

FIGURE 1 - GUSSET PLATE GEOMETRY  
(Bottom Chord)

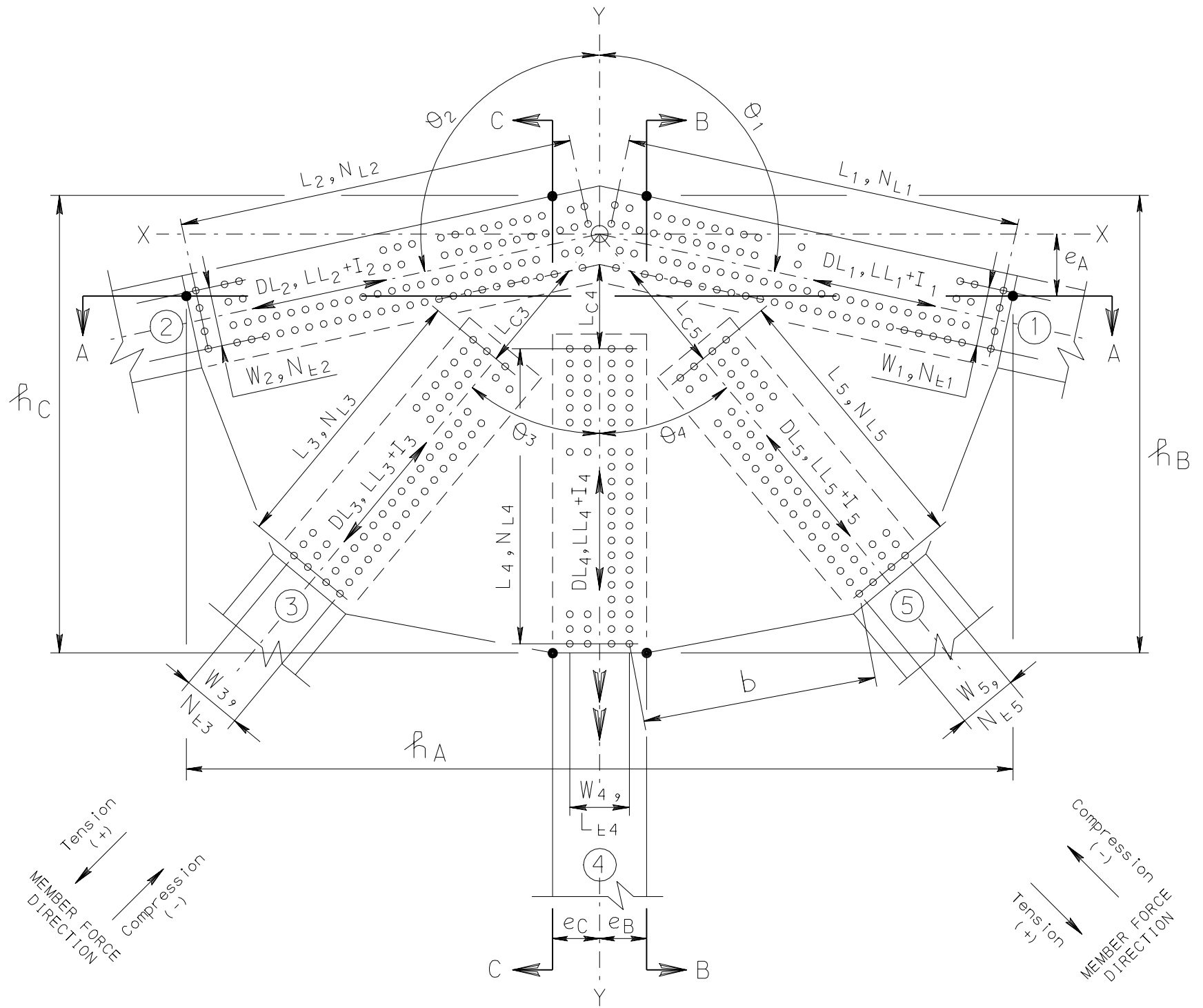


FIGURE 2 - GUSSET PLATE GEOMETRY  
(Top Chord)

