

Results

VT - Richmond Truss									
SUMMARY RESULTS									
grid main bar type:		WT 4 x 6 @ 12 in. c.c Spacing							
concrete thickness		5 in.							
top rebar		#4 @ 4 in.							
bot. Rebar		#4 @ 6 in.							
Cast-in-place concrete; main bars transverse to traffic; deck is Continuous									
Beam		HS-25							
Spacing		STRESSES (lbs/sq.in.)				DECK WEIGHT			
G.L.		POSITIVE		NEGATIVE		WEIGHT		WEIGHT	
		Bottom of main bar		Main Bar @ Top of Web		Top of Deck		Bottom of Deck	
Dead Load		1,399		6,287		71.1		80.9	
Sup. Imp. DL		143		122					
Live Load		8,978		7,643					
Total		10,518		13,051		71.1		80.9	
Deflection with wet concrete (if CIP unshored) =		0.032		< or =		0.3 in.		OK-Check for excess sag and extra weight	
Deflection under live load (if CIP unshored) = //		1436		simple span				OK	
Deflection under live load (if CIP unshored) = //		1994		continuous				OK	
Deflection under live load (if pre-cast) = //		1436		simple span				OK	
Deflection under live load (if pre-cast) = //		1994		continuous				OK	
Normal weight		Maximum Spans for this Configuration (ft.)							
pre-cast		concrete		pre-trans		pre-pare		csp-trans	
6.5		5		6.8		5.1			
<p>Notes:</p> <p>*Maximum Spans for this Configuration are based on maximum stresses, fatigue, and deflection.</p> <p>Maximum stresses are based on the design (input sheet selected) live load and dead load.</p> <p>For Vertical live loads, fatigue and deflection are evaluated at HS-20, REGARDLESS OF THE LIVE LOAD SELECTED ON THE INPUT SHEET!</p> <p>For Pedestrian load cases, fatigue and deflection are evaluated at the pedestrian load.</p> <p>Fatigue is checked at the top (assumed at top of distribution bar) or bottom of the web, whichever ever produces the worst case.</p>									
Overall Height from bottom of main bar to top of selected concrete thickness=		7.945 in.							
Clear concrete cover over main reinforcing steel @ selected concrete thickness=		3 in.							