESS 8 MILES WITH ARROW	72 x 42	16'	GREEN	XI	WHITE	XI	X	21.0	21.0	1		
PD-2	2-2	W8-5		SLIPPERY WHEN WET											1	
PD-2	2-3	D3-2		CARPENTER ROAD											1	
TOTAL												42.0	42.0	2	4	11



PREPARED UNDER THE DIRECTION OF:		DATE:	APPROVED
NO	DESCRIPTIONS	DATE	DATE

STANISLAUS COUNTY
 DEPARTMENT OF PUBLIC WORKS
 ENGINEERING AND OPERATIONS DIVISION
 1716 MORGAN ROAD - MODESTO, CA 95358

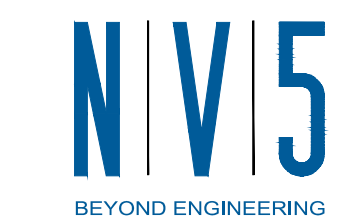


CROWS LANDING ROAD/SAN JOAQUIN RIVER BRIDGE REPLACEMENT PROJECT

SIGN QUANTITIES
CROWS LANDING ROAD

JOB NO. 226217-68
 DATE 6/24/2020
 DR BY PR
 CK BY JW
 SCALE AS SHOWN

SHEET NUMBER
SQ-1
40 OF 70 SHEETS



2625 NATOMAS PARK DRIVE, SUITE 300 SACRAMENTO, CA 95833
 916.641.9100 TEL. 916.641.9222 FAX WWW.NV5.COM



ROADWAY QUANTITIES

STATION	DIRECTION	ROADWAY EXCAVATION	ROADWAY EXCAVATION (SELECTED MATERIAL TOPSOIL)	DITCH EXCAVATION	EMBANKMENT (N)	IMPORTED BORROW	SUBGRADE ENHANCEMENT GEOGRID	CLASS 2 AGGREGATE BASE	HOT MIX ASPHALT (TYPE A)	PLACE HOT MIX ASPHALT DIKE (TYPE C)	PLACE HOT MIX ASPHALT DIKE (TYPE E)	PLACE HOT MIX ASPHALT DIKE (TYPE F)	COLD PLANE ASPHALT CONCRETE PAVEMENT	DESCRIPTION
		CY	CY	CY	CY	CY	SQYD	CY	TON	LF	LF	LF	SQYD	
"CL" 7+80.00 TO 12+50.00		2,248												BASIN #1
"CL" 11+20.00 TO 11+50.00									11.0				111	COLD PLANE AT BEGIN CONFORM
"CL" 11+50.00 TO 19+59.52	NB/SB	1,651	563	59	63,000		513	1,409	1,247					SHEET PP-1
"CL" 11+50.00 TO 16+37.16	NB								12.0		484			HMA DIKE (TYPE E)
"CL" 11+50.00 TO 12+34.99	SB								2.0		85			HMA DIKE (TYPE E)
"CL" 16+37.16 TO 17+00.00	NB								0.5	62				HMA DIKE (TYPE C)
"CL" 17+00.00 TO 19+39.02	NB								3.2			236		HMA DIKE (TYPE F)
"CL" 26+82.52 TO 32+50.00	NB/SB	1,039	305		5,495		538	1,690	1,306					SHEET PP-2
"CL" 27+03.02 TO 29+84.60	NB								3.8			281		HMA DIKE (TYPE F)
"CL" 27+92.00 TO 30+45.07	SB								2.9	87		168		HMA DIKE (TYPE C & F)
"CL" 29+84.60 TO 31+92.35	NB								1.6	207				HMA DIKE (TYPE C)
"CL" 31+92.35 TO 32+54.26	NB								1.6		62			HMA DIKE (TYPE E)
"CL" 32+50.00 TO 42+00.00	NB/SB	1,490			363			1,474	1,326					SHEET PP-3
"CL" 37+80.00 TO 38+10.00	NB/SB								9.8				97	COLD PLANE AT END CONFORM
"CA" 10+00.00 TO 11+75.00	NB/SB	194			28			154	139					SHEET PP-4
"CA" 11+75.00 TO 12+05.00	NB/SB								18				179	COLD PLANE AT END CONFORM
"CL" 12+34.99 TO 13+05.49	SB							61						LEVEE ROAD
"LA" 5+15.25 TO 11+00.00		60			403			274						LEVEE ACCESS ROAD
"CL" 11+50.00 TO 19+59.52	NB/SB	44,710												OVER-EXCAVATION - SOUTH APPROACH
"CL" 26+82.52 TO 37+80.00	NB/SB	492												OVER-EXCAVATION - NORTH APPROACH
"CL" 28+00.00 TO 30+25.00	SB	296												BASIN #2
"CL" 34+50.00 TO 37+25.00	SB	650												BASIN #3
FROM STAGE CONSTRUCTION		3,091		154	2,926				978					STAGE CONSTRUCTION QUANTITIES
TOTAL		55,921	868	213	72,215	24,700	1,051	5,062	5,062	356	631	685	387	TOTAL

(N) - NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY

MIDWEST GUARDRAIL SYSTEM

STATION	DIRECTION	MIDWEST GUARDRAIL SYSTEM	VEGETATION CONTROL (MINOR CONCRETE)	TRANSITION RAILING (TYPE WB-31)	END ANCHOR ASSEMBLY (TYPE SFT)	ALTERNATIVE FLARED TERMINAL SYSTEM	REMOVE GUARDRAIL	LAYOUT (N)
		LF	SQYD	EA	EA	EA	LF	TYPE
"CL" 17+00.00 TO 19+39.02	NB	211	128	1		1	239	12B
"CL" 19+13.11 TO 19+37.52	SB		46	1		1	100	12BB
"CL" 27+03.02 TO 31+86.10	NB	458	261	1	1		65	12DD
"CL" 27+04.02 TO 29+60.00	SB	256	132	1		1	62	12B
TOTAL		925	567	4	1	3	466	

(N) - NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY

FENCES AND GATES

STATION	TEMPORARY HIGH-VISIBILITY FENCE	12' PIPE GATE	REMOVE FENCE	REMOVE GATE
	LF	EA	LF	EA
"CL" 12+71.95 Lt				1
"CL" 12+80.63 Lt		1		
"CL" 12+95.87 TO 23+73.44 Lt	1,247			
"CL" 17+86.52 TO 23+11.81 Rt	513			
"CL" 25+79.38 TO 26+76.92 Rt	100			
"CL" 25+88.11 TO 27+20.81 Lt	157			
"CL" 26+70.13 TO 27+03.53 Rt			42	
"CL" 27+13.88 TO 27+18.56 Rt			30	
"CL" 27+45.87 Lt		1		1
"CL" 31+92.44 Rt		1		
"CA" 10+66.56 TO 11+57.18 Lt			92	
TOTAL	2,017	3	164	2

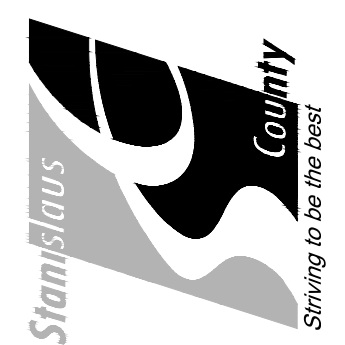
ROAD MONUMENT

LOCATION	STATION	EA
BEGIN HORIZONTAL CURVE	"CL" 14+00.86	1
BEGIN HORIZONTAL CURVE	"CL" 27+31.55	1
CARPENTER ROAD INTERSECTION	"CL" 31+04.46	1
POINT OF REVERSE CURVE	"CL" 32+35.89	1
END HORIZONTAL CURVE	"CL" 37+62.59	1
BEGIN HORIZONTAL CURVE	"CA" 11+69.62	1
TOTAL		6



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NO	DESCRIPTIONS	DATE

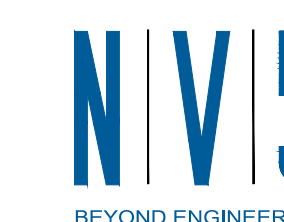
STANISLAUS COUNTY
DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND OPERATIONS DIVISION
1716 MORGAN ROAD - MODESTO, CA 95358



CROWS LANDING ROAD/SAN JOAQUIN RIVER
BRIDGE REPLACEMENT PROJECT
SUMMARY OF QUANTITIES
CROWS LANDING ROAD

JOB NO. 226217-68
DATE 6/24/2020
DR BY PR
CK BY JW
SCALE AS SHOWN

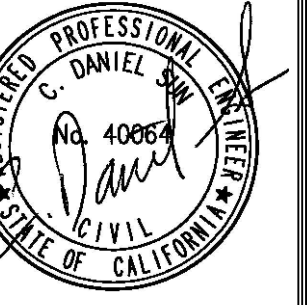
SHEET NUMBER
Q-1
41 OF 70 SHEETS



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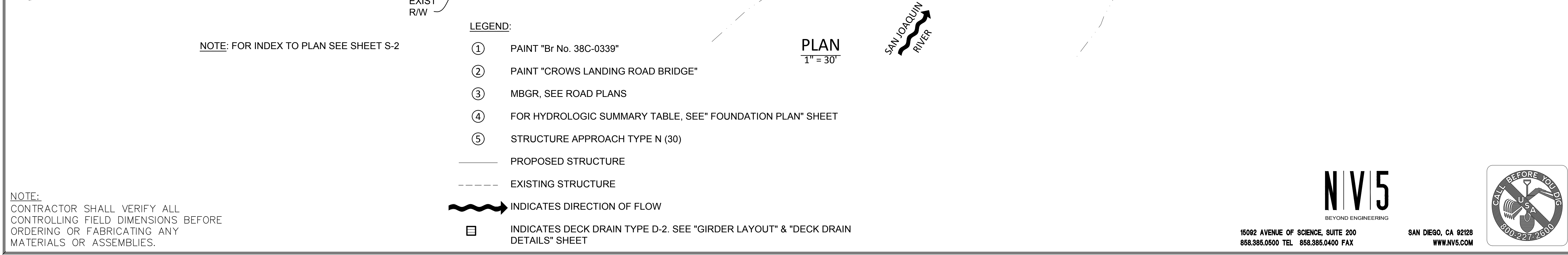
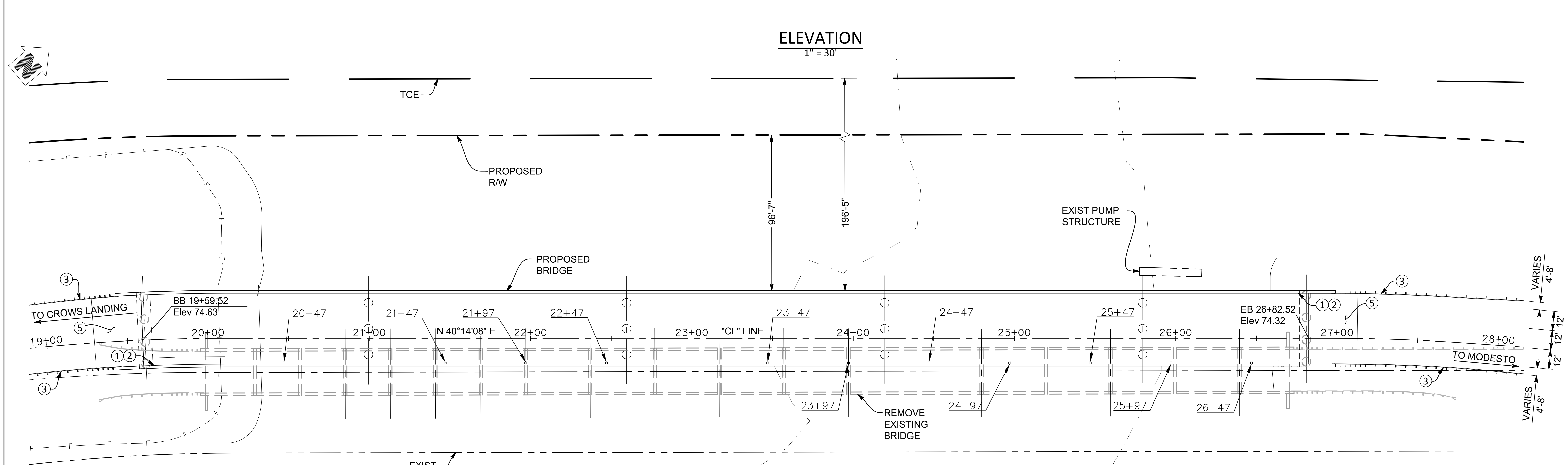
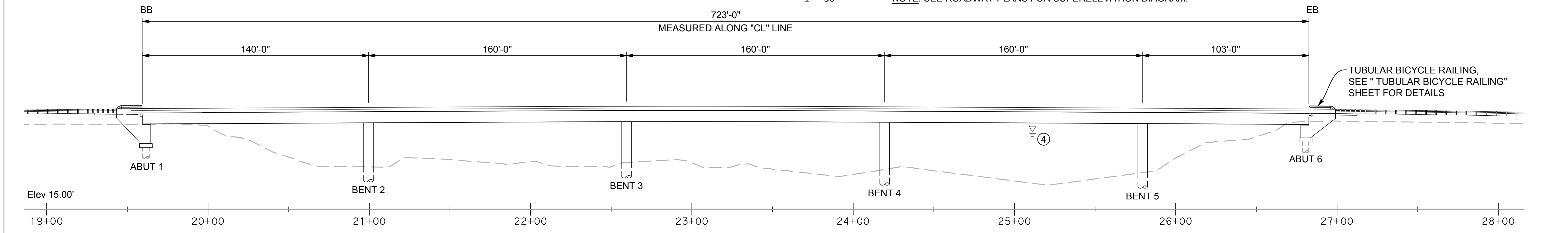
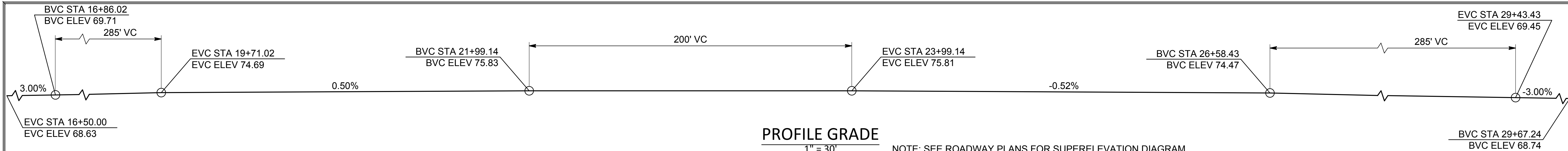
STANISLAUS COUNTY
DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND OPERATIONS DIVISION
1716 MORGAN ROAD - MODESTO, CA 95358



CROWS LANDING BRIDGE IMPROVEMENTS
GENERAL PLAN NO. 1

JOB NO. 226217-68
DATE 6/24/20
DR BY AG
CK BY DS
SCALE AS SHOWN

SHEET NUMBER
S-1
42 OF 70 SHEETS



NOTE:
CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIALS OR ASSEMBLIES.

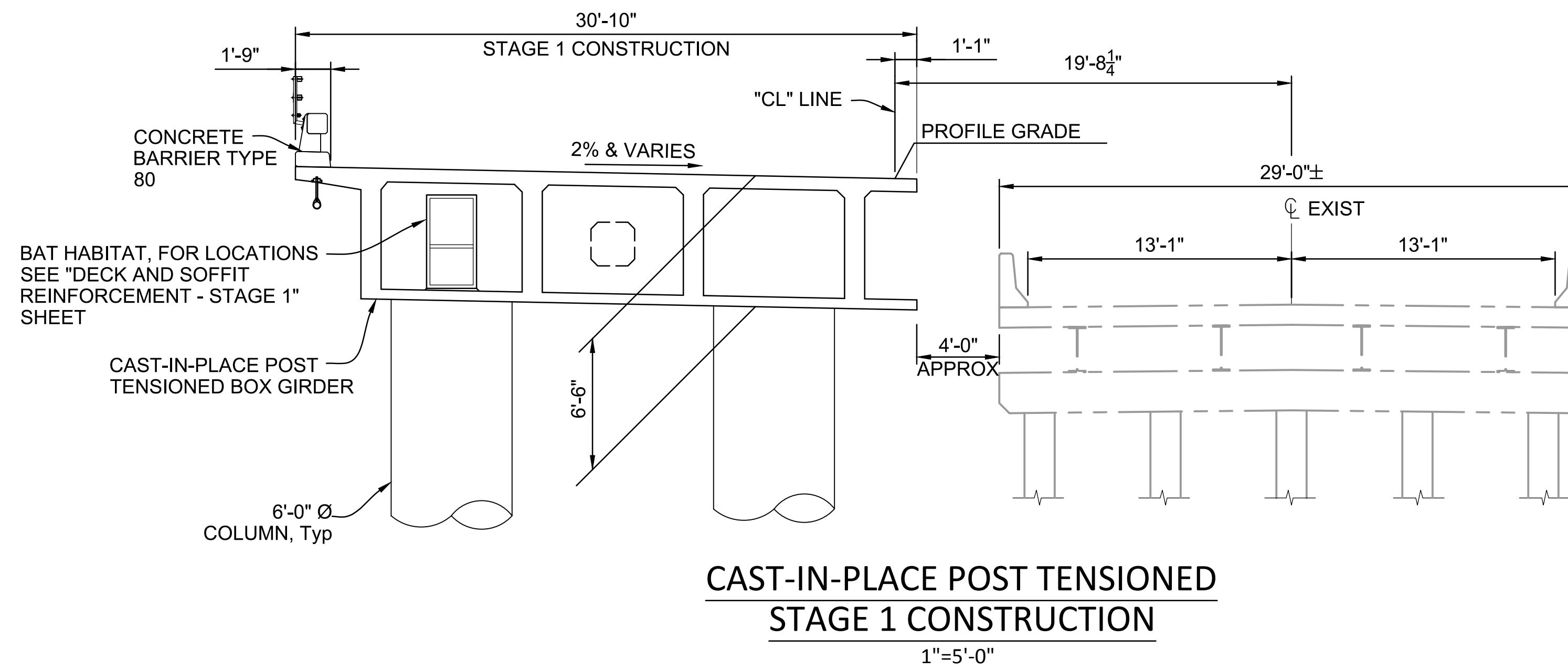
N|V|5
BEYOND ENGINEERING

15092 AVENUE OF SCIENCE, SUITE 200
858.385.0500 TEL 858.385.0400 FAX

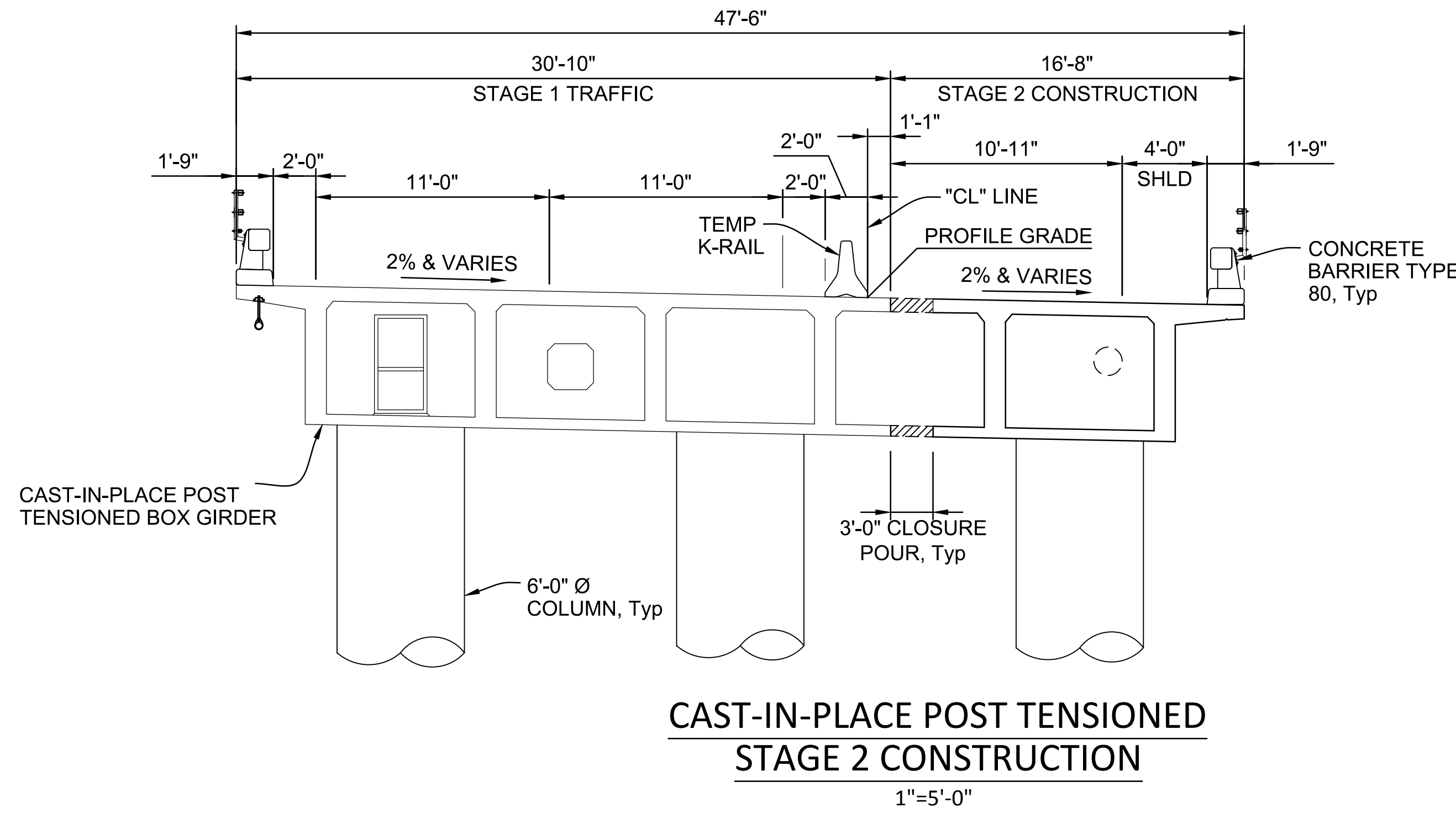
SAN DIEGO, CA 92128
WWW.NV5.COM

CALL BEFORE YOU DIG
800-227-2600

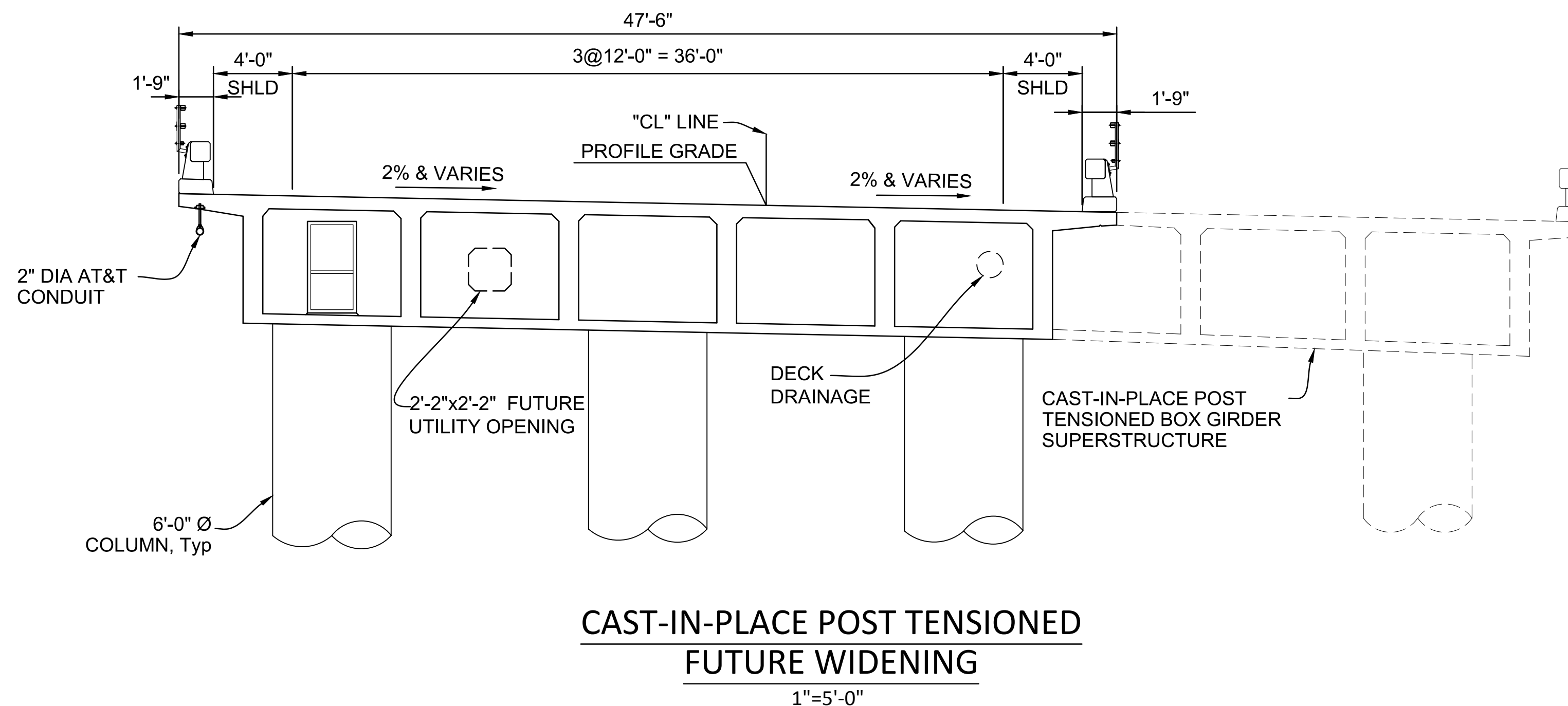
PLOT DATE: 6/24/20 FILE: P:\2262\226217-0000068-00\Cadd\Structure\S-01_General_Plan No.1



**CAST-IN-PLACE POST TENSIONED
STAGE 1 CONSTRUCTION**
1"=5'-0"



**CAST-IN-PLACE POST TENSIONED
STAGE 2 CONSTRUCTION**
1"=5'-0"



**CAST-IN-PLACE POST TENSIONED
FUTURE WIDENING**
1"=5'-0"

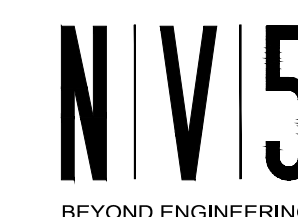
INDEX TO PLANS

SHEET NO.	TITLE
S-1	GENERAL PLAN NO. 1
S-2	GENERAL PLAN NO. 2
S-3	DECK CONTOURS
S-4	FOUNDATION PLAN
S-5	ABUTMENT LAYOUT - STAGE 1
S-6	ABUTMENT LAYOUT - STAGE 2
S-7	ABUTMENT DETAILS NO. 1
S-8	ABUTMENT DETAILS NO. 2
S-9	BENT DETAILS NO. 1
S-10	BENT DETAILS NO. 2
S-11	PTFE ELASTOMERIC BEARING PAD DETAILS
S-12	TYPICAL SECTION - STAGE 1
S-13	TYPICAL SECTION - STAGE 2
S-14	DECK AND SOFFIT REINFORCEMENT - STAGE 1
S-15	DECK AND SOFFIT REINFORCEMENT - STAGE 2
S-16	GIRDER LAYOUT NO.1
S-17	GIRDER LAYOUT NO.2
S-18	GIRDER LAYOUT NO.3
S-19	GIRDER LAYOUT NO.4
S-20	GIRDER LAYOUT NO.5
S-21	GIRDER LAYOUT NO.6
S-22	JOINT SEAL-ABUTMENT DETAILS
S-23	TUBULAR BICYCLE RAILING DETAILS
S-24	DECK DRAIN DETAILS
S-25	ROCK SLOPE PROTECTION
S-26	BAT HABITAT DETAILS No.1
S-27	BAT HABITAT DETAILS No.2
S-28	LOG OF TEST BORINGS 1 (1 OF 2)
S-29	LOG OF TEST BORINGS 2 (2 OF 2)

QUANTITIES

ITEM	TOTAL
BRIDGE REMOVAL	1 LS
STRUCTURE EXCAVATION (BRIDGE)	1,057 CY
STRUCTURE BACKFILL (BRIDGE)	345 CY
FURNISH 66" CISS CONCRETE PILING	294 LF
DRIVE 66" CISS CONCRETE PILING	8 EA
FURNISH 72" CISS CONCRETE PILING	1,056 LF
DRIVE 72" CISS CONCRETE PILING	12 EA
PRESTRESSING CAST-IN-PLACE CONCRETE	1 LS
STRUCTURAL CONCRETE, BRIDGE FOOTING	105 CY
STRUCTURAL CONCRETE, BRIDGE	3,072 CY
STRUCTURAL CONCRETE, APPROACH SLAB (TYPE N)	132 CY
PTFE BEARING	12 EA
JOINT SEAL ASSEMBLY (MR 5")	95 LF
BAR REINFORCING STEEL (BRIDGE)	1,050,230 LB
BAT HABITAT	5 EA
ROCK SLOPE PROT'N (1/4 T, CLASS V, METH B)	728 CY
ROCK SLOPE PROTECTION FABRIC (CLASS 8)	2,777 SQ YD
BRIDGE DECK DRAINAGE SYSTEM	22,285 LB
CONCRETE BARRIER (TYPE 80)	1,566 LF
TUBULAR BICYCLE RAILING	1,566 LF

NOTE:
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CROWS LANDING BRIDGE IMPROVEMENTS

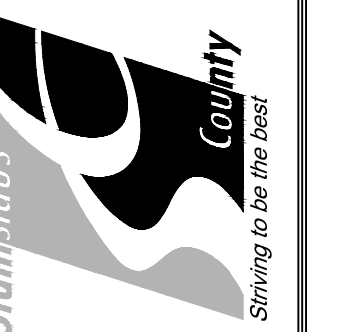
GENERAL PLAN NO. 2

JOB NO. 226217-68
DATE 6/24/20
DR BY AG
CK BY DS
SCALE AS SHOWN

SHEET NUMBER
S-2

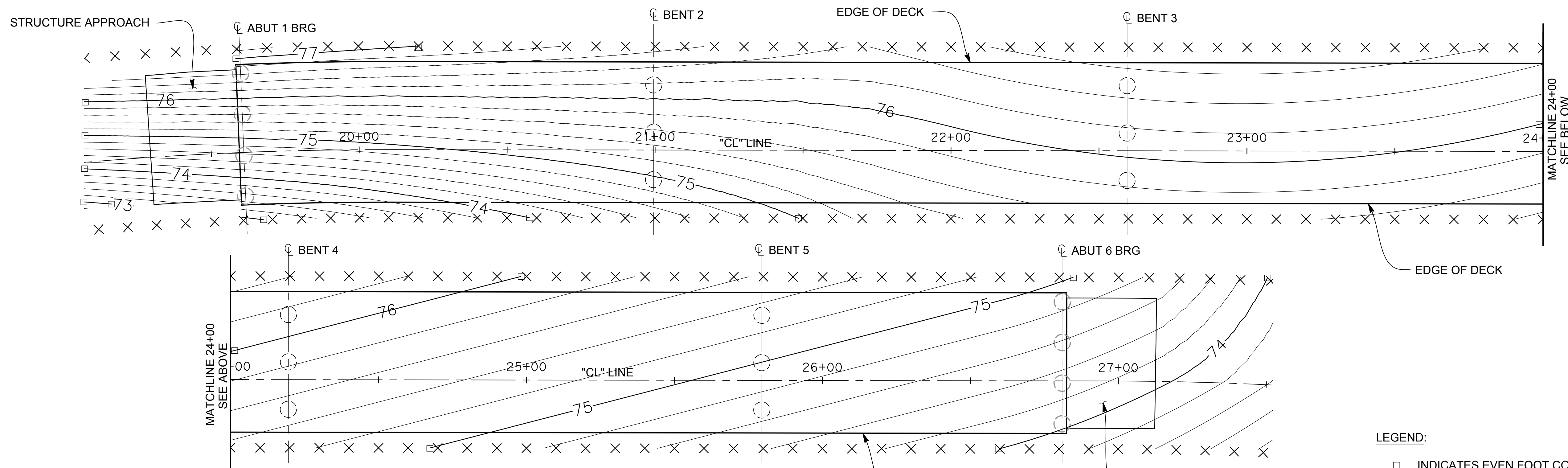
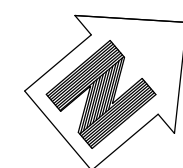
43 OF 70 SHEETS

STANISLAUS COUNTY
DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND OPERATIONS DIVISION
1716 MORGAN ROAD - MODESTO, CA 95358



PREPARED UNDER THE DIRECTION OF:

NO.	REVISIONS	DATE	APPROVED



DECK CONTOURS
1" = 20'

GENERAL NOTES
LOAD RESISTANCE FACTOR DESIGN

- DESIGN:** AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 6TH EDITION AND THE CALTRANS AMENDMENTS V6.0, DATED JANUARY 2014; EXCEPT DETAILS TAKEN FROM STANDARD PLANS 2015 AND STANDARD BRIDGE DETAILS XS SHEETS ARE DESIGNED USING BRIDGE DESIGN SPECIFICATIONS ('96 AASHTO W/REVISIONS BY CALTRANS).
- SEISMIC DESIGN:** CALTRANS SEISMIC DESIGN CRITERIA (SDC), VERSION 1.7 DATED APRIL 2013.
- DEAD LOAD:** INCLUDES 35 PSF FOR FUTURE WEARING SURFACE.
ALLOW FOR THE USE OF STEEL DECK FORMS. (WHERE APPROPRIATE)
240 PLF FOR FUTURE UTILITY LOADING
- LIVE LOADING:** HL93 AND PERMIT DESIGN LOAD.
- SEISMIC LOADING:** SOIL PROFILE $V_{s30M} = 250$ m/s
MAGNITUDE GROUP 6.75 ± 0.25
PEAK GROUND ACCELERATION 0.42g
SEE "ARS DESIGN CURVE"
- CAST-IN-PLACE CONCRETE:** $F_y = 60$ KSI
 $F'_c = 4.0$ KSI UNLESS OTHERWISE NOTED
 $N = 7$
- STEEL PIPE CASING:** $F_y = 36$ KSI, $F_u = 58$ KSI
- PRESTRESSED CONCRETE:** SEE "PRESTRESSING NOTES" ON "GIRDER LAYOUT NO. 1" SHEET

STANDARD PLANS DATED 2015

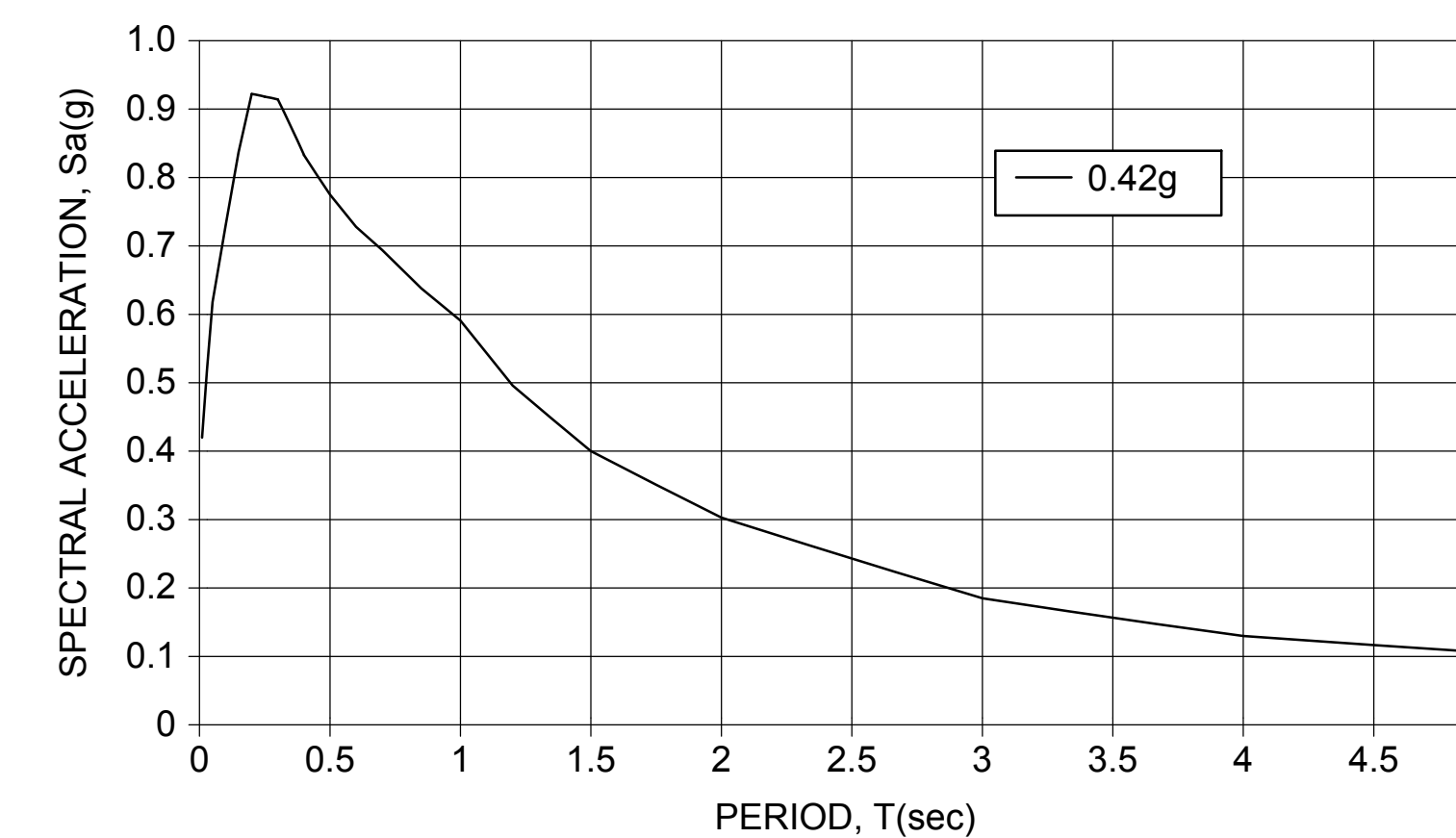
- A3A ABBREVIATIONS (SHEET 1 OF 3)
- A3B ABBREVIATIONS (SHEET 2 OF 3)
- A3C ABBREVIATIONS (SHEET 3 OF 3)
- A10A LEGEND - LINES AND SYMBOLS (SHEET 1 OF 5)
- A10B LEGEND - LINES AND SYMBOLS (SHEET 2 OF 5)
- A10C LEGEND - LINES AND SYMBOLS (SHEET 3 OF 5)
- A10D LEGEND - LINES AND SYMBOLS (SHEET 4 OF 5)
- A10E LEGEND - LINES AND SYMBOLS (SHEET 5 OF 5)
- A10F LEGEND - SOIL (SHEET 1 OF 2)
- A10G LEGEND - SOIL (SHEET 2 OF 2)
- A10H LEGEND - ROCK
- 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
- B7-1 BOX GIRDER DETAILS
- B7-6 DECK DRAINS - TYPES D-1 AND D-2
- B7-7 DECK DRAINS - TYPE D-3
- B7-8 DECK DRAINAGE DETAILS
- B7-10 UTILITY OPENING - BOX GIRDER
- RSP B8-5 CAST-IN-PLACE PRESTRESSED GIRDER DETAILS
- RSP B9-1 STRUCTURE APPROACH TYPE N (30)
- RSP B9-5 STRUCTURE APPROACH SLAB DETAILS
- RSP B9-6 STRUCTURE APPROACH DRAINAGE DETAILS
- RSP B11-60 CONCRETE BARRIER TYPE 80
- B14-3 COMMUNICATION AND SPRINKLER CONTROL CONDUITS (CONDUITS LESS THAN 4")
- B14-5 WATER SUPPLY LINE (DETAILS) (PIPE SIZES LESS THAN 4")

LEGEND:

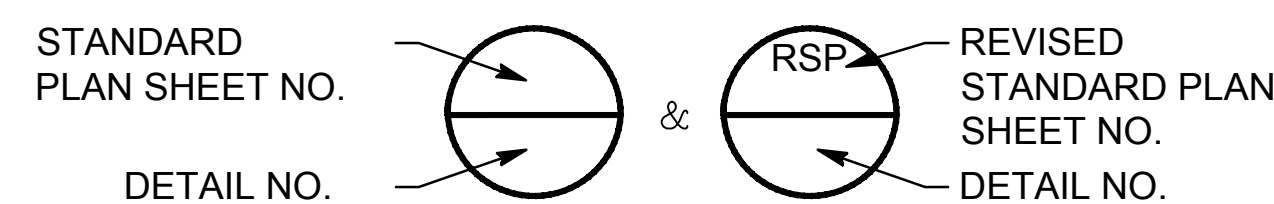
- INDICATES EVEN FOOT CONTOURS.
- × INDICATES 10' INTERVAL MEASUREMENTS ALONG "CL" LINE.

NOTES:

1. CONTOURS INDICATE TOP OF DECK ELEVATION.
2. CONTOURS DO NOT INCLUDE CAMBER OR FALSEWORK SETTLEMENT.
3. CONTOUR INTERVAL IS 0.20'.

