A Beginner's Guide to Structural Engineering

Peters Creek Brid

General Notes:

1. All member and connection design is to be in accordance with latest version of the American Institute of Steel Construction (AISC) Specification for Structural Steel Buildings and the AISC Specification for Structural Joints using ASTM A325 or A490 bolts as found in the AISC Steel Construction Manual (SCM).
2. All steel is the preferred type for each shape as indicated in the Steel Construction Manual unless otherwise noted or specified in problem statements.
3. All bolts are $\frac{3}{4}$" dia. A325–N unless otherwise noted or specificed in problem statements.
4. Concrete 28–day strength, f'c, is 4,000 psi
5. The drawings presented here are schematic in nature. Actual member and bolt types and sizes and connection configurations are subject to change during problem completion.

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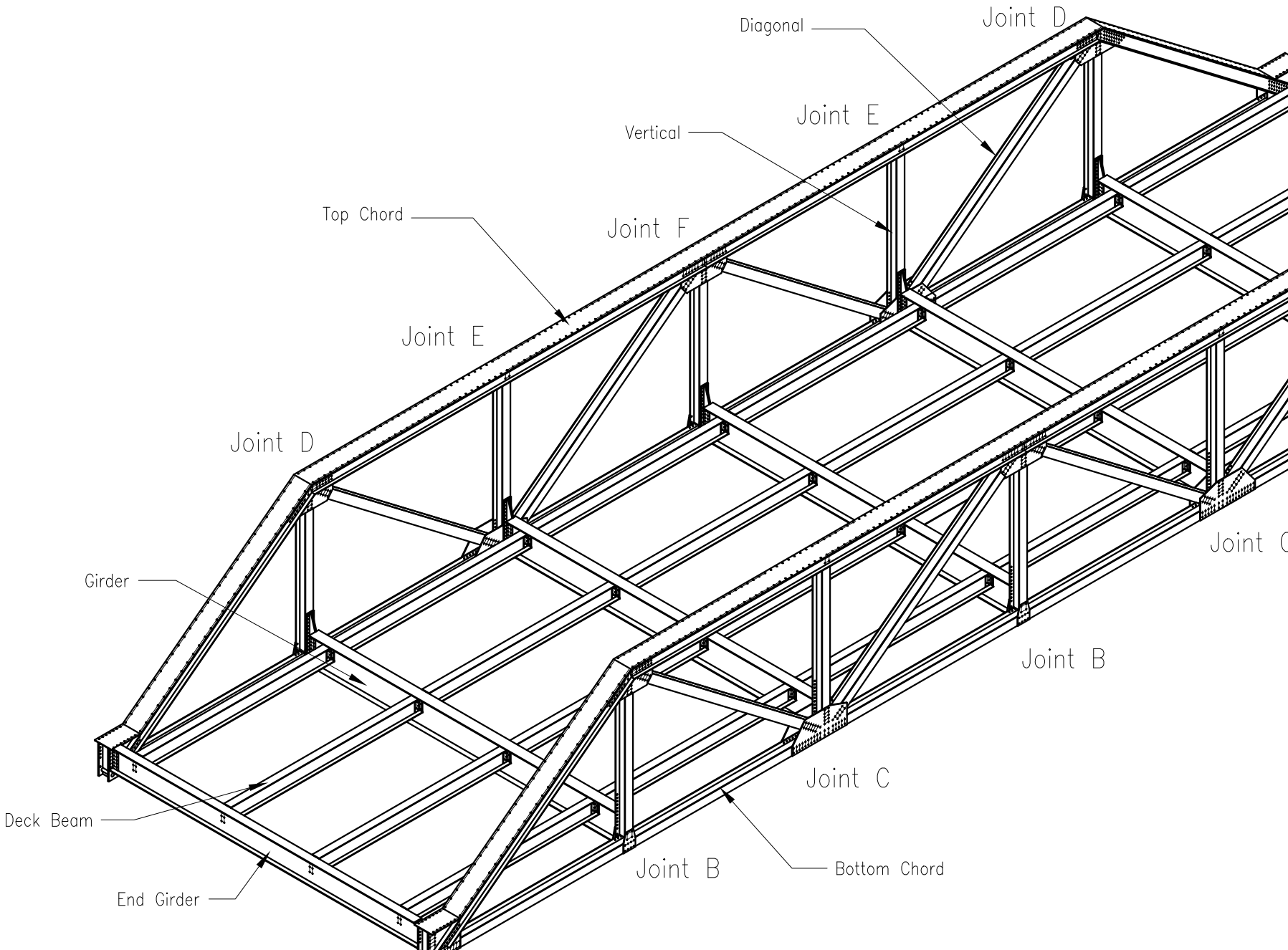
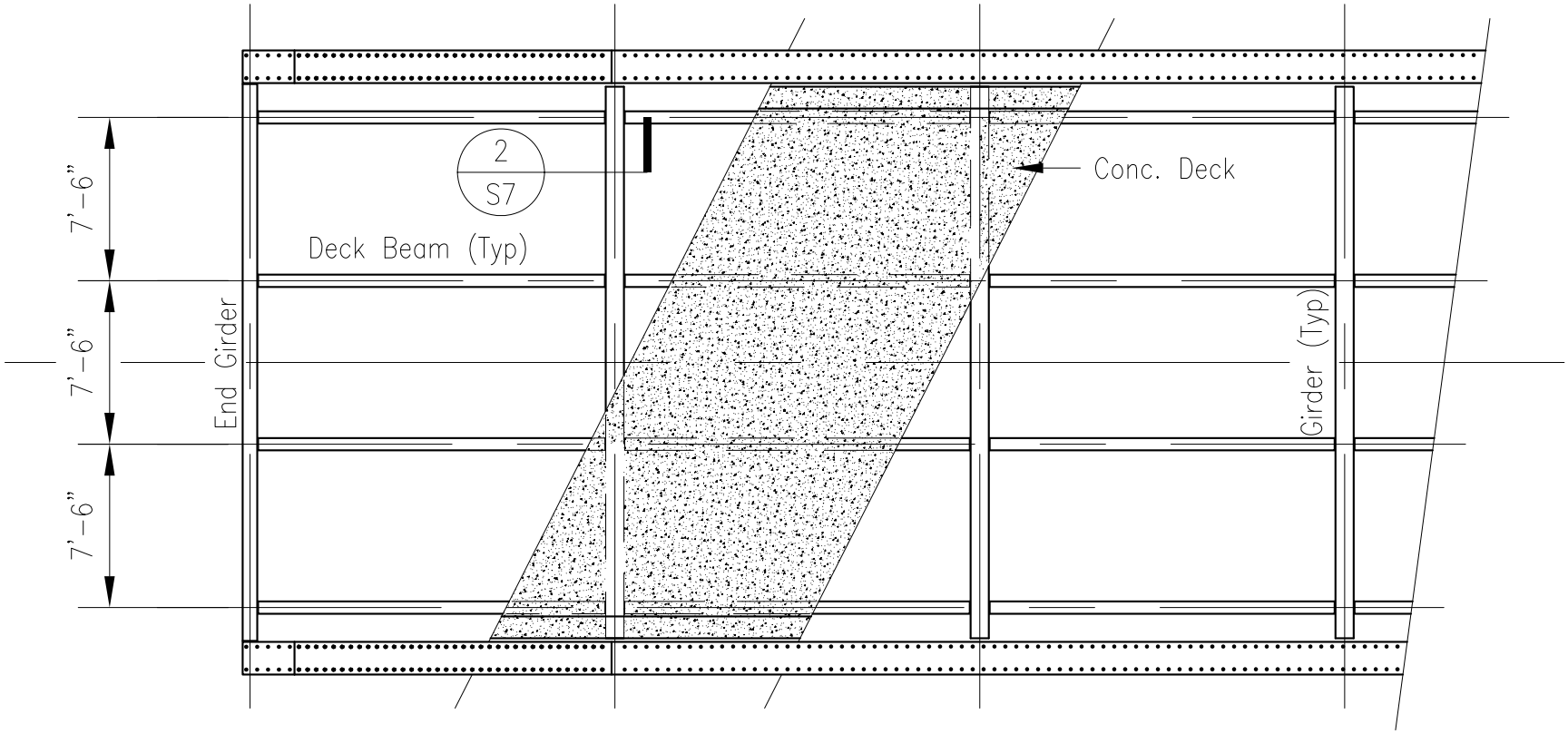
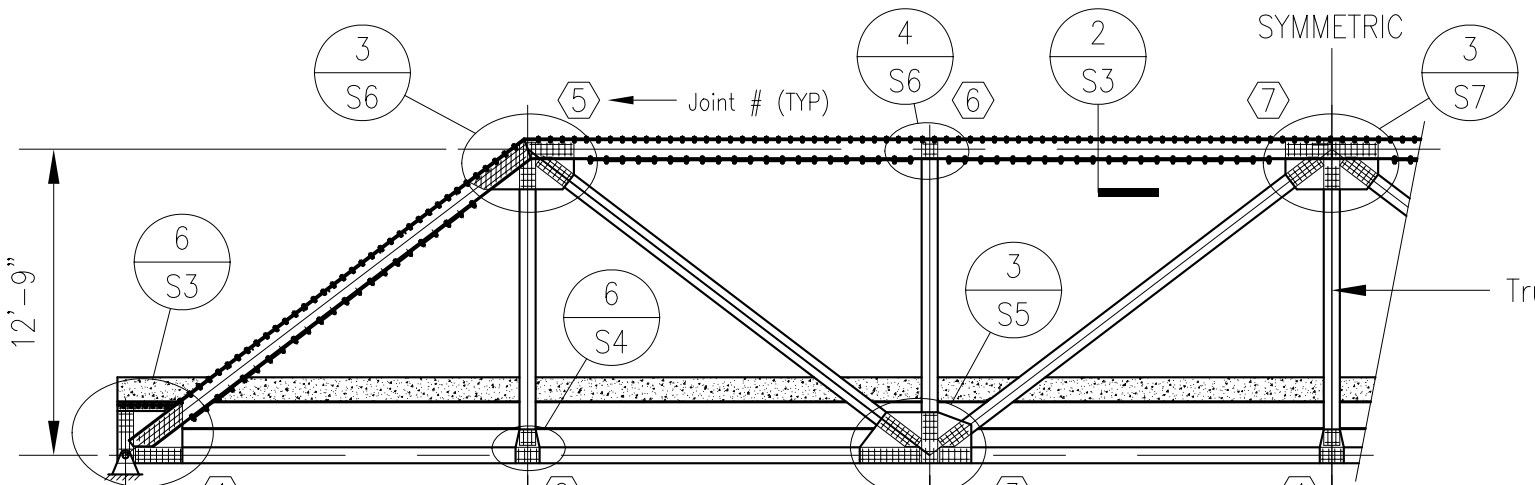
S1	Isometric
S2	Plan, Profile, & Section
S3–S7	Connection Details

