

CALIFORNIA DEPARTMENT OF PARKS AND RECREATION  
ACQUISITION AND DEVELOPMENT DIVISION

SOUTH YUBA RIVER STATE PARK

HISTORIC COVERED BRIDGE REHABILITATION AND RESTORATION

(National Register of Historic Places: No. 71000168), (California Historic Landmark: No. 390), (Historic American Engineering Record: No. CA-41), (Historic American Building Survey: No. CA-1404)

CSFM # 01-29-11-0032



ACQUISITION & DEVELOPMENT DIVISION  
One Capitol Mall  
Sacramento, CA  
95814-3229



CALIFORNIA STATE FIRE MARSHAL - APPROVED  
Approval of this plan does not authorize or approve any omission of deviation from applicable regulations. Final approval is subject to field inspection. One set of approved plans shall be available on the project site at all times.  
Reviewed by \_\_\_\_\_ Date \_\_\_\_\_

DPR ACCESS COMPLIANCE REVIEW  
ACCESSIBILITY SECTION  
CERTIFICATION # 18-025  
Reviewed by *Shawn B. Smith, CSP-009* Date *1/14/18*

ACCESSIBILITY COMPLIANCE AND STATE FIRE MARSHAL SIGNED ORIGINALS ARE ON FILE AT THE DEPARTMENT OF PARKS AND RECREATION, NORTHERN SERVICE CENTER

DESIGNED: DESIGNER  
DRAWN: STAFF  
CHECKED: SUPERVISOR  
DATE: DECEMBER 2017

REVISIONS table with columns for revision number and date.

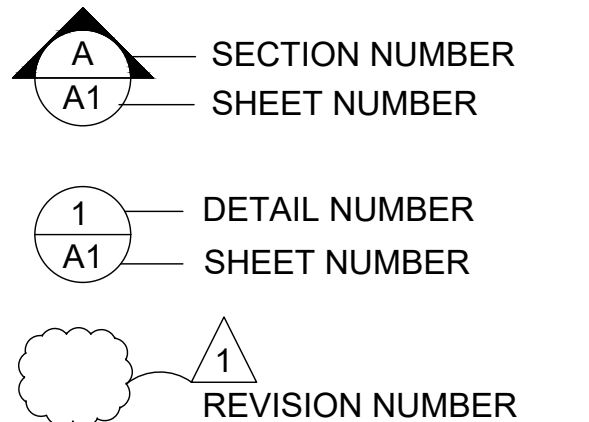
SOUTH YUBA RIVER STATE PARK  
HISTORIC COVERED BRIDGE REHABILITATION AND RESTORATION  
COVER SHEET

DRAWING NO. 30419.001

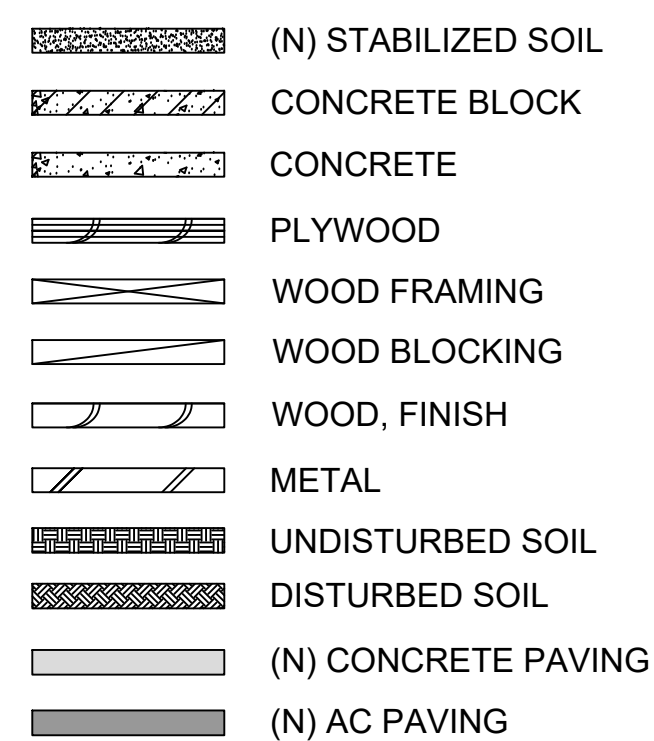
SHEET NO. G1.0

001 OF 030

- 1-ALL MATERIALS SHOWN OR NOTED ON THE PLANS ARE NEW UNLESS CALLED OUT OTHERWISE.
- 2-THE CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS SHOWN OR DIMENSIONED HERE. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE STATE REPRESENTATIVE FOR RESOLUTION BEFORE PROCEEDING WITH THAT PORTION OF THE WORK.
- 3-ALL WORK SHALL COMPLY WITH THE CURRENT EDITION OF THE FOLLOWING LISTED CODES, AND ALL OTHERS HAVING JURISDICTION OVER THE WORK.  
TITLE 19, CCR, PUBLIC SAFETY, SFM REGULATIONS.  
2016 CA ADMINISTRATIVE CODE TITLE 24, PT 1.  
2016 CA BUILDING CODE (CBC) TITLE 24, PT 2.  
2016 CA ELECTRICAL CODE (CEC) TITLE 24, PT 3.  
2016 CA MECHANICAL CODE (CMC) TITLE 24, PT 4  
2016 CA PLUMBING CODE (CPC) TITLE 24, PT 5.  
2016 CA ENERGY CODE CCR TITLE 24, PT 6.  
2016 CA GREEN BUILDING STANDARDS TITLE 24, PT 11.  
2016 CA REFERENCED STANDARDS TITLE 24, PT 12.  
2016 CA BUILDING STANDARDS ADMINISTRATIVE CODE; CCR TITLE 19, PUBLIC SAFETY: DIVISION 1. STATE FIRE MARSHAL; AND CCR TITLE 24 ADA REQUIREMENTS.  
2010 ADA STANDARD FOR ACCESSIBLE DESIGN.  
THE SECRETARY OF THE INTERIOR'S STANDARDS FOR THE TREATMENT OF HISTORIC PROPERTIES.
- 4-CONDUCT ALL WORK IN ACCORDANCE WITH THE LATEST SAFETY RULES AND REGULATIONS OF ALL AUTHORITIES AND AGENCIES HAVING JURISDICTION OVER THE WORK.
- 5-ALL WORK SHALL BE IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS. WHERE DETAILED INFORMATION OR CLARIFICATION IS REQUIRED, THE MATTER SHALL BE REFERRED TO THE STATE REPRESENTATIVE FOR WRITTEN RESOLUTION.
- 6-THE CONTRACTOR SHALL NOT SCALE THE DRAWINGS, BUT SHALL RELY ONLY ON THE WRITTEN DIMENSIONS GIVEN. IF A DISCREPANCY OCCURS OR NO DIMENSION IS GIVEN, THE CONTRACTOR SHALL NOTIFY THE STATE REPRESENTATIVE FOR WRITTEN CLARIFICATION BEFORE PROCEEDING WITH THAT PORTION OF THE WORK.
- 7-THE CONTRACTOR SHALL FIELD VERIFY DIMENSIONS AND EXISTING CONDITIONS AT THE SITE AND SHALL REPORT ANY DISCREPANCIES IN WRITING TO THE STATE REPRESENTATIVE PRIOR TO SUBMITTALS
- 8-ALL DIMENSIONS ARE GIVEN FROM THE FACE OF CONCRETE, CONCRETE MASONRY UNITS, STRUCTURAL STEEL, STUD OR CENTERLINE OF PARTITION UNLESS OTHERWISE NOTED



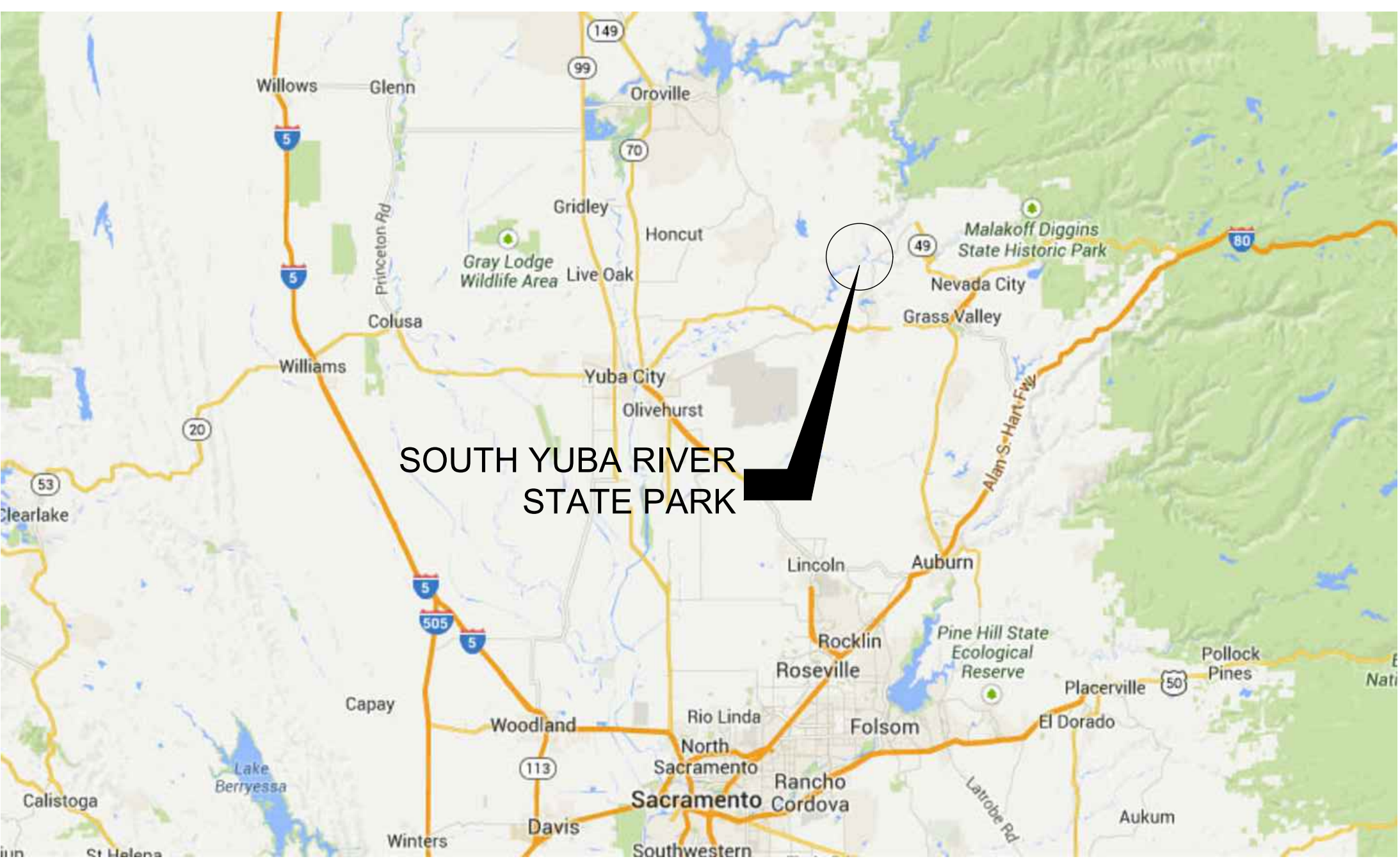
SYMBOLS LEGEND



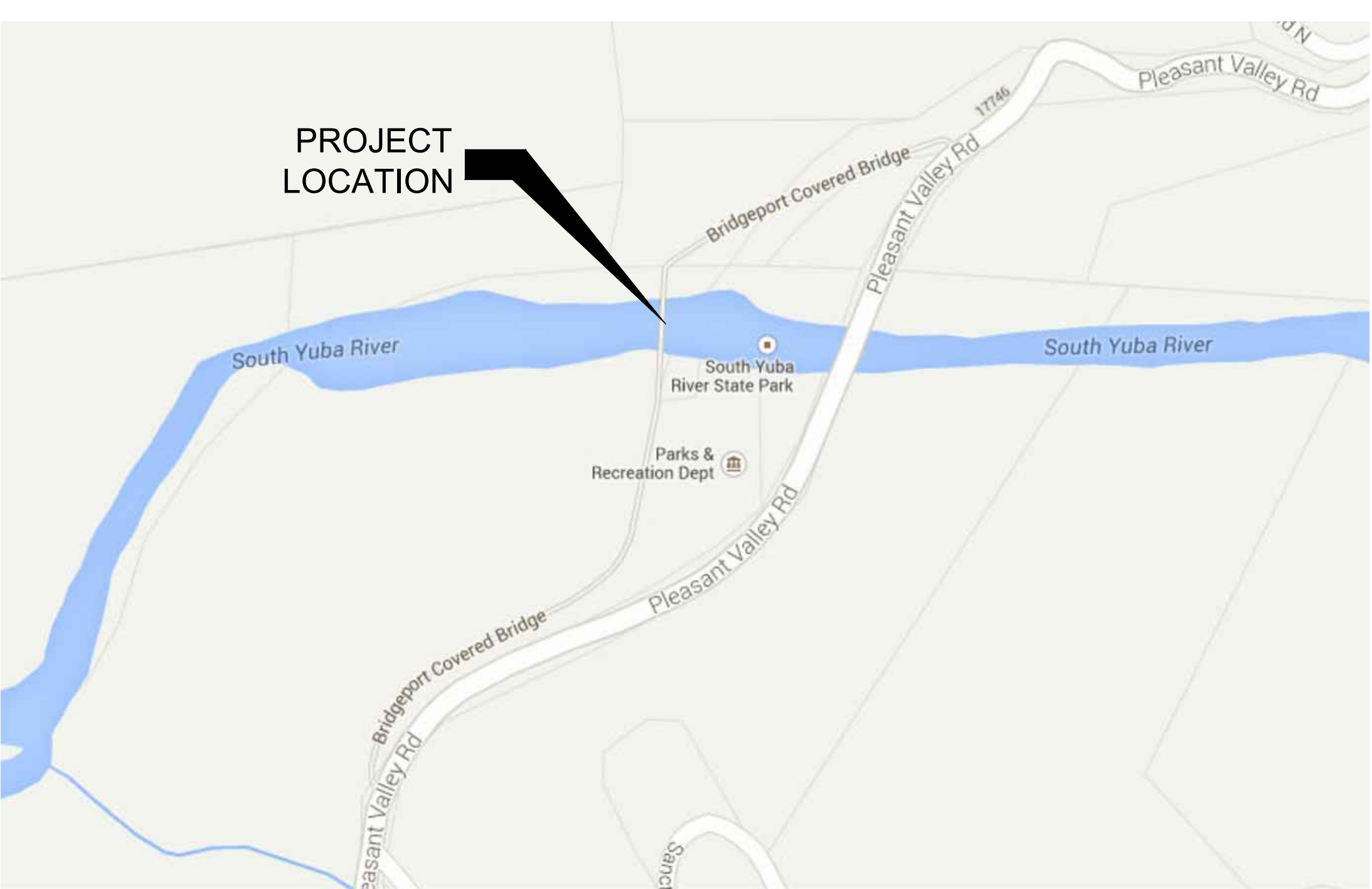
MATERIAL LEGEND

REPAIR, RESTORE AND REHABILITATE, TO ITS ORIGINAL USE THE 208 FEET, SINGLE SPAN, HISTORIC TRUSS/ARCH, AND COVERED BRIDGE. WORK WILL INCLUDE REPLACING THE EXISTING TEMPORARY, NONE-HISTORIC SUPPORTS WITH PERMANENT BRIDGE MEMBERS AND SUPPORTS DESIGNED TO BE COMPATIBLE AND REPRESENTATIVE OF THE ORIGINAL DESIGN AND APPEARANCE.

SCOPE OF WORK



VICINITY MAP



LOCATION MAP

- G1.0 COVER SHEET
- G2.0 ABBREVIATIONS
- S0.01 GENERAL NOTES
- S0.02 GENERAL NOTES
- S0.03 GENERAL NOTES
- S0.04 TYPICAL DETAILS
- S1.01 SHORING PLAN
- S1.02 DEMOLITION PLAN
- S2.01 BRIDGE FOUNDATION PLAN
- S2.02 SOUTH BRIDGE ABUTMENT PLAN
- S2.03 NORTH BRIDGE ABUTMENT PLAN
- S2.04 BRIDGE FLOOR DECK & TOP CORD BRACING PLAN
- S2.05 ROOF FRAMING PLAN
- S3.01 SECTIONS
- S3.02 SECTIONS
- S3.03 SECTIONS
- S4.01 TRUSS ELEVATIONS
- S4.02 TRUSS REPAIR ELEVATIONS
- S5.01 DETAILS
- S5.02 DETAILS
- S5.03 DETAILS
- S5.04 DETAILS
- C1 EXISTING CONDITIONS & DEMO PLAN
- C2 GRADING PLAN
- C3 SITE PLAN
- C4 DETAILS
- A2.0 FLOOR DECK PLAN - ARCHITECTURAL
- A3.0 ROOF PLAN SECTION AND ELEVATIONS
- A4.0 ARCHITECTURAL DETAILS
- A5.0 ARCHITECTURAL DETAILS

SHEET INDEX



For field inspections, contact:  
Deputy *Paul Goodrich* at 916-445-9930  
to schedule appointments

APPROVAL

GENERAL NOTES

- 1. THIS IS A REGISTERED HISTORICAL PLACE AND STRUCTURE.
- 2. OCCUPANCY CLASSIFICATION AND USE U
- 3. BUILDING CONSTRUCTION TYPE V-B
- 4. NUMBER OF STORIES 1
- 5. ACTUAL BUILDING HEIGHT 28'6"
- 6. BUILDING AREA IN SQUARE FEET 2470
- 7. AREA OF PROJECT IN SQUARE FEET NO CHANGE
- 8. ALLOWABLE AREA PER C.B.C. 5500
- 9. FIRE ALARM NO  
TYPE: (MANUAL, AUTOMATIC, ETC)
- 10. OTHER FIRE PROTECTION SYSTEMS, IF ANY HYDRANT
- 11. SMOKE CONTROL SYSTEM NO
- 12. OCCUPANT LOAD (Posted based on struct capacity) 50
- 13. YEAR BUILDING WAS CONSTRUCTED 1862
- 14. IN A HIGH FIRE HAZARD SEVERITY ZONE? YES

