

GENERAL NOTES

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO STATE OF VERMONT, AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, DATED 2006, AND ITS LATEST REVISIONS, AND THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, DATED 2002, AND ITS LATEST REVISIONS.
2. DESIGN CRITERIA:
 - SEISMIC PERFORMANCE CATEGORY: A
 - DESIGN LIVE LOAD FOR PROPOSED SUPERSTRUCTURE REHABILITATION: HS 25
3. ALL DIMENSIONS ARE HORIZONTAL OR VERTICAL AND ARE GIVEN AT 68 F.
4. THE CONTRACTOR IS RESPONSIBLE FOR FIELD CHECKING ANY AND ALL DIMENSIONS AND ELEVATIONS APPLICABLE TO THIS WORK PRIOR TO COMMENCING WORK OR ORDERING MATERIAL.
5. ALL WORK SHALL TAKE PLACE WITHIN THE EXISTING RIGHT-OF-WAY. NO PROVISIONS HAVE BEEN MADE FOR THE CONTRACTOR TO PERFORM WORK OR SET UP STAGING OUTSIDE THE EXISTING RIGHT-OF-WAY ON THE WEST END OF THE BRIDGE OR OUTSIDE OF THE SILT FENCE ON THE EAST END OF THE PROJECT AS DETAILED ON SHEET 6 OF 41 DUE TO ARCHAEOLOGICAL CONCERNS.
6. HALF WIDTH CONSTRUCTION PHASING SHALL BE USED AND ONE-WAY TRAFFIC WILL BE MAINTAINED WITH TEMPORARY TRAFFIC SIGNAL. NO TEMPORARY BRIDGE WILL BE ALLOWED DUE TO ARCHAEOLOGICAL CONCERNS.
7. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT SILTATION OR POLLUTION, ESPECIALLY THE DISCHARGE OF RAW CONCRETE INTO THE MISSISSQUOI RIVER AS DIRECTED BY THE RESIDENT ENGINEER AND STANDARD SPECIFICATIONS SECTION 105.
8. FLEMING BRACKETS OR SIMILAR FALSEWORK SHALL BE SPACED AS REQUIRED BY DESIGN UP TO A MAXIMUM OF 4 FEET.
9. EXISTING GUARDRAIL AND BRIDGE APPROACH RAIL SHALL BE REMOVED UNDER ITEM 621.80, REMOVAL AND DISPOSAL OF GUARDRAIL.
10. N/A
11. THE EXISTING PAVEMENT ON THE BRIDGE DECK SHALL BE REMOVED USING ITEM 529.10, REMOVAL OF BRIDGE PAVEMENT.
12. ITEM 529.20, PARTIAL REMOVAL OF STRUCTURE SHALL INCLUDE: REMOVAL OF THE EXISTING BRIDGE RAILING, CONCRETE BRIDGE DECK, SIDEWALK, EXISTING ELECTRICAL CONDUIT, AND CURB, APPROACH SLABS, AND ABUTMENTS, AS INDICATED BY THIS PLAN SET. CARE SHALL BE TAKEN NOT TO DAMAGE THE EXISTING BEAMS, ANY DAMAGE TO THE BEAMS DUE TO THE REMOVAL OPERATIONS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR'S METHODS FOR PARTIAL REMOVAL OF THE EXISTING STRUCTURE SHALL BE APPROVED BY THE ENGINEER PRIOR TO ANY REMOVAL WORK.
13. ITEM 613.10, STONE FILL, TYPE I SHALL BE USED TO REPAIR AREAS OF EMBANKMENT AND SLOPE EROSION AS ORDERED BY THE ENGINEER.
14. AFTER SUPERSTRUCTURE DECK CONCRETE HAS BEEN REMOVED, ELEVATIONS ALONG THE TOP OF THE BEAMS SHALL BE TAKEN AS DIRECTED BY THE ENGINEER, FOR USE IN DETERMINING CONCRETE HAUNCH DEPTHS.
