

**GENERAL NOTES:**

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, DATED 2001, INCLUDING ITS LATEST REVISIONS AND THE AASHTO STANDARD SPECIFICATIONS FOR BRIDGES, DATED 2002 INCLUDING ITS LATEST REVISION.
2. DESIGN OF THE NEW CONCRETE DECK IS FOR HS-25 LIVE LOADING WITH NO ALLOWANCE FOR FUTURE PAVEMENT.
3. SIGNALIZED ALTERNATING ONE-WAY TRAFFIC SHALL BE MAINTAINED DURING PHASE CONSTRUCTION.
4. ITEM 529.20, "PARTIAL REMOVAL OF STRUCTURE" SHALL INCLUDE:
  - A. REMOVAL OF THE EXISTING CONCRETE BRIDGE DECK, INCLUDING CURBS, SIDEWALKS, BRIDGE RAILINGS AND CURTAIN WALLS. CARE SHALL BE TAKEN NOT TO DAMAGE THE EXISTING BEAMS. ANY DAMAGE TO THE BEAMS DUE TO REMOVAL OPERATIONS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
  - B. REMOVAL OF THE EXISTING BEARINGS.
  - C. REMOVAL OF PORTIONS OF THE EXISTING ABUTMENTS.
  - D. DISCONNECTING AND RECONNECTING DIAPHRAGMS, INCLUDING ALL MATERIALS AND LABOR.
5. ALL WORK SHALL BE DONE WITHIN THE EXISTING RIGHT-OF-WAY. SHOULD THE CONTRACTOR REQUIRE ANY ADDITIONAL RIGHT-OF-WAY, IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL EASEMENTS.
6. SHEAR STUD CONNECTORS SHALL BE INSTALLED ON ALL BEAMS.
7. ALL EXISTING BEARINGS SHALL BE REPLACED WITH FABRIC PAD TYPE BEARINGS.
8. (NOT USED)
9. THE CONTRACTOR SHALL TAKE CARE AND PRECAUTIONS TO ENSURE THAT NO DEBRIS FALLS INTO THE LAMOILLE RIVER. A BARRIER SUCH AS PLYWOOD OR NETTING ETC. SHALL BE INSTALLED PRIOR TO DEMOLITION OF THE DECK. PAYMENT FOR THIS WORK, INCLUDING INSTALLATION, MAINTENANCE AND REMOVAL SHALL BE MADE UNDER ITEM 527.11 "TRAFFIC PROTECTION FOR BRIDGE PROJECTS".
10. A. DIMENSIONS OF THE EXISTING STRUCTURE SHOWN ON THESE PLANS ARE FOR GENERAL REFERENCE ONLY. THEY HAVE BEEN TAKEN FROM ORIGINAL DESIGN DRAWINGS AND ARE NOT GUARANTEED. THE CONTRACTOR SHALL TAKE ALL FIELD MEASUREMENTS NECESSARY TO ENSURE PROPER FIT OF THE FINISHED WORK AND SHALL ASSUME FULL RESPONSIBILITY FOR THEIR ACCURACY. WHEN SHOP DRAWINGS BASED ON FIELD MEASUREMENTS ARE SUBMITTED FOR APPROVAL, FIELD MEASUREMENTS SHALL ALSO BE SUBMITTED FOR REFERENCE BY THE REVIEWER.
 

