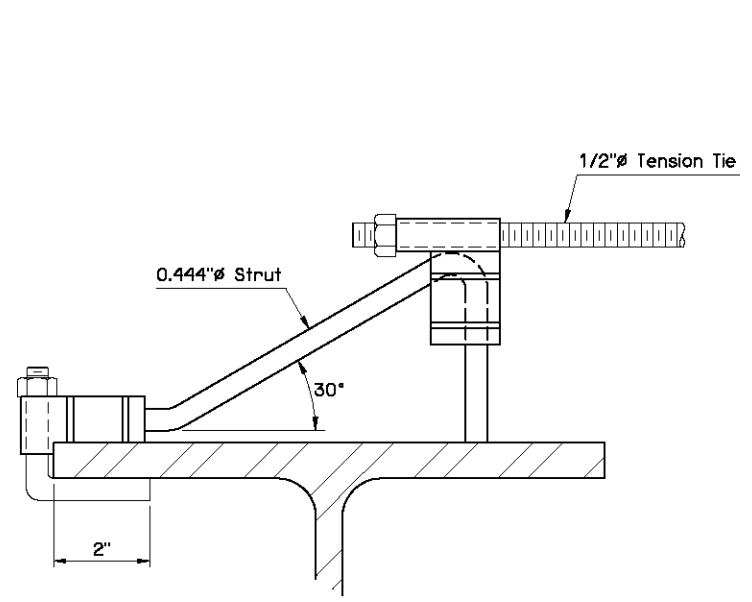
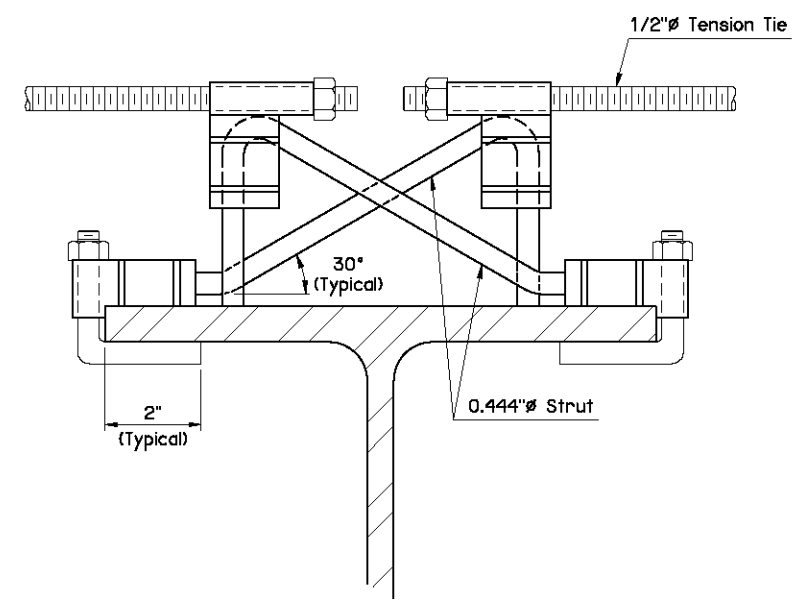


BEAM BRACING FOR DECK SLAB PLACEMENT

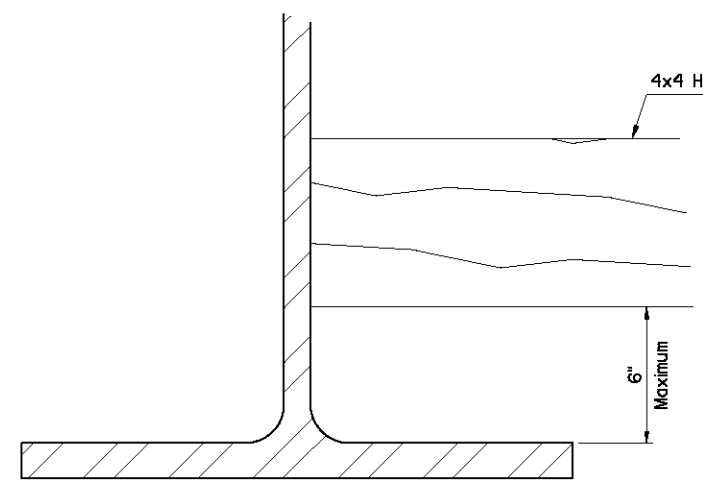


EXTERIOR

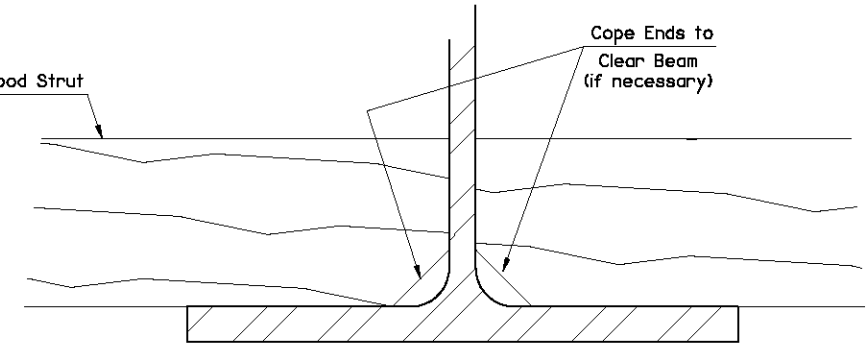


INTERIOR

TY-BAR CLIP DETAIL
(EPOXY COATED)



EXTERIOR



INTERIOR

HARDWOOD STRUT DETAIL

BRACING NOTES

Submit drawings of the bracing system to the Bridge Engineer for approval. Bracing systems other than that shown may be used if design calculations and drawings of the proposed bracing system are submitted to and approved by the Bridge Engineer. Drawings and calculations of the proposed system shall be signed and sealed by a Professional Engineer licensed in the State of Oklahoma. Do not place deck slab concrete until bracing system is approved. The Department considers all cost for bracing to be included in other items of work.

Use adjustable Cantilever Forming Brackets at exterior Beams capable of being adjusted during the placement of Deck Slab concrete in order to maintain proper grades at the Deck Slab overhang. If shims are to be used to adjust the Forming Brackets, provide the Bridge Engineer a method to predict crush and settlement of shims. Bear the leg brace of the Brackets on the Beam web within 6 inches of the bottom flange.

Use #4 epoxy coated reinforcing steel with threaded ends or galvanized all thread for Tension Ties. Place Tension Ties perpendicular to the beams. Attach Tension Ties to the top flange of the Beams with Ty-Bar Clips as shown. Do not weld Ty-Bar Clips to the top flange of the Beams.

Wedge Hardwood Struts, or another material of an equivalent strength, between Beam webs within 6" of the bottom flange at each Tension Tie location.

APPROVED BY BRIDGE ENGINEER	<i>Scott J. Smith</i>	DATE	4/2/10
OKLAHOMA DEPT. OF TRANSPORTATION BRIDGE STANDARD (ENGLISH)			
STEEL BEAM BRACING DETAILS			
2009 SPECIFICATIONS	B40-STL-BM-BRACING	OOE	B-37E