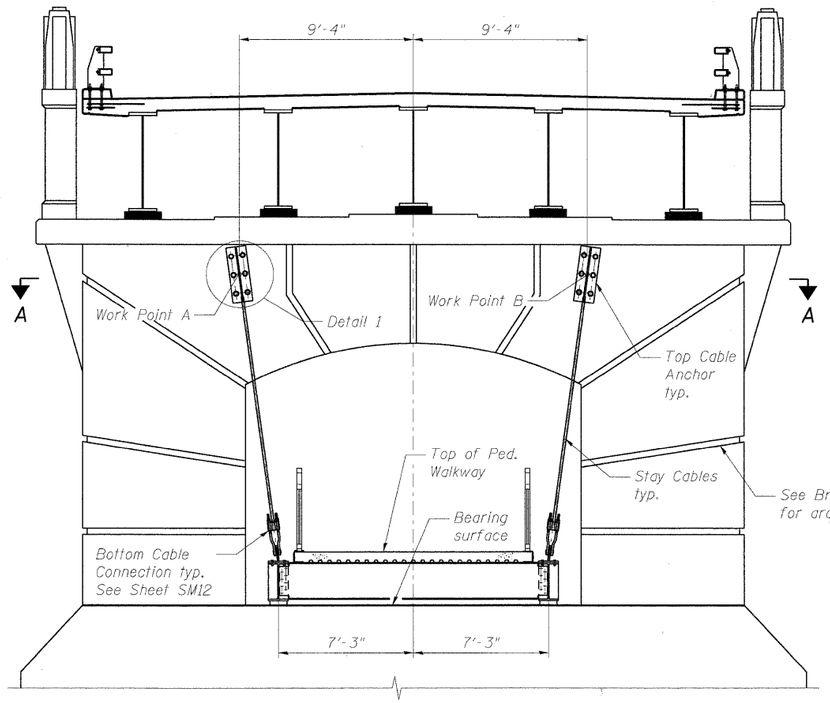
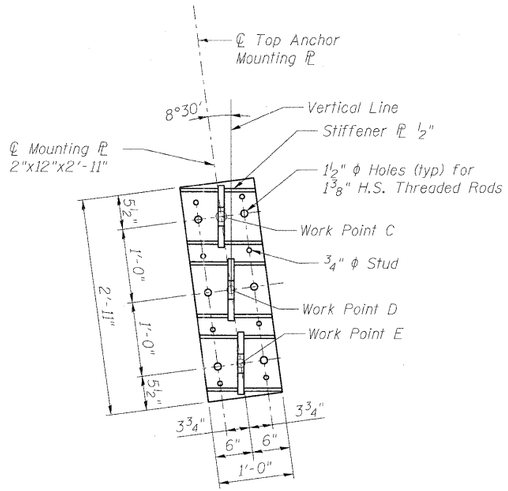
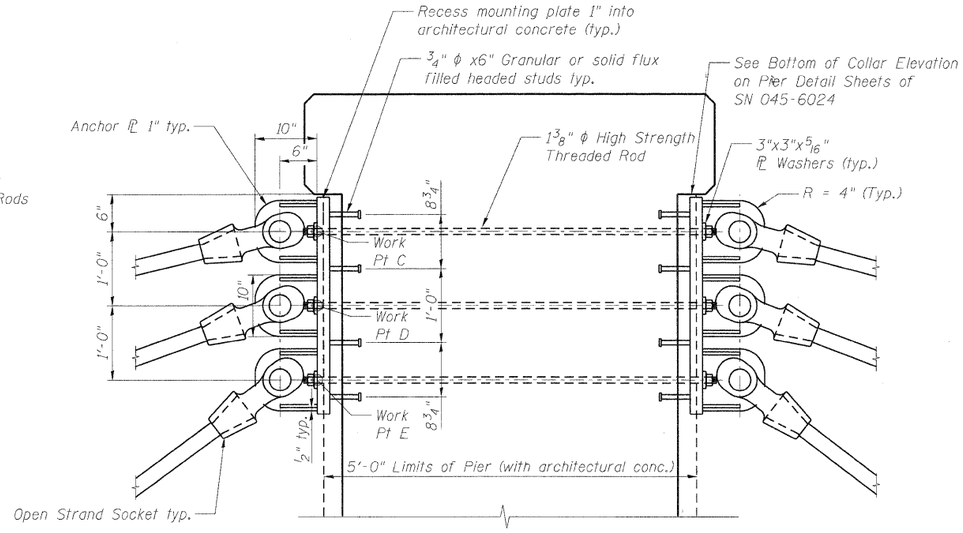