15. BECAUSE THE NEW DECK AND PAVEMENT ARE THICKER THAN THE EXISTING, THE PROPOSED FINISHED GRADE WILL BE APPROXIMATELY 3 1/2" HIGHER THAN THE EXISTING. CONSEQUENTLY, IT IS NECESSARY TO TRANSITION THE NEW BRIDGE PAVEMENT INTO THE EXISTING APPROACH PAVEMENT. 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 FOR EACH LIFT. 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 0.025 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 PAID UNDER ITEM 404.65, EMULSIFIED ASPHALT.
16. ALL CONCRETE SHALL BE SPECIAL PROVISION (HIGH PERFORMANCE CONCRETE, CLASS A LOW CEMENT).
HIGH PERFORMANCE CONCRETE, CLASS A LOW CEMENT $f_c = 4000 \text{ psi}$
17. REINFORCING STEEL SHALL CONFORM TO AASHTO M 31, GRADE 420 (GRADE 60) AND SHALL BE DETAILED AND FABRICATED USING PROCEDURES AND TOLERANCES IN ACCORDANCE WITH APPLICABLE PUBLICATIONS OF THE CONCRETE REINFORCING STEEL INSTITUTE (CRSI).
18. ALL REINFORCING STEEL SHALL BE EPOXY COATED AND PAID FOR UNDER ITEM 507.17. WHEN EPOXY COATED REBAR IS CUT, THE UNCOATED ENDS SHALL BE REPAIRED WITH MATERIALS AND PROCEDURES APPROVED BY THE COATING MANUFACTURER. FLAME CUTTING OF EPOXY COATED REBAR WILL NOT BE PERMITTED.
19. ABUTMENT 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 REQUIRED FOR THIS INSPECTION. THE COST FOR WHICH SHALL BE INCIDENTAL TO ALL OTHER ITEMS IN THE CONTRACT.
20. MINIMUM COVER FOR REINFORCING STEEL (EXCEPT IN THE DECK) SHALL BE 2 INCHES ALONG BACK FACES OF WALLS AGAINST EARTH, AND 3 INCHES ELSEWHERE.
21. REINFORCING PLACEMENT TOLERANCES SHALL BE:
SPACING: +/- 1 INCH
CLEARANCE: +/- 1/4 INCH
22. WHEN POURING THE DECK, THE CONCRETE SHALL BE DEPOSITED PARALLEL TO THE CENTERLINE OF BEARING SO AS TO LOAD THE BEAMS EQUALLY. SEE THE DECK REINFORCING PLAN FOR DECK POUR SEQUENCE DETAILS.
23. THE KEY IN CONSTRUCTION JOINTS SHALL BE MONOLITHIC AND CONTINUOUS FOR THE FULL LENGTH OF THE JOINT.
24. JOINTS AND SCORE MARKS IN CONCRETE SHALL BE CONSTRUCTED AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
25. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1" X 1".
26. WATER REPELLENT SHALL BE APPLIED TO ALL NEW EXPOSED CONCRETE SURFACES EXCEPT THE UNDERSIDE OF THE DECK BETWEEN DRIP BEADS AND ALL EXISTING EXPOSED CONCRETE SUBSTRUCTURE SURFACES. ITEM 514.10, WATER REPELLENT, SILANE SHALL BE USED.
27. 100% OF ALL EXISTING STRUCTURAL STEEL PAINT COATING IS TO BE REMOVED AND THE STRUCTURAL STEEL SURFACES SHALL BE FIELD PREPARED FOR PAINTING PER SPECIAL PROVISION SECTION 900 - QC/QA CLEAN AND PAINT EXISTING STEEL STRUCTURES, BARE STEEL. PAYMENT FOR REMOVAL OF EXISTING PAINT COATING SHALL BE PAID UNDER ITEM 900.645, SPECIAL PROVISION (QC/QA CLEAN AND PAINT EXISTING STEEL STRUCTURES, BARE STEEL).
