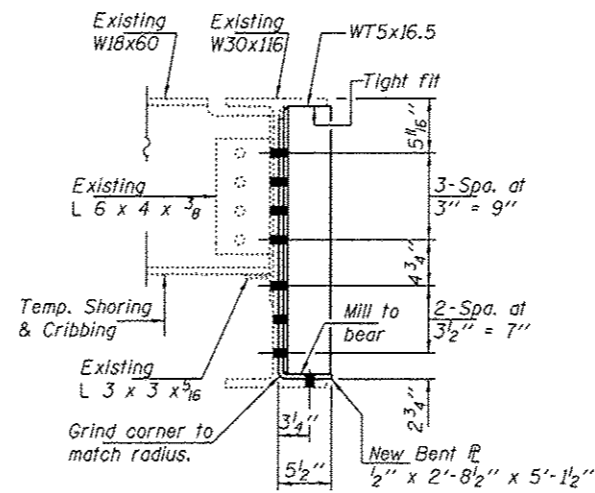
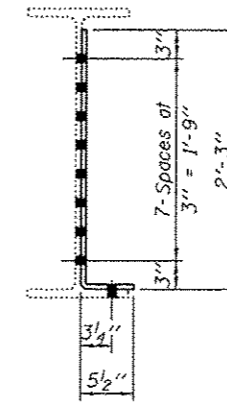


**REPAIR 8 DETAILS**

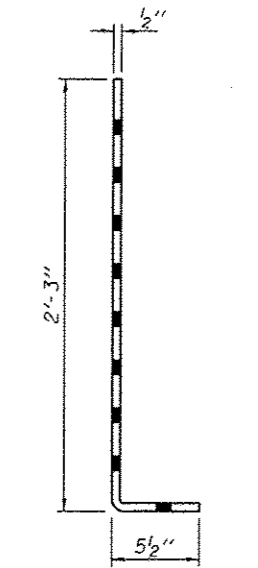
Span 8, Floor Beam 0, North Face, East End  
Span 8, Floor Beam 8, South Face, West End



**SECTION A-A**



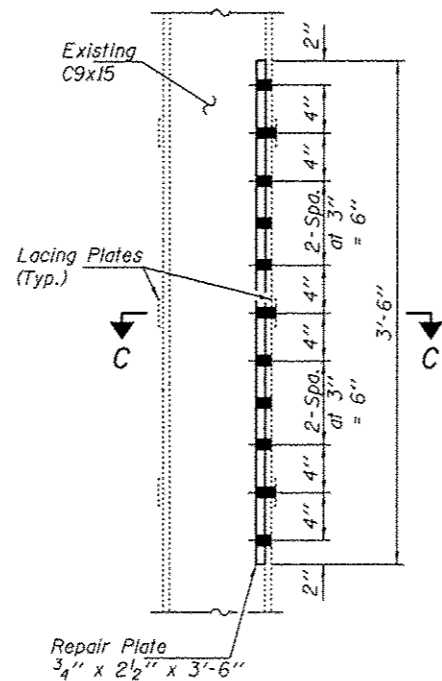
**SECTION B-B**



**BENT PLATE**  
P 1/2" x 2'-8 1/2" x 5'-1 1/2"  
(2 Required)

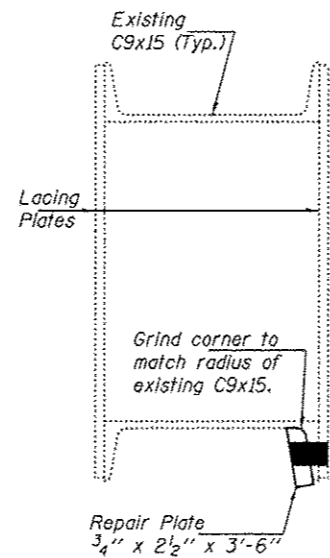
**STEPS TO REPAIR THE FLOOR BEAMS**

1. Provide support to the exterior stringer at the floor beam that is to be repaired.
2. Remove the existing WT5x16.5 from the W30x116 floor beam.
3. Prepare all surfaces of the existing W30x116, from the end of the floor beam to 1 foot beyond the end of the new bent plate. The linear distance would be approximately 7 feet. Included in the surface preparation will be the angles that attach the exterior stringer to the floor beam and 2 linear feet of the exterior stringer. Refer to "Cleaning and Painting Contact Surface Areas of Existing Steel Structures"
4. Install the Bent Plate (1/2" x 2'-8 1/2" x 5'-1 1/2") on the W30x116 floor beam.
5. Install the WT5x16.5 on top of the bent plate. Reuse the existing holes in the web of the W30x116 to attach the WT and bent plate to the existing floor beam.



**REPAIR 9 DETAILS**

Span 7, L2W-U2W, ±3' above deck



**SECTION C-C**

REACTION TABLE AT TEMPORARY SHORING		
Q	(k)	7.5
L	(k)	28.0
Imp.	(k)	8.4
Total	(k)	43.9

**BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Structural Steel Repair	Pound	1020
Temporary Shoring & Cribbing	Each	2

DESIGNED - MKC  
CHECKED - VP  
DRAWN - Kyla M. Steffen  
CHECKED - MKC VP

EXAMINED  
ACTING ENGINEER OF STRUCTURAL SERVICES  
PASSED  
ACTING ENGINEER OF BRIDGES AND STRUCTURES

DATE - JULY 26, 2012

REVISED  
REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

REPAIRS 8 & 9  
SN 062-0036

SHEET NO. 9 OF 10 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2369	(104B-D)	MARSHALL	17	16
CONTRACT NO. 68B16				
ILLINOIS FED. AID PROJECT				