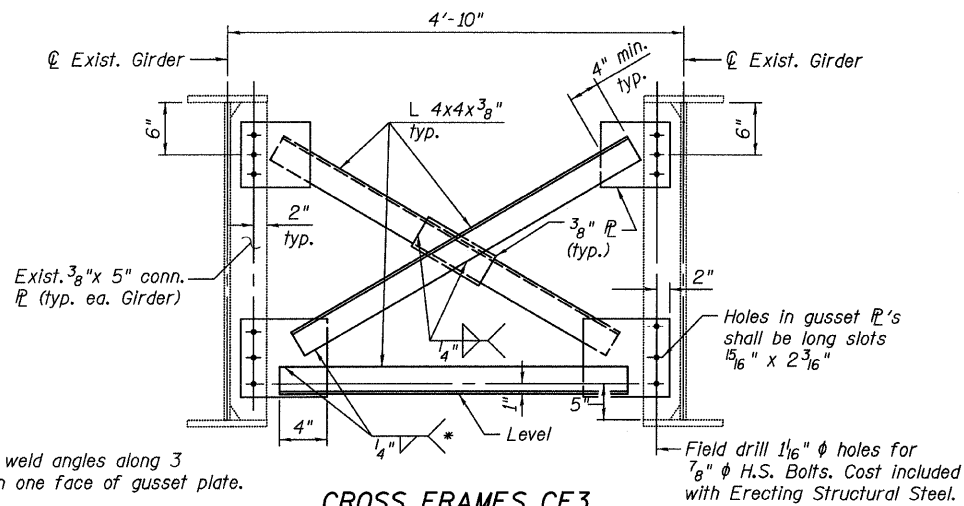


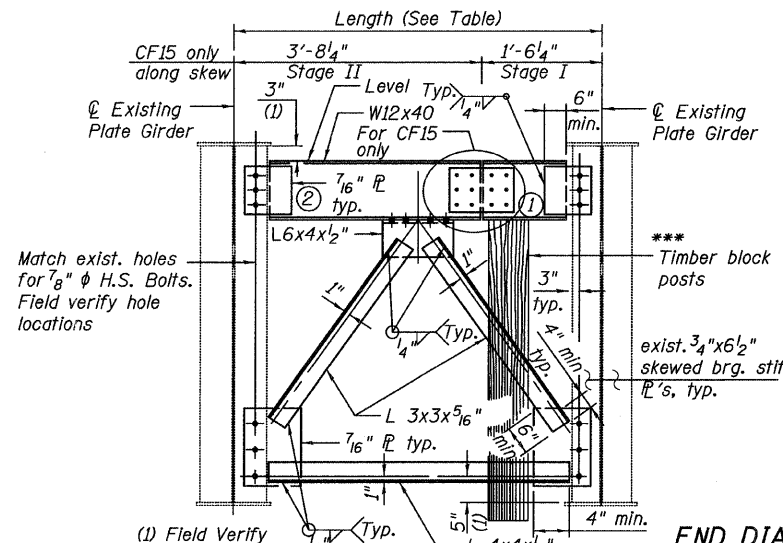
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

\*\*\* Cost of Timber Block Posts is included with "Erecting Structural Steel."