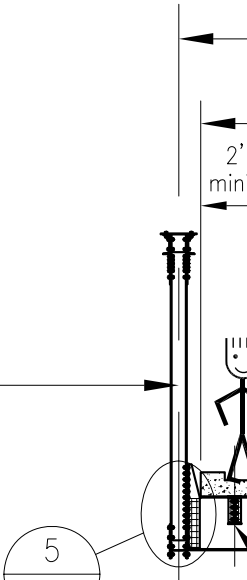

Diagonal
Joint D
Joint E
Vertical
Top Chord
Joint F
Joint E
Joint D
Joint C
Girder
Joint B
Joint C
Deck Beam
Joint B
Bottom Chord
End Girder

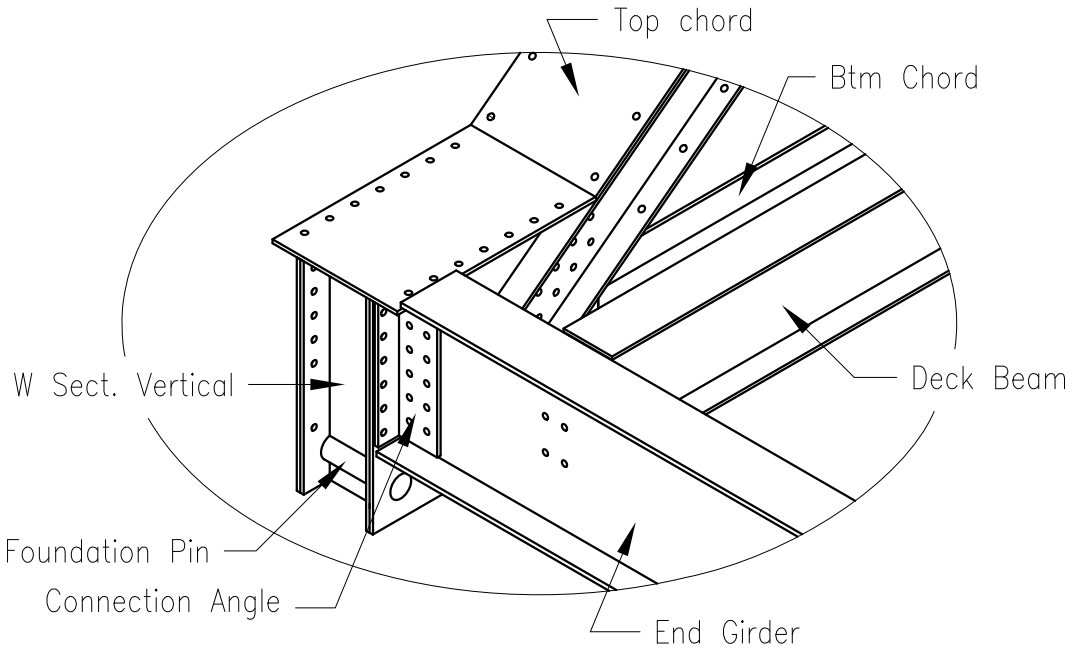


1 BRIDGE PLAN

BGSCM: Bridge SCALE: 1/8" = 1'-0"

