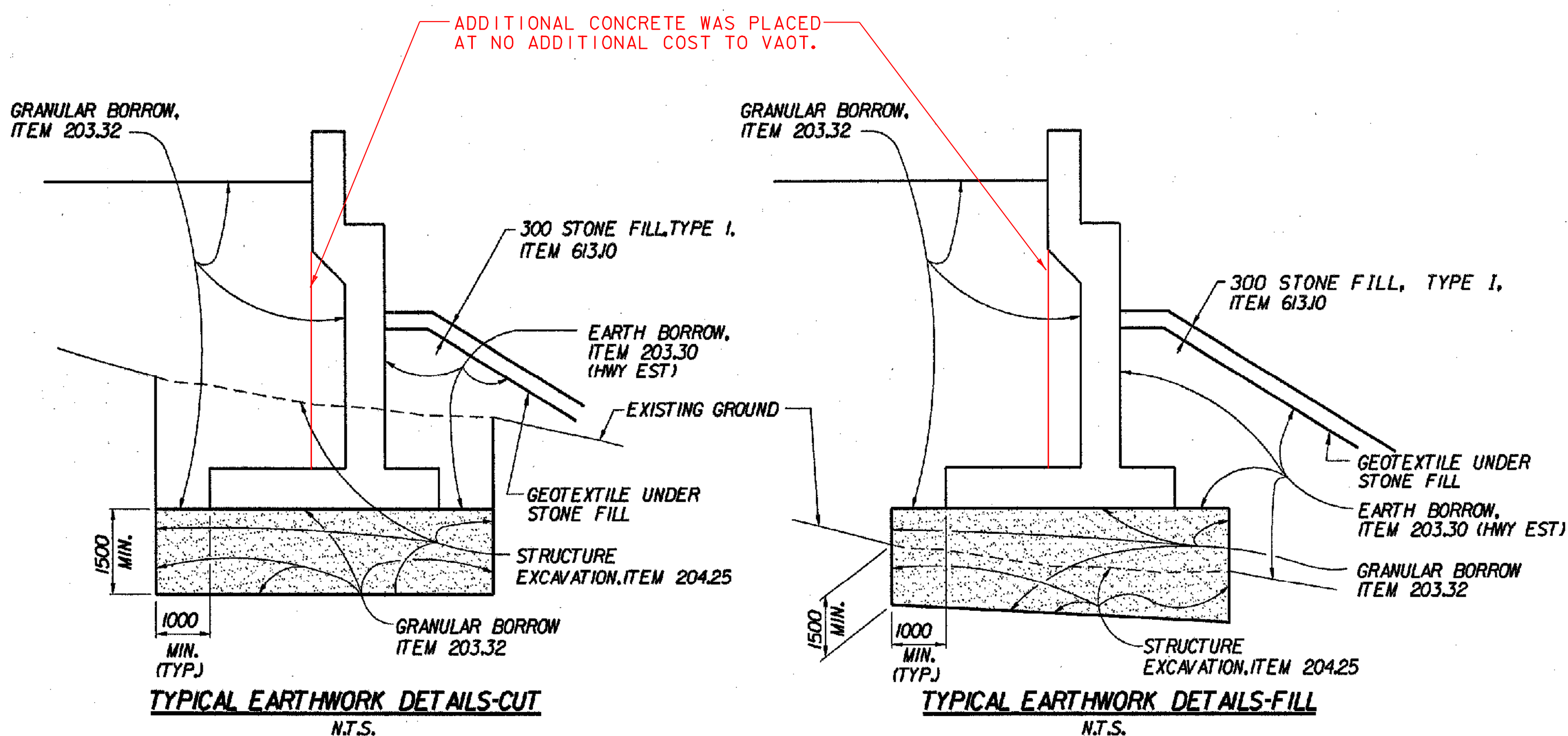
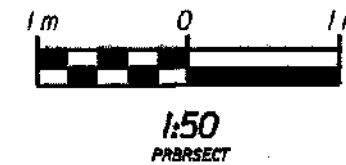


TYPICAL BRIDGE SECTION



TYPICAL EARTHWORK DETAILS-CUT N.T.S.