28. THE EXISTING BEARINGS TO BE REMOVED ON THIS PROJECT ARE PAINTED WITH A MATERIAL WHICH MAY CONTAIN LEAD. THE EXISTING STEEL NOT REUSED IS TO BECOME THE PROPERTY OF THE CONTRACTOR AND THE CONTRACTOR MAY DISPOSE OF OR RETAIN IT FOR FUTURE USE. THE CONTRACTOR WILL INFORM THE ENGINEER OF THEIR PLANS TO DISPOSE OF OR RETAIN THE STEEL PRIOR TO ITS REMOVAL. THE CONTRACTOR SHALL FOLLOW ALL APPLICABLE REGULATIONS WHEN HANDLING AND WORKING WITH THIS STEEL. THE CONTRACTOR SHALL INDEMNIFY AND HOLD THE STATE, ITS OFFICERS, AND EMPLOYEES HARMLESS CONCERNING THE CONTRACTOR'S USE OR DISPOSITION OF THE REMOVED STRUCTURAL STEEL.
29. ALL STEEL PAID UNDER THE ITEM 506.60, STRUCTURAL STEEL SHALL CONFORM TO AASHTO M 270, GRADE 345 (GRADE 50) PAINTED UNLESS NOTED OTHERWISE ON THE PLANS.
30. ALL EXISTING STRUCTURAL STEEL THAT IS TO REMAIN SHALL BE PAINTED PER SPECIAL PROVISION SECTION 900 - QC/QA CLEAN AND PAINT EXISTING STEEL STRUCTURES, BARE STEEL. FINAL COAT PAINT COLOR SHALL BE BLACK, FEDERAL STANDARD (595) COLOR CHIP 27038. GREASE COATING SHALL BE APPLIED TO BEAM ENDS AT EXPANSION JOINTS AND TO AREAS EXTENDING 3 FEET TO EACH SIDE OF SCUPPER LOCATIONS. THE GREASE COATING AS REQUIRED BY SPECIAL PROVISIONS SECTION 900 - QC/QA CLEAN AND PAINT EXISTING STEEL STRUCTURES, BARE STEEL, SHALL BE INCIDENTAL TO THE ITEM 900.645, SPECIAL PROVISION (QC/QA CLEAN AND PAINT EXISTING STEEL STRUCTURES, BARE STEEL). PAYMENT FOR FIELD PAINTING SHALL BE UNDER ITEM 900.645, SPECIAL PROVISION (QC/QA CLEAN AND PAINT EXISTING STEEL, STRUCTURES, BARE STEEL).
31. THE CONTRACTOR SHALL PROVIDE CONTAINMENT, COLLECTION, TEMPORARY STORAGE, TRANSPORTATION, AND DISPOSAL OF WASTE FROM LEAD PAINT REMOVAL OPERATIONS PER THE REQUIREMENTS OF SPECIAL PROVISION SECTION 900 - CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES. PAYMENT FOR THIS WORK SHALL BE UNDER ITEM 900.645, SPECIAL PROVISION (CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES).
32. ALL FIELD CONNECTIONS SHALL BE MADE USING NEW 7/8" INCH DIAMETER, AASHTO M 164 TYPE 1 GALVANIZED BOLTS. HOLES SHALL BE 1/16" INCH DIAMETER, UNLESS OTHERWISE NOTED. ANY CONNECTIONS NOT DESIGNATED SHALL BE DETAILED BY THE FABRICATOR AND SUBMITTED TO THE STRUCTURES ENGINEER FOR APPROVAL.
33. ANY BOLT HOLES IN THE WEB OF THE FASCIA BEAMS NOT OTHERWISE FILLED SHALL BE FILLED WITH NEW AASHTO M 164 TYPE 1 GALVANIZED BOLTS. THE BOLTS SHALL BE TIGHTENED IN ACCORDANCE WITH SUBSECTION 506.19. FASTENERS SHALL BE FIELD PAINTED AFTER INSTALLATION.
