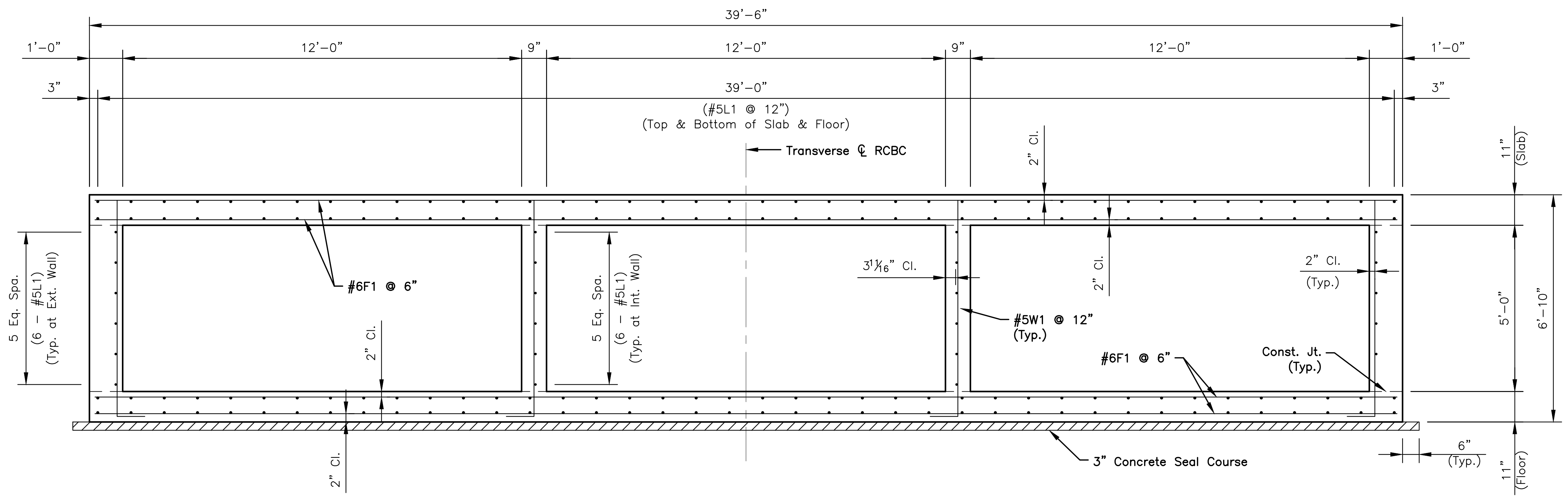


PLOTTED: Friday, July 26, 2019 @ 09:22AM
 J:\PROJECTS\2019\1801010315_COW_2ND ST. BRIDGE AT BROOKSIDE\180315 CAD\SHOTS\05 CIVIL\BRIDGE\180315-BR02.DWG



TYPICAL SECTION

BARREL GENERAL NOTES

- DESIGN SPECIFICATION:** AASHTO LRFD Bridge Specifications, 8th Edition
- DESIGN LOADING:** HL-93
- UNIT STRESSES:** Grade 4.0 Concrete $f'_c = 4,000$ p.s.i.
Reinforcing Steel: $f_y = 60,000$ p.s.i.
- FILL HEIGHT:** Unless otherwise noted, the Design Fill Height is measured from the riding surface at the culvert and shall include the surfacing.
- CONCRETE:** Grade 4.0 Concrete shall be used throughout. Bevel all exposed edges with a $\frac{3}{4}$ inch triangular moulding. Prior to casting concrete against a previous casting, all concrete joint surfaces shall have a brush sandblast, power wash, and water soaked prior to casting.
- REINFORCING:** All reinforcing shall conform to ASTM A615, Grade 60. All dimensions relative to reinforcing steel shall be to centerline of bar unless otherwise noted. If reinforcing steel is field cut, the Contractor shall patch epoxy coating at the exposed ends of rebar according to KDOT Specifications. The patching material shall be selected from Kansas Department of Transportation Prequalified Materials List, PQL-10.2 "Patching Materials for Epoxy Coatings".
- EXCAVATION:** Class III Excavation for RCB Bridges shall be considered subsidiary to the bid item "Pipe, SWS, RCBC, (3-12'x5)", see "Bridge Excavation" sheet.
- SEAL COURSE:** A Seal Course is required. The Seal Course shall be unreinforced Concrete (Commercial Grade) to a minimum depth of 3 inches or as determined by the Engineer. Concrete for the seal course shall be considered subsidiary to the bid item "Pipe, SWS, RCBC, (3-12'x5)".

