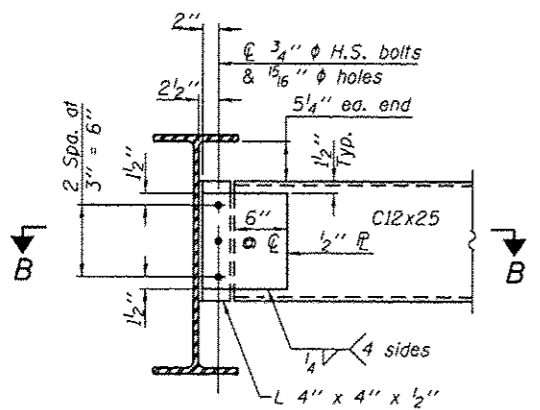
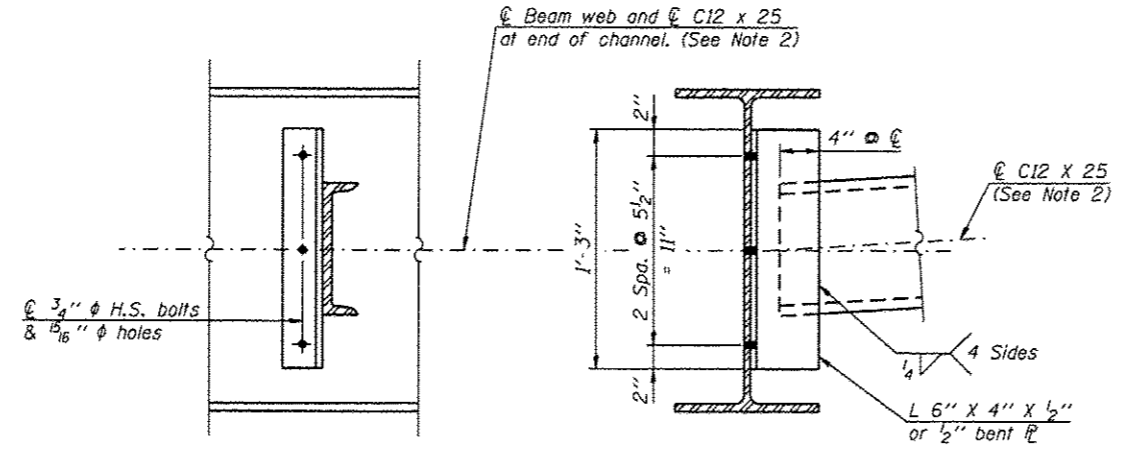


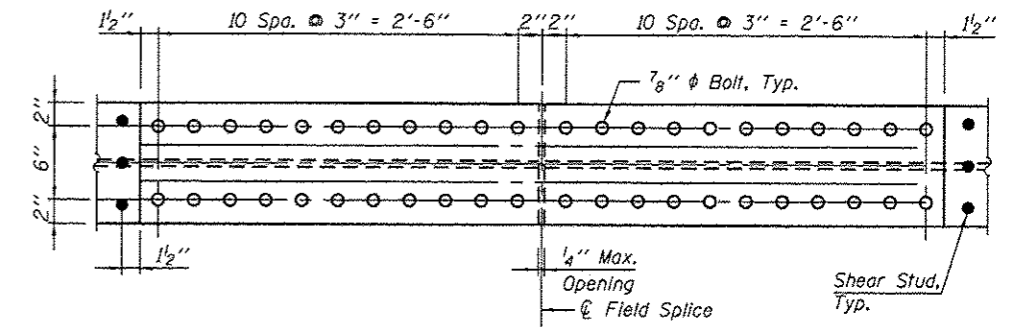
SECTION B-B



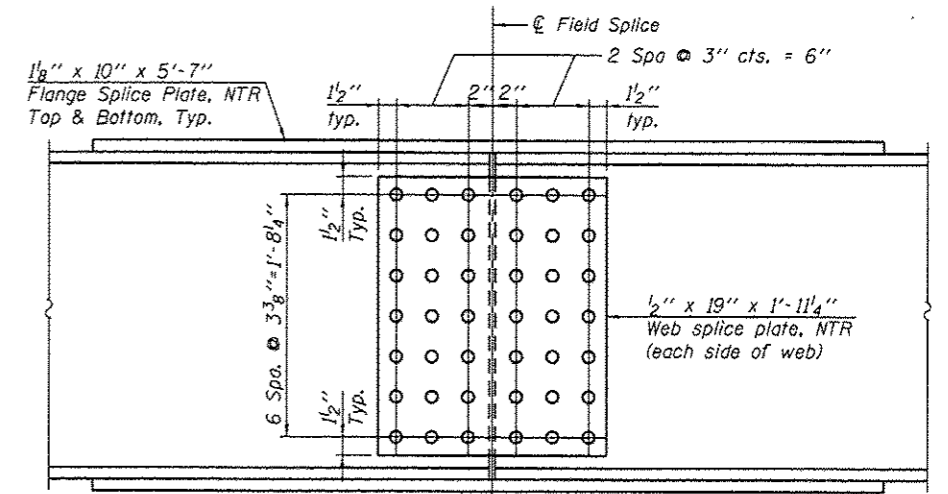
END DIAPHRAGM-D1
(16 Required)



