

PLAN  
SCALE 1" = 20'-0"  
20 0 20

NOTE: FOR LOCATION OF FIRST BRIDGE RAIL POST SEE SHEET NO. 28

DESIGN CRITERIA:

- DESIGN LIVE LOAD AASHTO: HS-25
- DESIGN SPAN: 94.71 - 110 - 94.71
- ALLOWABLE LOAD FOR SPREAD FOOTINGS ON SOIL: N/A ON LEDGE: N/A
- ALLOWABLE LOAD FOR PILING: 20 TONS TYPE: EXISTING TIMBER ESTIMATED LENGTH: N/A
- STRUCTURAL STEEL AASHTO GRADE: EXISTING ASTM, A7-49T GR 33 PAINTED
- REINFORCING STEEL GRADE: 60
- CONCRETE HIGH PERFORMANCE CLASS A LOW CEMENT  $f_c$ : 4000 PSI

TRAFFIC MAINTENANCE:

- IS TRAFFIC TO BE MAINTAINED? YES IF YES, ON EXISTING STRUCTURE YES OR ON TEMPORARY BRIDGE NO
- TEMPORARY BRIDGE REQUIREMENTS: ONE OR TWO WAY: N/A TRAFFIC CONTROL SIGNALS REQUIRED: YES
- MINIMUM CLEAR SPAN (NORMAL TO STREAM): N/A VERTICAL CLEARANCE ABOVE STREAMBED: N/A
- WATERWAY AT FULL OPENING: N/A
- ARE SIDEWALKS REQUIRED? PHASE II ONLY IF SO, ON WHAT SIDE? DOWN STREAM

EXISTING STRUCTURE

STRUCTURE TYPE: THREE SPAN CONTINUOUS COMPOSITE STEEL BEAM YEAR BUILT: 1952  
 CLEAR SPAN (NORMAL TO STREAM): 287'  
 VERTICAL CLEARANCE ABOVE STREAMBED: 17'  
 WATERWAY OF FULL OPENING: UNKNOWN  
 DISPOSITION OF STRUCTURE: REMOVE BRIDGE RAIL AND CONCRETE DECK  
 TYPE OF MATERIAL UNDER SUBSTRUCTURE: GRAVEL AND CLAY  
 WATER SURFACE ELEV. @ 02.33= UNKNOWN VELOCITY: UNKNOWN  
 010= 410.7' " UNKNOWN  
 025= UNKNOWN " UNKNOWN  
 050= 412.2' " UNKNOWN  
 0100= 412.9' " UNKNOWN  
 LONG TERM STREAM BED CHANGES: UNKNOWN  
 IS THE ROADWAY OVERTOPPED BELOW THE 0100? UNKNOWN FREQUENCY: N/A  
 RELIEF ELEVATION: N/A DISCHARGE OVER ROAD @ 0100: N/A

