GENERAL

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO STATE OF VERMONT, AGENCY OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR CONSTRUCTION, DATED 2006, AND ITS LATEST REVISIONS; AND THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 5TH EDITION AND ITS LATEST REVISIONS.

2. ALL DIMENSIONS ARE HORIZONTAL OR VERTICAL, AND ARE GIVEN AT 68 DEGREES FAHRENHEIT, UNLESS NOTED OTHERWISE.

EARTHWORK

3. ITEM 529.15 "REMOVAL OF STRUCTURE" SHALL INCLUDE:

   - THE REMOVAL OF THE EXISTING SUPERSTRUCTURE AND ANY PORTION OF THE EXISTING ABUTMENTS AND PIERS NOT REMOVED UNDER STRUCTURE EXCAVATION OR UNCLASSIFIED CHANNEL EXCAVATION.
   - THE CONCRETE PIER CAP SHALL BE REMOVED AND TIMBER PILES PULLED OUT COMPLETELY OR CUT OFF AT LAKE BED ELEVATION.
   - THE TIMBER PILES AT THE ABUTMENTS SHALL BE REMOVED IN THEIR ENTIRETY. OTHERWISE, THERE WILL BE CONFLICTS DRIVING IN THE NEW HPILES AND THE EXISTING PILES AT EACH ABUTMENT.

4. THE CONTRACTOR'S ATTENTION IS DIRECTED TO SUBSECTION 301.06 REGARDING THE COMPACTION OF SUBBASE MATERIAL.

5. THE CONTRACTOR MAY SUBSTITUTE SUBBASE OF DENSE GRADED CRUSHED STONE FOR THE SAND BORROW SHOWN ON THE PLANS. IF PLACEMENT OF SUBBASE IS IN LIEU OF SAND BORROW, PLACE A GEOTEXTILE MEETING THE REQUIREMENTS OF SECTION 649 FOR "GEOTEXTILE FOR ROAD BED SEPARATOR" BETWEEN THE SUBGRADE AND THE SUBBASE MATERIAL. ANY SUBSTITUTED MATERIAL WILL BE PAID UNDER ITEM 203.31, "SAND BORROW". ALL COSTS ASSOCIATED WITH THE INSTALLATION OF THE GEOTEXTILE FOR ROADBED SEPARATOR SHALL BE INCIDENTAL TO ITEM 203.31, "SAND BORROW".

6. ABUTMENT STONE FILL: PLACE STONE FILL UNDER THE BRIDGE BEFORE SETTING THE STRUCTURAL STEEL.

CONCRETE

7. ITEM 514.10, "WATER REPELLENT, SILANE", SHALL BE APPLIED TO ALL EXPOSED CONCRETE ON THE BRIDGE SUPERSTRUCTURE AND SUBSTRUCTURE, WITH THE EXCEPTION OF THE BOTTOM OF THE DECK BETWEEN THE DRIP NOTCHES.

8. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1 INCH BY 1 INCH, UNLESS OTHERWISE NOTED. A ½ INCH RADIUS SHALL BE USED ON THE TOP INSIDE CORNER OF THE CURBS.

9. JOINTS AND SCORE MARKS IN CONCRETE SHALL BE CONSTRUCTED AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

10. ITEM 900.608, "SPECIAL PROVISION (HIGH PERFORMANCE CONCRETE, CLASS A LOW CEMENT)": USE FOR THE DECK, SIDEWALKS, CURB, AND INTEGRAL ABUTMENT CURTAIN WALL AND WING WALLS ABOVE THE PILE CAP CONSTRUCTION JOINT. ALL SUBSTRUCTURE BELOW THE BRIDGE SEATS (EXCLUDING DRILLED SHAFTS) AND THE APPROACH SLAB CONCRETE SHALL BE ITEM 501.34, "CONCRETE, HIGH PERFORMANCE CLASS B."

11. ALL REINFORCING STEEL SHALL BE DETAILED AND FABRICATED USING PROCEDURES AND TOLERANCES IN ACCORDANCE WITH APPLICABLE PUBLICATIONS OF THE "CONCRETE REINFORCING STEEL INSTITUTE".

12. ALL EPOXY REINFORCING STEEL TO BE CUT IN THE FIELD SHALL BE SAW CUT AND THE EXPOSED ENDS TREATED WITH AN APPROVED TWO-PART EPOXY REPAIR MATERIAL.