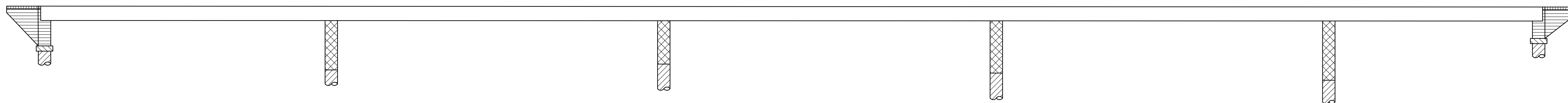


ARS DESIGN CURVE
NO SCALE



STANDARD PLAN SHEET NO. _____
DETAIL NO. _____

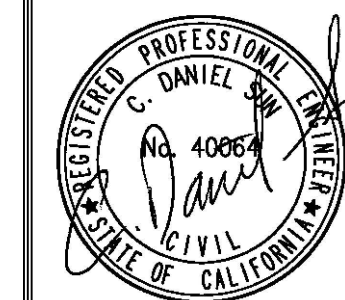
REVISED STANDARD PLAN SHEET NO. _____
DETAIL NO. _____



CONCRETE STRENGTH AND TYPE LIMITS
NO SCALE

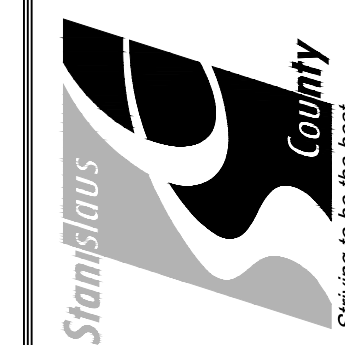
- STRUCTURAL CONCRETE, BRIDGE (4,500 PSI AT 28 DAYS)
- ▨ STRUCTURAL CONCRETE, BRIDGE FOOTING
- ▩ STRUCTURAL CONCRETE, BRIDGE (4,000 PSI AT 28 DAYS)
- ▧ CISS PILE (CONCRETE INFILLING 4,000 PSI AT 28 DAYS)
- ▤ STRUCTURAL CONCRETE, BRIDGE (3,600 PSI AT 28 DAYS)
- ▥ STRUCTURAL CONCRETE, APPROACH SLAB (TYPE N 30S)

NOTE:
CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIALS OR ASSEMBLIES.



NO.	REVISIONS	DATE	APPROVED

STANISLAUS COUNTY
DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND OPERATIONS DIVISION
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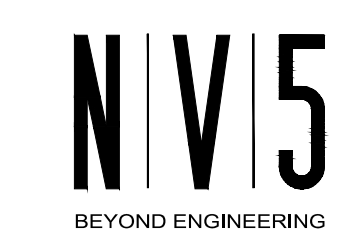


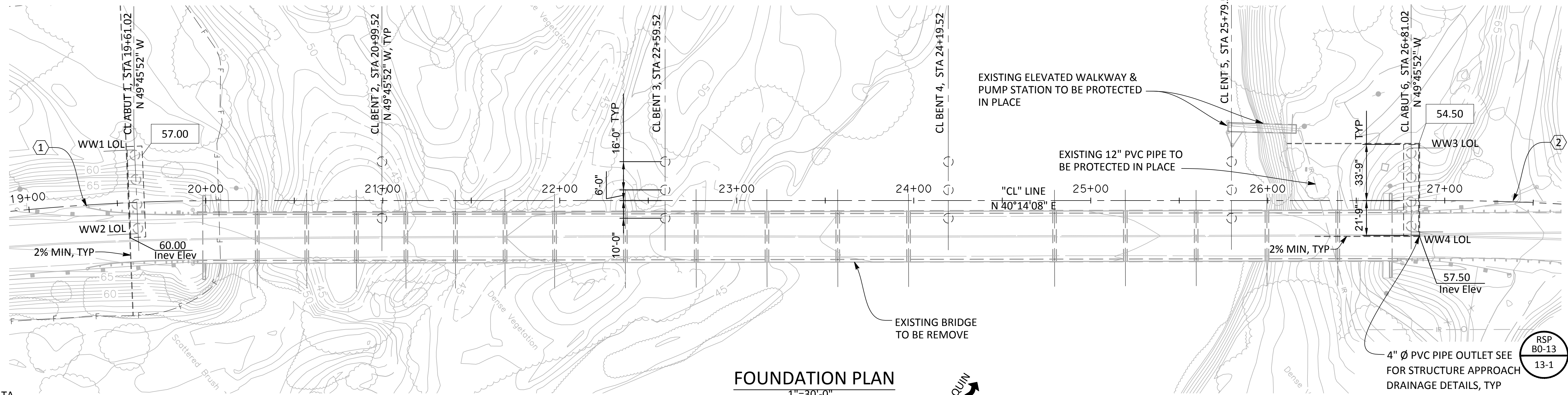
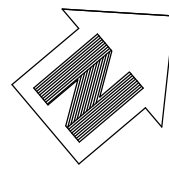
CROWS LANDING BRIDGE IMPROVEMENTS
DECK CONTOURS

JOB NO. 226217-68
DATE 6/24/20
DR BY AG
CK BY DS
SCALE AS SHOWN

SHEET NUMBER
S-3
44 OF 70 SHEETS

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858.385.0600 TEL 858.385.0400 FAX
SAN DIEGO, CA 92128
WWW.NV5.COM





1 CURVE DATA
 R = 1200.00'
 Δ = 29°06'36"
 L = 2790.00'

2 CURVE DATA
 R = 1200.00'
 Δ = 3°59'02"
 L = 2790.00'

FOUNDATION PLAN
 1"=30'-0"

PILE DATA TABLE

PILE LOCATION	PILE TYPE	CUT-OFF ELEVATION (FT)	NOMINAL RESISTANCE (K)		DESIGN PILE TIP ELEVATION (FT)	SPECIFIED PILE TIP ELEVATION (FT)	NOMINAL DRIVING RESISTANCE REQUIRED (KIPS)
			COMPRESSION	TENSION			
ABUT 1 (NOTE 2)	66" CISS	57.42	1112	0	17 (A-I), N/A (B-I), 18 (A-II), N/A (B-II), 25 (C), 40 (D)	17	1220
BENT 2	72" CISS	50.00	3480	295	-23 (A-I), N/A (B-I), -23 (A-II), N/A (B-II), 1 (C), -37 (D)	-37	3440
BENT 3	72" CISS	50.00	3703	305	-33 (A-I), N/A (B-I), -36 (A-II), N/A (B-II), -16 (C), -22 (D)	-36	3440
BENT 4	72" CISS	50.00	3414	256	-42 (A-I), N/A (B-I), -38 (A-II), N/A (B-II), -18 (C), -34 (D)	-42	3480
BENT 5	72" CISS	50.00	3060	340	-35 (A-I), N/A (B-I), -37 (A-II), N/A (B-II), -18 (C), -23 (D)	-37	3070
ABUT 6 (NOTE 2)	66" CISS	54.92	983	0	22 (A-I), N/A (B-I), 37 (A-II), N/A (B-II), 30 (C), 37 (D)	22	1040

SCOUR DATA TABLE

SUPPORT NO.	LONG-TERM (DEGRADATION AND CONTRACTION) SCOUR ELEVATION (FT)	SHORT-TERM (LOCAL) SCOUR DEPTH (FT)
ABUTMENT 1	3.2	-
BENT 2	4.2	19.88
BENT 3	4.2	9.56
BENT 4	4.2	9.56
BENT 5	4.2	9.56
ABUTMENT 6	3.2	-

HYDROLOGIC SUMMARY

FREQUENCY (YEARS)	DESIGN FLOOD	BASE FLOOD	BASE FLOOD
	80-YEAR	100-YEAR	>>>500-YEAR
DISCHARGE (CUBIC FEET PER SECOND)	45,000	59,100	370,000
WATER SURFACE (ELEVATION AT BRIDGE) (FT)	63.3	65.5	94.5

FLOOD PLAIN DATA IS 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 THE COUNTY OF STANISLAUS OR NV5 AND INTERESTED OR AFFECTED PARTIES SHOULD MAKE THEIR OWN INVESTIGATION.

NOTES:

- DESIGN TIP ELEVATION IS CONTROLLED BY: (A) COMPRESSION, (A-I) COMPRESSION (STRENGTH LIMIT), (A-II) COMPRESSION (EXTREME LIMIT), (B) TENSION, (B-I) TENSION (STRENGTH LIMIT), (B-II) TENSION (EXTREME LIMIT), (C) SETTLEMENT, (D) LATERAL LOADS (DYNAMIC), (E) LIQUEFACTION (LATERAL LOADING), (F) SCOUR.
- THE SPECIFIED TIP ELEVATION SHALL NOT BE RAISED ABOVE THE DESIGN TIP ELEVATIONS FOR TENSION, LATERAL, AND TOLERABLE SETTLEMENT.
- THE NOMINAL DRIVING RESISTANCE REQUIRED IS EQUAL TO THE NOMINAL RESISTANCE NEEDED TO SUPPORT THE FACTORED LOAD PLUS DRIVING RESISTANCE FROM THE UNSUITABLE PENETRATED SOIL LAYERS (VERY SOFT, LIQUEFIABLE, SCOURABLE, ETC.), IF ANY, WHICH DO NOT CONTRIBUTE TO THE DESIGN RESISTANCE.

LEGEND:

- XXXXX INDICATES BOTTOM FTG ELEV.
- INDICATES CISS CONCRETE PILE

BENCH MARK

PROCEDURES OF SURVEY:

- STATIC OBSERVATION OF POINT #1 WAS USED TO ESTABLISH THIS SURVEY. FINAL LOCATION OF POINT #1 WAS DERIVED FROM OPUS AND POST PROCESSED BASELINES.

BASIS OF COORDINATES:

- THE COORDINATES ARE REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 AND ARE EXPRESSED IN TERMS OF THE CALIFORNIA COORDINATE SYSTEM 1983, ZONE 3, AT EPOCH 2002, AND ARE BASED ON CORS POINT CMOD PER NGS PID DE6246, AND CORS POINT MHCB PER NGS PID AF9702. SAID GRID COORDINATES ARE AS FOLLOWS:

CMOD = N - 2056373.10 E - 6416907.74
 MHCB = N - 1948852.80 E - 6229522.76
 #1 = N - 1979271.54 E - 6412109.59

BASIS OF BEARINGS:

- BEARINGS ARE REFERENCED TO GRID NORTH AS DEFINED BY THE CALIFORNIA COORDINATE SYSTEM 1983, ZONE 3 AND ARE BASED ON THE OBSERVED LINE FROM CMOD TO MHCB SAID BEARING = S 60°09'11" W.

BASIS OF ELEVATION:

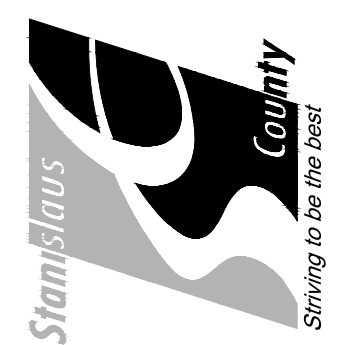
- ELEVATIONS ARE REFERENCED TO NAVD88, UTILIZING GEOID09 AND DETERMINED BY OPUS.
 ELEVATION AT #1 = 62.42 (NAVD88)

NOTE:
 CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIALS OR ASSEMBLIES.



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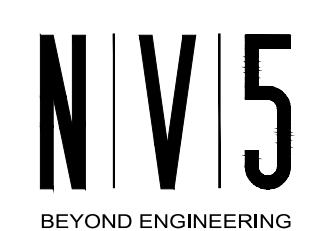
STANISLAUS COUNTY
 DEPARTMENT OF PUBLIC WORKS
 ENGINEERING AND OPERATIONS DIVISION
 1716 MORGAN ROAD - MODESTO, CA 95358



CROWS LANDING BRIDGE IMPROVEMENTS
 FOUNDATION PLAN

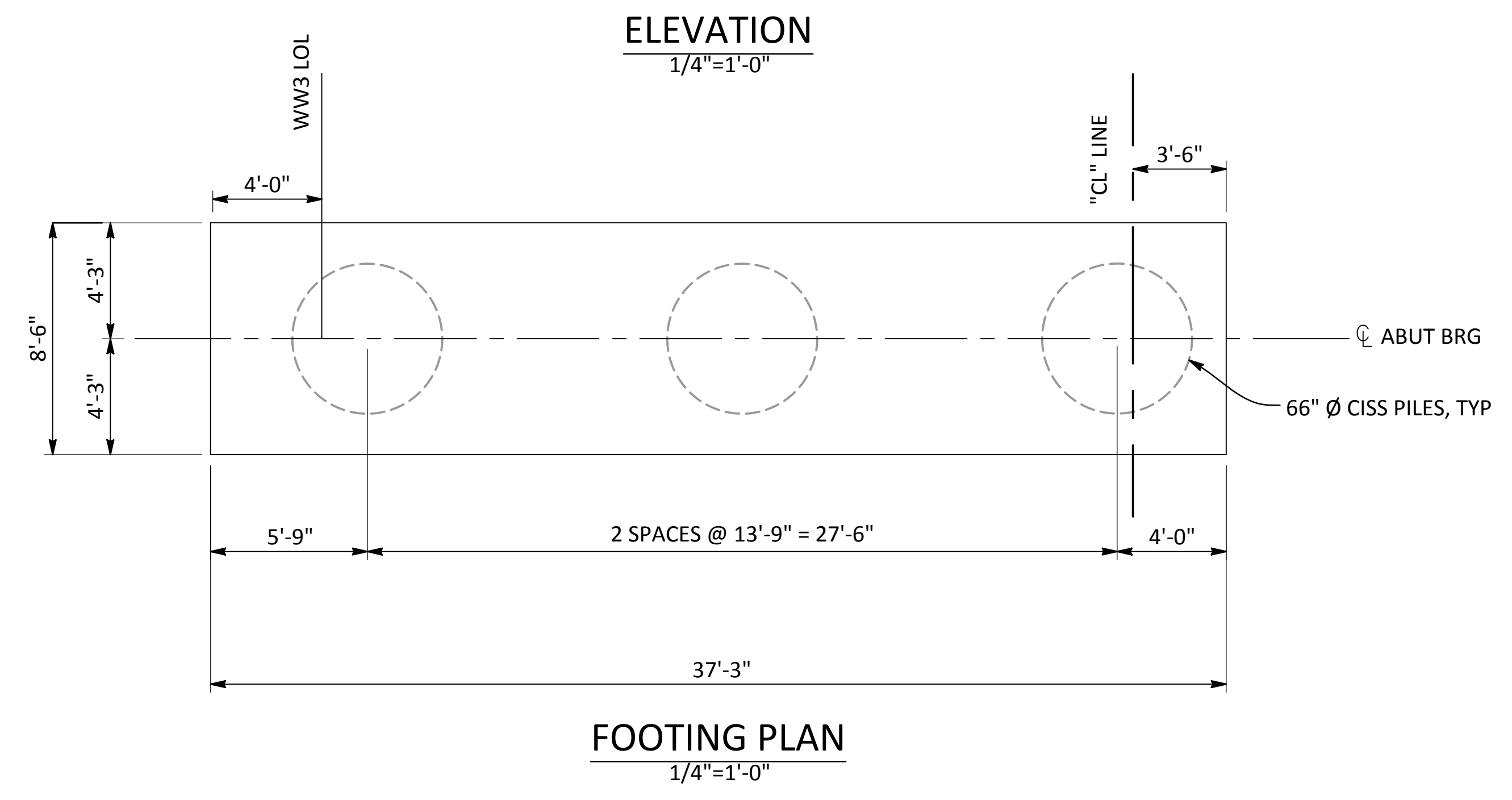
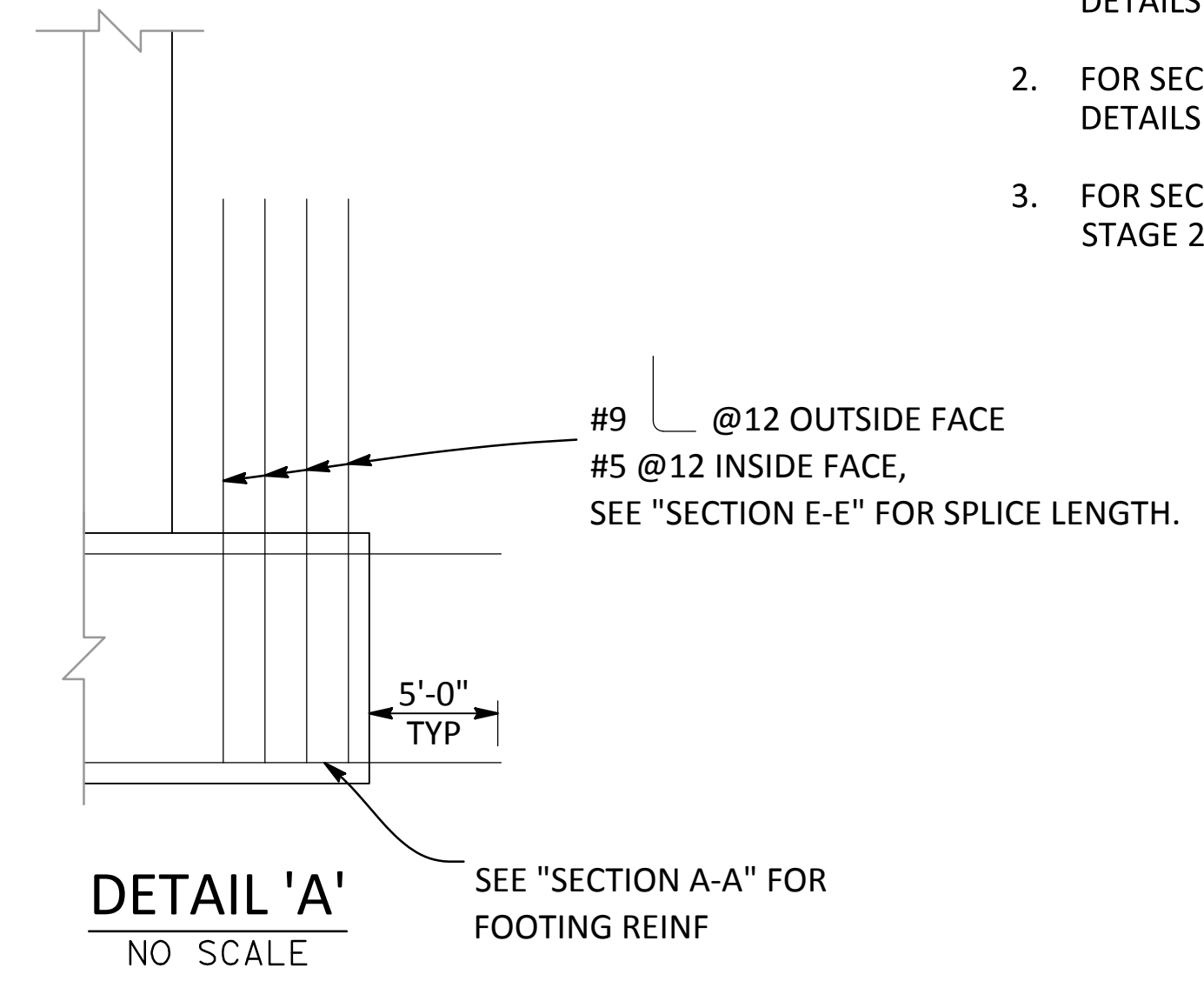
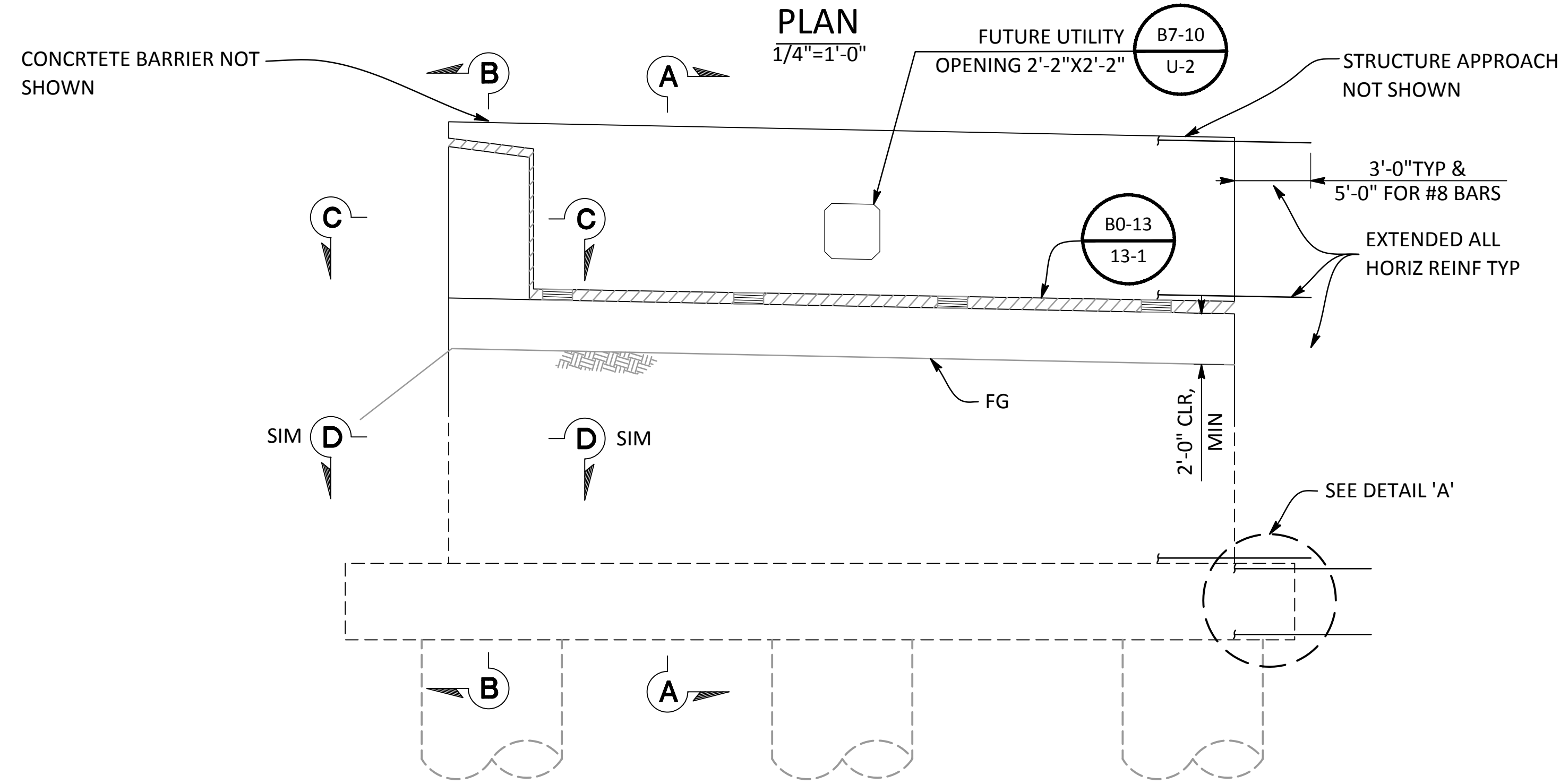
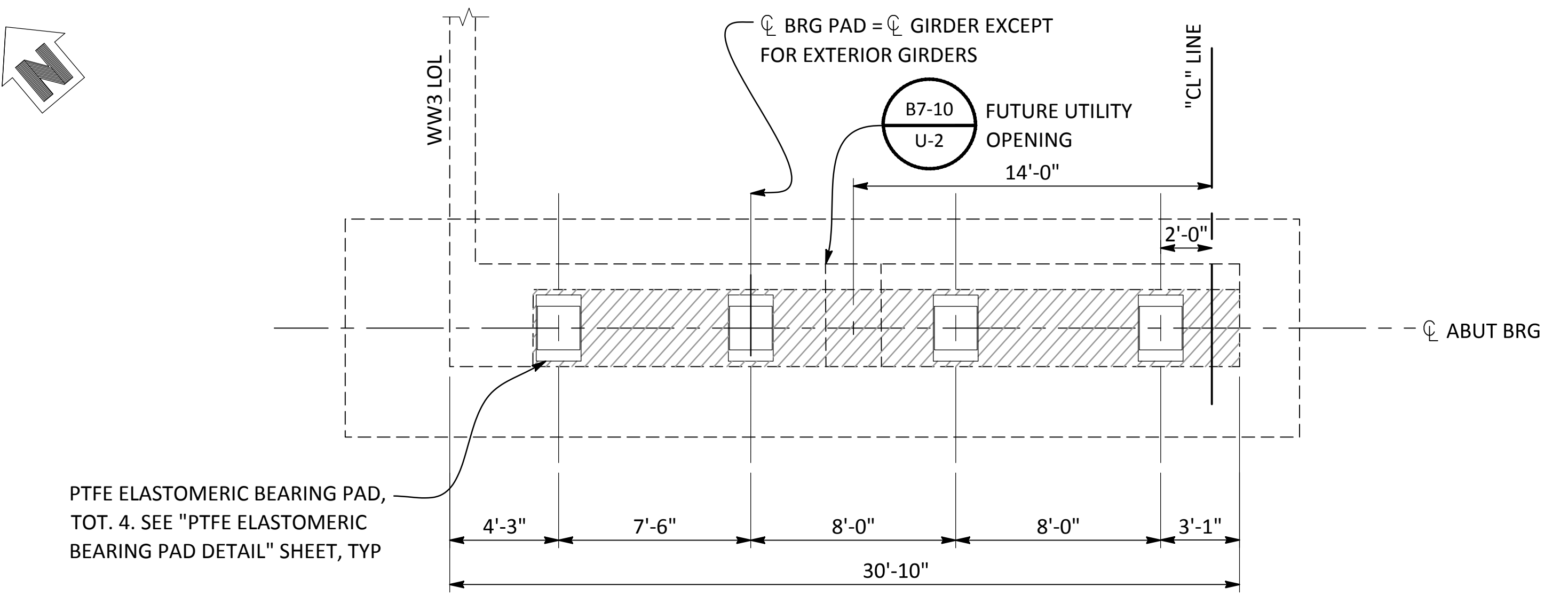
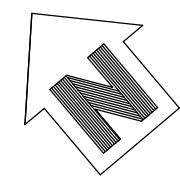
JOB NO. 226217-68
 DATE 6/24/20
 DR BY AG
 CK BY DS
 SCALE AS SHOWN

SHEET NUMBER
S-4
 45 OF 70 SHEETS



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- NOTES:**
1. FOR SECTIONS 'A-A' AND 'B-B', SEE "ABUTMENT DETAILS NO. 1" SHEET.
 2. FOR SECTIONS 'C-C' AND 'D-D', SEE "ABUTMENT DETAILS NO. 2" SHEET.
 3. FOR SECTION 'E-E', SEE "ABUTMENT LAYOUT - STAGE 2" SHEET.

NOTE:
ABUTMENT 6 SHOWN, ABUTMENT 1 SIMILAR

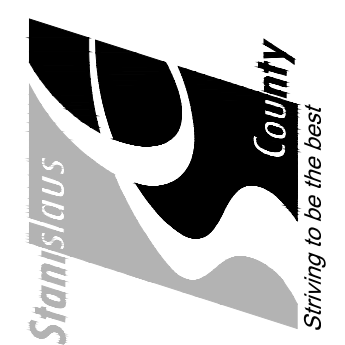
NOTE:
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PREPARED UNDER THE DIRECTION OF:

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ENGINEERING AND OPERATIONS DIVISION
1716 MORGAN ROAD - MODESTO, CA 95358



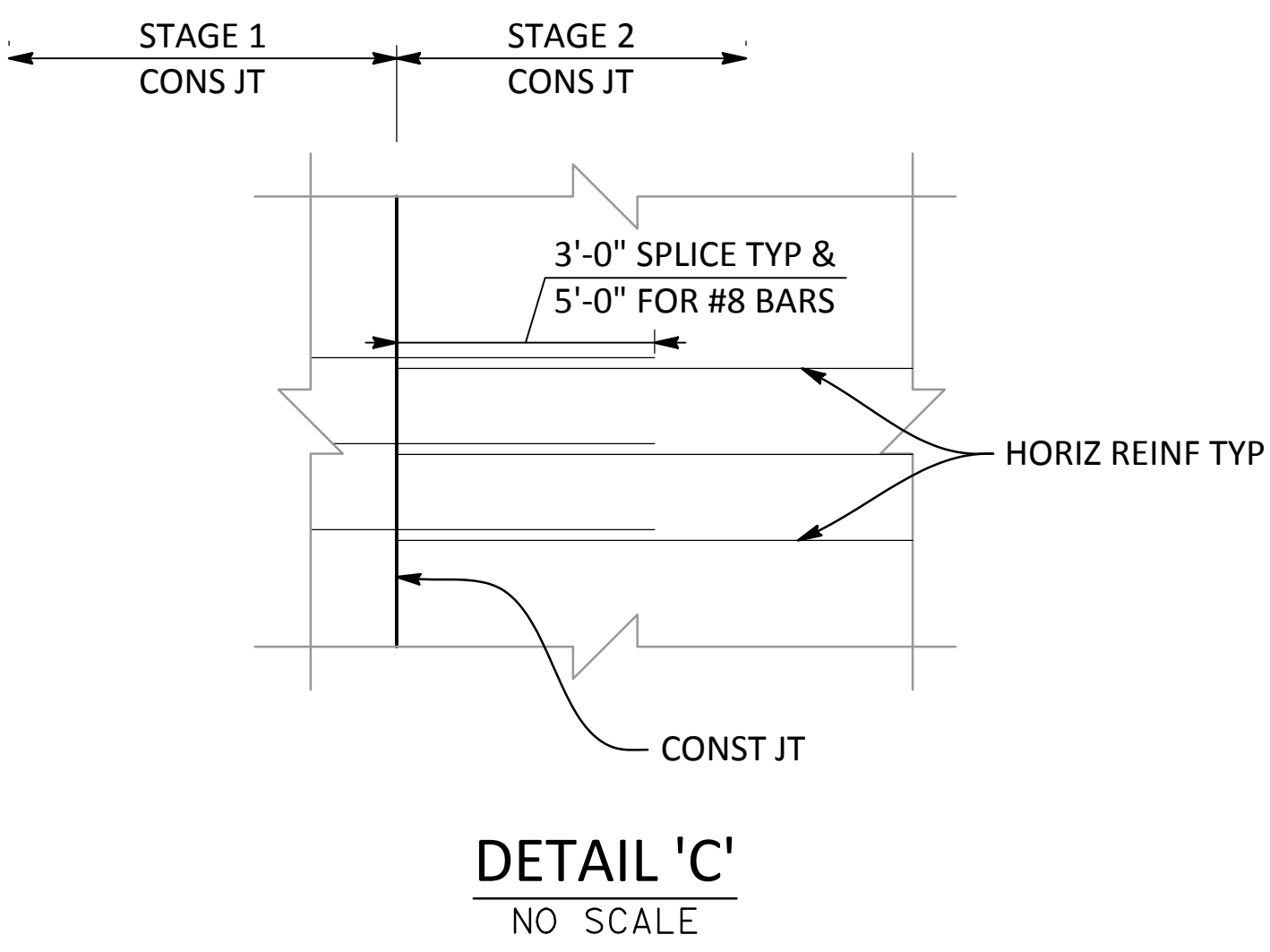
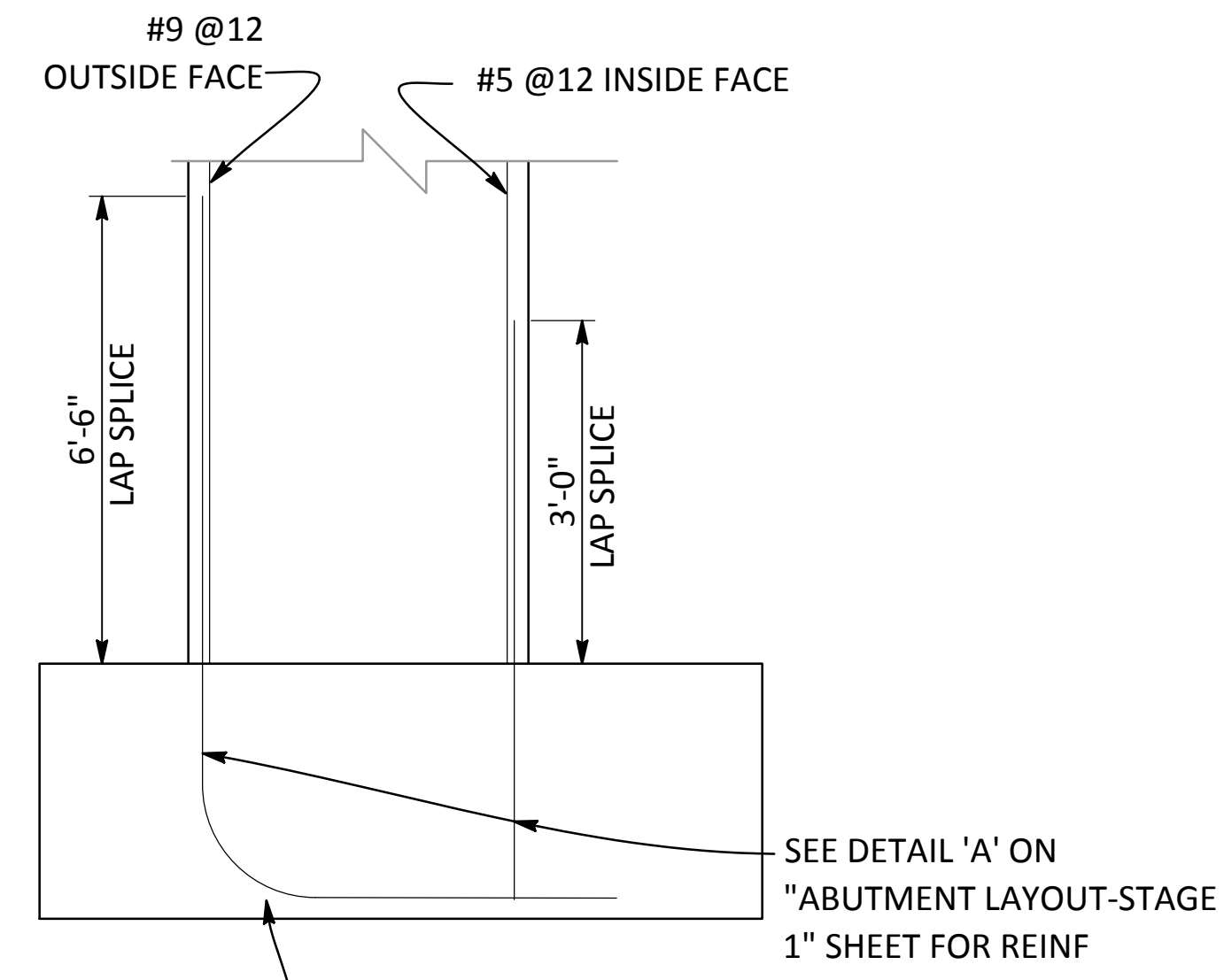
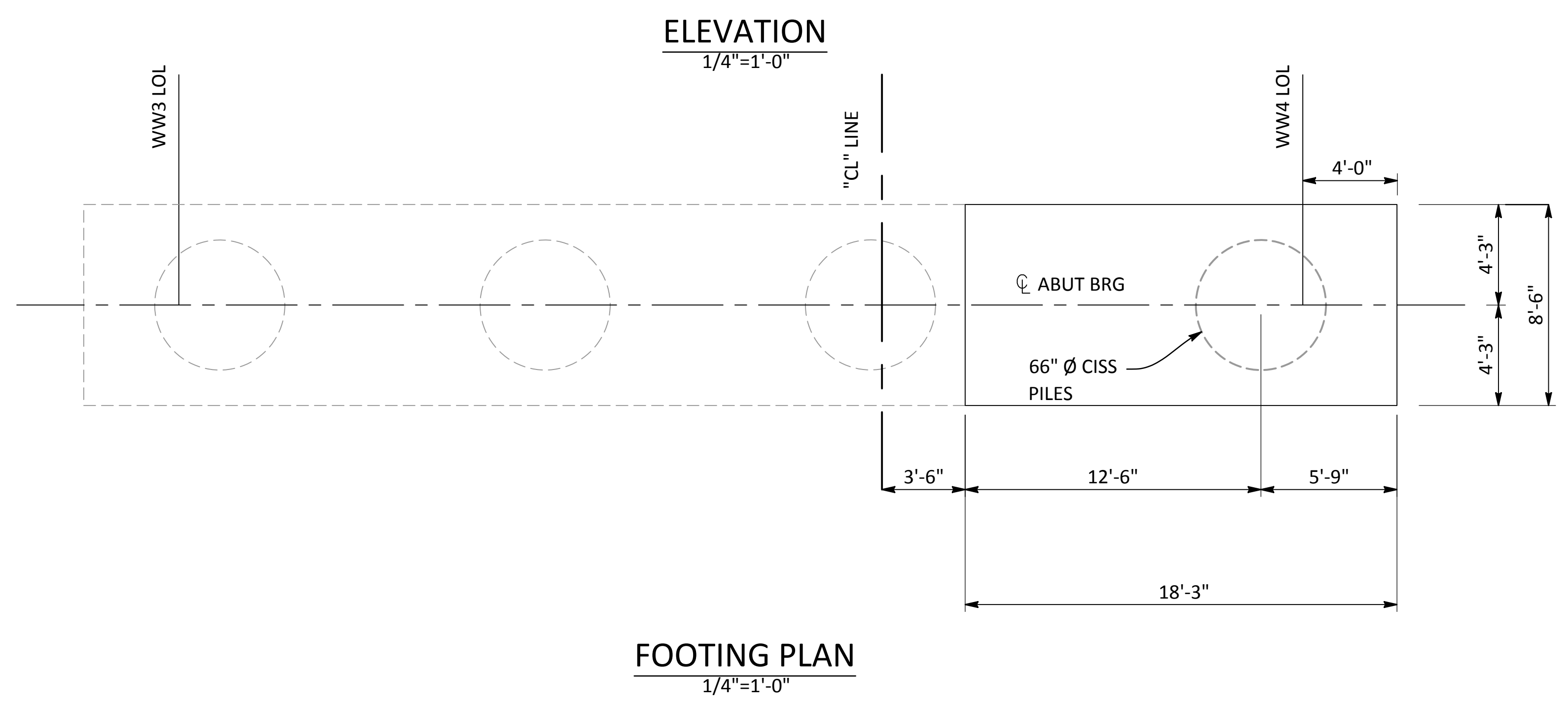
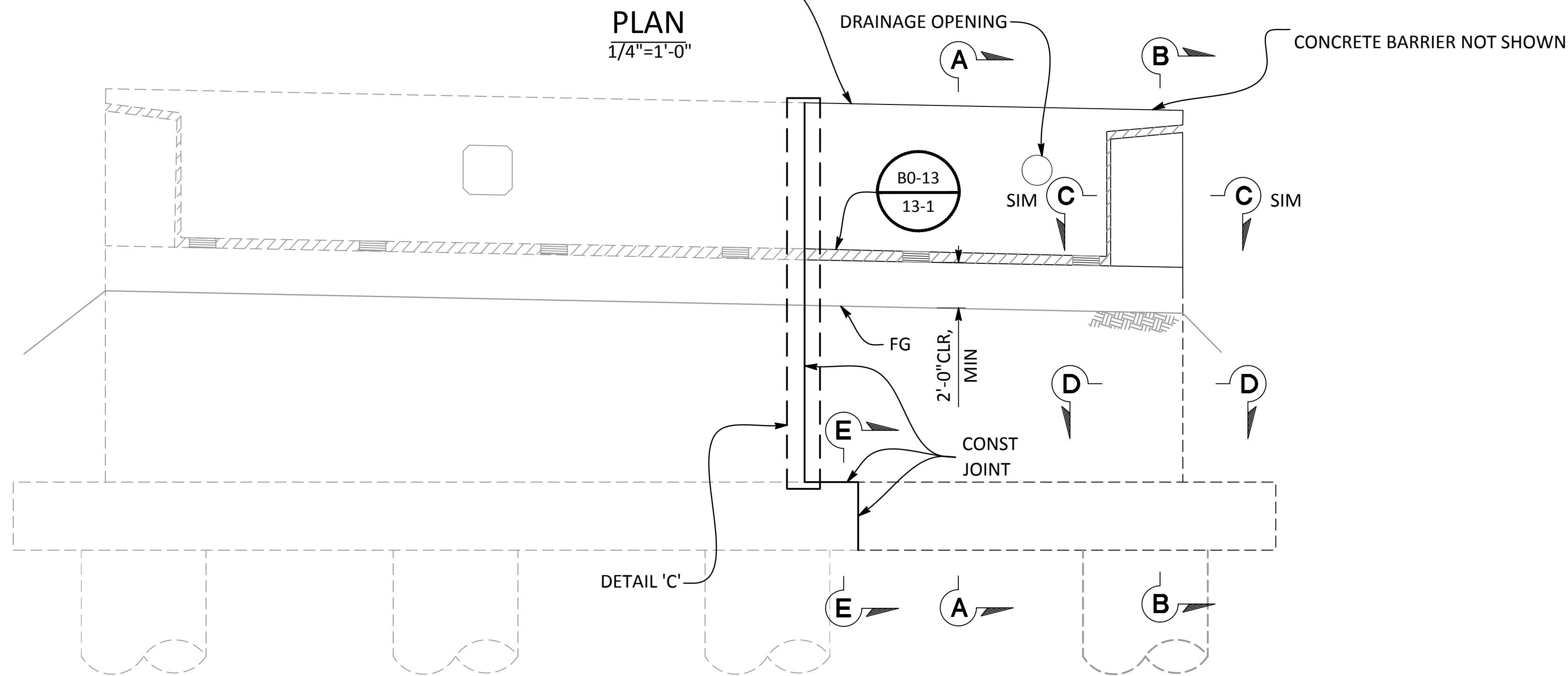
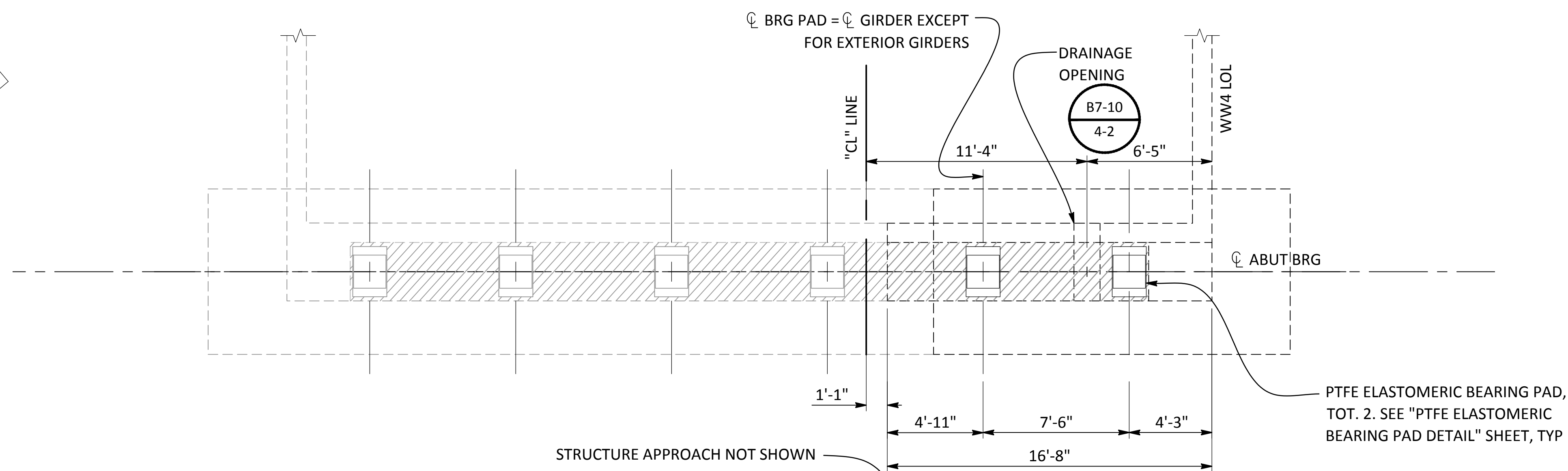
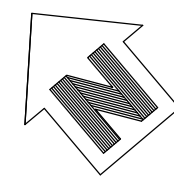
CROWS LANDING BRIDGE IMPROVEMENTS
ABUTMENT LAYOUT - STAGE 1

JOB NO. 226217-68
DATE: 6/24/20
DR BY: AG
CK BY: DS
SCALE: AS SHOWN

SHEET NUMBER
S-5
46 OF 70 SHEETS

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- NOTES:**
1. FOR SECTIONS 'A-A' AND 'B-B', SEE "ABUTMENT DETAILS NO. 1" SHEET.
 2. FOR SECTIONS 'C-C' AND 'D-D', SEE "ABUTMENT DETAILS NO. 2" SHEET.

