

F.A. ROUTE	SECTION
999	82-1B-2
FED. AID PROJECT	ILLINOIS
COUNTY	ST. CLAIR
USER NAME = jjo11ff	
PLOT SCALE = #SCALE#	
PLOT DATE = 4/14/2010	
DESIGNED -	HNTB
CHECKED -	CMT
DRAWN -	CMT / HNTB
REVISED -	
REVISED -	
REVISED -	

ILLINOIS APPROACH STRUCTURE FOR NEW I-70 MISSISSIPPI RIVER BRIDGE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

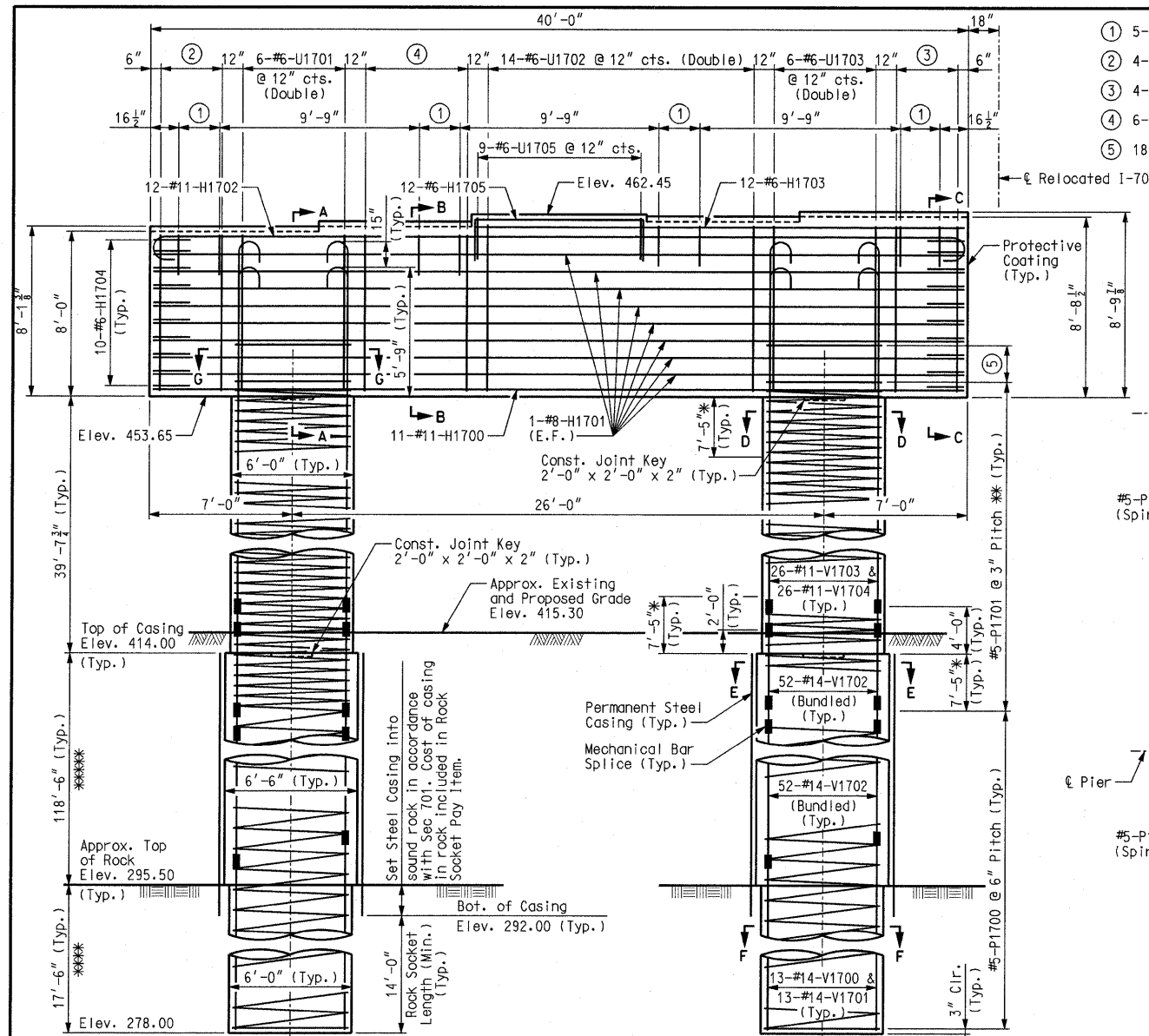
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

