

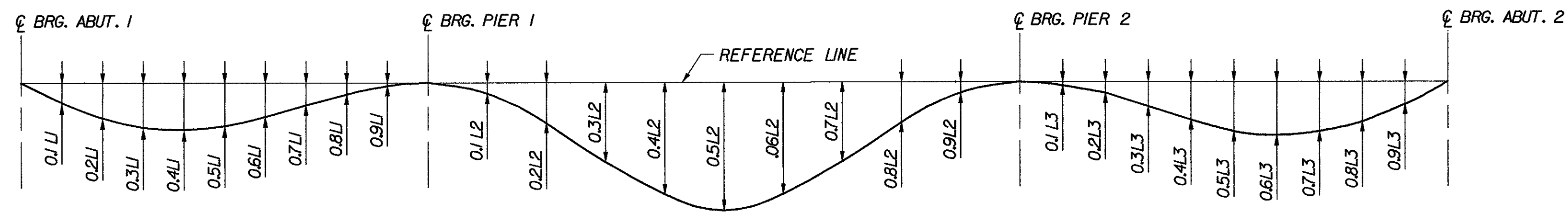
STRINGER ELEVATION (PLATE GIRDER)

N.T.S.

* MEMBERS INDICATED SHALL BE CHAMPY V-NOTCH TESTED IN ACCORDANCE WITH SECTION 714.01 OF THE SPECIFICATIONS.

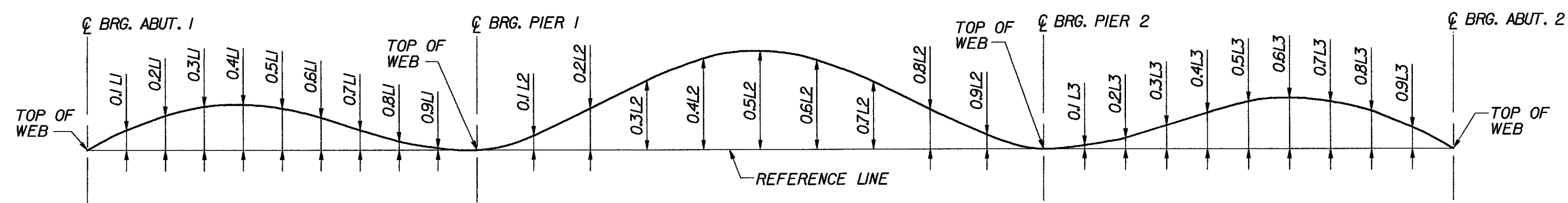
BR 50N					
STRINGER	RADIUS	SPAN LENGTHS (ALONG ARC)			TOTAL SPAN LENGTH
		L1	L2	L3	
S1	5751.65'	66'-6 1/8"	96'-8 15/16"	69'-11 5/8"	233'-2 11/16"
S2	5759.15'	66'-5"	96'-7 1/2"	69'-10 5/8"	232'-11 1/8"
S3	5766.65'	66'-3 15/16"	96'-6"	69'-9 5/8"	232'-7 9/16"
S4	5774.15'	66'-2 7/8"	96'-4 1/2"	69'-8 5/8"	232'-4"
S5	5781.65'	66'-1 13/16"	96'-3 1/16"	69'-7 5/8"	232'-0 1/2"
SECTION LENGTHS (ALONG ARC)					
STRINGER		D1	D2	D3	
S1		45'-0 1/8"	56'-8 15/16"	48'-6 1/2"	
S2		44'-11"	56'-7 1/2"	48'-5 1/2"	
S3		44'-9 15/16"	56'-6"	48'-4 1/2"	
S4		44'-8 7/8"	56'-4 1/2"	48'-3 1/2"	
S5		44'-7 13/16"	56'-3 1/16"	48'-2 1/2"	

BR 50S					
STRINGER	RADIUS	SPAN LENGTHS (ALONG ARC)			TOTAL SPAN LENGTH
		L1	L2	L3	
S1	5677.65'	65'-6 9/16"	90'-8 15/16"	63'-8"	219'-11 1/2"
S2	5685.15'	65'-5 7/16"	90'-7 7/16"	63'-7"	219'-7 7/8"
S3	5692.65'	65'-4 5/16"	90'-6"	63'-6"	219'-4 5/16"
S4	5700.15'	65'-3 3/16"	90'-4 9/16"	63'-5"	219'-0 3/4"
S5	5707.65'	65'-2 1/8"	90'-3 1/16"	63'-4 1/16"	218'-9 1/4"
SECTION LENGTHS (ALONG ARC)					
STRINGER		D1	D2	D3	
S1		46'-2 1/4"	53'-8 15/16"	43'-7 15/16"	
S2		46'-1 1/8"	53'-7 7/16"	43'-6 15/16"	
S3		46'-0"	53'-6"	43'-5 15/16"	
S4		45'-10 7/8"	53'-4 9/16"	43'-4 15/16"	
S5		45'-9 13/16"	53'-3 1/16"	43'-4"	



DEAD LOAD DEFLECTION DIAGRAM

N.T.S.