B. THERE SHALL BE NO CLAIM MADE BY THE CONTRACTOR FOR WORK PERTAINING TO SUCH MODIFICATIONS AS MAY BE REQUIRED DUE TO MINOR DIFFERENCES BETWEEN ACTUAL FIELD CONDITIONS AND THOSE SHOWN BY THE DETAILS AND DIMENSIONS ON THE PLANS.
11. ALL DIMENSIONS ARE HORIZONTAL OR VERTICAL AND ARE GIVEN AT 68 F, UNLESS OTHERWISE NOTED.
12. CONCRETE FOR THE DECK SLAB, CURB AND SIDEWALK SHALL BE CONCRETE, HIGH PERFORMANCE CLASS A. CONCRETE FOR THE APPROACH SLABS AND SUBSTRUCTURE MODIFICATIONS SHALL BE CONCRETE, HIGH PERFORMANCE, CLASS B.
13. WHENEVER NEW CONCRETE IS BEING PLACED AGAINST EXISTING CONCRETE, THE SURFACE OF THE EXISTING CONCRETE SHALL BE CLEANED AS SPECIFIED IN SUBSECTION 501.13 AND CONTINUOUSLY WATERED FOR 12 HRS. EXCESS WATER SHALL BE SWEEPED AWAY OR BLOWN OFF WITH COMPRESSED AIR PRIOR TO POURING NEW CONCRETE. THIS WORK SHALL BE INCIDENTAL TO THE CONCRETE ITEM BEING POURED.
14. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1" X 1", UNLESS OTHERWISE NOTED.
15. REINFORCING STEEL SHALL CONFORM TO AASHTO M31/M31M GRADE 60.
16. ALL REINFORCING STEEL IN THE CONCRETE DECK, CURB, APPROACH SLAB, SIDEWALK AND CURTAIN WALL SHALL BE EPOXY COATED AND PAID FOR UNDER THE ITEM 507.17. WHEN EPOXY COATED REINFORCING STEEL IS CUT, THE UNCOATED ENDS SHALL BE REPAIRED WITH MATERIALS AND PROCEDURES APPROVED BY THE COATING MANUFACTURER. FLAME CUTTING OF EPOXY COATED REINFORCING STEEL WILL NOT BE PERMITTED.
17. THE PHASE CONSTRUCTION SEQUENCE SHOWN IN THE PLANS IS A SUGGESTED METHOD. THE CONTRACTOR MAY PROPOSE A CLOSURE POUR OR OTHER METHOD FOR REVIEW & APPROVAL BY THE ENGINEER PRIOR TO THE START OF CONSTRUCTION.
18. THE MINIMUM COVER FOR REINFORCING STEEL (EXCEPT IN THE DECK) SHALL BE 2" ALONG BACK FACES OF WALLS AGAINST EARTH AND 3" ELSEWHERE.
19. REINFORCING STEEL PLACEMENT TOLERANCES SHALL BE AS FOLLOWS:
 

SPACING	+/- 1"
CLEARANCE	+/- 1/4"
20. AFTER THE EXISTING BRIDGE DECK HAS BEEN REMOVED AND NEW BEARINGS HAVE BEEN SET, ELEVATIONS SHALL BE TAKEN ALONG THE CENTERLINE OF THE BEAMS AS DIRECTED BY THE ENGINEER FOR USE IN DETERMINING THE HAUNCHES.
21. JOINTS AND SCORE MARKS IN THE CONCRETE SHALL BE CONSTRUCTED AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
22. THE KEY IN CONSTRUCTION JOINTS SHALL BE MONOLITHIC AND CONTINUOUS FOR THE FULL LENGTH OF THE JOINT.
23. WHEN POURING THE DECK, THE CONCRETE SHALL BE DEPOSITED PARALLEL TO THE CENTERLINE OF BEARING SO AS TO LOAD THE BEAMS EQUALLY.
24. ITEM 514.10, "WATER REPELLENT (MOD. - SILANE)", SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES INCLUDING ALL SUBSTRUCTURES EXCEPT THE UNDERSIDE OF THE BRIDGE DECK BETWEEN THE DRIP BEADS.
25. THE STRUCTURAL STEEL ON THIS PROJECT IS PAINTED WITH A MATERIAL WHICH MAY CONTAIN LEAD. ALL STRUCTURAL STEEL THAT IS TO REMAIN SHALL HAVE 100% OF THE EXISTING COATINGS REMOVED AS PER SUPPLEMENTAL SPECIFICATION SECTION 513. ALL STRUCTURAL STEEL (NEW AND EXISTING) IS TO BE PAINTED AND GREASED PER SUPPLEMENTAL SPECIFICATION SECTION 513. PAINT COLOR SHALL BE BLACK AND SHALL CONFORM WITH FEDERAL STANDARD NO. 595, COLOR CHIP NO. 27038.
26. FLEMING BRACKETS OR SIMILAR FALSE WORK SHALL BE DESIGNED BY THE CONTRACTOR, BUT SHALL BE LIMITED TO A MAXIMUM SPACING OF 4'-0". ANY BOLT HOLES IN THE WEBS SHALL BE FILLED WITH TYPE I BUTTON HEAD OR HEX HEAD BOLTS MEETING AASHTO M164, GALVANIZED.
27. THE FINISHED GRADE ACROSS THE BRIDGE WILL BE 1.5' +/- HIGHER THAN THE EXISTING GRADE. ITEM 210.10, "COLD PLANING BITUMINOUS CONCRETE", SHALL BE REQUIRED FOR SHAPING THE APPROACH PAVEMENT TRANSITION FROM THE EXISTING ROADWAY PAVEMENT TO THE PROPOSED BRIDGE PAVEMENT.
28. ABBREVIATIONS AND SYMBOLS USED ON THE PLANS FOLLOW INDUSTRY AND VERMONT AGENCY OF TRANSPORTATION (VTRANS) STANDARD PRACTICES, UNLESS OTHERWISE NOTED.
29. (NOT USED)
30. THE PAY ITEM 507.19, "MECHANICAL BAR CONNECTORS" REQUIRE THE FOLLOWING TYPES AND SIZES OF CONNECTORS:
 