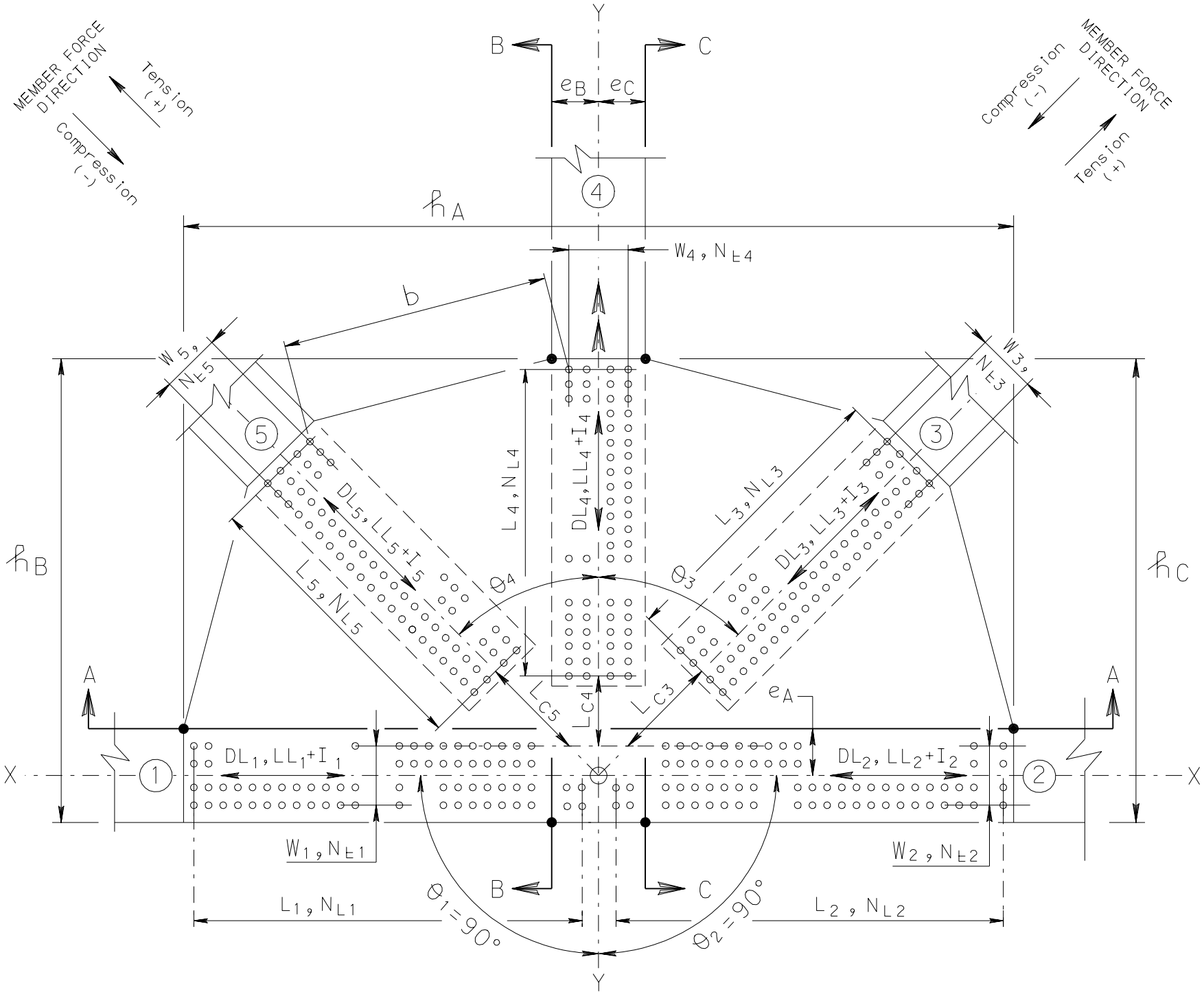


FIGURE 3 - GUSSET PLATE GEOMETRY  
(Horizontal Bottom Chord)