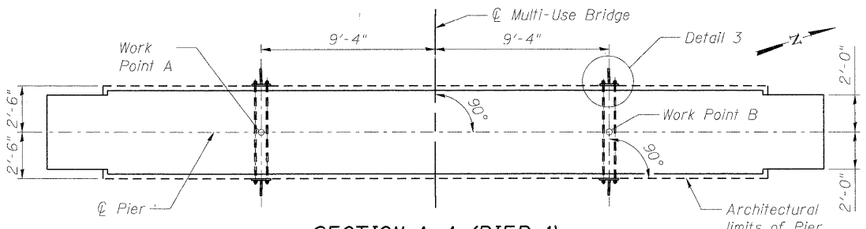
PIER ELEVATION



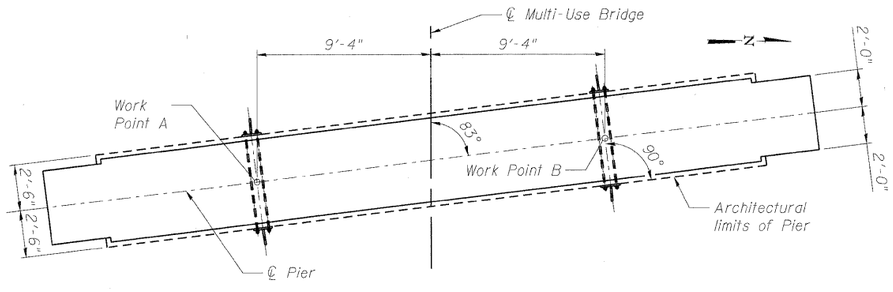
DETAIL 1
UPPER ANCHORAGE ASSEMBLY



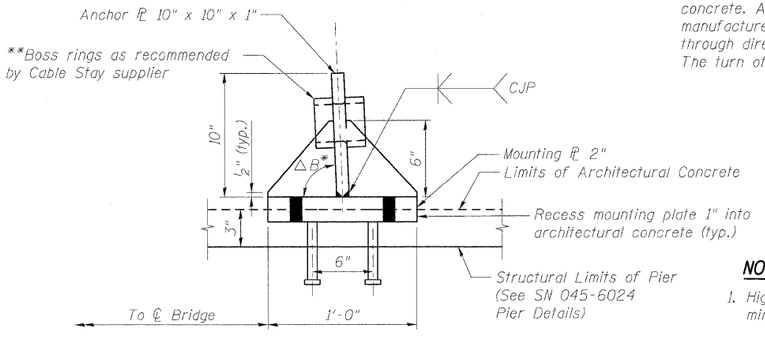
SECTION THRU UPPER ANCHORAGE ASSEMBLY



SECTION A-A (PIER 1)



SECTION A-A (PIERS 2 thru 5)



* See SM12 for values of ΔB

DETAIL 3

Northwest corner shown, southwest side mirrored.
(East side of pier details symmetric by rotation)

** Boss rings shall be welded to the plate prior to boring of the pin hole to ensure proper fit.

HIGH STRENGTH BAR INSTALLATION PROCEDURE

1. Anchorage assembly shall be installed to the geometry shown on the plans. Coordinate with SN 045-6024 Pier drawings.
2. High Strength threaded rods shall be installed with grease and a debonding sheathing to be submitted to the Engineer for approval. Caution shall be taken to ensure the shear studs are free from grease prior to concrete placement.
3. Contractor shall ensure annulus between threaded rod and hole is sealed. The rod shall be isolated from contact with concrete prior to and during placement.
4. High Strength Rods shall be tensioned to 85 kips after installation and curing of the concrete. All nuts and washers shall be in accordance with the high strength rod manufacturer's recommendations. Verification of the tensile load shall be accomplished through direct tension indicating washers which shall be installed at both ends of the rod. The turn of the nut method is not acceptable.

NOTES:

1. High strength threaded rod shall conform to ASTM A722 with a minimum ultimate strength of 150 ksi.
2. All plates, shear studs, threaded rods, nuts and washers along with the pre-tensioning operation and any addtional required accessories shall be included with the cost of "Furnishing and Erecting Structural Steel Bridge No. 1"

benesch
engineers · scientists · planners
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10092

FILE NAME = 0456022.11.CblStyDtls.dgn	USER NAME = akeaschall	DESIGNED -	REVISED -
		CHECKED -	REVISED -
	PLOT SCALE =	DRAWN -	REVISED -
	PLOT DATE = 11/10/2011	CHECKED -	REVISED -

CITY OF ST. CHARLES

CABLE STAY DETAILS (1 OF 2)
STRUCTURE NO. 045-6020 MULTI-USE TRAIL BRIDGE OVER FOX RIVER
SHEET NO. SM11 OF SM19 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	04-00092-00-BR	KANE	440	289
		CONTRACT NO. 63650		
	ILLINOIS FED. AID PROJECT			

x:\10000s\10092\engineering_documents_redgatephase1\pedbridgeoverfoxriver\final\plans\0456020.11.CblStyDtls.dgn
4:12:43 PM
11/10/2011