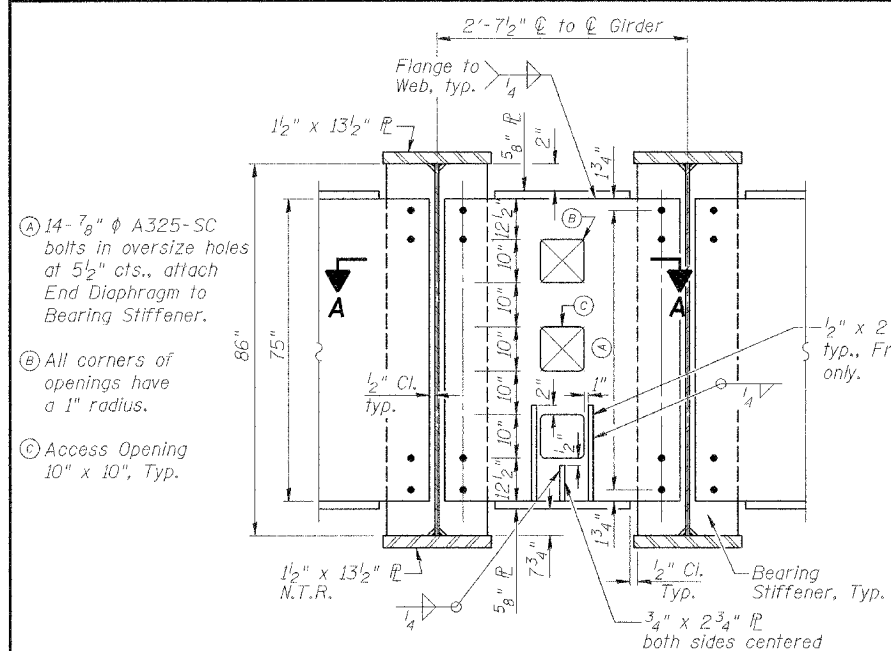


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

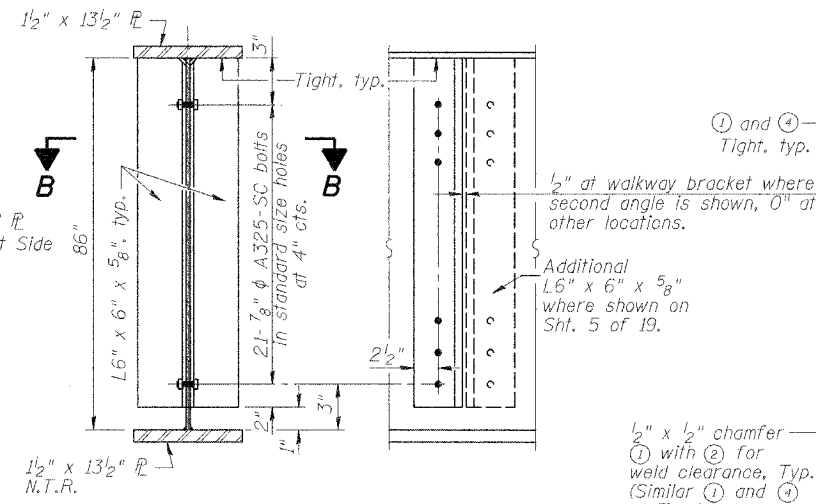
ROUTE NO.	SECTION	COUNTY	DATE	SHEET	SHEET NO. 6 19 SHEETS
F.A.P. 315	55-2	McDONOUGH	1025	522	
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT-			

