

CONSTRUCTION NOTES

1. A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION THROUGH THE USE OF MEDIAN CROSSOVERS. TRAFFIC CONTROL FOR EACH BRIDGE SHALL BE IN ACCORDANCE WITH THE TRAFFIC CONTROL NOTES AND PLANS, SHEETS 46 - 49.
2. THE CONTRACTOR SHALL TAKE SPECIAL CARE AND PRECAUTIONS TO ENSURE THAT NO DEBRIS FALLS INTO THE WHITE RIVER, ONTO VT 14, OR ONTO THE NEW ENGLAND CENTRAL RAILROAD. SEE SHEET 46 NOTE: 12
3. THE EXISTING PAVEMENT ON THE BRIDGE DECKS AND APPROACH SLABS SHALL BE REMOVED USING ITEM 529.10, "REMOVAL OF BRIDGE PAVEMENT".
4. EXISTING BRIDGE RAILING AND APPROACH RAILING SHALL BE REMOVED UNDER ITEM 525.10, "REMOVAL OF EXISTING RAILING" AND SHALL BE SALVAGED TO THE STATE.
5. EXISTING GUARDRAIL SHALL BE REMOVED UNDER ITEM 621.90, "REMOVAL AND DISPOSAL OF EXISTING GUARDRAIL" AND SHALL BE SALVAGED TO THE STATE.
6. THE GRANITE PORTION OF THE EXISTING CURBS SHALL BE REMOVED USING ITEM 618.41 "REMOVAL OF EXISTING CURB" AND SHALL BE SALVAGED TO THE STATE.
7. ALL MATERIALS THAT ARE TO BE SALVAGED TO THE STATE SHALL BE TRANSPORTED BY THE CONTRACTOR TO THE VAOT DISTRICT 4 MAINTENANCE FACILITY IN WHITE RIVER JUNCTION. THE RESIDENT ENGINEER SHALL CONTACT THE DISTRICT 4 TRANSPORTATION ADMINISTRATOR BEFORE THE CONTRACTOR TRANSPORTS ANY SALVAGED MATERIALS TO THE MAINTENANCE FACILITY. SEE SPECIAL PROVISIONS FOR ADDITIONAL REQUIREMENTS FOR SALVAGING MATERIALS.
8. ITEM 529.20, "PARTIAL REMOVAL OF STRUCTURE" SHALL INCLUDE:
 - A. REMOVAL OF THE EXISTING CONCRETE BRUSH CURBS, CONCRETE BRIDGE DECK, AND FINGER PLATE EXPANSION JOINTS. CARE SHALL BE TAKEN NOT TO DAMAGE THE EXISTING GIRDERS. ANY DAMAGE TO THE GIRDERS DUE TO THE REMOVAL OPERATIONS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
 - B. REMOVAL OF ALL THE EXISTING BEARING DEVICES EXCEPT THE FIXED BEARINGS AT PIERS 5 AND 6.
 - C. REMOVAL OF PORTIONS OF THE EXISTING ABUTMENT BACKWALLS AS NECESSARY TO INSTALL THE NEW FINGER PLATE EXPANSION JOINTS.
 - D. REMOVAL OF PORTIONS OF THE EXISTING ABUTMENT WINGWALLS AS NECESSARY TO CONSTRUCT THE NEW CONCRETE BRIDGE BARRIER CURBS.
 - E. REMOVAL OF DETERIORATED LATERAL BRACING ANGLES, GUSSET PLATES, AND CROSS-FRAMES.
 - F. REMOVAL OF ALL EXISTING SCUPPERS.