NOTE:
ABUTMENT 6 SHOWN, ABUTMENT 1 SIMILAR

NOTE:
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NO	REVISIONS	DATE	APPROVED
	DESCRIPTIONS		

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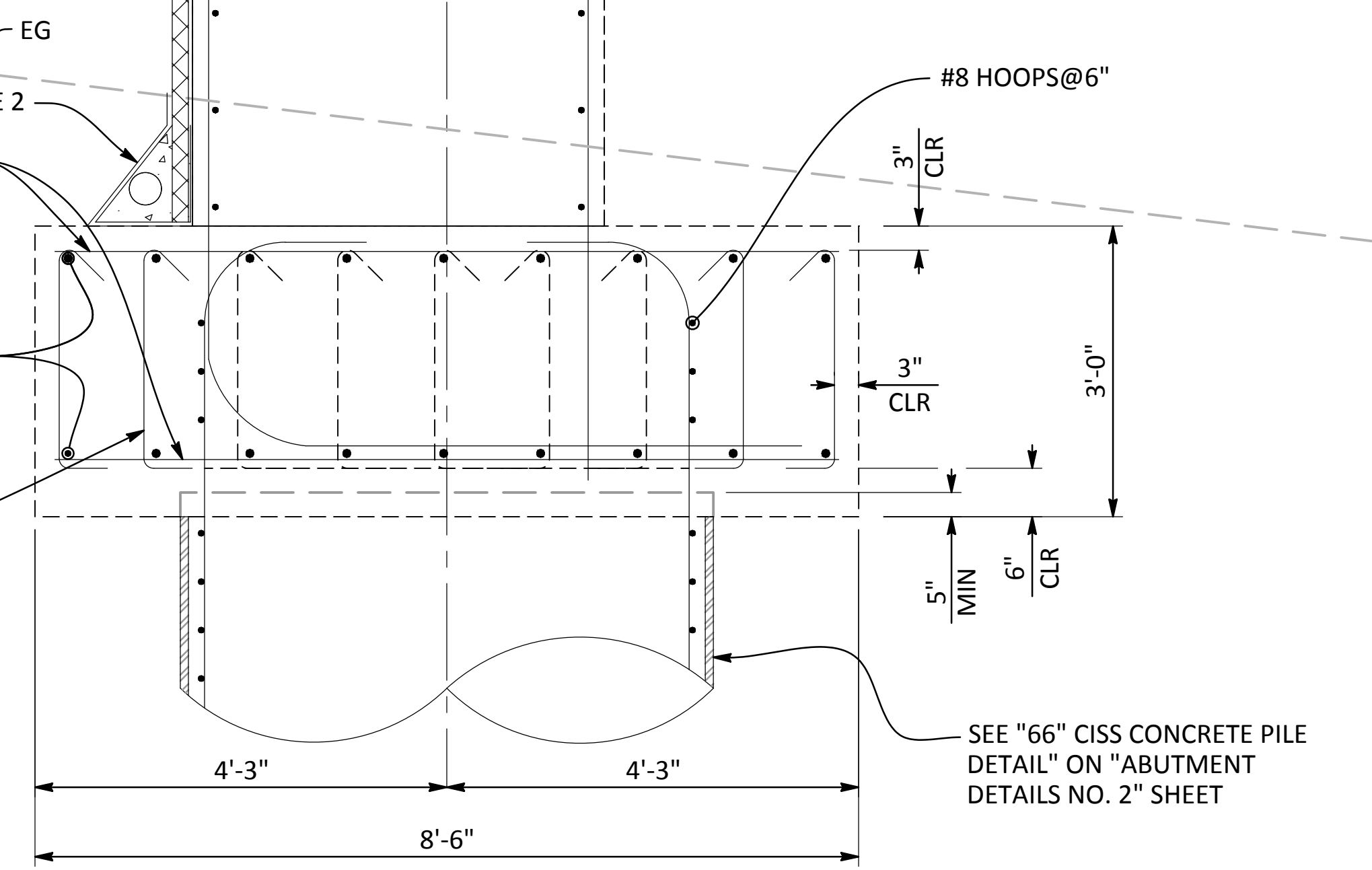
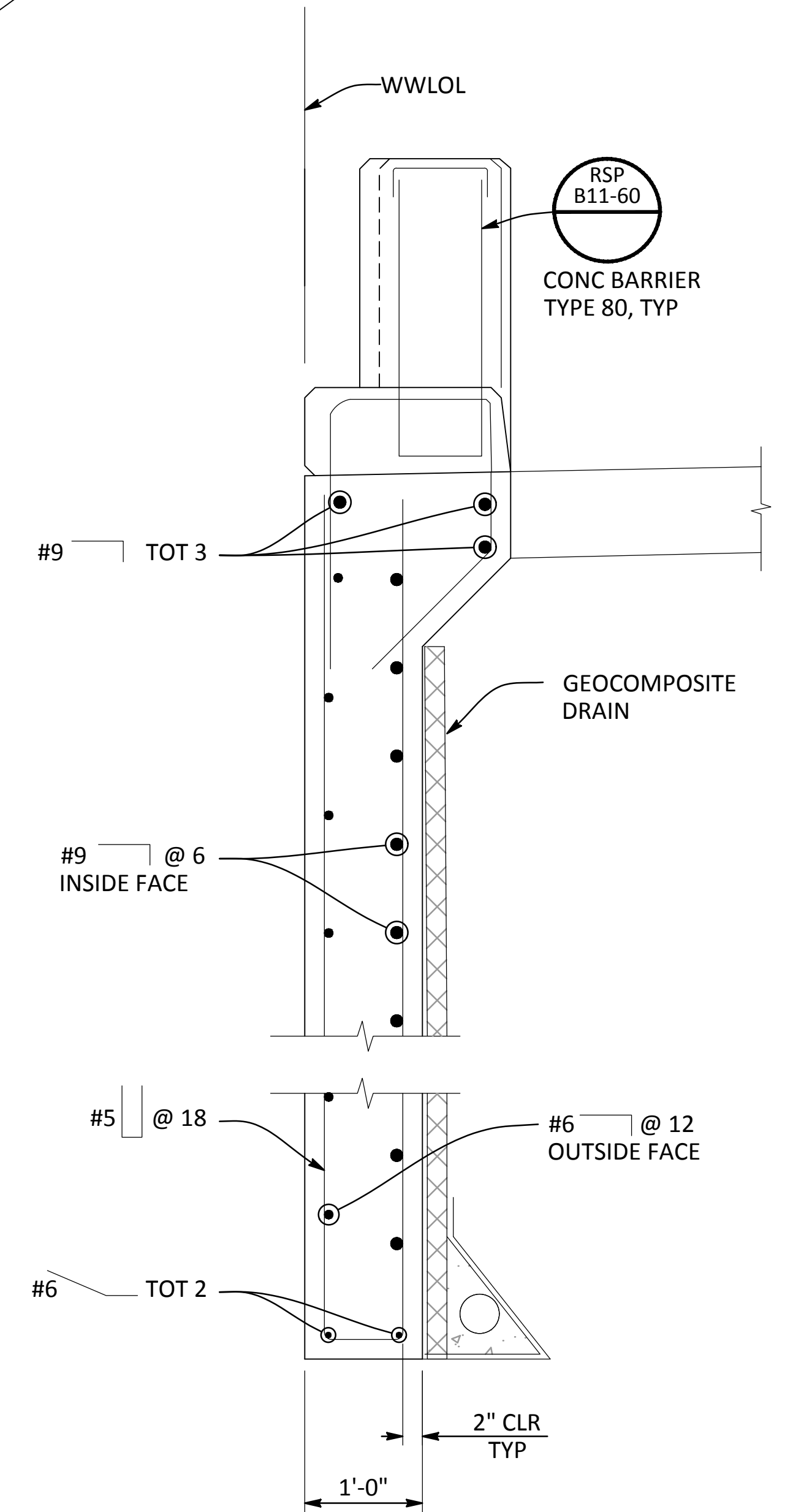
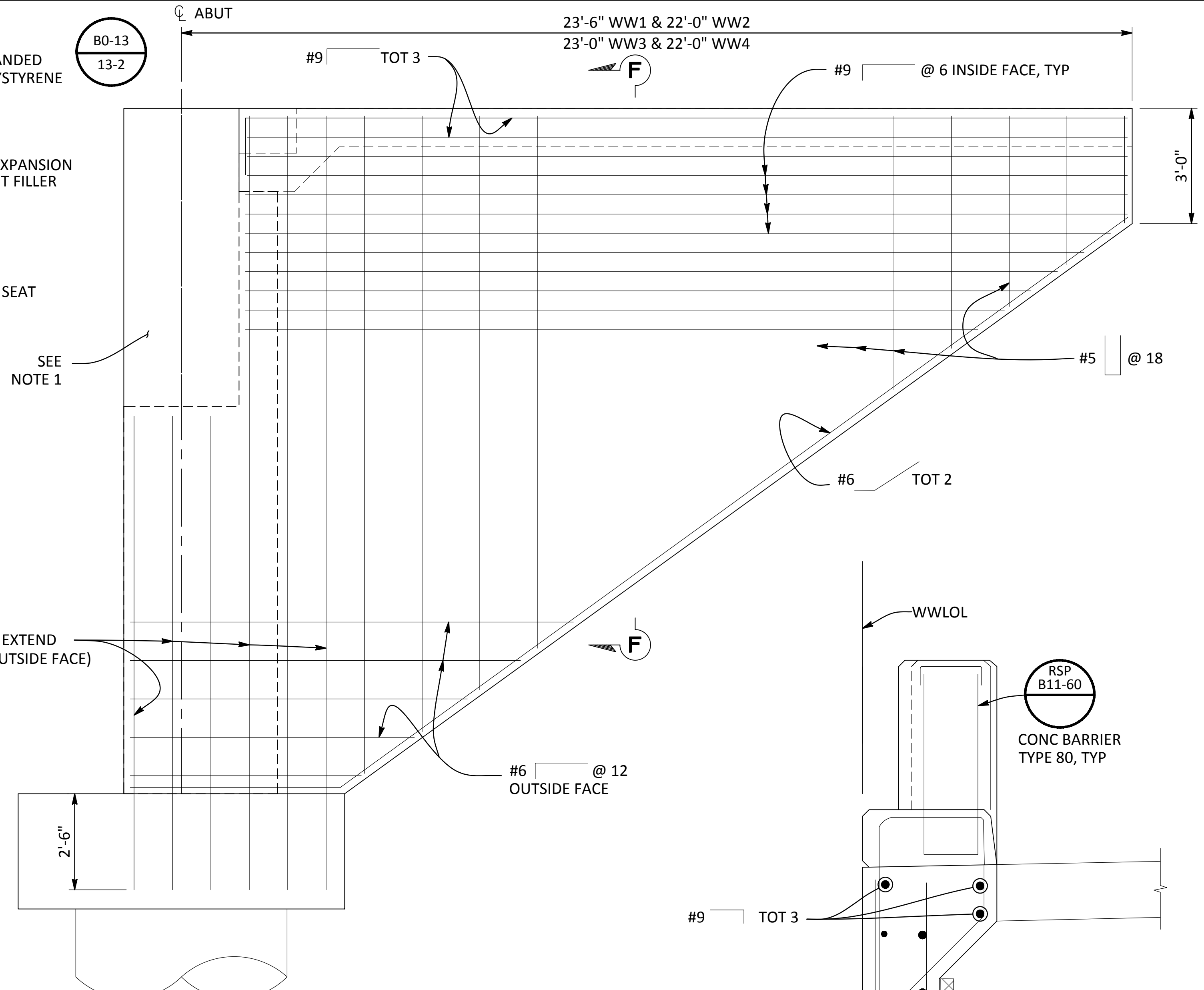
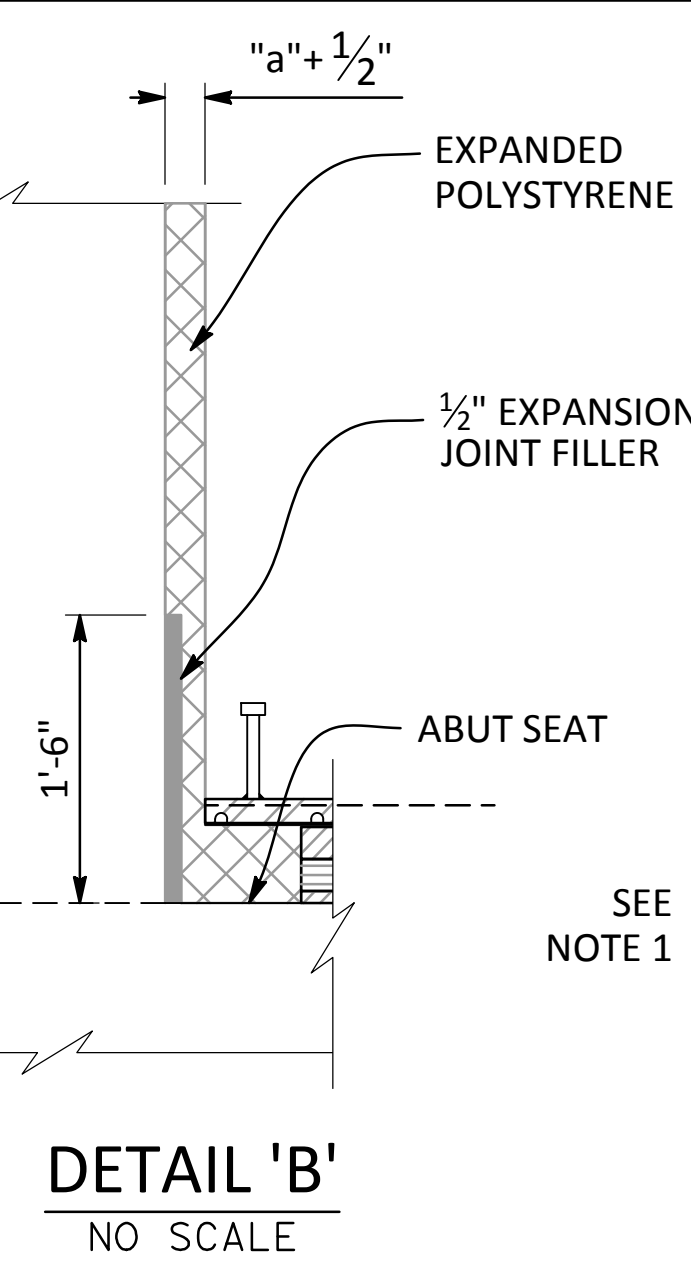
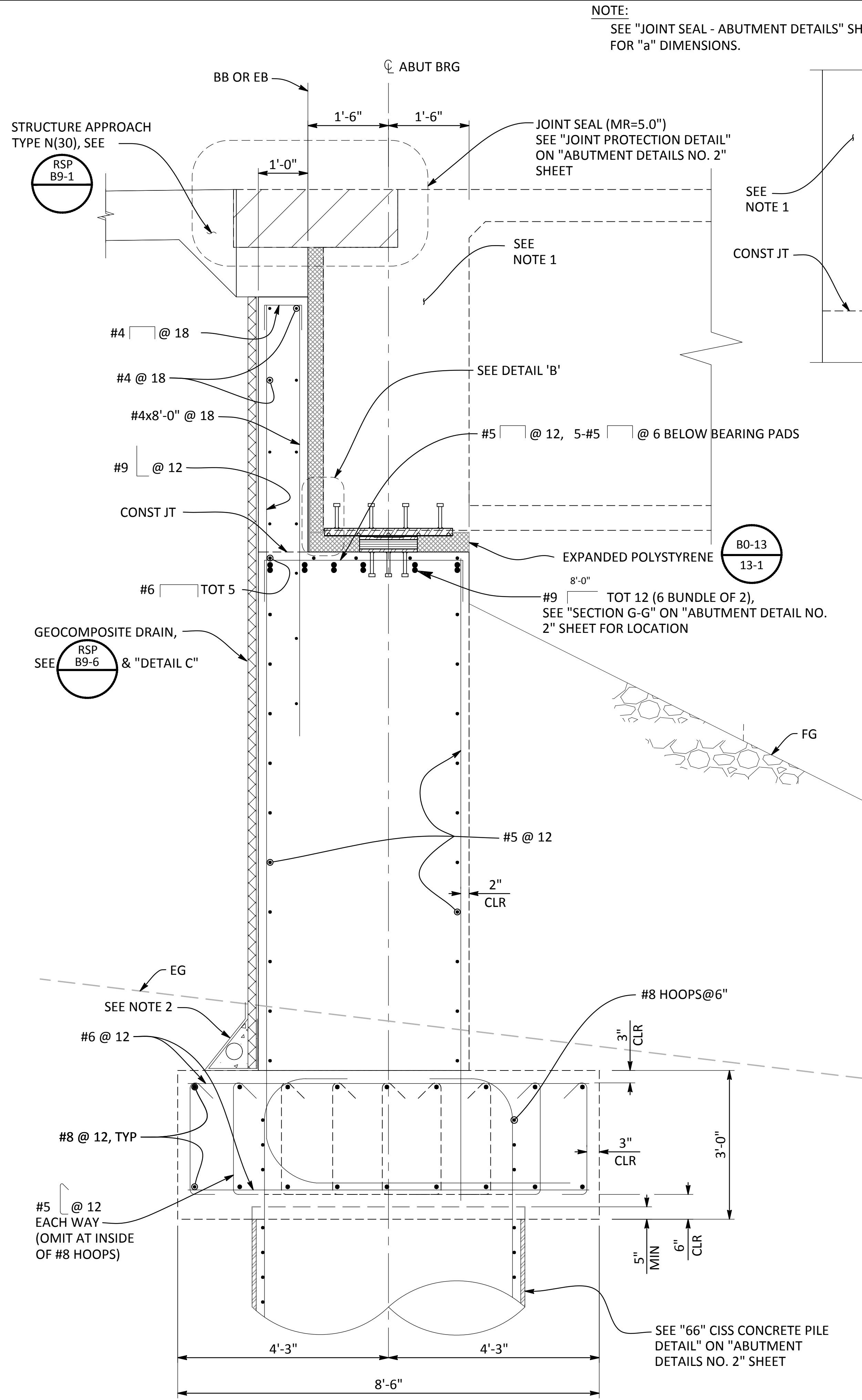
CROWS LANDING BRIDGE IMPROVEMENTS
ABUTMENT LAYOUT - STAGE 2

JOB NO. 226217-68
DATE: 6/24/20
DR BY: AG
CK BY: DS
SCALE: AS SHOWN

SHEET NUMBER
S-6
47 OF 70 SHEETS

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NOTE:
SEE "JOINT SEAL - ABUTMENT DETAILS" SHEET
FOR "a" DIMENSIONS.

DETAIL 'B'
NO SCALE

SECTION B-B
WINGWALL
1/2"=1'-0"

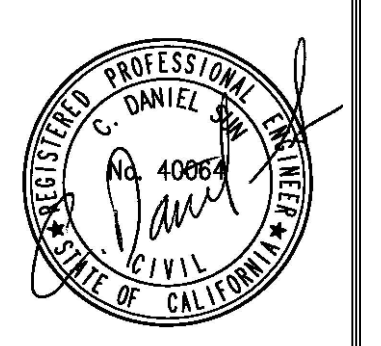
SECTION F-F
1"=1'-0"

NOTES:

- SEE "SHEAR KEY DETAIL" ON "ABUTMENT DETAILS NO. 2" SHEET FOR REINFORCING DETAILS.
- SEE "FOUNDATION PLAN" FOR DRAINAGE OUTLETS"

NOTE:
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SECTION A-A
3/4"=1'-0"



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ENGINEERING AND OPERATIONS DIVISION
1716 MORGAN ROAD - MODESTO, CA 95358



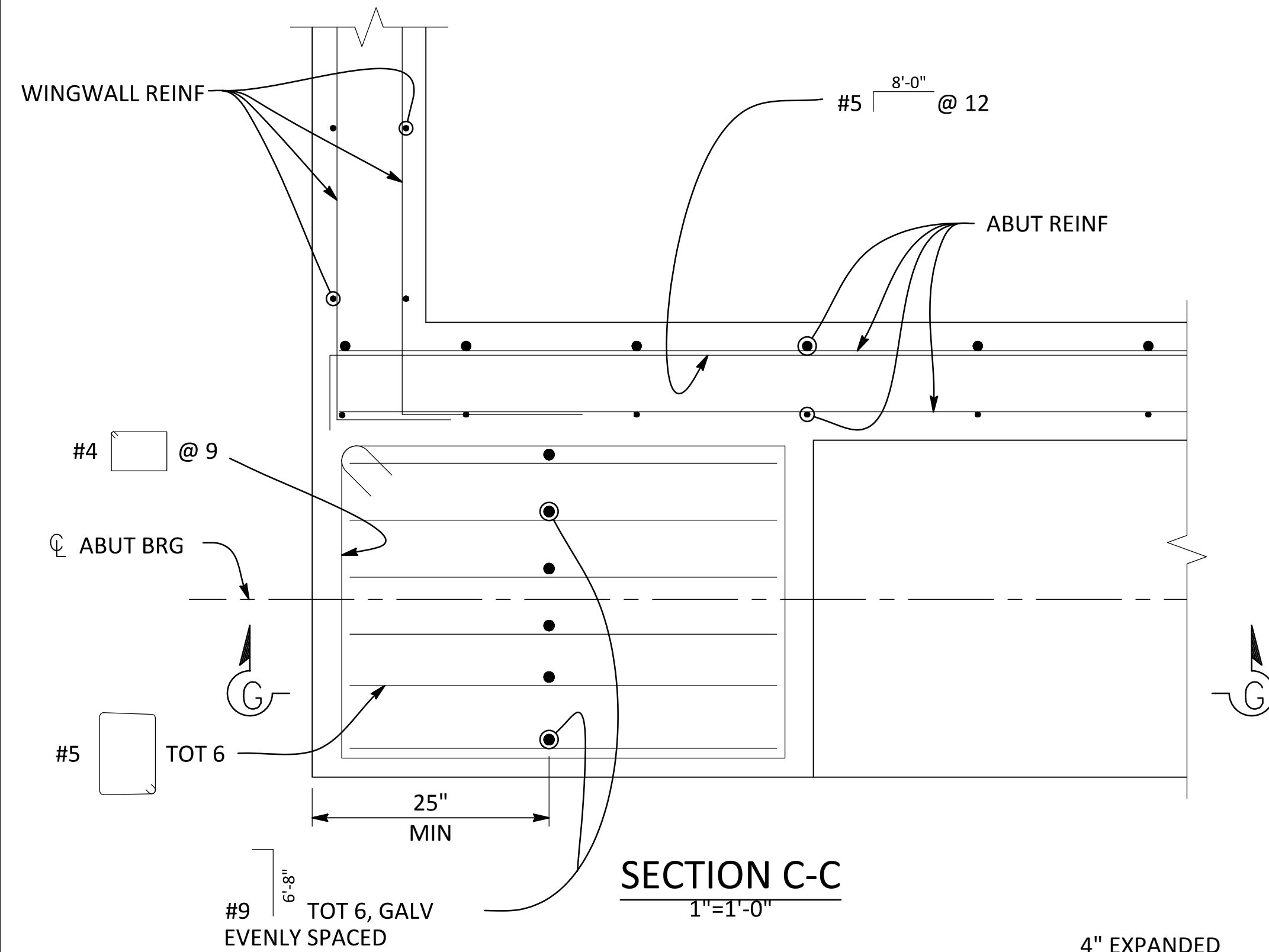
CROWS LANDING BRIDGE IMPROVEMENTS
ABUTMENT DETAILS NO. 1

JOB NO. 226217-68
DATE 6/24/20
DR BY AG
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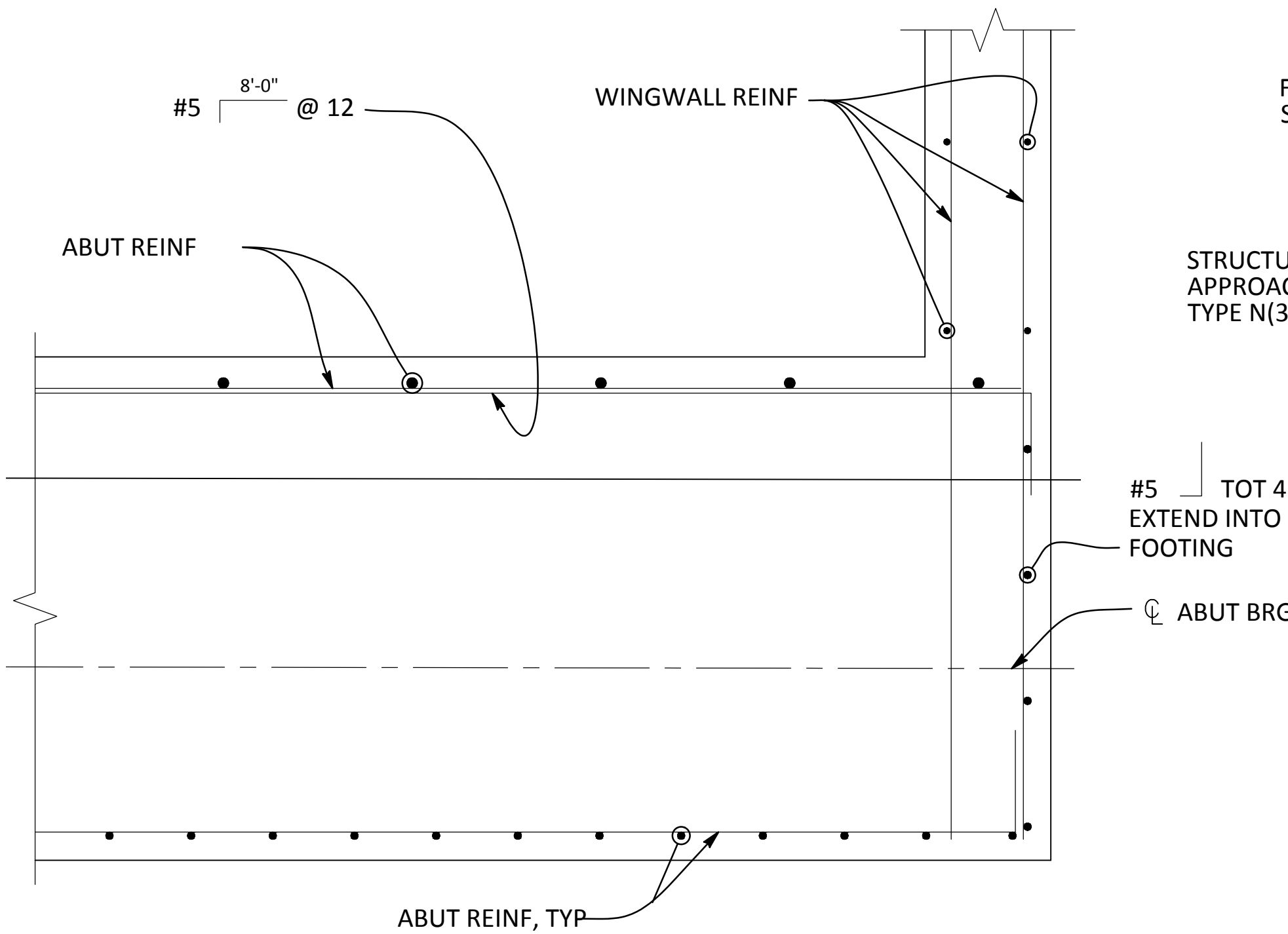
SHEET NUMBER
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48 OF 70 SHEETS

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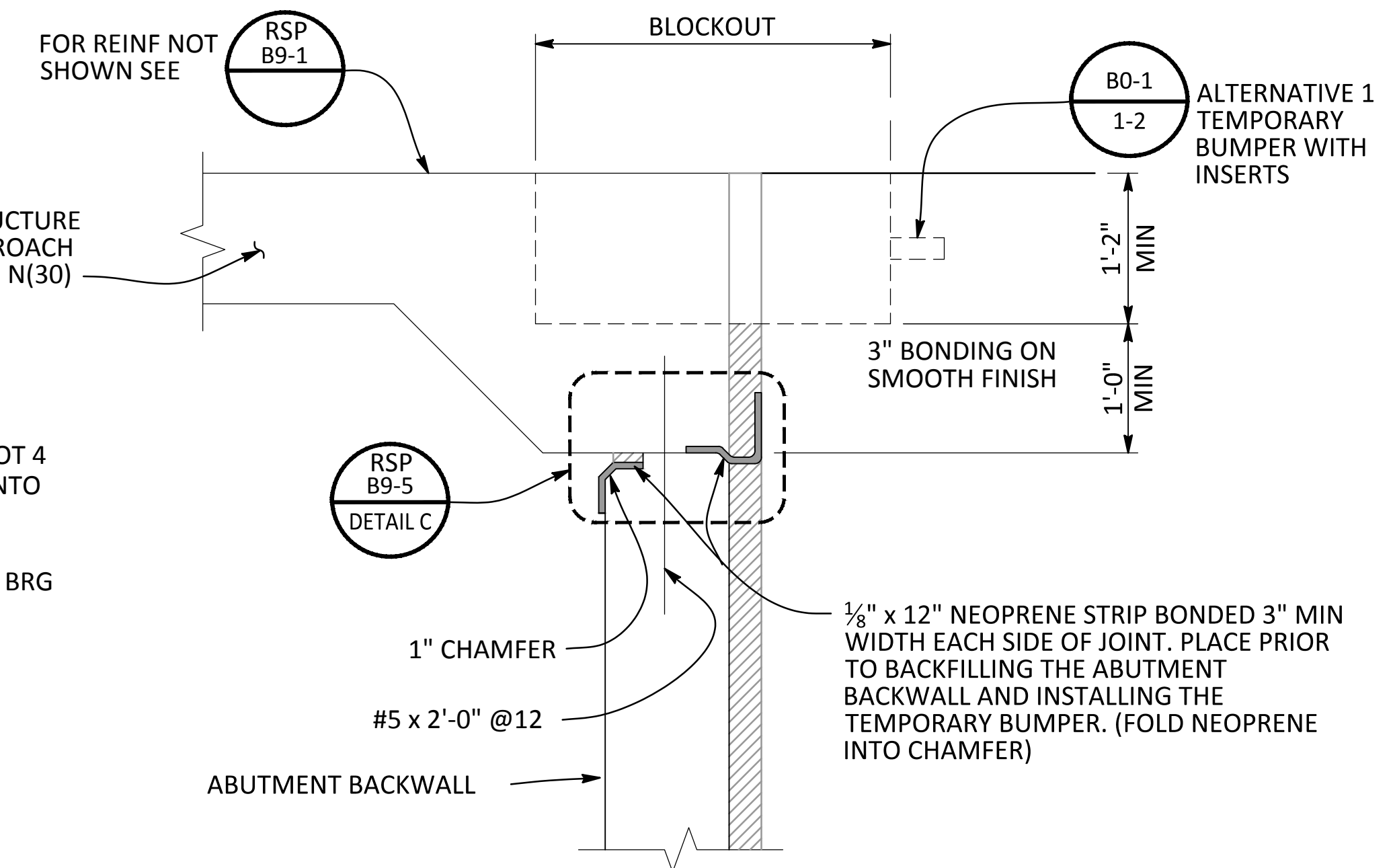




SECTION C-C
1"=1'-0"

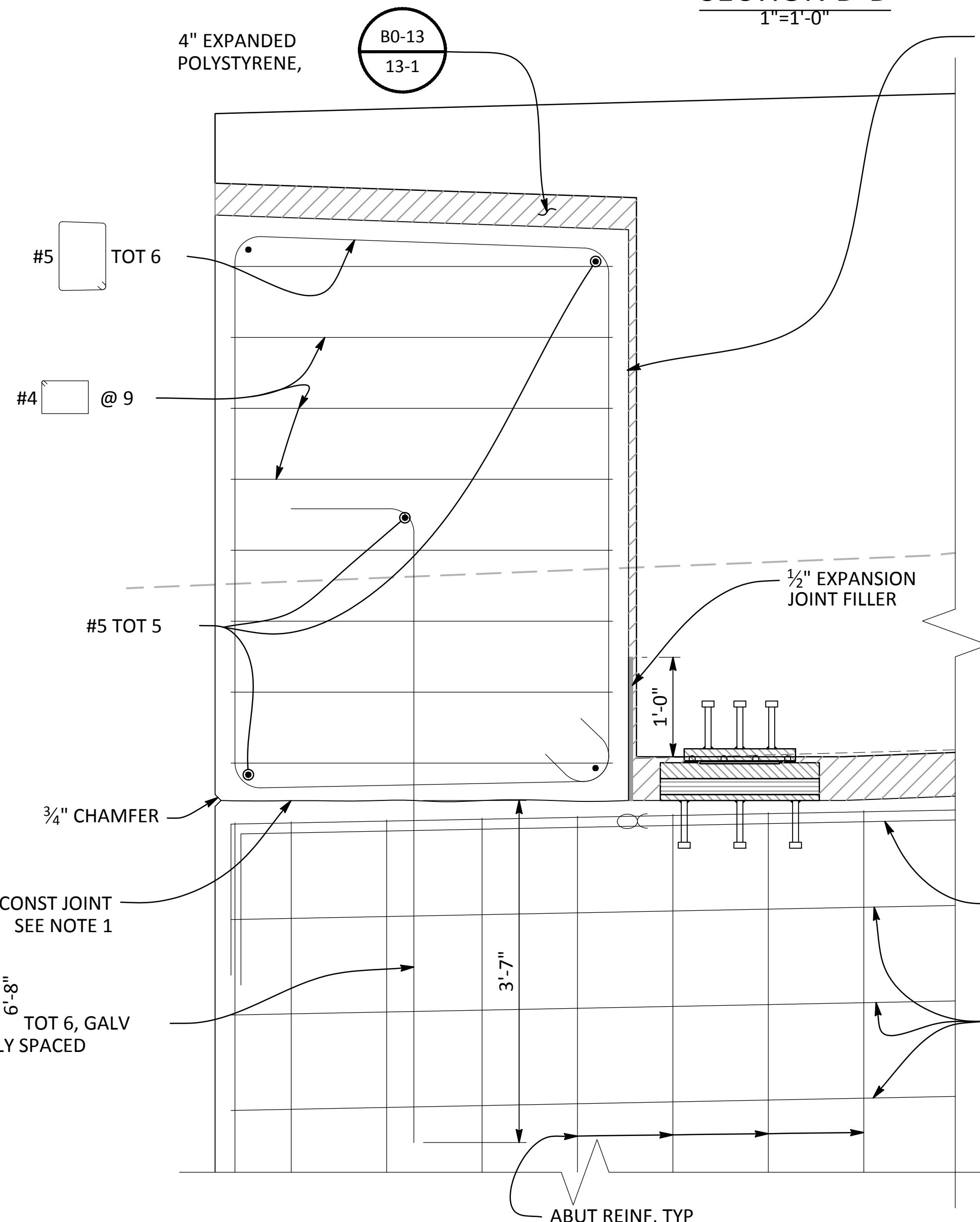


SECTION D-D
1"=1'-0"

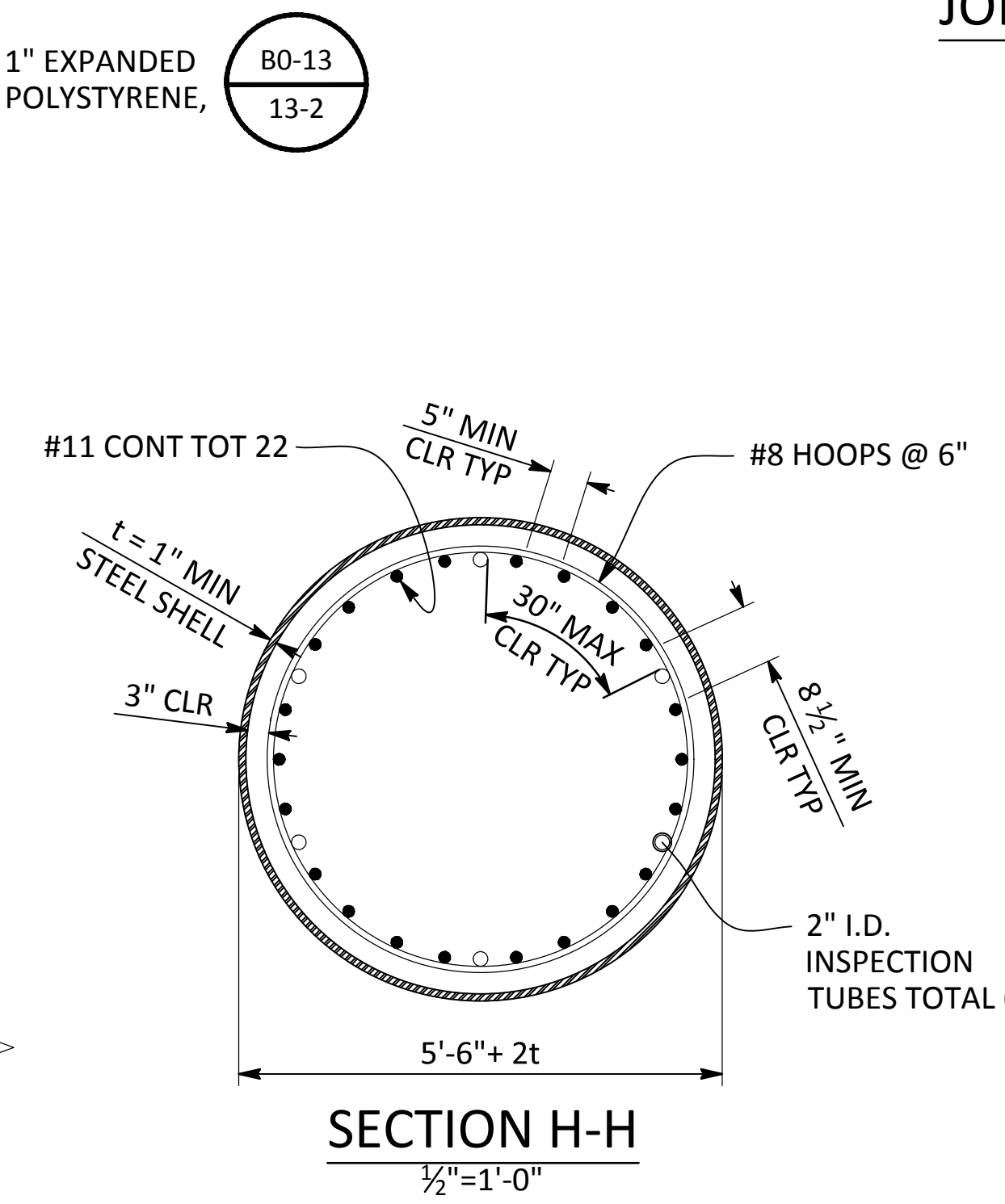


JOINT PROTECTION DETAIL
NO SCALE

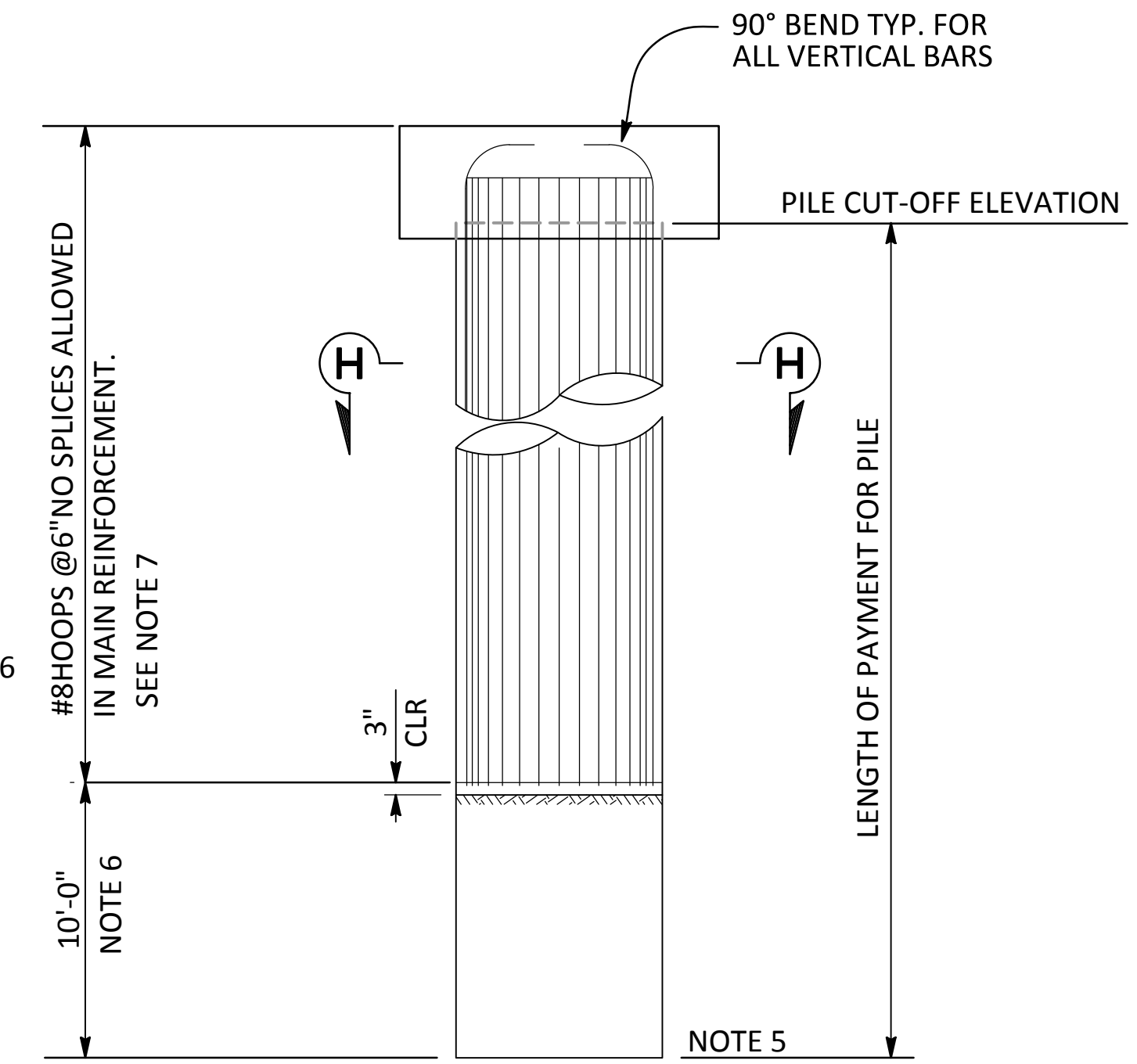
- NOTES:**
- MANDATORY CONSTRUCTION JOINT SHALL BE SMOOTH FINISHED AND LINED WITH 15 POUND CONSTRUCTION PAPER, BETWEEN STEM WALL AND BACKWALL.
 - TERMINATE TYPICAL ABUTMENT FRONT FACE REINFORCEMENT AT BASE OF SHEAR KEYS.
 - SHEAR KEY SHALL BE POURED SEPARATE FROM ABUTMENT SEAT AND BACKWALL.
 - MAIN VERTICAL SHEAR KEY REINF SHALL BE CENTERED TRANSVERSELY IN SHEAR KEY AND SHALL BE GALVANIZED.
 - FOR SPECIFIED TIP AND PILE CUTOFF ELEVATION, SEE "FOUNDATION PLAN" SHEET.
 - LIMITS OF UNDISTURBED SOIL PLUG TO BE MAINTAINED WITH STEEL SHEEL.
 - ALL HOOPS ARE "ULTIMATE" BUTT SPLICED CONTINUOUS.



