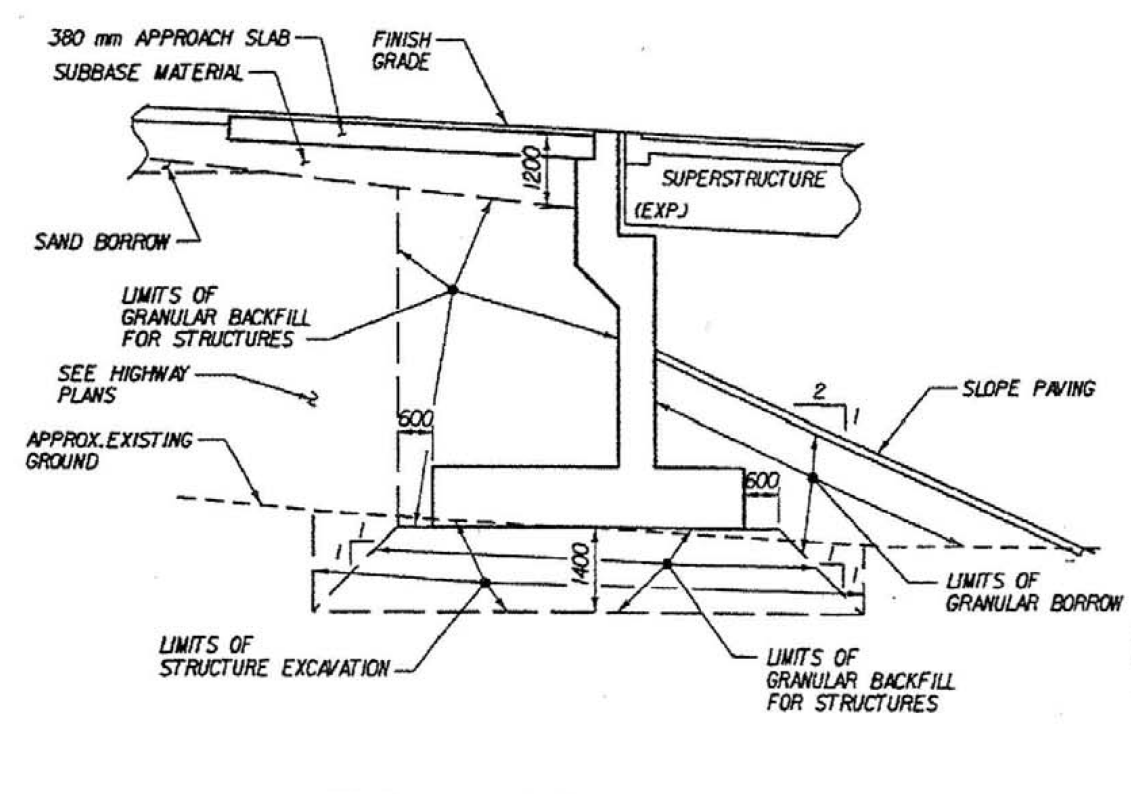
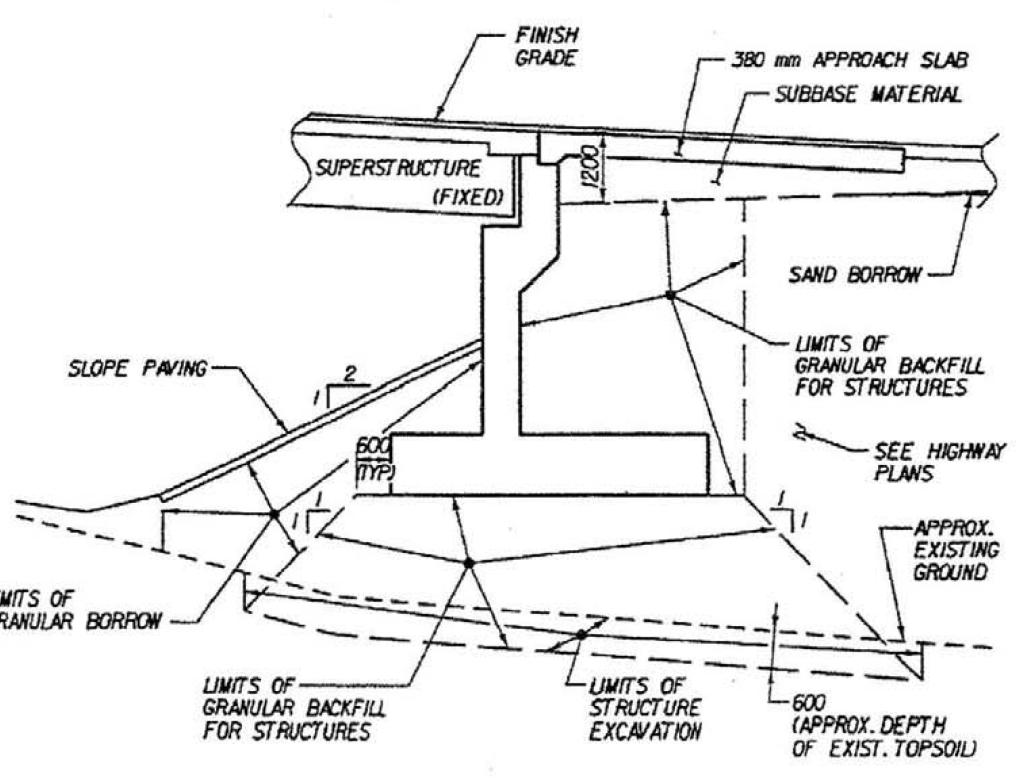


