

**GENERAL**

- 1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2006, AND ITS LATEST REVISIONS, AND THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, FOURTH EDITION, DATED 2007, AND ITS LATEST REVISIONS.
- 2. BRIDGE IS DESIGNED FOR HL-93 LIVE LOAD WITH AN ALLOWANCE FOR FUTURE PAVEMENT.
- 3. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT SILTATION OR POLLUTION, IN PARTICULAR THE DISCHARGE OF RAW CONCRETE INTO WILLARD STREAM, AS DIRECTED BY THE RESIDENT ENGINEER AND STANDARD SPECIFICATIONS SECTION 105.
- 4. FOR INFORMATION REGARDING UTILITIES, SEE THE SPECIAL PROVISIONS.
- 5. ALL DIMENSIONS SHOWN IN THE PLANS ARE HORIZONTAL OR VERTICAL AND ARE GIVEN AT 68 DEGREES FAHRENHEIT, UNLESS NOTED OTHERWISE

**TRAFFIC CONTROL**

- 6. THE CONTRACTOR SHALL ERECT AND MAINTAIN ALL TEMPORARY ON AND OFF-PROJECT SIGNS AND BARRICADES AS DIRECTED BY THE RESIDENT ENGINEER. PAYMENT FOR THIS WORK SHALL BE CONSIDERED INCIDENTAL TO ITEM 641.10, "TRAFFIC CONTROL."
- 7. FULL ACCESS TO ALL SIDE ROADS AND DRIVES WITHIN THE PROJECT LIMITS SHALL BE MAINTAINED AT ALL TIMES.

**TEMPORARY BRIDGE**

- 8. DURING CONSTRUCTION, TRAFFIC SHALL BE MAINTAINED ON A TWO-WAY TEMPORARY BRIDGE CONSTRUCTED DOWNSTREAM OF THE EXISTING STRUCTURE. THE CONTRACTOR HAS THE OPTION OF EITHER RELOCATING THE EXISTING TEMPORARY BRIDGE OR INSTALLING A SEPARATE TEMPORARY BRIDGE TO MAINTAIN TRAFFIC. BID ALTERNATIVES HAVE BEEN INCLUDED IN THE PROPOSAL FOR THIS PURPOSE. CONSTRUCTION AND MAINTENANCE OF THE TEMPORARY BRIDGE AND ITS APPROACHES SHALL BE PAID FOR UNDER ITEM 900.645, SPECIAL PROVISION "RELOCATE AND REMOVE EXISTING TEMPORARY BRIDGE", OR ITEM 528.11, TWO-WAY TEMPORARY BRIDGE. THE APPROACHES TO THE TEMPORARY BRIDGE SHALL BE PAVED WITH 2 INCHES OF PAVEMENT.

**ALTERNATE ZA**

DURING CONSTRUCTION OF THE TEMPORARY BRIDGE ON THE TEMPORARY ALIGNMENT THE CONTRACTOR SHALL MAINTAIN TRAFFIC ON THE TEMPORARY MABEY CURRENTLY IN PLACE. NO ROAD CLOSURE WILL BE ALLOWED UNDER THIS ALTERNATE. DISASSEMBLY OF THE MABEY WILL TAKE PLACE AFTER THE CONTRACTORS TEMPORARY STRUCTURE IS IN PLACE AND TRAFFIC IS ON THE TEMPORARY STRUCTURE.

CONTRACT ITEM 529.15 SHALL INCLUDE THE REMOVAL AND SALVAGE OF THE EXISTING TEMPORARY BRIDGE AND REMOVAL OF THE EXISTING BRIDGE SUBSTRUCTURES NOT REMOVED UNDER CONTRACT ITEMS 203.27 OR 208.30.

**ALTERNATE ZB**

VT 102 WILL BE CLOSED FOR A MAXIMUM DURATION OF TWO WEEKS WHILE THE EXISTING TEMPORARY BRIDGE IS RELOCATED TO THE TEMPORARY ALIGNMENT. A TEMPORARY DETOUR ROUTE IS SHOWN ON THE TRAFFIC CONTROL SHEET AND WILL BE PAID FOR UNDER ITEM 641.10, "TRAFFIC CONTROL".

THE CONTRACTOR SHALL NOTIFY THE TOWN A MINIMUM OF TWO (2) WEEKS PRIOR TO CLOSING THE ROAD. THE CONTRACTOR WILL ALSO NOTIFY DISTRICT 9 DTA DALE PERRON @ (802-334-7934) A MINIMUM OF TWO WEEKS PRIOR. AS WELL AS NH DISTRICT ENGINEER @ (603-788-4641).

WHEN CONSTRUCTION OF THE NEW BRIDGE IS COMPLETE, THE TEMPORARY MABEY BRIDGE WILL BE REMOVED, DISASSEMBLED, CLEANED, SORTED, BUNDLED, AND TRANSPORTED TO THE MENDON STATE GARAGE. PAYMENT FOR THIS WORK WILL BE MADE UNDER ITEM 900.645 SPECIAL PROVISION "RELOCATE AND REMOVE EXISTING TEMPORARY BRIDGE". SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

CONTRACT ITEM 529.20 SHALL INCLUDE THE REMOVAL OF THE EXISTING BRIDGE SUBSTRUCTURES OTHERWISE NOT REMOVED UNDER CONTRACT ITEMS 203.27 OR 208.30.

