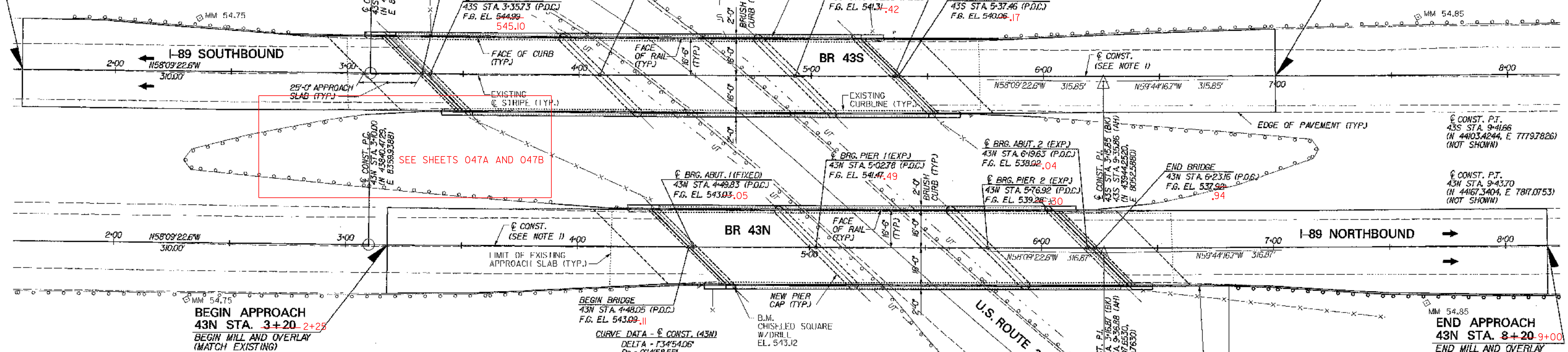


BEGIN APPROACH
43S STA. 1+60
PROJECT EXTENDED BY 185 FT
(25 FT AHEAD OF STATION 0+00)
BEGIN MILL AND OVERLAY
(MATCH EXISTING)



CURVE DATA - C CONST. (43S)
DELTA = 134°54.06'
Dc = 015°01.46'
R = 22881.32'
T = 315.85'
L = 631.65'
E = 2.18'

RAISED 43S FINISH GRADE 1 3/8"
RAISED 43N FINISH GRADE 1/4"

END APPROACH
43S STA. 7+00-50
END MILL AND OVERLAY
(MATCH EXISTING)

BEGIN APPROACH
43N STA. 3+20-2+25
BEGIN MILL AND OVERLAY
(MATCH EXISTING)

END APPROACH
43N STA. 8+20-9+00
END MILL AND OVERLAY
(MATCH EXISTING)

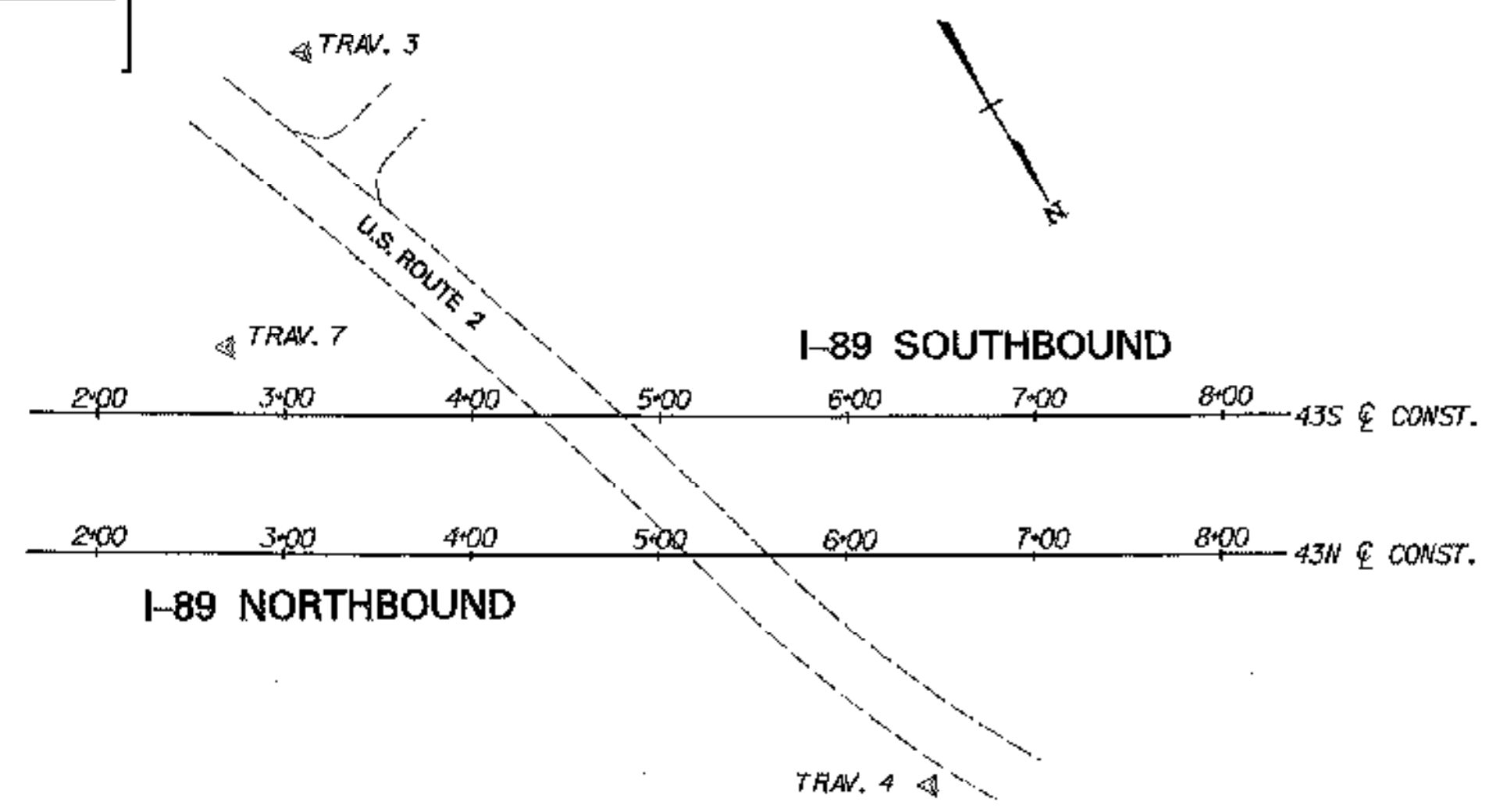
LOAD RATING (TONS)