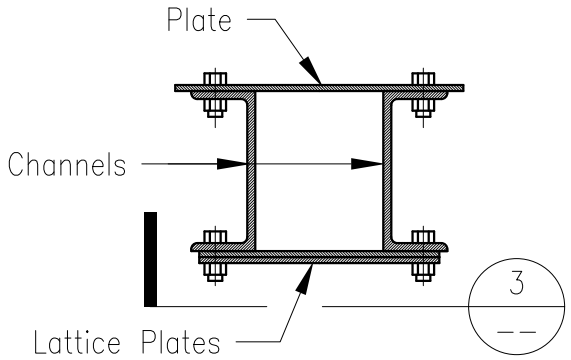






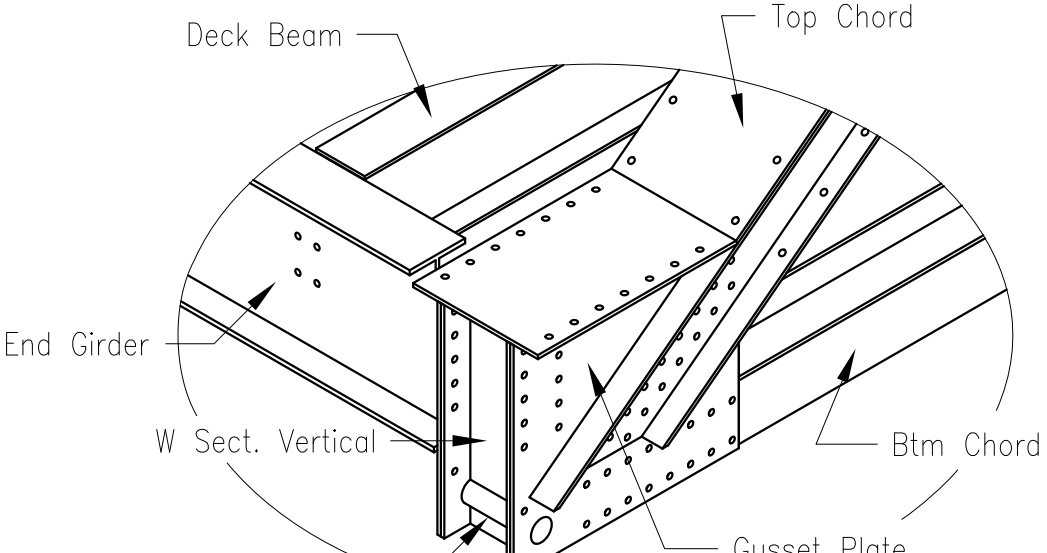
1 JOINT A ISOMETRIC VIEW

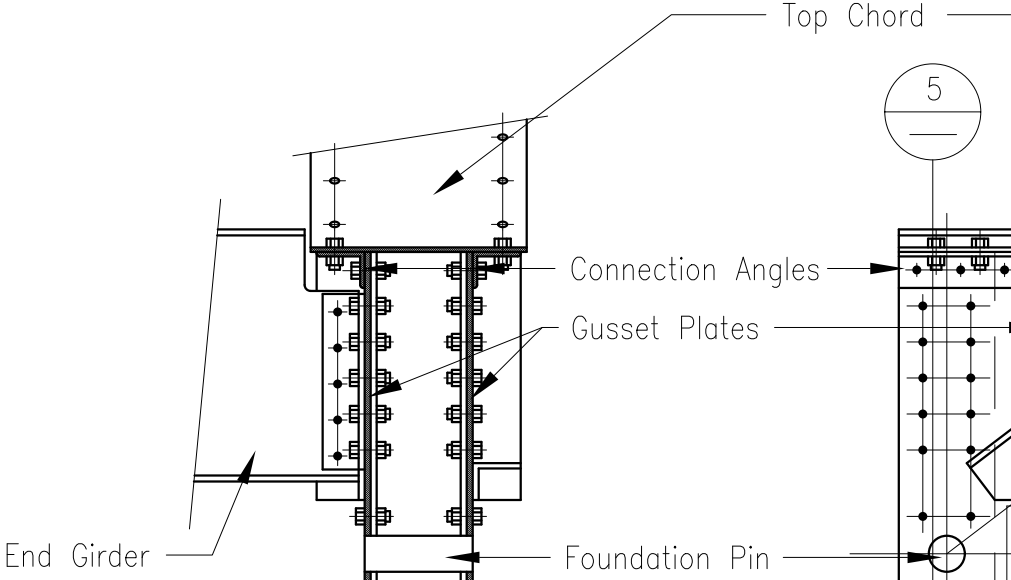
BGSCM: Bridge SCALE: 1/2" = 1'-0"

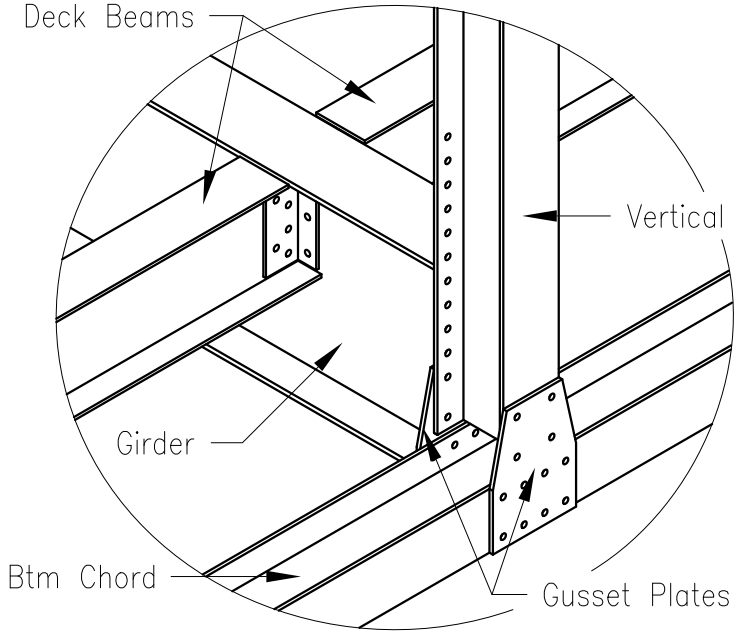


2 TOP CHORD SECTION

BGSCM: Bridge SCALE: 1" = 1'-0"