Contract # 68205



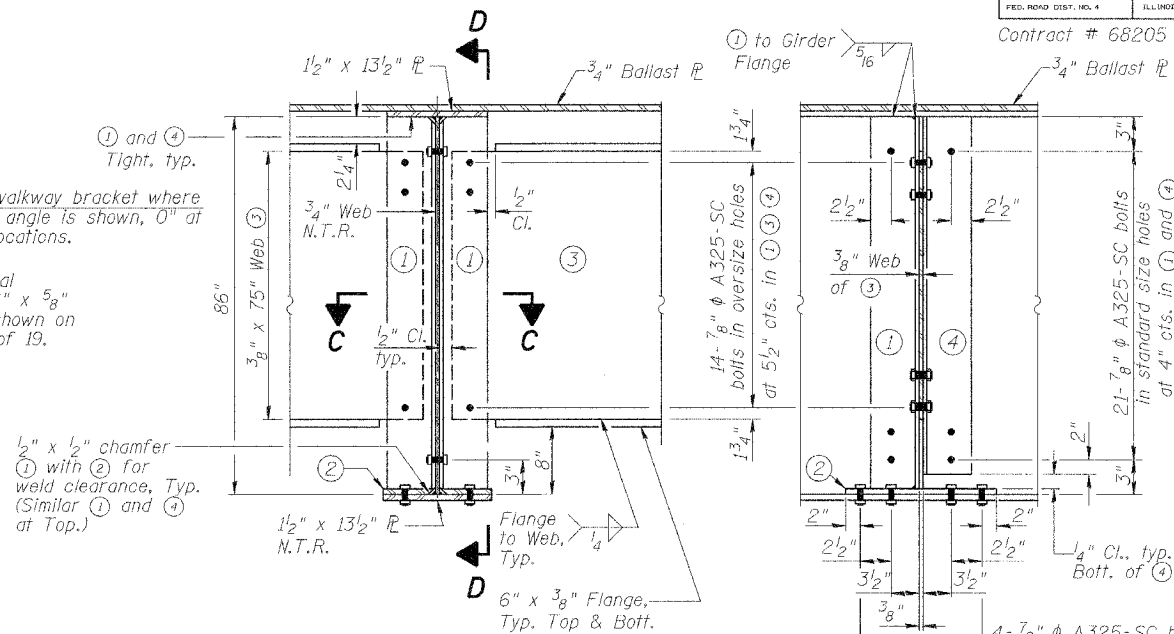
**END DIAPHRAGM (D1) DETAIL**  
at Pier and Abutments

Note: WT6 x 25 horizontal bracing and attachments not shown.  
See Note 3, this Sht.



**DETAIL AT INTERMEDIATE STIFFENER WITHOUT INTERIOR DIAPHRAGM**

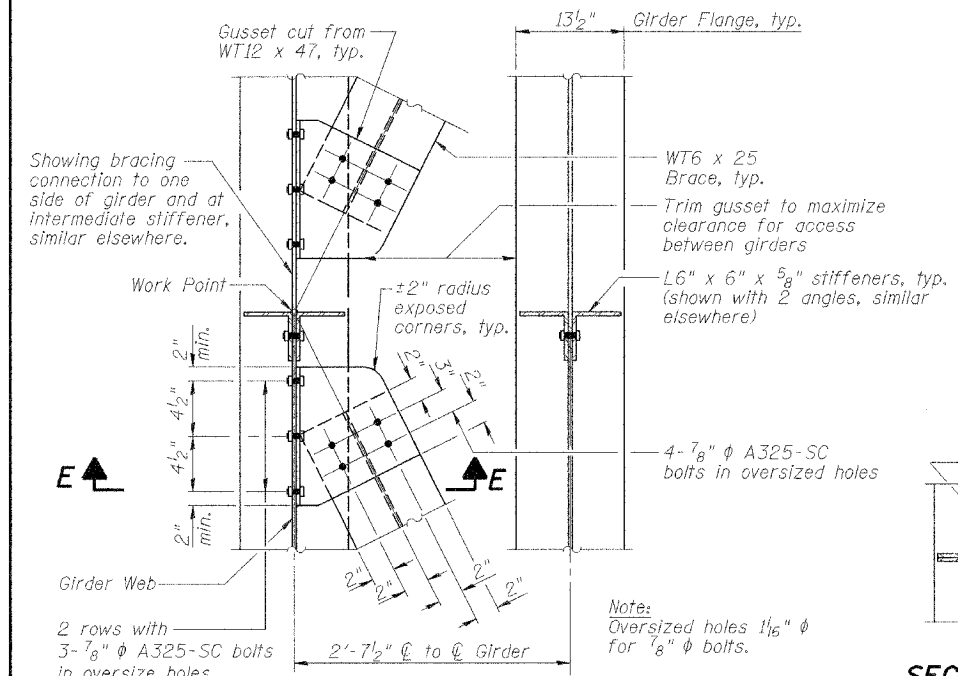
Note: WT6 x 25 horizontal bracing and attachments not shown.