**BRIDGE TYPICAL SECTION**  
SCALE 1:40



**TYPICAL ABUTMENT 1 SECTION**  
NOT TO SCALE



**TYPICAL ABUTMENT 2 SECTION**  
NOT TO SCALE

**INDEX OF SHEETS**

- BR400 PRELIMINARY INFORMATION SHEET
- BR401 GENERAL PLAN AND ELEVATION
- BR402-403 BORING INFORMATION SHEETS
- BR404-409 BORING LOGS

**NOTE:**

ALL DIMENSIONS ARE IN MILLIMETERS (mm) UNLESS OTHERWISE NOTED.

**FINAL HYDRAULICS REPORT**

**HYDROLOGIC DATA**

DRAINAGE AREA: \_\_\_\_\_  
 CHARACTER & TYPE OF TERRAIN: \_\_\_\_\_  
 CHARACTER & TYPE OF STREAM: \_\_\_\_\_  
 NATURE OF STREAMBED: \_\_\_\_\_

02.33= \_\_\_\_\_ cms  
 010= \_\_\_\_\_ cms  
 025= \_\_\_\_\_ cms

050= \_\_\_\_\_ cms  
 0100= \_\_\_\_\_ cms  
 0500= \_\_\_\_\_ cms

DATE OF FLOOD OF RECORD: \_\_\_\_\_  
 WATER SURFACE ELEV.: \_\_\_\_\_ ESTIMATED DISCHARGE: \_\_\_\_\_  
 NATURAL STREAM VELOCITY @ 050 = \_\_\_\_\_ mps  
 ICE CONDITIONS: \_\_\_\_\_ DEBRIS: \_\_\_\_\_  
 DOES THE STREAM REACH MAXIMUM HIGHWATER ELEVATION RAPIDLY? \_\_\_\_\_  
 IS ORDINARY RISE RAPID? \_\_\_\_\_  
 IS STAGE AFFECTED BY UPSTREAM OR DOWNSTREAM CONDITIONS? \_\_\_\_\_  
 IF YES, DESCRIBE: \_\_\_\_\_

WATERSHED STORAGE: \_\_\_\_\_ HEADWATERS: \_\_\_\_\_ UNIFORM THROUGHOUT WATERSHED: \_\_\_\_\_  
 IMMEDIATELY ABOVE SITE: \_\_\_\_\_

**PROPOSED STRUCTURE**

STRUCTURE TYPE: Single span plate  
 CLEAR SPAN (NORMAL TO STREAM): \_\_\_\_\_  
 VERTICAL CLEARANCE ABOVE STREAMBED: \_\_\_\_\_  
 WATERWAY OF FULL OPENING: \_\_\_\_\_

WATER SURFACE ELEV. @ 02.33= \_\_\_\_\_  
 010= \_\_\_\_\_  
 025= \_\_\_\_\_  
 050= \_\_\_\_\_  
 0100= \_\_\_\_\_

IS THE ROADWAY OVERTOPPED BELOW THE RELIEF ELEVATION? N/A DISCHARGE \_\_\_\_\_

AVERAGE LOW ELEVATION OF SUPERSTR. VERTICAL CLEARANCE @ 0100 = \_\_\_\_\_

SCOUR: Channel = N/A  
 REQUIRED CHANNEL PROTECTION: N/A

**EXISTING STRUCTURE**

STRUCTURE TYPE: N/A YEAR BUILT: N/A  
 CLEAR SPAN (NORMAL TO STREAM): N/A  
 VERTICAL CLEARANCE ABOVE STREAMBED: N/A  
 WATERWAY OF FULL OPENING: N/A  
 DISPOSITION OF STRUCTURE: N/A