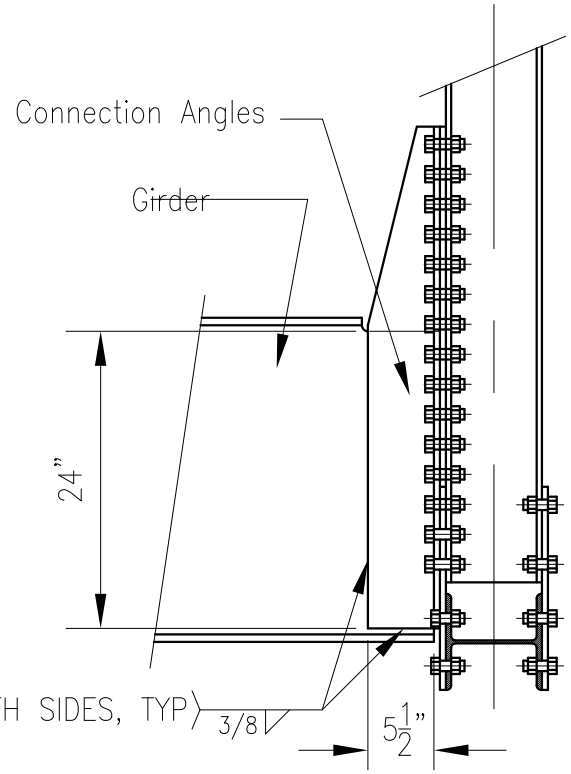






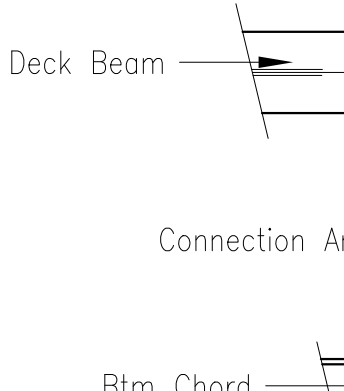
1 JOINT B ISOMETRIC VIEW

BGSCM: Bridge SCALE: 1/2" = 1'-0"



2 ALTERNATE GIRDER CONN.

BGSCM: Bridge SCALE: 3/4" = 1'-0"



