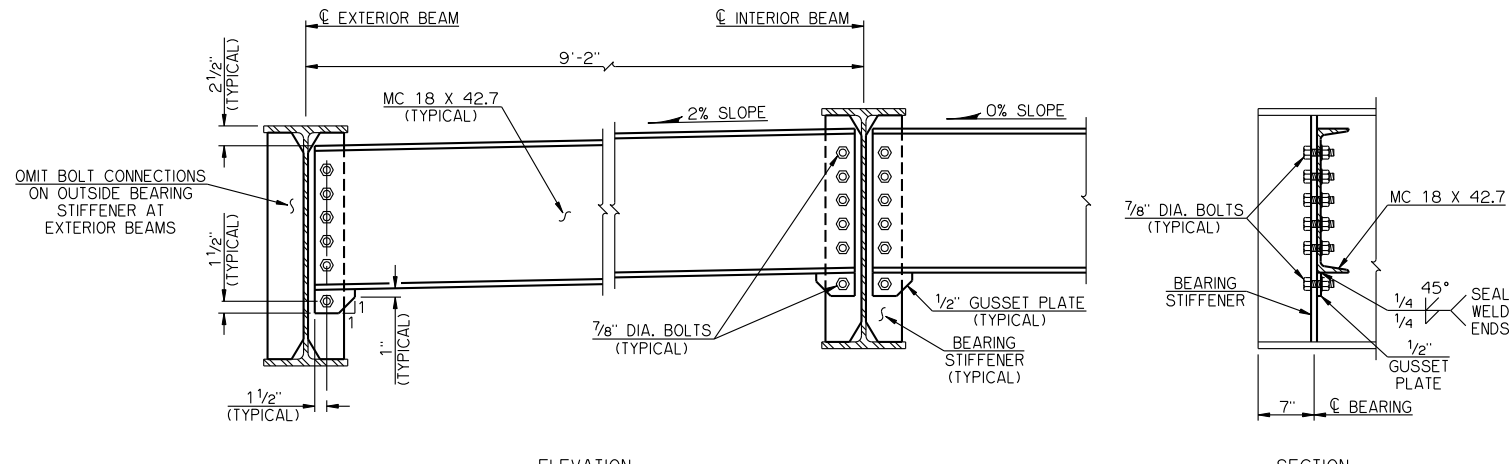


ELEVATION

SECTION

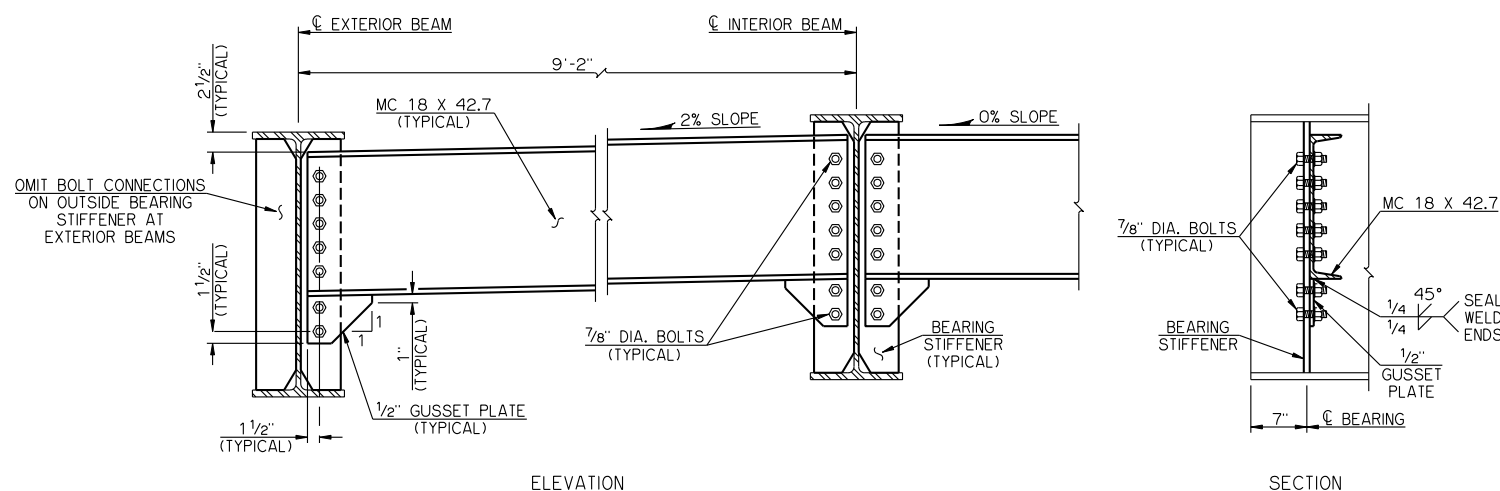
PIER DIAPHRAGM DETAILS FOR W24 AND W27 BEAMS