HNTB

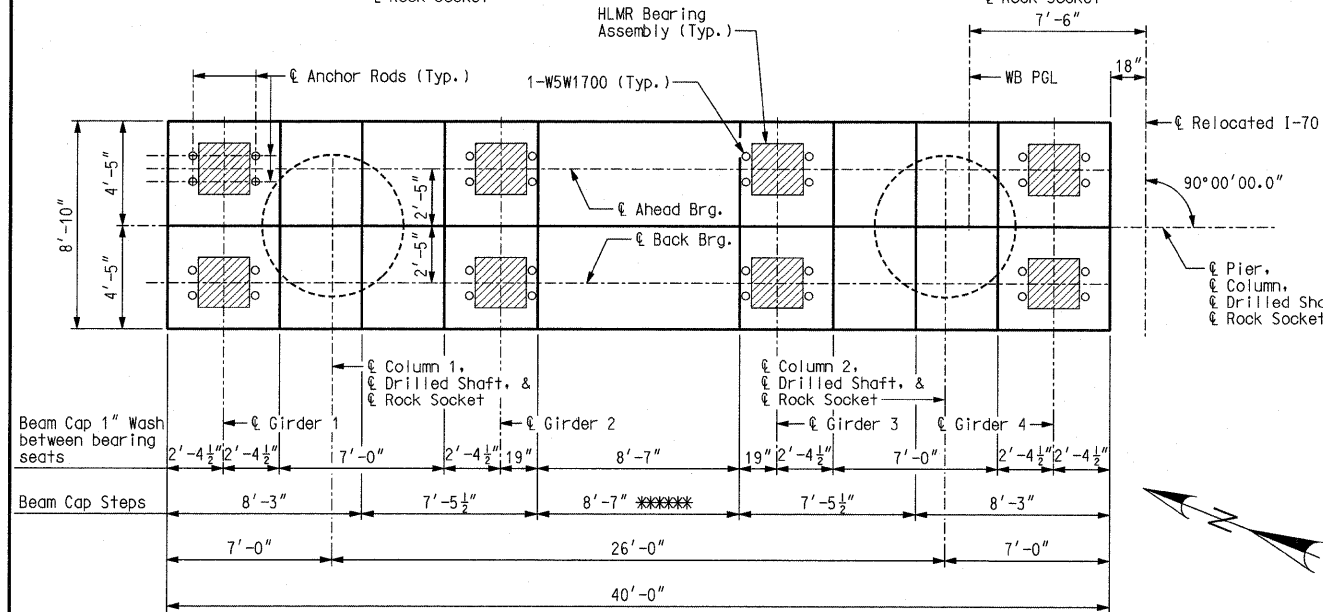
715 KIRK DRIVE
KANSAS CITY, MO 64105
TELEPHONE (816) 472-1201
CERTIFICATE OF AUTHORITY
NO. 001270

CMT

CRAWFORD, MURPHY & TILLY, INC.
2750 WEST WASHINGTON STREET
SPRINGFIELD, IL 62702
TELEPHONE (217) 787-8050
ENGINEERING CORPORATION - 000651



ELEVATION

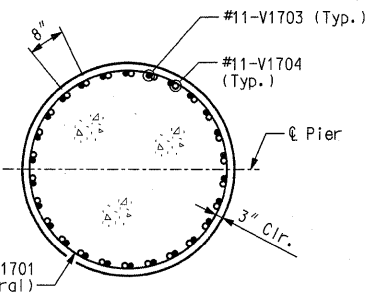


PLAN

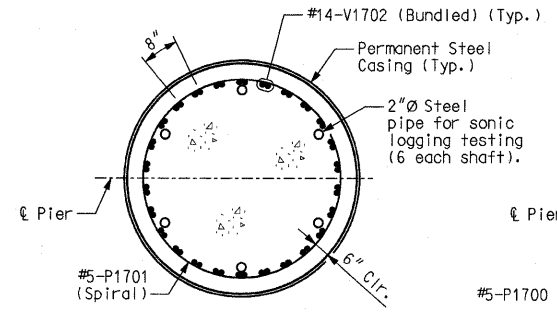
Note: This drawing is not to scale. Follow dimensions.

