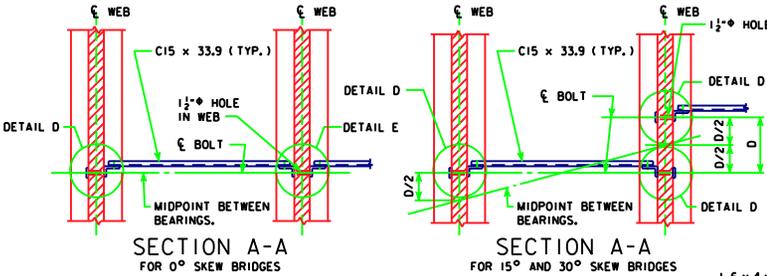
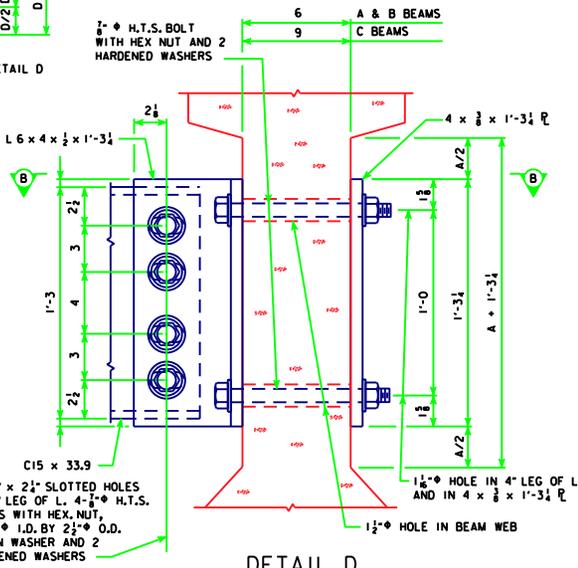


SECTION SHOWING INTERMEDIATE DIAPHRAGM

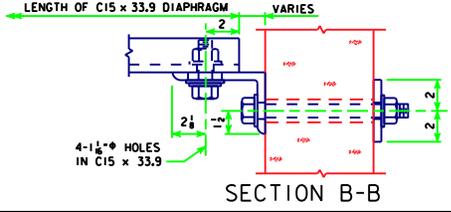


SECTION A-A FOR 0° SKEW BRIDGES

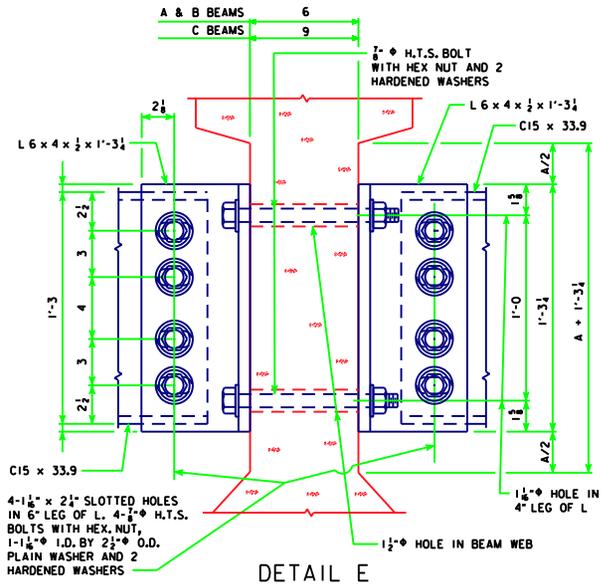
SECTION A-A FOR 15° AND 30° SKEW BRIDGES



DETAIL D



SECTION B-B



DETAIL E

NOTES:

- ALL DIAPHRAGM MATERIALS, INCLUDING BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED.
- SHOP DRAWINGS OF THE STEEL DIAPHRAGMS SHOWING LAYOUT AND DETAILS OF THE DIAPHRAGMS SHALL BE SUBMITTED FOR APPROVAL.
- ALL COSTS FOR FURNISHING AND INSTALLING STEEL INTERMEDIATE DIAPHRAGMS SHALL BE INCLUDED IN THE PRICE BID FOR STRUCTURAL STEEL.
- THE 1 1/2\"/>

CONCRETE DIAPHRAGM DETAILS SHALL BE PROVIDED IN THE BRIDGE PLANS FOR OVERHEAD BRIDGES. DESIGNER SHALL ADJUST THE CONCRETE, REINFORCING AND STRUCTURAL STEEL QUANTITIES ACCORDINGLY.

INTERMEDIATE DIAPHRAGM STRUCTURAL STEEL

ONE CONNECTION DETAIL "E"

WEB THICKNESS (IN.)	LENGTH OF H.T.S. BOLTS (IN.)	WEIGHT PER DETAIL "E" (LB.)	BRIDGE SKEW	
			0°	15° & 30°
6	9	4.30	15	0
9	12	5.34	15	0
2 - L 6 x 4 x 1/2 x 1'-3 1/4 = 41.2 LB			15	0

ONE CONNECTION DETAIL "D"

WEB THICKNESS (IN.)	LENGTH OF H.T.S. BOLTS (IN.)	WEIGHT PER DETAIL "D" (LB.)	BRIDGE SKEW	
			0°	15° & 30°
6	9	4.30	6	36
9	12	5.34	6	36
1 - BACKING PL 4 x 3/8 x 1'-3 1/4 = 6.5 LB			6	36
1 - L 6 x 4 x 1/2 x 1'-3 1/4 = 20.6 LB			6	36

* ONE C15 x 33.9 DIAPHRAGM

WEB THICKNESS (IN.)	BEAM SPACING	LENGTH	NO. OF DIAPH.	UNIT WEIGHT (LB.)	WEIGHT (LB.)
6	6'-10	6'-0 1/2	18	205.2	3693.0
9	6'-10	5'-9 1/2	18	196.7	3540.4

DIAPHRAGM CONNECTION BOLTS

8-1/2\"/>	
18	185.4

TOTAL WEIGHT

	BRIDGE SKEW	
	0°	15° & 30°
INTERMEDIATE DIAPHR. STRUCT. STEEL - TOTAL (LB.) =	6	4749
INTERMEDIATE DIAPHR. STRUCT. STEEL - TOTAL (LB.) =	9	4619

BEAM SERIES	DIMENSIONS	
	A + 1'-3 1/4	A/2
A	1'-4	2'-0
B	1'-8	2'-0
C	2'-1	4'-0

STANDARD DESIGN - 44' ROADWAY, THREE SPAN BRIDGE
PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES

HL93 SUPERSTRUCTURE MARCH, 2007 HS25 SUBSTRUCTURE

INTERMEDIATE STEEL DIAPHRAGMS	H44-31-07
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