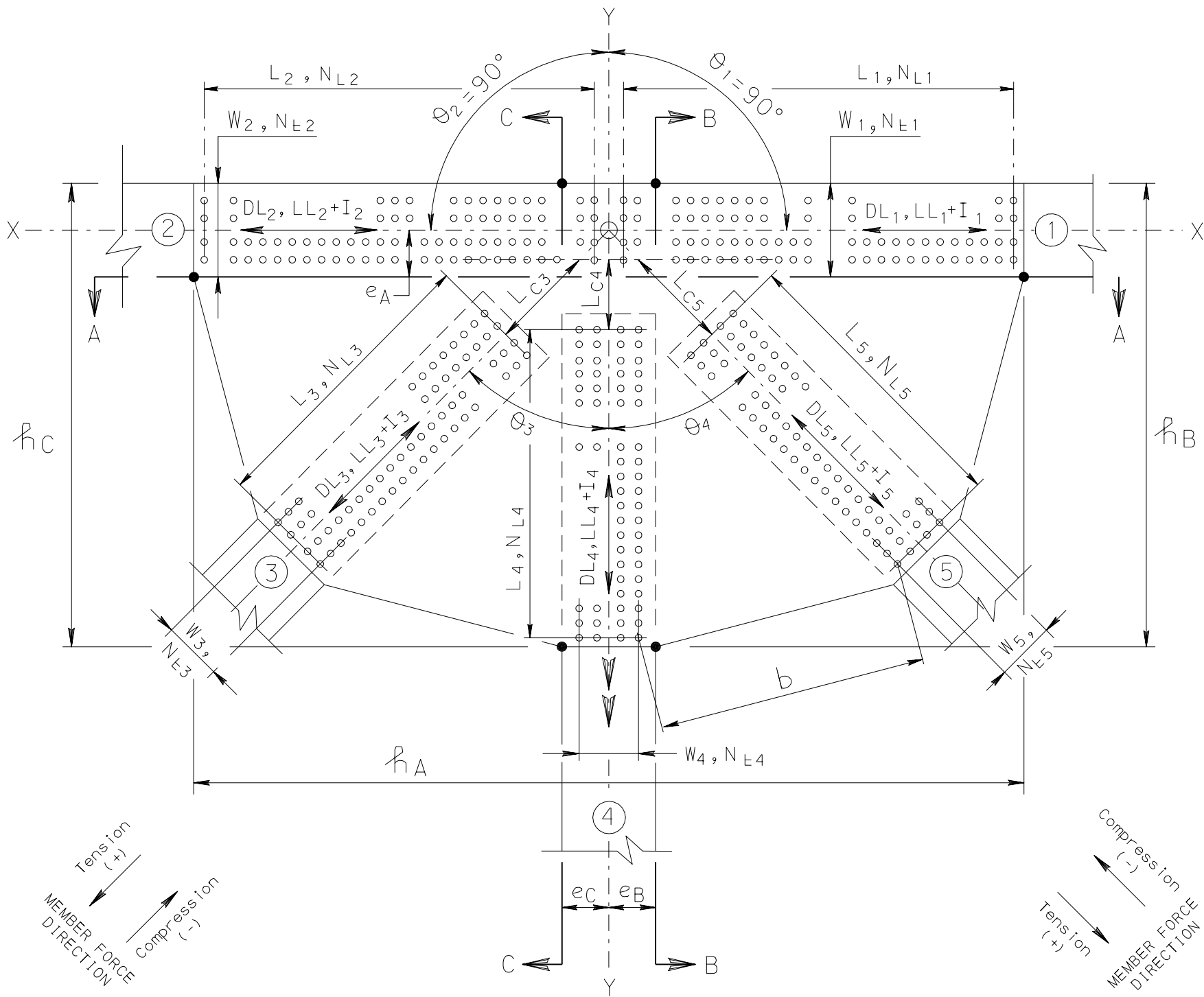


FIGURE 4 - GUSSET PLATE GEOMETRY  
(Horizontal Top Chord)

LEGEND FOR  
FIGURES 1 AND 3

- ① - Left Bottom Chord
- ② - Right Bottom Chord
- ③ - Right Diagonal Member
- ④ - Vertical Member
- ⑤ - Left Diagonal Member
- $e_A, e_B, e_C$  - Cross Section Eccentricity (in)
- $h_A, h_B, h_C$  - Cross Section Length (in)
- DL, LL+I - Member Force Load (k)
- $\theta_1, \theta_2, \theta_3, \theta_4$  - Member Angle (degree)
- $W_1, W_2, W_3, W_4, W_5$  - Length between first and last row of Fasteners in Longitudinal Direction (in).
- $L_{C3}, L_{C4}, L_{C5}$  - Length of the Unstiffened Vertical edge in Compression (in).
- $L_1, L_2, L_3, L_4, L_5$  - Length between first and last row of Fasteners in Transverse Direction (in).
- b - Maximum Unsupported Length along the edge of Gusset Plate (in).
- $N_{E1}, N_{E2}, N_{E3}, N_{E4}, N_{E5}$  - Number of Fasteners in the Transverse Direction.
- $N_{L1}, N_{L2}, N_{L3}, N_{L4}, N_{L5}$  - Number of Fasteners in the Longitudinal Direction.