SECTION G-G
SHEAR EXTERNAL KEY DETAIL
1"=1'-0"



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



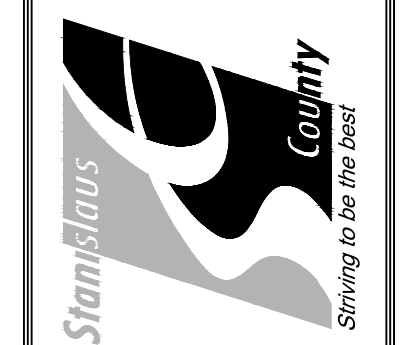
66" CAST IN STEEL SHEEL (CISS) CONCRETE PILE DETAIL
1/4"=1'-0"

NOTE:
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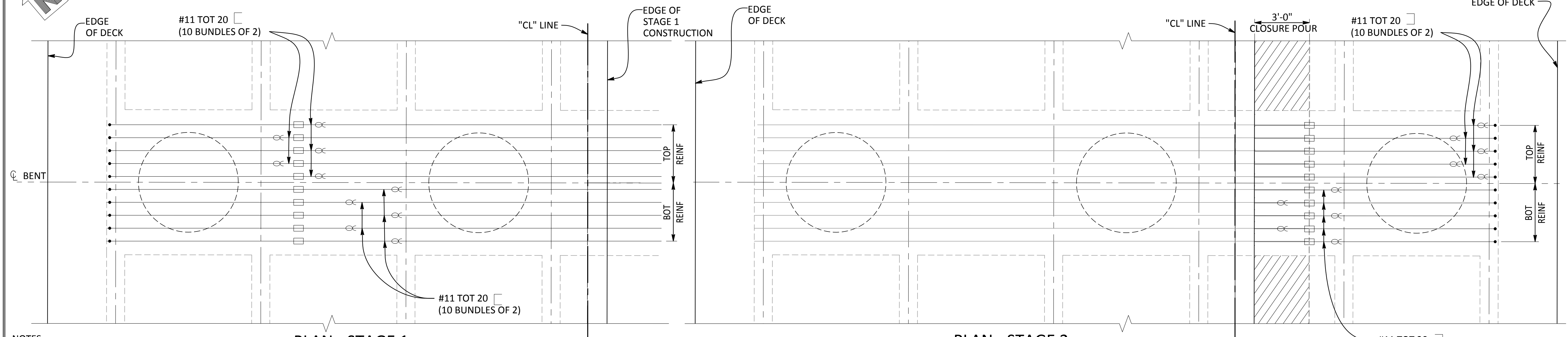
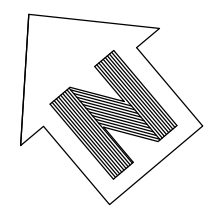
CROWS LANDING BRIDGE IMPROVEMENTS
ABUTMENT DETAILS NO. 2

JOB NO. 226217-68
DATE: 6/24/20
DR BY: AG
CK BY: DS
SCALE: AS SHOWN

SHEET NUMBER
S-8
49 OF 70 SHEETS

N|V|5
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PLAN - STAGE 1
3/8"=1'-0"

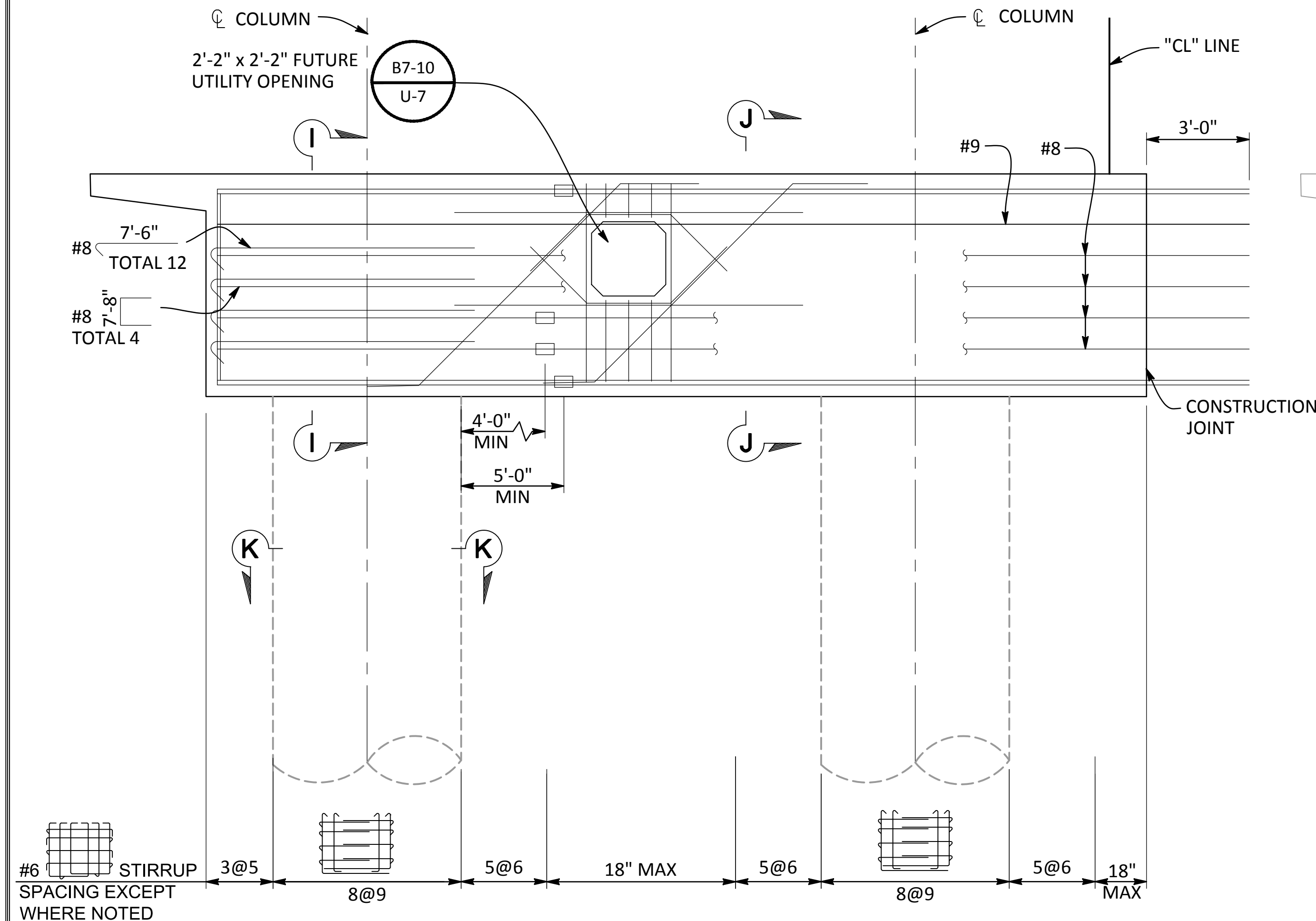
PLAN - STAGE 2
3/8"=1'-0"

NOTES:

- FOR DETAILS NOT SHOWN, SEE "BENT DETAILS NO. 2" SHEET.
- COLUMN HOOPS SHALL UTILIZE ULTIMATE BUTT SPLICES.
- NO SPLICES ARE ALLOWED IN MAIN COLUMN VERTICAL REINFORCEMENT.
- MECHANICAL COUPLERS MAY BE STAGGERED FOR EASIER INSTALLATION.
- FOR SECTION "I-I", "J-J" AND "K-K", SEE "BENT DETAIL NO. 2" SHEET.

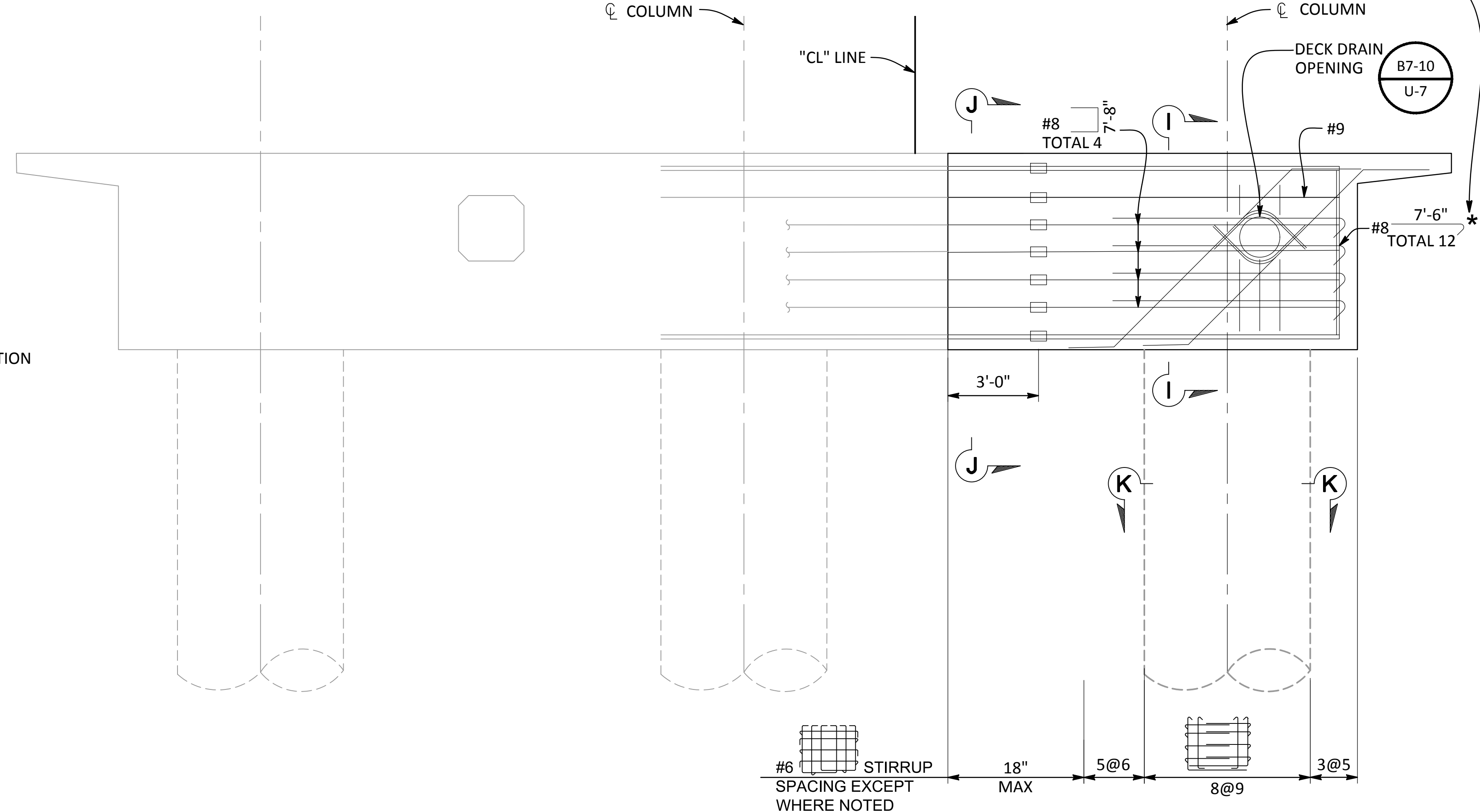
LEGEND

- DENOTES BUNDLED BARS
- DENOTES MECHANICAL COUPLER



ELEVATION - STAGE 1
3/8"=1'-0"

NOTE: PLANS & ELEVATIONS SHOWN ARE TYPICAL FOR ALL BENTS

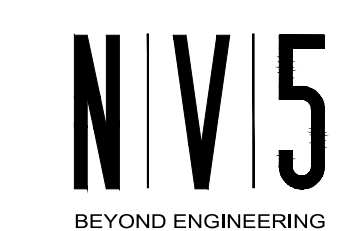


ELEVATION - STAGE 2
3/8"=1'-0"

NOTE:
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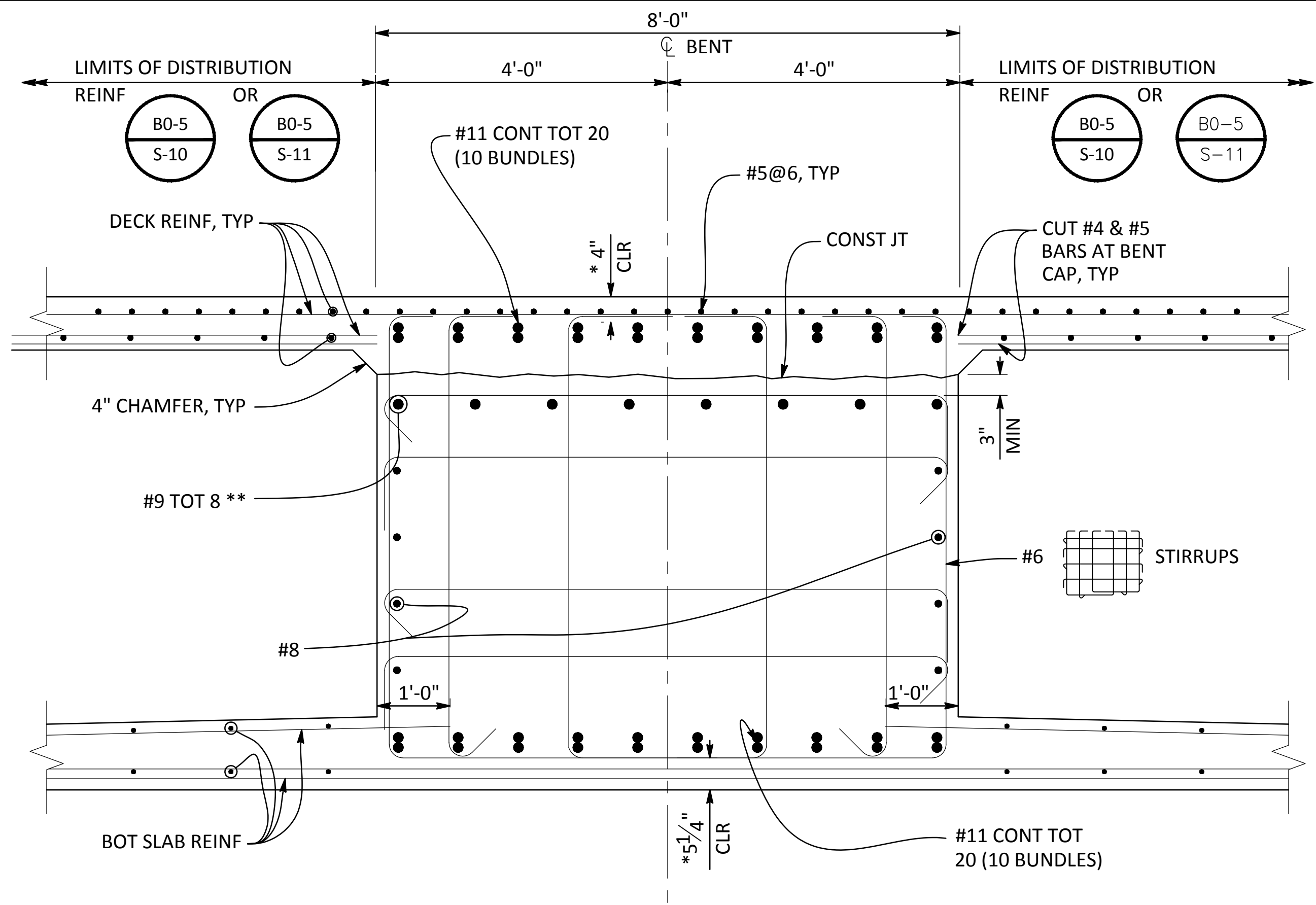
STANISLAUS COUNTY
DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND OPERATIONS DIVISION
1716 MORGAN ROAD - MODESTO, CA 95358



CROWS LANDING BRIDGE IMPROVEMENTS
BENT DETAILS NO. 1

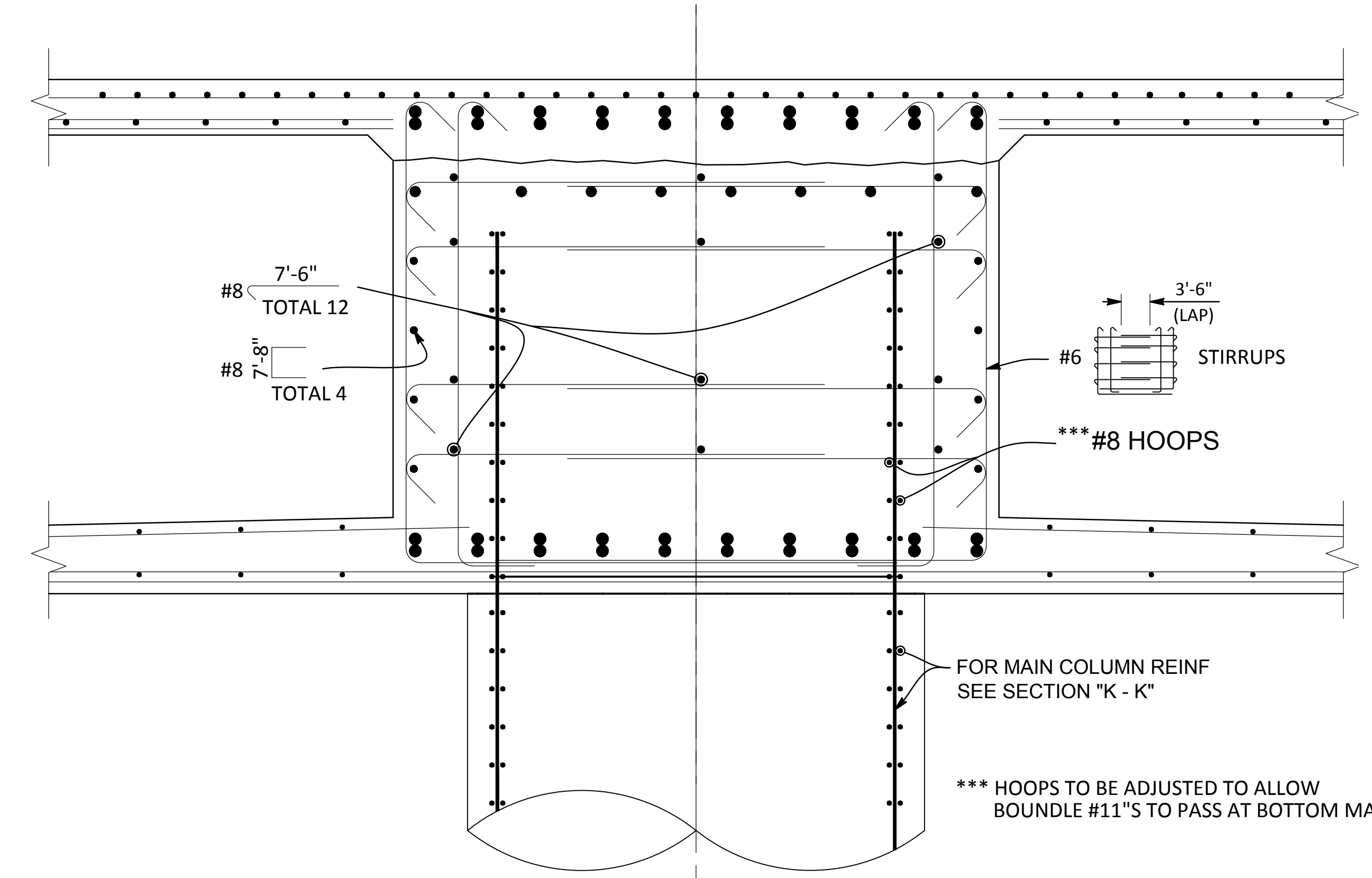
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DR BY AG
CK BY DS
SCALE AS SHOWN

SHEET NUMBER
S-9
50 OF 70 SHEETS



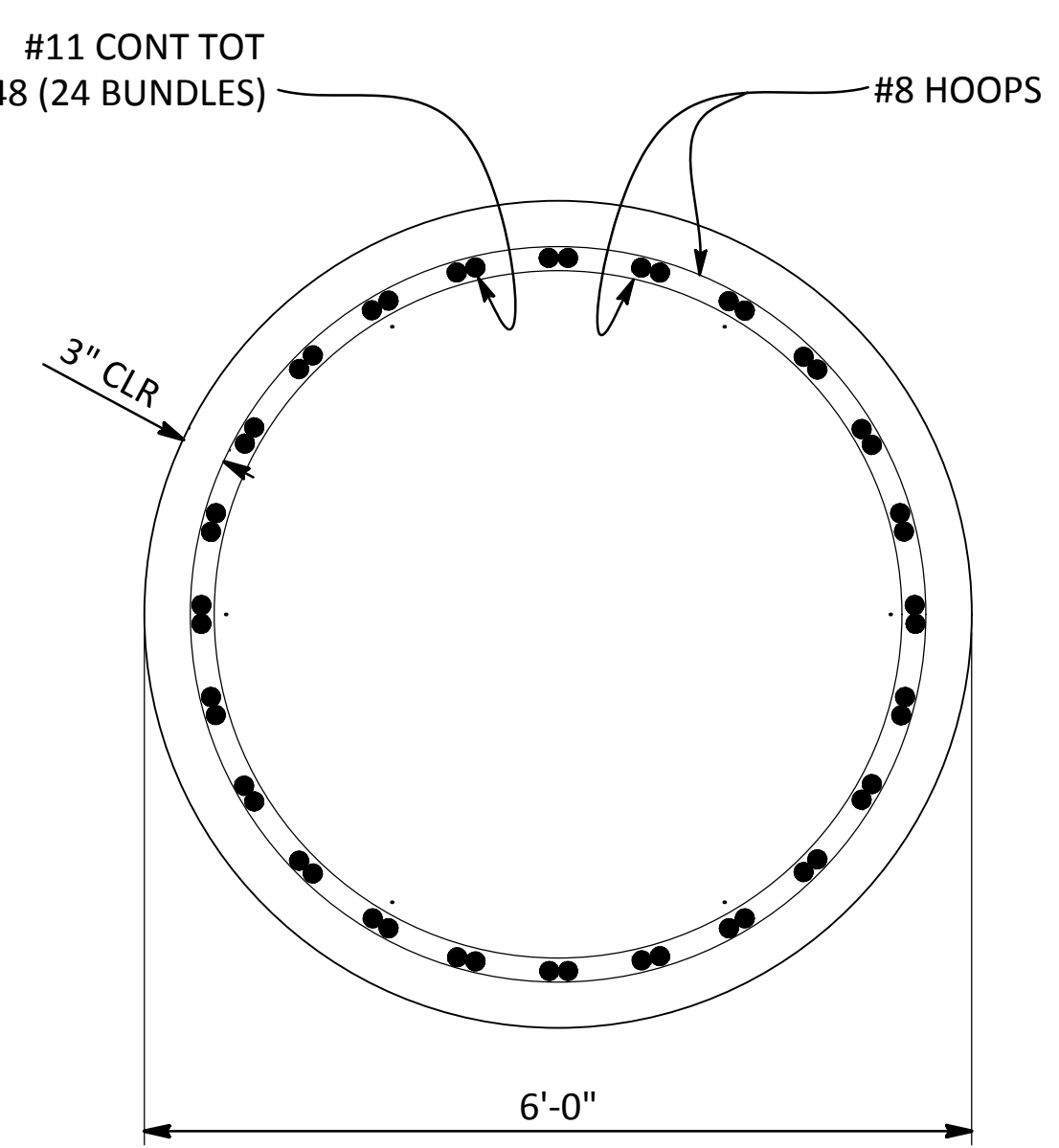
SECTION J-J
3/4"=1'-0"

* CLEARANCE TO MAIN CAP REINF
** REINFORCEMENT MAY BE ADJUSTED TO CLEAR P/S DUCTS

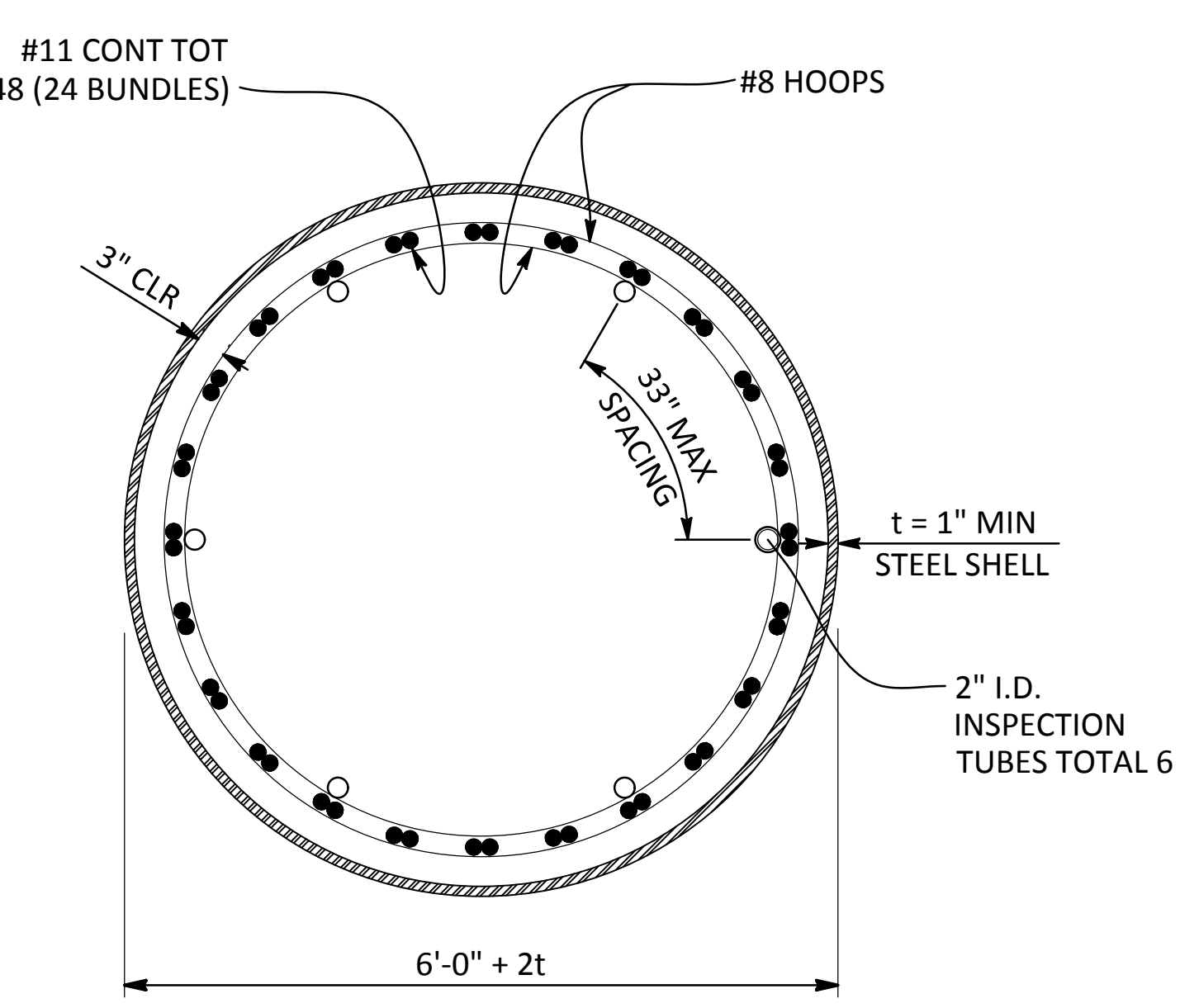


SECTION I-I
3/4"=1'-0"
FOR DETAILS NOT SHOWN, SEE "SECTION J-J"

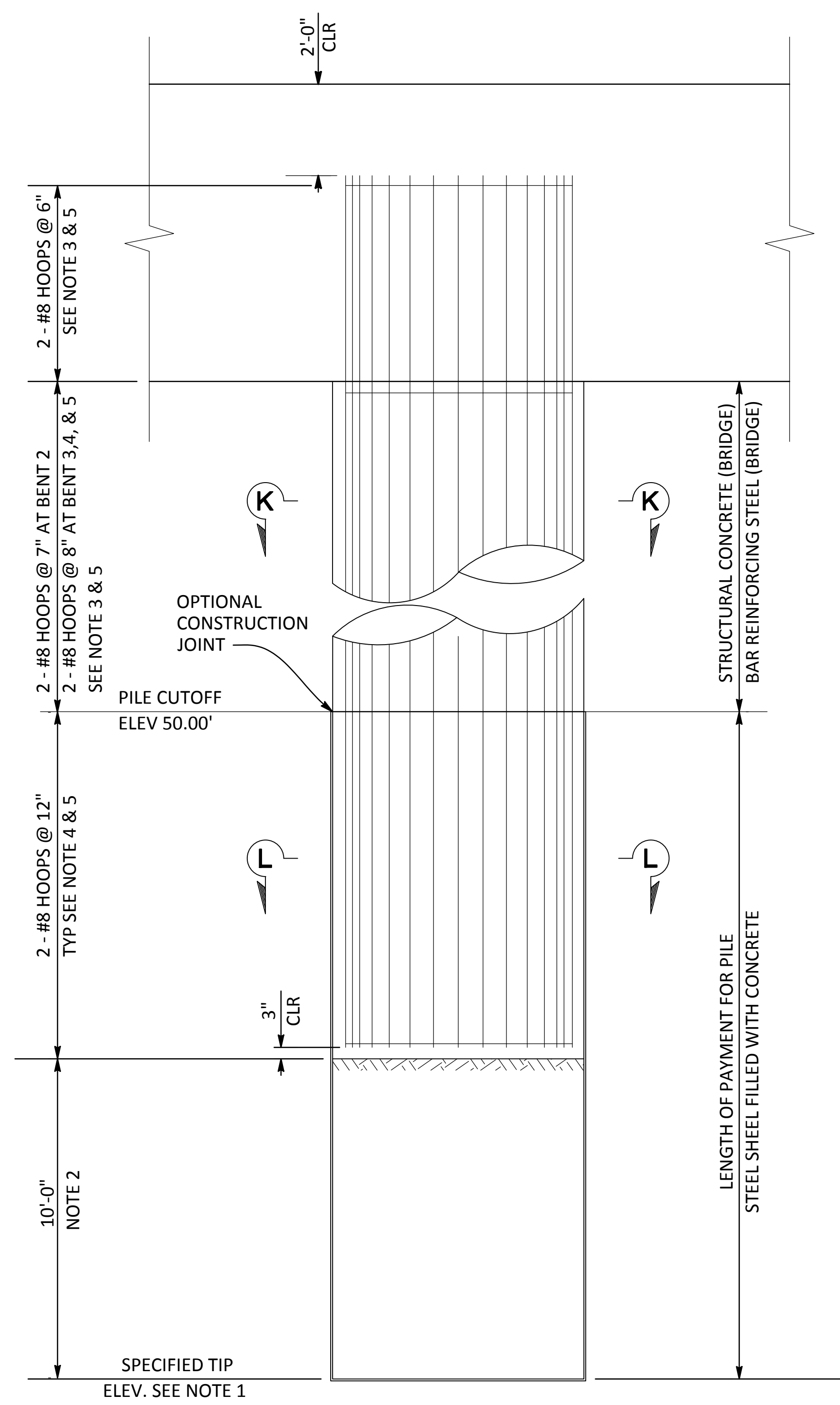
NOTE: PLANS & ELEVATIONS SHOWN ARE TYPICAL FOR ALL BENTS



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



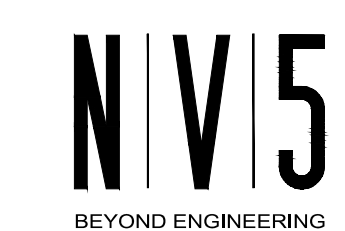
SECTION L-L
3/4"=1'-0"



72" CAST IN STEEL SHEEL (CISS) CONCRETE PILE DETAIL
1/2"=1'-0"

- NOTES:
- FOR SPECIFIED TIP AND PILE CUTOFF ELEVATION, SEE "FOUNDATION PLAN" SHEET.
 - LIMITS OF UNDISTURBED SOIL PLUG TO BE MAINTAINED WITH STEEL SHEEL.
 - NO SPLICES ALLOWED IN MAIN CIDH PILE REINF.
 - ONLY STAGGERED "SERVICE" BUTT SPLICES ARE ALLOWED IN MAIN CIDH PILE REINF. IN THIS ZONE.
 - ALL HOOPS ARE "ULTIMATE" BUTT SPLICED CONTINUOUS.

NOTE:
CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIALS OR ASSEMBLIES.