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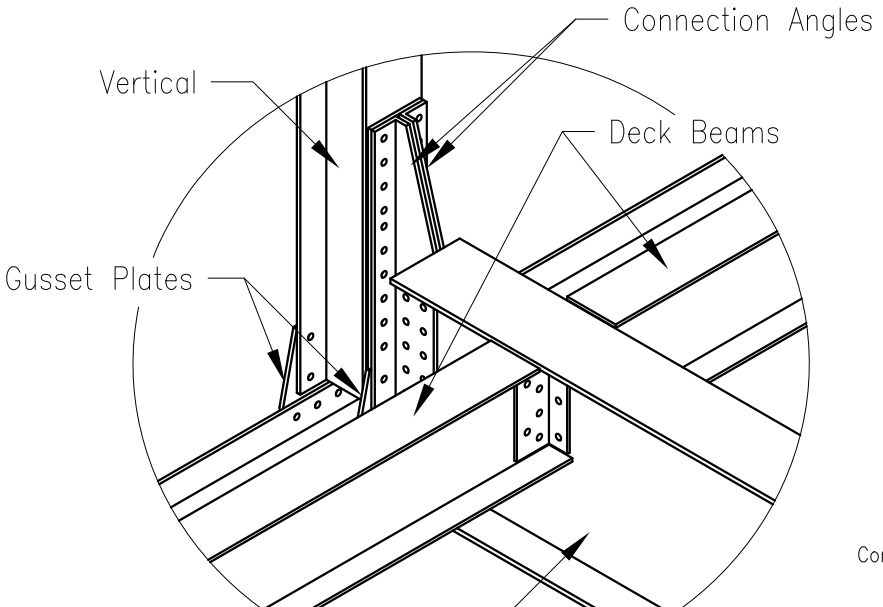
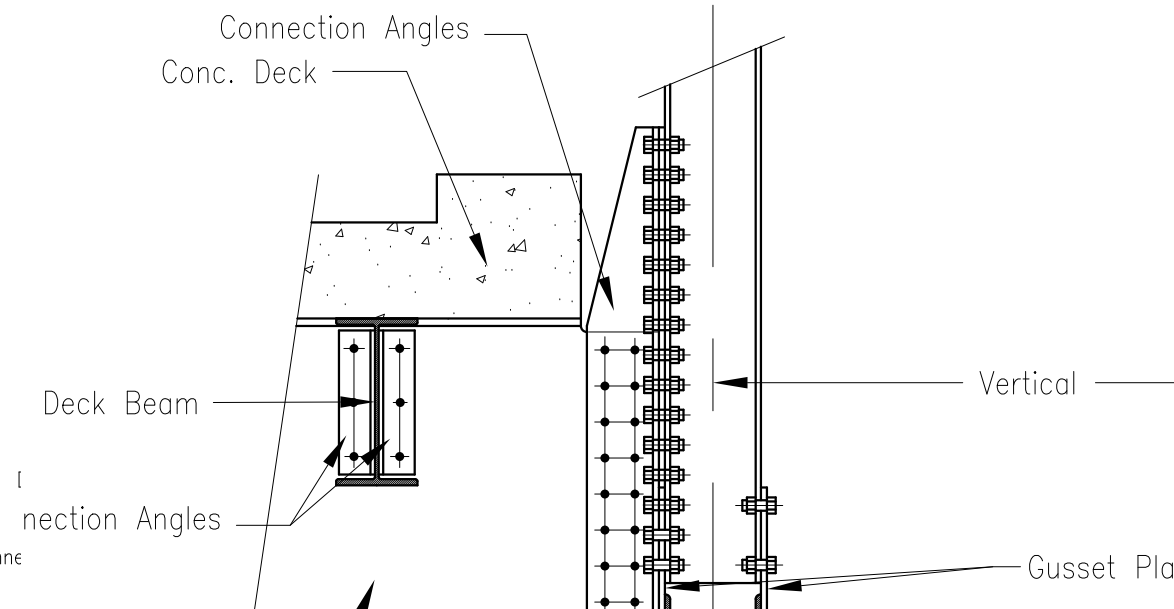
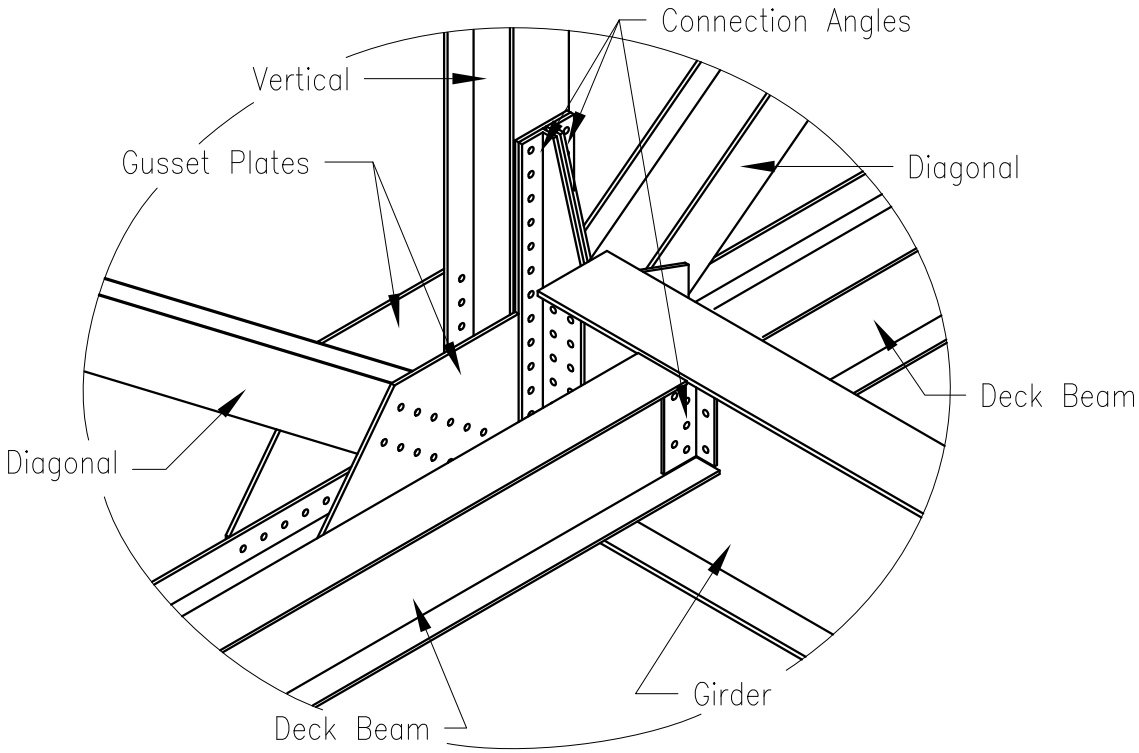
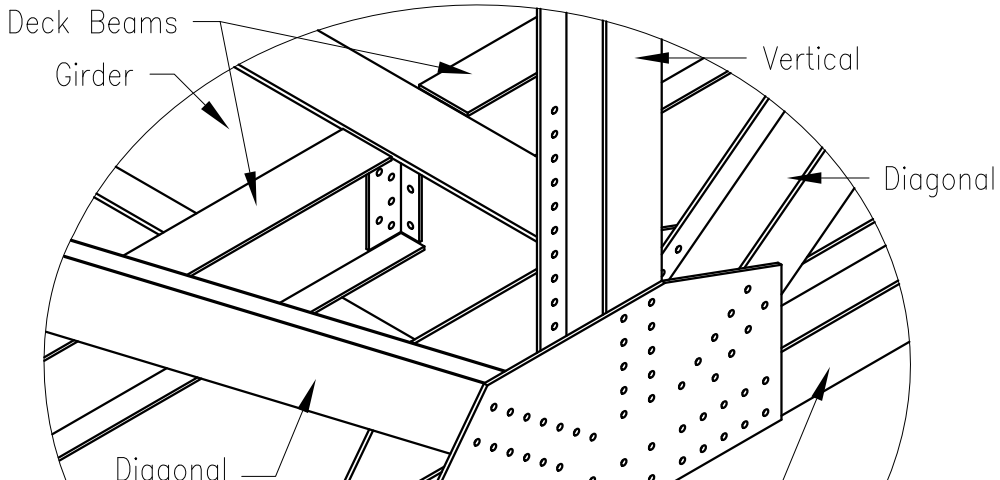


