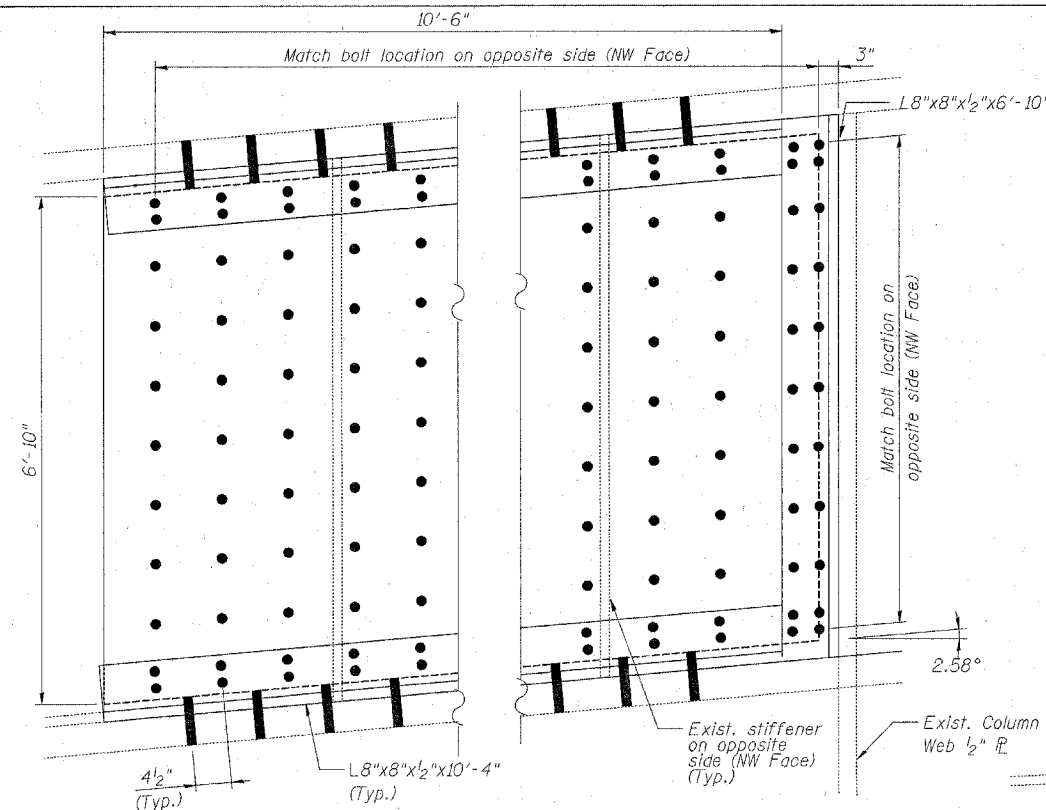
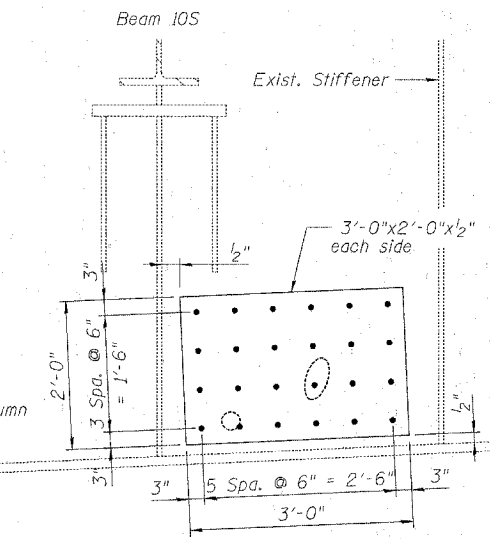