THE CONTRACTOR'S METHODS FOR PARTIAL REMOVAL OF THE EXISTING STRUCTURES SHALL BE APPROVED BY THE ENGINEER PRIOR TO ANY REMOVAL WORK.
9. SHEAR STUDS SHALL BE INSTALLED ON ALL GIRDERS AS SHOWN ON SHEET 13.
10. SCUPPERS SHALL EXTEND A MINIMUM OF 12" BELOW THE BOTTOM FLANGES OF THE GIRDERS. SEE SHEET 14 FOR DETAILS AND PAYMENT OF SCUPPER REPLACEMENTS.
11. DETERIORATED LATERAL BRACING AND CROSS FRAMES SHALL BE REPAIRED OR REPLACED AS DETAILED IN THESE PLANS OR AS DIRECTED BY THE ENGINEER. SEE SHEETS 8 - 12.
12. ALL EXISTING ROCKER EXPANSION BEARINGS SHALL BE REPLACED AS SHOWN ON SHEETS 18 & 19. THE EXISTING FIXED BEARINGS AT PIERS 5 AND 6 SHALL BE RETROFIT AS SHOWN ON SHEETS 20 & 21.
13. ABUTMENT AND PIER CONCRETE REPAIRS SHALL BE PERFORMED. A THOROUGH INSPECTION BY THE ENGINEER WILL BE MADE OF ALL SUBSTRUCTURE AREAS PRIOR TO COMMENCING ANY WORK, AND THOSE AREAS FOUND TO HAVE SPALLED, DELAMINATED OR OTHERWISE UNSOUND CONCRETE WILL BE REPAIRED. THE CONTRACTOR SHALL SUPPLY ANY STAGING AND LADDERS REQUIRED FOR THIS INSPECTION. THE COST FOR WHICH SHALL BE SUBSIDIARY TO ALL OTHER ITEMS IN THE CONTRACT.
14. THE EXISTING FINGER PLATE EXPANSION JOINTS AT BOTH ABUTMENTS ON EACH BRIDGE SHALL BE REPLACED WITH NEW FINGER PLATE JOINTS AS SHOWN ON SHEETS 15 & 16.
15. THE SHEET MEMBRANE WATERPROOFING SHALL BE INSTALLED ON THE BRIDGE DECK AND APPROACH SLABS ACCORDING TO THE SPECIFICATIONS CALLED FOR UNDER ITEM 519 AND IN SPECIAL PROVISIONS. BEFORE APPLYING THE SHEET MEMBRANE WATERPROOFING, THE EXISTING APPROACH SLAB SURFACE SHALL BE MADE SMOOTH TO THE SATISFACTION OF THE ENGINEER, USING ONE OR BOTH OF THE FOLLOWING METHODS:
 - A. FILL IN ALL POCK MARKS, COUGES OR OTHER DEPRESSIONS WITH ITEM 580.17, "RAPID SETTING CONCRETE REPAIR MATERIAL". CONTACT THE VERMONT AGENCY OF TRANSPORTATION MATERIALS DIVISION TO OBTAIN A LIST OF ACCEPTABLE MATERIALS FOR "RAPID SETTING CONCRETE REPAIR MATERIAL". USE OF "RAPID SETTING CONCRETE REPAIR MATERIAL" SHALL BE KEPT TO A MINIMUM IN SHALLOW DEPRESSIONS. THESE AREAS SHALL BE GROUND TO A "BOWL" SHAPE AS DIRECTED BY THE RESIDENT ENGINEER AND PAID UNDER ITEM 580.16, "SURFACE PREPARATION FOR MEMBRANE".
 - B. GRIND SMOOTH ALL ROUGH AREAS, RIDGES, OR OTHER HIGH SPOTS UNDER THE ITEM 580.16, "SURFACE PREPARATION FOR MEMBRANE".

18. BECAUSE THE NEW DECK AND PAVEMENT ARE THICKER THAN THE EXISTING, THE PROPOSED FINISHED GRADE WILL BE 2"± HIGHER THAN THE EXISTING. CONSEQUENTLY IT IS NECESSARY TO TRANSITION THE NEW BRIDGE PAVEMENT INTO THE EXISTING APPROACH PAVEMENT. SEE SHEET 39 FOR THE APPROACH PAVEMENT TRANSITION DETAIL. THE COLD PLANING NECESSARY FOR SHAPING BRIDGE APPROACHES FOR FINAL PAVING SHALL BE PAID UNDER ITEM 210.10, "COLD PLANING BITUMINOUS PAVEMENT". A BUTT PAVEMENT JOINT IS REQUIRED. FEATHERING NEW PAVEMENT INTO EXISTING WILL NOT BE ALLOWED. EMULSIFIED ASPHALT SHALL BE APPLIED TO THE COLD PLANED BITUMINOUS CONCRETE PAVEMENT SURFACE AT THE RATE OF 0.015 GAL/S.Y. OR AS DIRECTED BY THE ENGINEER. EMULSIFIED ASPHALT SHALL ALSO BE APPLIED BETWEEN ALL LIFTS OF PAVEMENT, NOT JUST ON COLD PLANED AREAS. THE COST SHALL BE SUBSIDIARY TO THE ITEM 406.25, "BITUMINOUS CONCRETE PAVEMENT".
17. NO PAVING SHALL BE ALLOWED ON BRIDGES UNTIL BEARINGS HAVE BEEN RETROFIT OR REPLACED AS DESIGNATED IN THESE PLANS, AND ALL JACKING AND SHORING HAS BEEN COMPLETED AND REMOVED.
18. ITEM 514.10, "WATER REPELLENT" SHALL BE APPLIED TO ALL EXPOSED CONCRETE ON ALL BRIDGE SUPERSTRUCTURES EXCEPT THE BOTTOM OF THE DECK BETWEEN THE DRIP BEADS. IT SHALL ALSO BE APPLIED TO THE EXPOSED CONCRETE ON ALL ABUTMENTS, WINGWALLS, PIER CAPS AND COLUMNS.