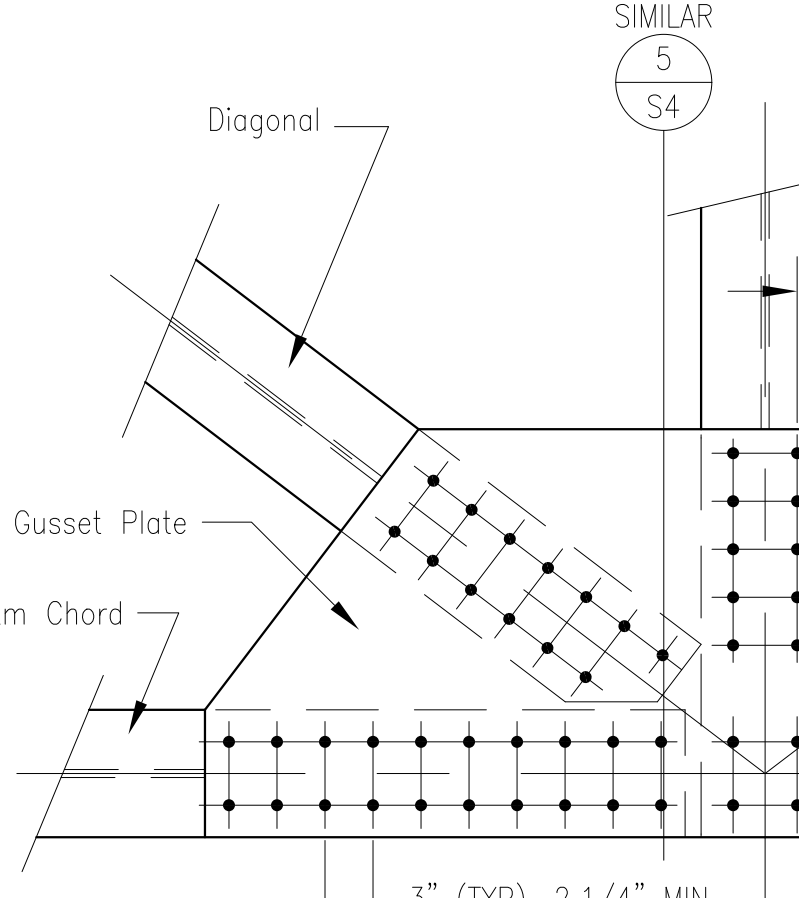


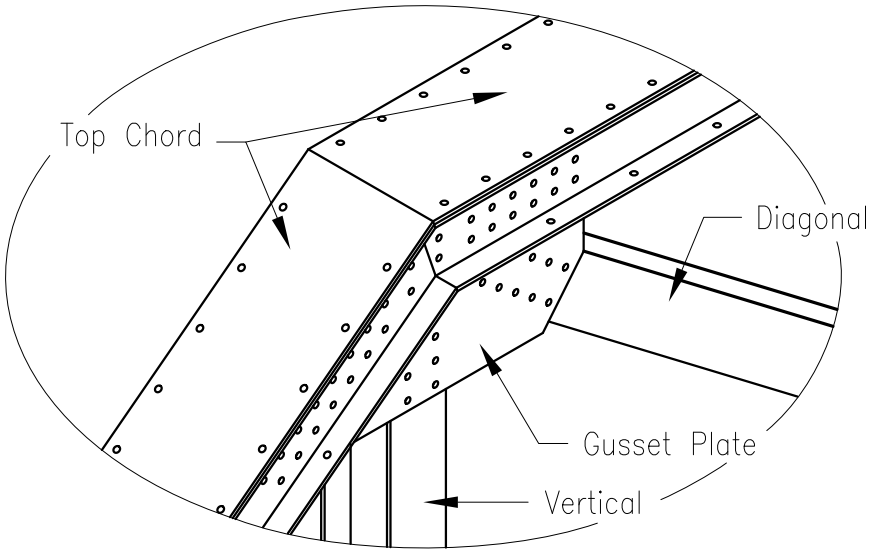


1 JOINT C ISOMETRIC VIEW

BGSCM: Bridge SCALE: 1/2" = 1'-0"

