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## PROJECT DESCRIPTIONS

### BRIDGES: 6 (MM 1J), 15 (MM 13.4), 16 (MM 13.9), 17 (MM 14.4), AND 18 (MM 15J) NORTH AND SOUTH

THE WORK FOR THESE BRIDGES INCLUDES THE REPLACEMENT OF THE APPROACH AND BRIDGE RAILING, REPLACEMENT OF THE CURBS, PLACEMENT OF SNOW FENCE, TRAFFIC CONTROL AND WATER REPELLENT APPLICATION TO THE EXISTING ABUTMENTS, PIERS AND NEW CURBS.

### BRIDGE \*8 (MM 4.0) US 4

THE WORK FOR THIS BRIDGE INCLUDES THE REPLACEMENT OF THE APPROACH AND BRIDGE RAILING, REPLACEMENT OF THE CURBS, PLACEMENT OF WIDE BAND JOINT, PLACEMENT OF SNOW FENCE, COLD PLANING, PAVING THE BRIDGE, TRAFFIC CONTROL AND WATER REPELLENT APPLICATION TO THE EXISTING ABUTMENTS, PIERS AND NEW CURBS.

### BRIDGES 10 (MM 6.5) TH 36 AND BRIDGE 21 (MM 17.5) TH 13

THE WORK FOR THESE BRIDGES INCLUDES THE REPLACEMENT OF THE APPROACH RAILING, MODIFICATION OF THE CURB ENDS AT ALL CORNERS OF THESE TWO BRIDGES, PLACEMENT OF SNOW FENCE, TRAFFIC CONTROL AND WATER REPELLENT APPLICATION TO THE EXISTING ABUTMENTS, PIERS AND CURBS.

### BRIDGE 1 (MM 0.0) NORTH & SOUTH

THE WORK FOR THIS BRIDGE INVOLVES ONLY THE PLACEMENT OF SNOW FENCE ON TO THE VERMONT SPAN OF I-89 NORTHBOUND AND I-89 SOUTHBOUND (OVER N.E.C.R.R.) EXISTING BRIDGE RAILING. (SEE SHEET BR127 FOR DETAILS)

### BRIDGE 3 (MM 0.5) I-89 UNDER I-91 (RAMP C)

THE WORK FOR THIS BRIDGE INVOLVES THE PLACEMENT OF SNOW FENCE ON TO THE EXISTING RAILING.