TYPE OF MATERIAL UNDER SUBSTRUCTURE: N/A

WATER SURFACE ELEV. @ 02.33= \_\_\_\_\_ VELOCITY: \_\_\_\_\_  
 010= \_\_\_\_\_ mps  
 025= \_\_\_\_\_ mps  
 050= \_\_\_\_\_ mps  
 0100= \_\_\_\_\_ mps

LONG TERM STREAM BED CHANGES: N/A

IS THE ROADWAY OVERTOPPED BELOW THE 0100? N/A FREQUENCY: N/A  
 RELIEF ELEVATION: N/A DISCHARGE OVER ROAD @ 0100: N/A

UPSTREAM STRUCTURE: TOWN: N/A DISTANCE: \_\_\_\_\_  
 HIGHWAY NO.: \_\_\_\_\_ STRUCTURE NO.: \_\_\_\_\_  
 STRUCTURE TYPE: \_\_\_\_\_  
 CLEAR SPAN: \_\_\_\_\_ CLEAR HEIGHT: \_\_\_\_\_  
 YEAR BUILT: \_\_\_\_\_ FULL WATERWAY: \_\_\_\_\_

DOWNSTREAM STRUCTURE: TOWN: N/A DISTANCE: \_\_\_\_\_  
 HIGHWAY NO.: \_\_\_\_\_ STRUCTURE NO.: \_\_\_\_\_  
 STRUCTURE TYPE: \_\_\_\_\_  
 CLEAR SPAN: \_\_\_\_\_ CLEAR HEIGHT: \_\_\_\_\_  
 YEAR BUILT: \_\_\_\_\_ FULL WATERWAY: \_\_\_\_\_

• COMPLETE INFORMATION WILL BE PROVIDED ON FINAL PLANS!

**PERMIT INFORMATION**

AVERAGE DAILY FLOW: N/A  
 ORDINARY LOW WATER: \_\_\_\_\_ cms  
 ORDINARY HIGH WATER: \_\_\_\_\_ cms

**TEMPORARY BRIDGE**

STRUCTURE TYPE: N/A  
 CLEAR SPAN (NORMAL TO STREAM): \_\_\_\_\_  
 VERTICAL CLEARANCE ABOVE STREAMBED: \_\_\_\_\_  
 WATERWAY OF FULL OPENING: \_\_\_\_\_

**DESIGN CRITERIA:**

- DESIGN LIVE LOAD AASHTO MS-22.5
- DESIGN SPAN 33 m
- ALLOWABLE LOAD FOR SPREAD FOOTINGS ON SOIL 290 kPa
- ALLOWABLE LOAD FOR PILING N/A TYPE N/A ESTIMATED LENGTH \_\_\_\_\_
- STRUCTURAL STEEL AASHTO GRADE M270M GR345W
- REINFORCING STEEL GRADE 420
- CONCRETE, HIGH PERFORMANCE CLASS A (OC/OA)  $f_c = 30$  MPA  
 CONCRETE, HIGH PERFORMANCE CLASS B  $f_c = 25$  MPA

**TRAFFIC MAINTENANCE:**

1. IS TRAFFIC TO BE MAINTAINED? YES IF YES, ON EXISTING STRUCTURE N/A OR ON TEMPORARY BRIDGE \_\_\_\_\_  
 2. TEMPORARY BRIDGE REQUIREMENTS: ONE OR TWO WAY N/A TRAFFIC CONTROL SIGNALS REQUIRED \_\_\_\_\_  
 MINIMUM CLEAR SPAN (NORMAL TO STREAM) N/A VERTICAL CLEARANCE ABOVE STREAMBED: \_\_\_\_\_  
 WATERWAY AT FULL OPENING: \_\_\_\_\_  
 ARE SIDEWALKS REQUIRED? N/A IF SO, ON WHAT SIDE? \_\_\_\_\_

LOADING LEVELS (LOAD FACTOR)	LOAD RATING (TONS)					
	H	HS	3S2	6 AXLE	3A. STR.	4A. STR.
INVENTORY						
A = 2.17						
POSTED						
A = 1.55						
OPERATING						
A = 1.30						

**STATE OF VERMONT**  
**AGENCY OF TRANSPORTATION**

Town Of **BENNINGTON**  
 Highway No. \_\_\_\_\_  
**VT ROUTE 27**

**PRELIMINARY DESIGN**

Designed By **S. BURBANK**  
 Checked By \_\_\_\_\_ Date **11/04**  
 PROJECT **BENNINGTON**  
 DH CAD Drawing Name: ...  
 Bridge Sheet No. **BR400**

