

# GENERAL NOTES

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO STATE OF VERMONT, AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, DATED 2001, AND ITS LATEST REVISIONS AND THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, DATED 1996 AND ITS LATEST REVISIONS.

2. THE BRIDGE DESIGN MEETS HS-20-44 LIVE LOAD (POSTED RATING).

3. THIS PROJECT HAS BEEN PERMITTED WITH NO PROVISIONS FOR ANY WORK BELOW ORDINARY HIGH WATER. IF THE CONTRACTOR DOES PERFORM ANY WORK BELOW ORDINARY HIGH WATER, THE CONTRACTOR MUST OBTAIN ANY PERMITS REQUIRED.

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

5. (a) EXISTING DIMENSIONS: DIMENSIONS AND ANGLES OF THE EXISTING STRUCTURE SHOWN ON THESE PLANS ARE FOR GENERAL REFERENCE ONLY. THEY HAVE BEEN TAKEN FROM LIMITED FIELD INVESTIGATION AND ARE NOT GUARANTEED. THE CONTRACTOR SHALL VERIFY THE EXISTING MEASUREMENTS PRIOR TO STARTING THE WORK. THE CONTRACTOR SHALL TAKE ALL FIELD MEASUREMENTS NECESSARY TO ASSURE 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, THE FIELD MEASUREMENTS SHALL ALSO BE SUBMITTED FOR REFERENCE BY THE REVIEWER. NO EXTRA PAYMENT WILL BE MADE FOR OBTAINING THE NECESSARY MEASUREMENTS.

(b) THESE PLANS WERE PREPARED BASED ON INFORMATION OBTAINED FROM REFERENCE PLAN SHEETS 65 - 73. THE RESIDENT ENGINEER MAY BE REQUIRED TO MAKE MINOR CHANGES TO THE DIMENSIONS SHOWN ON THE PLANS TO FIT THE ACTUAL FIELD CONDITIONS.

6. TRAFFIC SHALL BE MAINTAINED ON RAILROAD STREET, RIVER ROAD, AND RIVER STREET DURING THE CONSTRUCTION OF THIS PROJECT UNDER THE ITEM, "ONE WAY TEMPORARY BRIDGE (3360 SF) (MOD.)." THE ITEM 529.10 "ONE WAY TEMPORARY BRIDGE (3360 SF) (MOD.)" IS MODIFIED, BECAUSE THE MINIMUM WIDTH OF THE TEMPORARY BRIDGE IS 20 FEET FACE OF RAIL TO FACE OF WALKWAY INSTEAD OF 14'-9". THE TEMPORARY BRIDGE WIDTH WAS MODIFIED TO ACCOMMODATE TURNING TRUCK TRAFFIC.

7. FULL ACCESS TO THE DRIVES WITHIN THE PROJECT SHALL BE MAINTAINED AT ALL TIMES DURING THE PROJECT. IF THE CONTRACTOR, MUST TEMPORARILY RESTRICT ACCESS TO THE DRIVES, THEY WILL NOTIFY THE PROPERTY OWNERS IN ADVANCE. THIS WORK WILL BE PAID FOR UNDER THE ITEM, "ONE WAY TEMPORARY BRIDGE (3360 SF) (MOD)"

8. ITEM 529.20 "PARTIAL REMOVAL OF STRUCTURES" SHALL INCLUDE REMOVAL AND DISPOSAL OF THE FOLLOWING:

- CURBS AND CONCRETE BRIDGE DECK
- EXISTING LATERAL BRACING
- EXISTING FLOOR BEAMS AND STRINGERS
- ANY ANGLES, PLATES, OR STRUCTURAL SECTIONS NECESSARY TO MAKE SPECIFIED REPAIRS
- EXISTING BRIDGE SIDEWALK ELEMENTS (DECK, ANGLES, PLATES, ETC.)
- VERTICAL AND DIAGONAL TRUSS MEMBERS DETAILED ON SHEETS 26 AND 27

9. THE TERMINAL CONNECTOR SHOWN ON SHEETS 39 TO 41 USED TO CONNECT THE HEAVY DUTY STEEL BEAM GUARD RAIL TO THE BRIDGE RAILING ON THE TRUSS ON THE SIDEWALK SHALL BE PAID FOR UNDER THE ITEM 621.53 "TERMINAL END CONNECTOR FOR BEAM GUARD RAIL." THESE SHALL BE PAINTED BLACK AS PER SUPPLEMENTAL SPECIFICATION 513.