## GENERAL NOTES

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO STATE OF VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, DATED 1990, AND ITS LATEST REVISIONS, AND THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, AND ITS LATEST REVISIONS.
2. NO SURVEY WAS TAKEN ON THIS PROJECT. INFORMATION SHEETS INCLUDED IN THE PLANS WERE TAKEN FROM ORIGINAL PLANS AND ARE FOR INFORMATION ONLY. THE CONTRACTOR IS RESPONSIBLE FOR FIELD CHECKING ANY AND ALL DIMENSIONS APPLICABLE TO THIS WORK.
3. REMOVAL OF CONCRETE CURBS FOR EACH BRIDGE SHALL BE PAID FOR UNDER THE ITEM 529.25 "REMOVAL OF CONCRETE OR MASONRY".
4. THE CONCRETE USED FOR THE NEW CURB DETAILS WILL BE "SILICA FUME CONCRETE" AND WILL BE PAID FOR UNDER ITEM 501.60.
5. THE EXISTING CONCRETE SHALL BE THOROUGHLY CLEANED OF ANY LOOSE OR FOREIGN MATERIAL AND COATED WITH NEAT CEMENT PASTE BEFORE PLACING NEW CONCRETE AS PER SUBSECTION 501.13 (b).
6. MINIMUM COVER FOR REINFORCING STEEL IN CURBS SHALL BE THREE (3) INCHES.
7. ALL REINFORCING STEEL SHALL BE DETAILED AND FABRICATED USING PROCEDURES AND TOLERANCES IN ACCORDANCE WITH APPLICABLE PUBLICATIONS OF THE CONCRETE REINFORCING STEEL INSTITUTE.
8. REINFORCING PLACEMENT TOLERANCES SHALL BE:  
 SPACING:  $\pm 1"$   
 CLEARANCE:  $\pm 1/4"$
9. THE FOLLOWING ARE THE ALLOWABLE STRESSES USED FOR DESIGN OF THESE PLANS:  
 CONCRETE:  $f'c = 4000$  PSI  $fc = 1600$  PSI  
 SILICA FUME CONCRETE:  $f'c = 5000$  PSI  $fc = 2000$  PSI  
 REINFORCING STEEL:  $F_s = 24,000$  PSI (GRADE 60)
10. ALL DIMENSIONS ARE HORIZONTAL OR VERTICAL AND ARE GIVEN AT 68° F.
11. WATER REPELLENT SHALL BE APPLIED TO THE EXPOSED CONCRETE ON THE NEW CURBS FROM THE FACE OF CURB TO THE DRIP BEAD ON THE UNDERSIDE OF THE EXISTING BRIDGE DECK. SEE NOTE 24 ALSO.
12. NOT USED
13. DURING BRIDGE PAVEMENT REMOVAL, THE CONTRACTOR SHALL EXERCISE CARE TO ENSURE THAT NO DAMAGE OCCURS TO THE EXISTING SHEET MEMBRANE, FINGER PLATE JOINTS, VERTICAL PLATE JOINTS, PLUG-TYPE JOINTS OR SAW CUTS. IF DAMAGE OCCURS, THEN THE CONTRACTOR WILL BE RESPONSIBLE FOR THE REPAIRS AT THE CONTRACTOR'S EXPENSE.
14. ALL FABRIC OR METAL TROUGHS AND DOWNSPOUTS SHALL BE THOROUGHLY FLUSHED BY THE CONTRACTOR WITH THE COST TO BE SUBSIDIARY TO ALL OTHER ITEMS IN THE CONTRACT.
15. FOLLOWING PAVING, ANY BITUMINOUS CONCRETE PAVEMENT THAT BECOMES LODGED IN THE EXPANSION JOINTS OR THAT ENTERS DRAIN TROUGHS, SCUPPERS, OR DOWNSPOUTS WILL BE REMOVED BY THE CONTRACTOR AT NO EXPENSE TO THE STATE.
16. WHENEVER THE CONTRACTOR IS WORKING AT ANY PARTICULAR BRIDGE SITE, TRAFFIC IS TO BE CONTROLLED AND MAINTAINED AT ALL TIMES AS SPECIFIED IN THE TRAFFIC CONTROL PLANS.
17. THE EXISTING ALUMINUM BRIDGE RAILING AND RELATED POSTS WILL BE REMOVED UNDER ITEM 525.10, "REMOVAL OF EXISTING RAILING". THE EXISTING RAILING AND POSTS WILL BECOME THE PROPERTY OF THE STATE AND WILL BE DELIVERED TO THE DISTRICT \*4 GARAGE IN ROYALTON. SEE SPECIAL PROVISIONS.
18. THE EXISTING GRANITE BRIDGE CURB WILL BE REMOVED UNDER ITEM 616.41, "REMOVAL OF EXISTING CURB". REASONABLE CARE SHALL BE USED WHILE COMPLETING THIS WORK. THE GRANITE CURB SHALL BE SALVAGED AND REMAIN THE PROPERTY OF THE STATE AND SHOULD BE DELIVERED TO THE DISTRICT \*4 GARAGE IN ROYALTON. SEE SPECIAL PROVISIONS.
19. a) IF DURING WORK ON THE BRIDGE CURBING AND RAILING, IT APPEARS THAT DEBRIS, NEW CONCRETE OR WATER REPELLENT MAY FALL ON I-89 OR TOWN HIGHWAYS UNDER THE INTERSTATE, THEN THE CONTRACTOR SHALL CLOSE ONE LANE TO TRAFFIC AND FOLLOW STANDARD E-110 OR OTHER MEANS AS APPROVED BY THE ENGINEER. THIS WORK WILL BE SUBSIDIARY TO THE TRAFFIC CONTROL ITEM.  
 b) WHEN WORKING OVER THE RAILROAD TRACKS, THE CONTRACTOR SHALL PREVENT DEBRIS, NEW CONCRETE, REINFORCING, ETC. FROM CREATING A HAZARD TO THE TRACKS. THE CONTRACTOR SHALL USE NETS, SCAFFOLDING OR OTHER MEANS APPROVED BY THE ENGINEER IN THE FIELD TO PREVENT HAZARDS TO THE TRACKS. THIS WORK WILL BE SUBSIDIARY TO THE ITEM "REMOVAL OF CONCRETE OR MASONRY". SEE SPECIAL PROVISIONS.
20. THE CURB JOINTS AT THE ABUTMENTS SHALL BE RESEALED WITH POLYURETHANE JOINT SEALER. THIS WORK WILL BE SUBSIDIARY TO ITEM 501.60, "SILICA FUME CONCRETE".

## GENERAL NOTES (CONTINUED)

21. THE RUBBLE CREATED BY THE REMOVAL OF THE GRANITE END BLOCKS, GRANITE CURB AND CONCRETE CURB SHALL NOT BE LEFT AT THE BRIDGE SITE, BUT SHALL BE DISPOSED OF PROPERLY AS APPROVED BY THE RESIDENT ENGINEER.
22. THE EXISTING WOODEN SNOW FENCE ATTACHED TO THE EXISTING BRIDGE RAILING SHALL BE REMOVED AND DISPOSED OF PROPERLY BY THE CONTRACTOR. THIS WORK WILL BE SUBSIDIARY TO ITEM 620.75, "SNOW BARRIER-GALVANIZED".
23. THE WEEP TUBES LOCATED ALONG THE CURB LINES SHALL BE PLUGGED FROM THE UNDERSIDE OF THE DECK EXCEPT FOR THOSE WEEP TUBES LOCATED AT THE EXPANSION JOINTS. THE METHOD OF PLUGGING THE WEEP TUBES SHALL BE APPROVED BY THE RESIDENT ENGINEER PRIOR TO THIS WORK BEING DONE. THIS WORK WILL BE SUBSIDIARY TO ITEM 529.25, "REMOVAL OF CONCRETE OR MASONRY".
24. WATER REPELLENT WILL BE APPLIED TO ALL EXPOSED CONCRETE OF THE EXISTING ABUTMENTS AND THE PIERS ON BRIDGE 8, 6NB & 6SB, 15NB & 15SB, 16NB & 16SB, 17NB & 17SB, 18NB & 18SB.
25. AN ESTIMATED QUANTITY FOR ITEM 580.11, "REPAIR OF CONCRETE SUPERSTRUCTURE SURFACE, CLASS II" HAS BEEN INCLUDED FOR EACH BRIDGE. THIS PAY ITEM IS TO BE USED AS DEEMED NECESSARY BY THE ENGINEER IN THE FIELD.