ELEVATION

SECTION

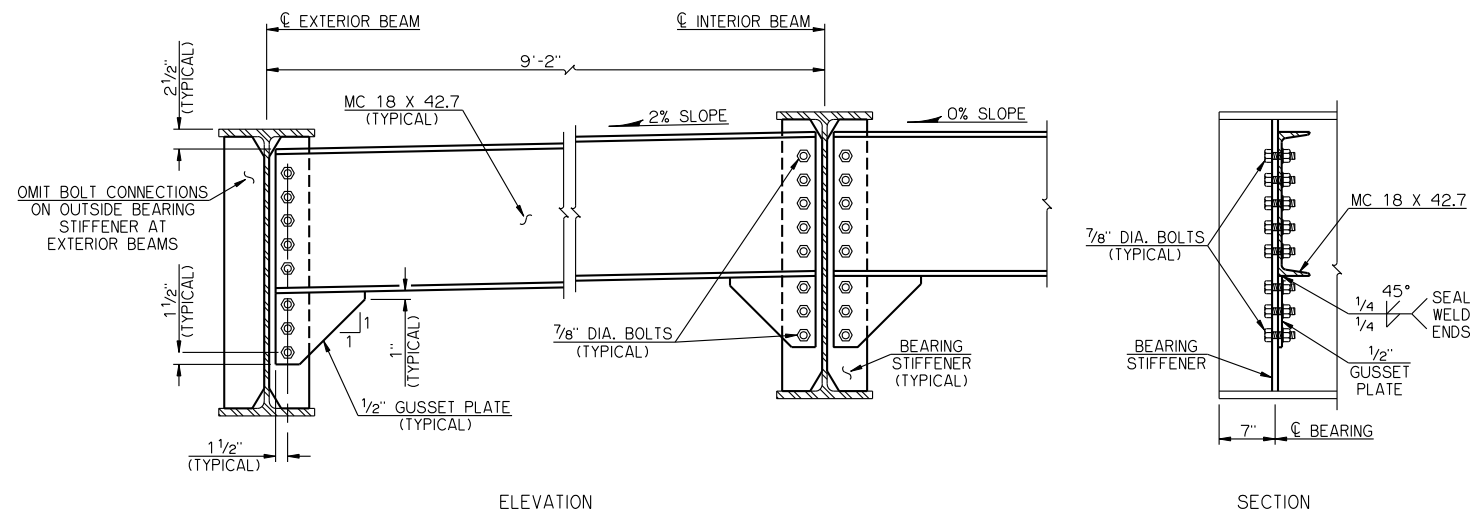
PIER DIAPHRAGM DETAILS FOR W30 BEAMS



ELEVATION

SECTION

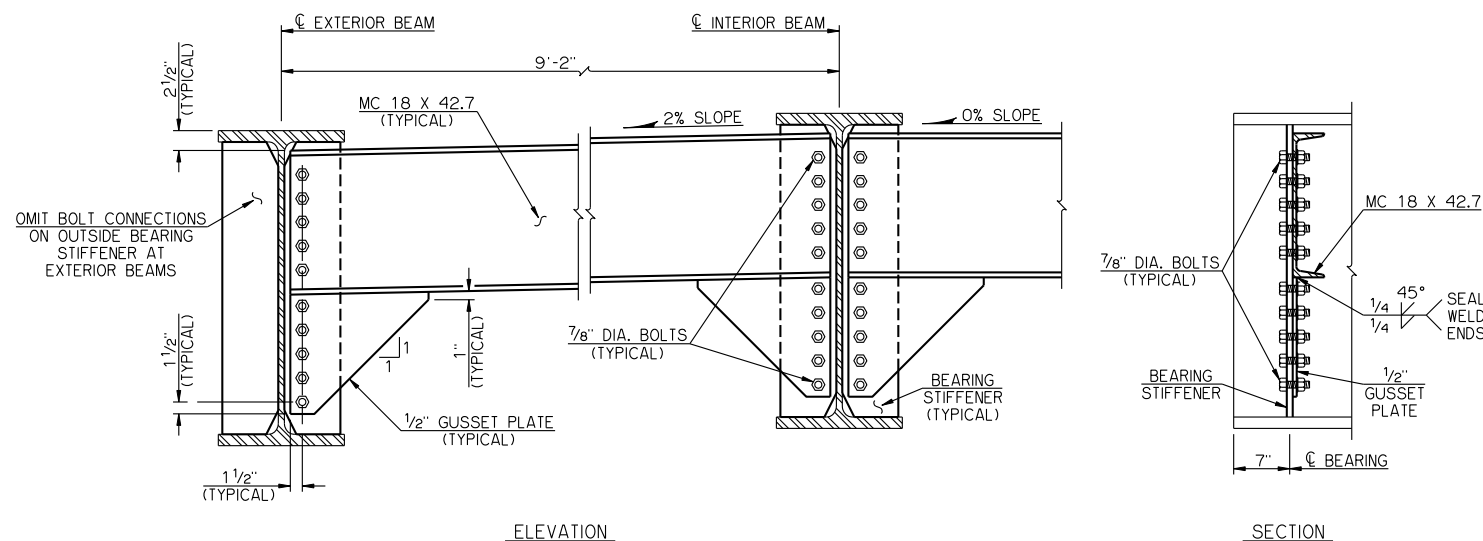
PIER DIAPHRAGM DETAILS FOR W33 BEAMS



ELEVATION

SECTION

PIER DIAPHRAGM DETAILS FOR W36 BEAMS



ELEVATION

SECTION

PIER DIAPHRAGM DETAILS FOR W40 BEAMS

NOTES

STRUCTURAL STEEL FOR CHANNEL DIAPHRAGMS AND GUSSET PLATES SHALL CONFORM TO AASHTO M 270 (ASTM A 709), GRADE 50W, WEATHERING STEEL (CHARPY V-NOTCH TESTING NOT REQUIRED). BOLTS SHALL CONFORM TO AASHTO M 164 (ASTM A 325), TYPE 3. HEX NUTS SHALL CONFORM TO AASHTO M 291 (ASTM A 563), PROPERTY CLASS 8S3 OR 10S3. WASHERS SHALL CONFORM TO AASHTO M 293 (ASTM F 436), TYPE 3.

CONTRACTOR MAY ELECT TO FABRICATE A BENT PLATE DIAPHRAGM IN LIEU OF CHANNEL AND GUSSET PLATE. PLATE SHALL BE 1/2" MINIMUM THICKNESS AND FORMED IN THE SHAPE OF CHANNEL WITH MINIMUM 4" FLANGES. DEPTH OF BENT PLATE DIAPHRAGM SHALL BE EQUAL TO OR GREATER THAN THAT SHOWN FOR COMBINED CHANNEL AND GUSSET PLATE. COST TO CONSTRUCT BENT PLATE DIAPHRAGM SHALL BE AT THE CONTRACTOR'S EXPENSE.

APPROVED BY BRIDGE ENGINEER *Robert D. Smith* DATE 9-9-2011
 OKLAHOMA DEPARTMENT OF TRANSPORTATION
 COUNTY BRIDGE STANDARD (ENGLISH)
PIER DIAPHRAGM DETAILS
ROLLED BEAMS
 32' CLEAR ROADWAY - INTEGRAL - SKEWED 0°
 2009 SPECIFICATIONS CB32-I-SKO-DIA-PR-RB Q1E
 CB-882E