Detailed JUL 2009
Checked JUL 2009

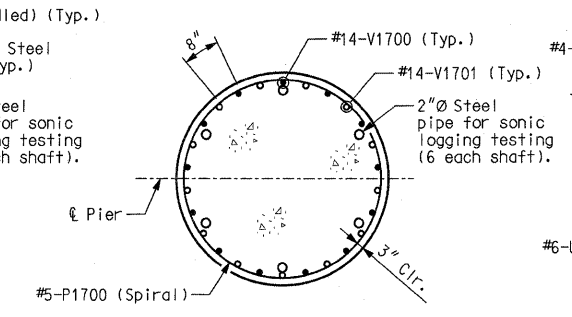
- ① 5-#4-U1704 @ 6" cts.
- ② 4-#6-U1700 @ 12" cts. (Double)
- ③ 4-#6-U1702 @ 12" cts. (Double)
- ④ 6-#6-U1700 @ 12" cts. (Double)
- ⑤ 18-#5-P1702 @ 3" cts. (Typ.) ***



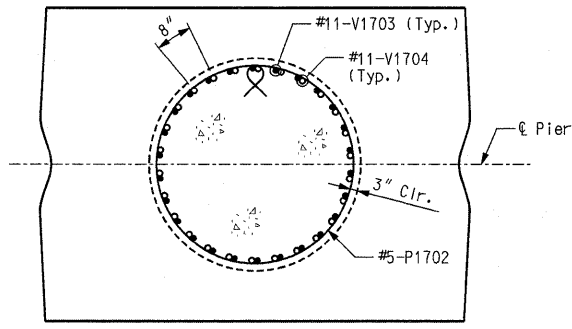
SECTION D-D
(6'-0" Diameter)



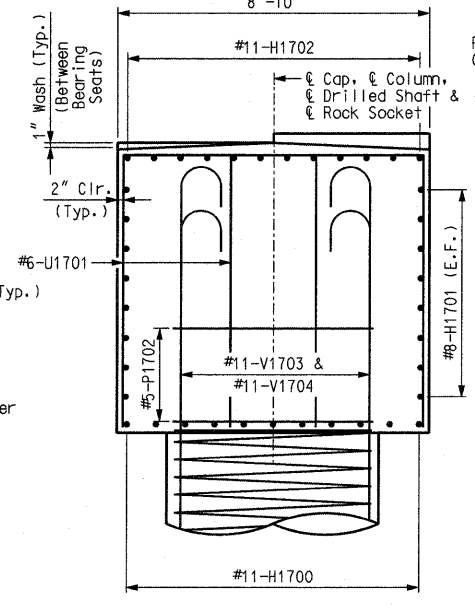
SECTION E-E
(6'-6" Diameter)



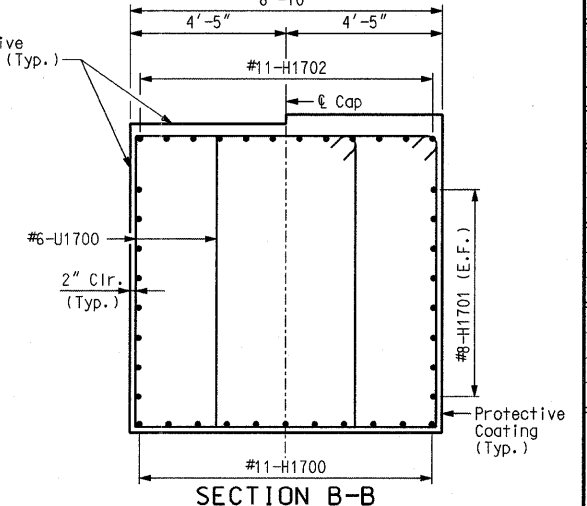
SECTION F-F
(6'-0" Diameter)