19. NOTE NOT USED

20. NOTE NOT USED

21. THREE 12'-6" SECTIONS OF VT 14 ROADWAY GUARD RAIL IN FRONT OF PIERS 9 AND 10 HAVE SUSTAINED MINOR DAMAGE. THE CONTRACTOR SHALL REPAIR THE GUARD RAIL BY REPLACING THE 3 W-BEAM SECTIONS AND RELATED HARDWARE, AND BY STRAIGHTENING STEEL POSTS AS DIRECTED BY THE RESIDENT ENGINEER. THIS WORK SHALL BE PAID AS ITEM 621.77, "REPLACE GUARD RAIL BEAM UNIT".
22. ITEM 613.10, "STONE FILL, TYPE I" AND ITEM 613.11, "STONE FILL, TYPE II" SHALL BE USED TO REPAIR AREAS OF EMBANKMENT AND SLOPE EROSION AS ORDERED BY THE ENGINEER. DURING THE OCTOBER AND NOVEMBER 1996 PRELIMINARY INSPECTIONS, THE FOLLOWING LOCATIONS OF EMBANKMENT AND SLOPE EROSION WERE FOUND:
 - BRIDGE 115, IN FRONT OF ABUTMENT 1, EAST AND WEST ENDS - USE 613.10
 - BRIDGE 115, BELOW THE STONE FILL IN FRONT OF ABUTMENT 3 - USE 613.11
 - MINOR SLOPE EROSION IN FRONT OF ALL WINGWALLS - USE 613.10
23. A VOID UNDER THE CENTER OF THE ABUTMENT 3 CAP BEAM AT BRIDGE 115 (MEASURING APPROXIMATELY 3' WIDE BY 20' LONG BY 1' DEEP) AND UNDER THE STONE FILL IN FRONT OF THE ABUTMENT WAS DETECTED DURING THE OCTOBER 1996 PRELIMINARY INSPECTION. THE CONTRACTOR SHALL FILL THE VOID WITH ITEM 301.35, "SUBBASE OF DENSE GRADED CRUSHED STONE" AND SHALL REPAIR THE EMBANKMENT IN FRONT OF THE ABUTMENT AS CALLED FOR IN NOTE 22.
24. ITEM 204.20, "TRENCH EXCAVATION OF EARTH" SHALL BE USED FOR EXPLORATORY TRENCHING WHEN THE LOCATION OF BURIED UTILITIES IS IN DOUBT.
25. NOTE NOT USED.
26. ALL EXISTING STRUCTURAL STEEL ON BOTH BRIDGES THAT IS TO REMAIN SHALL BE 100% CLEANED AND PAINTED PER SUPPLEMENTAL SPECIFICATION SECTION 513, AND GREASED PER SECTION 513.06(c). PAINT COLOR SHALL BE GREEN AND SHALL CONFORM WITH FEDERAL STANDARD NO. 595, COLOR CHIP NO. 14062.
27. ITEM 203.35, "GRAVEL BACKFILL FOR SLOPE STABILIZATION" SHALL BE USED ON BRIDGE APPROACHES TO REGRADE AROUND GUARD RAIL POSTS AS ORDERED BY THE RESIDENT ENGINEER. ANY BERMS THAT HAVE DEVELOPED BEHIND GUARD RAIL AND AT THE TOPS OF SLOPES THAT PREVENT WATER FROM DRAINING AWAY FROM THE ROADWAY SHOULDER SHALL BE REMOVED AS DIRECTED BY THE ENGINEER WITHIN 100 FEET OF THE ENDS OF THE BRIDGE. THIS WORK SHALL BE PAID FOR USING ITEM 203.99, "SHOULDER BERM REMOVAL".
28. THE RESIDENT ENGINEER SHALL TAKE GIRDER PROFILES BEFORE DECK SLAB FORMS ARE SET AND SHEAR STUDS ARE INSTALLED TO PROVIDE INFORMATION FOR THE CONTRACTOR TO SET DECK SLAB FORM ELEVATIONS.

