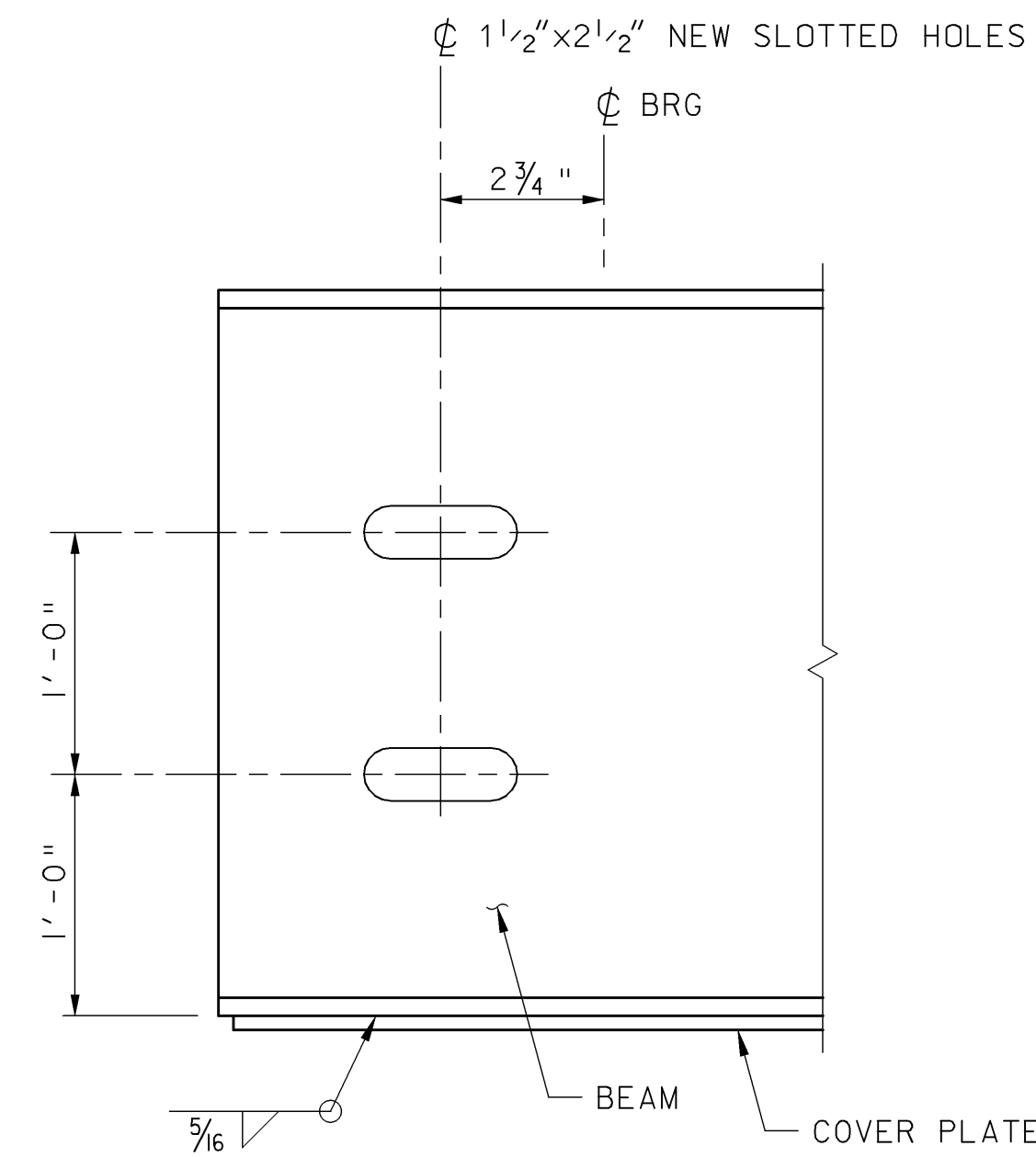


BEAM ELEVATION
NOT TO SCALE

SHEAR CONNECTOR DETAIL
NOT TO SCALE

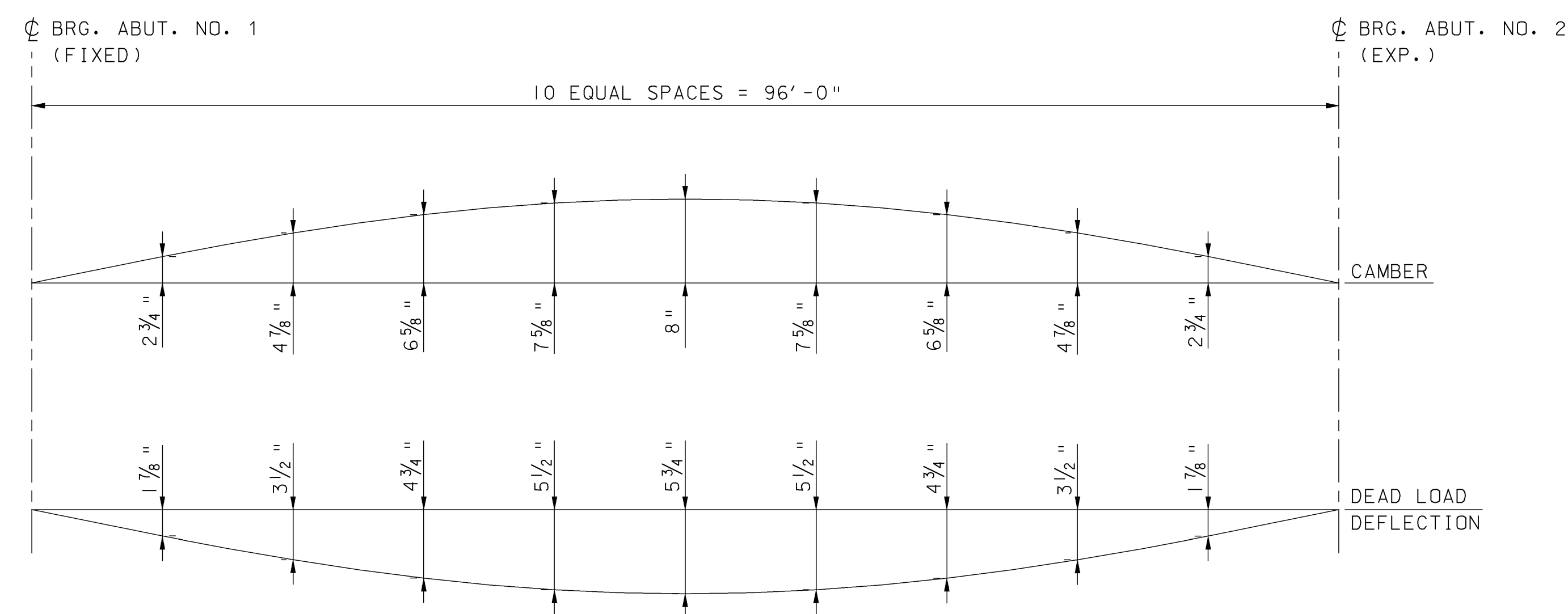


BEAM END DETAIL
NOT TO SCALE

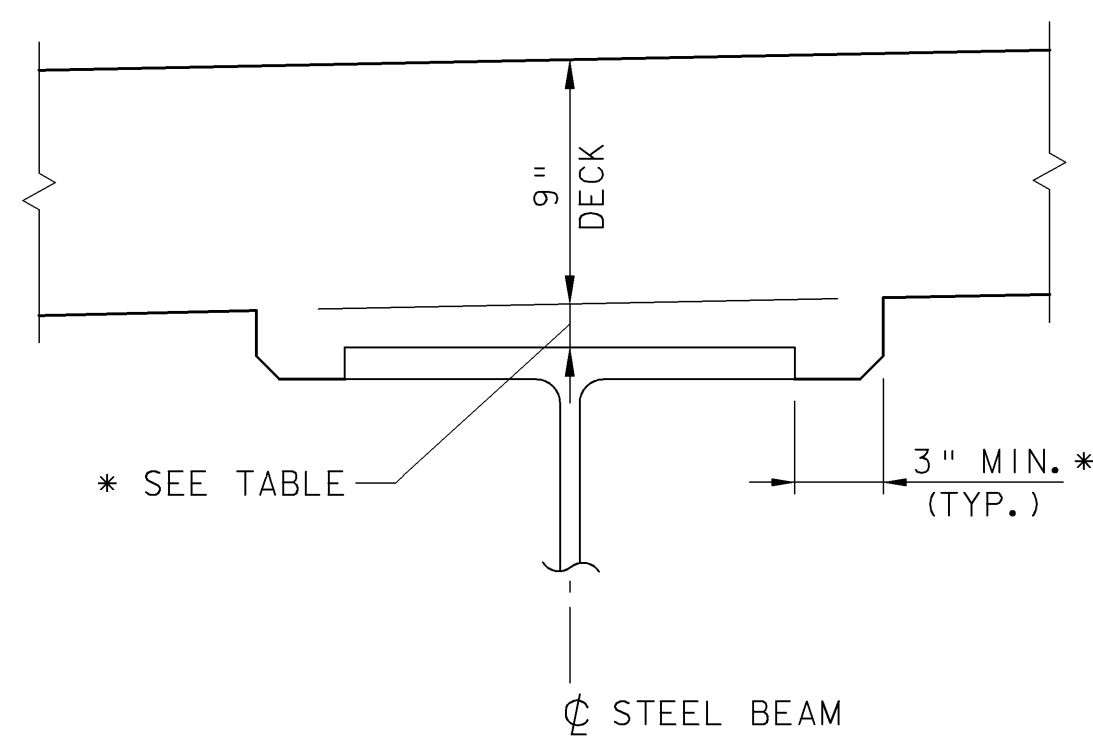
BEAM TENTH POINTS										
0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
1"	2 1/8"	3 1/8"	3 7/8"	4 3/8"	4 1/2"	4 3/8"	3 7/8"	3 1/8"	2 1/8"	1"