## CONCRETE NOTES

10. MINIMUM COVER FOR REINFORCING STEEL SHALL BE AS DETAILED IN THE PROJECT PLANS.

11. ITEM 529.25, "REMOVAL OF CONCRETE OR MASONRY", SHALL INCLUDE THE REMOVAL AND DISPOSAL OF:  
-THE EXISTING CONCRETE AT EACH ABUTMENT TO THE LIMITS SHOWN IN THE PROJECT PLANS.

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

13. REINFORCING PLACEMENT TOLERANCES SHALL BE:  
SPACING: +/- 1"  
CLEARANCE: +/- 1/4"

14. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1" BY 1".

15. WATER REPELLENT (MOD.-SILANE) SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES EXCEPT THE UNDERSIDE OF THE DECK BETWEEN DRIP NOTCHES.

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

17. THE KEY IN CONCRETE CONSTRUCTION JOINTS SHALL BE CONTINUOUS FOR THE FULL LENGTH OF THE JOINT. ANY UPWARD KEY SHALL BE PLACED INTEGRALLY WITH THE CONCRETE BELOW THE JOINT.

18. BRIDGE DECK, BRIDGE SIDEWALK AND BRIDGE CURB CONCRETE SHALL BE "CONCRETE, HIGH PERFORMANCE CLASS A." ALL OTHER CONCRETE SHALL BE "CONCRETE, HIGH PERFORMANCE CLASS B" UNLESS NOTED OTHERWISE.

19. ALL REINFORCING STEEL IN THE CONCRETE DECK, BRIDGE SIDEWALK, BRIDGE CURB AND APPROACH SLABS SHALL BE EPOXY COATED AND PAID UNDER THE ITEM 507.17. WHEN EPOXY COATED REINFORCING STEEL IS CUT, THE DAMAGED ENDS SHALL BE REPAIRED WITH MATERIALS AND PROCEDURES APPROVED BY THE COATING MANUFACTURER. FLAME CUTTING OF EPOXY COATED REINFORCING STEEL WILL NOT BE PERMITTED.

20. THE DECK IS TO BE POURED IN ONE CONTINUOUS POUR WITH A MAXIMUM DURATION OF EIGHT HOURS. IF CIRCUMSTANCES BEYOND THE CONTROL OF THE CONTRACTOR PREVENT THIS FROM BEING ACCOMPLISHED, A CONSTRUCTION JOINT SHALL BE USED. A NINETY-SIX HOUR DELAY BETWEEN THE COMPLETION OF ONE DAYS POUR AND THE BEGINNING OF ANY OTHER POUR SHALL BE OBSERVED.

## STRUCTURAL STEEL NOTES

21. ALL STRUCTURAL STEEL PAID FOR UNDER THE ITEM 506.50 "STRUCTURAL STEEL (ROLLED BEAM)", 506.55 "STRUCTURAL STEEL (PLATE GIRDER) AND 506.60 "STRUCTURAL STEEL" SHALL CONFORM TO AASHTO M-270 GRADE 50.

22. ITEM 506.50 "STRUCTURAL STEEL (ROLLED BEAM)," SHALL INCLUDE THE FOLLOWING:

- REPLACEMENT OF FLOOR BEAMS WITH W27X114 ROLLED BEAMS AS DETAILED ON SHEET 23.
- REPLACEMENT OF STRINGERS WITH W18X50 ROLLED BEAMS AS DETAILED ON SHEET 24.
- ALL ANGLES USED FOR CONNECTIONS BETWEEN FLOOR BEAMS AND STRINGERS AND FLOOR BEAMS AND TRUSS MEMBERS AS DETAILED ON SHEET 25.
- REPLACEMENT OF LATERAL BRACING AS SHOWN ON SHEET 24.
- SIDEWALK STRINGERS, STRUCTURAL TEES, GUSSET PLATES, CHANNEL AND SUPPORT ANGLES AS DETAILED ON SHEET 36.
- BRIDGE RAILING (THE ANGLES AND CHANNEL THAT MAKE UP THE BRIDGE RAILING) AS DETAILED ON SHEETS 41 AND 42.
- W8X31 ROLLED BEAMS USED FOR WATERLINE ATTACHMENT (INCLUDING W7X13'S, ANGLES, AND SPLICE PLATES AS DETAILED ON SHEET 51.)