13. MINIMUM CLEAR COVER FOR REINFORCING STEEL SHALL BE AS FOLLOWS:

ALONG BACK FACES OF WALLS AGAINST EARTH	2 INCHES
ALONG TOP SURFACE OF DECK SLAB:	2.5 INCHES
ALONG BOTTOM SURFACE OF DECK SLAB:	1.5 INCHES
ELSEWHERE UNLESS OTHERWISE INDICATED:	3 INCHES

REINFORCEMENT STEEL PLACEMENT TOLERANCES SHALL BE:

SPACING = +/- 1 INCH
CLEARANCE = +/- ¼ INCH

STRUCTURAL STEEL

14. ALL NEW STRUCTURAL STEEL SHALL CONFORM TO AASHTO M 270M/M 270, GRADE 50. ALL NEW STRUCTURAL STEEL SHALL BE PAINTED BLACK (COLOR CHIP #27038).

15. CHARPY V-NOTCH TEST: TEST STRUCTURAL STEEL MEMBERS DESIGNATED "CVN" IN THE PLANS IN ACCORDANCE WITH SUBSECTION 714.01.

16. BOLTS FOR ALL BOLTED FIELD CONNECTIONS SHALL BE 7/8 INCH DIAMETER HIGH STRENGTH BOLTS IN 15/16 INCH DIAMETER HOLES UNLESS OTHERWISE NOTED.

17. CONNECTIONS NOT SHOWN IN THE PLANS SHALL BE DETAILED BY THE FABRICATOR IN THE FABRICATION DRAWINGS AND SUBMITTED TO THE RESIDENT ENGINEER FOR APPROVAL.

18. AFTER THE SUPERSTRUCTURE STEEL HAS BEEN ERECTED, ELEVATIONS ALONG THE TOP OF GIRDERS SHALL BE TAKEN UNDER DIRECTION OF THE RESIDENT ENGINEER FOR USE IN DETERMINING THE FINAL GRADE AND HAUNCH DEPTHS.

19. FLEMING BRACKETS OR SIMILAR FALSE WORK: SPACE FLEMING BRACKETS OR SIMILAR FALSEWORK AS REQUIRED BY DESIGN WITH A MAXIMUM SPACING OF 4'-0". THE DESIGN OF FALSEWORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

20. HOLES IN WEB: FILL ANY BOLT HOLES IN THE WEBS OF THE BEAMS NOT OTHERWISE FILLED WITH BUTTON HEAD OR HEX HEAD BOLTS MEETING AASHTO M164 TYPE I. TIGHTEN THE BOLTS IN ACCORDANCE WITH SUBSECTION 506.19 OF THE STANDARD SPECIFICATIONS.

H-PILES

21. ITEM 505.265 "STEEL PILING FOR INTEGRAL ABUTMENTS, HP 12 X84". REINFORCE THE DRIVING TIP ACCORDING TO SUBSECTION 505.04(E).

22. ITEM 505.45 "DYNAMIC PILE LOADING TEST". THE NOMINAL AXIAL PILE RESISTANCE FOR EACH PILE IS 401 KIPS.

23. A MINIMUM OF ONE DYNAMIC PILE TEST SHALL BE CONDUCTED PER ABUTMENT. MORE TESTS MAY BE REQUIRED BY THE RESIDENT ENGINEER.

24. FOR ESTIMATING PURPOSES, THE PILE TIP ELEVATIONS WERE ASSUMED AND ARE SHOWN ON THE BORING LOGS. THE ACTUAL IN PLACE LENGTHS MAY VARY.

TRAFFIC CONTROL

25. TRAFFIC SHALL BE MAINTAINED ON A DETOUR AROUND THE BRIDGE DURING CONSTRUCTION. THE TOWN SHALL BE NOTIFIED 2 WEEKS PRIOR TO CLOSURE.

26. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING, INSTALLING AND MAINTAING ALL ON AND OFF PROJECT SIGNS AS DETAILED IN THE DETOUR SIGN PACKAGE AND TRAFFIC CONTRTOL SHEETS INCLUDED IN THE PLANS. THIS WORK WILL BE INCIDENTAL TO ITEM 641.10, "TRAFFIC CONTROL".

27. ANY REMOVAL, COVERING AND/OR RESETTING OF EXISTING TRAFFIC SIGNS, AS DEEMED NECESSARY BY THE RESIDENT ENGINEER, WILL BE INCIDENTAL TO THE ITEM 641.10, "TRAFFIC CONTROL."

28. IF THE CITY OF NEWPORT AND/OR THE RESDIENT ENGINEER DETERMINE ADDITIONAL DETOUR/TRAFFIC SIGNS ARE NECESSARY TO KEEP THE TRAVELING PUBLIC SAFE AND MOVING THROUGHOUT THE DETOUR; THE CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN THOSE ADDITIONAL SIGNS. THIS WORK WILL BE INCIDENTAL TO TIEM 641.10, "TRAFFIC CONTROL".