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PREPARED UNDER THE DIRECTION OF:

NO	DESCRIPTIONS	DATE	APPROVED

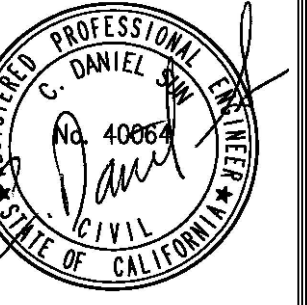
STANISLAUS COUNTY
DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND OPERATIONS DIVISION
1716 MORGAN ROAD - MODESTO, CA 95358



CROWS LANDING BRIDGE IMPROVEMENTS
BENT DETAILS NO. 2

JOB NO. 226217-68
DATE 6/24/20
DR BY AG
CK BY DS
SCALE AS SHOWN

SHEET NUMBER
S-10
51 OF 70 SHEETS



NO.	REVISIONS	DATE	APPROVED

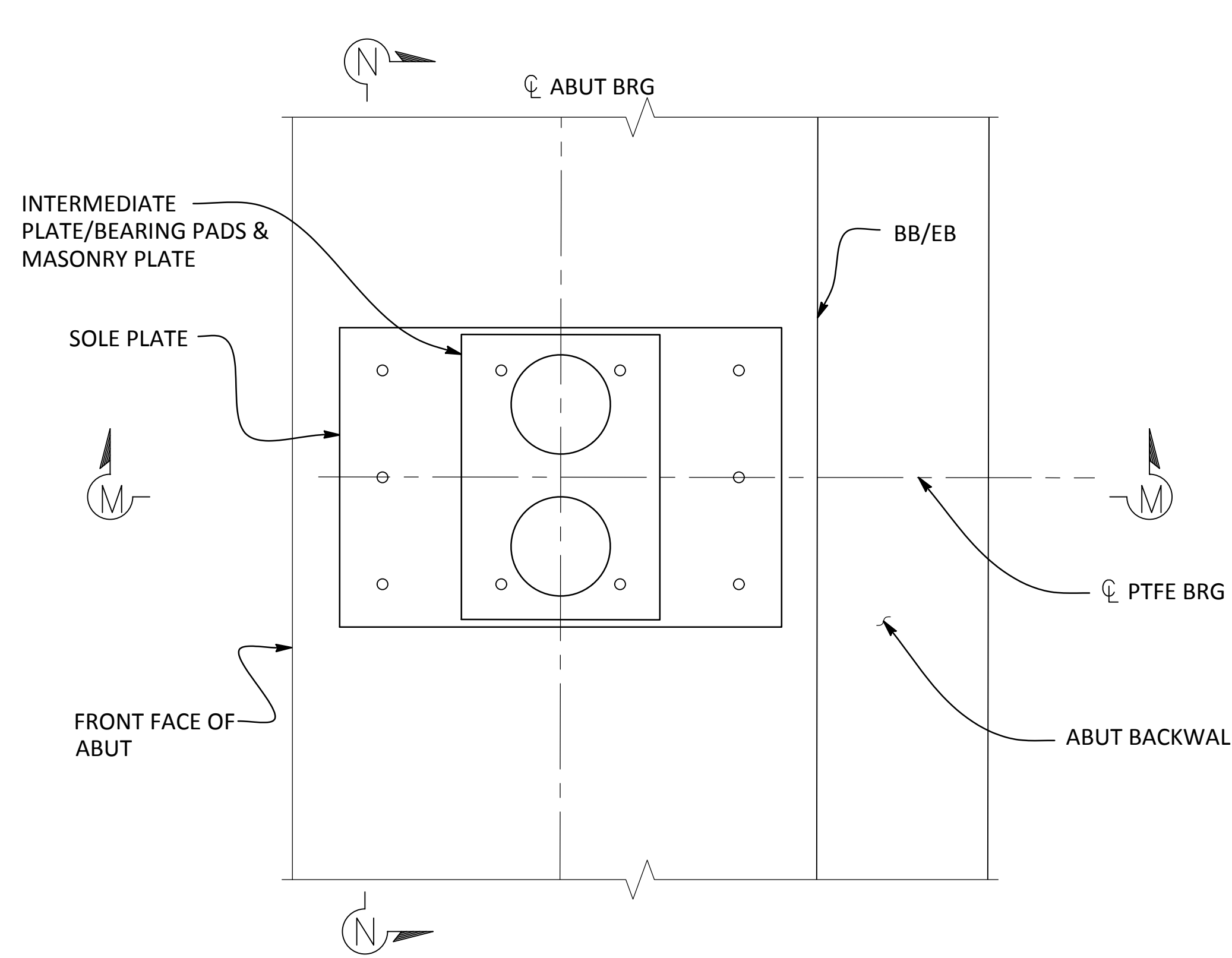
STANISLAUS COUNTY
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 1716 MORGAN ROAD - MODESTO, CA 95358



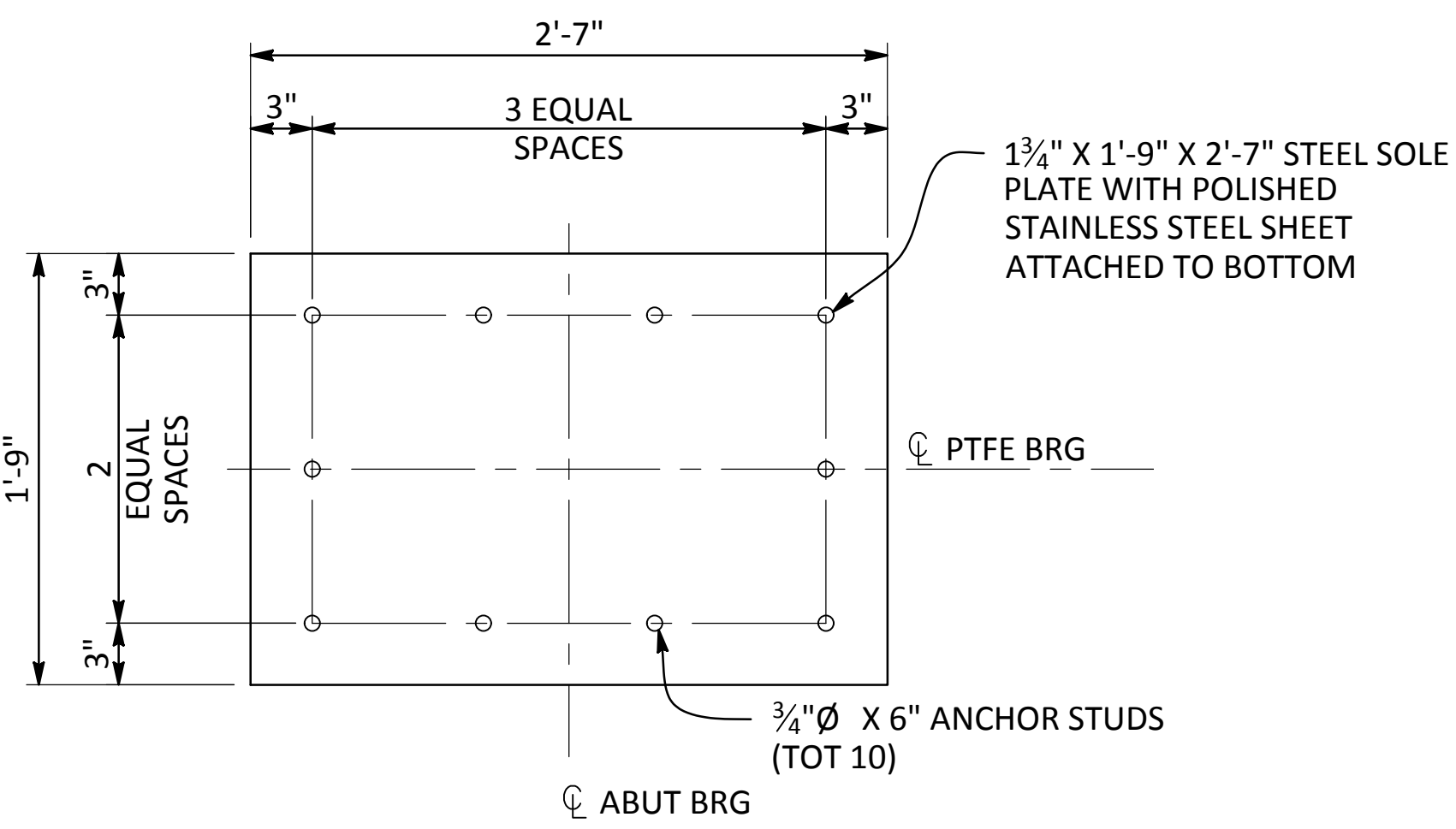
CROWS LANDING BRIDGE IMPROVEMENTS
 PTFE ELASTOMERIC BEARING PAD DETAILS

JOB NO. 226217-68
 DATE 6/24/20
 DR BY AG
 CK BY DS
 SCALE AS SHOWN

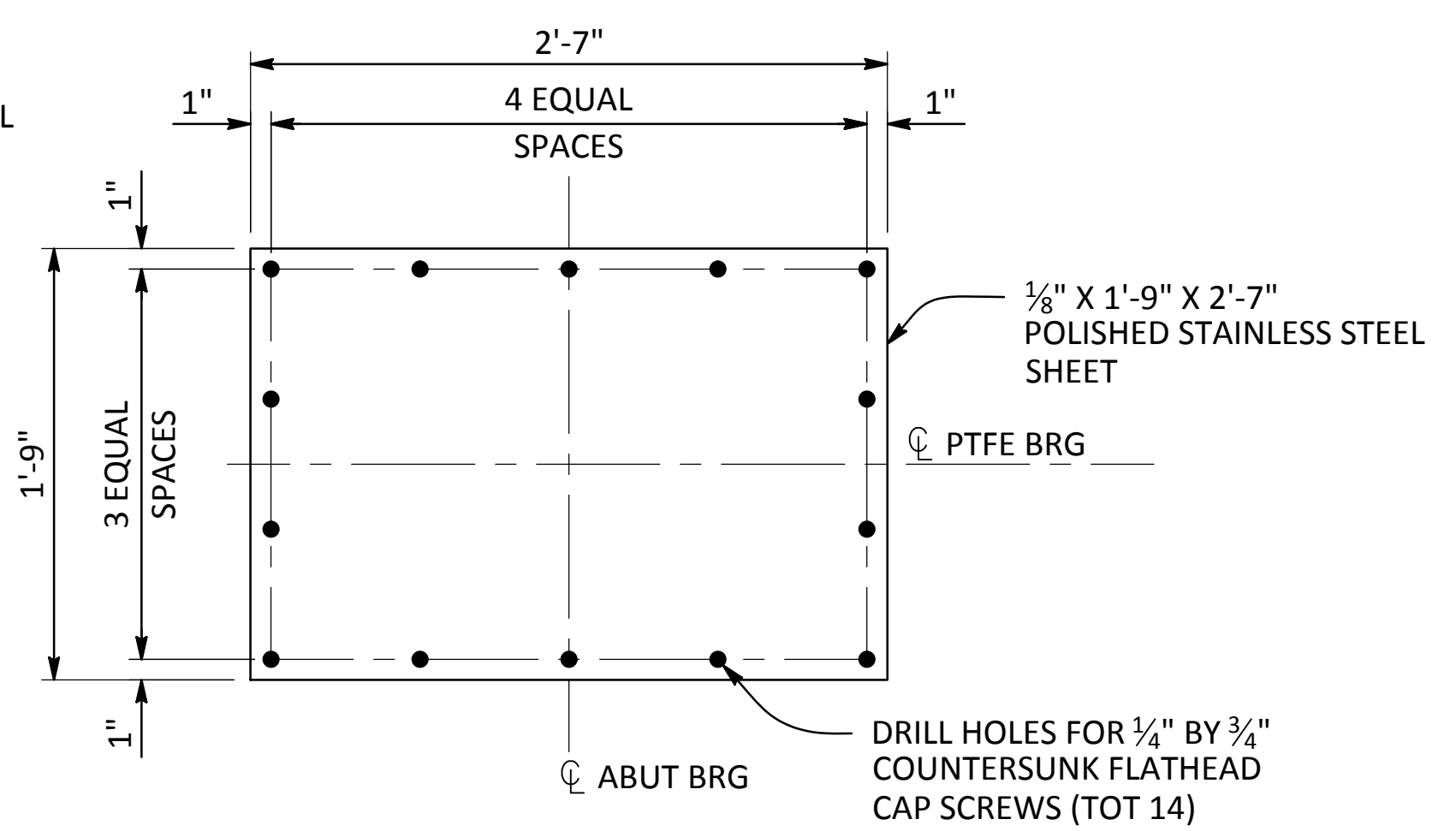
SHEET NUMBER
S-11
 52 OF 70 SHEETS



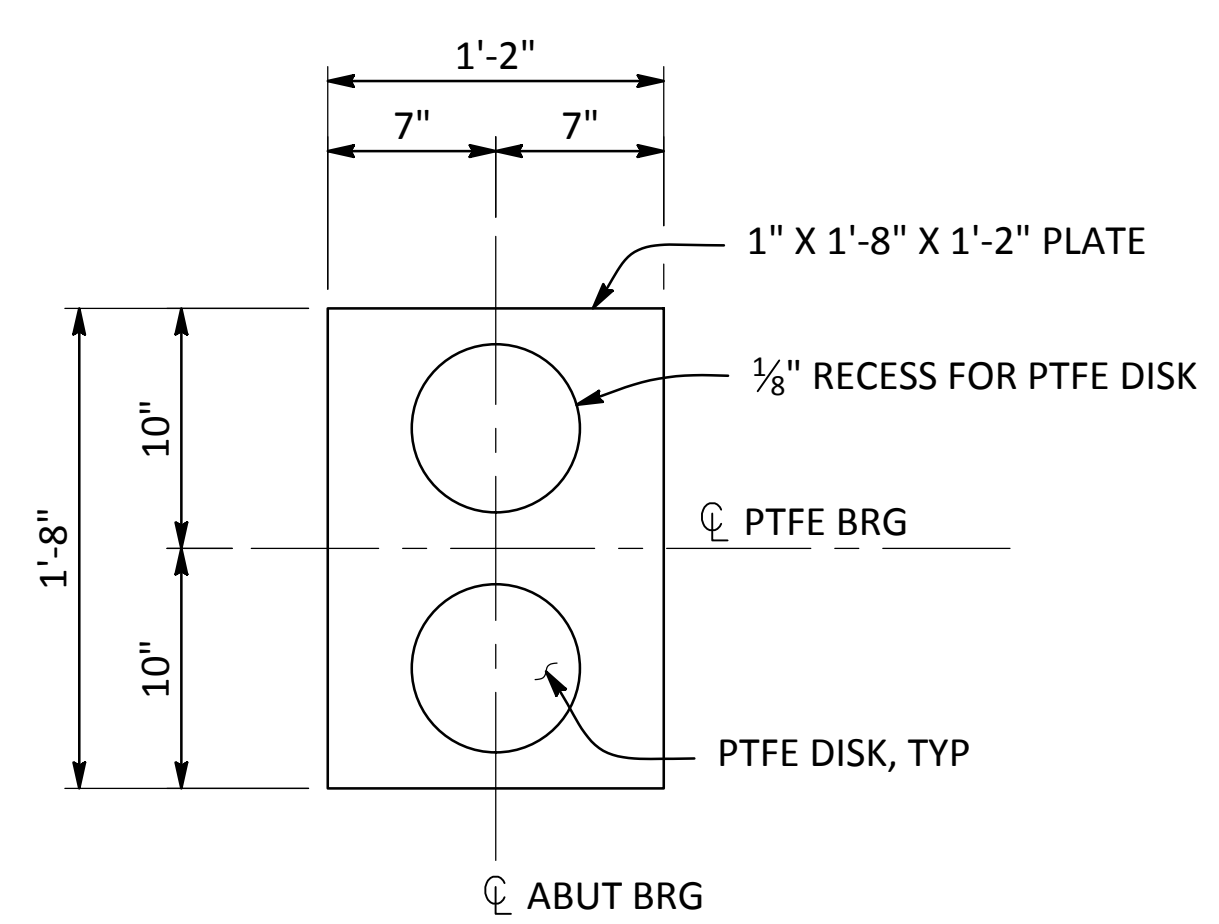
PLAN - BEARING PAD
 1 1/2" = 1' - 0"



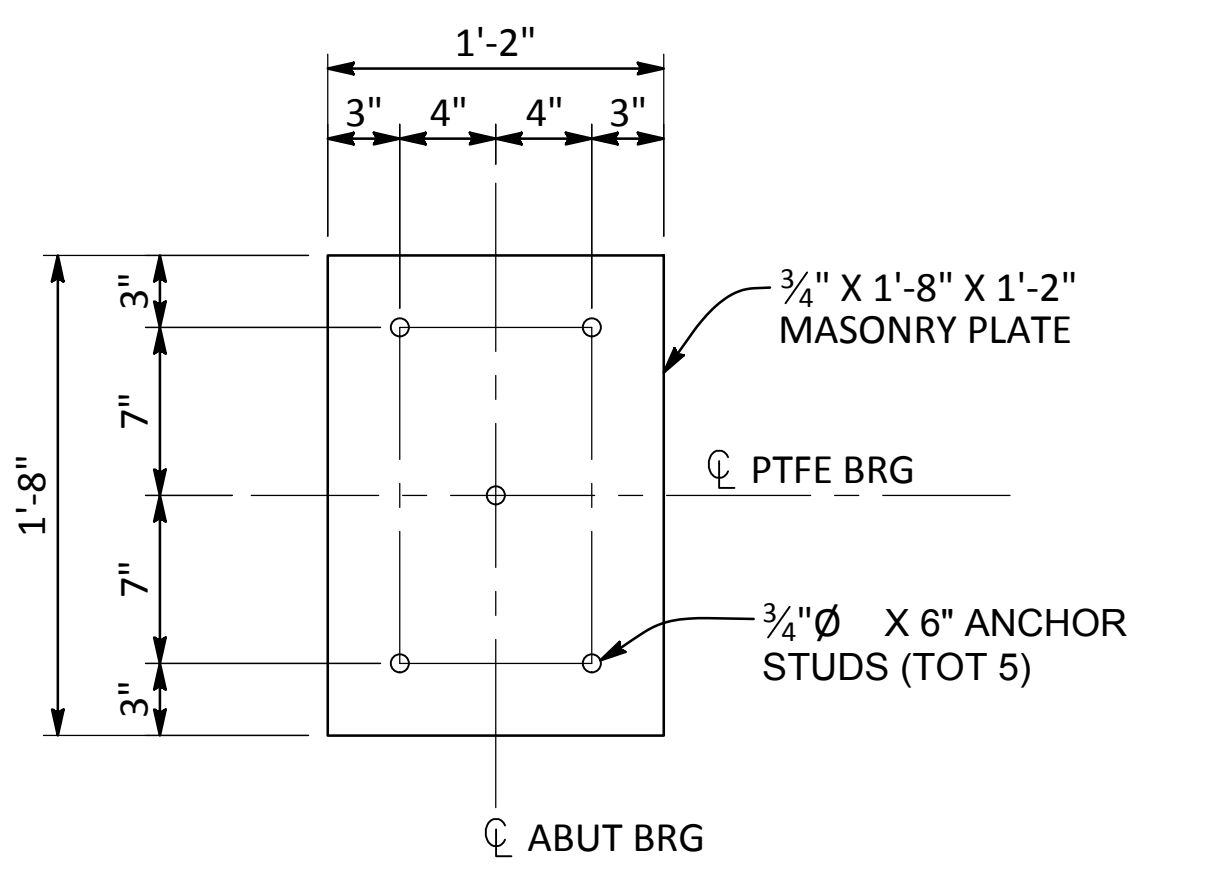
SOLE PLATE
 1 1/2" = 1' - 0"



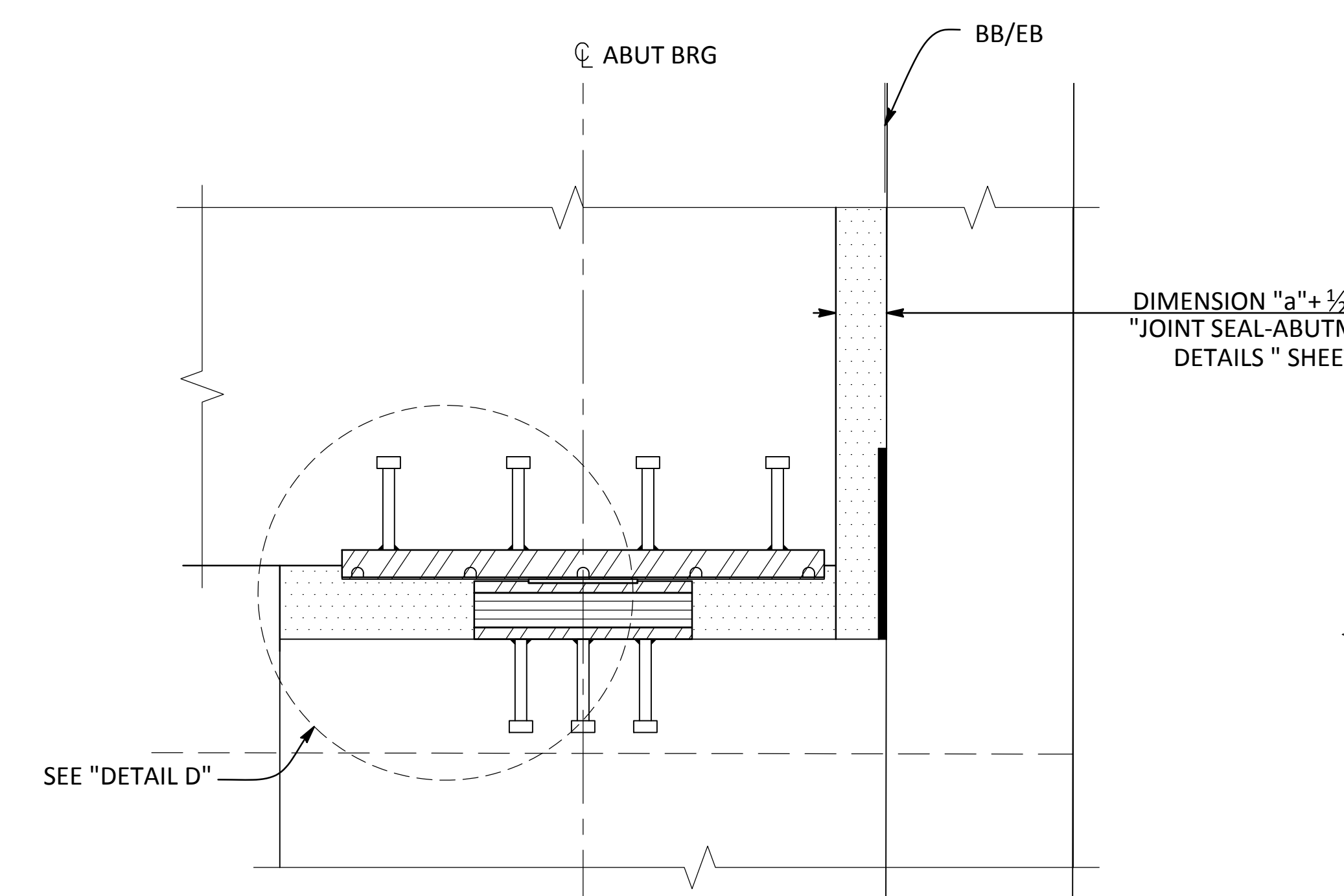
POLISHED STAINLESS STEEL SHEET
 1 1/2" = 1' - 0"



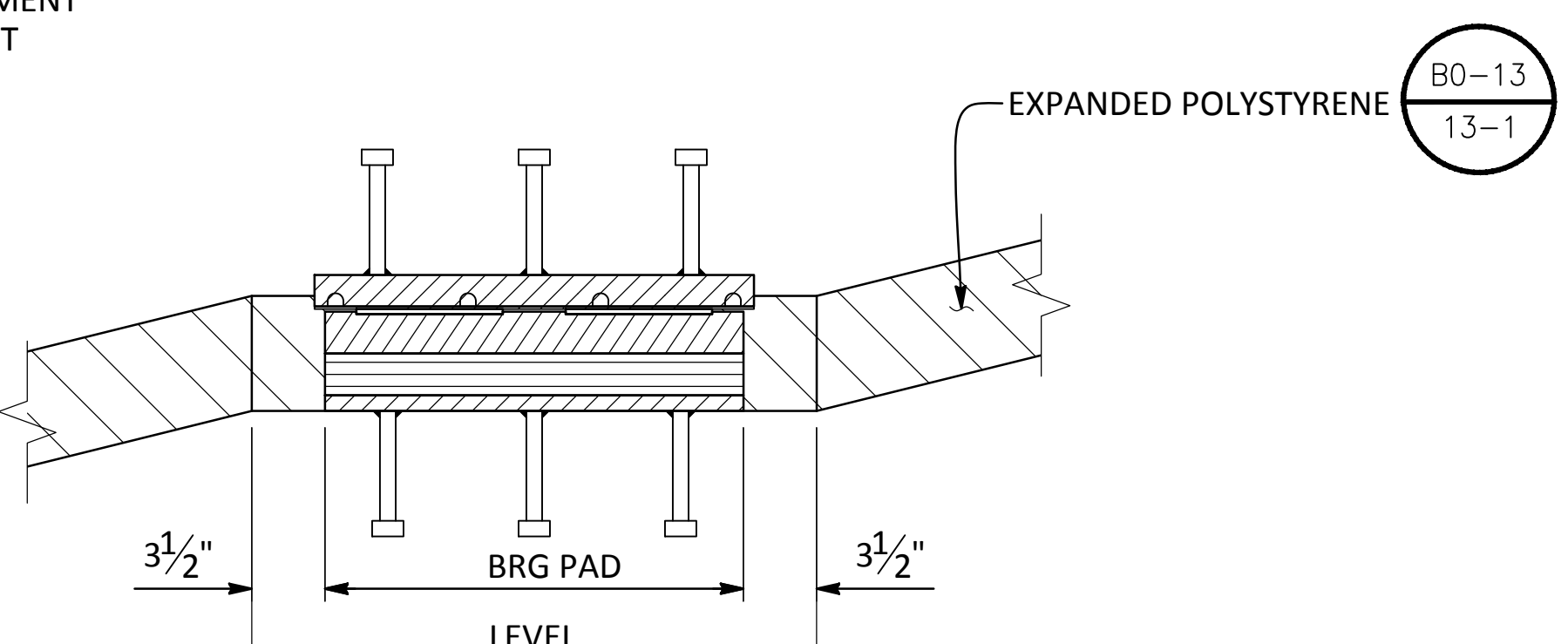
INTERMEDIATE PLATE
 1 1/2" = 1' - 0"



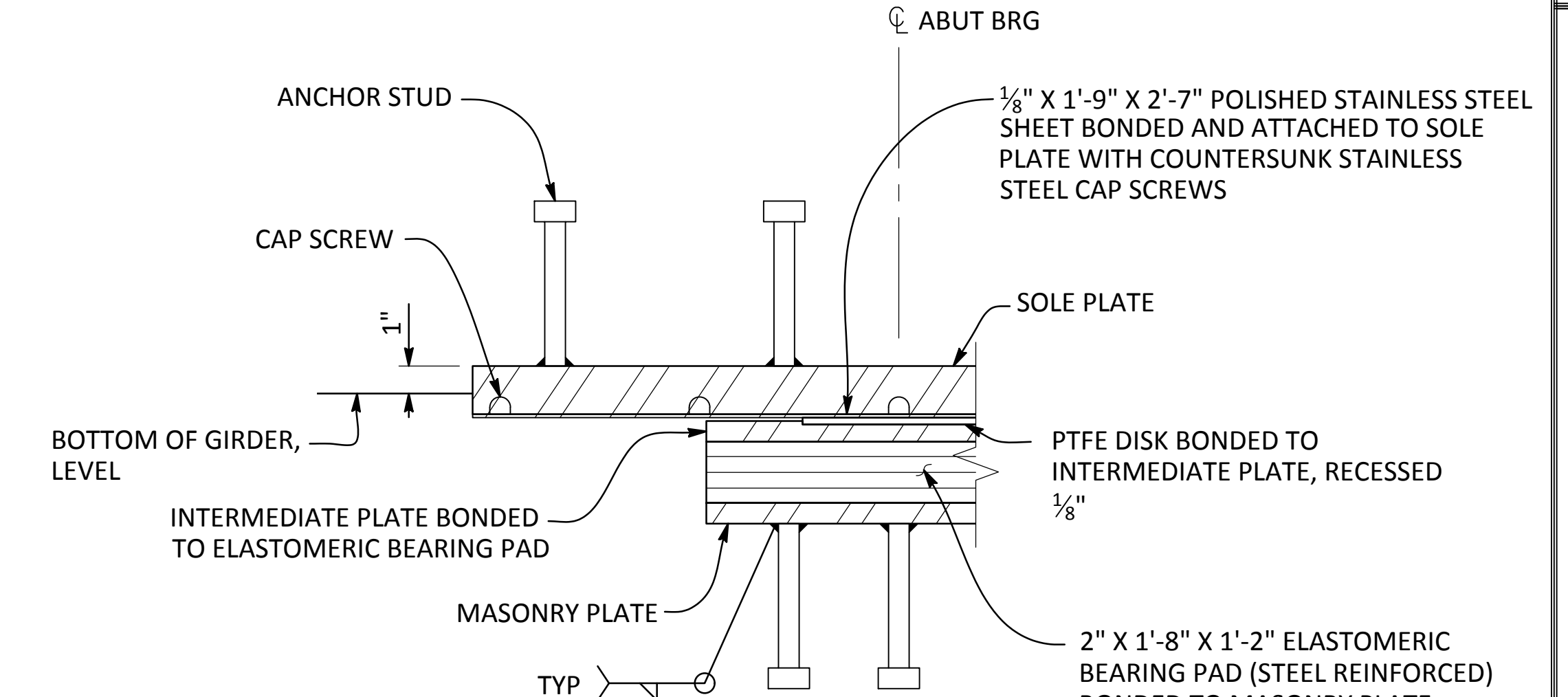
MASONRY PLATE
 1 1/2" = 1' - 0"



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



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

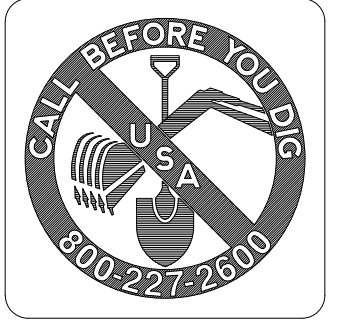


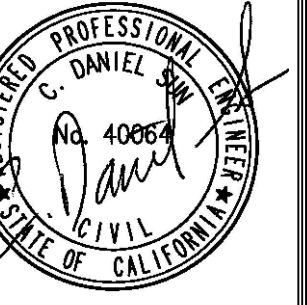
DETAIL "D"
 NO SCALE

GIRDER LOCATION	BEARING PAD SIZE WxLxT (IN)			PTFE DISKS TxØ (IN)	INTERMEDIATE PLATE WxLxT (IN)			SOLE PLATE WxLxT (IN)			MASONRY PLATE WxLxT (IN)			TOTAL PER ABUT		PER BRG PAD	
	W	L	T		W	L	T	W	L	T	W	L	T	MAX LOAD (KIPS)	MIN LOAD (KIPS)	MAX LOAD (KIPS)	MIN LOAD (KIPS)
	ABUT 1	20	14		2 1/2"	1/4" x 7"Ø	20	14	1"	21	31	1 3/4"	20	14	3/4"	1311	819
ABUT 6	20	14	2 1/2"	1/4" x 7"Ø	20	14	1"	21	31	1 3/4"	20	14	3/4"	1327	832	221	138

NOTE:
 CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIALS OR ASSEMBLIES.

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CROWS LANDING BRIDGE IMPROVEMENTS
TYPICAL SECTION - STAGE 2

JOB NO. 226217-68
DATE: 6/24/20
DR BY: AG
CK BY: DS
SCALE: AS SHOWN

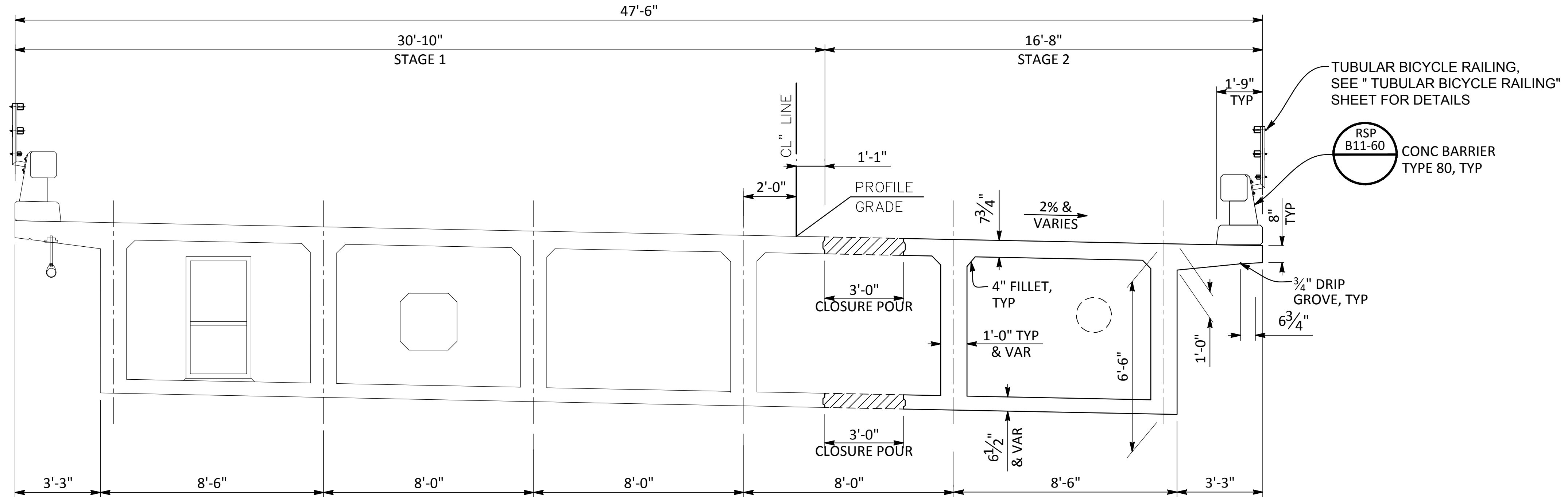
SHEET NUMBER
S-13
54 OF 70 SHEETS

FALSE WORK RELEASE

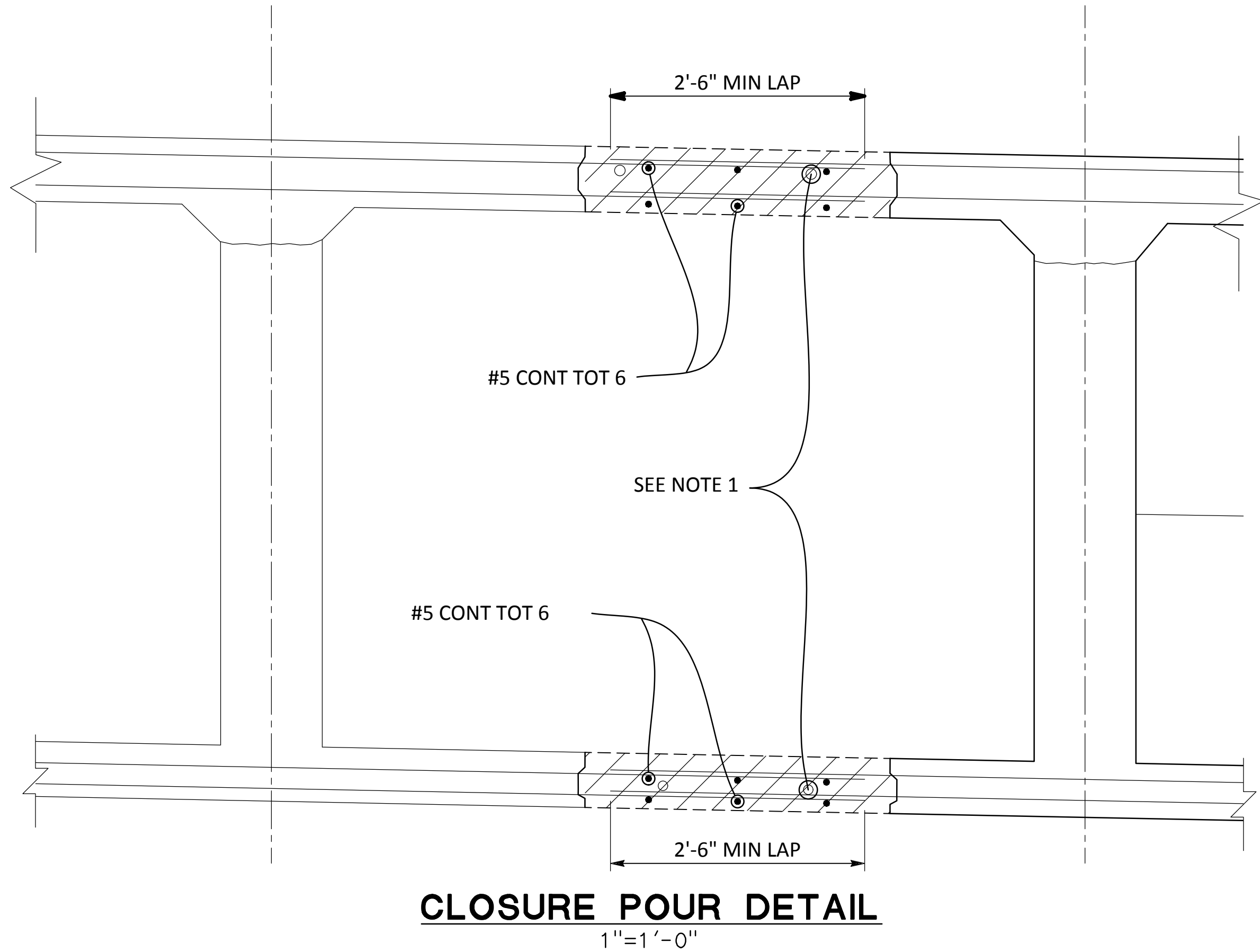
ALTERNATIVE 1:
FALSEWORK SHALL BE RELEASED AS SOON AS PERMITTED BY THE SPECIFICATIONS. CLOSURE POUR SHALL NOT BE PLACED SOONER THAN 60 DAYS AFTER THE FALSEWORK HAS BEEN REPLACED.

ALTERNATIVE 2:
FALSEWORK SHALL BE RELEASED LESS THAN 28 DAYS AFTER THE LAST CONCRETE HAS BEEN PLACED. CLOSURE POUR SHALL NOT BE PLACED SOONER THAN 14 DAYS AFTER THE FALSEWORK HAS BEEN RELEASED.

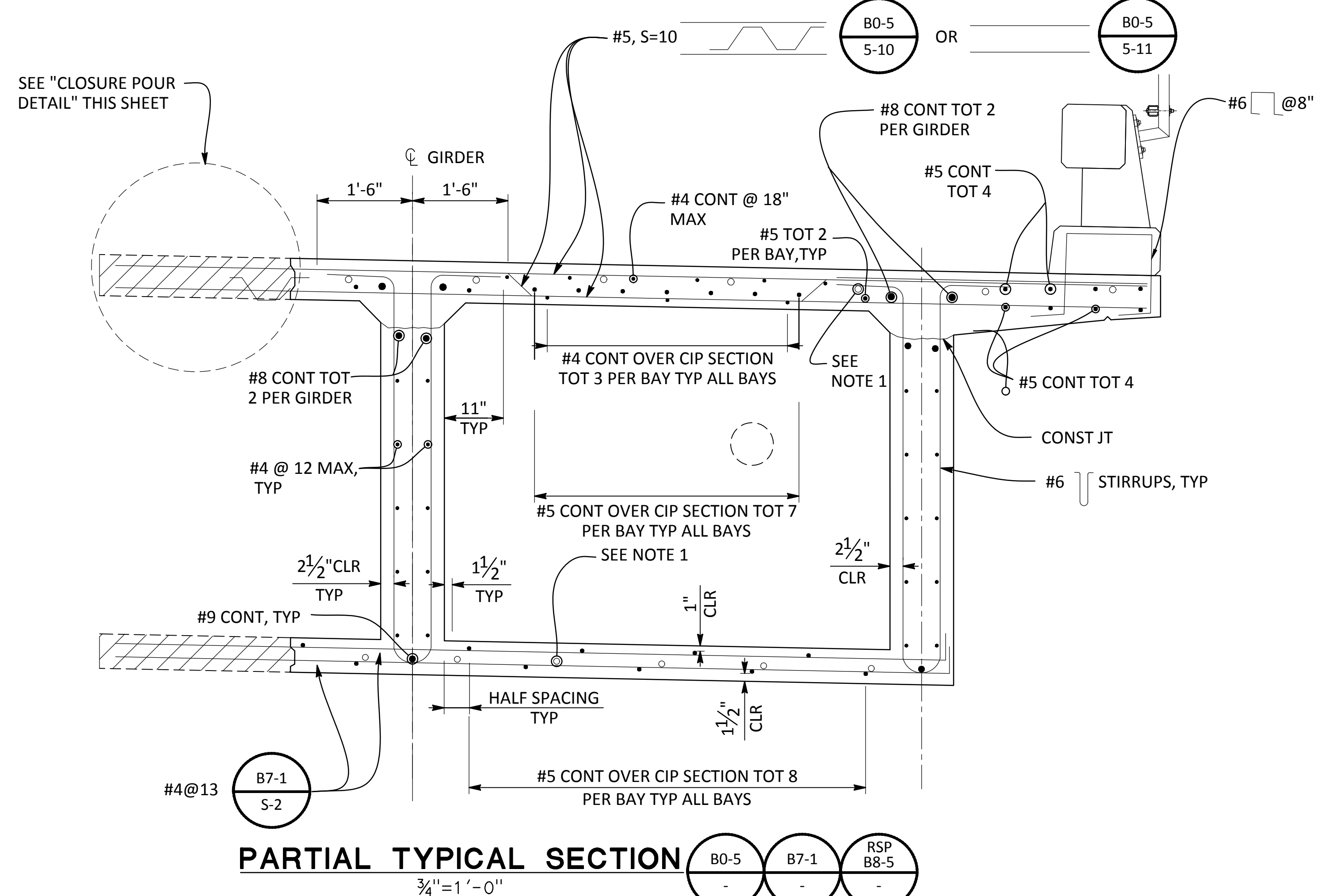
WHEN FALSEWORK RELEASE ALTERNATE 2 USED, CAMBER VALUES ARE 0.75 TIMES THOSE SHOWN.



TYPICAL SECTION STAGE 2
3/8" = 1'-0"



CLOSURE POUR DETAIL
1" = 1'-0"

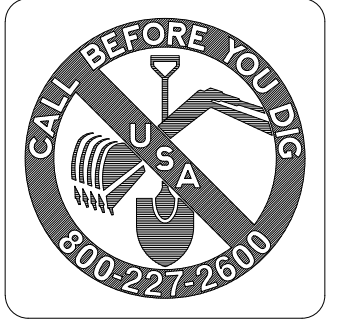


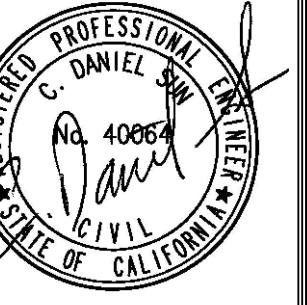
PARTIAL TYPICAL SECTION
3/4" = 1'-0"

NOTE 1:
○ DENOTES ADDITIONAL TOP AND BOTTOM REINFORCEMENT, SEE "DECK AND SOFFIT REINFORCEMENT" SHEETS.

NOTE:
CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIALS OR ASSEMBLIES.

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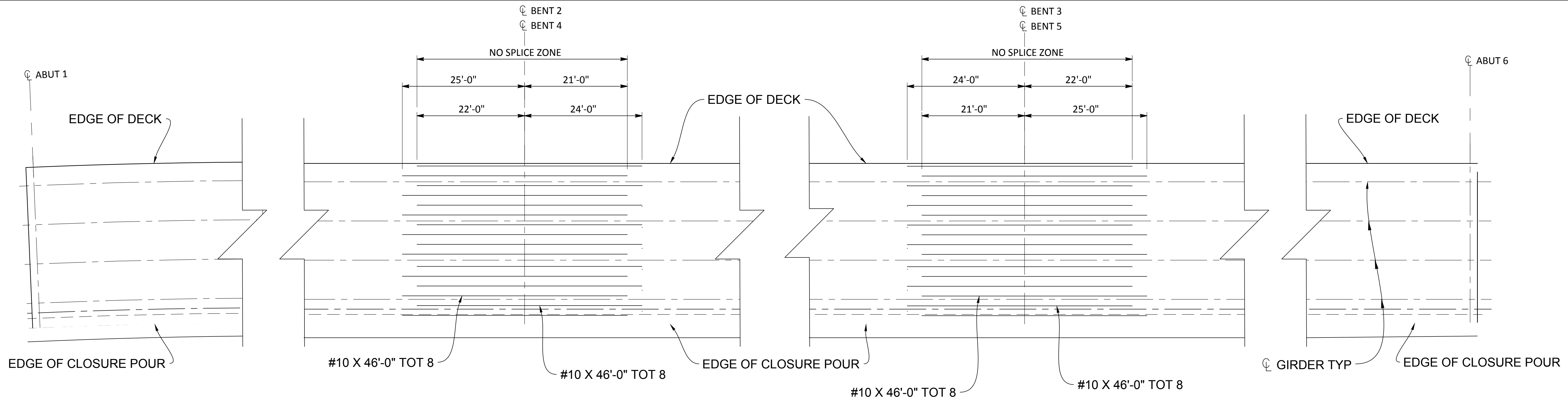
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DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND OPERATIONS DIVISION
1716 MORGAN ROAD - MODESTO, CA 95358



CROWS LANDING BRIDGE IMPROVEMENTS
DECK AND SOFFIT REINFORCEMENT - STAGE 1

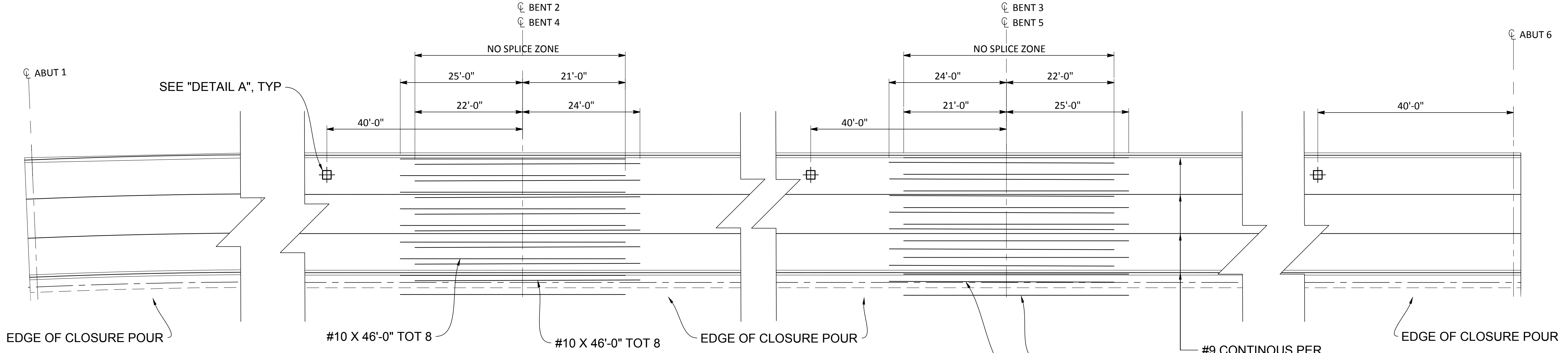
JOB NO. 226217-68
DATE 6/24/20
DR BY AG
CK BY DS
SCALE AS SHOWN

SHEET NUMBER
S-14
55 OF 70 SHEETS



ADDITIONAL DECK REINFORCEMENT

SCALE: 1"=10'-0"

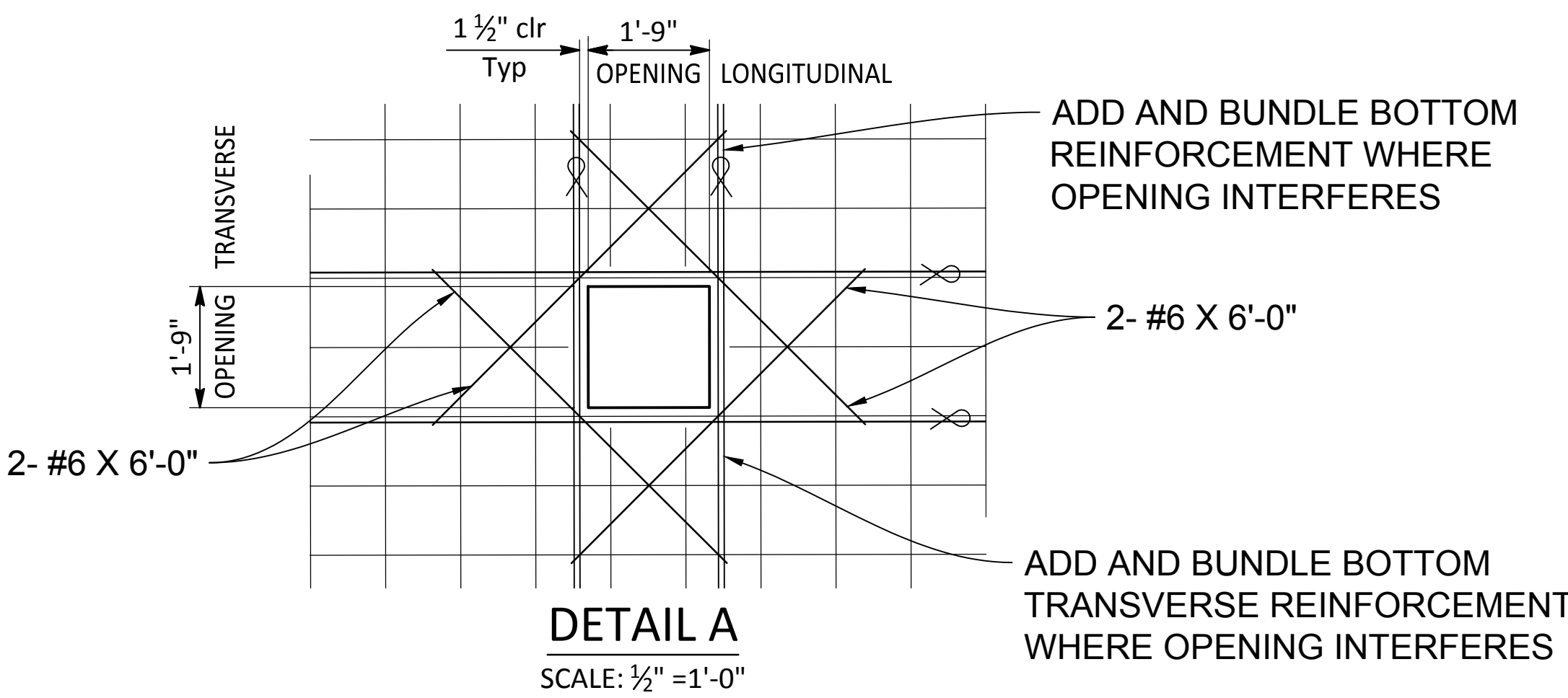


ADDITIONAL SOFFIT REINFORCEMENT

SCALE: 1"=10'-0"

- NOTES:
- ALL DIMENSIONS ARE MEASURED ALONG ϕ OF GIRDERS.
 - ALL DECK REINFORCEMENT TO BE EVENLY SPACED IN EACH BAY AND OVERHANG.
 - ALL SOFFIT REINFORCEMENT TO BE EVENLY SPACED IN BAY.