**** ANTICIPATED HAUNCH DEPTHS**

** TABLE INDICATES ANTICIPATED HAUNCH DEPTHS REQUIRED TO REDUCE BEAM CAMBER AS REQUESTED BY THE CONTRACTOR FOR CHANGE ORDER NO. 2. ACTUAL HAUNCH DEPTHS SHALL BE DETERMINED IN THE FIELD AS APPROVED BY THE RESIDENT ENGINEER.



DEAD LOAD DEFLECTION AND CAMBER DIAGRAM
NOT TO SCALE



TYPICAL HAUNCH DETAIL
NOT TO SCALE

STRUCTURAL STEEL NOTES:

- ALL STRUCTURAL STEEL COMPONENTS SHALL BE AASHTO M 270, GRADE 50W UNLESS OTHERWISE NOTED.
- ALL BOLTED FIELD CONNECTIONS SHALL BE MADE WITH 7/8" DIAMETER HIGH STRENGTH BOLTS IN 15/16" DIAMETER HOLES UNLESS OTHERWISE NOTED.
- CONNECTIONS NOT DESIGNED SHALL BE DETAILED BY THE FABRICATOR AND SUBMITTED TO THE RESIDENT ENGINEER FOR APPROVAL.
- AFTER THE SUPERSTRUCTURE STEEL HAS BEEN ERECTED, ELEVATIONS ALONG THE TOP OF BEAM WILL BE TAKEN BY THE RESIDENT ENGINEER FOR USE IN DETERMINING THE FINAL GRADE AND HAUNCH DEPTHS.
- ANY HOLES IN BEAM WEBS NOT OTHERWISE FILLED SHALL BE FITTED WITH BUTTON HEAD OR HEX HEAD BOLTS CONFORMING TO AASHTO M 164, TYPE 3.
- CHANGE ORDER NO. 2, ITEM 900.545, SUPPLEMENTAL AGREEMENT (506.75, STRUCTURAL STEEL (NEW STEEL)) SHALL INCLUDE ALL NEW BEAMS, COVER PLATES, DIAPHRAGMS, CONNECTION PLATES, BEARING BLOCKOUT PLATES, AND ALL NEW CONNECTIONS.
- THE CENTERLINE TO CENTERLINE OF BEARINGS SHALL BE FIELD VERIFIED BEFORE SHOP DRAWINGS ARE COMPLETED.
- THE ENDS OF THE BEAMS SHALL BE VERTICAL UNDER DEAD LOAD.
- SHEAR STUDS SHALL BE FIELD WELDED USING AUTOMATICALLY TIMED STUD WELDING EQUIPMENT.

**TOWN OF GRAFTON
CAMBRIDGEPORT BRIDGE**

Town Of	GRAFTON	Bridge No.	16G
Highway No.	TH 1	Log Sta.	
		Surv. Sta.	
TH 1 (CAMBRIDGEPORT BRIDGE) OVER THE SAXTONS RIVER			
BEAM ELEVATION			
Designed By	L. S. GARDNER	Drawn By	B. J. MASSE
Checked By	Date	Bridge Design Supervisor	
J. T. KLEIN	12/05	M. A. COLGAN	Date 12/05
PROJECT	GRAFTON	PROJECT NO.	TH2-0104
I.G.C. Info.		File No.	51335BE
		Sheet	31R of 42

THIS SHEET SUPERSEDES CONTRACT PLAN SHEET 31 DATED 6/05. REVISIONS ON THIS SHEET REFLECT CHANGES IN DESIGN AND DETAILS AS PER CHANGE ORDER NO. 2. SUBSTITUTING NEW STEEL BEAMS FOR RECYCLED BEAMS.

VHB Vanasse Hangen Brustlin, Inc.

* THE 3" HORIZONTAL EXTENSION MAY BE ELIMINATED FOR FORMING SYSTEMS DESIGNED FOR VERTICAL HAUNCHES IF APPROVED BY THE STRUCTURES ENGINEER. ANY HOLES RESULTING FROM THIS FORMING SYSTEM SHALL BE FILLED WITH MORATR, TYPE IV. ALL COSTS SHALL BE INCIDENTAL TO CONCRETE PAY ITEM.