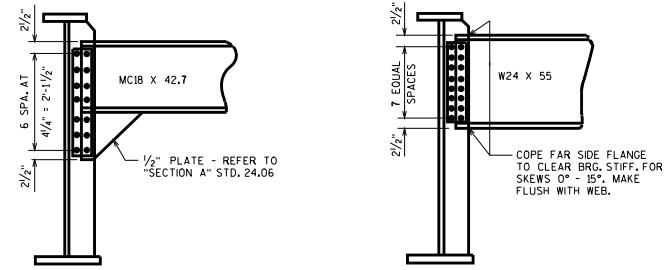


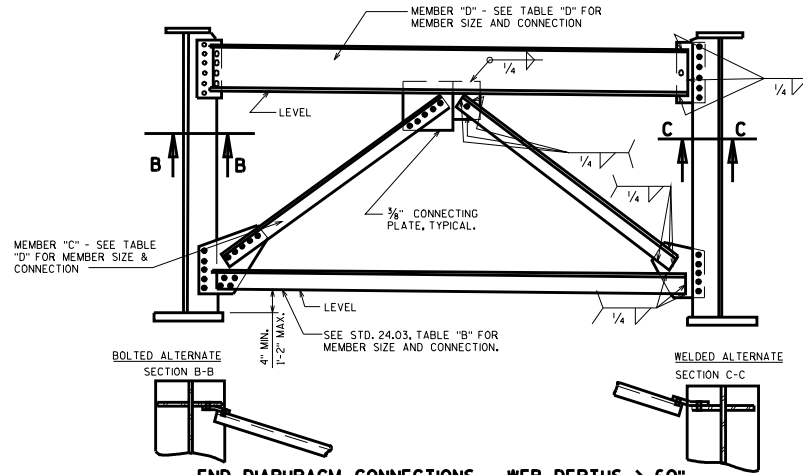
W24 X 55 TYPICAL CONN.
 USE W24x55 IN PLACE OF MC18x42.7
 WHEN LENGTH OF DIAPHRAGM EXCEEDS
 13'-6" BUT < 22'-0". (SKEW > 15°
 ≤ 30° SHOWN.)

END DIAPHRAGM CONNECTIONS - WEB DEPTHS < 48"



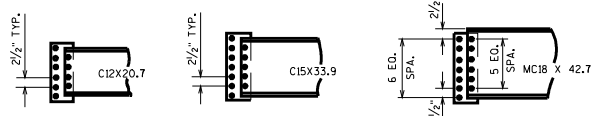
TYPICAL CONNECTION FOR MC18 X 42.7 AND W24 X 55. USE MC18 X 42.7
 WHEN DIAPHRAGM LENGTH IS ≤ 13'-6". USE W24 X 55 FOR LENGTHS
 > 13'-6" < 22'-0". (SKEW > 15° ≤ 30° SHOWN.)

END DIAPHRAGM CONNECTIONS - WEB DEPTHS > 48" < 60"



NOTES
 ALL BOLTED CONNECTIONS SHALL BE
 FRICTION TYPE MADE WITH 3/4" Ø HIGH
 STRENGTH ASTM A325 BOLTS.
 FOR WEB DEPTHS GREATER THAN 60",
 THE NUMBER OF BOLTS REQUIRED
 BETWEEN BEARING STIFFENERS AND
 LOWER CONNECTING PLATES EQUALS
 THE NUMBER OF BOLTS REQUIRED IN
 MEMBER "C" OR THE NUMBER REQUIRED
 IN THE LOWER HORIZONTAL MEMBER,
 WHICHEVER IS GREATER.

END DIAPHRAGM CONNECTIONS - WEB DEPTHS > 60"



MEMBER "D" END CONNECTIONS
 OMIT END CONNECTING PLATE FOR SKEWS 0° - 15°

TABLE "D"

MEMBER "C" MAXIMUM LENGTH	WEB DEPTH									MEMBER "D" SIZE	MEMBER "D" CONN.	
	5'-0" - 6'-6"			6'-6" - 7'-6"			7'-6" - 8'-9"				MEMBER "D" CONN. PLATE TO BRG. STIFF.	MEMBER "D"
	MEMBER "C" SIZE	NO. OF 3/4" Ø BOLTS	LENGTH OF 1/4" WELD	MEMBER "C" SIZE	NO. OF 3/4" Ø BOLTS	LENGTH OF 1/4" WELD	MEMBER "C" SIZE	NO. OF 3/4" Ø BOLTS	LENGTH OF 1/4" WELD			
11'-6"	4 X 4 X 3/8"	5	13	4 X 4 X 3/8"	5	12	4 X 4 X 3/8"	5	11	C12 X 20.7	6 Ø 2 1/2"	4 Ø 2 1/2"
13'-6"	5 X 5 X 3/8"	6	17	5 X 5 X 3/8"	6	16	5 X 5 X 3/8"	6	15	C12 X 20.7	6 Ø 2 1/2"	4 Ø 2 1/2"
17'-6"	6 X 6 X 3/8"	8	20	5 X 5 X 3/8"	7	18	5 X 5 X 3/8"	6	16	C15 X 33.9	7 Ø 2 1/2"	5 Ø 2 1/2"
22'-0"	6 X 6 X 3/8"	9	23	6 X 6 X 3/8"	8	21	6 X 6 X 3/8"	7	19	MC18 X 42.7	7 Ø 2 1/2"	6 Ø 2 1/2"

NOTE: ALL MEMBER "C" SIZES REPRESENT ANGLES.

END DIAPHRAGMS

STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION
 STRUCTURES DEVELOPMENT SECTION

APPROVED: **Scot Becker** DATE: 7-08

STANDARD 24.04