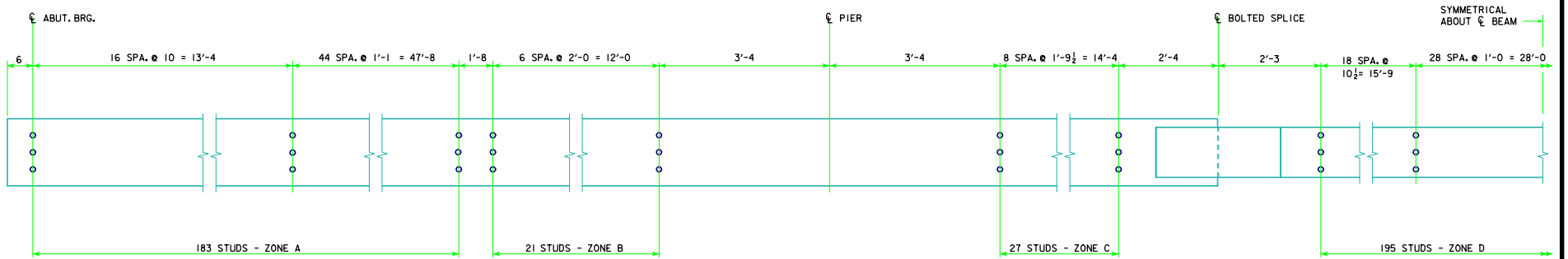


**BEAM ELEVATION**



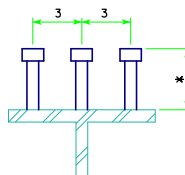
**SHEAR STUD SPACING**

\* NOTE: STUD HEIGHTS (3 1/2", 4" OR 5") FOR THE LOCATIONS SHOWN SHALL BE DETERMINED BY THE DESIGNER. ON "MISCELLANEOUS DETAILS 160'-0" BRIDGE" SHEET, STUD HEIGHTS CAN BE IDENTIFIED BY THE DESIGNER IN A TABLE CORRESPONDING TO THE ZONES LISTED ON THIS SHEET.

Δ WEIGHT OF SHEAR STUDS ARE NOT INCLUDED, SEE MISC. DETAILS - STANDARDS 5252 TO 5261.

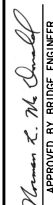

STRUCTURAL STEEL	
Δ BEAM WEIGHT	49,891 LBS.

NOTE: STRUCTURAL STEEL WEIGHT IS INCLUDED ON THE SUMMARY QUANTITIES SHEET.



3 STUDS PER ROW  
**SHEAR STUD DETAILS**  
NOTE: ALL STUDS TO BE 1/2"Ø

SKEW	a (IN)	b (IN)
0°	9	6
10°	9 1/2	6 1/2
20°	9 3/4	6 3/4
30°	10 1/4	6 1/2
45°	12 3/4	8 1/2

LATEST REVISION DATE	 APPROVED BY BRIDGE ENGINEER	 STANDARD DESIGN - 40' ROADWAY, 3 SPAN BRIDGES <b>ROLLED STEEL BEAM BRIDGES</b> OCTOBER, 2014