LEGEND FOR  
FIGURES 2 AND 4

- ① - Right Top Chord
- ② - Left Top Chord
- ③ - Left Diagonal Member
- ④ - Vertical Member
- ⑤ - Right Diagonal Member
- $e_A, e_B, e_C$  - Cross Section Eccentricity (in)
- $h_A, h_B, h_C$  - Cross Section Length (in)
- DL, LL+I - Member Force Load (k)
- $\theta_1, \theta_2, \theta_3, \theta_4$  - Member Angle (degree)
- $W_1, W_2, W_3, W_4, W_5$  - Length between first and last row of Fasteners in Longitudinal Direction (in).
- $L_{C3}, L_{C4}, L_{C5}$  - Length of the Unstiffened Vertical edge in Compression (in).
- $L_1, L_2, L_3, L_4, L_5$  - Length between first and last row of Fasteners in Transverse Direction (in).
- b - Maximum Unsupported Length along the edge of Gusset Plate (in).
- $N_{E1}, N_{E2}, N_{E3}, N_{E4}, N_{E5}$  - Number of Fasteners in the Transverse Direction.
- $N_{L1}, N_{L2}, N_{L3}, N_{L4}, N_{L5}$  - Number of Fasteners in the Longitudinal Direction.

FIGURE 5 - LEGENDS

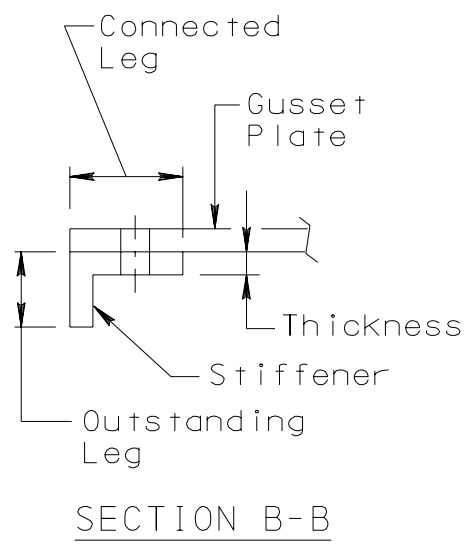
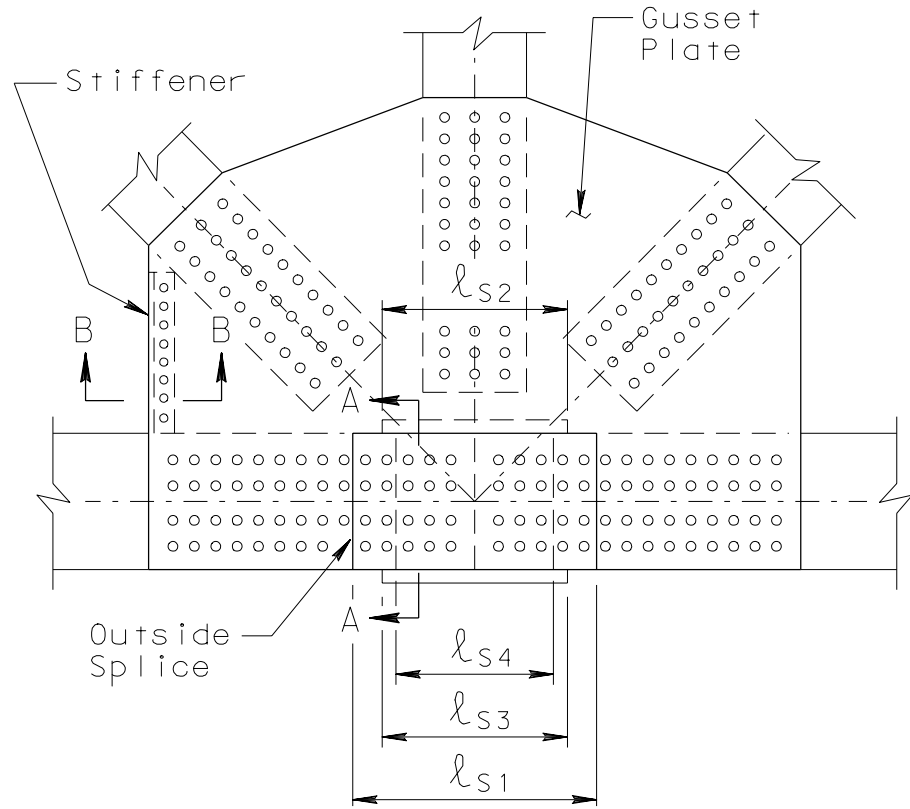
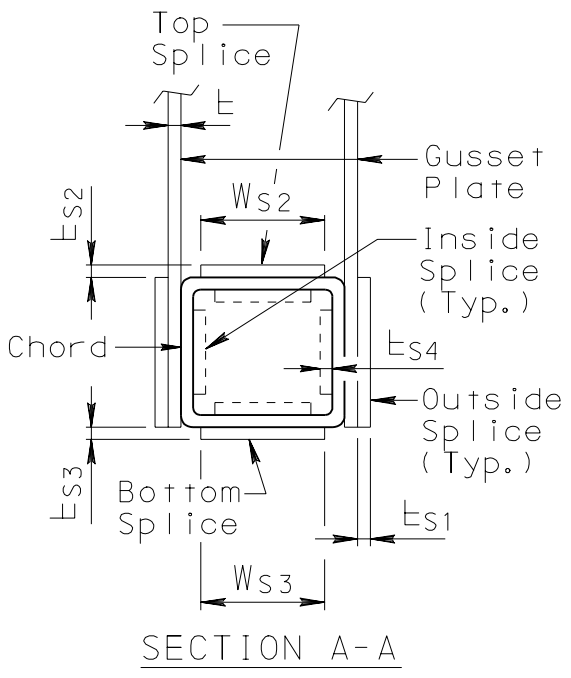
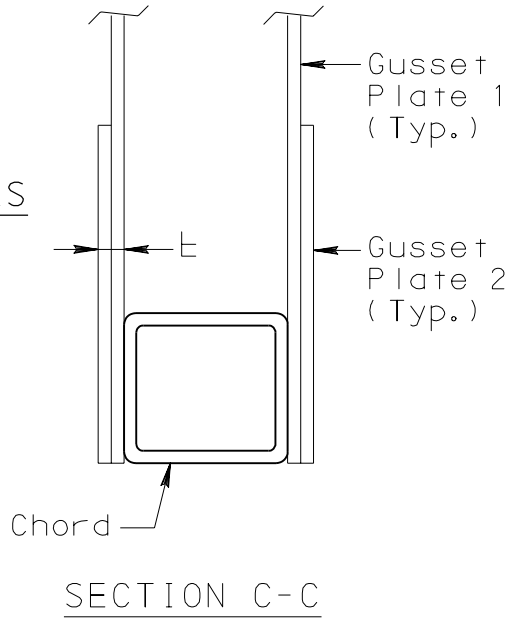
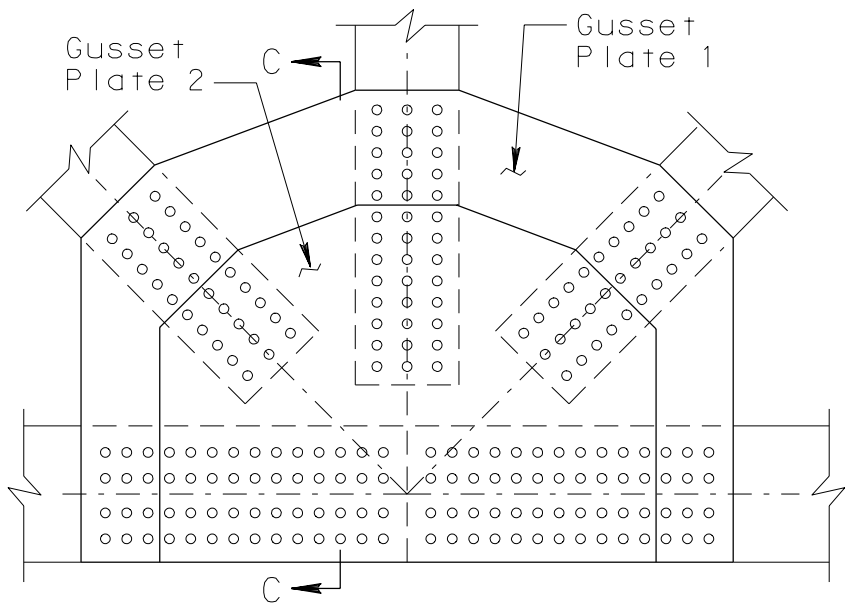


FIGURE 6 - GUSSET PLATE WITH SPLICES

LEGEND

- $t$  - Thickness of Gusset Plate
- $t_{s1}, t_{s2}, t_{s3}, t_{s4}$  - Thickness of splice
- $l_{s1}, l_{s2}, l_{s3}, l_{s4}$  - Length of Splice
- $w_{s2}, w_{s3}$  - Width of Top/Bottom Splice



Note:  
Total Gusset Plate Thickness used for the "CHECK" is equal to Gusset Plates 1 and 2 Combined.