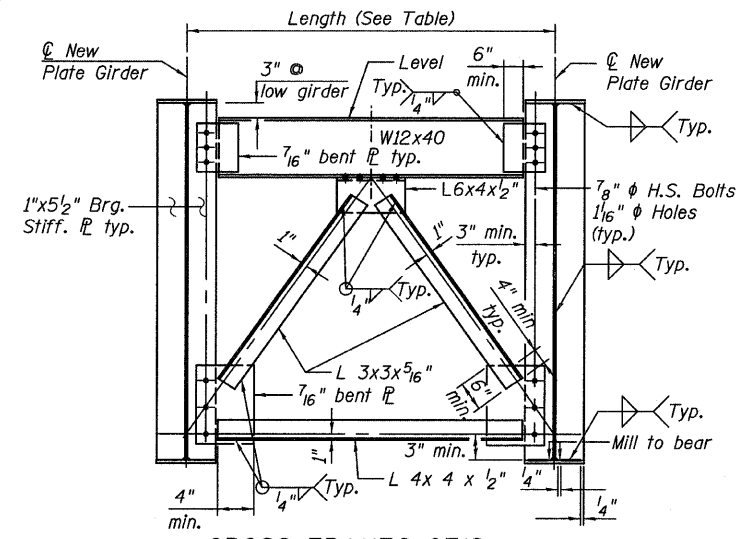


**CROSS FRAMES CF3**  
(10 Required) Place prior to Stage II deck pour

**NOTE:**  
Provide Crossframes CF3 at the location of the existing stiffeners. (Field verify the existing stiffener locations)



**CROSS FRAMES CF15 & CF16**  
(At Pier 9) (15 Required)



**CROSS FRAMES CF18**  
(At Pier 9)  
(2 Required)

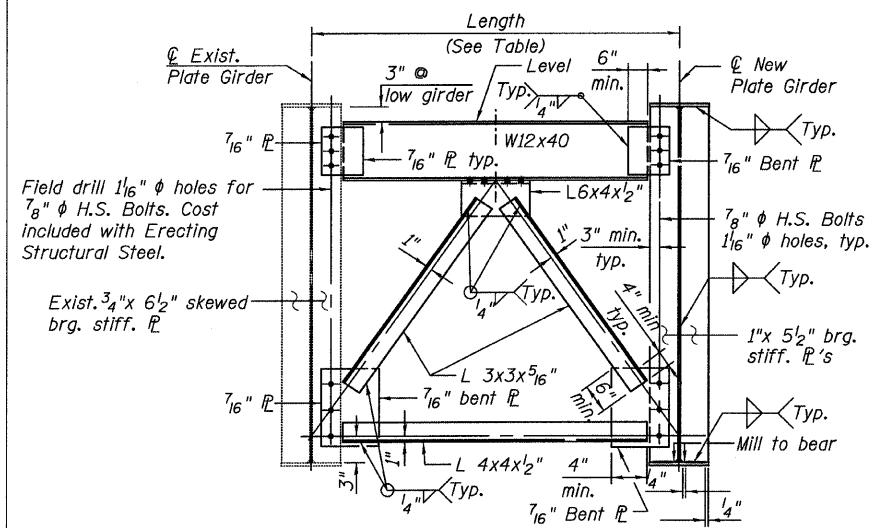
**END DIAPHRAGM STAGE CONSTRUCTION SEQUENCE**

1. Order diaphragm in two sections.
2. Attach section ① of diaphragm to girder.
3. Place timber block posts between section ① of diaphragm and pier bearing seat.
4. Attach section ② of diaphragm to both girder and section ① of diaphragm during stage II construction with splice plates.
5. Remove timber block posts.
6. Install lower portion of cross frame.

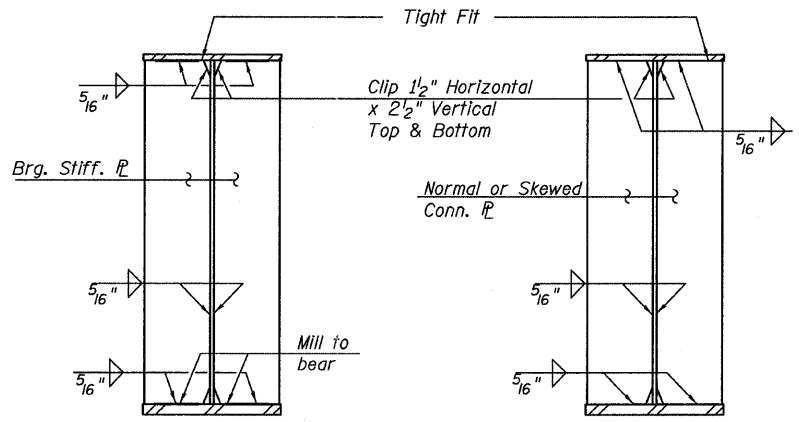
**TABLE OF CROSS FRAMES DIMENSIONS**  
See Detail A