BUILDING CODE REVIEW

&	AND	EQ	EQUAL	PI	POINT OF INTERSECTION
(E)	EXISTING	EQUIP	EQUIPMENT	PWD	PLYWOOD
(N)	NEW	EQUIV	EQUIVALENT	POT	POINT OF TANGENCY
@	AT	EVC	END VERTICAL CURVE	PNL	PANEL
A/C	AIR CONDITIONING	EW	EACH WAY	PRV	PRESSURE REDUCING VALVE
AB	AGGREGATE BASE OR ANCHOR BOLTS	(E)	EXISTING	PSF	POUNDS PER SQUARE FOOT
AC	ASPHALTIC CONCRETE	EO	EDGE OF	PSI	POUNDS PER SQUARE INCH
ACI	AMERICAN CONCRETE INSTITUTE	ES	EXISTING SURFACE	PT	POINT
ACP	ASBESTOS CEMENT PIPE	EXP	EXPANSION	PTD	PAPER TOWEL DISPENSER
ACST	ACOUSTIC	FOF	FACE OF FINISH	PTDF	PRESSURE-TREATED DOUGLAS FIR
ADA	AMERICAN DISABILITIES ACT	FA	FLANGE ADAPTER	PWD	PLYWOOD
ADJ	ADJUSTABLE	FB	FLAT BAR	PVC	POLYVINYL CHLORIDE
AFF	ABOVE FINISHED FLOOR	FCA	FLANGED COUPLING ADAPTER	R	RADIUS
AGG	AGGREGATE	FD	FLOOR DRAIN	R/W	RIGHT OF WAY
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	FG	FINISHED GRADE	RCP	REINFORCED CONCRETE PIPE
ALT	ALTERNATE	FH	FIRE HYDRANT	RCV	REMOTE CONTROL VALVE
ALUM	ALUMINUM	FIN	FINISHED	RI	RADIUS OR RISER
APA	AMERICAN PLYWOOD ASSN.	FF	FINISHED FLOOR	RD	ROAD
APPROX	APPROXIMATE	FRP	FIBER REINFORCED PLASTIC	REF	REFERENCE
ARCH	ARCHITECTURAL	FS	FINISH SURFACE	REINF	REINFORCEMENT
ARV	AIR RELEASE VALVE	FL	FLOW LINE	REP	REPRESENTATIVE
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS	FL OR FLR	FLOOR	REQ'D	REQUIRED
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	FM	FORCE MAIN	RLD	ROCK LINED DITCH
ASPH	ASPHALT	FOF	FACE OF FINISH	ROT	ROUTE OF TRAVEL
AV	AIR VALVE	FRMG	FRAMING	RM	ROOM
AWS	AMERICAN WELDING SOCIETY	FT	FOOT OR FEET	RT	RIGHT
BOT	BOTTOM	FTG	FOOTING	RV	RECREATION VEHICLE
B	BOTTOM (REINFORCEMENT DRAWINGS)	GA	GAUGE	RWD	REDWOOD
BAB	BOTTOM ALTERNATE BENT	GAL	GALLON	SCD	SEAT COVER DISPENSER
BC	BOTTOM OF CURB	GALV	GALVANIZED	S	SEWER
BOW	BOTTOM OF WALL	GB	GRAB BAR	S	S. STL OR S.S.
BFP	BACKFLOW PREVENTER	GD	GUTTER DRAIN	S=	SLOPE
BLDG	BUILDING	GFI	GROUND FAULT INTERRUPTER	S4S	SURFACED 4 SIDES
BM	BENCHMARK	GI	GALVANIZED IRON	SBR	SEQUENCING BATCH REACTOR
BO	BLOW OFF VALVE	GPM	GALLONS PER MINUTE	SCD	SEAT COVER DISPENSER
BOT	BOTTOM	GS	GALVANIZED STEEL	SCH	SCHEDULE
BOL	BEGINNING OF LINE	GV	GATE VALVE	SD	SOAP DISPENSER
BOS	BOTTOM OF STEP	GYP. BD	GYPSUM BOARD	SDI	SUBSURFACE DRIP IRRIGATION
BP	BASE PLATE	H.P.	HIGH POINT	SECT.	SECTION
BRG	BEARING	H.R.	HANDRAIL	SF	SQUARE FEET
BV	BALL VALVE	HB	HOSE BIBB	SHR	SHOWER
BVC	BEGIN VERTICAL CURVE			SHT	SHEET
BW	BOTTOM OF WALL	HCB	HOLLOW CONCRETE BOX	SIM.	SIMILAR
C	CENTERLINE	HD	HEAD	SND	SANITARY NAPKIN DISPOSAL
CC	CENTER TO CENTER	HDPE	HIGH DENSITY POLYETHYLENE	SP	SPACES
CEM	CEMENT	HEX	HEXAGON	SPEC'S	SPECIFICATIONS
CFS	CUBIC FEET PER SECOND	HOR	HORIZONTAL	SQ	SQUARE
CG	CAMPGROUND	HR	HOUR	SS	SANITARY SEWER STAINLESS STEEL
CG&S	CURB GUTTER & SIDEWALK	HT	HEIGHT	SSMH	SANITARY SEWER MANHOLE
CHKR	CHECKER	HVAC	HEATING, VENTILATION & AIR CONDITIONING	STA	STATION
CIP	CAST IRON PIPE	HW	HOT WATER	STAG	STAGGER
CJ	CONSTRUCTION JOINT	I.D.	INSIDE FACE	STD	STANDARD
CL OR CLR	CLEAR	IN	INCHES	STIFF.	STIFFENER
CMP	CORRUGATED METAL PIPE	INC	INCLUDING	STL	STEEL
CS	COMFORT STATION	INV	INVERT	STRUCT	STRUCTURE
CMU	CONCRETE MASONRY UNIT	JAN	JANITOR	SV	SOLENOID VALVE
CO	CLEANOUT	JT	JOINT	SYM	SYMMETRICAL
COLS	COLUMNS	L OR LGTH	LENGTH	T	TANGENT
COMB.	COMBINATION	L.P.	LOW POINT	T&B	TOP & BOTTOM
CONC	CONCRETE	LAV	LAVATORY	T&G	TONGUE AND GROOVE
CONST.	CONSTRUCTION	LBS	POUNDS	TDH	TOTAL DYNAMIC HEAD
CONT	CONTINUOUS	LF	LINEAR FEET	T.O.	TOP OF
COSS	CLEAN OUT SANITARY SEWER	LT	LEFT OR LIGHT	TOC	TOP OF CURB
C.P.	CONTROL POINT	LO	LITHOCARPUS DENSIFLOROUS	T.O.M.W.	TOP OF MASONRY WALL
CS	COMFORT STATION	MATL	MATERIAL	TOW	TOP OF WALL
CSK	COUNTERSUNK	MAX	MAXIMUM	TW	TOP OF WALL
CSP	CALIFORNIA STATE PARKS	MBGR	METAL BEAM GUARD RAILING	TOS	TOP OF STEP
CV	CHECK VALVE	MECH	MECHANICAL	TPH	TOILET PAPER HOLDER
CT	CERAMIC TILE	MET	METAL	TRD	TREAD
CW	COLD WATER	MFR	MANUFACTURER	TPZ	TREE PROTECTION ZONE
D OR DIA	DIAMETER	MH	MANHOLE	TYP. (TYP.)	TYPICAL
DBH	DIAMETER AT BREAST HEIGHT	MIN.	MINIMUM	UG	UNDERGROUND
DET	DETAIL	MISC.	MISCELLANEOUS	UNO	UNLESS NOTED OTHERWISE
DF	DRINKING FOUNTAIN	MT	METAL THRESHOLD	VC	VERTICAL CURVE
DG	DECOMPOSED GRANITE	(N)	NEW	VCP	VITRIFIED CLAY PIPE
DI	DROP INLET, DUCTILE IRON	N	NORTH	VERT	VERTICAL
DIAG	DIAGONAL	N/A	NOT APPLICABLE	VPI	VERTICAL POINT OF INTERSECTION
DIM	DIMENSION	NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION	VTR	VENT THROUGH ROOF
DIST	DISTRIBUTION	NF	NEAR FACE	W	WATER
DN	DOWN	NIC	NOT IN CONTRACT	W/	WITH
DPR	DEPARTMENT OF PARKS AND RECREATION	NO.	NUMBER	W/H	WATER HEATER
DR	DOOR	NTS	NOT TO SCALE	W/O	WITHOUT
DO	DRAIN OUTLET	OC	ON CENTER	WD	WOOD
DWG	DRAWING	OD	OUTSIDE DIAMETER	WL	WATER LINE
DWR	DEPARTMENT OF WATER RESOURCES	OF	OUTSIDE FACE	WP	WORKING POINT
EA	EACH	OG	ORIGINAL GROUND OPPOSITE HAND	WR	WASTE RECEIPTICLE
EC	END CURVE	O-O	OUT - OUT	WS	WATER SURFACE OR WATER STOP
EF	EACH FACE	OPG	OPENING	WSA	WATER SERVICE ASSEMBLY
EFEW	EACH FACE EACH WAY	OPP	OPPOSITE	WTP	WATER TREATMENT PLANT
EJ	EXPANSION JOINT	OSHA	OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION	WTR	WATER
EL	ELEVATION	PA	PLANTING AREA	WV	WATER VALVE
ELECT	ELECTRICAL	P/L	PROPERTY LINE	WWF	WELDED WIRE FABRIC
ELEV	ELEVATION	PC	POINT OF CURVE	WWTP	WASTEWATER TREATMENT PLANT
EOL	END OF LINE	PCC	PORTLAND CEMENT CONC.		
EP	EDGE OF PAVEMENT				
EPB	ELECTRIC PULL BOX				



ACQUISITION & DEVELOPMENT DIVISION  
One Capitol Mall  
Sacramento, CA  
95814-3229



CALIFORNIA STATE FIRE MARSHAL- APPROVED  
Approval of this plan does not authorize or approve any omission of deviation from applicable regulations. Final approval is subject to field inspection. One set of approved plans shall be available on the project site at all times.

Reviewed by \_\_\_\_\_ Date \_\_\_\_\_

DPR ACCESS COMPLIANCE REVIEW  
ACCESSIBILITY SECTION  
CERTIFICATION # 18-015  
Reviewed by \_\_\_\_\_ Date \_\_\_\_\_

ACCESSIBILITY COMPLIANCE AND STATE FIRE MARSHAL SIGNED ORIGINALS ARE ON FILE AT THE DEPARTMENT OF PARKS AND RECREATION, NORTHERN SERVICE CENTER

DESIGNED: DESIGNER  
DRAWN: STAFF  
CHECKED: SUPERVISOR  
DATE: DECEMBER 2017

REVISIONS	
NO.	DATE

SOUTH YUBA RIVER STATE PARK  
HISTORIC COVERED BRIDGE REHABILITATION AND RESTORATION  
ABBREVIATIONS

OFFICE OF THE STATE FIRE MARSHAL  
APPROVED FIREFIGHTING ONLY  
Reviewed by David Nye, DCFM  
JAN 09 2018  
Approval of this plan does not authorize or approve any omission of deviation from applicable regulations. Final approval is subject to field inspection. One set of approved plans shall be available on the project site at all times.

DRAWING NO.  
30419.002

SHEET NO.  
G2.0  
002 OF 030

GENERAL NOTES

APPLICABLE TO ALL DRAWINGS UNLESS NOTED OR SHOWN OTHERWISE

GENERAL NOTES

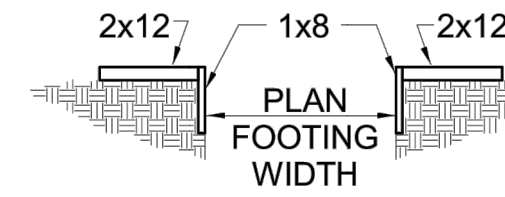
- 1. INTERPRETATION OF DRAWINGS & SPECIFICATIONS
A. FOR CONVENIENCE, SPECIFICATIONS HAVE BEEN PREPARED FOR THIS PROJECT AND ARE ARRANGED IN SEVERAL SECTIONS, BUT SUCH SEPARATION SHALL NOT BE CONSIDERED AS THE LIMITS OF THE WORK REQUIRED OF ANY SEPARATE TRADE.
B. IN GENERAL, THE WORKING DETAILS WILL INDICATE DIMENSIONS, POSITION AND KIND OF CONSTRUCTION, AND THE SPECIFICATIONS, QUALITIES AND METHODS.
C. SHOULD AN ERROR APPEAR IN THE WORKING DETAILS OR SPECIFICATIONS OR IN WORK DONE BY OTHERS AFFECTING THIS WORK, THE CONTRACTOR SHALL NOTIFY THE STATES' REPRESENTATIVE AT ONCE AND IN WRITING.
D. PRIOR TO SUBMISSION THE CONTRACTOR SHALL REVIEW ALL SUBMITTALS FOR CONFORMANCE WITH THE CONTRACT DOCUMENTS AND SHALL STAMP SUBMITTALS AS BEING "REVIEWED FOR CONFORMANCE".

ABBREVIATIONS

Table with 4 columns: Abbreviation, Description, Abbreviation, Description. Includes items like AB (ANCHOR BOLT), MB (MACHINE BOLT), MFR (MANUFACTURER), MI (MALLEABLE IRON), etc.