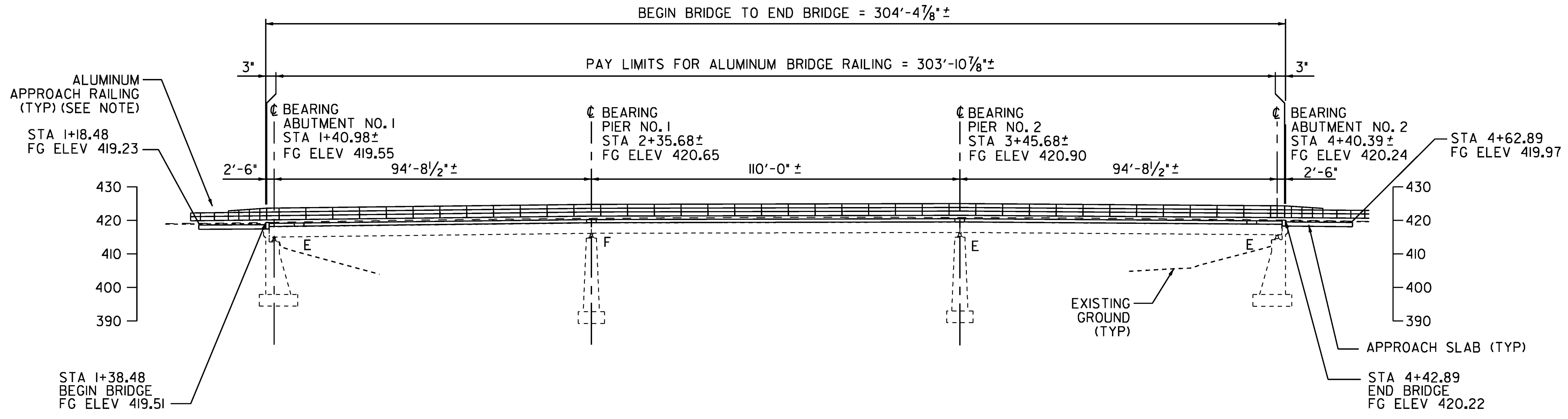
UPSTREAM STRUCTURE: TOWN: BERKSHIRE DISTANCE: 1.8 MILES  
 HIGHWAY NO.: VT 105 STRUCTURE NO.: 27  
 STRUCTURE TYPE: PLATE GIRDER W/ CONC. DECK  
 CLEAR SPAN: 144' CLEAR HEIGHT: 17'  
 YEAR BUILT: 1967 FULL WATERWAY: UNKNOWN  
 DOWNSTREAM STRUCTURE: TOWN: ENOSBURG DISTANCE: 3.2 MILES  
 HIGHWAY NO.: OLD BOSTON POST RD STRUCTURE NO.: 12  
 STRUCTURE TYPE: THRU-TRUSS  
 CLEAR SPAN: 196' CLEAR HEIGHT: 23'  
 YEAR BUILT: 1929 FULL WATERWAY: UNKNOWN

NOTE: WATER SURFACE ELEVATIONS OBTAINED FROM TOWN OF BERKSHIRE, FLOOD INSURANCE STUDY (FIS) DATED DECEMBER 1, 1982. ALL OTHER INFORMATION OBTAINED FROM RECORD PLANS AND BRIDGE INSPECTION FILES.

LOADING LEVELS (LOAD FACTOR)	LOAD FACTOR LOAD RATING (TONS)						
	H	HS	3S2	6 AXLE	3A, STR.	4A, STR.	5A, SEMI
INVENTORY A=2.17 B=1.00	25*	46*					
POSTED A=1.55 B=1.40	35*	64*	119		70*	95	110
OPERATING A=1.30 B=1.67		76*	141	168	83*	113	

STRENGTH RF =  $\frac{0.95 F_y \times S_{LL+1} - M_{DL} \times \frac{S_{LL+1}}{S_{SL}} - M_{SDL} \times \frac{S_{LL+1}}{S_{SDL}}}{A \times M_{LL+1}}$  SERVICEABILITY RF =  $\frac{0.95 F_y \times S_{LL+1} - M_{DL} \times \frac{S_{LL+1}}{S_{SL}} - M_{SDL} \times \frac{S_{LL+1}}{S_{SDL}}}{1.67 M_{LL+1}}$

\* RATING CONTROLLED BY DECK



ELEVATION  
SCALE 1" = 20'-0"  
20 0 20

STATE OF VERMONT  
AGENCY OF TRANSPORTATION

Town Of	BERKSHIRE	Bridge No.	30
Highway No.	VT 118	Log Sta.	
		Surv. Sta.	
VT 118 OVER MISSISSQUOI RIVER			
GENERAL PLAN AND ELEVATION			
Designed By	J Howe	Drawn By	J Davis
Checked By	R Hebert	Date	4/2/09
		Bridge Design Supervisor	
PROJECT	BERKSHIRE	PROJECT NO.	BHF 0283(9)S
I.G.C. Info.			ZC304PELDGN
Bridge Sheet No.		Sheet	12 of 41