FIGURE 7 - DOUBLE GUSSET PLATES ON EACH SIDE

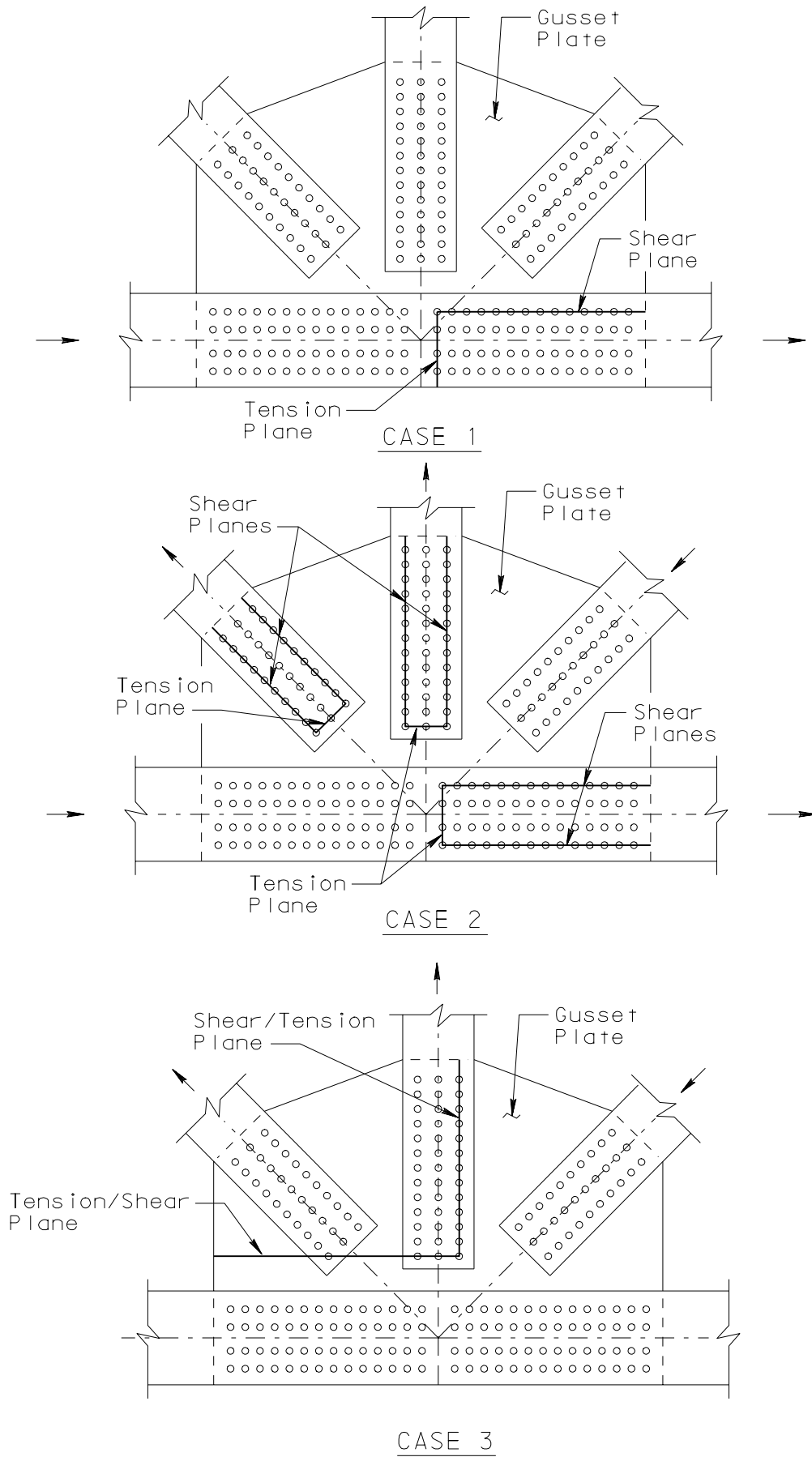


FIGURE 8 - BLOCK SHEAR RUPTURE PLANES IN GUSSET PLATE IN TENSION  
USED FOR THE "CHECK"

Details shown with only (1) one  
Gusset Plate for Clarity.

