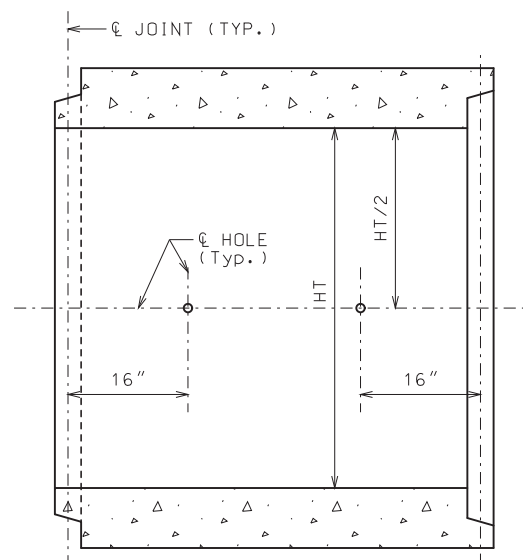
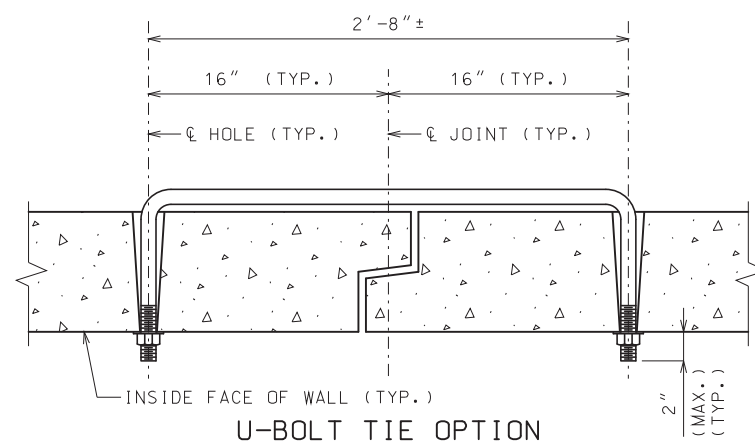


HALF SECTION THRU BARREL

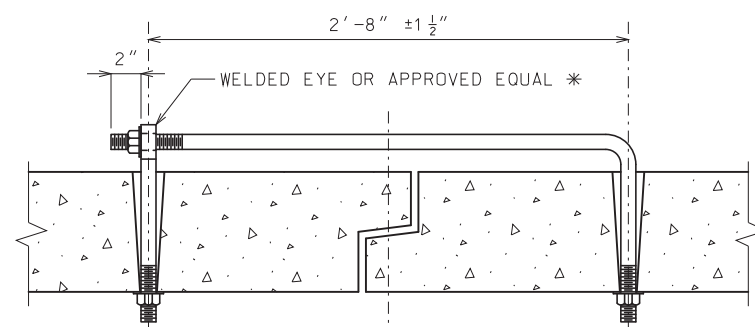


LONGITUDINAL SECTION

PLACEMENT OF HOLES

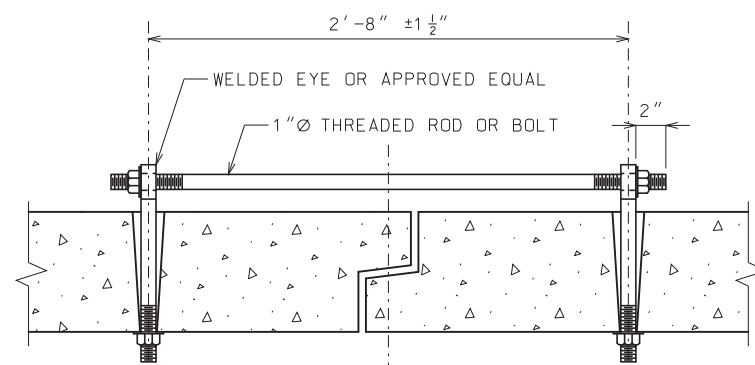


U-BOLT TIE OPTION



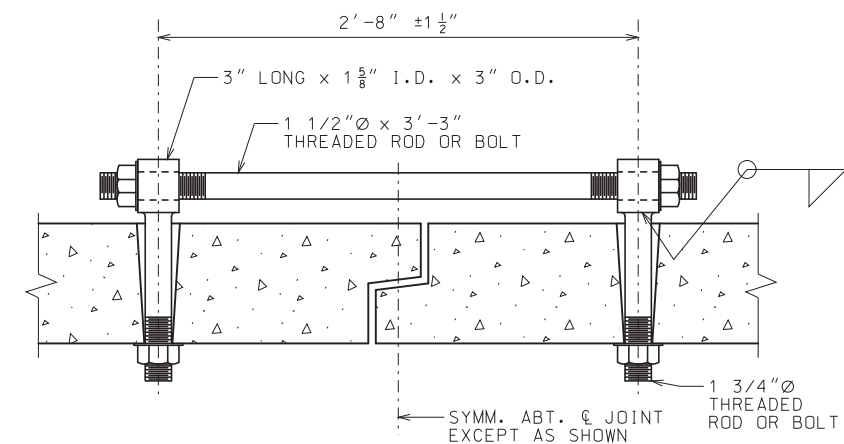
* THE CONNECTIONS SHALL BE PLACED AT DOWNSTREAM END WHEN PLACED INSIDE OF STRUCTURE.

EYE BOLT TIE OPTION



DOUBLE CONNECTION TIE OPTION

REGULAR STRENGTH CONNECTION DETAILS



DOUBLE CONNECTION TIE

EXTRA STRENGTH CONNECTION DETAILS

GENERAL NOTES:

TIES SHALL BE USED ONLY TO HOLD BOX SECTIONS TOGETHER, NOT FOR PULLING SECTIONS TIGHT.

TIE ROD THREADS SHALL PROJECT TO THE INSIDE OF CULVERT EXCEPT AS NOTED ON PLANS.

HOLES:
HOLES SHALL BE CAST OR DRILLED 16 INCHES FROM CENTERLINE OF JOINT AS SHOWN, UNLESS FORMS ARE SET UP FOR 16-INCH SPACING FROM OUTSIDE OF JOINT.

TAPERED HOLES ARE PERMITTED WHEN PRECAST.

REGULAR STRENGTH CONNECTIONS:
REGULAR STRENGTH CULVERT TIES SHALL BE 1" Ø THREADED RODS.

TIE RODS FOR REGULAR STRENGTH CONNECTIONS SHALL BE GALVANIZED IN ACCORDANCE WITH SEC 1081.

EXTRA STRENGTH CONNECTIONS:
THREADED RODS FOR EXTRA STRENGTH CONNECTIONS SHALL BE STAINLESS STEEL IN ACCORDANCE WITH ASTM A193 OR A320.

NUTS FOR EXTRA STRENGTH CONNECTIONS SHALL BE STAINLESS STEEL IN ACCORDANCE WITH ASTM A194 AND OF GRADE EQUIVALENT TO GRADE USED FOR THREADED RODS.

MoDOT MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

STATE OF MISSOURI
ERIC E. SCHROETER
NUMBER PE-28411
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

PRECAST CONCRETE BOX CULVERT TIES

DATE EFFECTIVE: 04/01/2018	733.00	SHEET NO. 1 OF 1
DATE PREPARED: 2/9/2018		

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.