



3 Spa. at 3" = 9"

2"

2 1/2"

5 5/8" Beam A

4 1/2" Beam I

1 1/2" typ.

6"

C15 x 33.9

1/2" x 9 1/2" x 12" L (Bend for skew)

4 sides

4" x 4" x 1/2" x 12"

3/4" ϕ H.S. bolts

1 1/2" ϕ holes

A

A

Note:
Two hardened washers required for each set of oversized holes.

Diagram illustrating a 7' x 3' grid layout. The grid is divided into sections with dimensions: 6", 6", 6", 5", 6 1/2", 3", 6", 6", 6 3/4", and a total width of 6 sp @ 7" cts = 3'-6". The grid contains circular holes arranged in a pattern, with some sections enclosed by dashed lines.

Technical drawing of a 15/16" ϕ Holes for 7/8" ϕ HS bolts. The drawing shows a side view of a bolted connection with dimensions for hole spacing, edge distances, and flange thickness. Key dimensions include: 15/16" ϕ Holes for 7/8" ϕ HS bolts, 2" edge distance, 7 1/2" hole spacing, 1 1/2" edge distance, 5 Spacing at 3" = 1'-3", 4" flange thickness, and 1/2" flange thickness. A note indicates "Outside flange splice 1/2" x 1 1/2" x 3'-1" NTP top and bottom".

Technical drawing of a rectangular box girder showing dimensions and splice locations.

Dimensions and Spacing:

- Flange thickness: $1\frac{1}{2}"$
- Web thickness: $4"$
- Bolt spacing (top and bottom): $2 \text{ Spa. at } \frac{2}{3}" = 6"$
- Flange width (total): $12"$
- Web width (total): $12"$

Material Specifications:

- Web splice:** $\frac{1}{2}"$ ϕ Holes for A325 $\frac{7}{8}"$ ϕ HS bolts, 9 Spa. at $3" = 2'-3"$
- Inside Flange splice:** $\frac{1}{2}"$ s $\frac{1}{2}"$ x $4"$ x $3'-1"$ NTR top and bottom

3/4" ϕ H.S. bolts
 1/8" ϕ holes
 Field drill holes
 in existing Beam 1

Note:
Two hardened washers required for each set of oversized holes.

Diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual diaphragms at supports may be temporarily disconnected to install bearing anchor rods.

* Alternate C 12 x 30 channels are permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section. The alternate, if utilized, shall be provided at no cost to the Department.

** Field weld at existing Beam 1

PROJECT NO. 09033	SHEET NO. 26 55 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DATE 6/4/2010		280	81-1 (VB) R	ROCK ISLAND	503	212
DESIGN BY BD/MCB		CONTRACT NO. 64815				
DRAWN BY MMI						
CHECKED BY MCB	FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

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LOT DATE      = 7/21/2010
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LOT SCALE    = 240.705529 'ft' / IN,
USER NAME     = CFC.

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