FOUNDATIONS

- 1. ALL FOUNDATION WORK SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE SOILS REPORT #59030-05-41 BY GEOCON CONSULTANTS, INC DATED MAY 2015.
2. FOUNDATIONS SHALL BE MICROPILES. SEE 4/55.03
3. ALL FILLING, BACKFILLING AND COMPACTION SHALL BE DONE UNDER THE OBSERVATION OF A REPRESENTATIVE OF THE SOILS ENGINEER OF RECORD AND MUST BE COMPACTED TO THE MINIMUM DENSITY SPECIFIED IN ACCORDANCE WITH THE PROCEDURE OUTLINED IN THE SOILS REPORT.



WOOD

- 1. ALL STRUCTURAL WOOD SHALL CONFORM WITH THE FOLLOWING SPECIFICATIONS: DOUGLAS FIR - COAST REGION - WCLIB GRADING RULES #17 OR WWPFA STANDARD GRADING RULES FOR WESTERN LUMBER.
2. ALL DOUGLAS FIR WOOD IN DIRECT CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED, EXCEPT LEDGERS, WHICH DO NOT NEED TO BE PRESSURE TREATED.
3. FIELD CUTS AND BOLT HOLES IN PRESSURE TREATED WOOD SHALL BE PROTECTED IN ACCORDANCE WITH AWPA STANDARD M4.

DESIGN CRITERIA

- 1. CODES AND STANDARDS
2013 CALIFORNIA BUILDING CODE
ASCE 7-10
ACI 318-11
AISC 360-10, AISC 341-10
2012 NDS, 2008 SDPWS
2. VERTICAL LOADS
BRIDGE DECK LIVE LOAD = 65 PSF
3. SOILS VALUES
FOOTING
MINIMUM DEPTH = 18"
MINIMUM WIDTH = 24"
PASSIVE RESISTANCE = 150 PCF
FRICTION = 0.40
(MICROPILES SEE SO.03)

- 4. LATERAL LOADS
SEISMIC:
SITE CLASS: C
Ss = 0.580 ; S0S = 0.452
S1 = 0.247 ; S01 = 0.256
R = 1.25
Omega\_o = 2.0 ; Cd = 2.5
Ie = 1.0 TYPICAL
RISK CATEGORY: II
SEISMIC DESIGN CATEGORY: D
SEISMIC BASE SHEAR = 96 KIPS (N/S DIR.) = 96 KIPS (E/W DIR.)
SEISMIC FORCE RESISTING SYSTEM: CONCRETE ABUTMENT (ALL OTHER STRUCTURES)
LATERAL ANALYSIS PROCEDURE: LINEAR STATIC
WIND:
V100 = 110 MPH ; VASD = 85 MPH
RISK CATEGORY: II
EXPOSURE CATEGORY: C

STATEMENT OF STRUCTURAL SPECIAL INSPECTIONS AND TESTING

- 1. SPECIAL INSPECTIONS AND TESTING SHALL BE PROVIDED BY AN INSPECTION AGENCY, EMPLOYED BY THE CONTRACTOR, AND QUALIFIED BY THE BUILDING OFFICIAL TO INSPECT THE PARTICULAR TYPE OF CONSTRUCTION. TESTS AND INSPECTIONS, AS REQUIRED BY SECTIONS 110, 1704, 1705.10, 1705.11 AND 1705.12 OF THE 2013 CBC, SHALL BE PERFORMED DURING CONSTRUCTION ON THE TYPES OF WORK LISTED BELOW:
INSPECTIONS/TESTING
SECTION 1705.2.1 STRUCTURAL STEEL CONSTRUCTION
SECTION 1705.3 CONCRETE CONSTRUCTION
SECTION 1705.4 MASONRY CONSTRUCTION-LEVEL B
SECTION 1705.6 SOILS
SEE DRILLED-IN ANCHOR NOTES
SEE SPECIFICATIONS
SEE 4/55.03
2. INSPECTIONS SHALL BE CONTINUOUS OR PERIODIC AS NOTED FOR THE INDIVIDUAL MATERIAL OR COMPONENT INSPECTION SECTIONS AND TABLES NOTED ABOVE.

STRUCTURAL SHEET INDEX table with columns for sheet number and description (e.g., S0.01 GENERAL NOTES, S1.01 SHORING PLAN, S2.01 BRIDGE FOUNDATION PLAN).

OFFICE OF THE STATE FIRE MARSHAL APPROVED FOR FIRE AND LIFE SAFETY ONLY Reviewed by: David Nye, USFM

JAN 09 2018

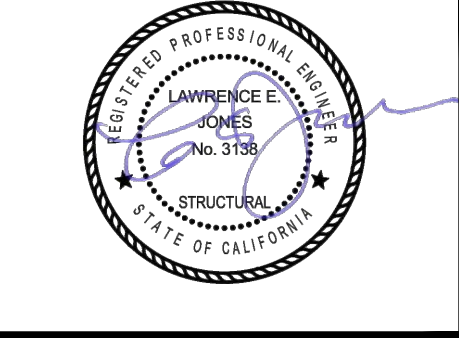
Approval of this plan does not authorize or approve any omission or deviation from applicable regulations. Final approval is subject to field inspection. One set of approved plans shall be available on the project site at all times.



Buchler & Buehler Structural Engineers, Inc. 600 Q Street, Suite 200, Sacramento, CA 95811



ACQUISITION & DEVELOPMENT DIVISION One Capitol Mall Sacramento, CA 95814-3229



CALIFORNIA STATE FIRE MARSHAL - APPROVED Approval of this plan does not authorize or approve any omission of deviation from applicable regulations.

DPR ACCESS COMPLIANCE REVIEW ACCESSIBILITY SECTION CERTIFICATION # 18-015

Reviewed by [Signature] Date [Date]

ACCESSIBILITY COMPLIANCE AND STATE FIRE MARSHAL SIGNED ORIGINALS ARE ON FILE AT THE DEPARTMENT OF PARKS AND RECREATION, NORTHERN SERVICE CENTER

DESIGNED: DRAWN: CHECKED: DATE: Issue Date

REVISIONS table with columns for revision number and date.

SOUTH YUBA RIVER STATE PARK HISTORIC COVERED BRIDGE REHABILITATION AND RESTORATION GENERAL NOTES

DRAWING NO. 30419.003

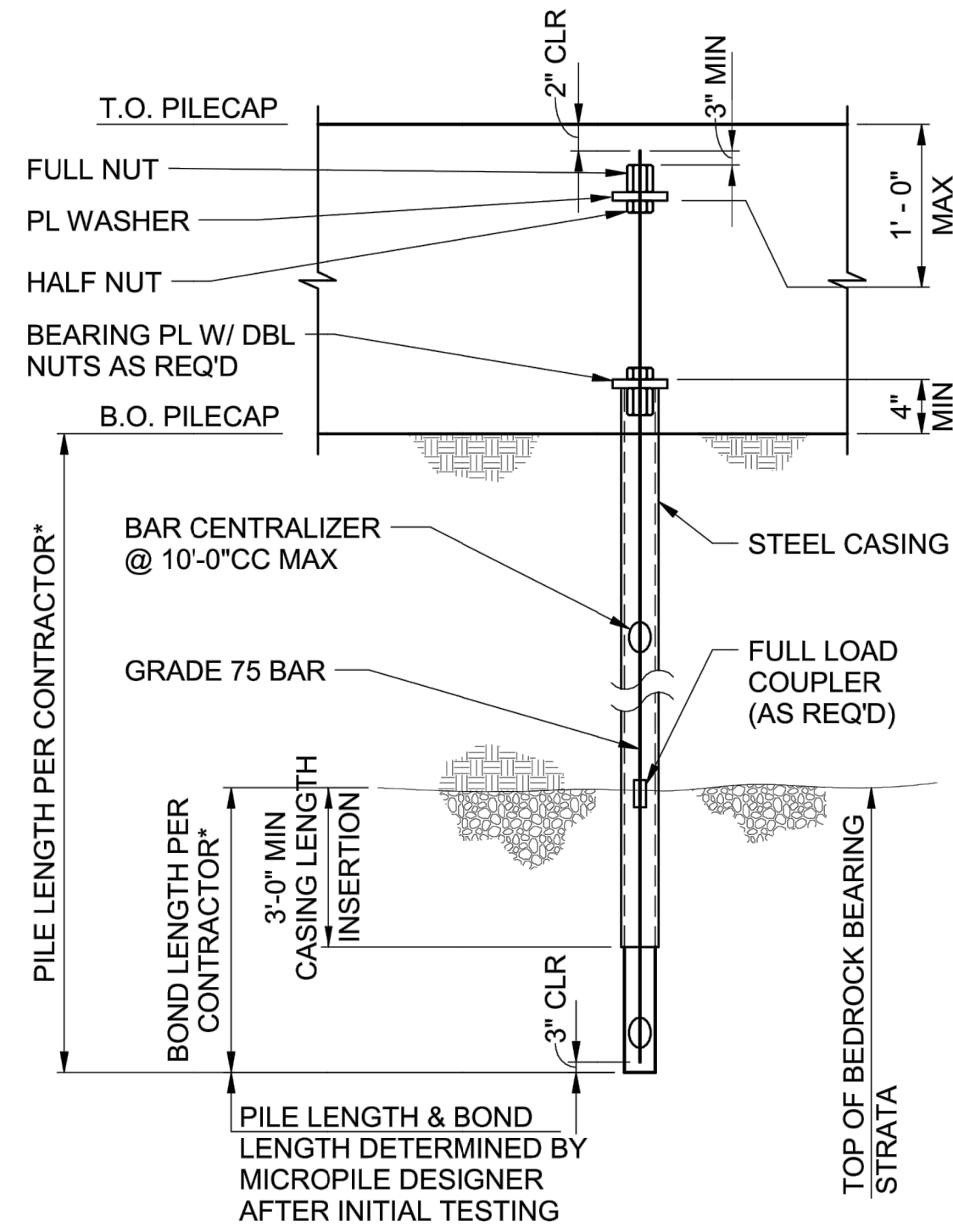
SHEET NO. S0.01

003 OF 030



# GENERAL NOTES

APPLICABLE TO ALL DRAWINGS UNLESS NOTED OR SHOWN OTHERWISE



**NOTES:**

1. DESIGN LOAD CAPACITY:
 

SIZE	D	D+H+L	D+H+E
7"Ø	80K	165K	-55K

LOADS GIVEN IN KIPS, 1K= 1000LBS. POSITIVE VALUES ARE DOWNWARD, NEGATIVE VALUES ARE UPLIFT. MINIMUM FACTOR OF SAFETY=2.0 (D+L) SEE GEOTECHNICAL REPORT FOR ESTIMATED ULTIMATE BOND STRESS