| Cross Frame | Length        | No. Req'd. | Angle "A" | Angle "B" |
|-------------|---------------|------------|-----------|-----------|
| CF1         | 5'-2 1/8"     | 20         | 90°0'0"   | 90°0'0"   |
| CF2         | *5'-2 1/8"    | 10         | 90°0'0"   | 90°0'0"   |
| CF3         | *4'-10"       | 10         | 90°0'0"   | 90°0'0"   |
| CF4         | *5'-1 1/8"    | 1          | 90°41'27" | 90°0'0"   |
| CF5         | *4'-10 5/8"   | 1          | 90°41'27" | 90°0'0"   |
| CF6         | *4'-8 1/8"    | 1          | 90°41'27" | 90°0'0"   |
| CF7         | *4'-5 1/8"    | 1          | 90°41'27" | 90°0'0"   |
| CF8         | *4'-2"        | 1          | 90°41'27" | 90°0'0"   |
| CF9         | *3'-10 5/8"   | 1          | 90°41'27" | 90°0'0"   |
| CF10        | *3'-8 1/8"    | 1          | 90°41'27" | 90°0'0"   |
| CF11        | *3'-5 5/8"    | 1          | 90°41'27" | 90°0'0"   |
| CF12        | *3'-2 15/16"  | 1          | 90°41'27" | 90°0'0"   |
| CF13        | *2'-11 15/16" | 1          | 90°41'27" | 90°0'0"   |
| CF14        | *2'-11 3/4"   | 1          | -         | -         |
| CF15        | 5'-2 3/8"     | 1          | -         | -         |
| CF16        | 6'-2 1/4"     | 14         | -         | -         |
| CF17        | *5'-6 13/16"  | 1          | -         | -         |
| CF18        | 5'-6 13/16"   | 2          | -         | -         |

\* Field verify lengths and locations prior to steel fabrication.

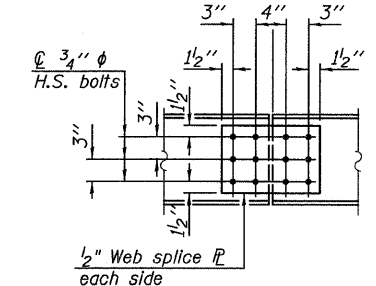


**CROSS FRAMES CF14 & CF17**  
(At Pier 9) (2 Required)

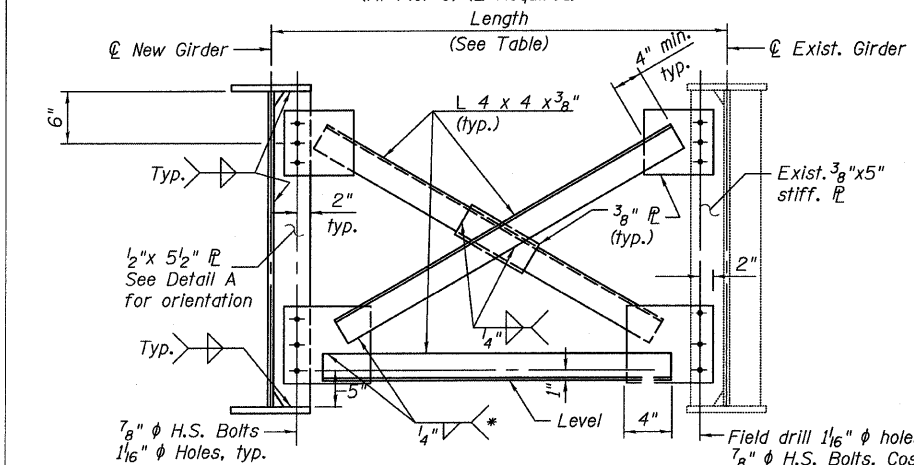


**\*\*BEARING STIFFENER \*\* INTERIOR CONNECTION PLATE**

\*\*For size, location and skew see Girder Elevation Details.

