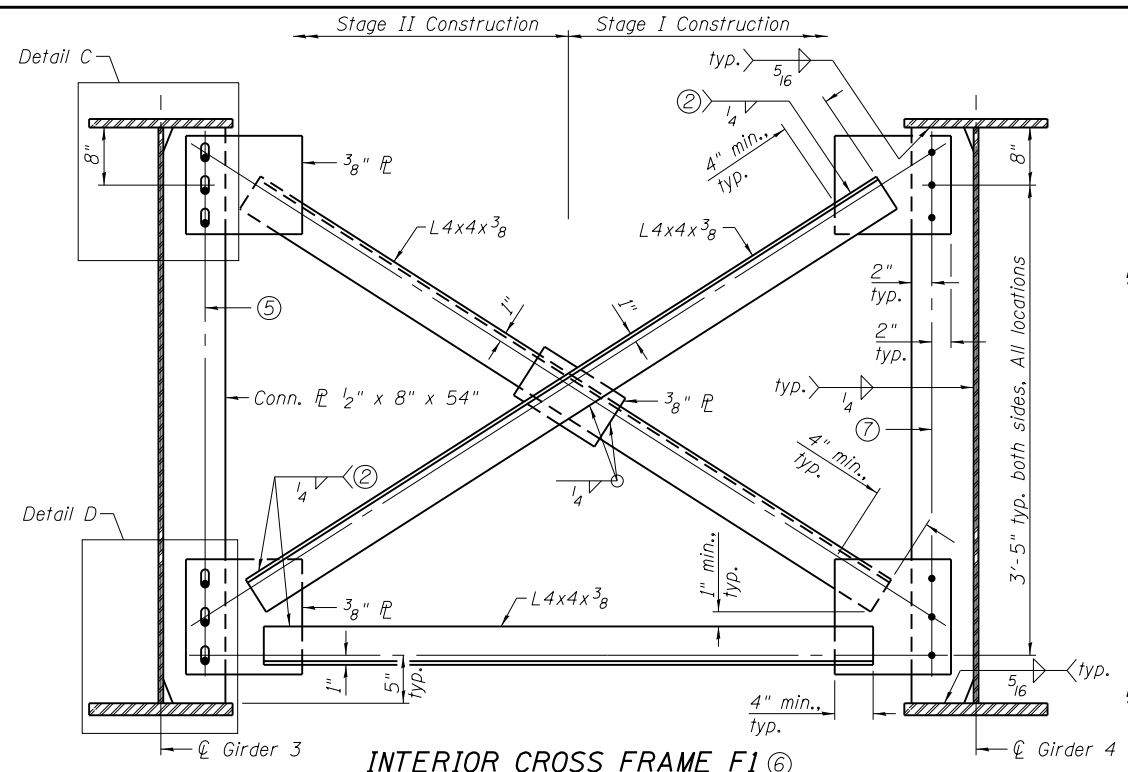


END DIAPHRAGM D3

(1 Required)
(Galvanized)