D = DEAD LOAD  
L = LIVE LOAD  
H = SOIL LOAD
2. MATERIAL SPECIFICATIONS:
  - A) GROUT - A NEAT MIX OF PORTLAND CEMENT (TYPE I/II) CONFORMING TO ASTM C150 WITH A WATER CEMENT RATIO OF APPROXIMATELY 0.35. THE MINIMUM 28 DAY COMPRESSIVE STRENGTH OF THE GROUT SHALL BE 5,000 PSI.
  - B) REINFORCING BAR - THE REINFORCING BAR SHALL BE GRADE 75 DWIDAG THREADBAR (OR EQUIVALENT) CONFORMING TO ASTM A-615. LENGTH OF COUPLED BAR SECTIONS SHALL BE DETERMINED BASED ON THE OVERHEAD CLEARANCE AVAILABLE AT EACH PILE LOCATION.
  - C) CASING - THE STEEL CASING SHALL BE 0.5" MINIMUM WALL THICKNESS - 80 KSI YIELD STRENGTH MANUFACTURED TO API N-80 SPECIFICATIONS.
  - D) PLATE - STEEL PLATE SHALL CONFORM TO ASTM A572 GRADE 50.
3. RECOMMENDED MICROPILE INSTALLATION PROCEDURE:
  - A) ADVANCE OUTSIDE DIAMETER CASING TO FULL PILE DEPTH UTILIZING ROTARY DRILLING TECHNIQUES.
  - B) PLACE REINFORCING TREAD BAR WITH CENTRALIZERS.
  - C) TREMIE CASING FULL WITH NEAT CEMENT GROUT.
  - D) EXTRACT CASING OUT OF THE PILE BOND LENGTH WHILE PLACING ADDITIONAL GROUT. PRESSURE SHALL BE APPLIED TO THE BOND LENGTH GROUT A MINIMUM OF 2 TIMES DURING CASING EXTRACTION TO A MINIMUM PRESSURE OF 75 PSI. THIS PRESSURE MAY BE APPLIED THROUGH THE DRILL.
  - E) UPON COMPLETION OF PRESSURE GROUTING, REINSERT THE CASING 3' TO 4' MINIMUM INTO THE TOP OF THE BOND LENGTH AS SHOWN ON THE PILE DESIGN DETAILS. APPLY PRESSURE TO THE GROUT ONE FINAL TIME AFTER CASING REINSERTION.
  - F) THE TOP PIECE OF CASING SHALL BE PREFABRICATED WITH THE CONNECTION SHEAR RINGS WHERE OCCURS. REMOVE UNSOUND GROUT FROM THE TOP OF THE PILE CASING AND PLACE THE BEARING PLATE AS REQUIRED BY THE CONNECTION DETAILS. CAST PILE TOP INTO THE FOOTING CONCRETE.
  - G) THE QUALITY OF THE GROUT SHALL BE MONITORED BY COLLECTING GROUT CUBES EACH DAY FOR LATER COMPRESSION TESTING.
  - H) CONSISTENCY OF PILE INSTALLATION SHALL BE MONITORED AND RECORDED IN THE MICROPILE INSTALLATION LOG FORM. MONITORED AND RECORDED DATA SHALL INCLUDE TOTAL PILE DEPTH, GROUT PRESSURES AND QUANTITIES, SOILS ENCOUNTERED DURING INSTALLATION, AND ANY OBSTRUCTIONS OR IRREGULARITIES.
  - I) CONSTRUCTION TOLERANCE ON PLACEMENT OF PILES IS 3 INCHES HORIZONTALLY IN ANY DIRECTION AND A VERTICAL ALIGNMENT OF NO MORE THAN 2% OUT OF PLUMB.
4. DESIGN OF PILES TO CONFORM WITH SOILS REPORT # S9030-05-41 BY GEOCON CONSULTANTS DATED MAY 2015.
5. INSTALLATION TO BE PERFORMED BY A QUALIFIED CONTRACTOR WITH A MINIMUM OF 5 YEARS OF EXPERIENCE WITH THIS TYPE OF FOUNDATION.
6. INSTALLATION RECORDS AND INITIAL TESTING TO BE DONE IN ACCORDANCE WITH SPECIFICATIONS. LOAD TESTS SHALL BE COMPLETED ON PRE-PRODUCTION AND PRODUCTION PILES AS REQUIRED IN THE SOILS REPORT AND CBC 1810.3.3.
7. MINIMUM PILE SPACING 3'-0" CENTER TO CENTER.
8. PROVIDE PILE DESIGN CALCULATIONS FOR APPROVAL SIGNED BY CIVIL ENGINEER LICENSED IN THE STATE OF CALIFORNIA.

**MICRO-PILE NOTES**



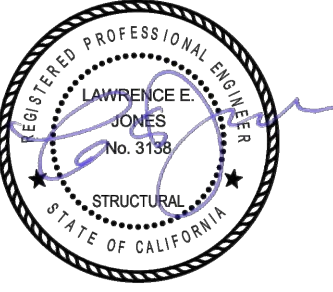
OFFICE OF THE STATE FIRE MARSHAL  
APPROVED BY *David Nye*  
Reviewed by David Nye, DSFM

JAN 09 2018

Approval of this plan does not authorize or approve any omission or deviation from applicable regulations. Final approval is subject to field inspection. One set of approved plans shall be available on the project site at all times.



ACQUISITION & DEVELOPMENT DIVISION  
One Capitol Mall  
Sacramento, CA  
95814-3229



CALIFORNIA STATE FIRE MARSHAL- APPROVED  
Approval of this plan does not authorize or approve any omission or deviation from applicable regulations. Final approval is subject to field inspection. One set of approved plans shall be available on the project site at all times.

Reviewed by \_\_\_\_\_ Date \_\_\_\_\_

DPR ACCESS COMPLIANCE REVIEW  
ACCESSIBILITY SECTION  
CERTIFICATION # 18-015

Reviewed by *AFB* Date *1/10/18*

ACCESSIBILITY COMPLIANCE AND STATE FIRE MARSHAL SIGNED ORIGINALS ARE ON FILE AT THE DEPARTMENT OF PARKS AND RECREATION, NORTHERN SERVICE CENTER

DESIGNED: \_\_\_\_\_  
DRAWN: \_\_\_\_\_  
CHECKED: \_\_\_\_\_  
DATE: \_\_\_\_\_ Issue Date \_\_\_\_\_

REVISIONS	
DATE	

SOUTH YUBA RIVER STATE PARK  
HISTORIC COVERED BRIDGE REHABILITATION AND RESTORATION  
GENERAL NOTES



Buehler & Buehler  
Structural Engineers, Inc.  
600 Q Street, Suite 200, Sacramento, CA 95811  
tel 916.443.0303 fax 916.443.0313  
Sacramento - Florence - San Francisco