23. (a) ITEM 506.55 "STRUCTURAL STEEL (PLATE GIRDER)," SHALL INCLUDE THE FOLLOWING:  
-VERTICAL AND DIAGONAL TRUSS MEMBERS THAT ARE REPLACED AS DETAILED ON SHEETS 26 AND 27.

(b) AN ADDITIONAL 2000 POUNDS OF STRUCTURAL STEEL (PLATE GIRDER) IS INCLUDED IN THIS PAY ITEM FOR ANY ADDITIONAL DIAGONALS OR VERTICALS THAT REQUIRE REPLACEMENT.

24. (a) ITEM 506.60 "STRUCTURAL STEEL," SHALL INCLUDE ALL NEW STEEL NOT OTHERWISE DESIGNATED, INCLUDING BUT NOT LIMITED TO:

- DOWNSPOUT AS DETAILED ON SHEET 35.
- NEW SCUPPERS DETAILED ON SHEET 21.
- REPAIR AND REPLACEMENT OF PEDESTRIAN HAND RAILING PIECES DETAILED ON SHEETS 35 - 38. (SEE NOTES ON SHEET 38 FOR MORE INFORMATION.)
- NEW GUSSET PLATES DETAILED ON SHEETS 23 AND 29.
- NEW LATTICE BARS SHOWN ON SHEET 29.
- ANCHORAGE PLATES AS DETAILED ON SHEET 41.

(b) 1500 POUNDS OF ADDITIONAL PAINTED STRUCTURAL STEEL HAVE BEEN INCLUDED FOR ANY UNIDENTIFIED TRUSS REPAIRS. AFTER INITIAL REMOVAL OF TRUSS MEMBERS IDENTIFIED IN THE PLANS FOR REPLACEMENT AND CLEANING OF THE AREAS OF THE REMAINING MEMBERS NOW EXPOSED, CONTACT THE VTRANS STRUCTURES PROJECT MANAGER. AN ENGINEER FROM VTRANS STRUCTURES WILL JOINTLY INSPECT THE TRUSS WITH THE RESIDENT ENGINEER TO DETERMINE IF ADDITIONAL TRUSS REPAIRS OR TRUSS MEMBER REPLACEMENT ARE REQUIRED. PAYMENT OF ANY OF THIS ADDITIONAL 1500 POUNDS QUANTITY WILL ONLY BE MADE FOR REPAIRS DIRECTED BY THE ENGINEER.

25. ALL NEW STRUCTURAL STEEL ELEMENTS SUBJECT TO TENSION SHALL BE CHARPY V-NOTCH TESTED. THESE MEMBERS ARE DESIGNATED BY (CVN) IN THE APPLICABLE DETAILS.

26. EXISTING RIVETS THAT ARE REMOVED FOR REPAIRS NOT DETAILED ON THE PLANS SHALL BE REPLACED WITH 7/8" DIAMETER DOME-HEADED HIGH STRENGTH BOLTS MEETING AASHTO M-164 TYPE I.

27. CONNECTIONS NOT DETAILED SHALL BE DETAILED BY THE FABRICATOR AND SUBMITTED TO THE STRUCTURES ENGINEER FOR APPROVAL.

28. ALL BOLTS SHALL BE COATED IN ACCORDANCE WITH AASHTO M-298 CLASS 50, TYPE I. BOLTS SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO OTHER STRUCTURAL STEEL ITEMS.

29. THE CONTRACTOR SHALL INSTALL THE SIDEWALK BRACKETS AFTER THE EXISTING DECK HAS BEEN REMOVED AND BEFORE THE NEW DECK IS PLACED. THE CONTRACTOR MAY ELECT TO DO THIS WORK AT THE SAME TIME AS INSTALLING THE FLOOR BEAMS PROVIDED THE FLOOR BEAM IS INSTALLED FIRST AND IS FULLY TIGHTENED PRIOR TO ANY REMOVAL OF RIVETS TO INSTALL THE SIDEWALK BRACKET.

30. THE EXISTING STRUCTURAL STEEL ON THIS PROJECT WAS PAINTED WITH A MATERIAL WHICH MAY CONTAIN LEAD. THE REMOVED STRUCTURAL STEEL IS TO BECOME THE PROPERTY OF THE CONTRACTOR. THE CONTRACTOR SHALL INDEMNIFY AND HOLD THE STATE, ITS OFFICERS, AND EMPLOYEES HARMLESS CONCERNING THE CONTRACTOR'S USE OR DISPOSITION OF THE STRUCTURAL STEEL.