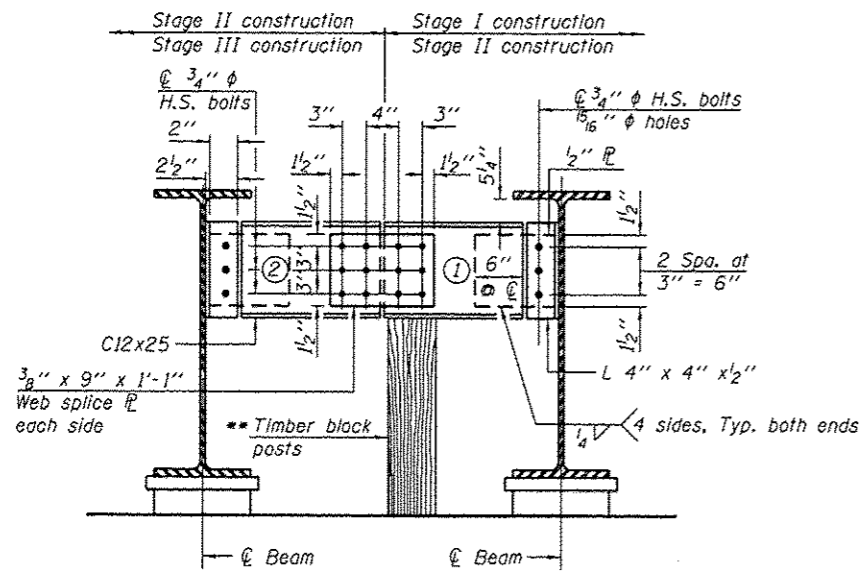
INTERIOR DIAPHRAGM - D2
(112 Required)



FLANGE SPLICE PLATE



WEB SPLICE PLATE
SPLICE DETAILS



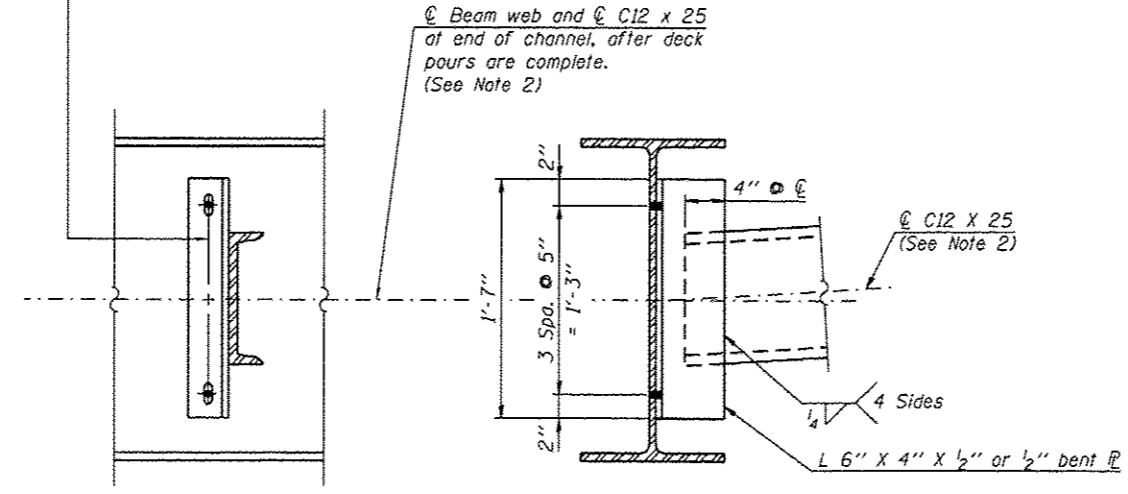
END DIAPHRAGM-D3
(4 Required)

END DIAPHRAGM STAGE CONSTRUCTION SEQUENCE

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

☉ of 3/4" φ H.S. bolts, 1 5/16" φ holes at Beam 6 end of bracing and 1 3/8" x 1 7/8" standard long-slotted vertical holes at Beam 5 member connection plate. At Beam 5, locate slotted holes such that at final condition, bolts are at bottom of slots. The bolts for the slotted holes shall only be finger tightened prior to the deck pouring and to be fully tightened after completion of the pouring for Stage II Construction.

☉ of 3/4" φ H.S. bolts, 1 5/16" φ holes at Beam 3 end of bracing and 1 3/8" x 1 7/8" standard long-slotted vertical holes at Beam 2 member connection plate. At Beam 2, locate slotted holes such that at final condition, bolts are at bottom of slots. The bolts for the slotted holes shall only be finger tightened prior to the deck pouring and to be fully tightened after completion of the pouring for Stage III Construction.



INTERIOR DIAPHRAGM - D4
(28 Required)

NOTES

1. Two hardened washers are required for each set of oversized holes.
2. Alternate C12x30 diaphragm channels are permitted for D2 and D4 diaphragms to facilitate material acquisition. Calculated weight of structural steel is based on C12x25. The alternate, if utilized, shall be provided at no extra cost to the Department.
3. The W27 beams and the splice plates for the W27 beams shall be AASHTO M270 Grade 50.

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| | | |
|--------------|------------------|-----------|
| USER NAME = | DESIGNED - J.Z. | REVISED - |
| PLOT SCALE = | CHECKED - J.A.Z. | REVISED - |
| PLOT DATE = | DRAWN - E.E.J. | REVISED - |
| | DATE - 5/17/2013 | REVISED - |

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|---------|--------|--------------|-----------|
| 94 | 1920-B | COOK | 137 | 87 |
| CONTRACT NO. 60J15 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |