

LOAD RATING (TONS) (49N&S)

LOADING LEVELS (LOAD FACTOR)	TRUCK						
	H	HS	3S2	6 AXLE	3A. STR.	4A. STR.	5A. SEMI
INVENTORY A= 2.17; B= 1.00	52	76					
POSTED A= 1.55; B= 1.40	73	107	124		100	102	115
OPERATING A= 1.30; B= 1.67		127	147	171	118	121	

$$\text{STRENGTH RF} = \frac{\phi M_n - 1.3 M_{uL}}{A X M_{uL}}$$

$$\text{* SERVICEABILITY RF} = B \left[\frac{0.95 F_y S_{LL1} - M_{DL} S_{LL1} - M_{SL} S_{LL1}}{187 M_{uL1}} \right]$$

BR 49N&S SPECIFIC CONSTRUCTION NOTES:

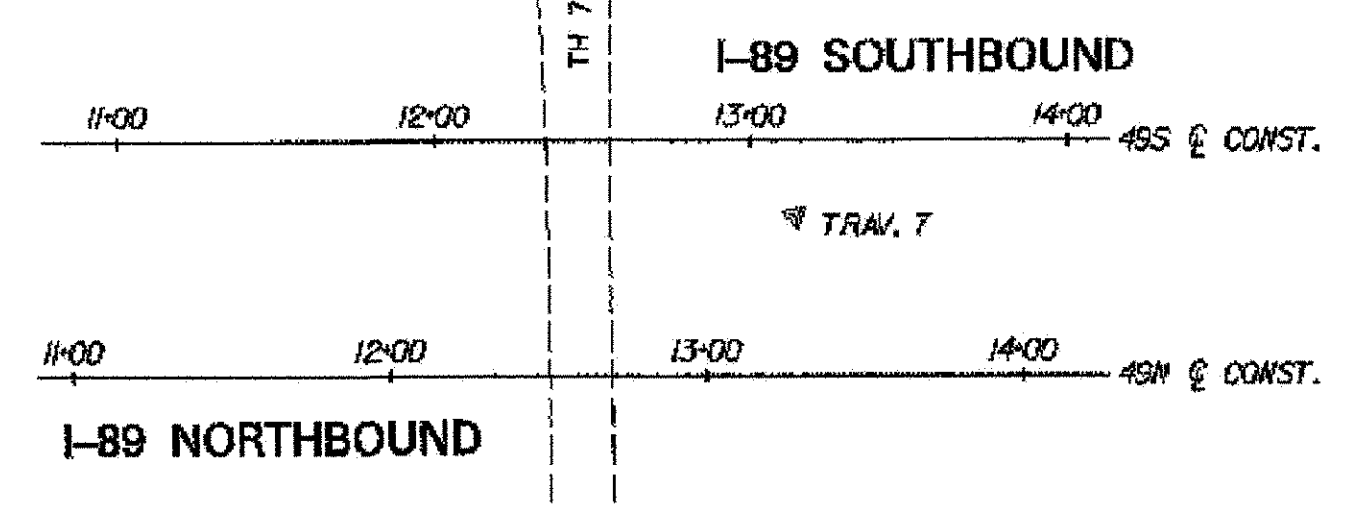
1. THE PROPOSED CONSTRUCTION CENTERLINE FOR EACH BRIDGE WAS ESTABLISHED BASED ON BEST FIT BETWEEN EXISTING CURB LINES. IT DOES NOT EXACTLY MATCH THE ORIGINAL CONSTRUCTION CENTERLINE.
2. ADDITIONAL CONTROL POINTS ARE LOCATED ADJACENT TO BR 49N&S, AS SHOWN ON GENERAL PLAN (49N&S), BRIDGE SHEET BR49-I. FOR CONTROL POINT TIE SKETCHES, SEE CONTROL POINT TIES (49N&S AND 49N&S), BRIDGE SHEET C-11.
3. REMOVE SCUPPERS. REPLACE DECK SLABS, SHEAR CONNECTORS, APPROACH SLABS, BRIDGE RAIL AND APPROACH RAIL. RESET GUARD RAIL.
4. NEW SCUPPERS ARE NOT REQUIRED ON THESE BRIDGES.
5. AT EXPANSION ABUTMENTS, CONSTRUCT NEW BACKWALLS, REBUILD BRIDGE SEATS AND MODIFY WINGWALLS AS SHOWN IN THE PLANS. INSTALL NEW ELASTOMERIC BEARINGS. INSTALL NEW BEARING STIFFENERS AND DIAPHRAGMS.
6. AT FIXED ABUTMENTS, CONSTRUCT NEW CURTAINWALLS AND MODIFY WINGWALLS AS SHOWN IN THE PLANS. AT FASCIA STRINGERS, REPLACE BEARINGS IN KIND. AT INTERIOR STRINGERS, JACK, CLEAN, PAINT AND GREASE EXISTING BEARINGS.
7. REPAIR ABUTMENT DELAMINATED AND SPALLED AREAS.
8. REMOVE 100% OF EXISTING PAINT COATING FROM EXISTING STRUCTURAL STEEL. PAINT EXISTING AND NEW STRUCTURAL STEEL.
9. MILL AND OVERLAY EXTENDS TO BR 49N&S. FOR BEGIN LIMITS OF MILL AND OVERLAY, SEE GENERAL PLAN (49N&S), BRIDGE SHEET BR49-I.
10. RE-STRIPE BRIDGE AND APPROACH ROADWAY.
11. THE CONTRACTOR SHALL MAINTAIN A MINIMUM 12' WIDE TRAFFIC LANE AT ALL TIMES ON TH 7. FOR ADDITIONAL TRAFFIC CONTROL REQUIREMENTS, SEE TRAFFIC CONTROL NOTES, BRIDGE SHEETS TC-1A AND TC-1B.

PLAN
SCALE: P=20'

MIDDLESEX - WATERBURY
ST-IM 089-2(42)
SHEET 20 OF 25
BRIDGES 49 N & S
FOR REFERENCE ONLY

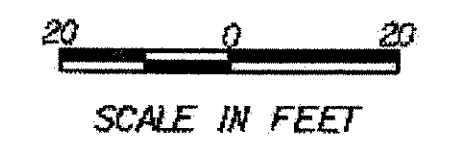
TABLE OF BRIDGE COORDINATES

BRIDGE	CL CONST. @	STATION	NORTHING	EASTING
49N	BEGIN BRIDGE	12+12.22	75550.9332	67081.1809
	CL BRG. ABUT. 1	12+13.47	75551.2144	67078.9828
	CL BRG. ABUT. 2	13+10.36	75573.0049	68985.5853
	END BRIDGE	13+12.85	75573.5872	68983.1283
49S	BEGIN BRIDGE	11+98.17	75478.7754	67064.7899
	CL BRG. ABUT. 1	11+98.42	75478.0588	67083.5519
	CL BRG. ABUT. 2	12+98.40	75500.8888	68989.0569
	END BRIDGE	12+98.90	75501.4320	68988.8209



CONTROL POINT LAYOUT MAP

N.T.S.
(SEE NOTE 2)



TVGA TVGA ENGINEERING,
SURVEYING, P.C.

**STATE OF VERMONT
AGENCY OF TRANSPORTATION**

Town Of	MIDDLESEX-BOLTON	Bridge No.	49N&S
Highway No.	I-89	Log Sta.	
		Surv. Sta.	
I-89 OVER TH 7			
GENERAL PLAN (49N&S)			
Designed By	P.W. SZUSTAK	Drawn By	R.A. BOTZENHART
Checked By	Date	Bridge Design Supervisor	
	J.P. HALSTEAD 10/99	J.P. HALSTEAD	Date 10/99
PROJECT	MIDDLESEX-BOLTON	PROJECT NO.	M-089-2(26)
TVGA CAD Drawing No.	49gen.pl	Date	10/99
Bridge Sheet No.	BR49-I	Sheet	75 of 307