



BRIDGE AND STRUCTURES OFFICE

EXAMPLE INTERMEDIATE CROSSFRAME | EXAMPLE PIER CROSSFRAME

ψ DO NOT WRAP WELDS AT EDGES

Washington State
Department of Transportation

EXAMPLE CROSSFRAME

OF

DETAILS

SHEET

SHEET

SHEETS

NOTES FOR INTERMEDIATE CROSSFRAMES:

-WT 6 x 15

-GUSSET ₽% (TYP.)

1. EXAMPLE SHOWN IS REPRESENTATIVE OF A MODERATE SPAN BRIDGE WITHOUT SIGNIFICANT CURVATURE OR SKEW.

EXAMPLE INTERMEDIATE CROSSFRAME

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2. WHERE CURVATURE IS PRESENT, THE CROSSFRAMES SHALL BE CONSIDERED MAIN LOAD CARRYING MEMBERS, DESIGNED FOR ALL DEAD AND LIVE LOADS. MARK ALL COMPONENTS ♥. FILLET WELDED CONNECTIONS MUST BE CHECKED FOR FATIGUE CATEGORY E OR E', PER LRFD TABLE 6.6.1.2.3-1 FIG. 7.1. ALTERNATIVELY, DESIGN SHOP CONNECTIONS AS BOLTED.

EXAMPLE PIER CROSSFRAME

-WT 6 x 15

WT 6 x 25-

NOTES FOR PIER CROSSFRAMES:

-WT 6 x 25

-GUSSET R34 (TYP.)

- EXAMPLE SHOWN IS REPRESENTATIVE OF A MODERATE SPAN BRIDGE WITHOUT SIGNIFICANT CURVATURE OR SKEW.
- 2. DESIGN MEMBERS AND CONNECTIONS FOR SEISMIC DEMAND.

 TYPICAL INTERIOR PIER CROSSFRAMES ARE CAPACITY PROTECTED

 COMPONENTS. VERIFY STRENGTH LOAD CASES ARE SATISFIED.
- 3. VERIFY STRENGTHS OF UPPER AND LOWER STIFFENER WELDS ARE SUFFICIENT FOR SEISMIC LOAD PATH, IN ADDITION TO STRENGTH LOAD CASES.
- 4. RESISTANCE FACTOR FOR BOLTS, EXTREME LIMIT STATE = 0.80
 PER LRFD 6.5.5. ALL OTHER COMPONENTS = 1.0
- 5. WHERE FATIGUE STRESS RANGE IS A CONCERN, CHECK WELD DETAILS OR USE BOLTED SHOP CONNECTIONS.