31. THE EXISTING TRUSSES SHALL BE SHORED DURING THE REPAIR OF THE VERTICAL AND DIAGONAL MEMBERS AS WELL AS GUSSET PLATE REPLACEMENTS. THIS WORK IS PAID FOR UNDER THE ITEM 502.10, "SHORING SUPERSTRUCTURE."

## PAINTING NOTES

32. THE SURFACE PREPARATION FOR THE REHABILITATION OF THE EXISTING STEEL SHALL INCLUDE 100% REMOVAL OF THE EXISTING PAINT SYSTEM.

33. THE FAYING SURFACES ON THE TRUSS WHERE THE NEW FLOOR BEAMS AND SIDEWALK BRACKETS CONNECT TO THE EXISTING TRUSS SHALL BE BLAST CLEANED AND PRIMED IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 513, PRIOR TO THE INSTALLATION OF THE NEW STEEL ELEMENTS. THE TRUSS FAYING SURFACE AND ALL OTHER FAYING SURFACES SHALL MEET THE CLASS "B" SLIP COEFFICIENT IN THE "AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES." THIS IS TRUE FOR THOSE LOCATIONS WHERE NEW STEEL IS TO BE ATTACHED TO THE EXISTING TRUSS.

34. THE COLOR OF THE FINAL COAT OF PAINT SHALL BE BLACK, COLOR CHIP #27038.

35. AFTER THE FINAL COAT OF PAINT HAS BEEN APPLIED, AND HAS THOROUGHLY CURED, THE FOLLOWING SHALL BE GREASED PER SUPPLEMENTAL SPECIFICATION 513:  
-ENTIRE FLOOR SYSTEM.  
-ALL TRUSS COMPONENTS BELOW THE TOP OF CURB.  
-NEW SIDEWALK BRACKETS, STRINGERS AND CHANNELS.  
-BEARINGS.

PAYMENT FOR THE GREASE SHALL BE INCIDENTAL TO THE ITEM 513.30 "STRUCTURAL PAINTING FIELD APPLIED." THE COLOR OF THE GREASE SHALL BE BLACK.

36. ALL NEW STEEL ELEMENTS UNDER THE ITEM 506.50 "STRUCTURAL STEEL (ROLLED BEAM)", 506.55 "STRUCTURAL STEEL (PLATE GIRDER) AND 506.60 "STRUCTURAL STEEL" SHALL BE GIVEN AN APPROVED SHOP APPLIED PAINT SYSTEM PER SUPPLEMENTAL SPECIFICATION 513. (SEE GENERAL NOTE NO. 37)

37. THE PAINT SYSTEM USED IN THE FIELD AND THE SHOP APPLIED PAINT SYSTEM SHALL BE COMPATIBLE AND PROVIDED FROM THE SAME MANUFACTURER.

38. METAL HAND RAILING (MOD.) SHALL BE PAINTED BLACK AS PER SUPPLEMENTAL SPECIFICATION 513.

## MISCELLANEOUS

39. THE CEDAR HEDGES LOCATED BETWEEN STATIONS 14+25 LT AND 14+80 LT AND CEDAR BUSHES AT STA 15+40 LT, STA 15+50 LT, AND STA 15+63 LT SHALL BE REMOVED PRIOR TO THE INSTALLATION OF THE TEMPORARY BRIDGE AND DETOUR. THE CEDAR HEDGES AND BUSHES SHALL BE REPLACED WITH NEW 6 FOOT CEDAR TREES. THE NEW TREES WILL BE PAID FOR UNDER THE ITEM 656.20, "EVERGREEN TREES." (WHITE CEDAR-THUJA OCCIDENTALIS, 8&B, 6 FT.)

40. IF THE PROPERTY OWNER DESIRES IT, THE CEDAR STOCKADE FENCING THAT WILL BE USED AS A GLARE BARRIER DURING THE CONSTRUCTION OF THE PROJECT SHALL BE REMOVED AND RELOCATED TO A LOCATION TO BE DETERMINED BY THE PROPERTY OWNER AND RESIDENT ENGINEER. THIS WORK WILL BE INCIDENTAL TO THE ITEM 620.80, "MISCELLANEOUS FENCE."