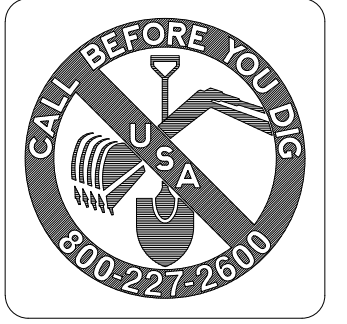
- LEGEND:
- \oplus DENOTES 1'-9" x 1'-9" SOFFIT OPENING FOR BAT HABITAT TOTAL 5 LOCATIONS. FOR DETAILS, SEE "BAT HABITAT DETAILS No1 & No2" SHEETS
 - ∞ DENOTES BUNDLED BARS.

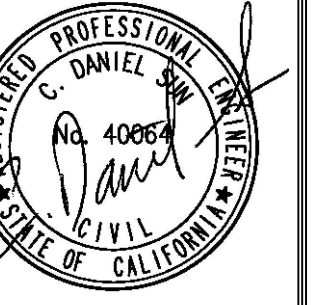


DETAIL A
SCALE: 1/2" = 1'-0"

NOTE:
CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIALS OR ASSEMBLIES.

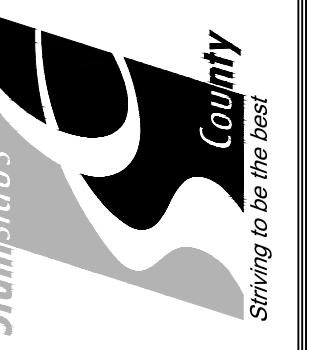
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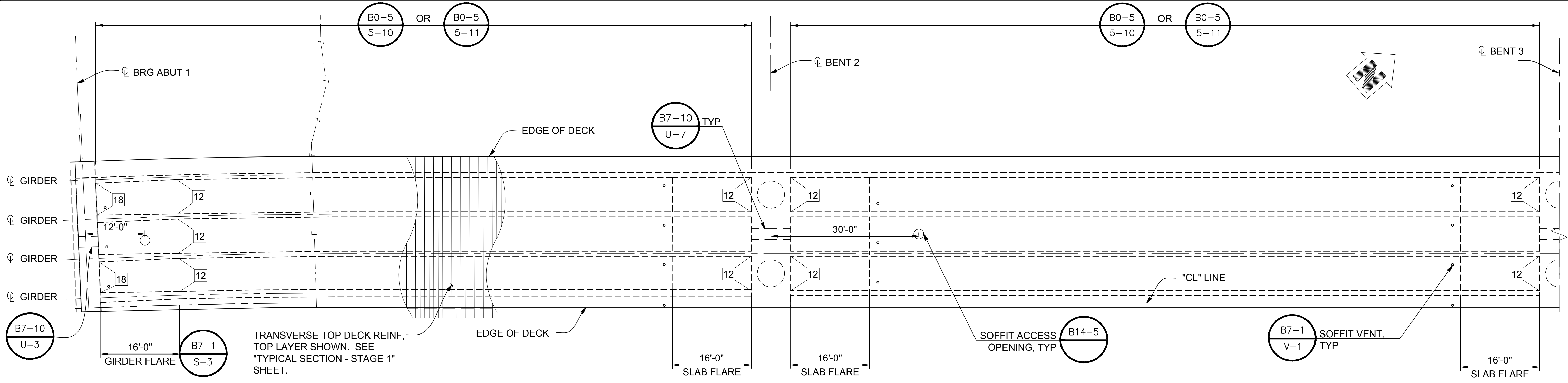
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 1716 MORGAN ROAD - MODESTO, CA 95358



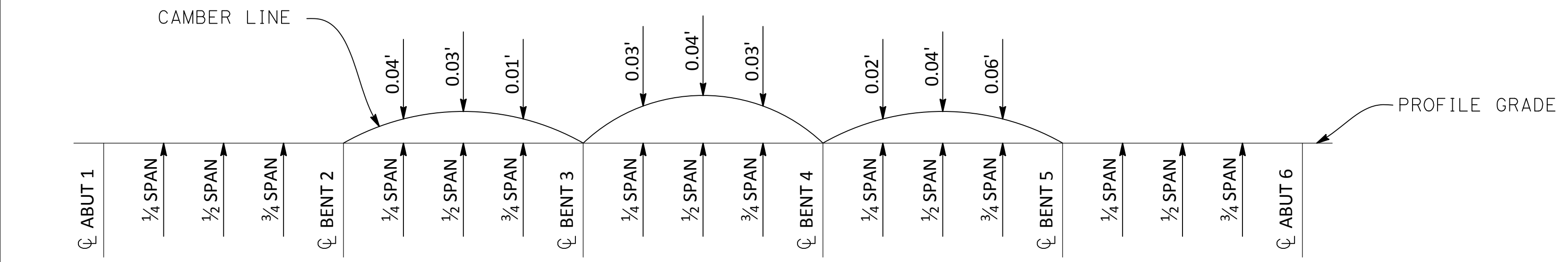
CROWS LANDING BRIDGE IMPROVEMENTS
 GIRDER LAYOUT NO. 1

JOB NO. 226217-68
 DATE 6/24/20
 DR BY AG
 CK BY DS
 SCALE AS SHOWN

SHEET NUMBER
S-16
 57 OF 70 SHEETS



GIRDER LAYOUT - STAGE 1
 1"=10'-0"



NOTE: DOES NOT INCLUDE ALLOWANCE FOR FALSEWORK SETTLEMENT

CAMBER DIAGRAM - STAGE 1
 NO SCALE

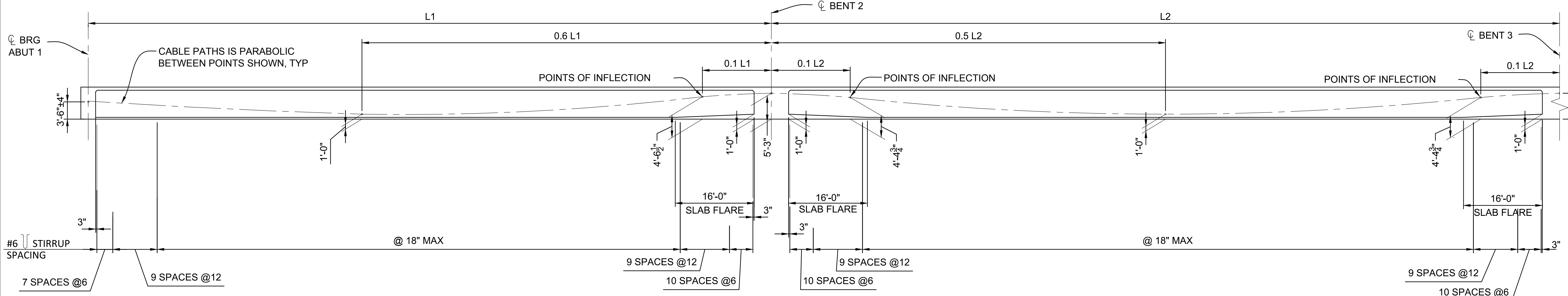
- NOTES:**
- "L" IS GIRDER LENGTH MEASURED ALONG GIRDERS.
 - CABLE PATH IS PARABOLIC BETWEEN POINTS SHOWN.
 - CONCRETE BARRIER NOT SHOWN.

- LEGEND**
- X INDICATES GIRDER STEM WIDTH IN INCHES

PRESTRESSING NOTES
 270 KSI LOW RELAXATION STRAND:
 P_{JACK} = 10000 KIPS
 ANCHOR SET = 0.375 IN
 TOTAL NUMBER OF GIRDERS = 4

DISTRIBUTION OF PRESTRESS FORCE (PJACK) BETWEEN GIRDERS SHALL NOT EXCEED THE RATIO OF 3:2 OR 1000 KIPS.
 FRICTION WOBBLE COEFFICIENT, K = 0.0002 (1/FT)
 FRICTION CURVATURE COEFFICIENT, M = 0.15 (1/RAD)

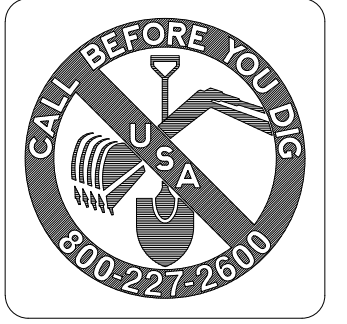
CONCRETE: F_C = 4500 PSI @ 28 DAYS
 F_{CI} = 3750 PSI @ TIME OF STRESSING CONTRACTOR SHALL
 SUBMIT ELONGATION CALCULATIONS BASED ON INITIAL STRESS AT:
 = 0.815 TIMES JACKING STRESS.
 TWO-END STRESSING SHALL BE PERFORMED.

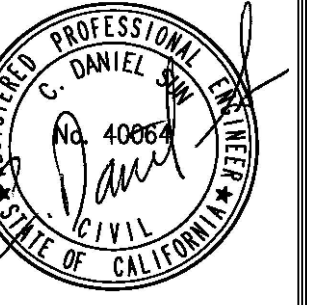


LONGITUDINAL SECTION - STAGE 1
 1"=10'-0"

NOTE:
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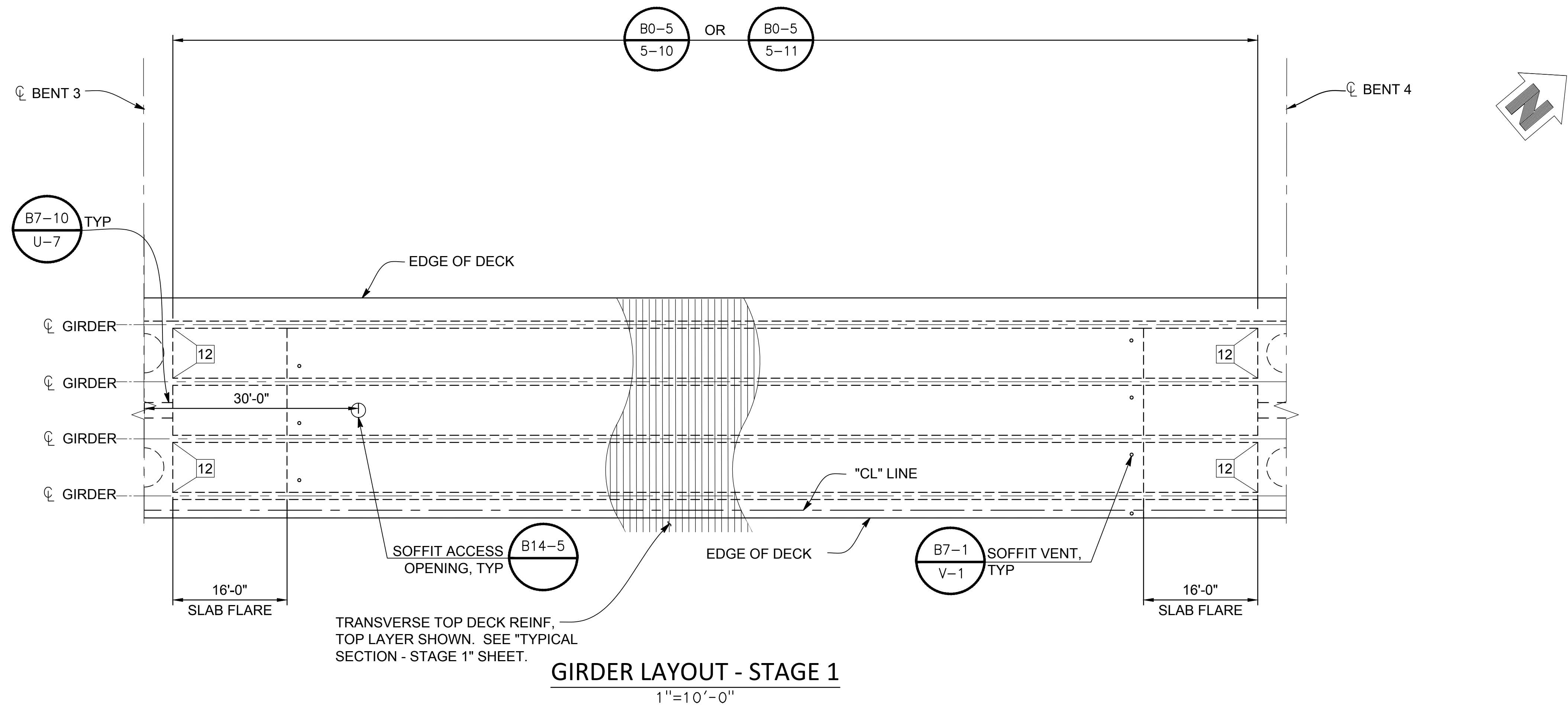
STANISLAUS COUNTY
 DEPARTMENT OF PUBLIC WORKS
 ENGINEERING AND OPERATIONS DIVISION
 1716 MORGAN ROAD - MODESTO, CA 95358



CROWS LANDING BRIDGE IMPROVEMENTS
 GIRDER LAYOUT NO. 2

JOB NO. 226217-68
 DATE 6/24/20
 DR BY AG
 CK BY DS
 SCALE AS SHOWN

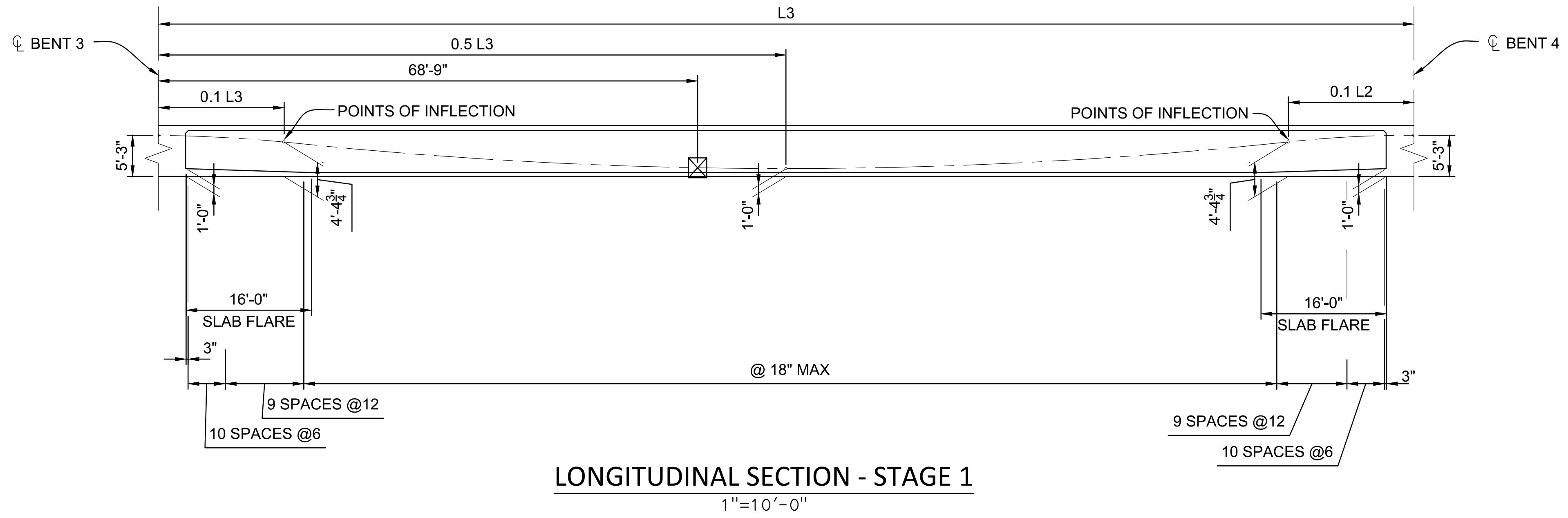
SHEET NUMBER
S-17
 58 OF 70 SHEETS



GIRDER LAYOUT - STAGE 1
 1"=10'-0"

- NOTES:
- "L" IS GIRDER LENGTH MEASURED ALONG ϕ GIRDERS.
 - CABLE PATH IS PARABOLIC BETWEEN POINTS SHOWN.
 - CONCRETE BARRIER NOT SHOWN.

- LEGEND
- INDICATES GIRDER STEM WIDTH (B7-1 S-3)
 - INDICATES POINT OF NO MOVEMENT



LONGITUDINAL SECTION - STAGE 1
 1"=10'-0"

NOTE:
 CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIALS OR ASSEMBLIES.

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DATE:	DATE:
APPROVED:	APPROVED:
REVISIONS:	REVISIONS:
NO.	DESCRIPTIONS:

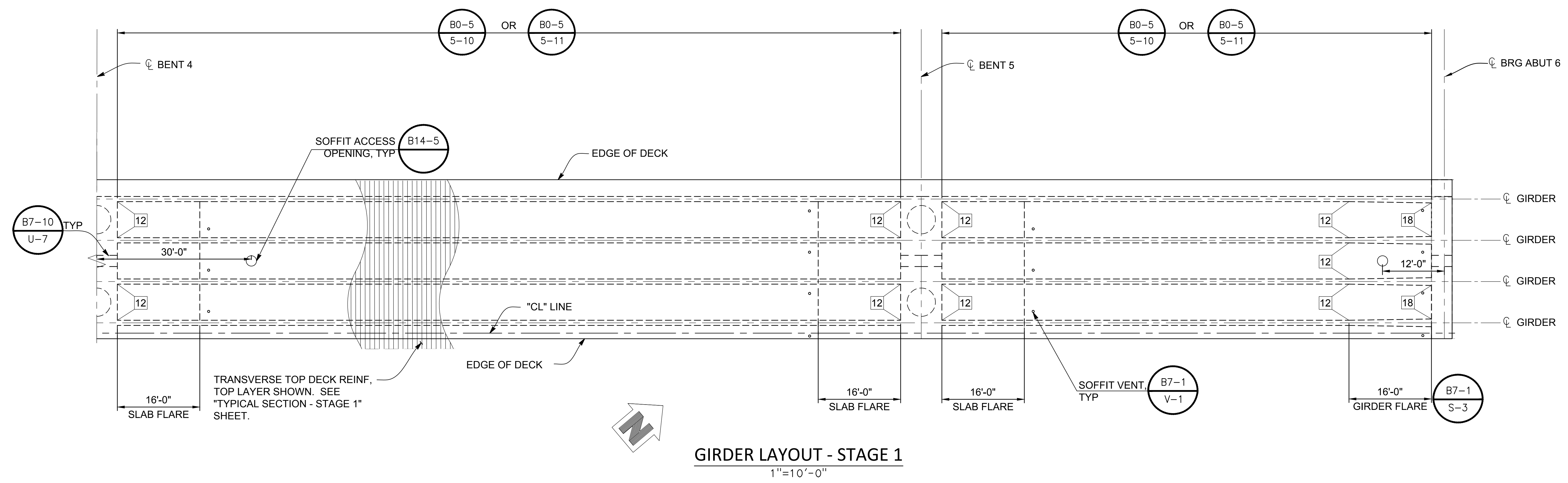
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CROWS LANDING BRIDGE IMPROVEMENTS
 GIRDER LAYOUT NO. 3

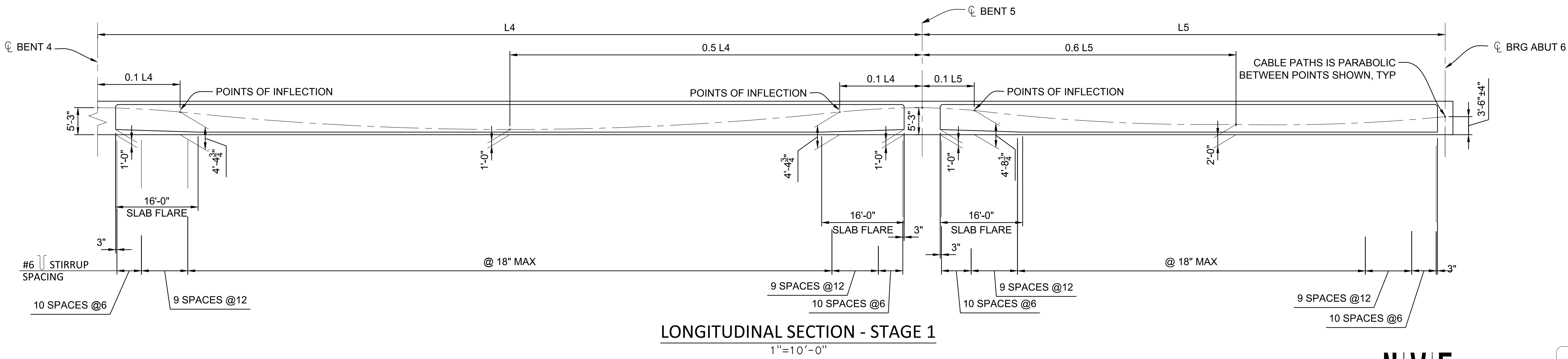
JOB NO. 226217-68
 DATE: 6/24/20
 DR BY: AG
 CK BY: DS
 SCALE: AS SHOWN

SHEET NUMBER
S-18
 59 OF 70 SHEETS



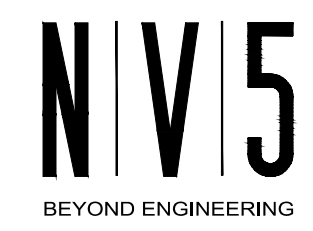
GIRDER LAYOUT - STAGE 1
 1"=10'-0"

- NOTES:
- "L" IS GIRDER LENGTH MEASURED ALONG GIRDERS.
 - CABLE PATH IS PARABOLIC BETWEEN POINTS SHOWN.
 - CONCRETE BARRIER NOT SHOWN.



LONGITUDINAL SECTION - STAGE 1
 1"=10'-0"

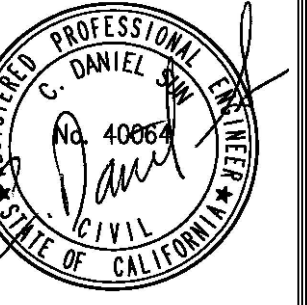
NOTE:
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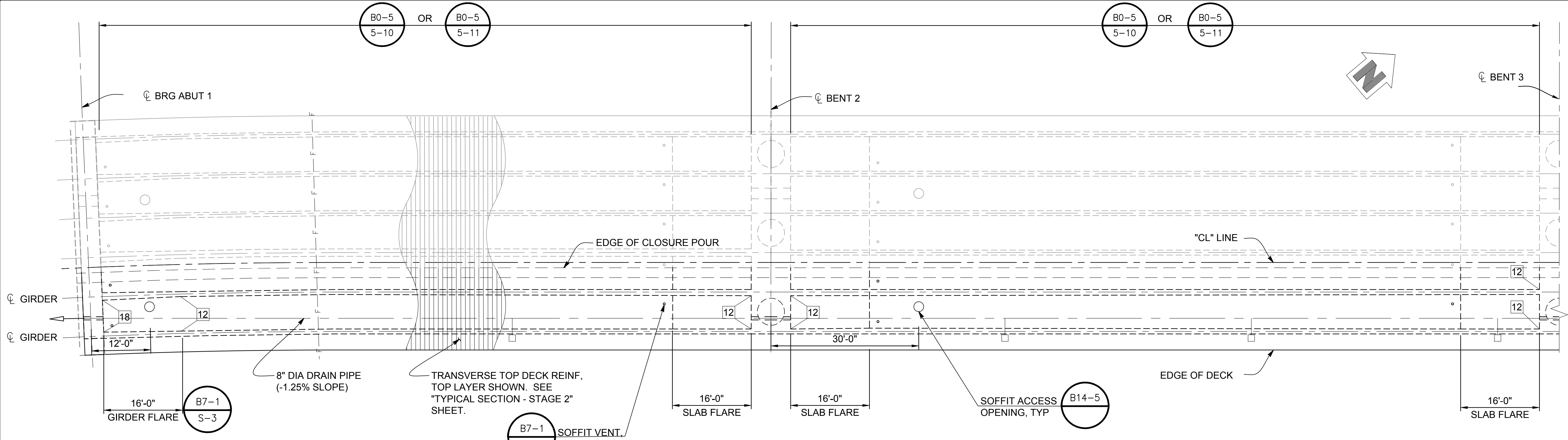
STANISLAUS COUNTY
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CROWS LANDING BRIDGE IMPROVEMENTS
 GIRDER LAYOUT NO. 4

JOB NO. 226217-68
 DATE: 6/24/20
 DR BY: AG
 CK BY: DS
 SCALE: AS SHOWN

SHEET NUMBER
S-19
 60 OF 70 SHEETS



GIRDER LAYOUT - STAGE 2
 1"=10'-0"

- NOTES:**
- "L" IS GIRDER LENGTH MEASURED ALONG CL GIRDERS.
 - CABLE PATH IS PARABOLIC BETWEEN POINTS SHOWN.
 - CONCRETE BARRIER NOT SHOWN.

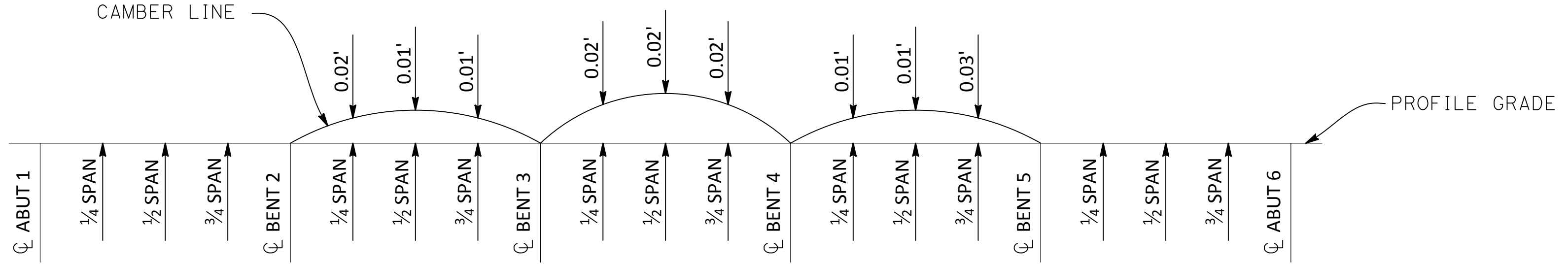
- LEGEND**
- X INDICATES GIRDER STEM WIDTH IN INCHES

PRESTRESSING NOTES
 270 KSI LOW RELAXATION STRAND:
 P_{JACK} = 5000 KIPS
 ANCHOR SET = 0.375 IN
 TOTAL NUMBER OF GIRDERS = 2

DISTRIBUTION OF PRESTRESS FORCE (P_{JACK}) BETWEEN GIRDERS SHALL NOT EXCEED THE RATIO OF 3:2 OR 1000 KIPS.
 FRICTION WOBBLE COEFFICIENT, K = 0.0002 (1/FT)
 FRICTION CURVATURE COEFFICIENT, M = 0.15 (1/RAD)

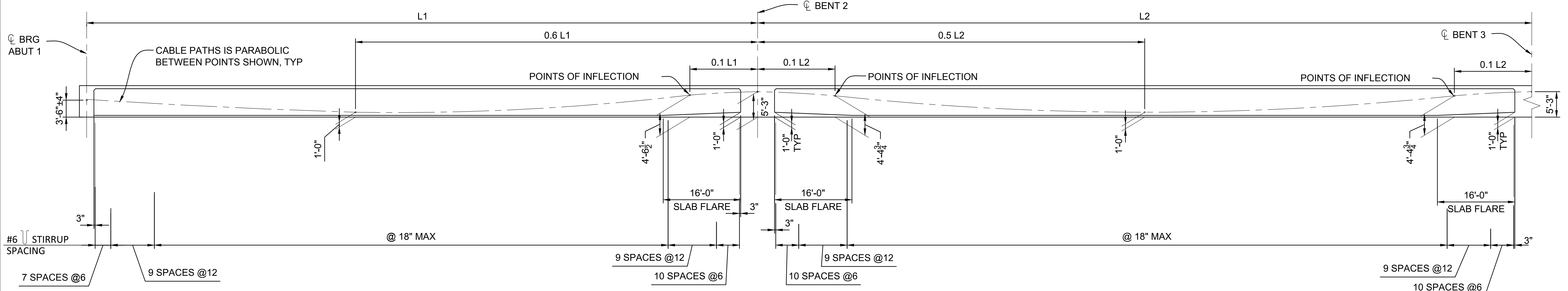
CONCRETE: F_C = 4500 PSI @ 28 DAYS
 F_{CI} = 3750 PSI @ TIME OF STRESSING CONTRACTOR SHALL
 SUBMIT ELONGATION CALCULATIONS BASED ON INITIAL STRESS AT:
 = 0.815 TIMES JACKING STRESS.
 TWO-END STRESSING SHALL BE PERFORMED.

□ DECK DRAIN TYPE D2. FOR LOCATION, SEE "GENERAL PLAN NO. 1" SHEET.



NOTE: DOES NOT INCLUDE ALLOWANCE FOR FALSEWORK SETTLEMENT

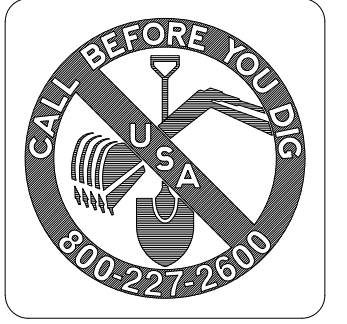
CAMBER DIAGRAM - STAGE 2
 NO SCALE

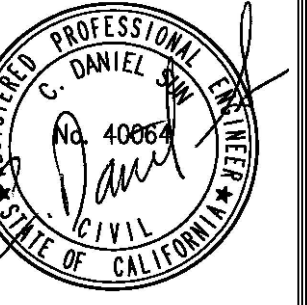


LONGITUDINAL SECTION - STAGE 2
 1"=10'-0"

NOTE:
 CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIALS OR ASSEMBLIES.

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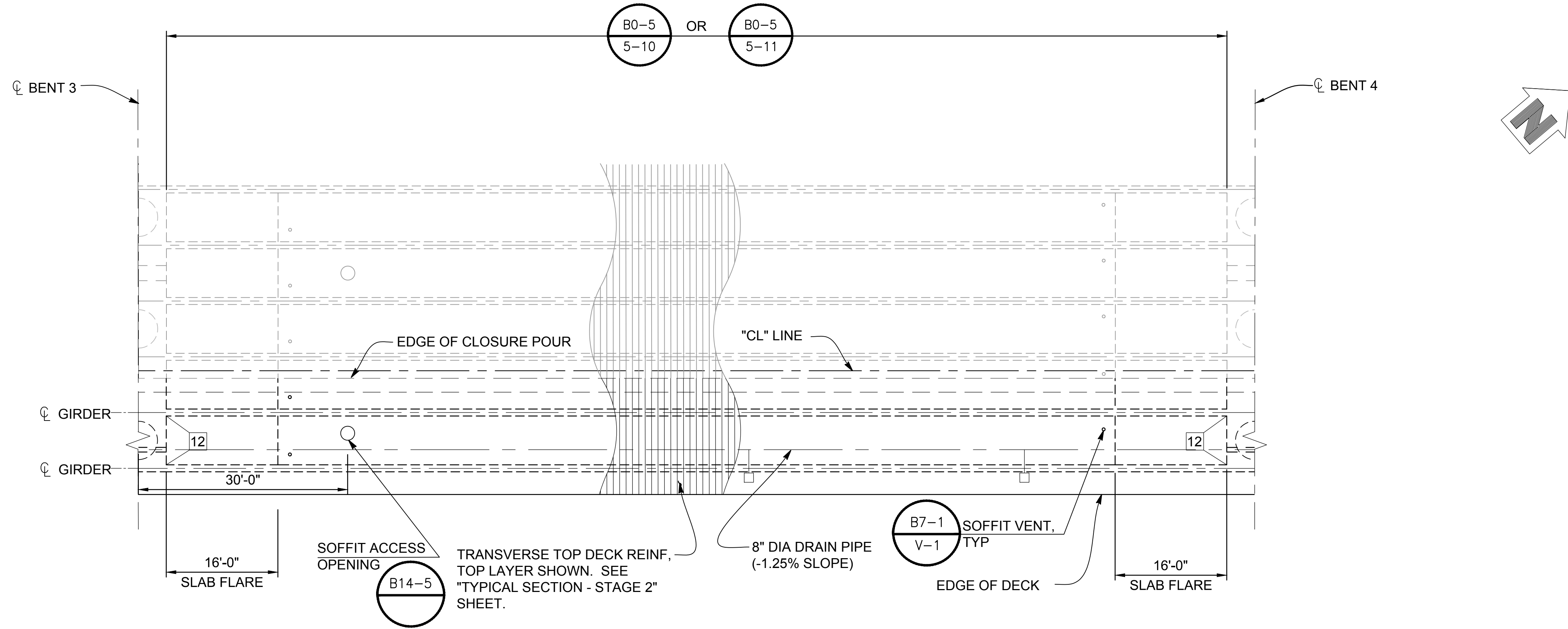
STANISLAUS COUNTY
DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND OPERATIONS DIVISION
1716 MORGAN ROAD - MODESTO, CA 95358



CROWS LANDING BRIDGE IMPROVEMENTS
GIRDER LAYOUT NO. 5

JOB NO. 226217-68
DATE: 6/24/20
DR BY: AG
CK BY: DS
SCALE: AS SHOWN

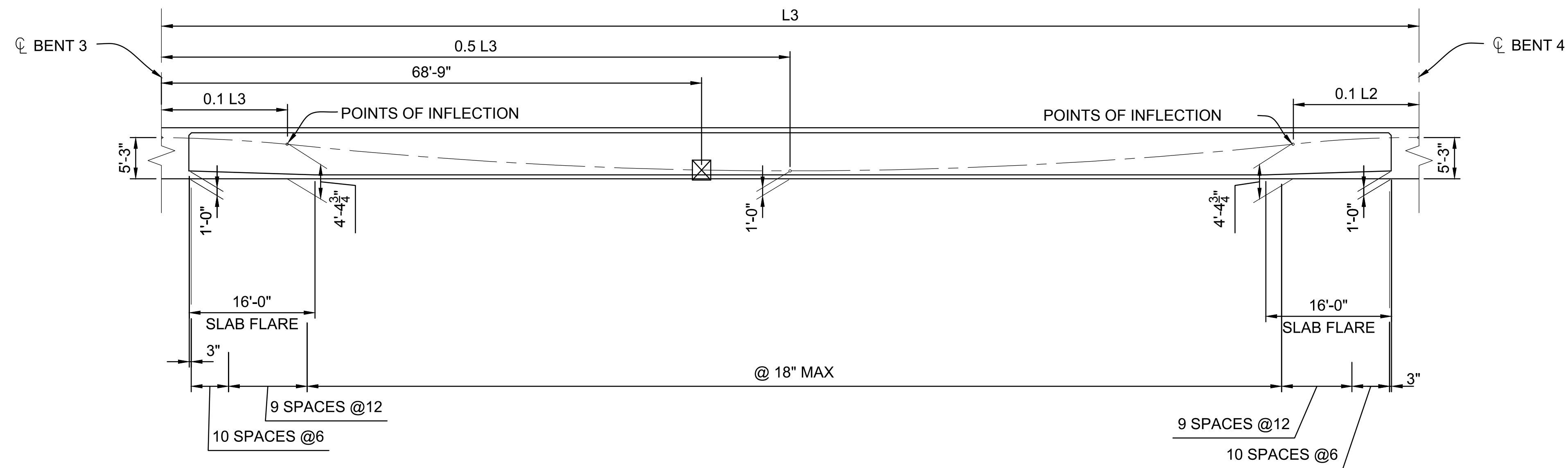
SHEET NUMBER
S-20
61 OF 70 SHEETS



GIRDER LAYOUT - STAGE 2
1"=10'-0"

- NOTES:**
- "L" IS GIRDER LENGTH MEASURED ALONG GIRDERS.
 - CABLE PATH IS PARABOLIC BETWEEN POINTS SHOWN.
 - CONCRETE BARRIER NOT SHOWN.

- LEGEND**
- INDICATES GIRDER STEM WIDTH
 - INDICATES POINTS OF NO MOVEMENT
 - DECK DRAIN TYPE D2. FOR LOCATION, SEE "GENERAL PLAN NO. 1" SHEET.

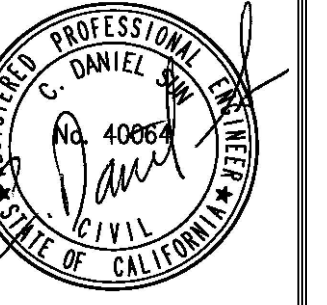


LONGITUDINAL SECTION - STAGE 2
1"=10'-0"

NOTE:
CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIALS OR ASSEMBLIES.

