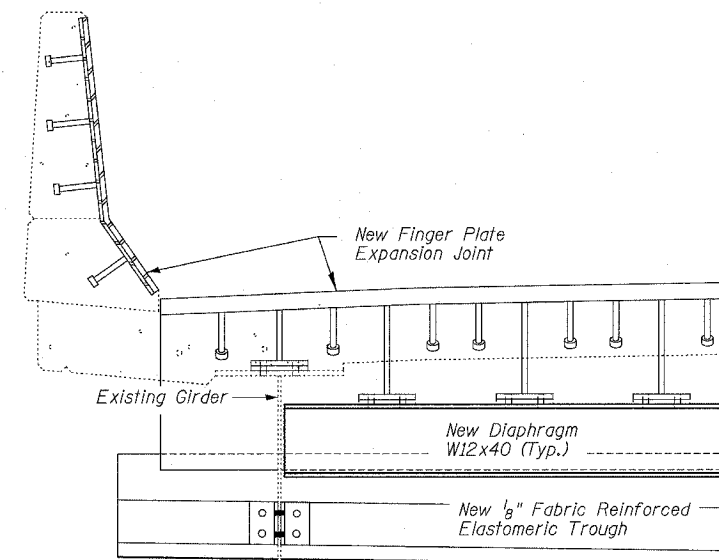


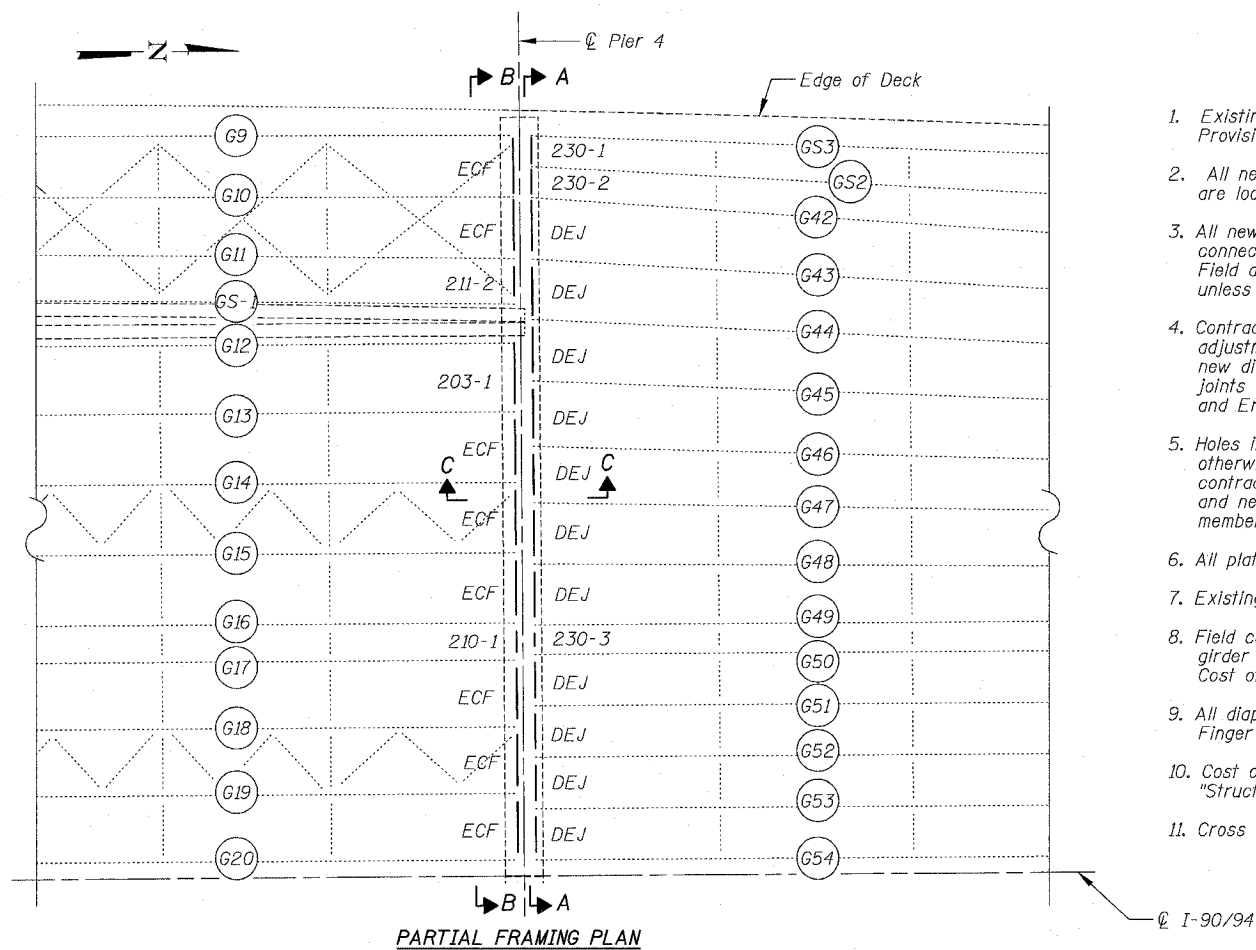
F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0291	COOK	344	261
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62581				