## GENERAL NOTES - BRIDGES 10 & 21

1. THERE WILL BE GAPS BETWEEN THE APPROACH RAILING AND BRIDGE RAILING WHILE THE BRIDGE RAILING IS REMOVED TO REPLACE THE CURB ENDS. THEREFORE, THE CONTRACTOR MUST FOLLOW THE TRAFFIC CONTROL DETAILS ON SHEET BR 104 TO ENSURE THE SAFETY OF THE TRAVELLING PUBLIC DURING CONSTRUCTION. THE CONTRACTOR WILL BE ALLOWED TO WORK ON THE CURB ON ONLY ONE SIDE OF THE BRIDGE AT A TIME.
2. LOCATION OF THE EXISTING U-BARS ARE NOT KNOWN. DRILL AND GROUT S501'S (AS SHOWN ON THE REINFORCEMENT PLANS FOR EACH BRIDGE) TO MAINTAIN A MAXIMUM SPACING OF 12" AS DIRECTED BY THE ENGINEER.
3. AS DIRECTED BY THE ENGINEER, ANY EXISTING "U" BARS RUSTED OR BROKEN OFF DURING THE REMOVAL OF CONCRETE SHALL BE REMOVED AND REPLACED BY S501 DOWELS AS REQUIRED TO PROVIDE THE NECESSARY VERTICAL REINFORCEMENT. AN ADDITIONAL QUANTITY OF S501'S HAVE BEEN INCLUDED IN THE REINFORCING STEEL SCHEDULE. ALSO, AN ADDITIONAL QUANTITY OF THE ITEM "DRILLING AND GROUTING DOWELS" HAS BEEN INCLUDED.
4. THE CONCRETE WILL BE POURED BACK TO THE ORIGINAL CURB GRADE AND ALL SCOREMARKS WILL BE FORMED TO MATCH EXISTING.
5. WATER REPELLENT WILL BE APPLIED TO THE EXPOSED CONCRETE ON THE CURBS FROM THE FACE OF CURB TO THE DRIP BEAD ON THE UNDERSIDE OF THE DECK. THIS WATER REPELLENT APPLICATION WILL BE FOR THE ENTIRE LENGTH OF THE CURBS (NEW CURB END TREATMENTS AND EXISTING CURB). THE CONTRACTOR WILL USE EXTREME CARE WHEN APPLYING THE WATER REPELLENT TO THE CURBS TO INSURE THAT THE TRAVELLING PUBLIC ON I-89 DO NOT INCUR DAMAGE TO THEIR VEHICLES FROM THE WATER REPELLENT.
6. WATER REPELLENT WILL BE APPLIED TO ALL EXPOSED CONCRETE ON THE EXISTING ABUTMENTS AND PIERS.
7. SEE REFERENCE SHEETS BR 172 TO BR 178.

## STANDARDS

NUMBER	DATE
C-1	01/03/00
E-100	01/06/97
E-101	03/10/97
E-102	08/08/95
E-102A	08/08/95
E-103	09/23/98
E-105	09/24/98
E-106	08/08/95
E-107	08/08/95
E-107A	08/08/95
E-110	08/08/95
E-120	08/08/95
E-121	08/08/95
E-140	08/30/96
E-171A	08/09/95
E-172	08/09/95
G-18	06/01/94
SB-R4a-82	09/19/89
SB-R4b-82	03/30/88

## STATE OF VERMONT AGENCY OF TRANSPORTATION

Town Of <b>HARTFORD-SHARON-ROYALTON</b>	Bridge No.
Highway No. <b>189</b>	Log Sta.
	Surv. Sta.

### GENERAL AND TRAFFIC CONTROL NOTES

Designed By <b>C. MEUNIER</b>	Drawn By <b>STR</b>
Checked By <b>C. MEUNIER</b>	Bridge Design Supervisor <b>G.S. ROGERS</b>
Date <b>11/98</b>	Date <b>11/98</b>
PROJECT <b>HARTFORD-SHARON-ROYALTON</b>	PROJECT NO. <b>IM IR 089-K(8)</b>
I.G.C. \088\cadd\111ngcabl\net\87\008\Structures\sa008r11.dgn sa008gen1	
Bridge Sheet No. <b>BR 100</b>	Sheet <b>57</b> of <b>260</b>