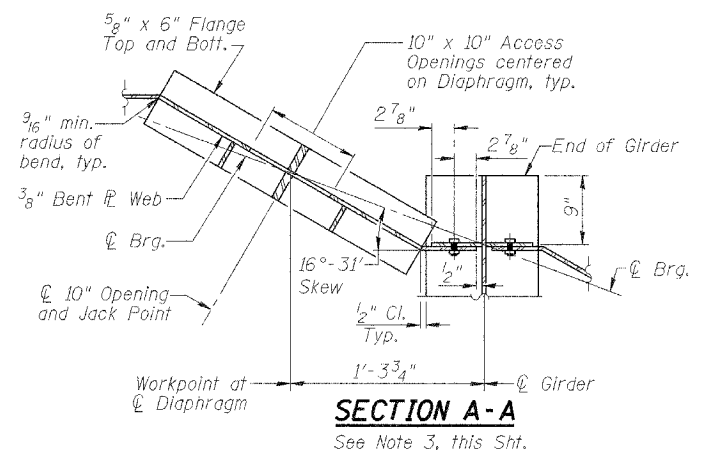
**DETAIL AT INTERIOR DIAPHRAGM (D2)**

Note: WT6 x 25 horizontal bracing and attachments not shown.

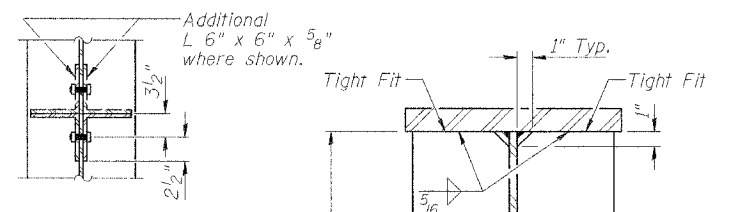
**SECTION D-D**



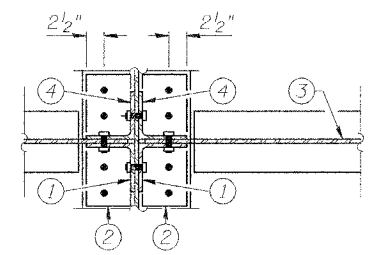
**BRACING CONNECTION DETAIL**



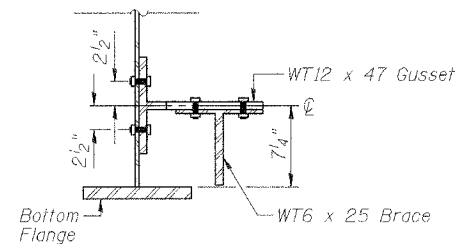
**SECTION A-A**  
See Note 3, this Sht.



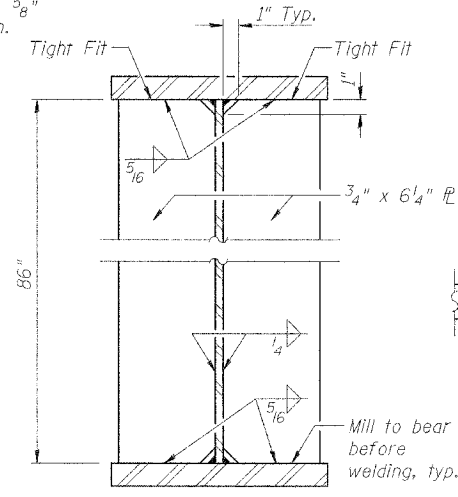
**SECTION B-B**  
Shown with two angles each face, similar with one angle each face.