**EARTHWORK AND RELATED ITEMS**

- 9. THE FOLLOWING TABLE OF ALLOWABLE STRESSES AND WEIGHTS APPLY TO THESE PLANS FOR DESIGN PURPOSES:

SPECIAL PROVISION (HIGH PERFORMANCE CONCRETE, CLASS A LOW CEMENT) f'c = 4000 PSI fc=1600PSI

HIGH PERFORMANCE CONCRETE, CLASS B f'c = 3500 PSI fc = 1400 PSI

REINFORCING STEEL: Ft = 24,000 GRADE 60

SOIL: UNIT WEIGHT 140 PCF

SPECIAL PROVISION(LIGHTWEIGHT BACKFILL): UNIT WEIGHT 48 PCF

- 10. TEMPORARY CONSTRUCTION FILLS WITHIN THE WATERCOURSE FOR ANY PURPOSE SHALL CONSIST OF CLEAN STONE FILL ONLY. NO OTHER FILLING IN THE STREAM SHALL OCCUR WITHOUT THE APPROVAL OF THE STREAM ALTERATION ENGINEER.

- 11. THE CONTRACTOR'S ATTENTION IS DIRECTED TO SUBSECTION 306.06 REGARDING THE COMPACTION OF SUBBASE MATERIAL FOR THIS PROJECT.

- 12. COFFERDAMS ARE REQUIRED FOR THE CONSTRUCTION OF THE NEW SUBSTRUCTURE UNITS. PAYMENT FOR COFFERDAM EXCAVATION WILL BE MADE ONLY FOR SUCH EXCAVATION WITHIN THE LIMITS SHOWN ON THE PLANS.

- 13. THE "STONE FILL, TYPE III" UNDER THE BRIDGE AS SHOWN IN THE PLANS SHALL BE PLACED BEFORE THE NEW STEEL GIRDERS ARE SET.

- 14. A VEHICLE TRACKING PAD SHALL BE USED FOR EROSION CONTROL AT THE DISCRETION OF THE RESIDENT ENGINEER. PAYMENT FOR MATERIAL AND PLACEMENT SHALL BE MADE UNDER ITEM 653.35 VEHICLE TRACKING PAD.

- 15. THE HEIGHT OF FILL BEHIND ABUTMENTS WILL BE LIMITED TO THE BRIDGE SEAT ELEVATION UNTIL THE DECK HAS BEEN POURED AND THE CURING PERIOD IS UP.

- 16. DRY HYDRANT AND ALL NEEDED MATERIALS WILL BE PAID UNDER 900.645 SPECIAL PROVISION (DRY HYDRANT) DETAILS ARE SHOWN ON SHEET 50. CONTRACTOR SHALL NOTIFY VERN CRAWFORD @ (802-266-8277) A MINIMUM OF ONE WEEK PRIOR TO INSTALLATION OF THE DRY HYDRANT.

- 17. AFTER DECK HAS BEEN POURED AND CURED BEAMS AT ABUTMENT 1 WILL BE JACKED UP TO ALLOW THE ELASTOMERIC BEARINGS TO RETURN TO THEIR ORIGINAL POSITION BEFORE WELDING THE SOLE PLATES TO THE BOTTOM FLANGE. FINAL POSITION OF THE VERTICAL BEARING FACES WILL BE STRAIGHT. PAYMENT FOR THIS WORK WILL BE INCIDENTAL TO BEARING ITEM. NO BEARING WILL BE JACKED MORE THAN 1/2" FROM ITS ORIGINAL POSITION.

**STRUCTURAL STEEL**

- 18. UNLESS OTHERWISE NOTED, ALL NEW STRUCTURAL STEEL SHALL CONFORM TO AASHTO M 270M/M 270 GRADE 50 AND SHALL BE PAID FOR UNDER ITEM 506.50, "STRUCTURAL STEEL ROLLED BEAM", COLOR CHIP NO. 20059, BROWN.

- 19. STRUCTURAL STEEL MEMBERS DESIGNATED "CVN" IN THE PLANS SHALL BE CHARPY V-NOTCH TESTED IN ACCORDANCE WITH SUBSECTION 714.01 OF THE STANDARD SPECIFICATIONS.

- 20. ALL FIELD CONNECTIONS SHALL BE MADE USING 7/8 INCH BOLTS IN 15/16 INCH HOLES PER SECTION 506. ANY CONNECTIONS NOT DESIGNATED SHALL BE DETAILED BY THE FABRICATOR AND SUBMITTED TO THE STRUCTURES ENGINEER FOR APPROVAL.

- 21. AFTER SUPERSTRUCTURE STEEL HAS BEEN ERECTED, ELEVATIONS ALONG THE TOP OF THE BEAMS SHALL BE TAKEN AS DIRECTED BY THE RESIDENT ENGINEER FOR USE IN DETERMINING FINISHED GRADES.