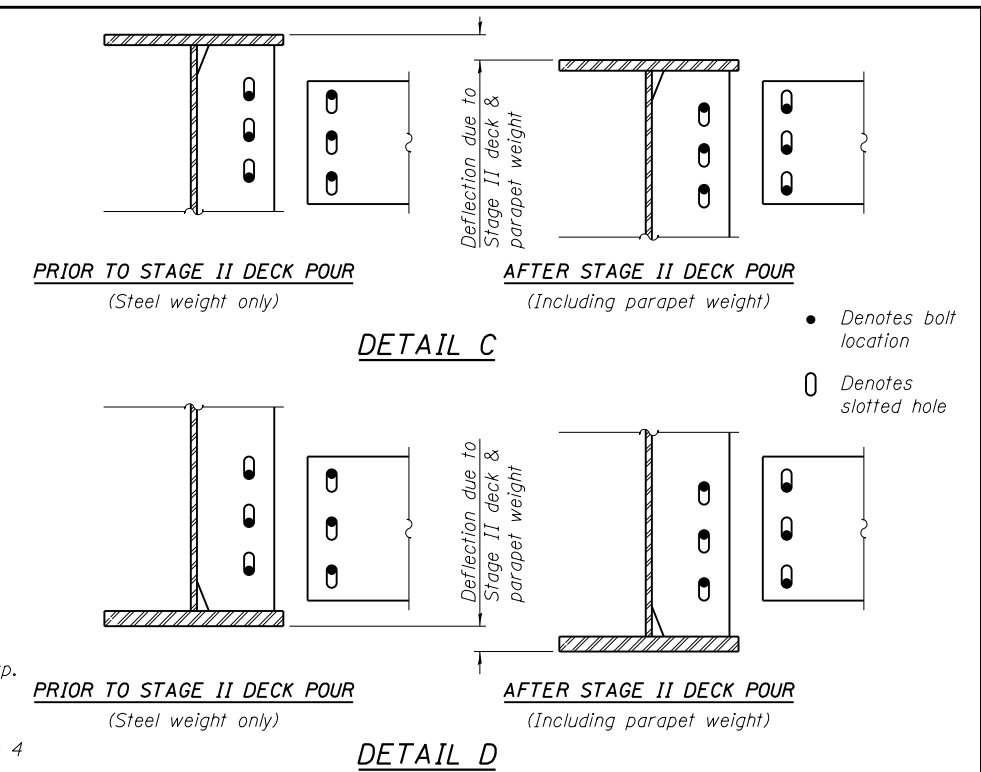
END DIAPHRAGM D3 STAGE CONSTRUCTION SEQUENCE

- 1.) Order diaphragm in two sections.
- 2.) Attach Section 1 of diaphragm to girder 4.
- 3.) Place timber block posts between Section 1 of diaphragm and abutment bearing section.
- 4.) Attach Section 2 of diaphragm to both girder 3 and Section 1 of diaphragm during stage II construction with splice plates.
- 5.) Remove timber block posts.



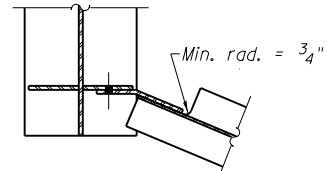
INTERIOR CROSS FRAME F1

(Showing final position)
(19 Required)

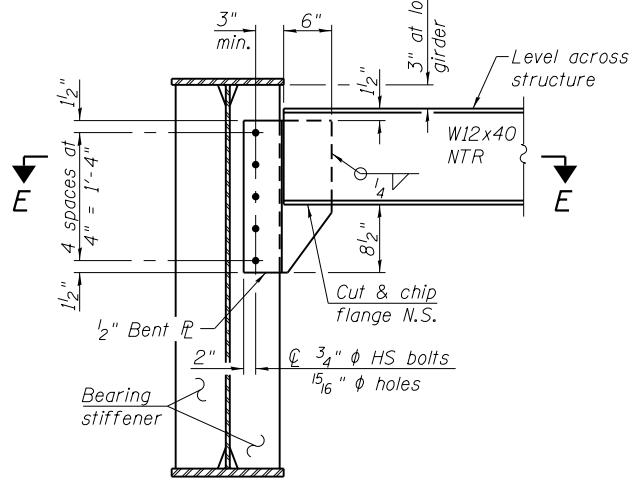


INTERIOR CROSS FRAME F

(76 Required)