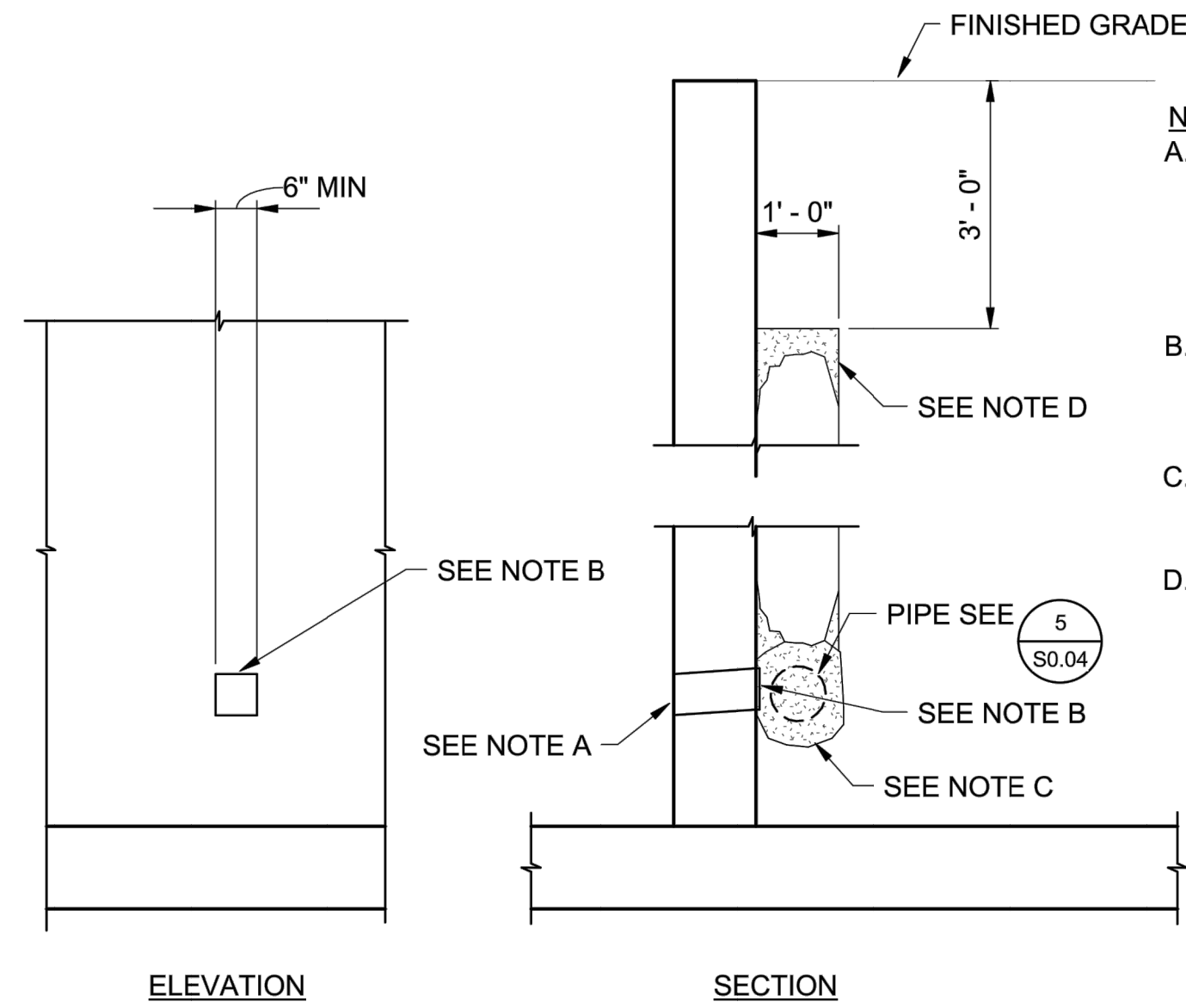
DRAWING NO.  
30419.005

SHEET NO.  
S0.03

005 OF 030

# TYPICAL DETAILS

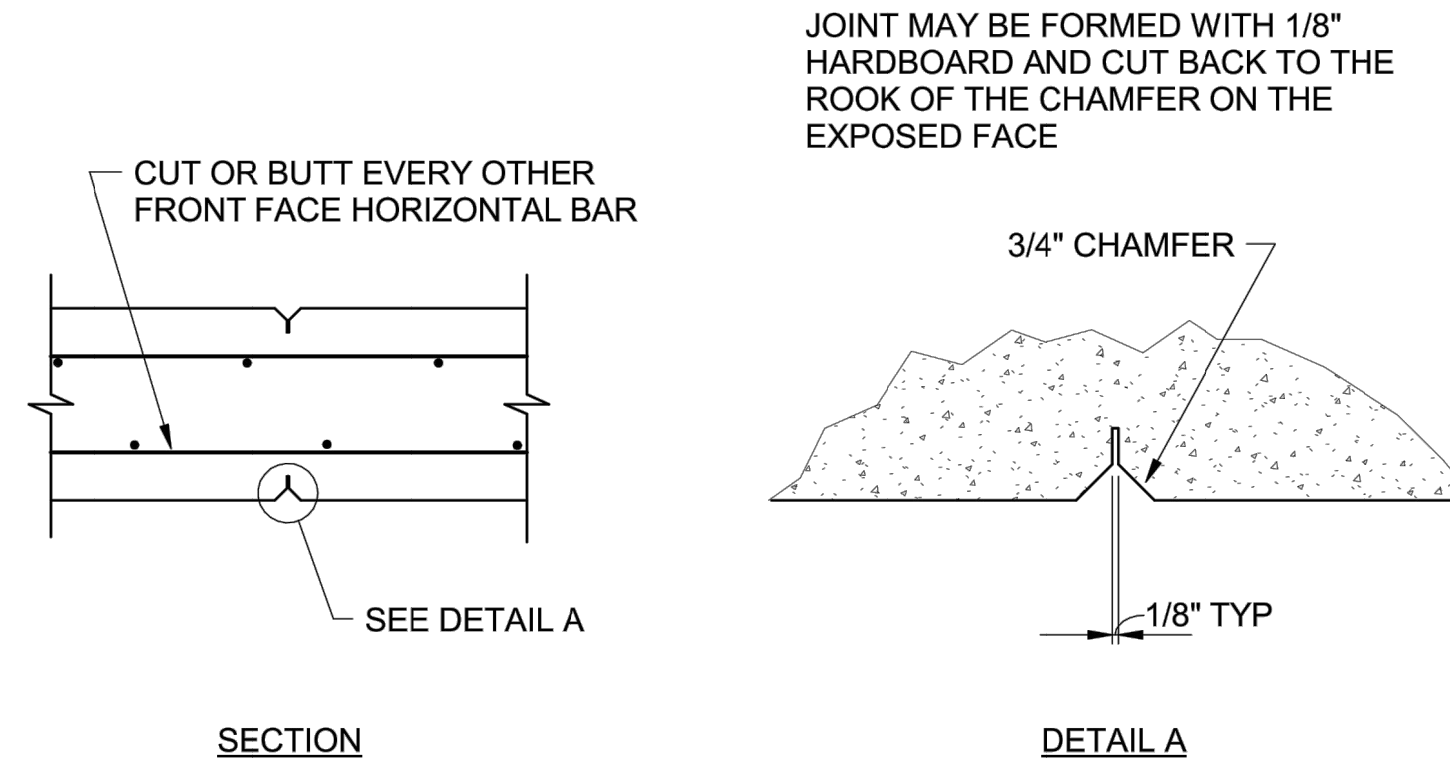
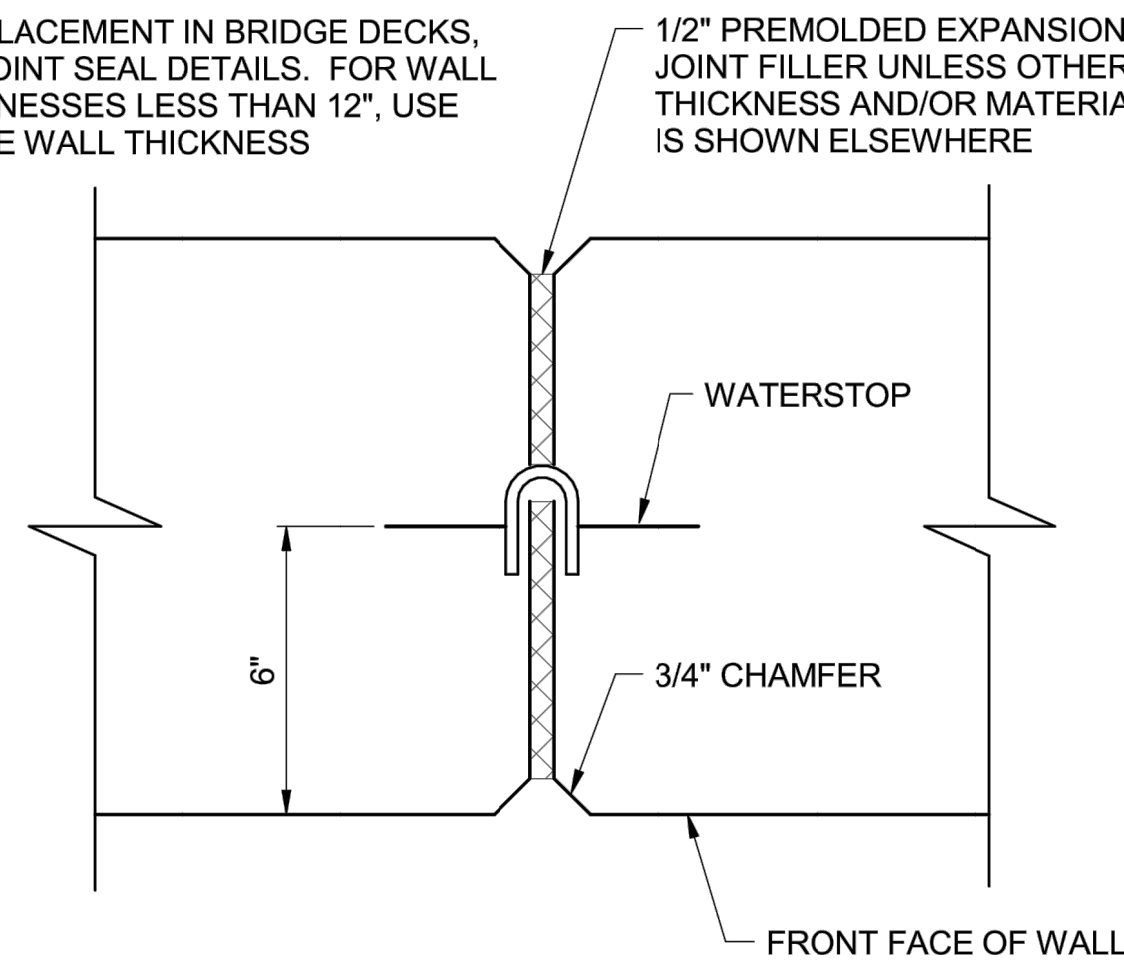
APPLICABLE TO ALL DRAWINGS UNLESS NOTED OR SHOWN OTHERWISE



- NOTES:**
- A. 2"Ø DRAINS @ 48"CC MAX, FOR WALLS ADJACENT TO SIDEWALKS OR CURBS. PROVIDE 4" PLASTIC PIPE UNDER THE SIDEWALK TO DISCHARGE THROUGH CURB FACE. EXPOSED WALL DRAINS SHALL BE LOCATED 3"± ABOVE FINISHED GRADE.
  - B. 6" MIN SQUARE ALUMINUM OR GALVANIZED STEEL WIRE 1/4" MESH HARDWARE CLOTH (22GA MIN WIRE DIAMETER). ANCHOR FIRMLY TO BACKFACE.
  - C. 1 CUBIC FOOT PERVIOUS BACKFILL MATERIAL IN A NONWOVEN FILTER FABRIC, SECURELY TIED.
  - D. PERVIOUS BACKFILL MATERIAL CONTINUOUS BEHIND RETAINING WALL OR ABUTMENT.