TYPICAL EARTHWORK DETAILS-FILL N.T.S.

MATERIAL ITEM	TOLERANCE
PAVEMENT	± 5 mm TOTAL THICKNESS
AGGREGATE SURFACE COURSE	± 10 mm
BASE COURSE	± 10 mm
SUBBASE	± 30 mm
SAND BORROW	± 30 mm
GRANULAR BORROW	± 30 mm

\*NOTE: CONC. PLACEMENT JFW 2/3/06

HYDROLOGIC DATA

DRAINAGE AREA= N/A  
 CHARACTER OF TERRAIN: \_\_\_\_\_  
 CHARACTER & TYPE OF STREAM: \_\_\_\_\_  
 NATURE OF STREAMBED: \_\_\_\_\_  
 02.33= \_\_\_\_\_ 050= \_\_\_\_\_  
 010= \_\_\_\_\_ 0100= \_\_\_\_\_  
 025= \_\_\_\_\_ 0500= \_\_\_\_\_  
 DATE OF FLOOD OF RECORD: \_\_\_\_\_  
 WATER SURFACE ELEV.: \_\_\_\_\_ ESTIMATED DISCHARGE: \_\_\_\_\_  
 NATURAL STREAM VELOCITY @ 0 \_\_\_\_\_  
 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 \_\_\_\_\_

EXISTING STRUCTURE

STRUCTURE TYPE: N/A YEAR BUILT: \_\_\_\_\_  
 CLEAR SPAN (NORMAL TO STREAM): \_\_\_\_\_  
 VERTICAL CLEARANCE ABOVE STREAMBED: \_\_\_\_\_  
 WATERWAY OF FULL OPENING: \_\_\_\_\_  
 DISPOSITION OF STRUCTURE: \_\_\_\_\_  
 TYPE OF MATERIAL UNDER SUBSTRUCTURE: \_\_\_\_\_  
 WATER SURFACE ELEV. @ 02.33= \_\_\_\_\_ VELOCITY= \_\_\_\_\_  
 010= \_\_\_\_\_  
 025= \_\_\_\_\_  
 050= \_\_\_\_\_  
 0100= \_\_\_\_\_  
 LONG TERM STREAM BED CHANGES: \_\_\_\_\_  
 IS THE ROADWAY OVERTOPPED BELOW THE 0100? \_\_\_\_\_ FREQUENCY: \_\_\_\_\_  
 RELIEF ELEVATION: \_\_\_\_\_ DISCHARGE OVER ROAD @ 0100: \_\_\_\_\_  
 UPSTREAM STRUCTURE: TOWN: \_\_\_\_\_ DISTANCE: \_\_\_\_\_  
 HIGHWAY NO.: \_\_\_\_\_ STRUCTURE NO.: \_\_\_\_\_  
 STRUCTURE TYPE: \_\_\_\_\_  
 CLEAR SPAN: \_\_\_\_\_ CLEAR HEIGHT: \_\_\_\_\_  
 YEAR BUILT: \_\_\_\_\_ FULL WATERWAY: \_\_\_\_\_  
 DOWNSTREAM STRUCTURE: TOWN: \_\_\_\_\_ DISTANCE: \_\_\_\_\_  
 HIGHWAY NO.: \_\_\_\_\_ STRUCTURE NO.: \_\_\_\_\_  
 STRUCTURE TYPE: \_\_\_\_\_  
 CLEAR SPAN: \_\_\_\_\_ CLEAR HEIGHT: \_\_\_\_\_  
 YEAR BUILT: \_\_\_\_\_ FULL WATERWAY: \_\_\_\_\_