12 - #5 BAR (EPOXY COATED) FOR SUPERSTRUCTURE
17 - #5 BAR (EPOXY COATED) FOR APPROACH SLAB NO.1
132 - #6 BAR (EPOXY COATED) FOR SUPERSTRUCTURE
31. THE CONTRACTOR SHALL BE RESPONSIBLE FOR GUARDING AND PROTECTING ALL OPEN EXCAVATIONS.
32. NEW STEEL DIAPHRAGMS AND CONNECTION PLATES SHALL BE AASHTO M270 GRADE 36 OR GRADE 50 - PAINTED, SEE NOTE 25.
33. ALL WELDING SHALL BE IN ACCORDANCE WITH AASHTO/AWS D1.5-BRIDGE WELDING CODE.
34. THE CONTRACTOR IS REQUIRED TO PERFORM A "DRY RUN" WITH THE SCREED MACHINE DEMONSTRATING THE CONTRACTOR'S ABILITY TO ACHIEVE THE BANKING TRANSITION IN SPANS 1 & 2.
35. ALL FIELD CONNECTIONS SHALL BE MADE USING 7/8 INCH DIAMETER, TYPE I BOLTS MEETING AASHTO M164, GALVANIZED. HOLES SHALL BE 15/16 INCH DIAMETER, UNLESS OTHERWISE NOTED. ANY CONNECTIONS NOT DESIGNED SHALL BE DETAILED BY THE FABRICATOR AND SUBMITTED TO THE STRUCTURES ENGINEER FOR APPROVAL.
36. ITEM 613.11 "STONE FILL, TYPE II" SHALL BE USED AT THE DISCRETION OF THE RESIDENT ENGINEER TO PREVENT EROSION BEHIND THE WINGWALLS AND AS INDICATED ON THE PLANS.
37. THE HISTORICAL PLAQUE MARKING THE ELEVATION OF THE 1927 FLOOD WATER SHALL BE SALVAGED AND REMOUNTED ON THE NEW RAILING IN A SIMILAR LOCATION AT THE SAME ELEVATION. ATTACHMENT DETAILS SHALL BE SUBMITTED WITH THE RAILING SHOP DRAWINGS FOR REVIEW. PAYMENT FOR REMOVING, AND REATTACHING THE PLAQUE AS WELL AS ALL ASSOCIATED HARDWARE SHALL BE MADE INCIDENTAL TO THE BRIDGE RAILING PAY ITEM.
38. FOLLOWING THE WET-CURE OF THE DECK POURED IN PHASE I, WATER REPELLENT (MOD. - SILANE) SHALL BE APPLIED OVER THE ENTIRE TOP SURFACE OF THE DECK IF THE CONSTRUCTION SCHEDULE IS SUCH THAT THE DECK WILL NOT BE PAVED AND TRAFFIC WILL BE ON THE NEW BRIDGE SURFACE FOR THE WINTER. SEE PROJECT SPECIAL PROVISIONS FOR APPLICABLE DRYING PERIOD FOLLOWING THE WET CURE BEFORE THE WATERPROOFING IS TO BE APPLIED.
39. REMOVAL OF EXISTING PAVEMENT MARKINGS DURING PHASED CONSTRUCTION WILL BE PAID FOR WITH ITEM #646.85, "REMOVAL OF EXISTING PAVEMENT MARKINGS".
40. AREAS OF PAVEMENT REMOVED AT THE INTERSECTION OF VT 15 AND T.H. 2 SHALL BE TOPSOILED, SEEDED AND MULCHED. PAYMENT FOR EXCAVATION WILL BE UNDER ITEM 203.28, "EXCAVATION OF SURFACES AND PAVEMENTS".

<b>STATE OF VERMONT AGENCY OF TRANSPORTATION</b>			
Town Of	CAMBRIDGE	Bridge No.	20
Highway No.	VT 15	Log Sta.	
		Surv. Sta.	
<b>VT 15 OVER LAMOILLE RIVER</b>			
<b>GENERAL NOTES</b>			
Designed By	B. W. ERNST	Drawn By	C. L. SZCZEPANSKI
Checked By	M. K. CHEVALIER	Date	11/3/2006
		Bridge Design Supervisor	R. R. WHITCOMB
PROJECT	CAMBRIDGE	PROJECT NO.	BHF 030-2(19)S
I.G.C. Info.			zb308gnl.dgn
Bridge Sheet No.		Sheet 24	of 68