

**GIRDER ELEVATION**  
(NOT TO SCALE)

\* DENOTES THAT CHARPY V-NOTCH (CVN) TESTING IS REQUIRED  
 \*\* ALL STEEL MEMBERS AND CONNECTION COMPONENTS WITHIN 2400mm OF EXPANSION ENDS OF THE GIRDERS SHALL BE PAINTED AND GREASED. HOWEVER, BOTH ENDS OF GIRDER #1 (INTERIOR GIRDER) SHALL BE PAINTED AND GREASED. CONNECTIONS WITHIN THE PAINTED AREAS SHALL BE MADE WITH M 164M TYPE I GALVANIZED BOLTS. ALL OTHER CONNECTIONS SHALL USE M 164M TYPE III BOLTS. SEE SUPPLEMENTAL SPECIFICATION SECTION 513.

**GIRDER DIMENSION TABLE**

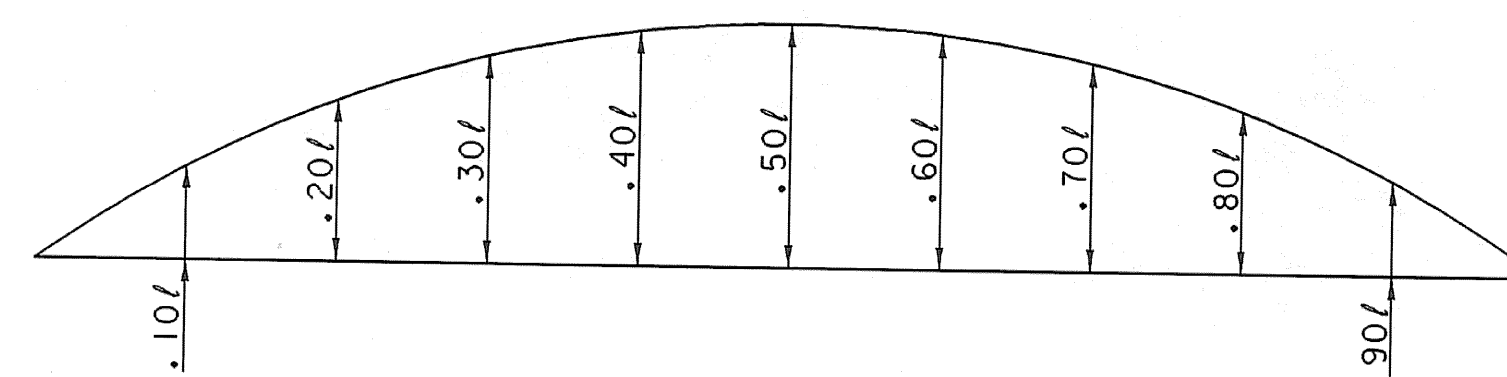
GIRDER	RADIUS	GIRDER			MEASUREMENTS						STUDS		
		LENGTH FROM $\text{C}$ BRG TO $\text{C}$ BRG (A)	LENGTH FROM END TO END (B)	END OF GIRDER TO $\text{C}$ STUD (C)	TOP FLANGE THICKNESS (D)	TOP FLANGE WIDTH (E)	BOTTOM FLANGE THICKNESS (F)	BOTTOM FLANGE WIDTH (G)	WEB THICKNESS (H)	NUMBER (J)	SPACING (K)	TOTAL NUMBER (L)	
4	85.850m	26.686m	27.144m	237	32	457	57	457	14.3	105	254	210	
3	83.950m	26.095m	26.553m	281	32	457	57	457	14.3	100	254	200	
2	82.050m	25.505m	25.963m	203	22	406	25	406	12.7	99	254	198	
1	80.150m	24.914m	25.372m	366	22	406	25	406	12.7	97	254	194	

**CAMBER TABLE - TOTAL (mm)**

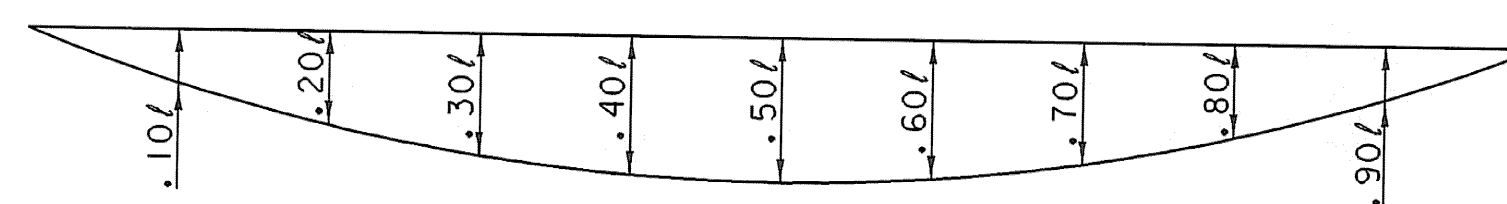
GIRDER	.10/	.20/	.30/	.40/	.50/	.60/	.70/	.80/	.90/
4	29	51	67	77	80	77	67	51	29
3	26	47	61	70	73	70	61	47	26
2	24	43	57	65	68	65	57	43	24
1	23	41	54	61	64	61	54	41	23

**DEAD LOAD DEFLECTION TABLE (mm)**

GIRDER	.10/	.20/	.30/	.40/	.50/	.60/	.70/	.80/	.90/
4	17	33	45	52	55	52	45	33	17
3	15	29	39	46	48	46	39	29	15
2	14	26	35	41	43	41	35	26	14
1	12	23	31	37	39	37	31	23	12



**CAMBER DIAGRAM**  
NTS - SEE TABLE BELOW



**DEFLECTION DIAGRAM**  
NTS - SEE TABLE BELOW

**NOTES:**

- DIMENSIONS SHOWN ARE ALONG THE ARC OF THE  $\text{C}$  OF THE GIRDER.
- ENDS OF GIRDERS SHALL BE FABRICATED SO THAT THEY WILL BE PLUMB UNDER FULL DEAD LOAD.
- BEARINGS STIFFENERS SHALL BE PLUMB AND PERPENDICULAR TO THE WEB IN THEIR FINAL POSITION.
- DEAD LOAD DEFLECTION IS DUE TO GIRDER, DIAPHRAGMS, DECK, CURB AND RAILING.

SHEET NAME: <b>GIRDER DETAILS</b>		
PROJECT NAME: <b>SUNDERLAND</b>	HIGHWAY NO.: TH 3	
PROJECT NUMBER: <b>BRF 0114(2)</b>	BRIDGE NO.: 14	
	OVER: ROARING BRANCH	
FILE NAME: /PW/93J009/sj009sup.dgn	PLOT DATE: 14-DEC-2005	
PROJECT MANAGER: R. R. WHITCOMB	DRAWN BY: J.GILMORE	
DESIGNED BY: D. BONNEAU	IPARM NAME: sj009grd.i	
	SHEET 37 OF 67	