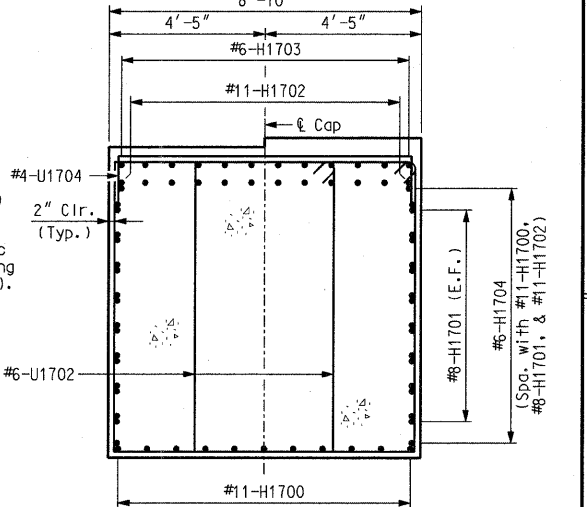
SECTION G-G
(Beam Cap reinforcement not shown)



SECTION A-A



SECTION B-B



SECTION C-C

Girder	Back Brg.	Ahead Brg.
1	461.76	461.65
2	462.00	461.89
3	462.23	462.12
4	462.47	462.36

Notes:
 An additional 4 feet has been added to #5-P1700, #14-V1700 and #14-V1701 lengths for possible change in drilled shaft or rock socket depth. This excess length shall be cut off or included in the reinforcement lap if not required.
 Sonic logging testing shall be performed on all drilled shafts and rock sockets.
 All reinforcing bars in the tops of substructure beams or caps shall be spaced to clear anchor rod wells for bearings by at least 1/2".
 The hooks of V-Bars embedded in the beam cap shall be oriented inward. Bending the hook outward, away from the column core, is not allowed.
 The thickness of steel casing shall meet all the requirements of Sec 701 with minimum thickness being 3/8 inch. Thicker casing may be required for installation.
 For details of HLMR Bearing Assembly, see Sheet No. 42.
 For Anchor Rod Well Details and Anchor Rod Setting Plan, see Sheet Nos. 44 and 46.
 For details of seismic stirrup bars, see Sheet No. 7.
 * Lapping of spiral reinforcement in this region not permitted.
 ** Continue spiral bars to the bottom of the beam cap stirrup reinforcing bar.
 *** Splice locations shall be staggered.
 Anchorage of spiral reinforcement shall be provided by 1-1/2 extra turns of spiral bar at each end of spiral unit.
 **** Pay Items Rock Socket (6 ft. 0 in. Dia.).
 ***** Pay Items Drilled Shaft (6 ft. 6 in. Dia.).
 Shear Block Dimension assumes masonry plate width of 3'-0" and 1" clear on either side to shear block. If masonry plate is wider than 3'-0" contractor shall adjust the shear block dimension to provide 1" clear.
 Seal back face of beam, top of beam, ends of beam, and front face of beam with Protective Coating - Concrete Bents and Piers (Epoxy).

Item	Quantity
Drilled Shafts (6 ft. 6 in. Dia.)	linear foot 237.0
Rock Sockets (6 ft. 0 in. Dia.)	linear foot 35.0
Supplementary Television Camera Inspection	each 1
Foundation Inspection Holes	linear foot 55.0
Sonic Logging Testing	each 2
Class B Concrete (Substructure)	cu. yard 194.4
Reinforcing Steel (Bridges)	pound 116,940
Mechanical Bar Splice	each 260
Reinforcing Steel (Epoxy Coated)	pound 37,350

Note: These quantities are included in the estimated quantities table on Sheet No. 7.