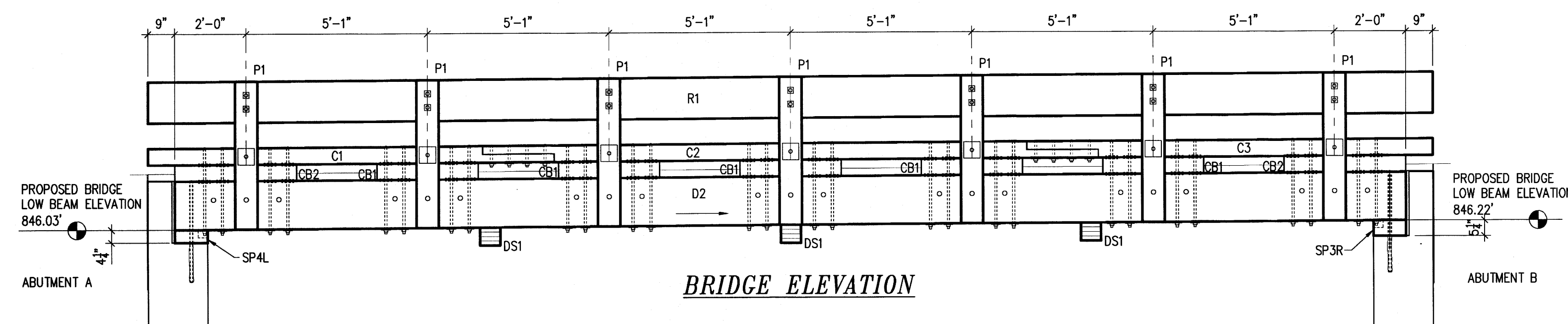
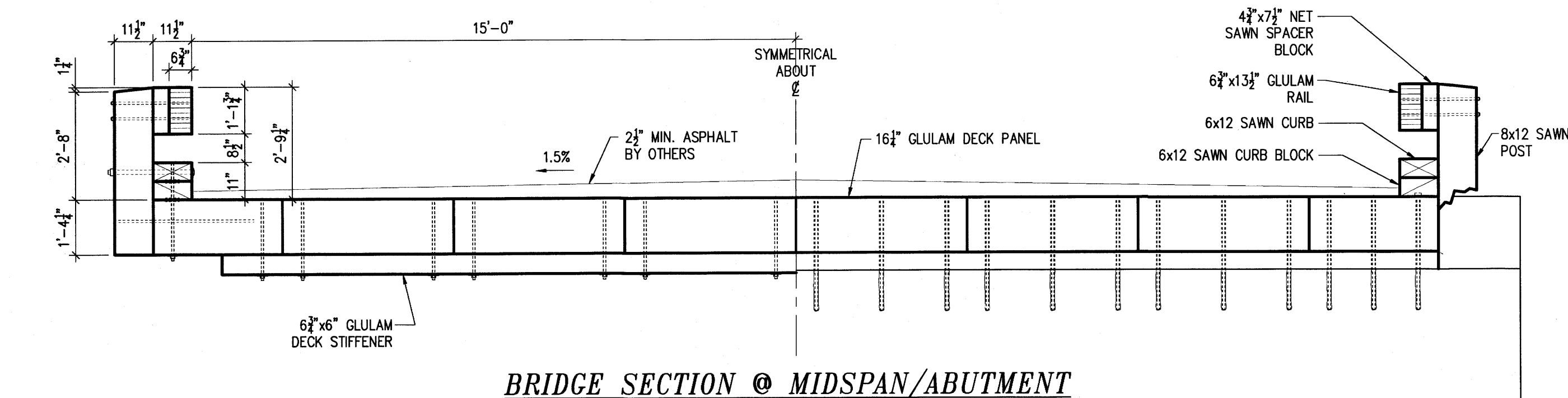


