

## NOTES:

1. C1 = CXxX (TYPICAL END CROSS FRAME) *(See Note 15)*  
C2 = CXxX (TYPICAL INTERMEDIATE CROSS FRAME) *(See Note 15)*  
U1 = TYPICAL UTILITY SUPPORT AT ABUTMENTS  
U2 = TYPICAL UTILITY SUPPORT BETWEEN CROSS FRAME  
U3 = TYPICAL UTILITY SUPPORT AT CROSS FRAME
2. SEE SHEET X FOR CROSS FRAME AND UTILITY SUPPORT DETAILS.
3. THE PRIMARY MEMBERS ARE XXX THROUGH XXX. REFER TO SHEET X FOR LIMITS OF NET TENSILE STRESS.
4. ALL CROSS FRAMES, TRANSVERSE CONNECTION PLATES, INTERMEDIATE STIFFENERS, BEARING STIFFENERS SOLE PLATES, AND DRIP BARS ARE CONSIDERED SECONDARY MEMBERS.
5. ALL STEEL SHALL CONFORM TO AASHTO M 270 GRADE XX.
6. ALL HIGH STRENGTH BOLTS SHALL BE  $\frac{7}{8}$ "  $\phi$  CONFORMING TO THE REQUIREMENTS OF ASTM F3125 GRADE A325 TYPE X, UNLESS OTHERWISE NOTED. *(See Note 13)* NUTS AND WASHERS SHALL BE LISTED AS SUITABLE IN THE ASTM F3125 SPECIFICATION FOR GRADE A325.
7. ALL CONNECTIONS HAVE BEEN DESIGNED FOR A CLASS X SURFACE CONDITION, ASSUMING A COEFFICIENT OF FRICTION ON THE FAYING SURFACES EQUAL TO OR GREATER THAN 0.XX, *(Omit rest of the note for weathering steel bridges)* EXCEPT FOR THE CONNECTION OF THE CROSS FRAMES TO THE TRANSVERSE CONNECTION PLATE, WHICH HAS BEEN DESIGNED FOR CLASS C WITH A COEFFICIENT OF FRICTION OF 0.30. *(See Note 14)*
8. ALL WELDING AND THE PREPARATION AND ASSEMBLY OF MATERIAL FOR WELDING SHALL CONFORM TO THE MASSDOT STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES, BRIDGE WELDING CODE (AASHTO AWS D1.5) AND ALL INTERIM REVISIONS PUBLISHED BY AASHTO AS OF THE BID OPENING DATE.
9. ALL CROSS FRAMES SHALL BE DETAILED AND FABRICATED TO THE TOTAL DEAD LOAD FIT (TDLF) CONDITION. *(See Note 12)*
10. THE BEAMS SHALL BE FABRICATED SO THAT UNDER FULL DEAD LOAD THE ENDS ARE PLUMB.
11. ALL BEAMS SHALL BE METALIZED. THE ENTIRE FASCIA GIRDERS SHALL BE METALIZED AND PAINTED, AMS STANDARD 595A COLOR NUMBER 14223 OF THE FEDERAL STANDARD 595B. DIAPHRAGMS MAY BE HOT-DIP GALVANIZED. *(Omit for weathering steel bridges)*