

## BRIDGES 87-3 N & S PROJECT NOTES

### GENERAL

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO STATE OF VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 1990, AND ITS LATEST REVISIONS, AND THE AASHTO STANDARD SPECIFICATIONS FOR CONSTRUCTION, DATED 1996, AND ITS LATEST REVISIONS.
  2. DURING CONSTRUCTION OF THE DRIVE CULVERT DOWNSTREAM OF BRIDGES 87-3 N&S, THE CONTRACTOR SHALL ENSURE ACCESS TO ALL DRIVES ON THE NORTH SIDE OF RUGG BROOK AT ALL TIMES. SHOULD CLOSURE OF VEHICULAR ACCESS TO THE TROMBLY PROPERTY ON THE SOUTH SIDE OF RUGG BROOK BE REQUIRED, A PEDESTRIAN ACCESS SHALL BE MAINTAINED TO THIS PROPERTY AS A MINIMUM. DURING CONSTRUCTION OF BRIDGES 87-3 N&S, TRAFFIC SHALL BE MAINTAINED AS INDICATED IN THE TRAFFIC CONTROL SHEETS INCLUDED IN THE PLANS.
  3. THERE IS NO CONTROL FOR THE DRIVE HORIZONTAL ALIGNMENT. LINES SHOWN ARE FOR DESIGN PURPOSES ONLY. THE RESIDENT ENGINEER SHALL RUN LINE TO APPROXIMATE CENTERLINE OF EXISTING DRIVE.
  4. ALL DIMENSIONS SHOWN IN THE PLANS ARE HORIZONTAL OR VERTICAL AND ARE GIVEN AT 68°F.
- ### EARTHWORK AND RELATED ITEMS
5. THE CONTRACTOR IS ADVISED TO EXERCISE CAUTION WHILE WORKING IN AREAS OF EXISTING UNDERGROUND UTILITIES. AS SHOWN IN THE PLANS, THESE UTILITIES CONSIST OF AN UNDERGROUND ELECTRIC LINE BELOW INLET CONSTRUCTION FOR THE DRIVE CULVERT AND A 3 INCH DIA. PRESSURE SEWER MAIN BELOW OUTLET CONSTRUCTION FOR BRIDGE 87-3S. RELOCATION OF THE PRESSURE SEWER MAIN TO ACCOMMODATE CONSTRUCTION IS NOT ANTICIPATED FOR THIS PROJECT.
  6. ALL CONSTRUCTION FOR THE RELOCATED UNDERGROUND ELECTRIC LINE AS SHOWN IN THE PLANS MUST COMPLY WITH THE NATIONAL ELECTRICAL CODE AND UTILITY COMPANY REQUIREMENTS. A SEPARATE WIRED CONDUIT SHALL BE INSTALLED FOR EACH SERVICE PROVIDED (I.E. ELECTRICAL, TELEPHONE, CABLE). PAYMENT FOR THIS RELOCATION SHALL BE PAID FOR UNDER ITEM 678.23, "WIRED CONDUIT".
  7. EXCAVATION FOR THE PLACEMENT OF THE NEW 4 INCH DIA. PVC DRAINAGE PIPE ON THE SANBORN PROPERTY SHALL BE PAID FOR UNDER ITEM 204.20, "TRENCH EXCAVATION OF EARTH".
  8. PAYMENT FOR STRUCTURE EXCAVATION SHALL BE AS SHOWN IN THE PLANS.
  9. TO MINIMIZE THE AMOUNT OF WATER FLOWING THROUGH THE STONE FILL, TYPE IV USED TO CONSTRUCT THE ENERGY DISSIPATION STRUCTURES AT THE OUTLETS TO BRIDGES 87-3 N&S, THE VOIDS BETWEEN THE LARGE STONES SHALL BE CHINKED WITH SMALLER STONE AS DIRECTED BY THE RESIDENT ENGINEER. PAYMENT SHALL BE MADE SUBSIDIARY TO ITEM 613.13, "STONE FILL, TYPE IV".

### PRECAST CONCRETE BOX CULVERTS

10. ALL COMPONENTS OF THE THREE BOX CULVERTS INCLUDED IN THIS SERIES SHALL BE PRECAST, INCLUDING CULVERT SECTIONS, BAFFLES, HEADERS, WINGWALLS, APRONS AND CUT-OFF WALLS. THE DESIGN OF THESE CULVERTS SHALL BE THE RESPONSIBILITY OF THE FABRICATOR. CULVERT DESIGN SHALL CONFORM TO ALL APPLICABLE SECTIONS OF THE AASHTO STANDARD SPECIFICATIONS FOR CONSTRUCTION, DATED 1996, AND ITS LATEST REVISIONS. PAYMENT FOR THE DESIGN, FABRICATION, TRANSPORT, AND INSTALLATION OF THE BOX CULVERTS SHALL BE PAID FOR UNDER THE LUMP SUM PRICE BID FOR ITEM 540.10, "PRECAST CONCRETE BOX".
11. DESIGN CRITERIA:
    1. SOIL UNIT WEIGHT = 140 PCF
    2. DESIGN LIVE LOAD = AASHTO HS-25-44
    3. MINIMUM CLEAR INSIDE DIMENSIONS (INCLUDING BAFFLES):
 