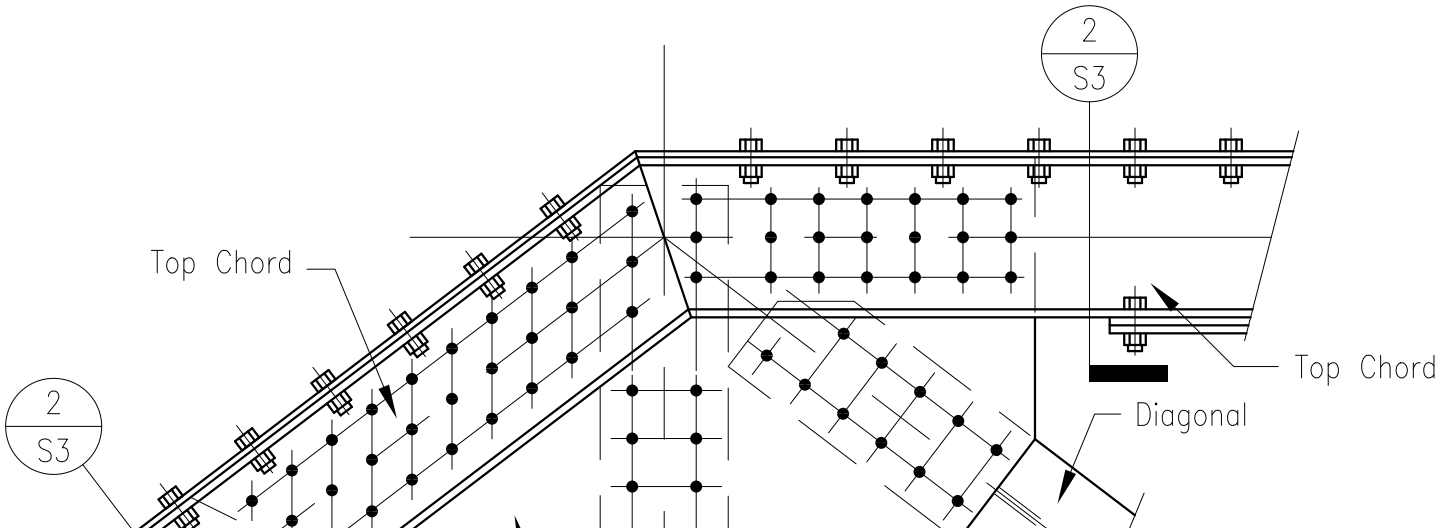


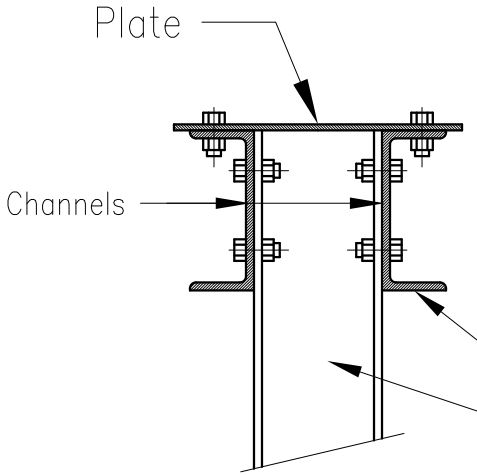


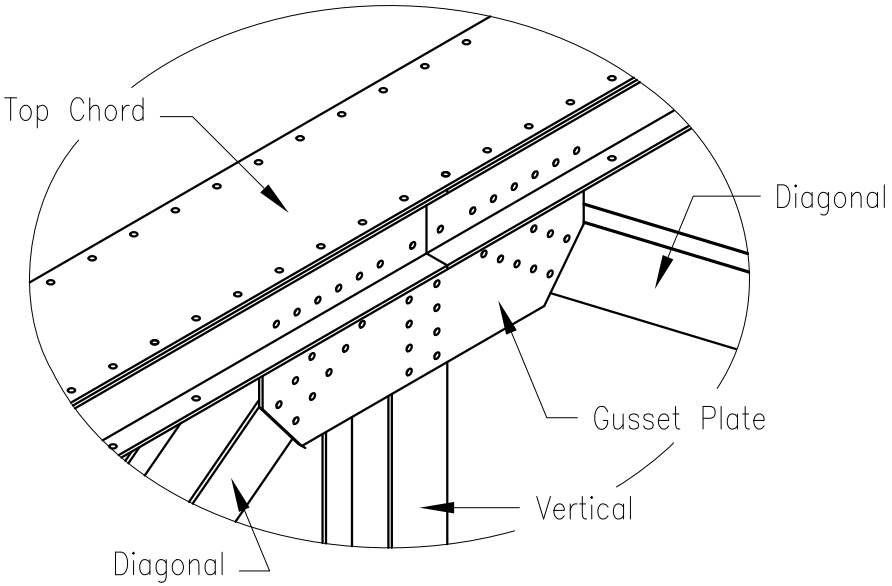


1 JOINT D ISOMETRIC

BGSCM: Bridge SCALE: 1/2" = 1'-0"

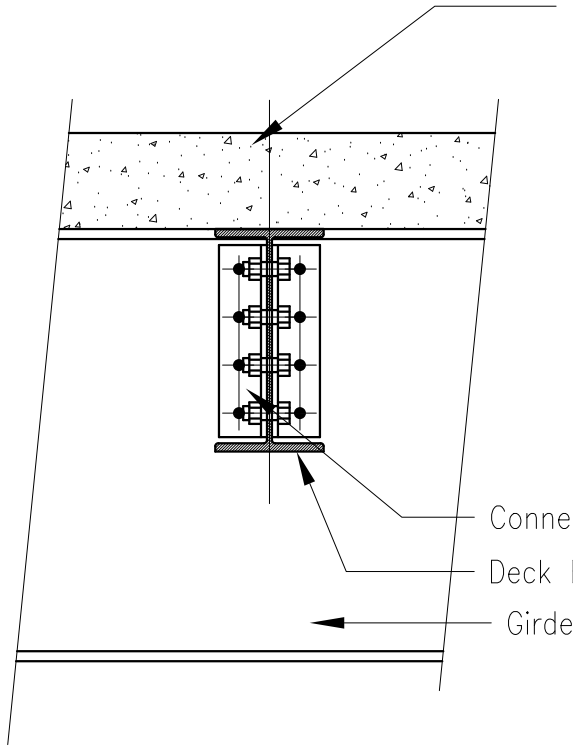






1 JOINT F ISOMETRIC

BGSCM: Bridge SCALE: 1/2" = 1'-0"



2 BEAM-BEAM CON

BGSCM: Bridge