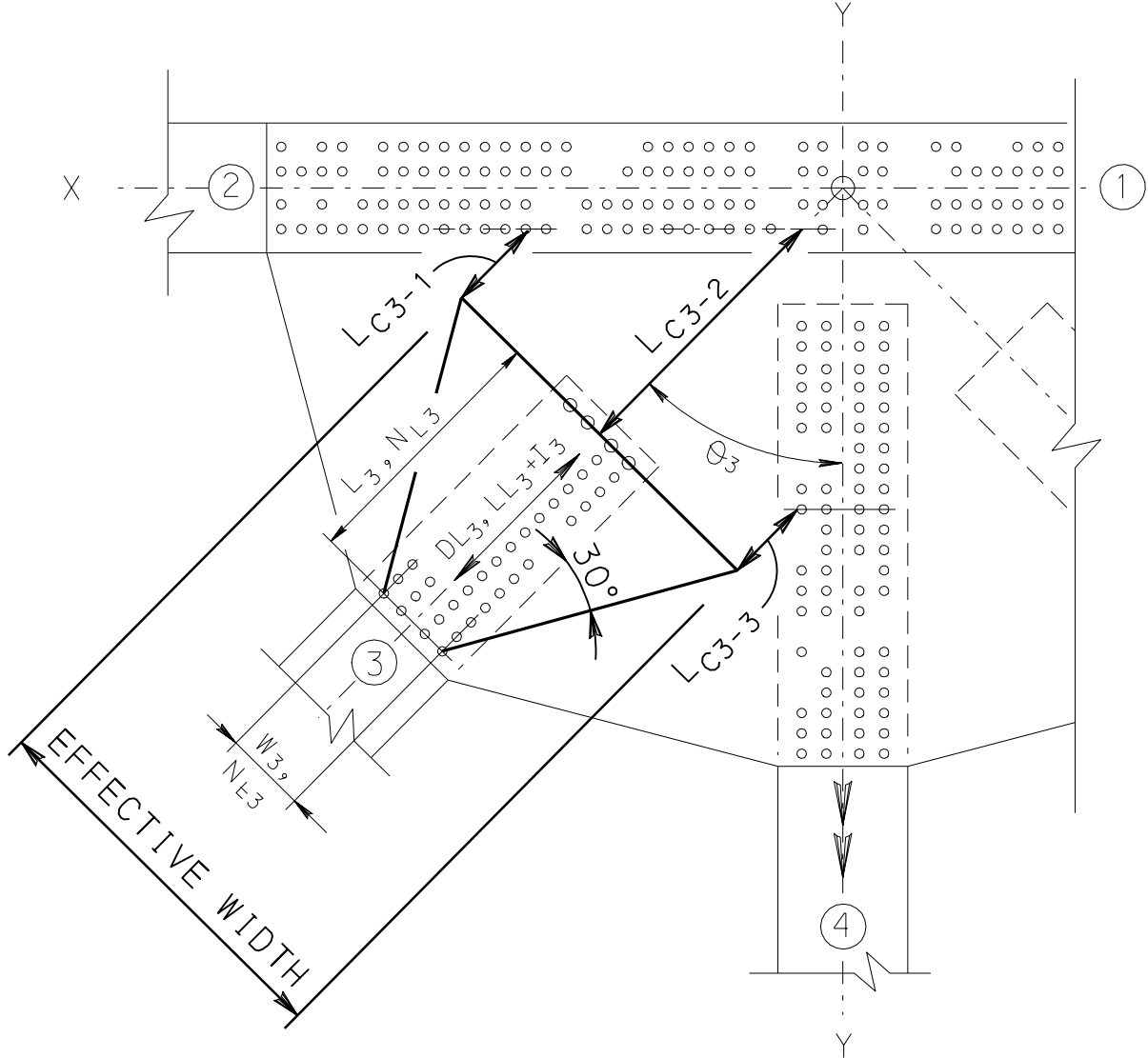
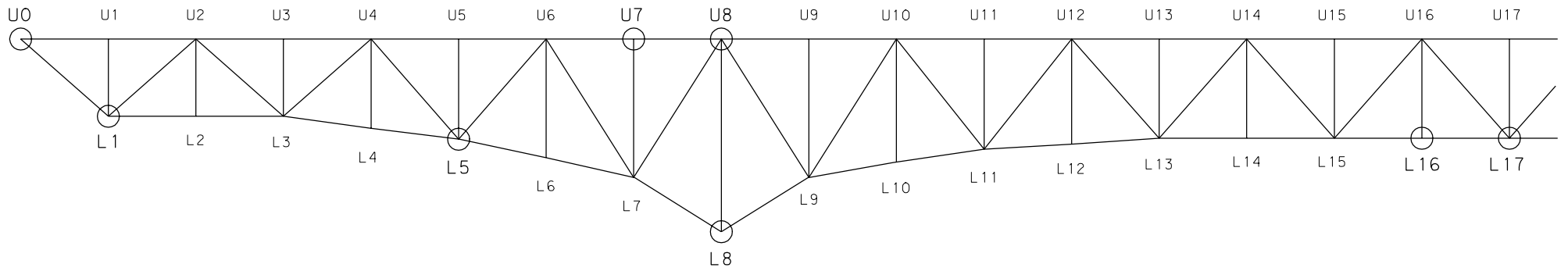