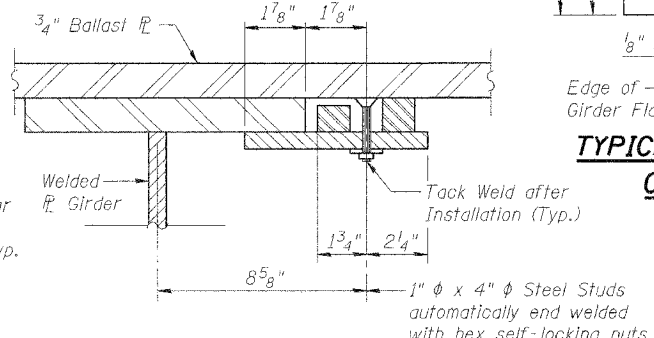
**SECTION C-C**



**SECTION E-E**  
At Lateral Bracing Connection Plate



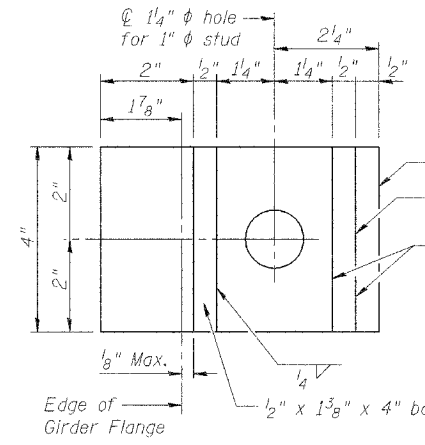
**BEARING STIFFENER**  
(See Also End Diaphragm Detail this sheet.)



**BALLAST PLATE CLAMP**

**KEY NOTES**

- 1 L6 x 6" x 5/8" welded to (2) top and bottom and shop bolted to girder web with 14-7/8" phi A325-SC bolts in 1 1/8" phi oversized holes.
- 2 3/4" x 6 1/4" x 16 3/8" plate, shop bolted to girder with 4-7/8" phi A325-SC bolts in standard size holes. 1/2" x 1/2" chamfer for weld clearance, typ. (To facilitate installation of (4), 2 bolts may be field installed after (4) is placed. Optionally, rotate (4) in place around the shop-installed bolts.)
- 3 Interior Diaphragm (D2) field bolted to (1) and (4) with 14-7/8" phi A325-SC bolts in oversized holes.
- 4 L6 x 6" x 5/8" - 85" long field bolted to (1) and (3) with 7/8" phi bolts in 1 1/8" phi oversized holes. (2) is not welded to (4). Top of (4) tight to girder flange, not welded.



**TYPICAL BALLAST PLATE CLAMP DETAILS**

**NOTES**

1. All contact surfaces of joints for the diaphragms, stiffeners, and lateral bracing shall be free of paint and lacquer.
2. All bolt holes in diaphragm and lateral bracing connections shall be 1 1/8" phi with two hardened washers used with each bolt.
3. Four jack points of 45 tons capacity each are provided at the bearing center line and midway between each girder of each span. Apply jacking force at all four points with simultaneous and equal lift distance to change one or all bearings. Provide a 1 3/4" minimum thick, 9" x 10" bearing plate between bottom of jack and top of concrete bearing ledge. Use 3/4" minimum thick, 5" x 5" plate between top of jack ram piston and bottom of diaphragm flange. Center jacks on 3/4" thick double web stiffeners and diaphragm web plate. Remove all live load prior to jacking.

DESIGNED	PJL
CHECKED	WDL
DRAWN	MGM
CHECKED	PJL

DIAPHRAGMS  
BURLINGTON NORTHERN  
SANTA FE RAILROAD OVER  
IL. ROUTE 336  
F.A.P. ROUTE 315 SECT. 55-2  
McDONOUGH COUNTY  
STATION 554+41.87  
STRUCTURE NO. 055-9901  
B.N.S.F. LINE SEGMENT 0011  
B.N.S.F. BRIDGE NO. 206.04

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