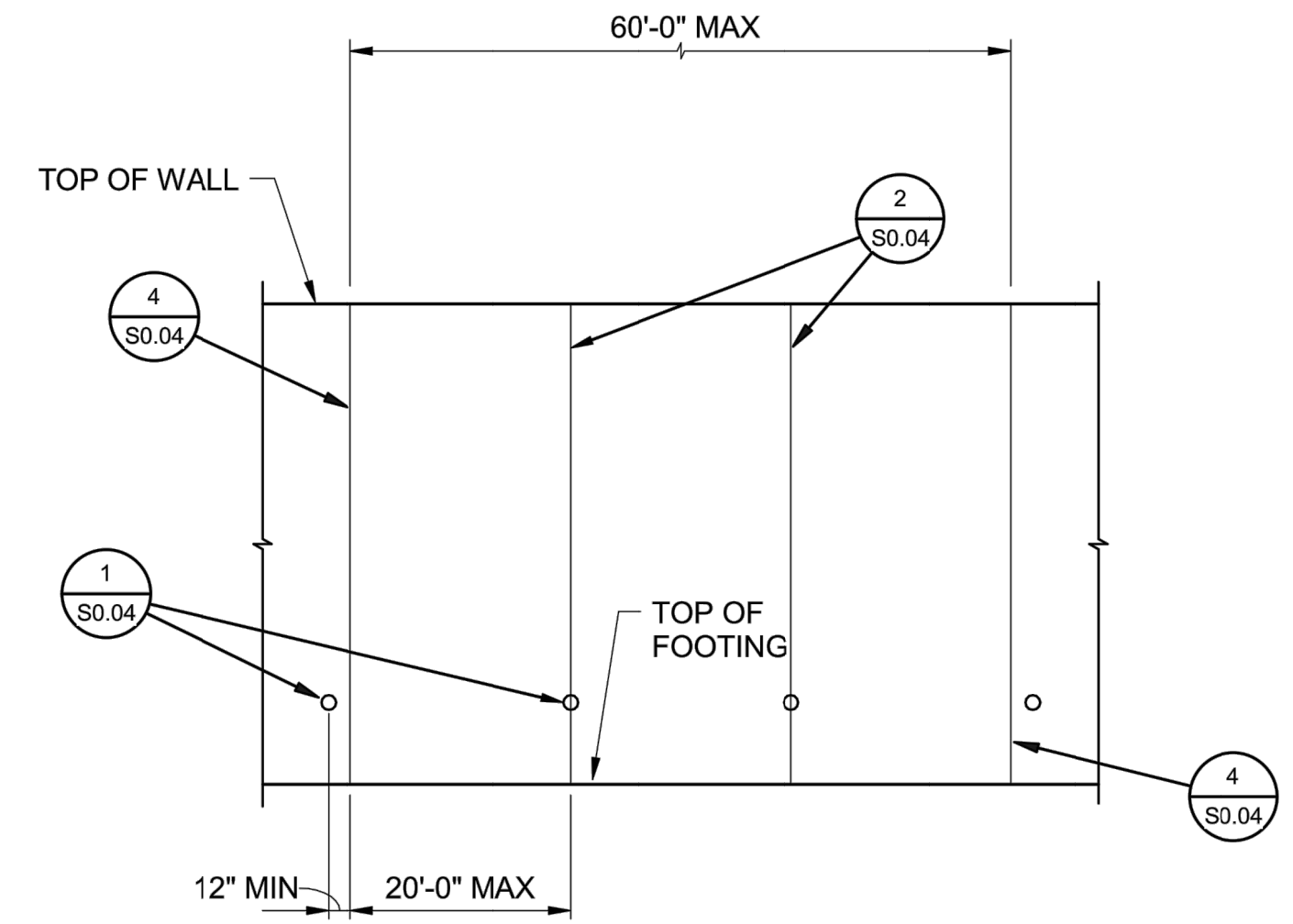
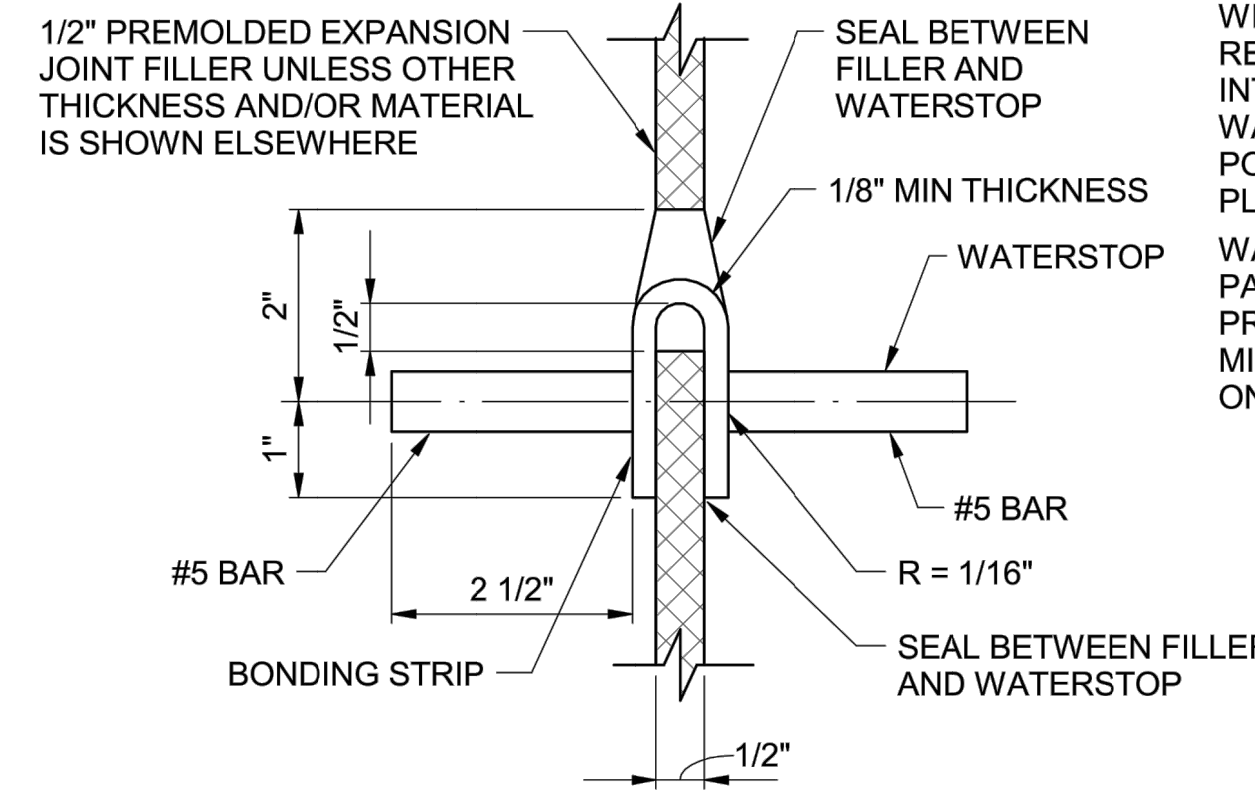
**1** **S0.04** **WEEP HOLE AND PERVIOUS BACKFILL**

**NOTE:**  
FOR PLACEMENT IN BRIDGE DECKS, SEE JOINT SEAL DETAILS. FOR WALL THICKNESSES LESS THAN 12", USE 1/2 THE WALL THICKNESS



**2** **S0.04** **WEAKENED PLANES**

**NOTES:**  
HOLES WILL BE PERMITTED IN THE OUTER 1/2" OF THE WEB FOR WIRE, RINGS, ETC. TIE WEB TO #5 REINFORCING BARS @ 16"CC MAX INTERVALS TO SUPPORT THE WATERSTOP IN PROPER POSITION DURING CONCRETE PLACEMENT.  
WATERSTOP TO HAVE 5 OR MORE PAIRS OF RAISED RIBS TO PROVIDE 0.10 SQUARE INCHES MINIMUM CROSS-SECTION AREA ON EA HALF OF THE WATERSTOP.



**3** **S0.04** **WALL EXPANSION JOINTS AND WEAKENED PLANES**

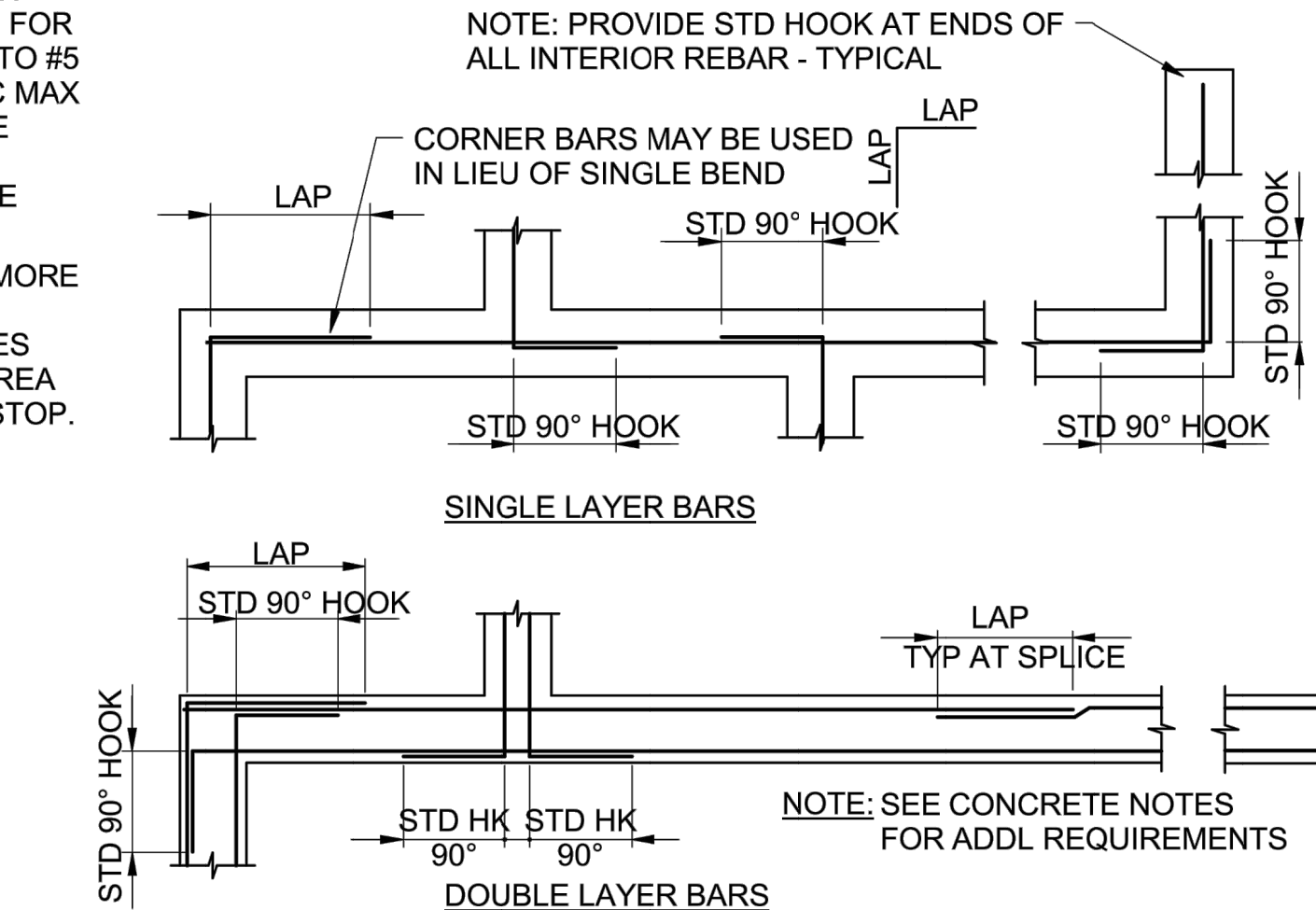
**4** **S0.04** **WALL EXPANSION JOINT**