34. SHEAR STUDS SHALL BE INSTALLED ON ALL BEAMS AS INDICATED.
35. ONCE THE HAUNCHES HAVE BEEN CALCULATED, THE SHEAR STUDS WITHIN THE AREAS WITH GREATER THAN 4" OF HAUNCH MUST BE EITHER "PIGGY-BACKED" WITH ADDITIONAL SHEAR STUDS OR LONGER STUDS MUST BE USED. IN NO CASE SHALL THERE BE LESS THAN 2 1/2" OF COVER OVER THE TOP OF THE STUDS OR THE STUDS HAVE LESS THAN 2" OF EMBEDMENT INTO THE DECK. ITEM 508.15, SHEAR CONNECTORS SHALL BE CONSIDERED AS FULL COMPENSATION FOR ALL "PIGGY-BACKED" OR LONGER STUDS USED.
36. PAYMENT FOR MAINTAINING PORTIONS OF THE EXISTING STRUCTURE AND ROADWAY FOR ACCEPTABLE USE DURING PHASED CONSTRUCTION WILL BE MADE UNDER CONTRACT ITEM 527.10.
37. CURB AND SIDEWALK JOINTS SHALL BE SPACED AT 15'-0" MAXIMUM. CURB AND SIDEWALK POUR SEQUENCE SHALL BE IN ALTERNATING SECTIONS.
38. NEW DOWNSPOUTS AND SCUPPERS SHALL BE PAID FOR UNDER ITEM 506.60, STRUCTURAL STEEL.
39. FOR PG BINDER GRADE SEE SECTION 406 OF THE GENERAL SPECIAL PROVISIONS.
40. ALL PLAN REFERENCES TO "BITUMINOUS CONCRETE PAVEMENT (TYPE IV)" REFER TO "MEDIUM DUTY BITUMINOUS CONCRETE PAVEMENT (TYPE IV)".
41. THE APPROXIMATE AERIAL UTILITY RELOCATION BY VERMONT ELECTRIC COOPERATIVE, INC., COMCAST COMMUNICATIONS AND TELEPHONE OPERATING COMPANY OF VERMONT, L.L.C. (FAIRPOINT COMMUNICATIONS) WILL REPLACE THE EXISTING TWO UTILITY POLES AT EITHER END OF THE BRIDGE WITH NEW TEN FOOT LONGER UTILITY POLES IN APPROXIMATELY THE SAME LOCATION. THE ATTACHED UTILITY LINES WILL BE ADJUSTED ACCORDINGLY.
42. ALL BEARING DEVICES SHALL BE RETAINED AND 100% CLEANED AND METALIZED PER STANDARD SPECIFICATION SUBSECTION 506.15 (b).
43. ALL BEARING DEVICES SHALL BE METALIZED AS PER SUBSECTIONS 531.04(b), 506.14(b), AND 506.15(b) OF THE STANDARD SPECIFICATIONS. THE BEARINGS SHALL BE SEALED WITH AN APPROVED SEALANT (NOT PRIMER) PER SUBSECTION 531.04(b).
44. ALL BEARING DEVICES SHALL BE GREASED PER SUBSECTION 513.06(d).
45. CLEANING, METALIZING AND GREASING OF BEARINGS SHALL BE INCIDENTAL TO ITEM 900.620 SPECIAL PROVISION (REFURBISH EXISTING BEARING DEVICE ASSEMBLY).

STATE OF VERMONT AGENCY OF TRANSPORTATION			
Town Of	<i>BERKSHIRE</i>	Bridge No.	30
Highway No.	<i>VT 118</i>	Log Sta.	
		Surv. Sta.	
<i>VT 118 OVER MISSISSQUOI RIVER</i>			
GENERAL NOTES			
Designed By	<i>J Howe</i>	Drawn By	<i>J Davis</i>
Checked By	<i>R Hebert</i>	Date	<i>4/2/09</i>
		Bridge Design Supervisor	
PROJECT	<i>BERKSHIRE</i>	PROJECT NO.	<i>BHF 0283(9)S</i>
I.G.C. Info.			<i>ZC304GILDGN</i>
Bridge Sheet No.		Sheet	5 of 41