DIAPHRAGM REPLACEMENT NOTES

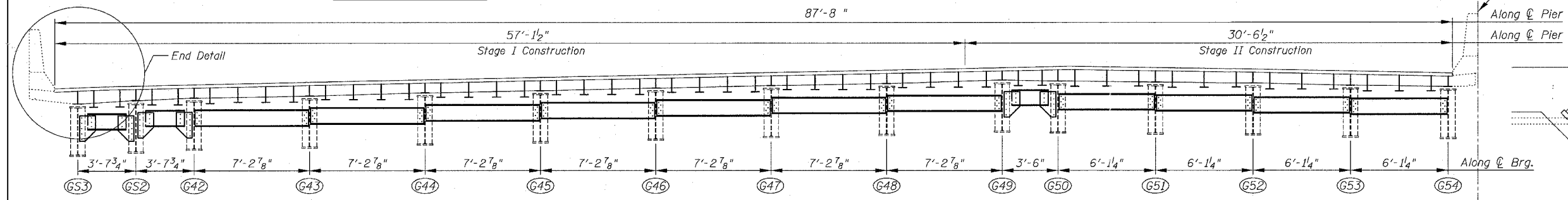
- Existing structural steel shall be cleaned and painted in accordance with the Special Provision for Cleaning and Painting Contact Surface Areas of Existing Steel Structures.
- All new diaphragms shall be level, and all cross frame and diaphragm details shown are looking toward \odot Pier unless otherwise noted.
- All new fasteners shall be $\frac{3}{4}$ " ϕ H.S. bolts with 2 washers (one on each side of connection) unless otherwise noted. Minimum edge distance for bolts shall be $1\frac{1}{2}$ ". Field drill $\frac{13}{16}$ " ϕ bolt holes to match existing and new stool dimensions unless otherwise noted.
- Contractor shall set the finger plate joints in place in the field and make all necessary adjustments to establish line and grade for the joints and then field drill $\frac{13}{16}$ " ϕ holes in new diaphragms to match stools and shims. Field drilling and removal and resetting of joints to accomplish field drilling, if necessary, will be included in the cost of Furnishing and Erecting Structural Steel.
- Holes in new diaphragms or connection plates shall be field drilled $\frac{13}{16}$ " ϕ unless otherwise noted, to match holes in existing members. Select connections may require the contractor to field drill, new $\frac{13}{16}$ " ϕ holes unless otherwise noted, through both existing and new members. Cost of all field drilling required to replace diaphragms and associated members will be included with Furnishing and Erecting Structural Steel.
- All plate dimensions refer to Width x Height x Thickness.
- Existing gusset plates shall be removed by removing welds and grinding smooth.
- Field cutting shall use the air-arc method. Flame cutting will not be permitted within 2" of girder web or flange. Grinding shall be done parallel to the longitudinal beam direction. Cost of field cutting, grinding shall be included with Structural Steel Removal.
- All diaphragm replacements shall be coordinated with stage construction for Finger Plate Expansion Joints.
- Cost of removal and disposal of existing steel shall be included in the cost of "Structural Steel Removal".
- Cross Frame designations reference original shop drawings.



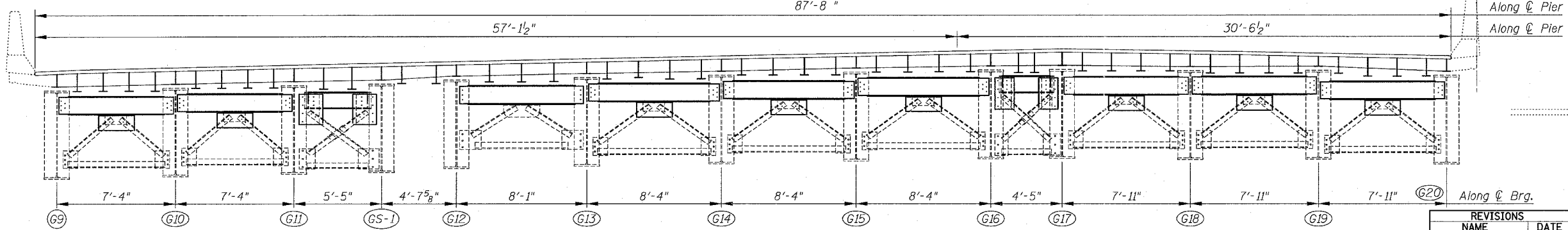
END DETAIL



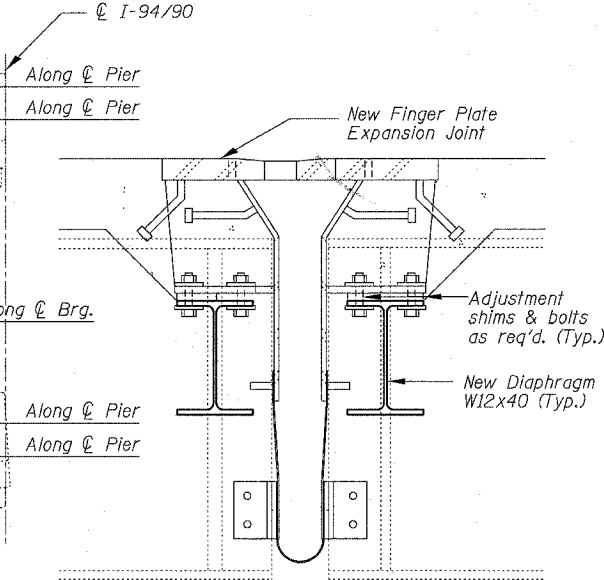
PARTIAL FRAMING PLAN



SECTION A-A
87'-8"



SECTION B-B
87'-8"



SECTION C-C

BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbandainc.com

REVISIONS	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
SB DAN RYAN ELEVATED BRIDGE
REPAIR FROM 15TH TO 28TH STREETS
DIAPHRAGM REPLACEMENT
PIER 4, SN 016-1110
SCALE: NTS
DATE: 5/25/2006
DRAWN BY: MTR
CHECKED BY: BLU

18-0650-COORD BRIDGE SHEET 215-016-1110-F-11-07-07