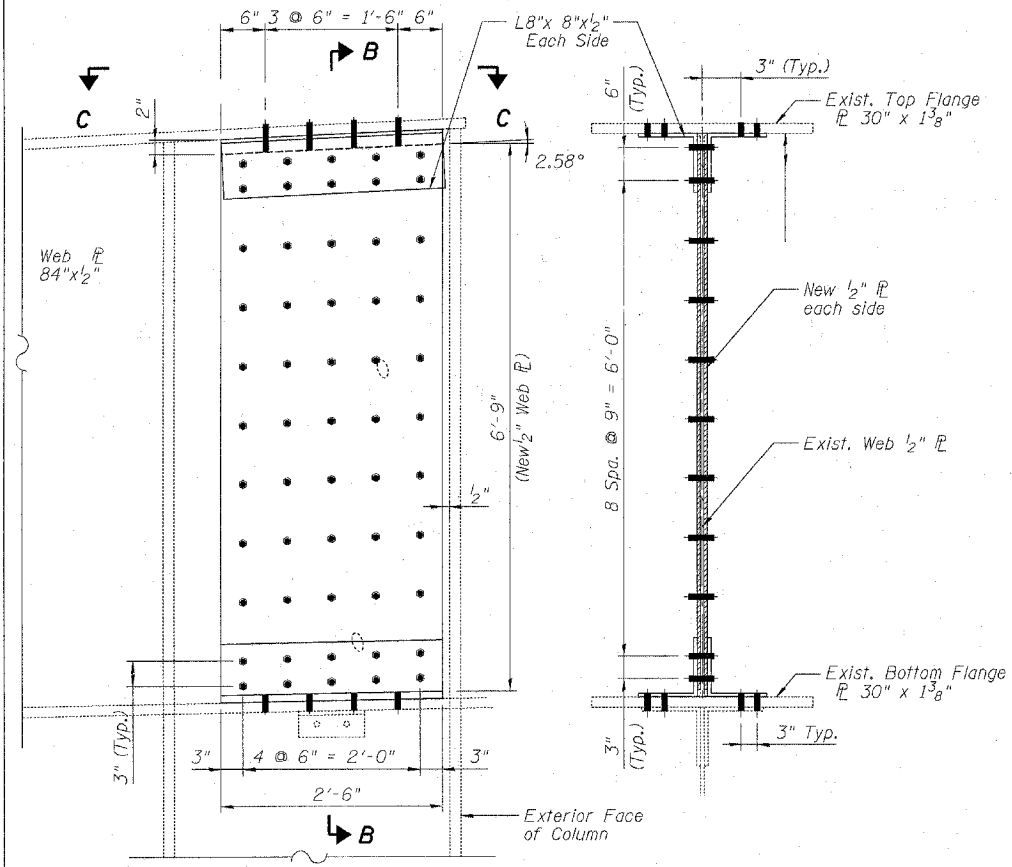
S.N. 016-1115 - PIER 14
(Looking Downstation)



VIEW E-E
(Span 14 side, SE Face)
(1 Location)



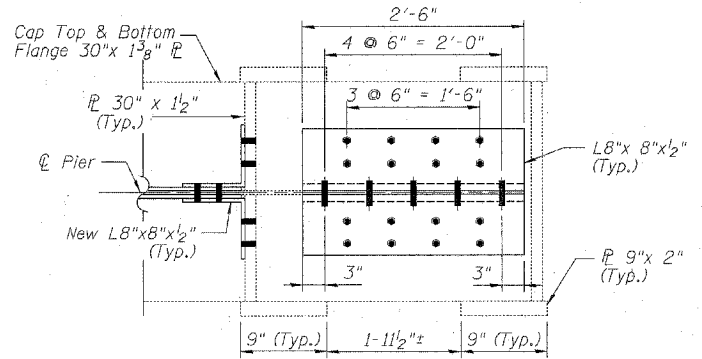
DETAIL 5
(1 Location)