41. TEMPORARY FENCING SHALL BE PLACED BETWEEN STATIONS 14+15 RT AND 14+60 RT TO RESTRICT ACCESS TO THE ARCHAEOLOGICAL AREA LOCATED NEAR WINGWALL 4. THIS FENCING AND WORK WILL BE PAID FOR AS ITEM 620.70, "SNOW FENCE(MOD-ARCH)".

42. THE FLOWER BED LOCATED AT STATION 0+90 RT SHALL BE REMOVED AND REPLANTED AS DIRECTED BY THE RESIDENT ENGINEER. THE RESIDENT ENGINEER WILL CONSULT WITH THE PROPERTY OWNER TO DETERMINE THE LOCATION OF THE NEW FLOWER BED. THIS WILL BE PAID FOR AS ITEM 656.50, "TRANSPLANTING SHRUBS". ALL OF THE PLANTS IN THE FLOWER BED WILL BE PAID AS ONE UNIT OF PAYMENT. (I.E., IF THE CONTRACTOR MOVES 10 PLANTS OR 20 PLANTS THEY WILL BE PAID ONLY FOR 1(ONE).)

43. THE LILAC TREE LOCATED AT STATION 14+60 RT WILL BE REMOVED AND RESET AT A LOCATION TO BE DETERMINED BY THE RESIDENT ENGINEER AND PROPERTY OWNER. THIS WILL BE PAID FOR AS ITEM 656.50, "TRANSPLANTING SHRUBS".

44. THERE WILL BE TWO 4 INCH DIAMETER MAPLE TREES PLANTED IN THE FIELD LOCATED BY THE RESIDENT ENGINEER. THE RESIDENT ENGINEER SHALL CONSULT WITH THE PROPERTY OWNER REGARDING THE EXACT LOCATION OF THE TREES. (SEE SHEET 9 FOR APPROXIMATE LOCATION.) THE TREES WILL BE PAID FOR UNDER ITEM 656.30, "DECIDUOUS TREES." (SUGAR MAPLE, ACER SACCHARUM, 8&B, 4" CAL.)

45. ALL HEAVY DUTY STEEL BEAM GUARD RAIL (MOD1) AND THE HEAVY DUTY STEEL BEAM GUARD RAIL (MOD2) SHALL BE PAINTED BLACK. SEE SPECIAL PROVISIONS.

46. IF FIELD CONDITIONS WARRANT EXTENDING THE WATER OR SEWERLINE WORK BEYOND THE LIMITS SHOWN ON SHEET 51, THE WORK SHALL BE PAID FOR AS EXTRA WORK IN ACCORDANCE WITH SECTION 109.06.

## REHABILITATION OF TRUSS BRIDGE

- A. REPLACE ALL FLOOR BEAMS WITH NEW BEAMS WITH SHEAR CONNECTORS.
- B. REPLACE ALL STRINGERS WITH NEW STRINGERS WITH SHEAR CONNECTORS.
- C. REPLACE BOTTOM LATERAL BRACING WITH NEW ANGLES.
- D. REPLACE ALL CONNECTIONS BETWEEN STRINGERS AND FLOOR BEAMS AND FLOOR BEAMS TO TRUSS MEMBERS.
- E. REPLACE VERTICALS AND DIAGONALS OF UPSTREAM TRUSS AS DETAILED ON SHEETS 26 & 27.
- F. REPLACE BEARINGS.
- G. REMOVE EXISTING SIDEWALK COMPONENTS AND REPLACE WITH NEW STRUCTURAL MEMBERS AND CONCRETE DECK.
- H. EXISTING BRIDGE RAILING ATTACHED TO THE DOWNSTREAM TRUSS SHALL BE REMOVED REPAIRED, CLEANED AND PAINTED. THE RAILING WILL BE REATTACHED TO THE UPSTREAM TRUSS AS PART OF THE NEW SIDEWALK.
- I. INSTALL NEW CHANNEL GUARD RAIL ON TRUSSES.
- J. REPLACE THE CONCRETE DECK WITH HIGH PERFORMANCE CONCRETE, ADD MEMBRANE AND PAVEMENT.
- K. CLEAN AND PAINT EXISTING TRUSSES.

PROJECT NAME:	JOHNSON	FILE NAME:	istr180j067ej067gen.xls	PLOT DATE:	4/18/2005
PROJECT NUMBER:	BHO 1448(18)	PROJECT LEADER:	R. WHITCOMB	DRAWN BY:	J. GILMORE
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		GENERAL NOTES			SHEET 18 OF 73