BRIDGE PLAN VIEW

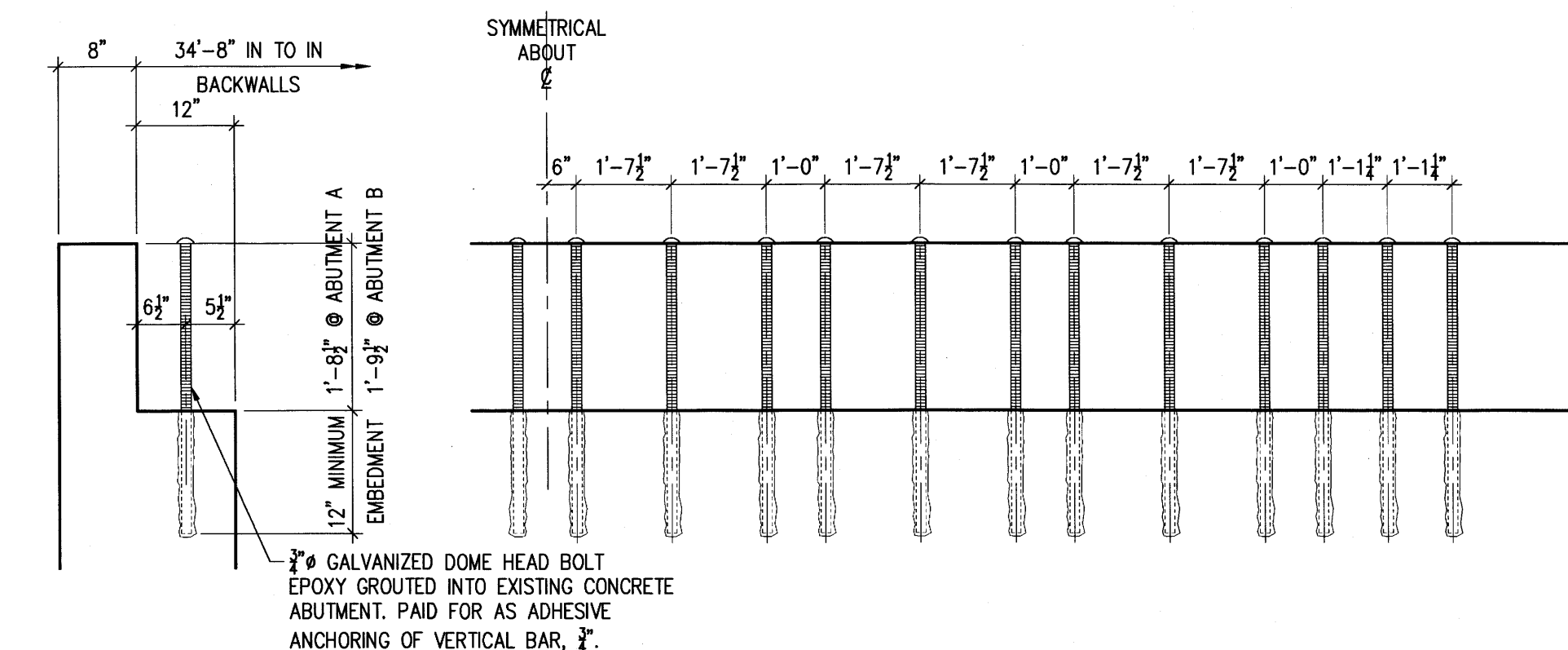


BRIDGE ELEVATION



BRIDGE SECTION @ MIDSPAN/ABUTMENT

- 8 DECK PANEL/SILL PLATE TO ABUTMENT A
- 3 3/4" x 33" DOME HEAD BOLT WITH EPOXY
- 8 DECK PANEL/SILL PLATE TO ABUTMENT B
- 3 3/4" x 34" DOME HEAD BOLT WITH EPOXY
- 3 DECK PANEL TO DECK STIFFENER
- 14 3/4" x 24" DOME HEAD BOLT
- 14 3/4" MALLEABLE IRON WASHER
- 14 CURB/ CURB BLOCK TO DECK PANEL
- 4 3/4" x 29" DOME HEAD BOLT
- 4 4" DRAIN SPLIT RING
- 4 STEEL PLATE WASHER - MARK PW2
- 4 CURB SPLICE
- 4 3/4" x 7" ECOM HEAD BOLT
- 4 3/4" MALLEABLE IRON WASHER
- 14 DECK PANEL TO POST
- 2 3/4" x 30" DOME DRIVE SPIKE
- 14 POST TO DECK PANEL
- 2 3/4" x 30" DOME DRIVE SPIKE
- 14 CURB TO POST
- 1 1-1/4" x 26" DOME HEAD BOLT
- 2 STEEL PLATE WASHER - MARK PW1
- 14 RAIL TO POST
- 2 5/8" x 25" DOME HEAD BOLT
- 2 STEEL PLATE WASHER - MARK PW3



ABUTMENT WITH ANCHOR BOLT LOCATIONS
FINAL DESIGN BY OTHERS

DESIGN CRITERIA:

VEHICLE LOAD : HL93
 WIND LOAD : 90 MPH
 SEISMIC DESIGN : SEISMIC ZONE = 1
 GROUND ACCELERATION 0.03g

GLULAM SPECIFICATIONS:

MATERIAL : WEST COAST DOUGLAS FIR COMB. 3 OR COMB. 2 AS NOTED.
 ADHESIVE : WATERPROOF PHENOLIC
 FABRICATION : AS SHOWN AND NOTED. MACHINE INCISE
 ALL GLULAM EXCEPT RAILS. DO NOT INCISE RAILS
 APPEARANCE : AS SHOWN & NOTED
 FINISH : SEE TREATMENT SPECIFICATIONS
 PROTECTION : NONE
 CERTIFICATE : ANSI 117-2010 / APA-EWS
 GLULAM MATERIAL INCLUDES DECK PANELS, DECK STIFFENERS & RAILS

SAWN LUMBER SPECIFICATIONS:

MATERIAL : WEST COAST DOUGLAS FIR #1 PER WCLIB GRADING RULES #16.
 FABRICATION : AS SHOWN & NOTED
 SURFACE : AS NOTED
 FINISH : SEE TREATMENT SPECIFICATIONS
 SAWN LUMBER INCLUDES SILL PLATES, CURBS, CURB BLOCKS, POSTS & SPACER BLOCKS

STEEL SPECIFICATIONS:

STEEL SHAPES : ASTM A36
 HARDWARE : ASTM A307
 HOT DIP GALVANIZE ALL STEEL SHAPES AFTER FABRICATION.
 HOT DIP GALVANIZE ALL HARDWARE.
 ALL WELDING TO BE PER AWS SPECIFICATIONS BY CERTIFIED WELDERS. TREAT ALL FIELD MODIFICATIONS W/ COLD GALVANIZING PAINT.