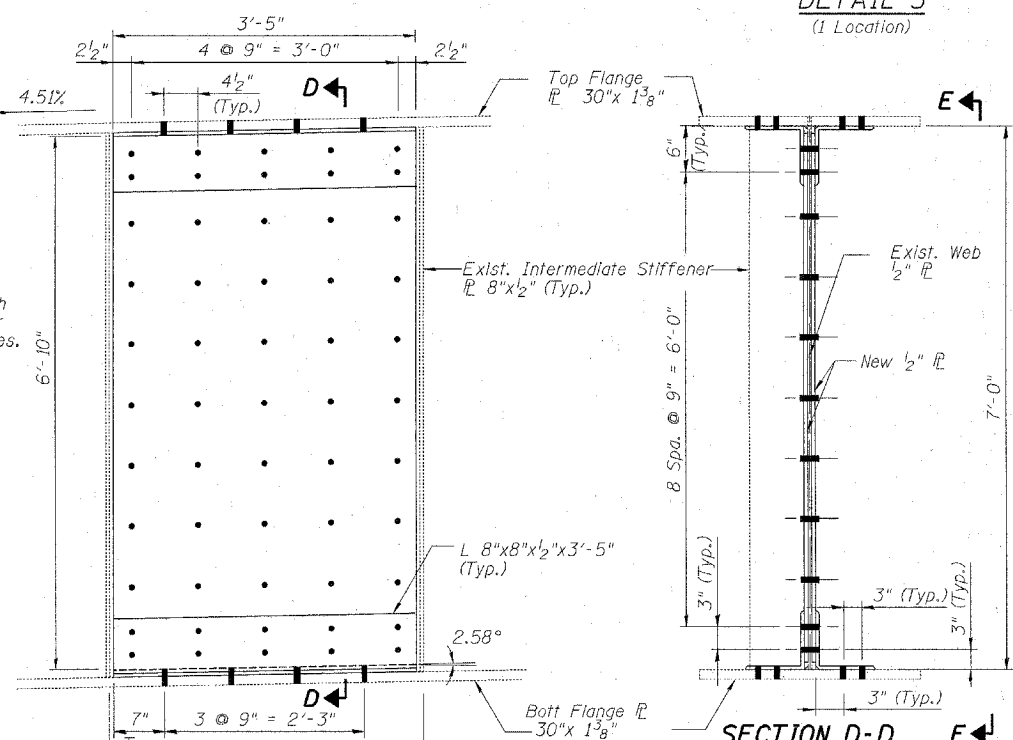
DETAIL 4
(1 Location)

SECTION B-B

- SN 016-1115, PIER 14 WEB REPAIR PROCEDURE**
1. This repair work shall be completed during the allowable closure hours of outside 2 SB lanes of I-90/94, in conjunction with outside 1 NB lane of I-55. See Special Provision for "Keeping the Expressway Open to Traffic".
 2. Web repairs shall start from partial installation of long plate (View E-E) to provide stability and proceed to the opposite side (Details 2 to 5). Prior to erecting long plate, remove debris and clean surface rust (but no grinding at this time) to provide smooth contacts for plating. Place long plate and crib with angles at top, bottom and column connection (on that face only). Drill and install all bolts to angles on top and bottom (t&b) flanges and column web. No more than 4 open holes without bolts shall be allowed. Drill and temporarily install 4 bolts to secure each angle to cap web adjacent to Beam 10S and at column connection on t&b.
 3. Detail 3 Panels shall be erected from Beam 10S and proceed outwards (toward exterior column). Remove debris, clean surface rust and grind sharp edges around rusted through holes. Grinding shall be done with extreme caution. No damage to long plate on the other side shall be allowed. Remove temporary bolts on web and place Detail 3 panel and angles. Complete installation of t&b angles prior to web panels. No more than 4 open holes without bolts shall be permitted at all times. Drill and bolt on web from bottom rows up. Complete one panel before erecting the next one.
 4. Remove temporary web bolts on column connection and completely install the column connection angle in Detail 2.
 5. Detail 3 Panels shall be erected from Beam 10S and proceed outwards (toward exterior column). Remove debris, clean surface rust and grind sharp edges around rusted through holes. Grinding shall be done with extreme caution. No damage to long plate on the other side shall be allowed. Remove temporary bolts on web and place Detail 3 panel and angles. Complete installation of t&b angles prior to web panels. No more than 4 open holes without bolts shall be permitted at all times. Drill and bolt on web from bottom rows up. Complete one panel before erecting the next one.
 6. Repeat Steps in Note 5 to complete all panels in Details 2 to 5.



VIEW C-C
(Pier 14)



DETAIL 3 - TYPICAL PANEL
(Span 15 Side, NW Face)
(3 Locations)

SECTION D-D

BILL OF MATERIAL

Item	Unit	Quantity
Structural Steel Repair	Pound	8,000

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
DAN RYAN ELEVATED BRIDGE
BEARING REPLACEMENT & STEEL REPAIR
STEEL REPAIRS - DETAIL J
SCALE: NTS
DATE: 3/1/2008
DRAWN BY: LAM
CHECKED BY: BLU

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