DRIVE CULVERT = 7'-0" SPAN AND 5'-0" RISE

BRIDGES 87-3 N&S = 6'-0" SPAN AND 6'-0" RISE
  12. THE CONTRACTOR SHALL SUBMIT FABRICATION DRAWINGS FOR THE BOX CULVERTS AND ALL ASSOCIATED DETAILS FOR THE APPROVAL OF THE STRUCTURES ENGINEER IN ACCORDANCE WITH SUBSECTION 105.03 OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION.
  13. THE BOX CULVERT TYPICAL SECTIONS SHOWN IN THE DRAWINGS ARE FOR SCHEMATIC PURPOSES ONLY. THE ACTUAL SHAPE OF THE BOX CULVERT AND ITS COMPONENTS WILL BE DEPENDENT ON THE FABRICATOR. WHERE MULTIPLE CULVERT SECTIONS ARE USED, EACH SECTION SHALL BE THE SAME LENGTH AND THE SAME SHAPE.
  14. ALL BOX CULVERT JOINTS SHALL BE STRENGTHENED WITH PERMANENT CLOSURE HARDWARE. ALL HARDWARE COMPONENTS SHALL BE GALVANIZED IN ACCORDANCE WITH SUBSECTION 506.15 OF THE STANDARD SPECIFICATIONS.
  15. AFTER BOX CULVERT SECTIONS HAVE BEEN SET IN THEIR FINAL POSITION, THE EXTERIOR (TOP AND SIDES) AND INTERIOR (SIDES AND BOTTOM) OF ALL BOX CULVERT JOINTS, AND ALL LIFTING HOLES, SHALL BE FILLED WITH MORTAR, TYPE IV. ALL MORTAR SHALL BE WET CURED A MINIMUM OF 24 HOURS PRIOR TO THE APPLICATION OF ANY WATERPROOFING. PAYMENT FOR THE MORTAR AND ITS APPLICATION SHALL BE MADE SUBSIDIARY TO ITEM 540.10, "PRECAST CONCRETE BOX".
  16. A 2 FOOT WIDE STRIP OF MEMBRANE WATERPROOFING SHALL BE APPLIED AT EACH SIDE JOINT. THE MEMBRANE SHALL BE CENTERED ON THE JOINT AND SHALL RUN THE ENTIRE HEIGHT OF THE JOINT. THE ENTIRE TOP OF THE BOX CULVERT SHALL THEN BE COVERED WITH MEMBRANE. THE MEMBRANE SHEETS SHALL OVERLAP THE EDGES OF THE CULVERT BY 1 FOOT ON EACH SIDE AS SHOWN IN THE PLANS. PAYMENT FOR THE MEMBRANE AND ITS INSTALLATION SHALL BE MADE UNDER ITEM 519.20, "SHEET MEMBRANE WATERPROOFING".

## BRIDGE 87-3 QUANTITIES

ITEM NO.	ITEM	UNIT	87-3 NB	87-3 SB	DRIVE	CHANNEL	TOTAL	FINAL
203.27	UNCLASSIFIED CHANNEL EXCAVATION	CY				3050	3050	
Ⓡ 204.20	TRENCH EXCAVATION OF EARTH	CY	240	380	20		640	
204.25	STRUCTURE EXCAVATION	CY	570	460	150		1180	
204.30	GRANULAR BACKFILL FOR STRUCTURES	CY	190	250	70		510	
301.15	SUBBASE OF GRAVEL	CY			70		70	
401.10	AGGREGATE SURFACE COURSE	CY			60		60	
514.10	WATER REPELLENT	GAL	10	10	5		25	
519.20	SHEET MEMBRANE WATERPROOFING	SY	135	180	25		340	
529.15	REMOVAL OF STRUCTURE (NB STA. 3395+77.05)	EA	1				1	
529.15	REMOVAL OF STRUCTURE (SB STA. 3395+93.10)	EA		1			1	
529.15	REMOVAL OF STRUCTURE (DRIVE STA. 51+42.43)	EA			1		1	
540.10	PRECAST CONCRETE BOX (NB STA. 3395+77.05)	LS	1				1	
540.10	PRECAST CONCRETE BOX (SB STA. 3395+93.10)	LS		1			1	
540.10	PRECAST CONCRETE BOX (DRIVE STA. 51+42.43)	LS			1		1	
Ⓡ 613.10	STONE FILL, TYPE I	CY				15	15	
613.12	STONE FILL, TYPE III	CY				520	520	
613.13	STONE FILL, TYPE IV	CY				1310	1310	
614.10	TEMPORARY RELOCATION OF STREAM	LS				1	1	
628.35	PVC SEWER PIPE (MOD. 4" PERFORATED)	LF			82		82	
Ⓡ 649.31	GEOTEXTILE UNDER STONE FILL	SY				1870	1870	
651.40	GRUBBING MATERIAL	SY				280	280	
656.45	TRANSPLANTING TREES	EA			8		8	
678.23	WIRED CONDUIT	LF			332		332	
679.25	REMOVE AND RESETTING LIGHT POLE	EA			2		2	

Ⓡ DENOTES ROADWAY QUANTITY

## STATE OF VERMONT AGENCY OF TRANSPORTATION

Town Of <b>FAIRFAX-FAIRFIELD-ST. ALBANS</b>		Bridge No. <b>87-3 N&amp;S</b>	
Highway No. <b>1-89</b>		Log Sta. Surv. Sta.	
<b>1-89 OVER THE RUGG BROOK</b>			
<b>87-3 N&amp;S PROJECT NOTES &amp; QUANTITIES</b>			
Designed By <b>G.ROY</b>		Drawn By <b>G.ROY</b>	
Checked By <b>M.LOZIER</b>		Bridge Design Supervisor <b>R.R.WHITCOMB</b>	
Date <b>06/00</b>		Date <b>06/00</b>	
PROJECT <b>FAIRFAX-FAIRFIELD-ST. ALBANS</b>		PROJECT NO. <b>1 M 089 - 3 (27)</b>	
I.G.C. Info. <b>96a056\structures\sa056p15.dgn</b>		sa056pn3j	
Bridge Sheet No. <b>BR310</b>		Sheet <b>136</b> of <b>370</b>	

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