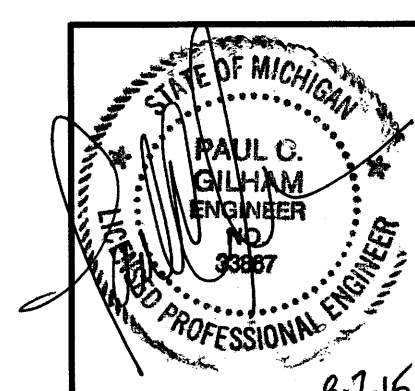
TREATMENT SPECIFICATIONS:

ALL DIMENSIONED CUTS AND HOLES IN TIMBER MATERIAL SHALL BE MADE PRIOR TO PRESSURE TREATMENT. TREAT ALL FIELD CUTS AND BORES WITH COPPER NAPHTHENATE IN ACCORDANCE WITH AMPA SPECIFICATION M4.
 TREAT GLULAM MATERIAL WITH PENTACHLOROPHENOL TYPE 'A' TO A MINIMUM NET RETENTION OF 0.4 PCF PER AMPA SPECIFICATION C2B. ISSUE CERTIFICATION OF TREATMENT.
 TREAT SAWN LUMBER WITH PENTACHLOROPHENOL IN LIGHT SOLVENT TO A MINIMUM NET RETENTION OF 0.4 PCF PER AMPA SPECIFICATION C2.