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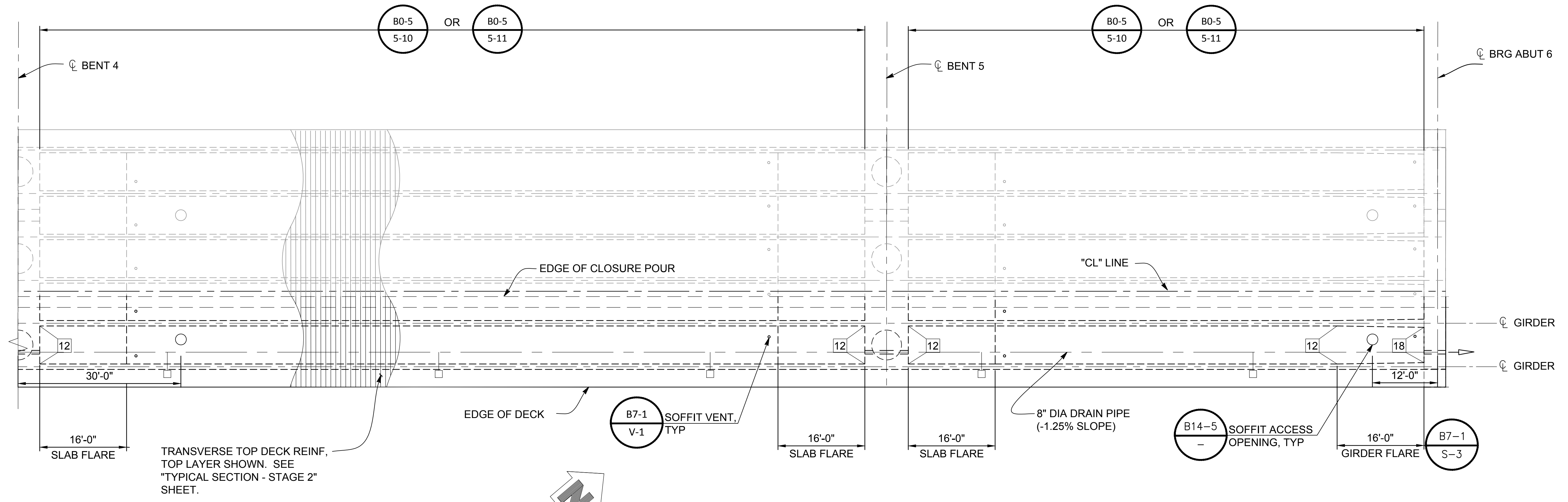
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ENGINEERING AND OPERATIONS DIVISION
1716 MORGAN ROAD - MODESTO, CA 95358



CROWS LANDING BRIDGE IMPROVEMENTS
GIRDER LAYOUT NO. 6

JOB NO. 226217-68
DATE: 6/24/20
DR BY: AG
CK BY: DS
SCALE: AS SHOWN

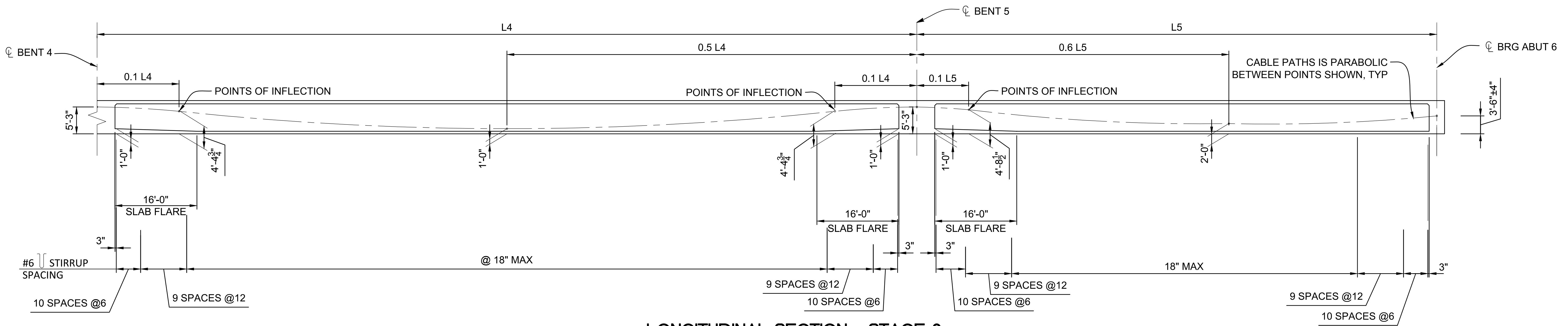
SHEET NUMBER
S-21
62 OF 70 SHEETS



GIRDER LAYOUT - STAGE 2
1"=10'-0"

- NOTES:**
- "L" IS GIRDER LENGTH MEASURED ALONG ϕ GIRDERS.
 - CABLE PATH IS PARABOLIC BETWEEN POINTS SHOWN.
 - CONCRETE BARRIER NOT SHOWN.

- LEGEND**
- INDICATES GIRDER STEM WIDTH
 - DECK DRAIN TYPE D2. FOR LOCATION, SEE "GENERAL PLAN NO. 1" SHEET.



LONGITUDINAL SECTION - STAGE 2
1"=10'-0"

NOTE:
CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIALS OR ASSEMBLIES.

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15092 AVENUE OF SCIENCE, SUITE 200
858.385.0600 TEL 858.385.0400 FAX
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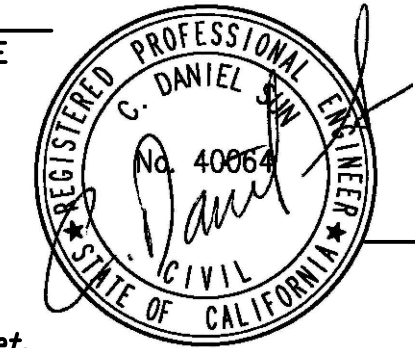
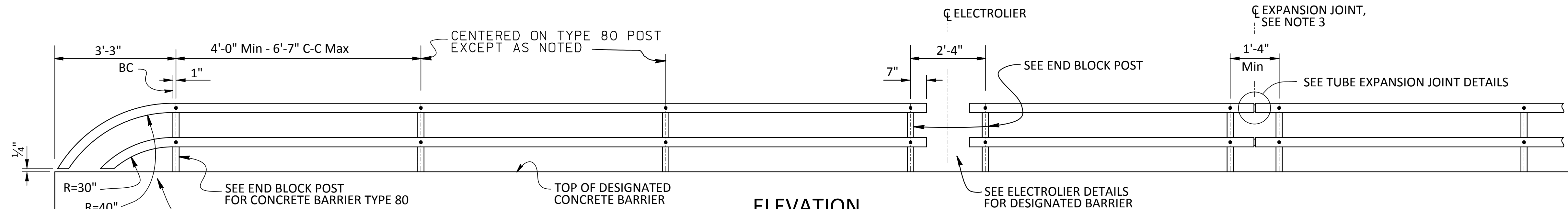


DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
X	X	X	X	X	X

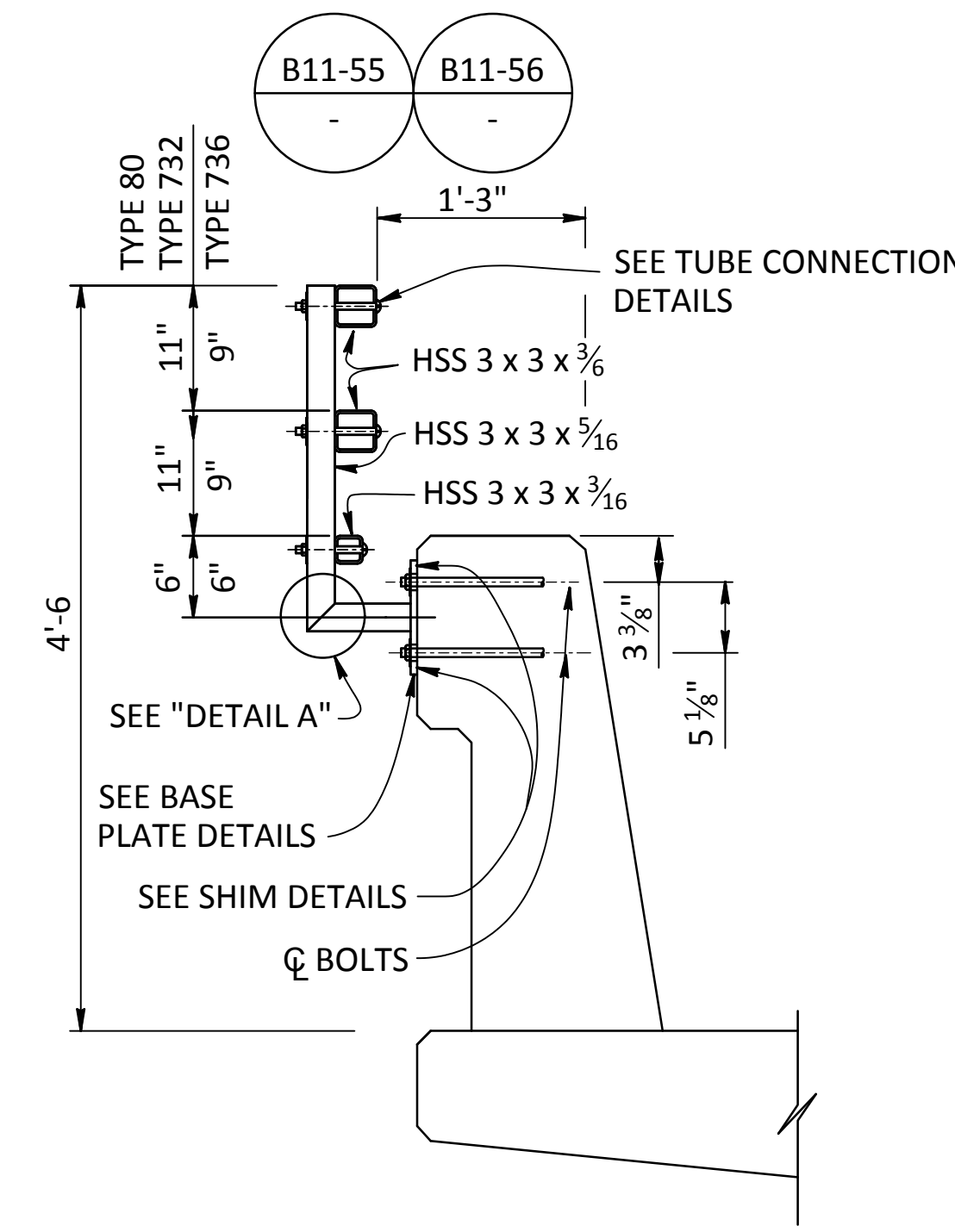
REGISTERED CIVIL ENGINEER _____ DATE _____

PLANS APPROVAL DATE _____

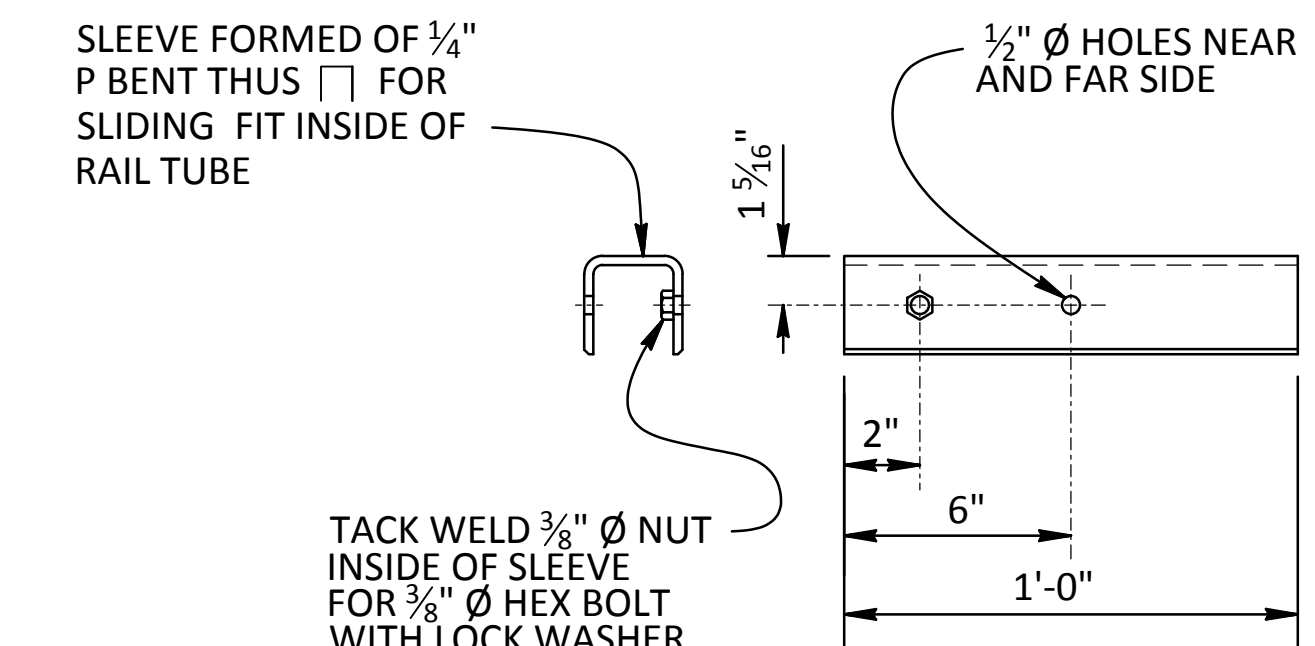
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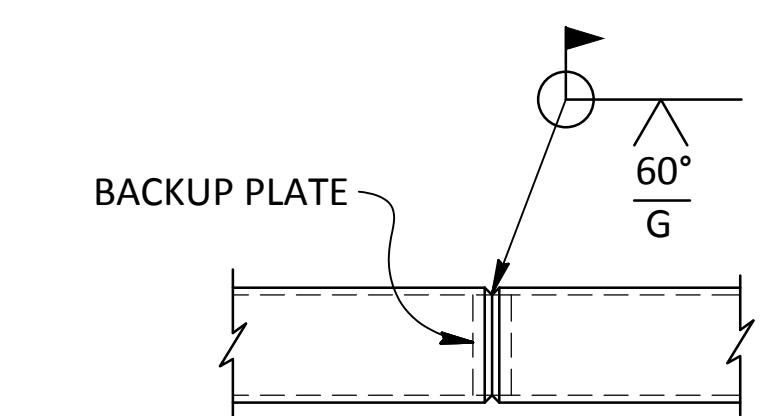
ELEVATION
NO SCALE



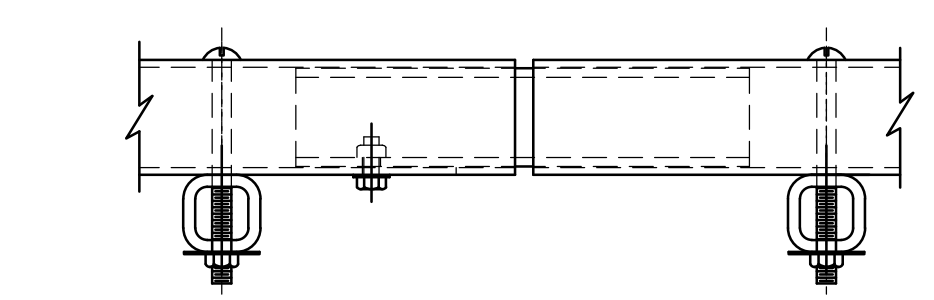
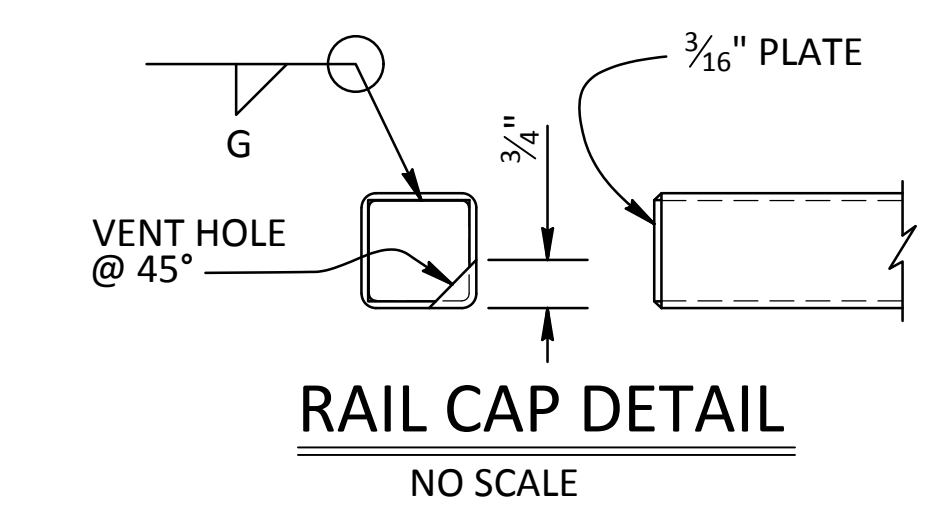
TYPE 732 OR 736
1" = 1'-0"



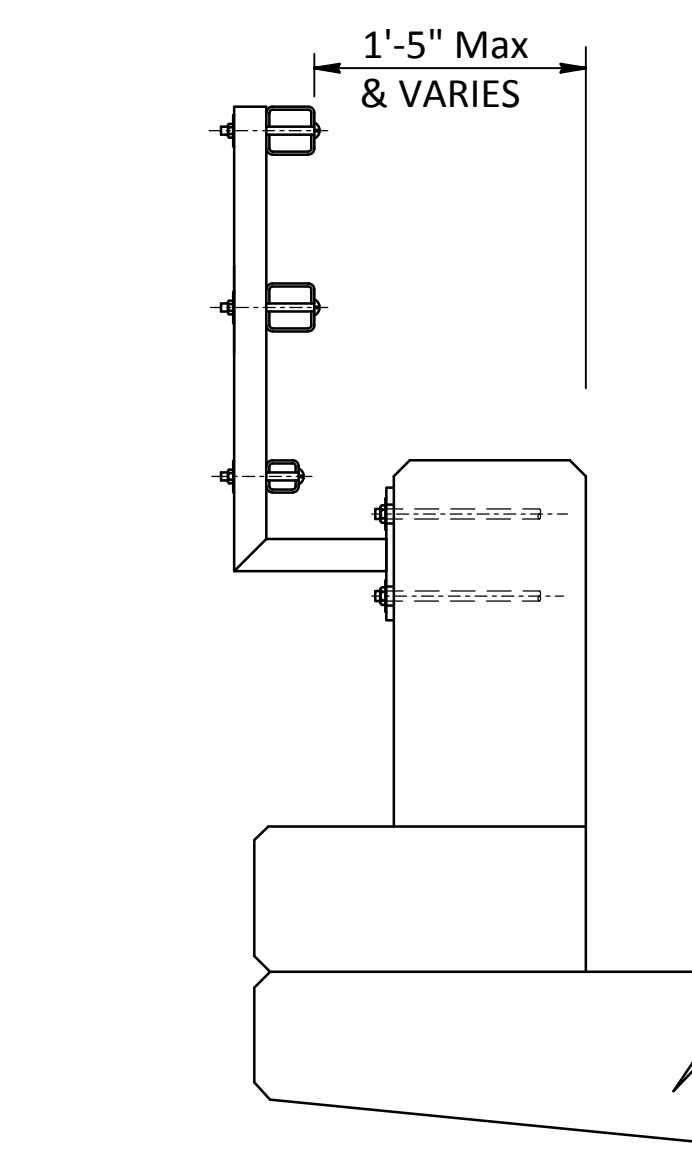
SLEEVE DETAIL
NO SCALE



WELDED SPLICE DETAIL
NO SCALE

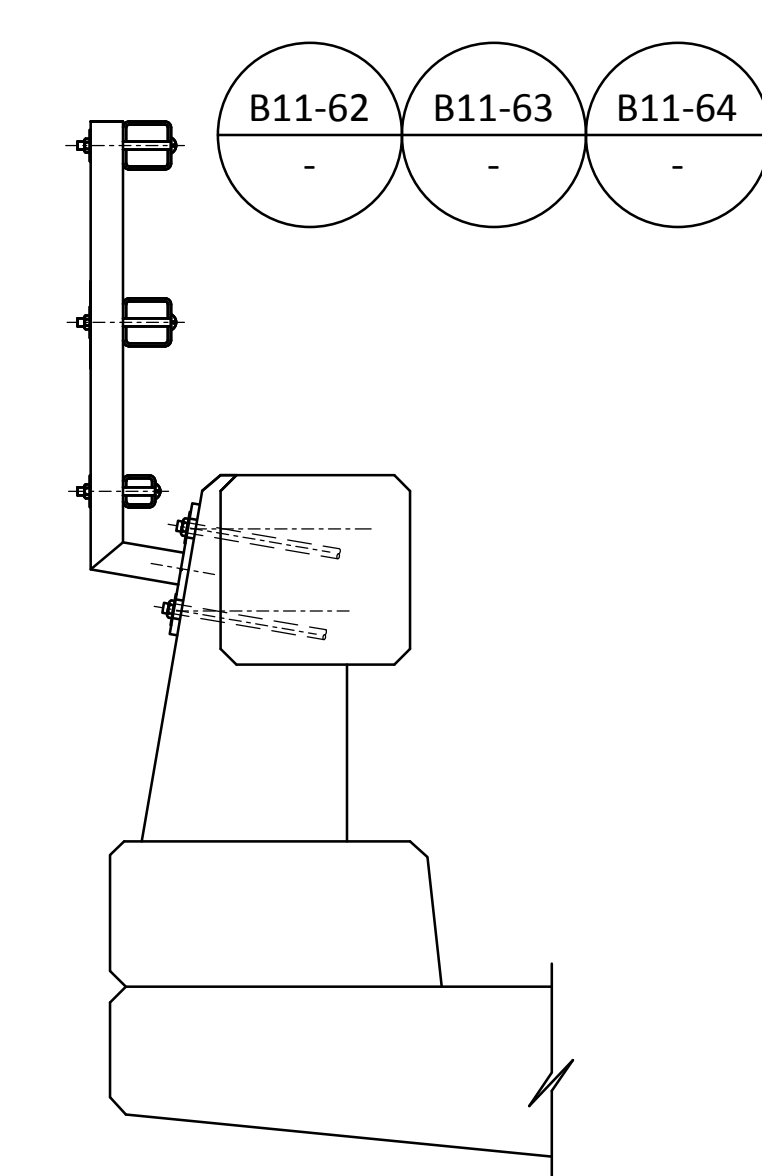


- NOTES:
1. Post must be normal to railing.
 2. Rail tubes must be shop bent or fabricated to fit horizontal curve when radius is less than 950'.
 3. Tube expansion joints must be located in the tubes spanning deck or wall joints. Increase joint width in tubes to match expansion joint width and increase sleeve length correspondingly.
 4. Top rail tube must be continuous over not less than two posts except a short post spacing is permitted near deck or wall joints, electroliers, or other rail discontinuities as noted.
 5. See Project Plans for limits of tubular bicycle railing.



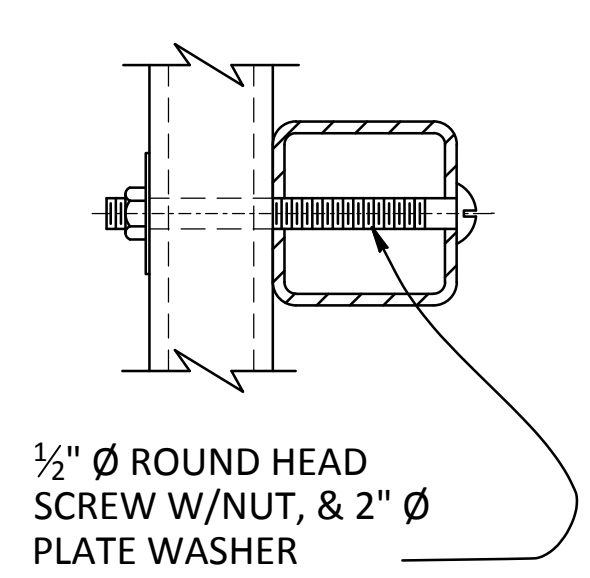
TYPE 80 END BLOCK POST
1" = 1'-0"

NOTE: For details not shown, see "TYPE 732 OR 736"

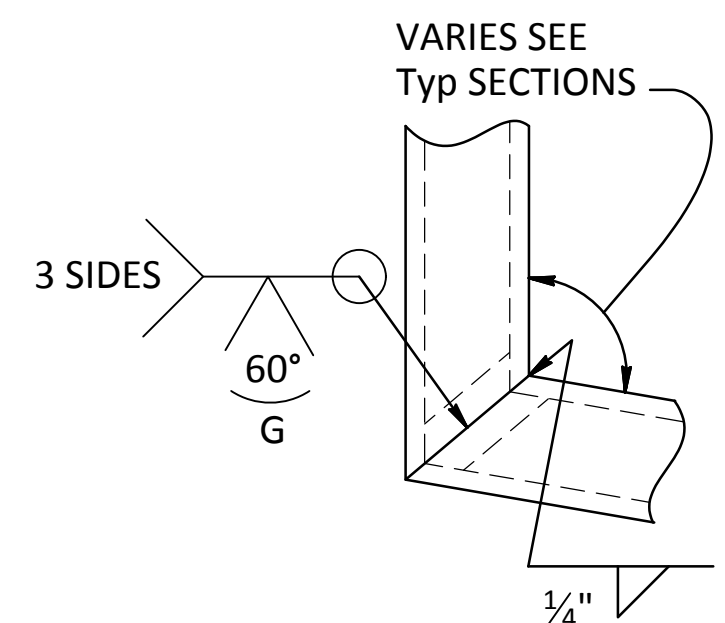


TYPE 80
1" = 1'-0"

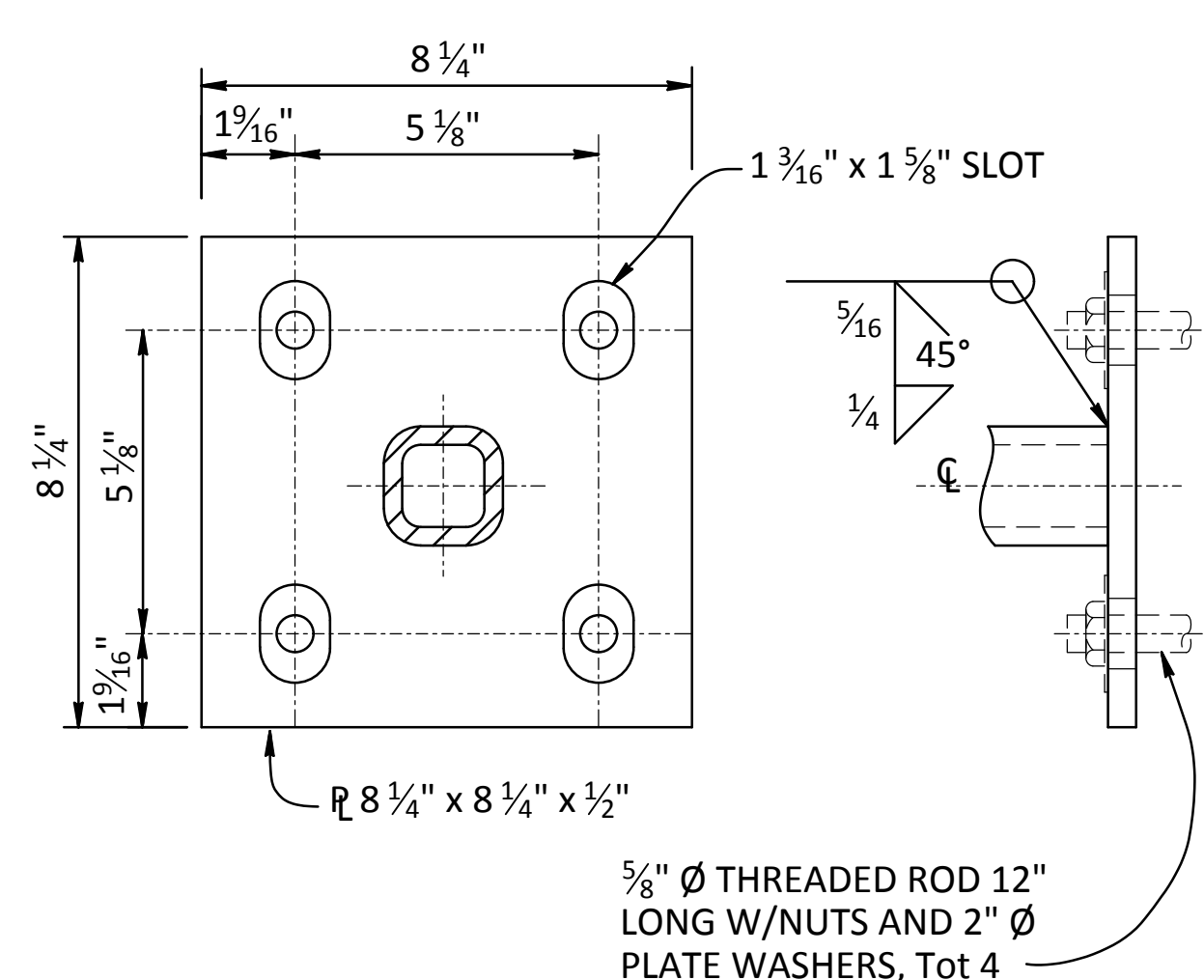
NOTE: For details not shown, see "TYPE 732 OR 736"



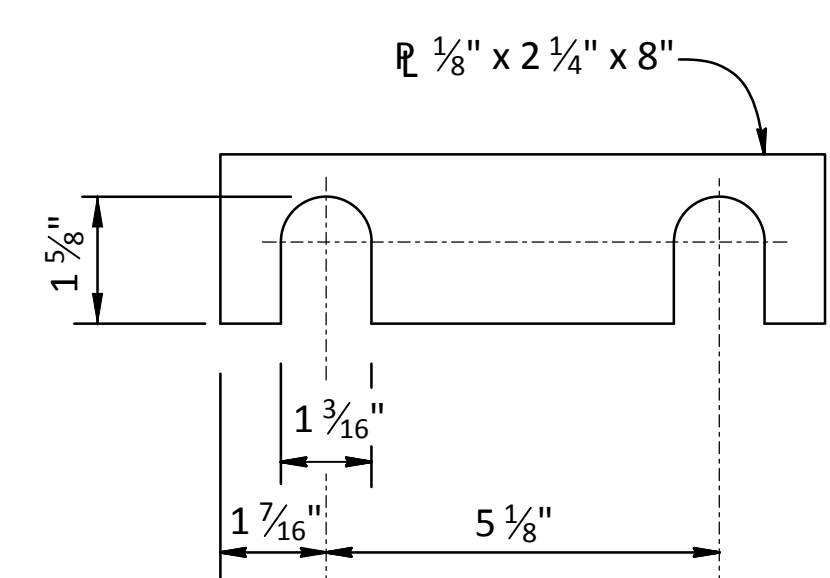
TUBE CONNECTION DETAIL
NO SCALE



DETAIL A
NO SCALE



BASE PLATE DETAIL
NO SCALE



SHIM DETAILS
NO SCALE

SPECIAL DETAILS

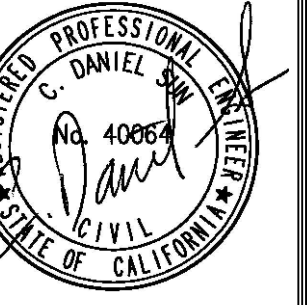
CROWS LANDING BRIDGE IMPROVEMENTS

REVISED STANDARD DRAWING	FILE NO. X816-035	APPROVAL DATE October 2014
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STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES	BRIDGE NO. X POST MILE X
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UNIT: X PROJECT NUMBER & PHASE: 226217-68 CONTRACT NO.: X	REVISION DATES	SHEET 64 OF 70
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DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 64 OF 70
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PREPARED UNDER THE DIRECTION OF:

NO.	REVISIONS	DATE	APPROVED
	DESCRIPTIONS		

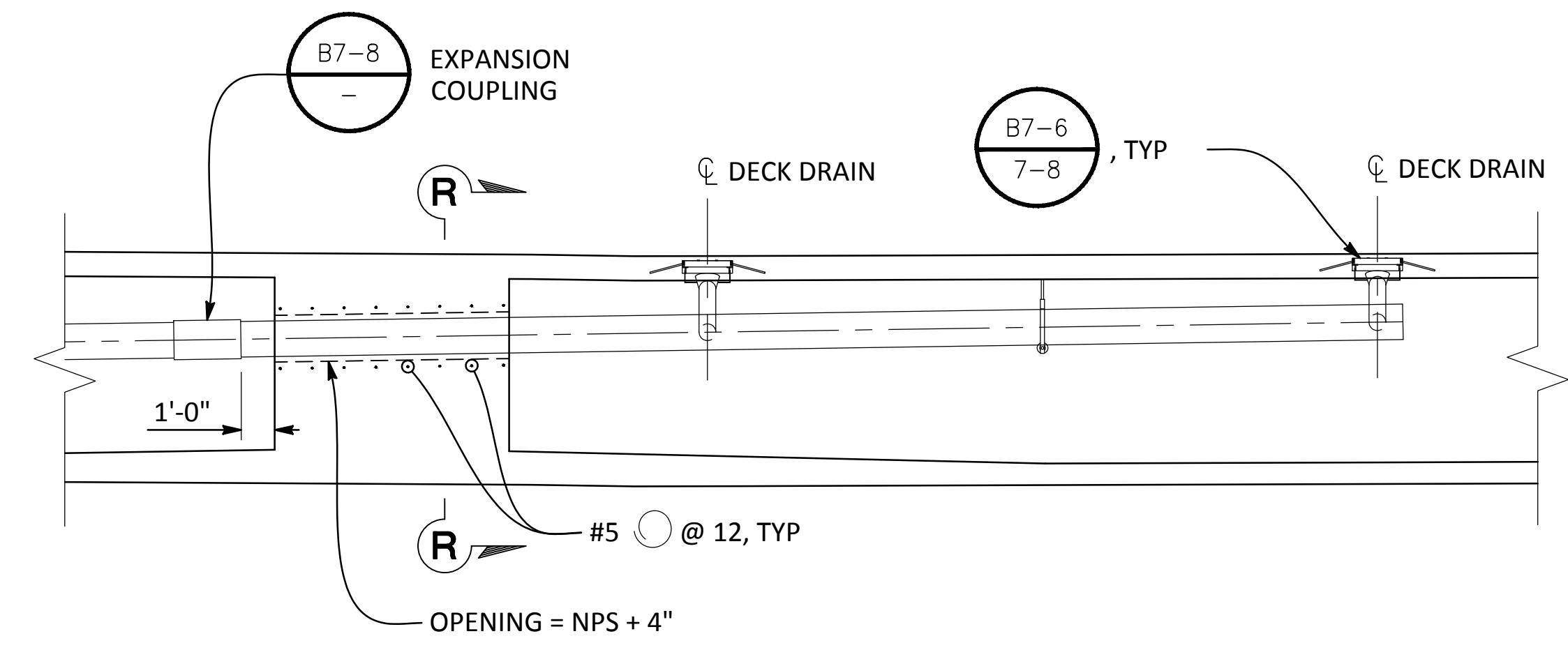
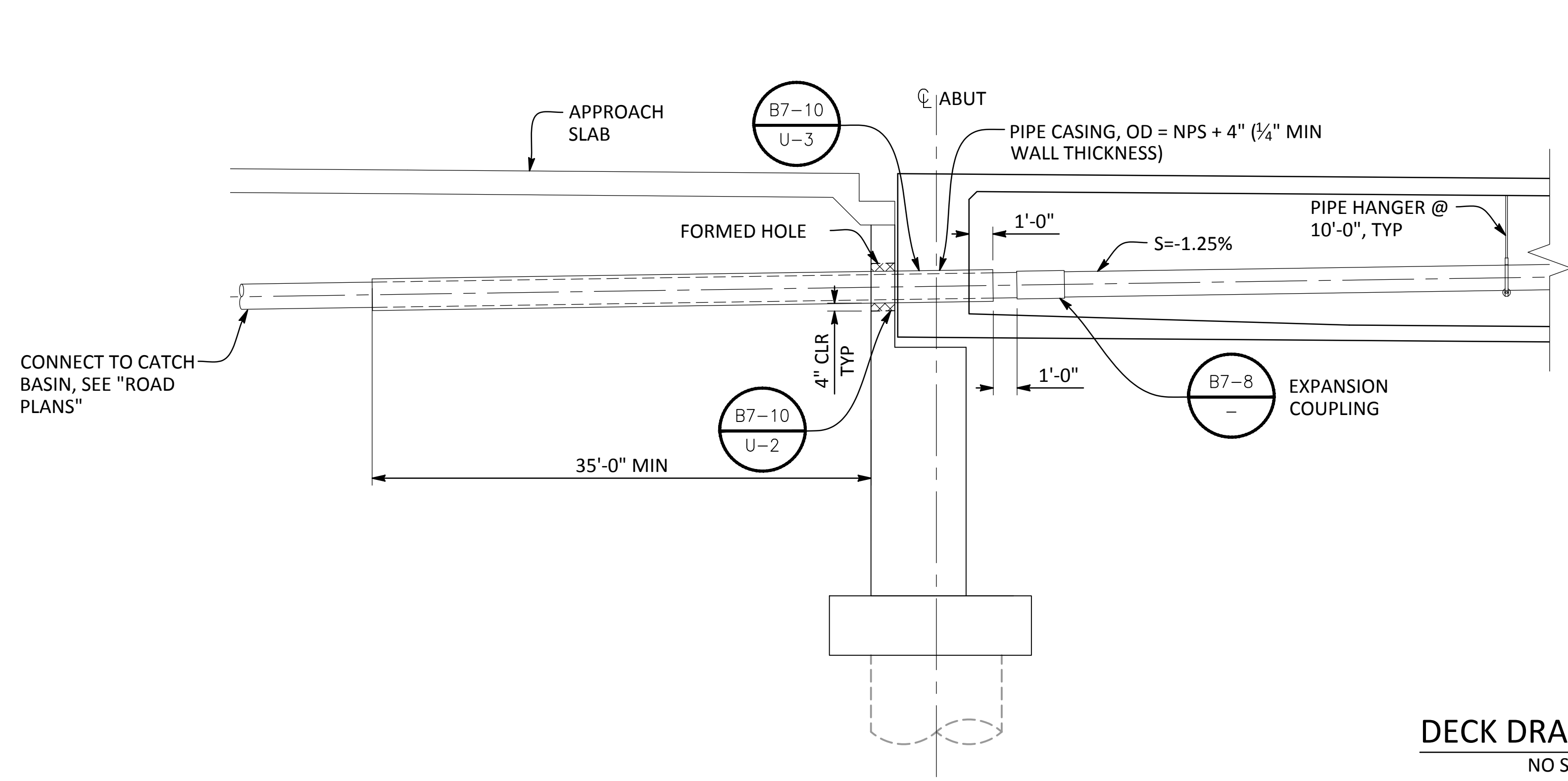
STANISLAUS COUNTY
 DEPARTMENT OF PUBLIC WORKS
 ENGINEERING AND OPERATIONS DIVISION
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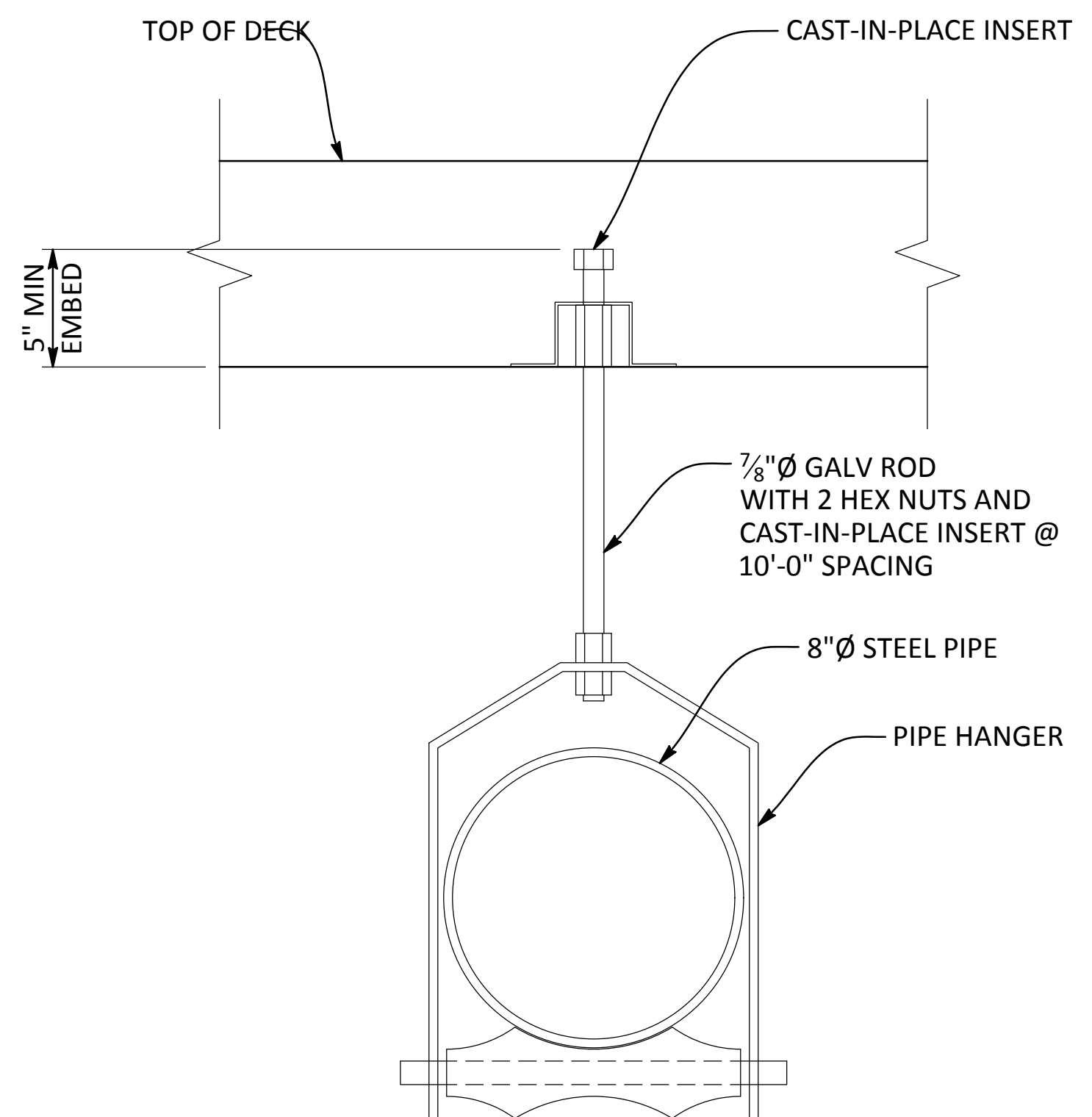
CROWS LANDING BRIDGE IMPROVEMENTS
 DECK DRAIN DETAILS