GENERAL NOTES

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, DATED 1980, AND ITS LATEST REVISIONS, AND THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 18TH EDITION, DATED 1996, AND ITS LATEST INTERIMS.
2. DESIGN CRITERIA:
 - DESIGN LIVE LOAD FOR EXISTING STRUCTURES: HS 20
 - DESIGN LIVE LOAD FOR PROPOSED REHABILITATION: HS 25
 - SEISMIC PERFORMANCE CATEGORY: A
3. NO SURVEY WAS TAKEN ON THIS PROJECT. INFORMATION SHEETS INCLUDED IN THE PLANS WERE TAKEN FROM ORIGINAL PLANS AND ORIGINAL SHOP DRAWINGS, AND ARE FOR INFORMATION ONLY. THE CONTRACTOR IS RESPONSIBLE FOR FIELD CHECKING ANY AND ALL DIMENSIONS AND ELEVATIONS APPLICABLE TO THIS WORK.
4. ALL DIMENSIONS ARE HORIZONTAL OR VERTICAL AND ARE GIVEN AT 88' F. UNLESS SHOWN OTHERWISE.
5. CONCRETE IN THE DECK SLABS SHALL BE ITEM 501.221, "CONCRETE, CLASS A GC/QA". CONCRETE IN THE ABUTMENT SEAT EXTENSIONS, BEARING ENCASUREMENTS AT FIXED PIERS, BEARING PEDESTALS AT EXPANSION PIERS, WINGWALL AND APPROACH SLAB MODIFICATIONS, AND SPLASH PADS SHALL BE ITEM 501.22, "CONCRETE, CLASS A". CONCRETE IN THE BRIDGE BARRIER CURBS SHALL BE ITEM 501.22, "CONCRETE, CLASS A (MOD.)", WHICH CONTAINS ADDITIVES TO IMPROVE THE DURABILITY OF THE CONCRETE. (SEE SPECIAL PROVISION). CONCRETE USED TO PATCH APPROACH SLABS AND SUBSTRUCTURES SHALL BE AS CALLED FOR IN THE APPLICABLE REPAIR NOTES. CONCRETE DESIGN STRENGTH:
 - CLASS A $f_c = 4000$ psi
 - CLASS B $f_c = 3500$ psi
6. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1" X 1" UNLESS OTHERWISE NOTED. WHENEVER NEW CONCRETE IS PLACED AGAINST EXISTING CONCRETE, THE EXISTING SURFACE SHALL BE CLEANED AS CALLED FOR IN SECTION 501.13.
7. NEW REINFORCING STEEL SHALL CONFORM TO AASHTO M31 (ASTM-A615), GRADE 60 AND SHALL BE EPOXY COATED WHERE INDICATED. REINFORCING STEEL SHALL BE DETAILED AND FABRICATED USING PROCEDURES AND TOLERANCES IN ACCORDANCE WITH APPLICABLE PUBLICATIONS OF THE CONCRETE REINFORCING STEEL INSTITUTE (CRSI). WHEN EPOXY COATED REINFORCING STEEL IS CUT THE UNCOATED ENDS SHALL BE REPAIRED WITH MATERIALS AND PROCEDURES APPROVED BY THE COATING MANUFACTURER. NO FLAME CUTTING OF REINFORCING STEEL WILL BE ALLOWED.
8. REINFORCING STEEL PLACEMENT TOLERANCES SHALL BE:
 - SPACING TOLERANCE: +/- 1"
 - CLEARANCE TOLERANCE: +/- 1/4"

APPROACH SLAB REPLACEMENT
REVISIONS 6/99

VANASSE HANGEN BRUSTLIN, INC.

STATE OF VERMONT AGENCY OF TRANSPORTATION			
Town Of	HARTFORD	Bridge No.	11N & 11S
Highway No.	1-89 NB & SB	Log Sta.	
		Surv. Sta.	
1-89 NB & SB OVER WHITE RIVER, VT 14 & NEOR			
GENERAL NOTES & CONSTRUCTION NOTES			
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Checked By	S.M. HODGDON	Date	9/98
		Bridge Design Supervisor	C.D. BAKER Date 6/99
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