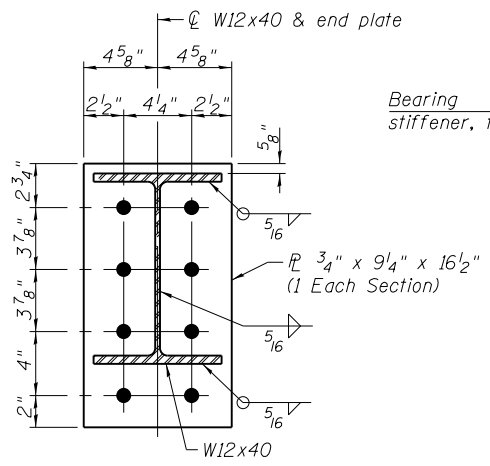


SECTION E-E



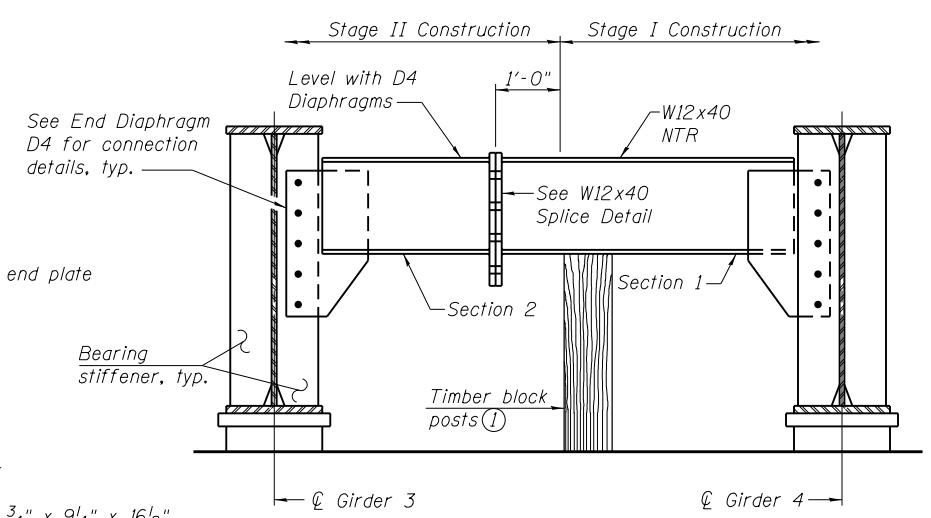
END DIAPHRAGM D4

(4 Required)
(Galvanized)



W12x40 SPLICE DETAIL

(2 Splices Required)



END DIAPHRAGM D5

(1 Required)
(Galvanized)

END DIAPHRAGM D5 STAGE CONSTRUCTION SEQUENCE

- 1.) Order diaphragm in two sections.
- 2.) Attach Section 1 of diaphragm to girder 4.
- 3.) Place timber block posts between Section 1 of diaphragm and pier bearing section.
- 4.) Attach Section 2 of diaphragm to both girder 3 and Section 1 of diaphragm during stage II construction.
- 5.) Remove timber block posts.

- Notes:
- 1) Cost of Timber Block Posts is included with Furnishing and Erecting Structural Steel.
 - 2) Fillet weld angles along 3 sides on one face of gusset plate.
 - 3) Do not provide plate on exterior face of fascia girders.
 - 4) Two hardened washers required for each set of oversized holes.
 - 5) Use 3-3/4 inch H.S. bolts at 4 inch minimum spacing at each connection. Provide 13/16 inch x 17/8 inch vertical slotted holes in connection plates attached to cross frame angles and girder. Two 5/16 inch structural plate washers required for each set of slotted holes.
 - 6) The Fabricator shall detail connection plate locations on angles to allow for differential deflection during Stage II deck and parapet pour. The bolts shall be finger tight until the Stage II deck and parapet concrete is poured, allowing the Stage II girders to deflect vertically without stressing the F1 cross frames or Stage I girders. The bolts shall be fully tightened after the Stage II deck and parapet concrete is poured. The cross frame connection shall be detailed so that the angle centerlines line up as shown in their final position.
 - 7) 3-3/4 inch H.S. bolts with 5/16 inch holes at 3 inch minimum spacing, typ.
 - 8) Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.



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DESIGNED - SJN
CHECKED - JAD
DRAWN - SJN
CHECKED - JAD

REVISIONS
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GIRDER DETAILS
STRUCTURE NO. 048-0100
SHEET NO. 32 OF 62 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
626	(44-B-1)BR	KNOX	122	62
CONTRACT NO. 68759				
ILLINOIS FED. AID PROJECT				