29. ACCESS TO THE POULIN GRAIN DRIVE, BOND AUTO AND THE CONVENIENT STORE SHALL BE MAINTAINED. IF THE CONTRACTOR NEEDs TO CLOSE THE ACCESSES DUE TO THEIR WORK; THEY MUST CONTACT THE PROPRTY OWNERS AT LEAST ONE (1) WEEK IN ADVANCE OF THAT WORK.

30. THE RESIDENT ENGINEER, POULIN GRAIN MANAGEMENT AND THE CONTRACTOR WILL MEET TO DISCUSS THE GRAIN HAULING OPERATIONS AT POULIN GRAINS. BASED ON THIS DISCUSSION, THE CONTRACTOR WILL PROVIDE FLAGGERS DURING PEAK HOURS OF TRAFFIC TO ASSIST THE POULIN GRAIN TRUCKS EXIT THEIR FACILITY AND ENTER ONTO US 5, THIS WORK WILL BE PAID FOR UNDER THE FLAGGER ITEM.

DRILLED SHAFTS

31. PAYMENT FOR ITEM 900.640 "SPECIAL PROVISION (DRILLED SHAFT IN EARTH) (5 FT TO 5 FT – 6 IN DIA.)" SHALL EXTEND UP TO THE BOTTOM OF THE PIER CAP.

32. SPLICES OF LONGITUDINAL STEEL SHALL BE STAGGERED TO ENSURE MINIMUM SPACING BETWEEN BARS.BARS SHALL NOT BE SPLICED WITHIN +/-10FT OF THE BOTTOM OF THE STEEL CASING.

33. STEEL CASING SHALL BE 35KSI STEEL WITH A MINIMUM THICKNESS OF 0.625 INCH.

34. ALL CONCRETE FOR THE DRILLED SHAFTS SHALL BE SELF-CONSOLIDATING CONCRETE (SCC) AS SPECIFIED IN ITEM 900.640, "SPECIAL PROVISION (DRILLED SHAFT IN EARTH) (5 FT TO 5 FT – 6 IN DIA.)".

35. NO SPLICES SHALL OCCUR IN THE REBAR CAGE FROM ELEVATION 620.00 TO ELEVATION 630.00.

36. THE CONTRACTOR SHALL HIRE A PROFESSIONAL ENGINEER TO DETERMNE HOW MUCH EQUIPMENT (I.E. THE DRILLED SHAFT SUBCONTRACTOR'S EQUIPMENT, MATERIALS ETC.) CAN BE PLACED ON THE EXISTING BRIDGE SPANS DURING THE CONSTRUCTION OF THE SHAFT WITHOUT AFFECTING THE STABILITY OF THE EXISTING BRIDGE DURING THE DRILLING OF THE SHAFTS. THIS WORK SHALL BE INCIDENTAL TO ITEM 900.640, "SPECIAL PROVISION (DRILLED SHAFT IN EARTH) (5 FT TO 5 FT – 6 IN DIA.)".

MISCELLANEOUS

37. PAYMENT FOR CONDUIT ON THE BRIDGE SHALL BE INCLUDED IN THE PRICE FOR ITEM 900.608 "SPECIAL PROVISION (HIGH PERFORMANCE CONCRETE, CLASS A LOW CEMENT)".

38. IT IS SUGGESTED THAT THE NEW UTILITY POLES ARE IN PLACE BEFORE THE ENDS OF THE CONDUIT BANK ARE INSTALLED. THE CONTRACTOR SHALL CONTACT THE VERMONT ELECTRIC COOPERATIVE (VEC) TWO (2) WEEKS PRIOR TO NEEDING THE INSTALLATION OF THE NEW UTILITY POLES AT THE TERMINATING ENDS OF THE CONDUIT BANK.

39. THE EXISTING NO SWIMMING/NO DIVING SIGNS LOCATED ON THE UTILITY POLES ON THE BRIDGE SHALL BE GIVEN TO THE CITY ONCE REMOVED. THE RELOCATION OF THESE SIGNS IS THE RESPONSIBILITY OF THE CITY.

40. THE CONTRACTOR SHALL USE EXTREME CARE WHILE WORKING AROUND THE EXISTING WATER LINE AND WATER MANHOLE AT THE NORTH WEST END OF THE BRIDGE. ANY DAMAGE THAT IS INCURRED WILL BE REPAIRED/REPLACED AT THE CONTRACTOR'S EXPENSE.

41. THERE IS AN EXISTING SEWER LINE ON EACH END OF THE STRUCTURE AND THE LOCATION IS APPROXIMATE ON THE PLANS. USE EXTREME CARE WHILE WORKING IN THOSE AREAS. ANY DAMAGE INCURRED TO THE EXISTING SEWER LINE SHALL BE REPAIRED/REPLACED AT THE CONTRACTOR'S EXPENSE.

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DESIGNED BY: D. PETERSON	CHECKED BY: C. CARLSON
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