- 22. FLEMING BRACKETS OR SIMILAR FALSEWORK SHALL BE SPACED AS REQUIRED BY DESIGN, BUT SHALL BE LIMITED TO A MAXIMUM SPACING OF 4 FEET. THE DESIGN OF FALSEWORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

- 23. ANY BOLT HOLES IN THE WEBS OF FASCIA BEAMS NOT OTHERWISE FILLED SHALL BE FILLED WITH BUTTON HEAD OR HEX HEAD BOLTS. THE BOLTS SHALL BE TIGHTENED IN ACCORDANCE WITH SUBSECTION 506.19 OF THE STANDARD SPECIFICATIONS.

- 24. ALL WELDING SHALL CONFORM TO THE PROVISIONS OF SUBSECTION 506.10.

**CONCRETE**

- 25. SUBSTRUCTURE CONCRETE SHALL BE HIGH PERFORMANCE CLASS B AND SHALL BE PAID FOR UNDER ITEM 501.34, "CONCRETE, HIGH PERFORMANCE CLASS B". ITEM 900.608 "SPECIAL PROVISION (HIGH PERFORMANCE CONCRETE, CLASS A LOW CEMENT)" SHALL BE USED TO PAY FOR THE DECK, THE CURBS, AND THE APPROACH SLABS.

- 26. SURFACES OF BRIDGE SEATS UNDER BEARING DEVICES SHALL BE LEVEL. ALL OTHER AREAS OF BRIDGE SEATS SHALL BE SLOPED 1/2 INCH PER FOOT. THE ENTIRE BRIDGE SEAT SURFACE SHALL BE GIVEN A FLOAT FINISH.

- 27. CONCRETE PORTIONS OF ABUTMENTS AND WINGWALLS ABOVE ADJACENT BRIDGE SEAT ELEVATIONS SHALL NOT BE PLACED UNTIL FINISH GRADES HAVE BEEN DETERMINED BY THE RESIDENT ENGINEER.

- 28. THE DECK IS TO BE POURED IN ONE CONTINUOUS POUR WITH A MAXIMUM DURATION OF EIGHT HOURS. IF CIRCUMSTANCES BEYOND THE CONTRACTOR'S CONTROL PREVENT THIS FROM BEING ACCOMPLISHED, A TRANSVERSE CONSTRUCTION JOINT SHALL BE USED BETWEEN ADJACENT POURS. A MINIMUM 96 HOUR DELAY BETWEEN ADJACENT POURS SHALL BE OBSERVED.

- 29. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1 INCH X 1 INCH.

- 30. WATER REPELLENT, SILANE, SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES, EXCEPT THE UNDERSIDE OF THE DECK BETWEEN DRIP NOTCHES.

- 31. JOINTS AND SCORE MARKS IN CONCRETE SHALL BE CONSTRUCTED AS SHOWN IN THE PLANS OR AS DIRECTED BY THE RESIDENT ENGINEER.

- 32. THE DECK AND APPROACH SLABS WILL HAVE A LONGITUDINAL GROOVED FINISH. THIS WORK WILL BE PAID FOR UNDER ITEM 900.675 "SPECIAL PROVISION (LONGITUDINAL DECK GROOVING)"

- 33. THE KEY IN CONCRETE CONSTRUCTION JOINTS SHALL BE MONOLITHIC AND CONTINUOUS FOR THE FULL LENGTH OF THE JOINT. UPWARD KEYS SHALL BE PLACED INTEGRALLY WITH THE CONCRETE BELOW THE JOINT.

- 34. ALL DECK, CURB, CURTAINWALL, AND APPROACH SLAB REINFORCING STEEL SHALL BE EPOXY COATED AND PAID FOR UNDER ITEM 507.17, "EPOXY COATED REINFORCING STEEL". CUTTING AND REPAIRING DAMAGED AREAS OF COATED REINFORCING STEEL SHALL BE PERFORMED IN ACCORDANCE WITH SUBSECTION 507.04 OF THE STANDARD SPECIFICATIONS.

- 35. MINIMUM COVER FOR REINFORCING STEEL SHALL BE AS INDICATED IN THE PLANS.

- 36. PVC WATERSTOPS TO BE USED ON ALL VERTICAL AND HORIZONTAL CONSTRUCTION JOINTS AND THE BOTTOM OF THE CURTAIN WALL AS SHOWN IN PLANS. PAYMENT WILL BE MADE INCIDENTAL TO THE ADJACENT CONCRETE.

- 37. REINFORCING STEEL PLACEMENT TOLERANCES SHALL BE:  
 SPACING: +/- 1 INCH  
 CLEARANCE: +/- 1/4 INCH

**GENERAL NOTES**

PROJECT NAME:	CANAAN
PROJECT NUMBER:	ER ST 0271 (16)
FILE NAME: structures/x04c098exoel.dg	PLOT DATE: 18-AUG-2008
PROJECT LEADER: M. ENANS-MONGEON	DRAWN BY: L. DUQUETTE
DESIGNED BY: S. SCRIBNER	CHECKED BY: S. SCRIBNER
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