LOADING LEVELS (LOAD FACTOR)	BRIDGE NO.	TRUCK					
		H	HS	3S2	3A. STR.	4A. STR.	5A. SEMI
INVENTORY A= 2.17; B= 1.00	43N/43S	*26/*29	*47/*51				
POSTED A= 1.55; B= 1.40	43N/43S	*36/*41	*66/*72	*86/*89	*61/*65	*63/*66	*79/*80
OPERATING A= 1.30; B= 1.67	43N/43S	*78/*85	*101/*105	*96/*115	*73/*77	*75/*78	

NOTE: RATINGS ARE BASED ON A STRAIGHT-LINE GIRDER ANALYSIS, DIVIDED BY 1.05 TO ACCOUNT FOR THE EFFECTS OF CURVATURE.

STRENGTH RF = $\frac{\phi M_u - 1.3 M_{DL}}{A X M_{LL1}}$ * SERVICEABILITY RF = $B \left[\frac{0.95 F_y S_{LL1} - M_{DL} S_{LL1}}{167 M_{LL1}} - M_{DL} S_{DL} \right]$

BRIDGE	CL CONST. @	STATION	NORTHING	EASTING
43N	BEGIN BRIDGE	4+48.05	43912.8626	8242.4533
	CL BRG. ABUT. 1	4+49.83	43913.8830	8240.9347
	CL BRG. PIER 1	5+02.78	43941.4931	8195.7530
	CL BRG. PIER 2	5+76.92	43979.9770	8132.3833
	CL BRG. ABUT. 2	6+19.63	44002.0536	8095.8215
	END BRIDGE	6+23.16	44003.8739	8092.7999
43S	BEGIN BRIDGE	3+32.17	43789.2952	8302.0827
	CL BRG. ABUT. 1	3+36.73	43791.1710	8299.0352
	CL BRG. PIER 1	4+08.85	43829.5802	8236.8157
	CL BRG. PIER 2	4+92.95	43873.5109	8165.1017
	CL BRG. ABUT. 2	5+35.70	43895.7408	8128.6881



CONTROL POINT LOCATION MAP

N.T.S.
(SEE NOTE 2)

PLAN
SCALE: 1"=20'

BR 43N&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. FOR CONTROL POINT TIE SKETCHES, SEE CONTROL POINT TIES (43N&S), BRIDGE SHEET C-10.
3. REPLACE PIER CAPS, SUPERSTRUCTURE STEEL, BEARINGS, DECK SLABS, APPROACH SLABS, BRIDGE RAIL AND APPROACH RAIL. RESET GUARD RAIL.
4. NEW SCUPPERS ARE REQUIRED ON BRIDGE 43N. FOR LOCATIONS OF NEW SCUPPERS, SEE FRAMING PLAN (43N), BRIDGE SHEET BR43-8.
5. CONSTRUCT NEW BACKWALLS AT EXPANSION ABUTMENTS AND NEW CURTAINWALLS AT FIXED ABUTMENTS. REBUILD ABUTMENT BRIDGE SEATS AND MODIFY WINGWALLS AS SHOWN IN THE PLANS.
6. REPAIR ALL PIER COLUMNS AND APPLY FIBER REINFORCED POLYMER (FRP) COLUMN WRAP.
7. REPAIR ABUTMENT DELAMINATED AND SPALLED AREAS.
8. REPLACE DAMAGED GUARD RAIL IMMEDIATELY NORTHEAST OF BR 43N. REPLACED BY DISTRICT BEFORE THE PROJECT BEGAN.
9. RE-STRIPE BRIDGE AND APPROACH ROADWAY.

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of **MIDDLESEX-BOLTON** Bridge No. **43N&S**

Highway No. **I-89** Log Sta. **I-89 OVER U.S. ROUTE 2**

GENERAL PLAN (43N&S)

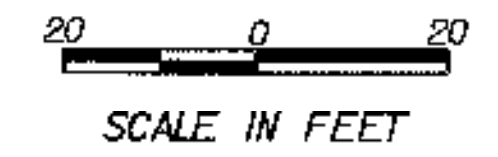
Designed By **P.W. SZUSTAK** Drawn By **R.A. BOTZENHART**

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. **43gen.pl** Date **10/99**

Bridge Sheet No. **BR43-1** Sheet **47** of **307**



TVGA TVGA ENGINEERING,
SURVEYING, P.C.