**5** **S0.04** **DRAIN PIPE AND PERMEABLE MATERIAL**

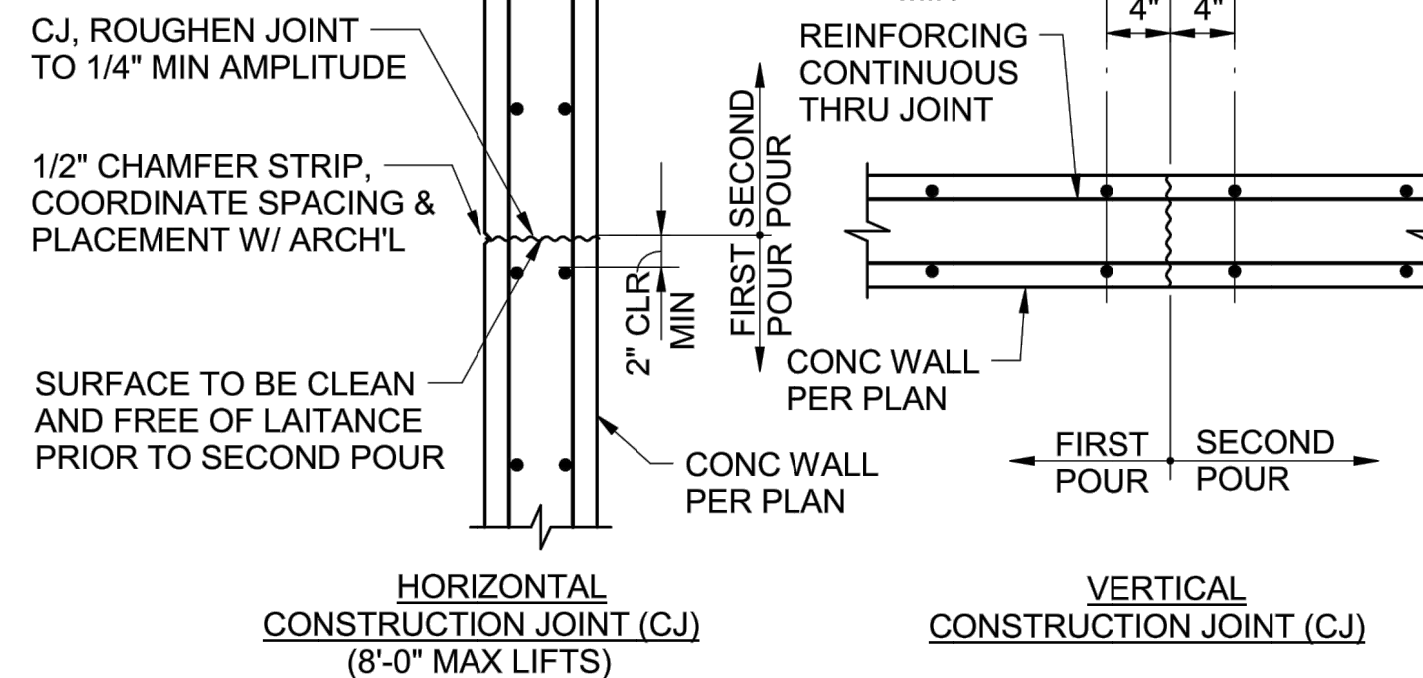
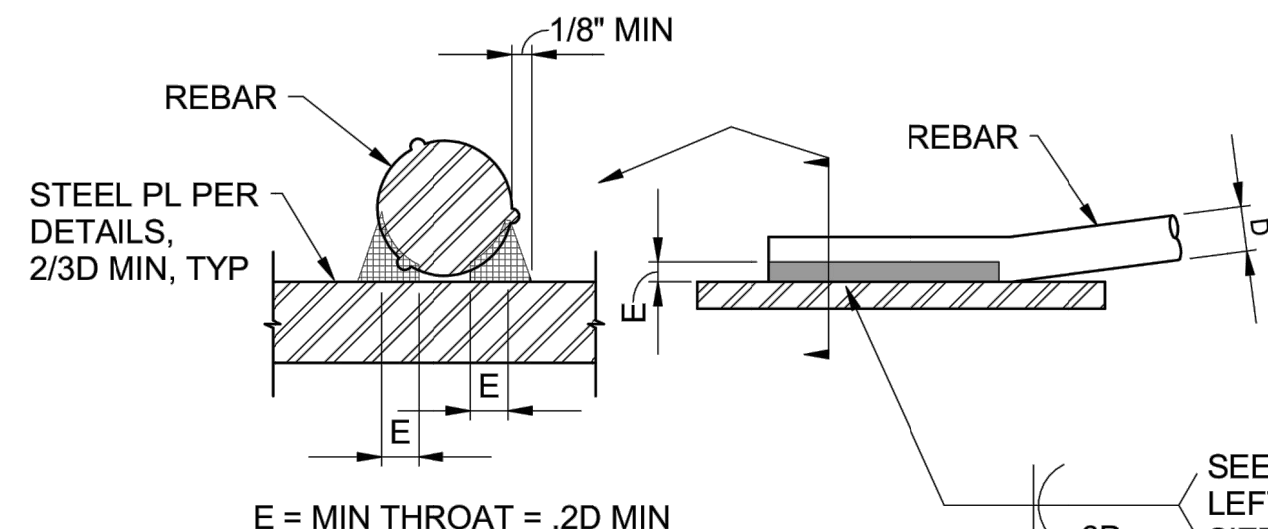
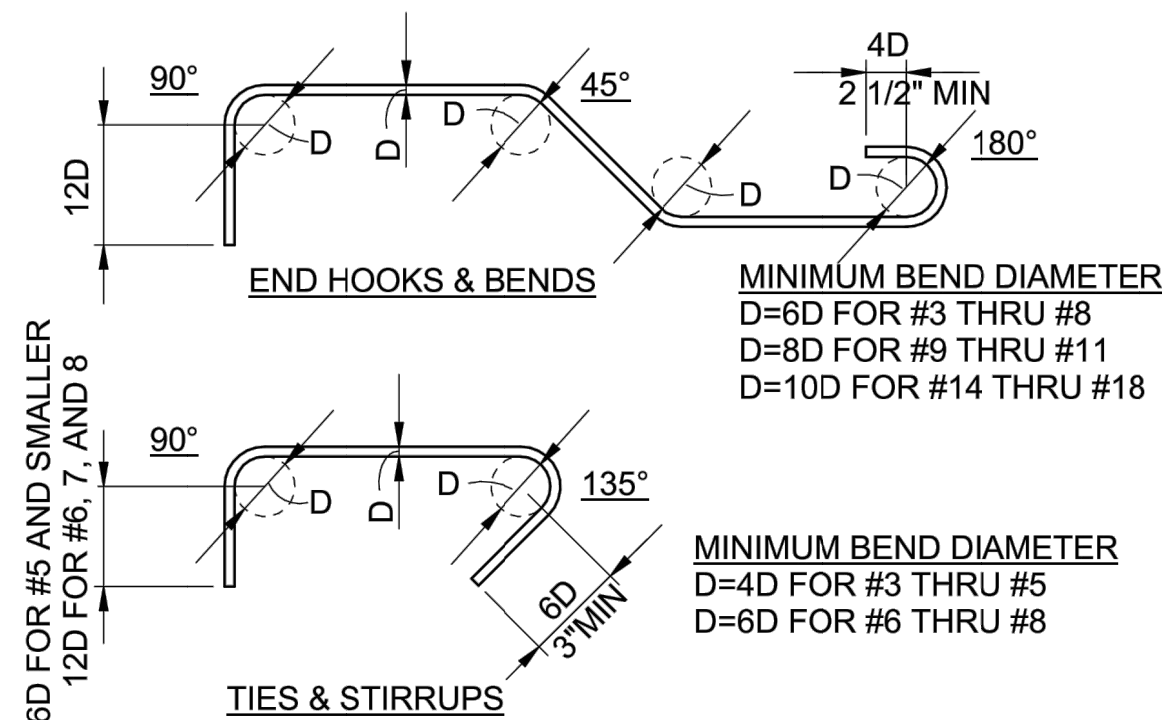
**6** **S0.04** **WATERSTOP**

OFFICE OF THE STATE FIRE MARSHAL  
APPROVED FIRE AND PLUMB ONLY  
Reviewed by: *[Signature]*  
JAN 09 2018

Approval of this plan does not authorize or approve any omission or deviation from applicable regulations. Final approval is subject to field inspection. One set of approved plans shall be available on the project site at all times.



**7** **S0.04** **CORNER REINFORCING AT CONCRETE FOOTINGS**



**8** **S0.04** **STANDARD REBAR HOOKS AND BENDS**

**9** **S0.04** **REBAR WELDING**

**10** **S0.04** **CONCRETE WALL JOINTS**

**11** **S0.04** **OPENING REINFORCING IN CONCRETE WALLS**

**NOTE:** ALL HOOKS SHALL BE 90° OR 180° STANDARD HOOKS UNLESS OTHERWISE SHOWN OR NOTED.

- NOTES:**
1. REINFORCING TO BE WELDED, EXCEPT ASTM A706, SHALL CONFORM TO THE MATERIAL PROPERTY REQUIREMENTS OF ANSI/AWS D1.4, NEWEST EDITION.
  2. ALL PREHEATING AND WELDING SHALL BE DONE IN ACCORDANCE WITH ANSI/AWS D1.4, NEWEST EDITION.
  3. ALL WELDING SHALL BE CONTINUOUSLY INSPECTED BY A QUALIFIED LABORATORY.

CJ, ROUGHEN JOINT TO 1/4" MIN AMPLITUDE

1/2" CHAMFER STRIP, COORDINATE SPACING & PLACEMENT W/ ARCH'L

SURFACE TO BE CLEAN AND FREE OF LAITANCE PRIOR TO SECOND POUR

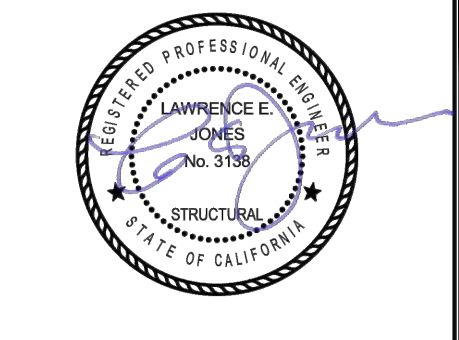
WHERE 2'-0" EXTENSION CANNOT BE ATTAINED, EXTEND AS FAR AS POSSIBLE AND USE STD HOOK



Buchler & Buehler  
Structural Engineers, Inc.  
600 Q Street, Suite 200, Sacramento, CA 95811  
tel 916.443.0303 fax 916.443.0313  
Sacramento • Florence • San Francisco



ACQUISITION & DEVELOPMENT DIVISION  
One Capitol Mall  
Sacramento, CA  
95814-3229



CALIFORNIA STATE FIRE MARSHAL- APPROVED  
Approval of this plan does not authorize or approve any omission of deviation from applicable regulations. Final approval is subject to field inspection. One set of approved plans shall be available on the project site at all times.  
Reviewed by: *[Signature]* Date: *[Date]*

DPR ACCESS COMPLIANCE REVIEW  
ACCESSIBILITY SECTION  
CERTIFICATION # 18-015  
Reviewed by: *[Signature]* Date: *[Date]*

DESIGNED:  
DRAWN:  
CHECKED:  
DATE: Issue Date

REVISIONS	DATE

SOUTH YUBA RIVER STATE PARK  
HISTORIC COVERED BRIDGE REHABILITATION AND RESTORATION  
TYPICAL DETAILS

DRAWING NO.  
30419.006

SHEET NO.  
**S0.04**

006 OF 030