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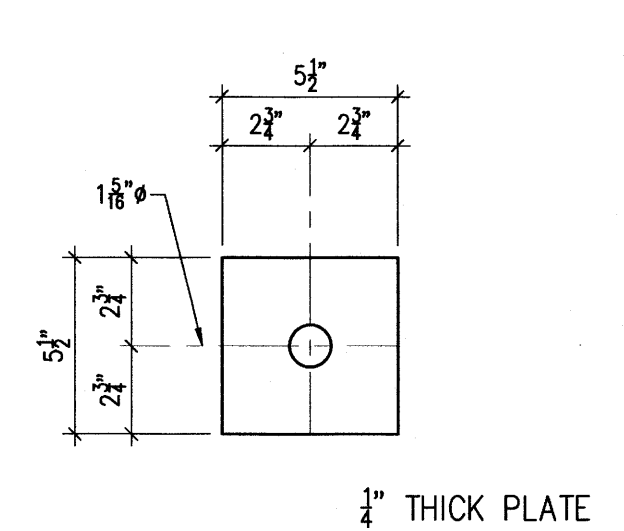
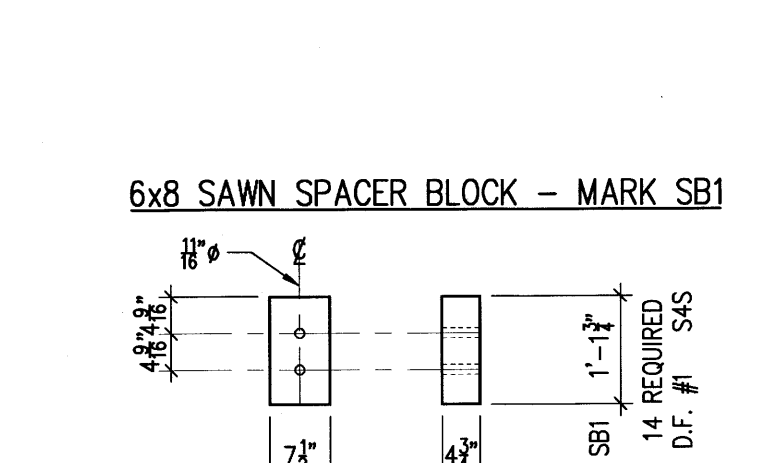
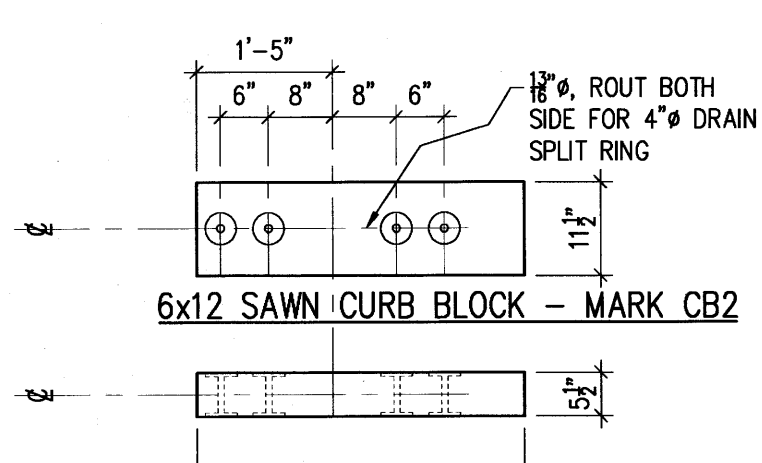
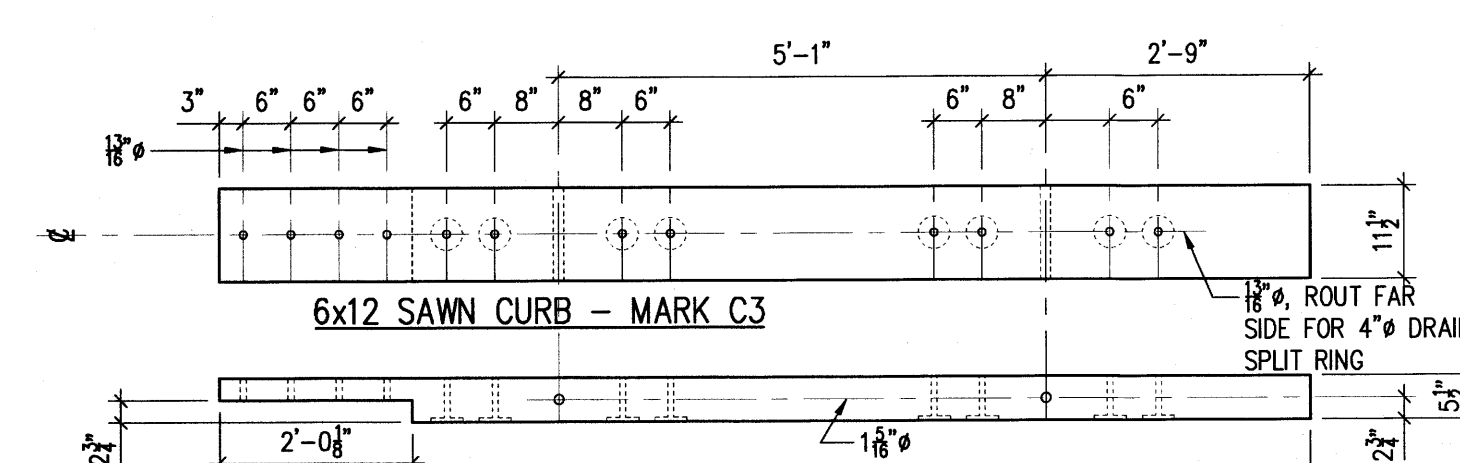
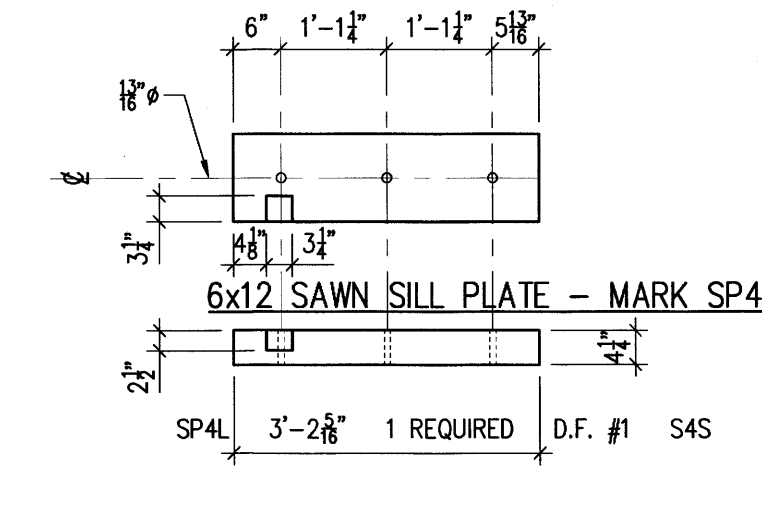
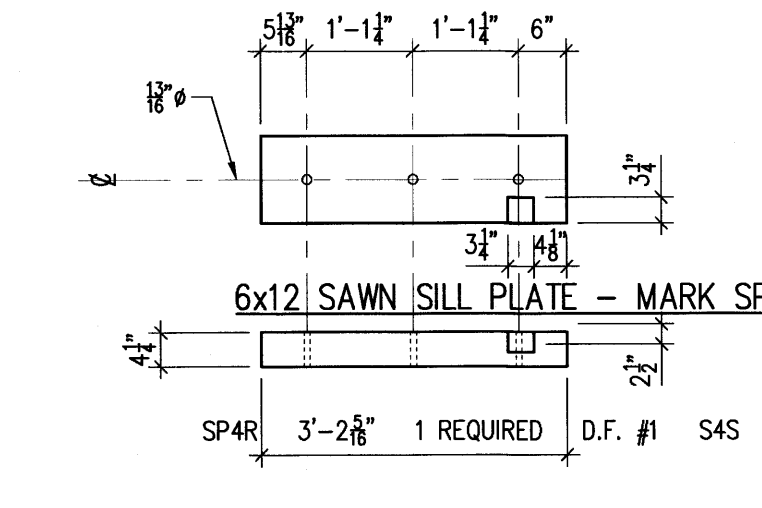
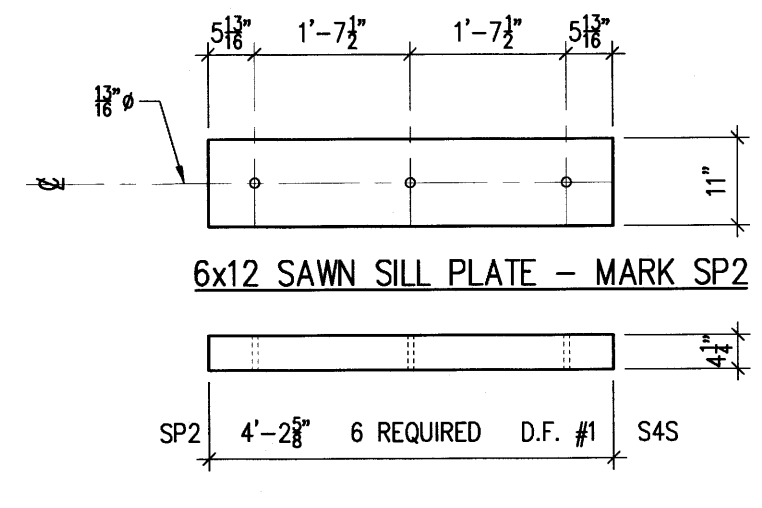
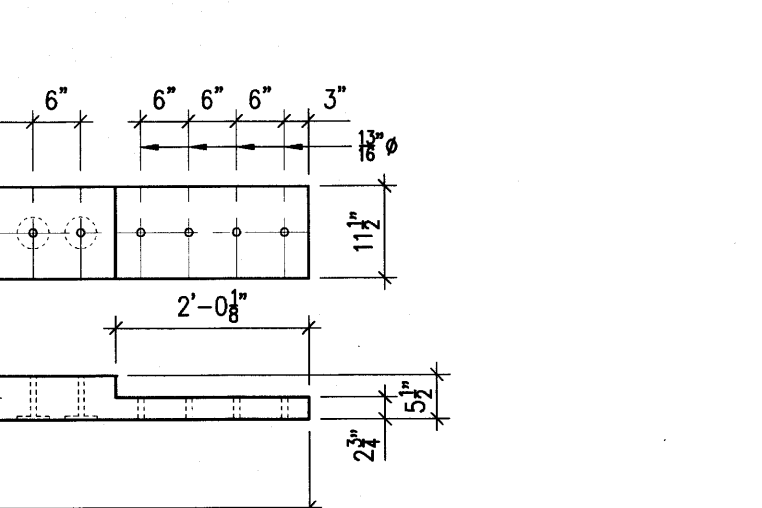
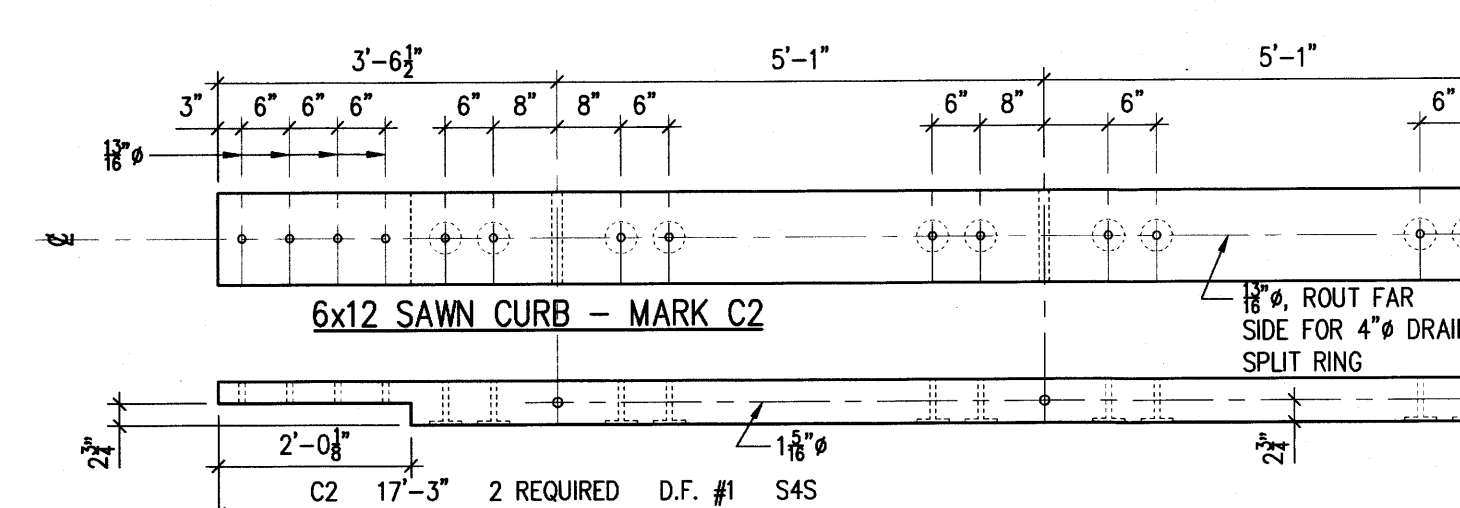
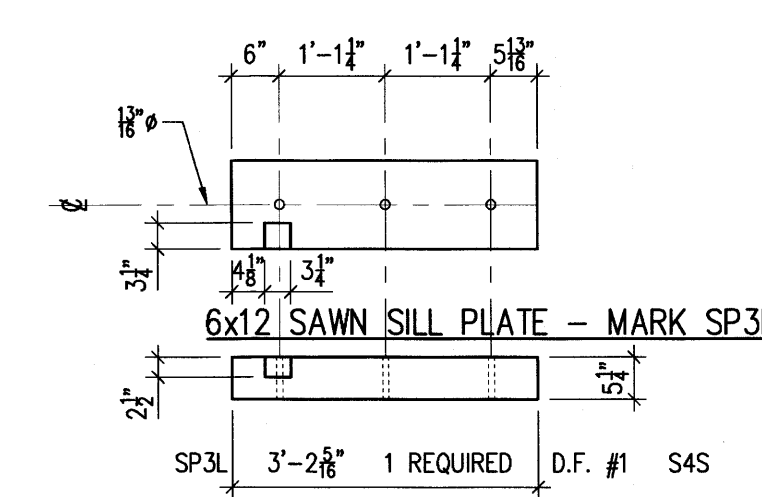
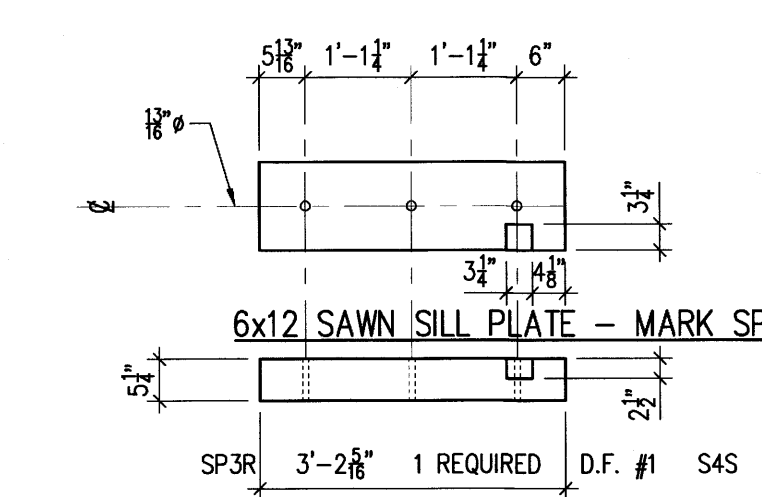
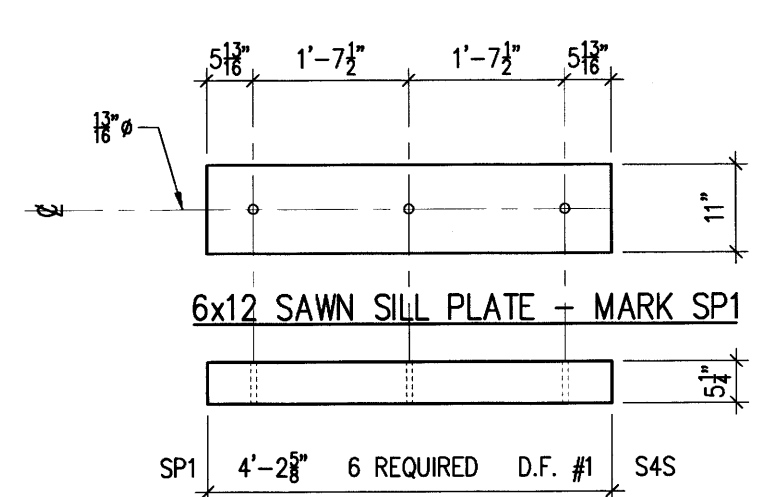
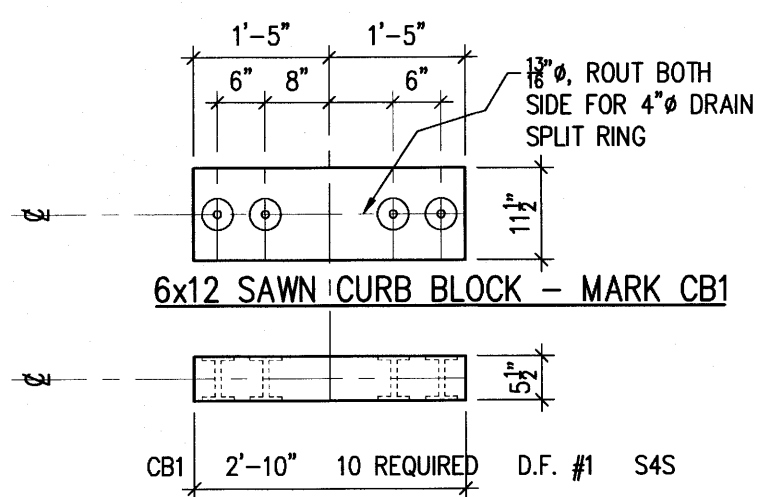
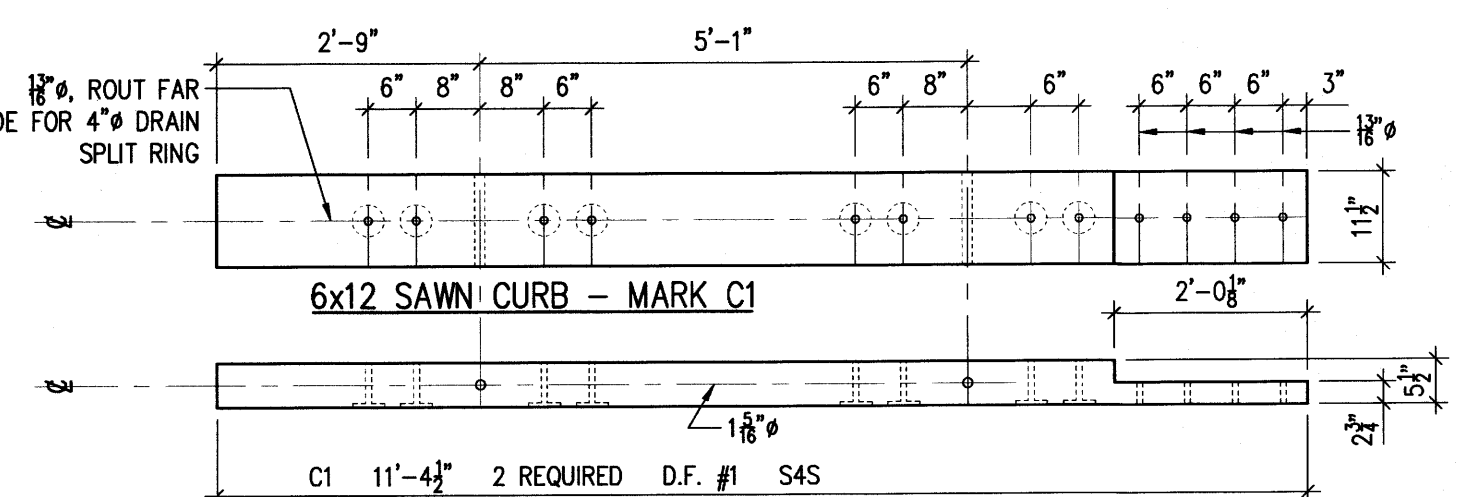
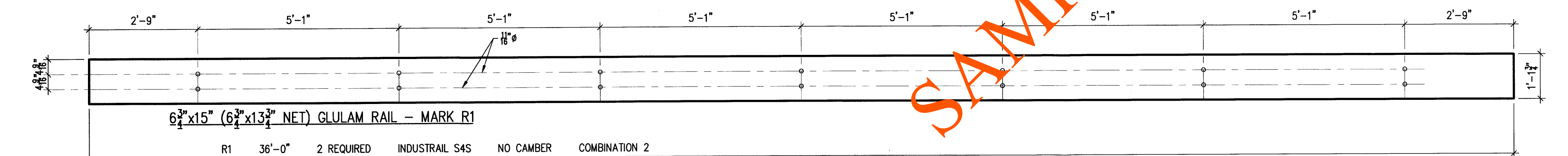