FOR INFORMATION ONLY

BILL OF REINFORCING STEEL
(Grade 60, Epoxy-Coated)

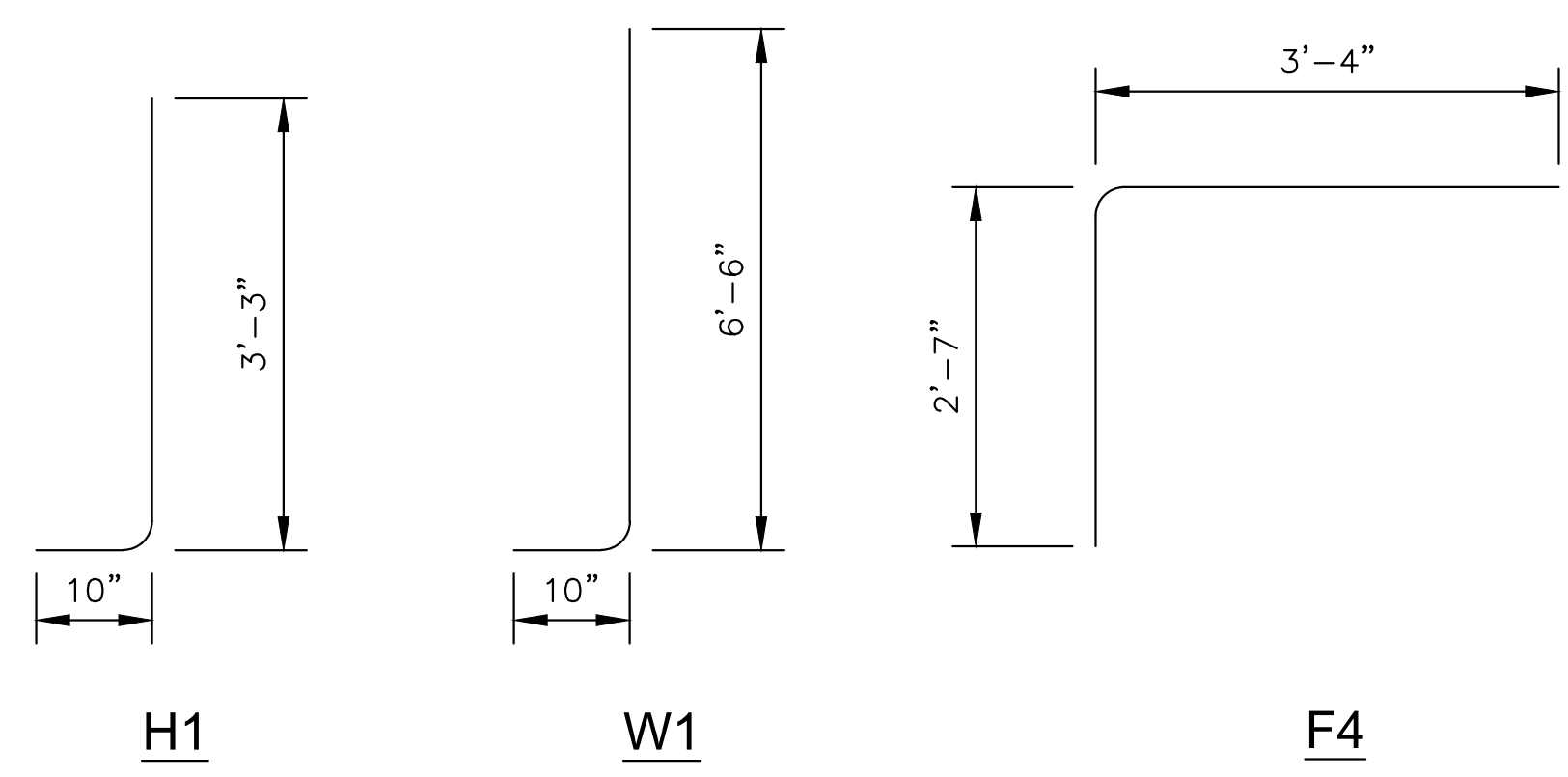
Straight Bars				Bent Bars			
Mark	Size	No.	Length	Mark	Size	No.	Length
F1	#6	432	39'-2"	H1	#5	80	4'-1"
F2	#5	6	39'-2"	W1	#5	220	7'-4"
L1	#5	184	53'-8"	F4	#5	74	5'-11"
F5	#5	10	37'-0"				

FOR INFORMATION ONLY

SUMMARY OF QUANTITIES
(Barrel Only)

Concrete (Grade 4.0)	197.1 C.Y.
Reinforcing Steel (Gr. 60)(Epoxy-Coated)	38,830 Lbs.
Class III Excavation	585.0 C.Y.
Concrete for Seal Course	20.3 C.Y.

Note: Quantities shown are for information only. All labor, materials, and equipment required for construction of RCBC shall be considered subsidiary to the bid item "Pipe, SWS, RCBC (3-12'x5)".



BAR BENDING DIAGRAMS

Note: All dimensions are out to out of bars.

©2019
MKEC Engineering
All Rights Reserved
www.mkec.com
These drawings and their contents, including, but not limited to, all concepts, designs, & ideas are the exclusive property of MKEC Engineering (MKEC), and may not be used or reproduced in any way without the express consent of MKEC.

BARREL DETAILS SHEET (1 OF 2)

PROJECT NO.	472-85435	
DATE	JULY 2019	
SCALE	NTS	
DESIGNED	DRAWN	CHECKED
J.T.H.	J.D.H.	J.T.H.
NO.	REVISION	DATE