PROPOSED STRUCTURE

STRUCTURE TYPE: SINGLE SPAN STEEL PLATE GIRDER - CURVED BRIDGE, STRAIGHT GIRDER  
 CLEAR SPAN (NORMAL TO ROAD): 30.200m  
 VERTICAL CLEARANCE ABOVE ROADWAY: 4.700  
 WATERWAY OF FULL OPENING: N/A  
 WATER SURFACE ELEV. @ 02.33= \_\_\_\_\_ VELOCITY= \_\_\_\_\_  
 010= \_\_\_\_\_  
 025= \_\_\_\_\_  
 050= \_\_\_\_\_  
 0100= \_\_\_\_\_  
 IS THE ROADWAY OVERTOPPED BELOW THE 0100? \_\_\_\_\_ FREQUENCY: \_\_\_\_\_  
 RELIEF ELEVATION: \_\_\_\_\_ DISCHARGE OVER ROAD @ 0100: \_\_\_\_\_  
 AVERAGE LOW ELEVATION OF SUPERSTRUCTURE: 218.525  
 VERTICAL CLEARANCE @ 0 \_\_\_\_\_  
 SCOUR: \_\_\_\_\_  
 REQUIRED CHANNEL PROTECTION: \_\_\_\_\_

PERMIT INFORMATION

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

ADDITIONAL COMMENTS

ULTIMATE CONSTRUCTION GOVERNS MINIMUM VERTICAL CLEARANCE



DESIGN CRITERIA:

- DESIGN LIVE LOAD AASHTO MS 22.5
- DESIGN SPAN 31.400 m
- ALLOWABLE LOAD FOR SPREAD FOOTINGS ON SOIL 300 kPa ON LEDGE N/A
- ALLOWABLE LOAD FOR PILING N/A TYPE N/A ESTIMATED LENGTH N/A
- STRUCTURAL STEEL AASHTO M270M GRADE 345W
- REINFORCING STEEL GRADE 420
- CONCRETE CLASS A, OC/OA  $F_c = 30 \text{ MPa}$   
CONCRETE CLASS B  $F_c = 25 \text{ MPa}$

TRAFFIC MAINTENANCE:

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

LOAD FACTOR LOAD RATING (TONS)

LOADING LEVELS (LOAD FACTOR)	TRUCK						
	M	MS	3S2	6 AXLE	3A.STR.	4A.STR.	5A.SEMI
INVENTORY A=2.17; B=1.00	40	60					
POSTED A=1.55; B=1.40	56	84	96		79	80	90
OPERATING A=1.30; B=1.67			101	115	116	94	95

$RF = 0.95 F_y S_{LL+I} - M_{DL} \frac{S_{LL+I}}{S_{DL}} - M_{SD} \frac{S_{LL+I}}{S_{SD}}$   
 $A \times M_{LL+I}$

PROJECTED TRAFFIC DATA

YEAR	ADT	DHV	% D	% T	ADTT
2000	5300	675	52	7	370
2020	6600	840	52	7	460

20 YEAR ESAL FOR FLEXIBLE PAVEMENT FROM 2000 TO 2020 : 4,825,000  
 40 YEAR ESAL FOR FLEXIBLE PAVEMENT FROM 2000 TO 2040 : 17,229,000  
 DESIGN SPEED: 100 KM/H

STATE OF VERMONT AGENCY OF TRANSPORTATION

Town Of BENNINGTON Bridge No. BR600  
 Highway No. VT. RTE. 9 Log Sta. \_\_\_\_\_  
 Surv. Sta. 15+170

VT. RTE. 9 OVER AUSTIN HILL ROAD

PRELIMINARY INFORMATION

Designed By M. GOGUEN Drawn by J. HOTALING/B. WEATHERBY  
 Checked By Date P. PERKINS 11/01 Bridge Design Supervisor M. OLSTAD Date 11/01

PROJECT BENNINGTON-HOOSICK PROJECT NO. D.P.J. 0146(1)

I.G.C. Info. \_\_\_\_\_  
 Bridge Sheet No. BR601 Sheet 263 OF 473