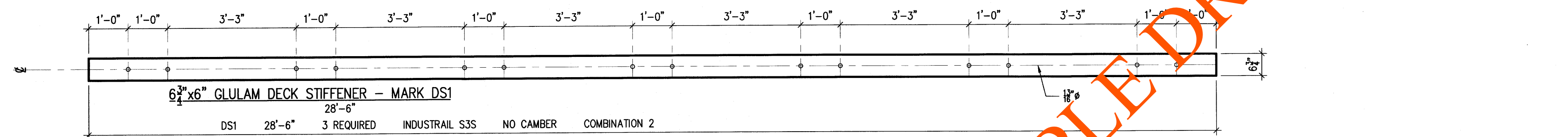
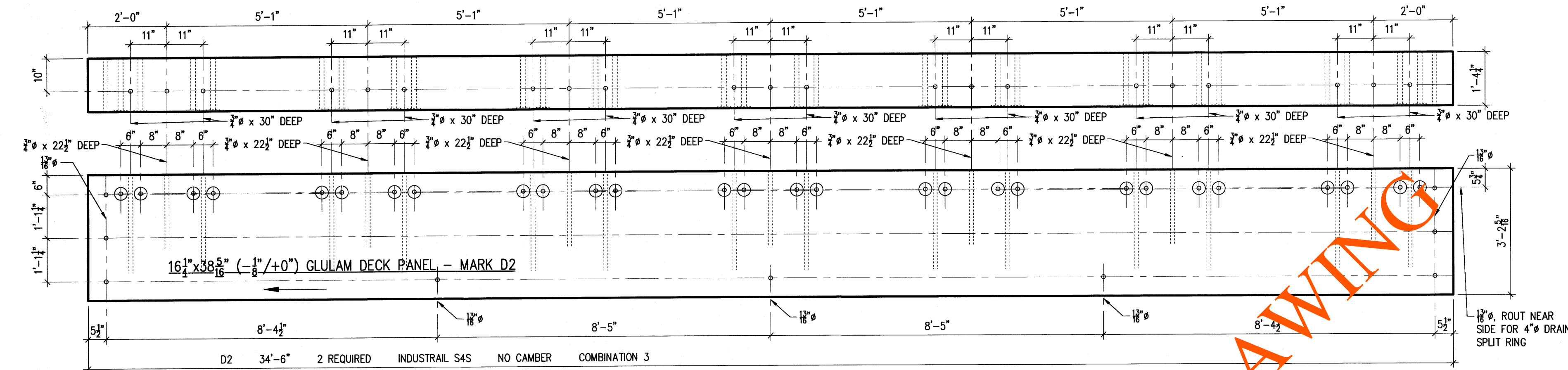
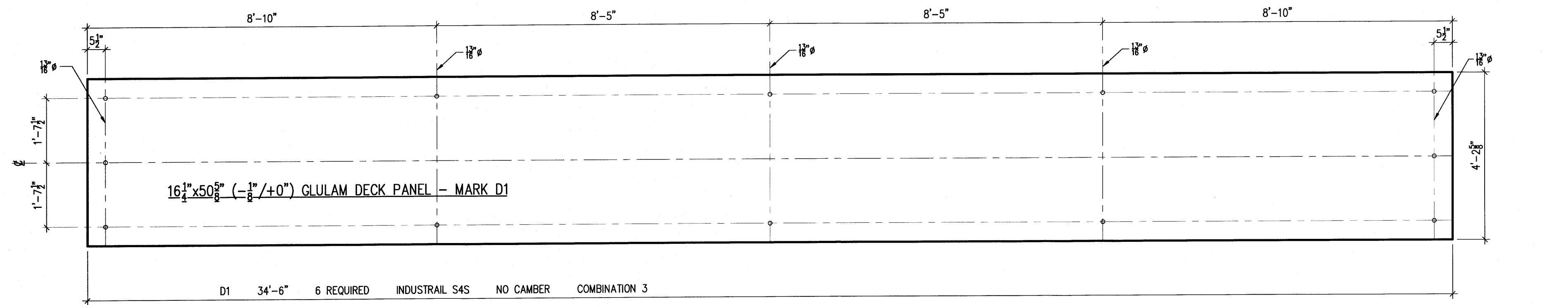
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 DISAPPROVED RE-SUBMIT