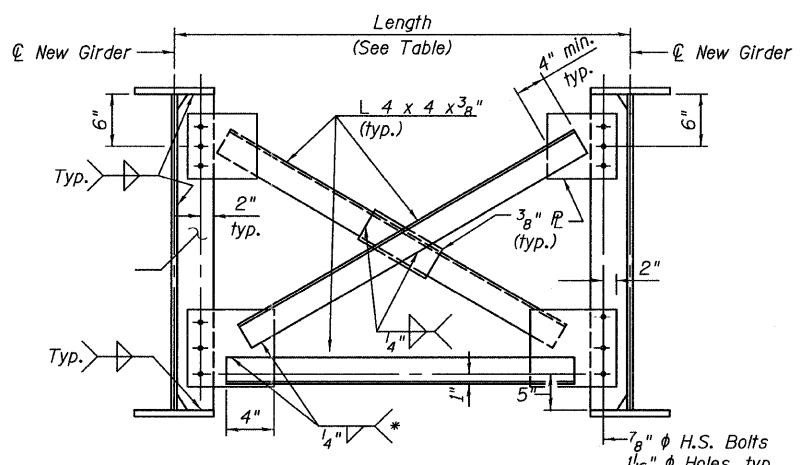


**SPLICE PLATE DETAIL**

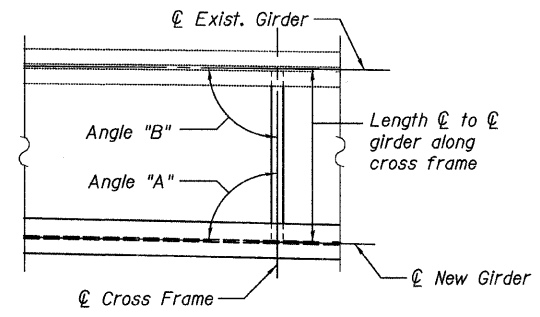


**CROSS FRAMES CF2 & CF4 THRU CF13**  
(20 Required)

\* Fillet weld angles along 3 sides on one face of gusset plate.



**CROSS FRAMES CF1**  
(20 Required)



**DETAIL A**

- NOTES:**
1. Two hardened washers required for each set of oversized holes.
  2. O.F. denotes outside face.
  3. I.F. denotes inside face.
  4. N.F. denotes near face.
  5. F.F. denotes far face.

**CROSS FRAMES SPANS 11, 12 & 13 STRUCTURE NO. 016-3240**

|                            |                   |           |      |              |            |   |                    |              |           |     |
|----------------------------|-------------------|-----------|------|--------------|------------|---|--------------------|--------------|-----------|-----|
| <b>TYLIN INTERNATIONAL</b> | DESIGNED - DY, LS | REVISIONS |      | SHEET NO. 44 | F.A.I RTE. | SECTION   | COUNTY             | TOTAL SHEETS | SHEET NO. |     |
|                            | CHECKED - AMD, LS | NAME      | DATE |              | 73 SHEETS  | 55  | 0711.2R & 1011.1BR | COOK         | 741       | 647 |
|                            | DRAWN - DY, LS    |           |      |              |            | CONTRACT NO. 60999                              |                    |              |           |     |
|                            | CHECKED - AMD, LS |           |      |              |            | FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |                    |              |           |     |
|                            | DATE - 03/25/2011 |           |      |              |            |   |                    |              |           |     |

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5/9/2011