JOB NO. 226217-68
 DATE 6/24/20
 DR BY AG
 CK BY DS
 SCALE AS SHOWN

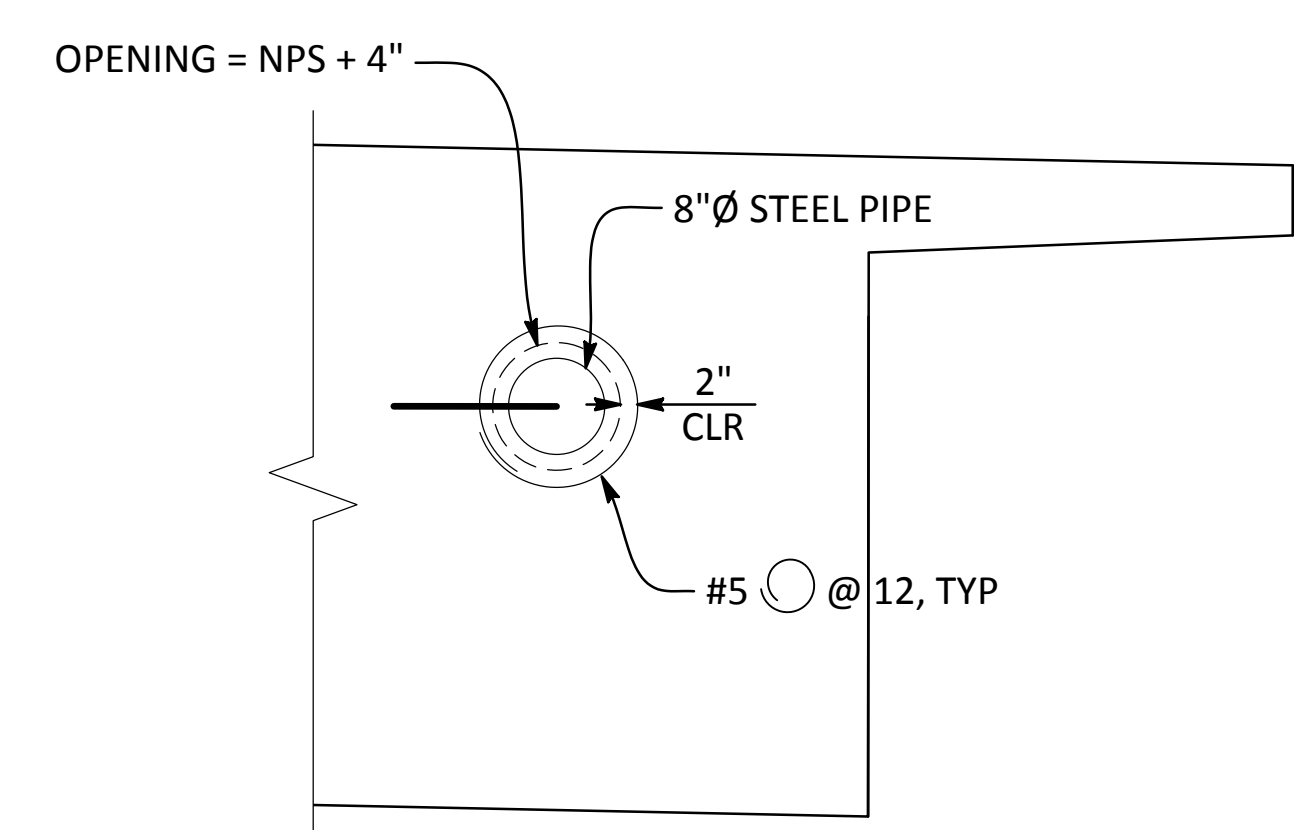
SHEET NUMBER
S-24
 65 OF 70 SHEETS



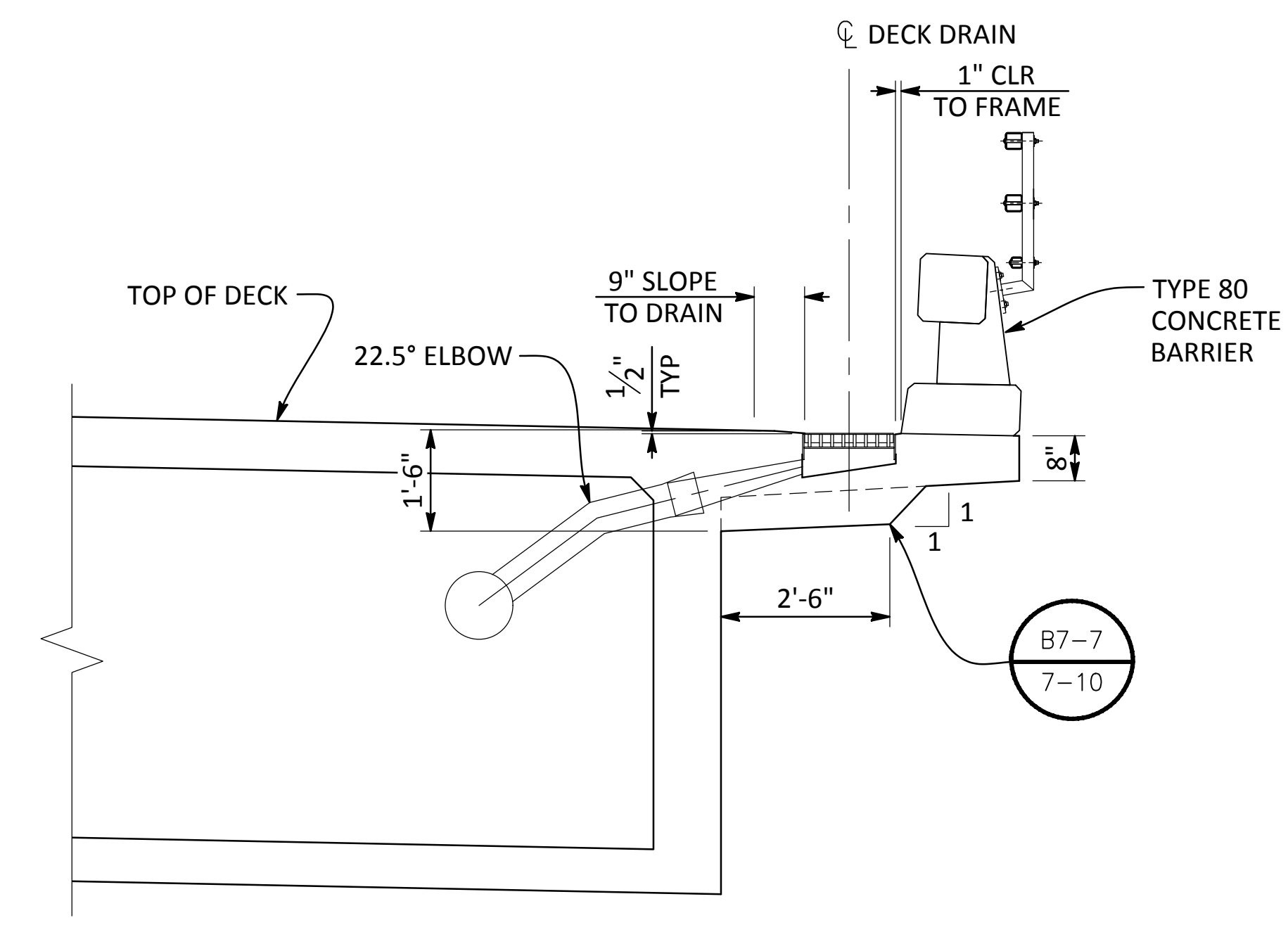
DECK DRAIN DETAILS
 NO SCALE



PIPE HANGER DETAILS
 NO SCALE



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

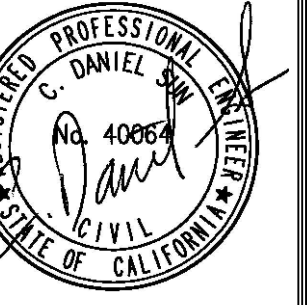


DECK DRAIN ELEVATION
 1/2" = 1'-0"

NOTE:
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DATE:	DATE APPROVED:
REVISIONS:	DATE:
DESCRIPTIONS:	DATE:
NO.	DATE:

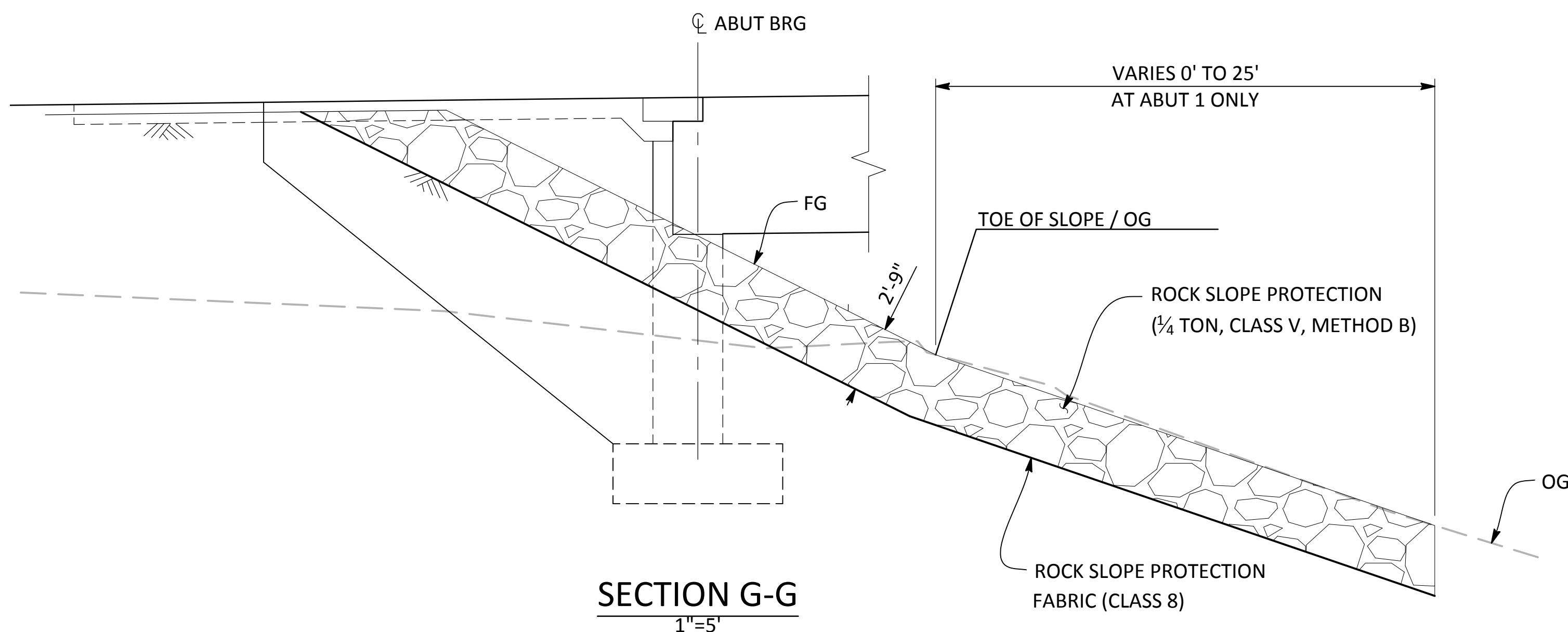
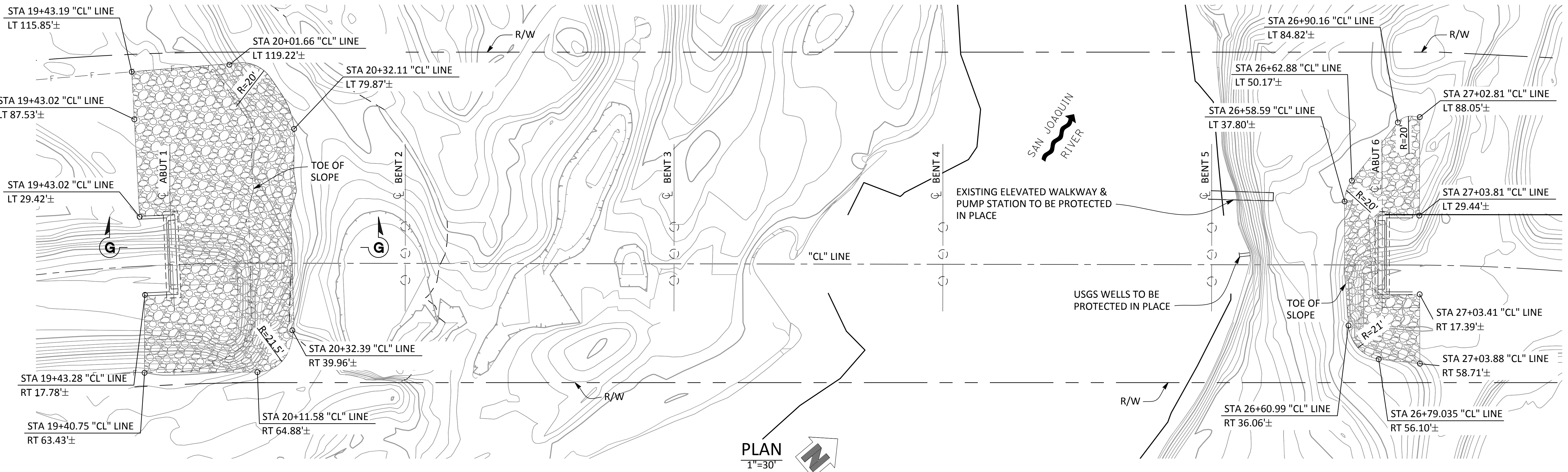
STANISLAUS COUNTY
DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND OPERATIONS DIVISION
1716 MORGAN ROAD - MODESTO, CA 95358



CROWS LANDING BRIDGE IMPROVEMENTS
ROCK SLOPE PROTECTION

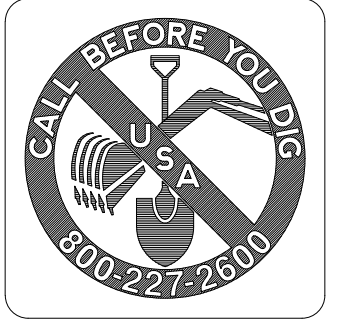
JOB NO. 226217-68
DATE 6/24/20
DR BY AG
CK BY DS
SCALE AS SHOWN

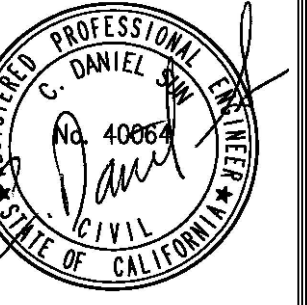
SHEET NUMBER
S-25
66 OF 70 SHEETS



NOTE:
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NO.	DESCRIPTIONS	DATE	APPROVED

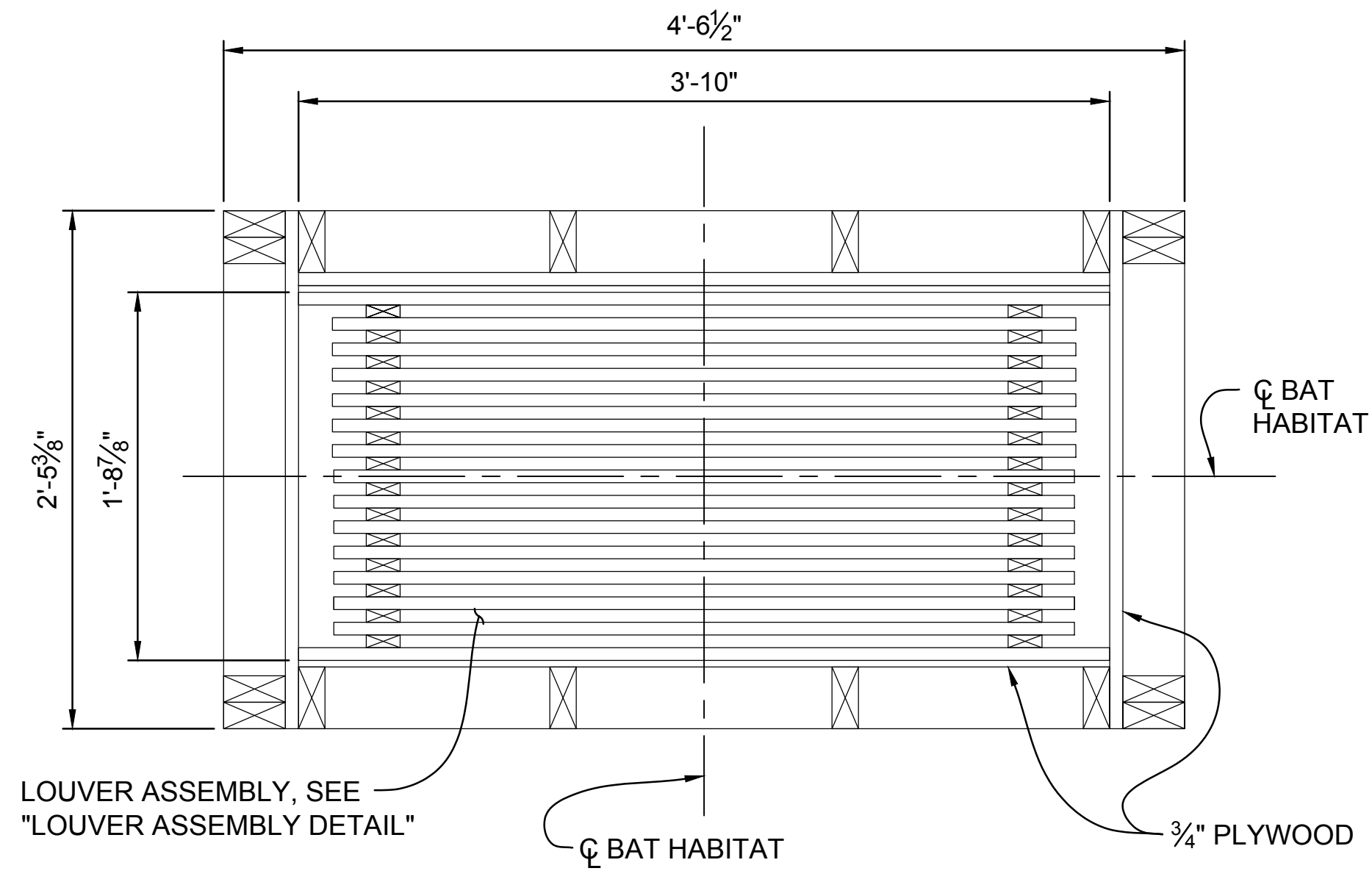
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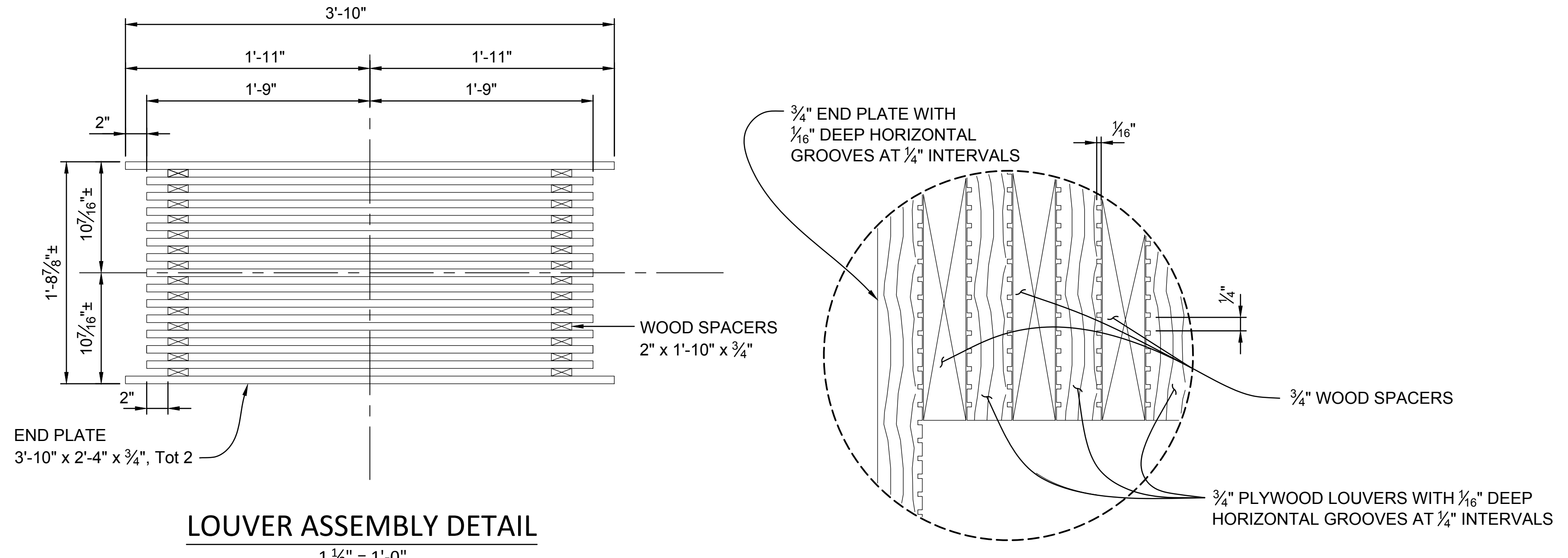
CROWS LANDING BRIDGE IMPROVEMENTS
 BAT HABITAT DETAILS No. 2

JOB NO. 226217-68
 DATE 6/24/20
 DR BY AG
 CK BY DS
 SCALE AS SHOWN

SHEET NUMBER
S-27
 68 OF 70 SHEETS

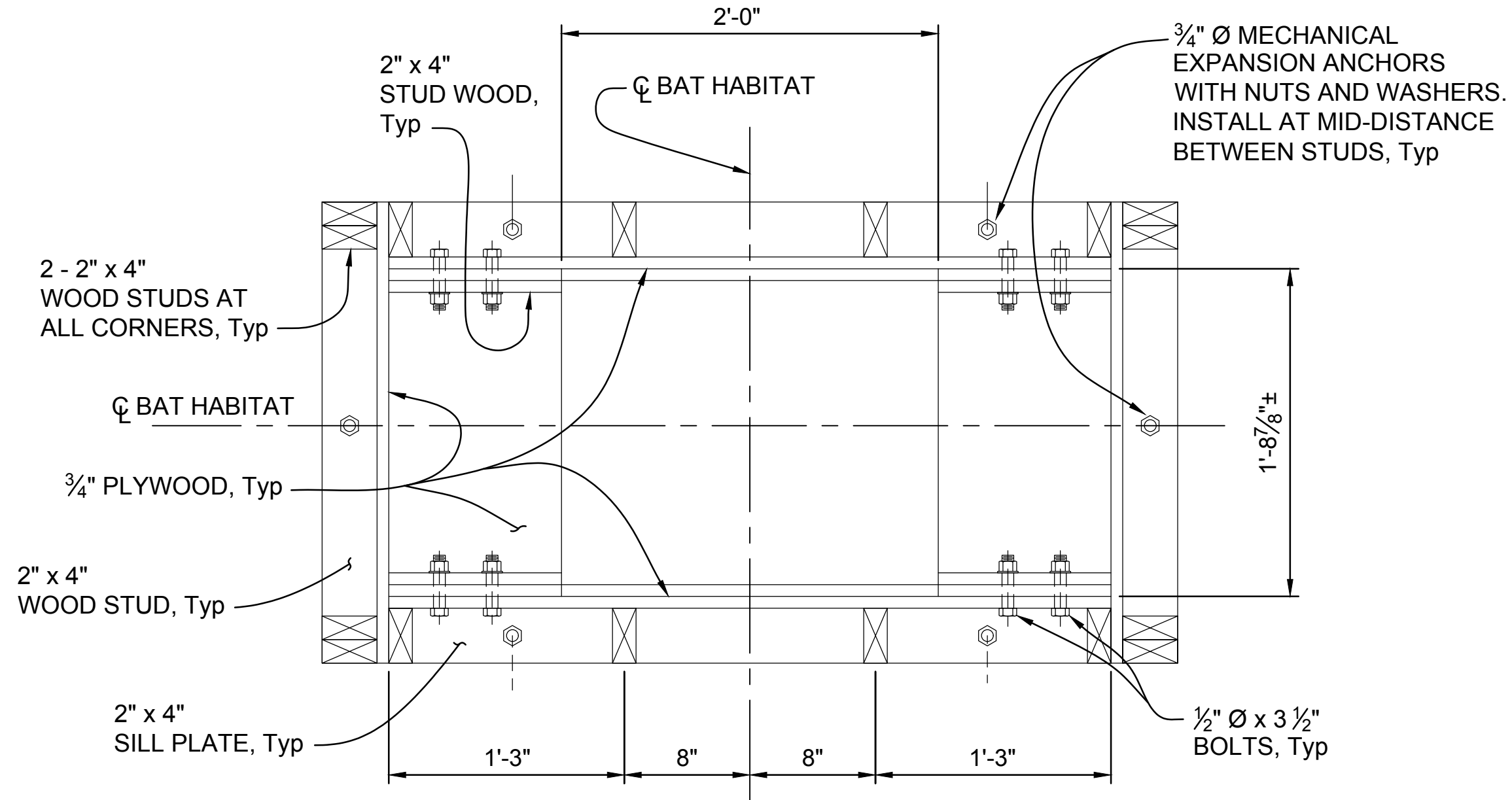


SECTION B-B
 1 1/2" = 1'-0"

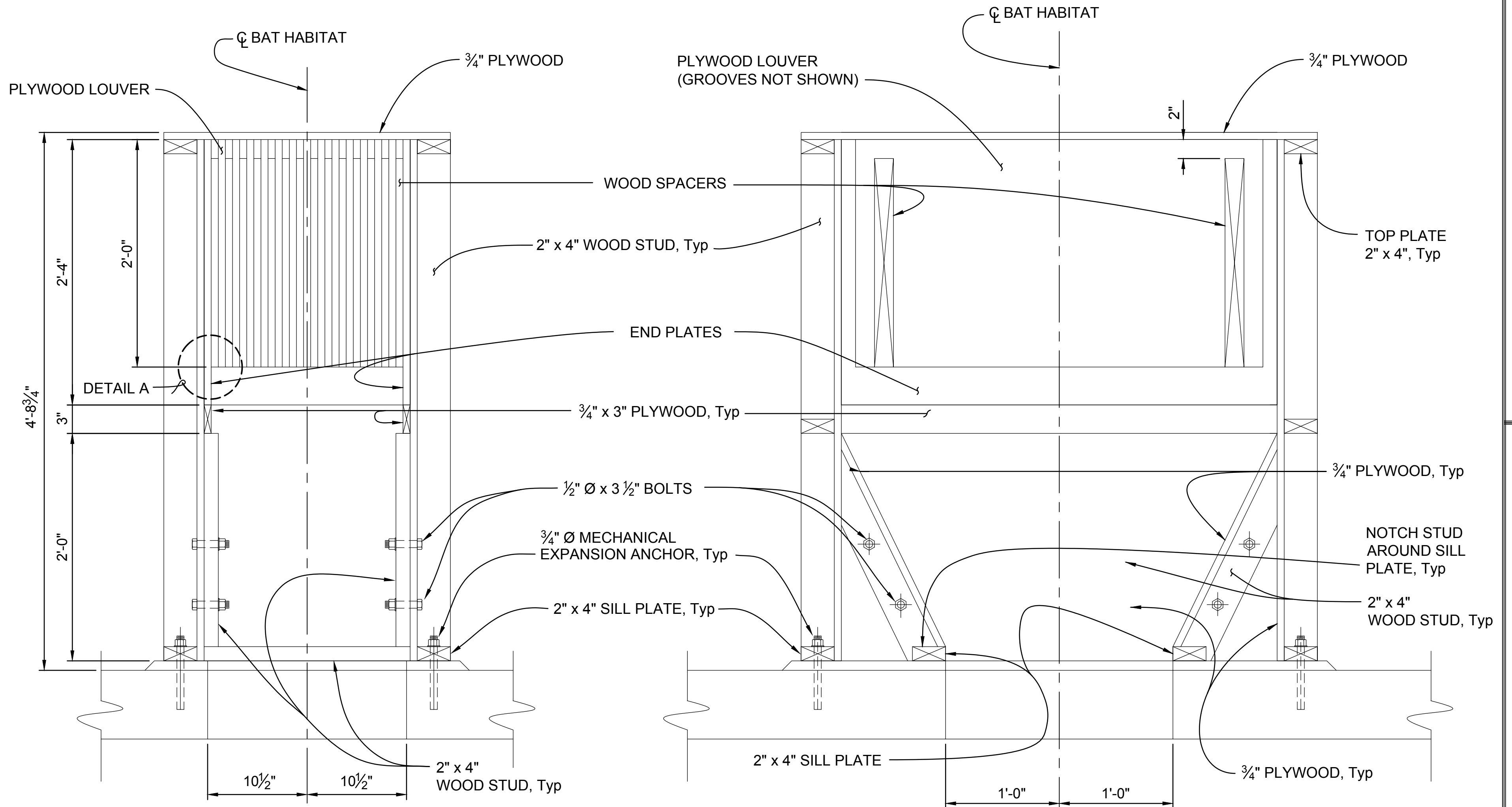


LOUVER ASSEMBLY DETAIL
 1 1/2" = 1'-0"

DETAIL A
 No Scale



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



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

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

NOTE:
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NO.	REVISIONS	DATE	APPROVED

DATE: NOV. 2018
 JOSEPH G. FRANZONE, P.E., GE

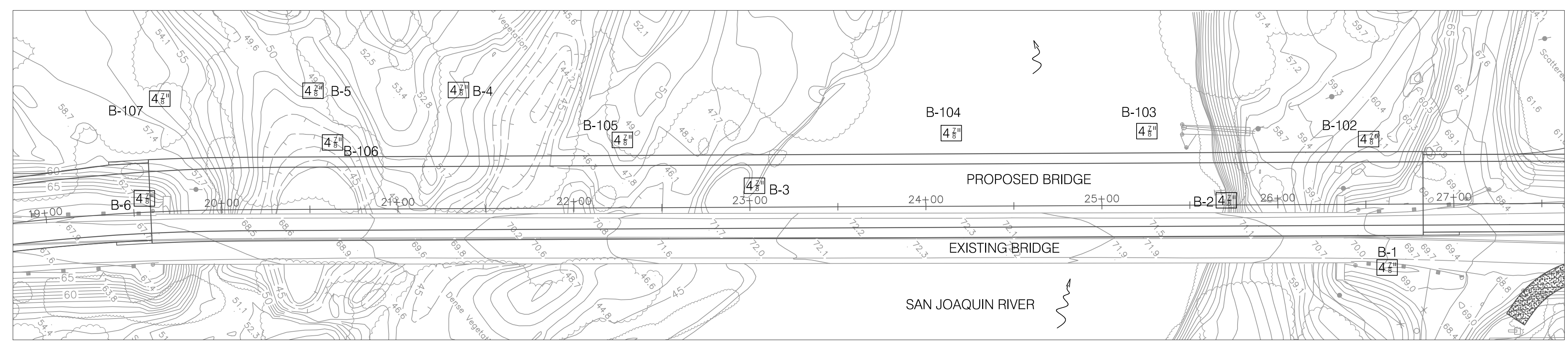
ENGINEERING AND OPERATIONS DIVISION
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 95358



CROWS LANDING BRIDGE IMPROVEMENTS
LOG OF TEST BORINGS (1 OF 2)

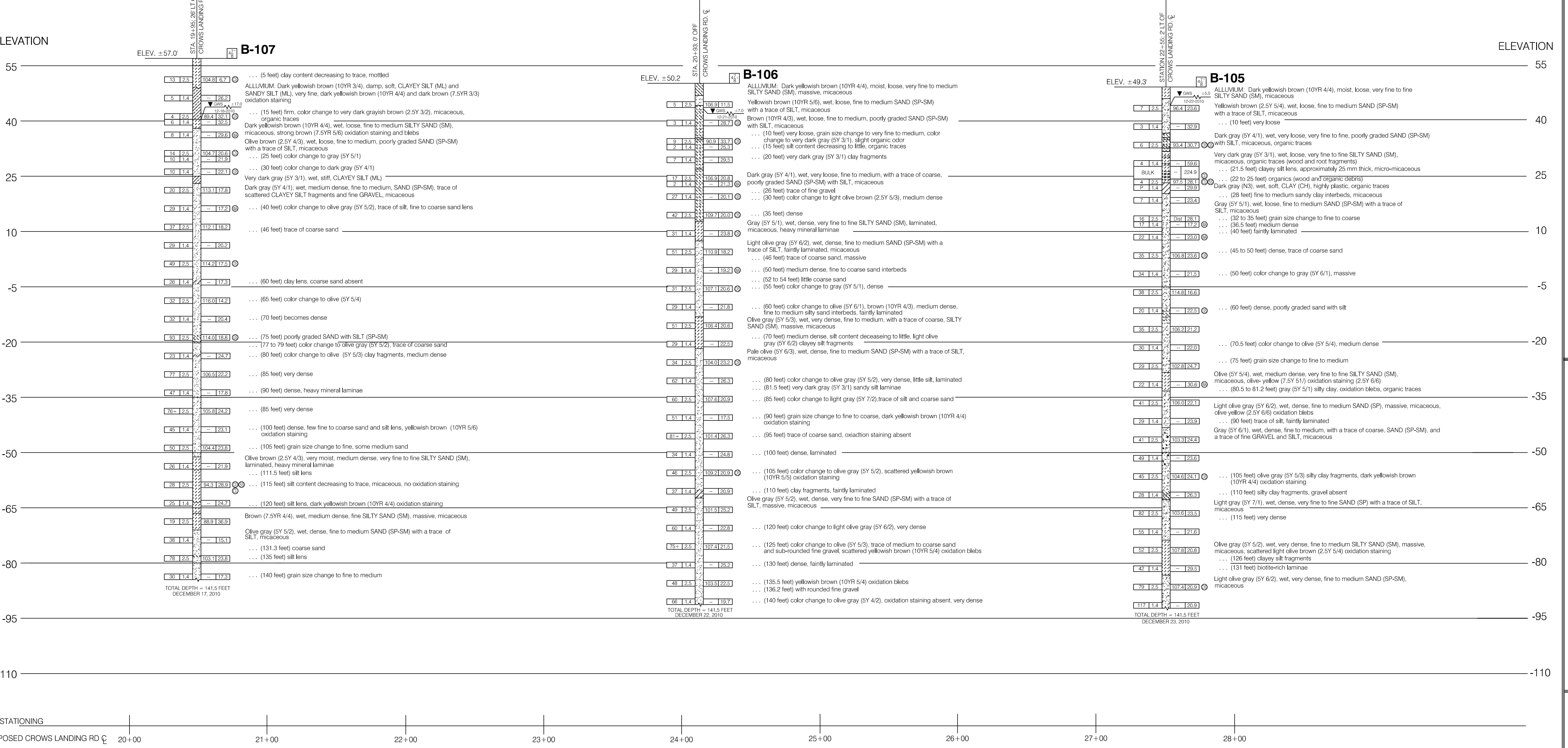
JOB NO. SAB044100
 DATE: NOV 2018
 DR BY: DLL
 CK BY: JGF
 SCALE: AS SHOWN

SHEET NUMBER
S-28
 69 OF 70 SHEETS



PLAN
 HORIZONTAL SCALE: 1"=40'

Borings B-1, B-2, B-3, B-4, B-5, and B-6 were advanced in a previous study by AGRA in 1997. See Log of Test Borings Sheets in Appendix A of Geotechnical Report.



PROFILE
 HORIZONTAL SCALE: 1"=40'
 VERTICAL SCALE: 1"=15'

NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.

Boring elevations obtained from Nolte topographic map dated 2010.

LEGEND OF BORING OPERATIONS

2-1/4" CONE PENETRATION BORING

ROTARY SAMPLE BORING (WET)

SAMPLE BORING (DRY)

2-1/4" CONE PENETRATION BORING

LEGEND OF EARTH MATERIALS

CONSISTENCY CLASSIFICATION FOR SOILS

Accord to the Standard Penetration Test (ASTM D-1586)

SPT N-Value (Blows/ft)	Consistency
0-4	Very Loose
5-10	Loose
11-30	Medium Dense
31-50	Dense
>50	Very Dense

NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.

LEGEND OF BORING OPERATIONS

2-1/4" CONE PENETRATION BORING

ROTARY SAMPLE BORING (WET)

SAMPLE BORING (DRY)

2-1/4" CONE PENETRATION BORING

LEGEND OF EARTH MATERIALS

CONSISTENCY CLASSIFICATION FOR SOILS

Accord to the Standard Penetration Test (ASTM D-1586)

SPT N-Value (Blows/ft)	Consistency
0-4	Very Loose
5-10	Loose
11-30	Medium Dense
31-50	Dense
>50	Very Dense

NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.



LEGEND OF BORING OPERATIONS

2-1/4" CORE PENETROMETER BORING (DRY)

Notes: No count recorded - Plunged
Diving rate in seconds - 2
McClernon-Terry air hammer at 115 psi or hammer (as noted)
Conformable material change (as noted)
Other lab tests

ROTARY SAMPLE BORING (WET)

Notes: No count recorded - Plunged
Diving rate in seconds - 2
McClernon-Terry air hammer at 115 psi or hammer (as noted)
Conformable material change (as noted)
Other lab tests

ROTOR PENE-TRATION BORING

Notes: No count recorded - Plunged
Diving rate in seconds - 2
McClernon-Terry air hammer at 115 psi or hammer (as noted)
Conformable material change (as noted)
Other lab tests

ELECTRIC CONE PENETROMETER

Notes: No count recorded - Plunged
Diving rate in seconds - 2
McClernon-Terry air hammer at 115 psi or hammer (as noted)
Conformable material change (as noted)
Other lab tests

LEGEND OF EARTH MATERIALS

GRAVEL SAND CLAY SILTY SAND SILTY CLAY

CLAYEY SILT PEAT and/or ORGANIC MATERIAL FILL MATERIAL

IGNEOUS ROCK SEDIMENTARY ROCK METAMORPHIC ROCK

GRAVEL SAND CLAY SILTY SAND SILTY CLAY

CLAYEY SILT PEAT and/or ORGANIC MATERIAL FILL MATERIAL

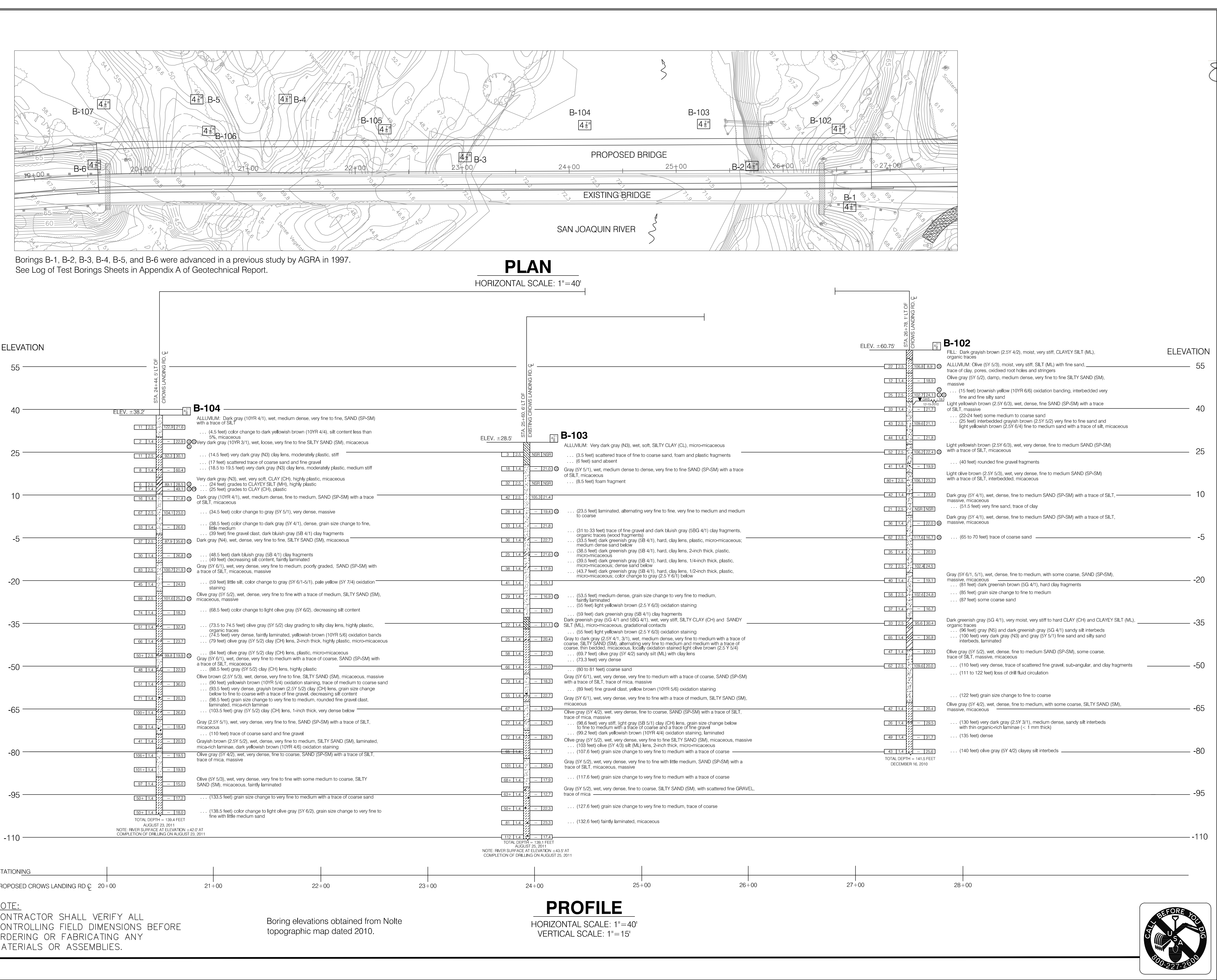
IGNEOUS ROCK SEDIMENTARY ROCK METAMORPHIC ROCK

CONSISTENCY CLASSIFICATION FOR SOILS

According to the Standard Penetration Test (ASTM D-1586)

SPT N-value (blows/ft)	Consistency
0-4	Very Soft
5-10	Soft
11-30	Medium Dense
31-50	Dense
51-100	Very Dense
>100	Hard

NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.



REGISTERED PROFESSIONAL ENGINEER
JOSEPH G. FRANZONI, P.E., G.E.
No. GE 21899
Exp. 12-31-19

PREPARED UNDER THE DIRECTION OF:
JOSEPH G. FRANZONI, P.E., G.E.

DATE: NOV. 2018

NO.	DESCRIPTIONS	DATE	APPROVED

ENGINEERING AND OPERATIONS DIVISION
1716 MORGAN ROAD - MODESTO, CA
95358

CROWS LANDING BRIDGE IMPROVEMENTS

LOG OF TEST BORINGS (2 OF 2)

JOB NO. SAR044100

DATE: NOV. 2018

DR BY: DLL

CK BY: JGF

SCALE: AS SHOWN

SHEET NUMBER

S-29

70 OF 70 SHEETS

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