FIRM DATE

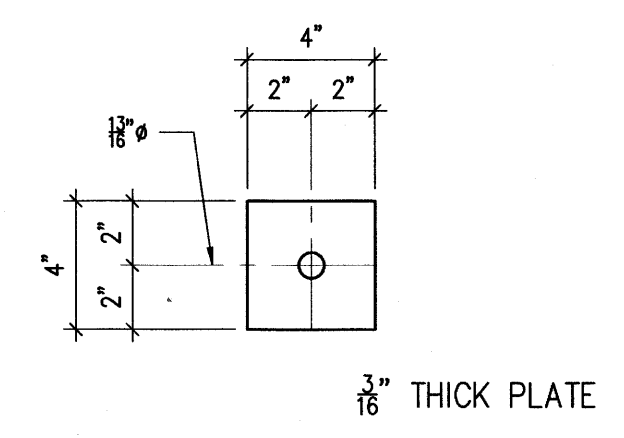


NO.	DATE	REVISIONS	BY

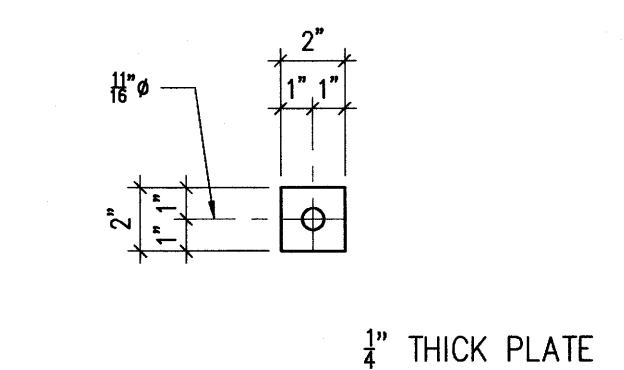
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LOCATION:	FLINT, MICHIGAN		
ARCHITECT:			
ENGINEER:			
CONTRACTOR:	ART THURESON, INC.		
DRAWN BY:	YK	DATE	8/05/15
CHECKED BY:		DATE	
DATE PRINTED:		PLOT DATE	08/05/15
JOB NO.:	154038	SHEET:	1 of 2



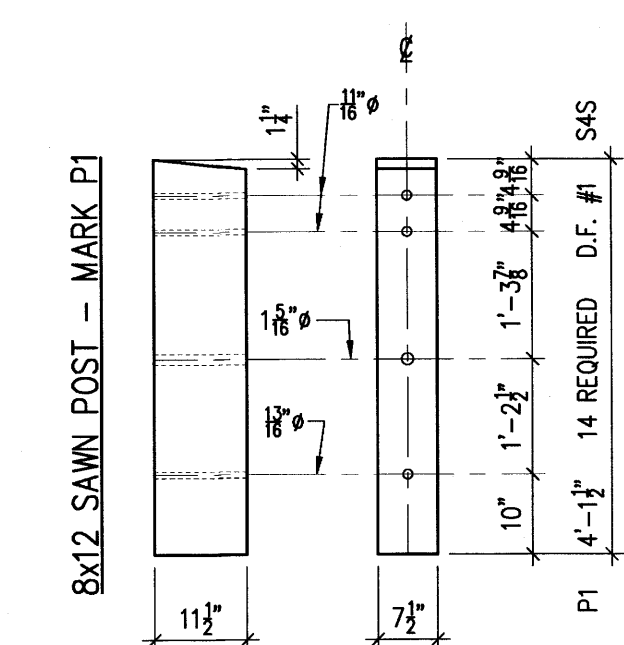
STEEL PLATE WASHER - PW1
MARK PW1 28 REQUIRED



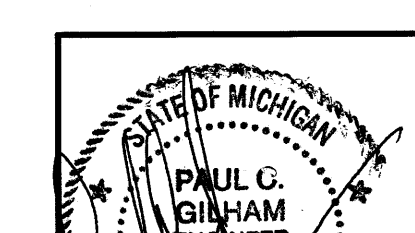
STEEL PLATE WASHER - PW2
MARK PW2 56 REQUIRED



STEEL PLATE WASHER - PW3
MARK PW3 28 REQUIRED



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PROJECT:	COLE ROAD BRIDGE
LOCATION:	FLINT, MICHIGAN
ARCHITECT:	
ENGINEER:	