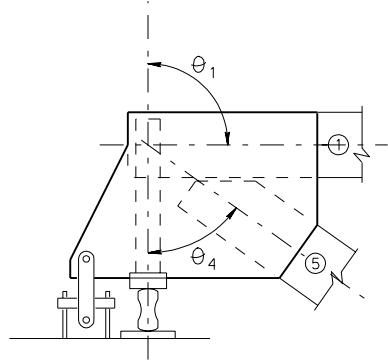
FIGURE 9 - EXAMPLES SHOWING  $L_{C3-1}$ ,  $L_{C3-2}$ ,  $L_{C3-3}$ , AND EFFECTIVE WIDTH FOR A GUSSET PLATE IN COMPRESSION



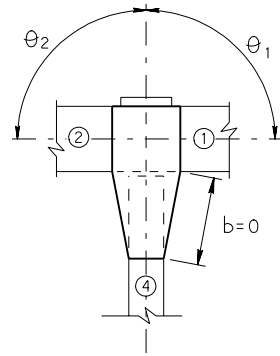
# DECK TRUSS EXAMPLE



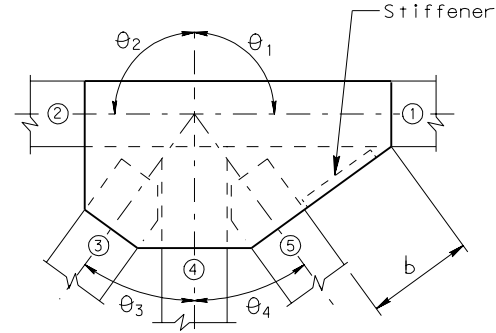
FRAMING ELEVATION



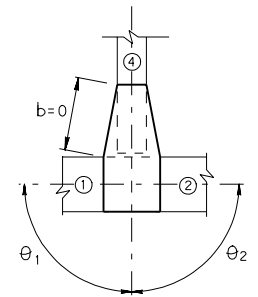
CONNECTION U0



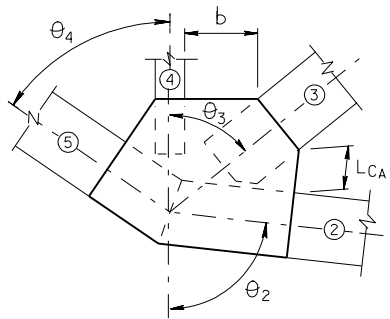
CONNECTION U7



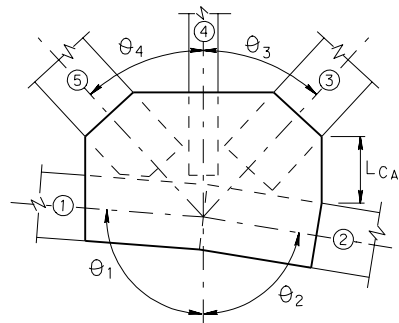
CONNECTION U8



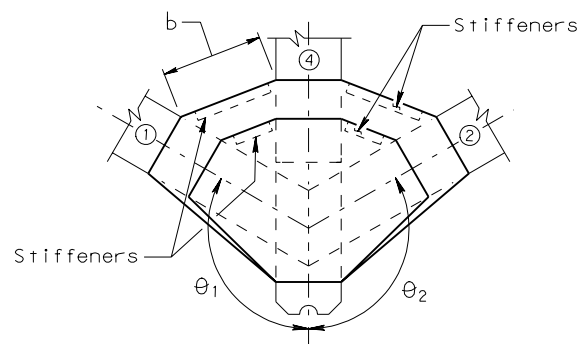
CONNECTION L16



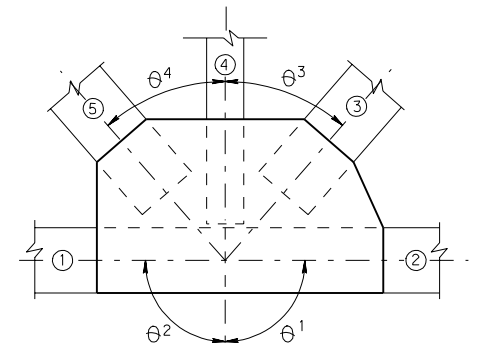
CONNECTION L1



CONNECTION L5



CONNECTION L8



CONNECTION L17

TRUSS JOINT DETAILS