CAMBER DIAGRAM

N.T.S.

BRIDGE	DL DEFLECTION																														
	CL	ABUT. 1									CL	PIER 1									CL	PIER 2									CL
	ABUT. 1	0.1 L1	0.2 L1	0.3 L1	0.4 L1	0.5 L1	0.6 L1	0.7 L1	0.8 L1	0.9 L1	PIER 1	0.1 L2	0.2 L2	0.3 L2	0.4 L2	0.5 L2	0.6 L2	0.7 L2	0.8 L2	0.9 L2	PIER 2	0.1 L3	0.2 L3	0.3 L3	0.4 L3	0.5 L3	0.6 L3	0.7 L3	0.8 L3	0.9 L3	ABUT. 2
50N	0"	0 1/4"	0 7/16"	0 9/16"	0 9/16"	0 1/2"	0 3/8"	0 3/16"	0"	-0 1/16"	0"	0 3/8"	1"	1 9/16"	2"	2 1/8"	1 15/16"	1 1/2"	0 15/16"	0 3/8"	0"	0"	0 1/8"	0 5/16"	0 1/2"	0 11/16"	0 3/4"	0 11/16"	0 9/16"	0 5/16"	0"
50S	0"	0 1/4"	0 7/16"	0 9/16"	0 5/8"	0 9/16"	0 7/16"	0 1/4"	0 1/16"	0"	0"	0 5/16"	0 13/16"	1 5/16"	1 5/8"	1 3/4"	1 5/8"	1 5/16"	0 13/16"	0 5/16"	0"	-0 1/16"	0 1/16"	0 3/16"	0 5/16"	0 7/16"	0 1/2"	0 1/2"	0 3/8"	0 3/16"	0"

BRIDGE	TOTAL CAMBER																														
	CL	ABUT. 1									CL	PIER 1									CL	PIER 2									CL
	ABUT. 1	0.1 L1	0.2 L1	0.3 L1	0.4 L1	0.5 L1	0.6 L1	0.7 L1	0.8 L1	0.9 L1	PIER 1	0.1 L2	0.2 L2	0.3 L2	0.4 L2	0.5 L2	0.6 L2	0.7 L2	0.8 L2	0.9 L2	PIER 2	0.1 L3	0.2 L3	0.3 L3	0.4 L3	0.5 L3	0.6 L3	0.7 L3	0.8 L3	0.9 L3	ABUT. 2
50N	0"	0 11/16"	1 3/16"	1 1/2"	1 9/16"	1 7/16"	1 1/8"	0 11/16"	0 1/4"	0"	0"	0 1/2"	1 7/16"	2 3/8"	3 1/8"	3 3/8"	3 1/16"	2 5/16"	1 3/8"	0 1/2"	0"	0 1/16"	0 3/8"	0 13/16"	1 1/4"	1 5/8"	1 3/4"	1 5/8"	1 5/16"	0 3/4"	0"
50S	0"	0 11/16"	1 3/16"	1 1/2"	1 5/8"	1 1/2"	1 3/16"	0 3/4"	0 5/16"	0 1/16"	0"	0 3/8"	1 1/8"	2"	2 3/4"	3"	2 3/4"	2"	1 1/8"	0 3/8"	0"	0"	0 5/16"	0 11/16"	1 1/16"	1 3/8"	1 1/2"	1 7/16"	1 1/8"	0 5/8"	0"

NOTES:

- EACH ROW OF SHEAR CONNECTORS SHALL CONSIST OF 2 STUDS. FOR LATERAL SPACING, SEE TRANSVERSE SECTION (50N&S), BRIDGE SHEET BR50-4.
- FOR FIELD SPLICE DETAILS, SEE TYPICAL GIRDER SPLICE DETAILS, BRIDGE SHEET C-20.
- ALL STRUCTURAL STEEL WITHIN 10 FEET OF END OF STRINGER AT EXPANSION ENDS SHALL BE COATED WITH A PROTECTIVE PAINT SYSTEM, WITH THE FINAL COAT TO BE DARK BROWN (COLOR CHIP #20059) TO BLEND WITH THE WEATHERING STEEL. THE COST OF PAINTING SHALL BE PAID FOR UNDER ITEM 513.25, 'STRUCTURAL PAINTING, SHOP APPLIED'.

STATE OF VERMONT AGENCY OF TRANSPORTATION

Town Of **MIDDLESEX-BOLTON** Bridge No. **50N&S**
 Highway No. **I-89** Log Sta. _____
 Surv. Sta. _____
I-89 OVER U.S. ROUTE 2

STRINGER ELEVATION (50N&S)

Designed By **P.W. SZUSTAK** Drawn By **R.A. BOTZENHART**
 Checked By **J.P. HALSTEAD** Date **10/99** Bridge Design Supervisor
 J.P. HALSTEAD Date 10/99

PROJECT **MIDDLESEX-BOLTON** PROJECT NO. **IM-089-2(26)**

TVGA CAD Drawing No. **50str-el** Date **08/00**
 Bridge Sheet No. **BR50-10** Sheet **94** of **307**