

GENERAL NOTES:

- G-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, 17TH EDITION, DATED 2002, AND ITS LATEST REVISIONS.
- G-2. DESIGN OF THE REHABILITATED STRUCTURE IS FOR AN AASHTO H4 LIVE LOAD.
- G-3. THE CONTRACTOR SHALL TAKE SPECIAL CARE AND PRECAUTION TO ENSURE THAT NO DEBRIS FALLS INTO THE OTTER CREEK DURING CONSTRUCTION. ALL MATERIAL FALLING IN THE AREA BELOW AND ADJACENT TO THE BRIDGE SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AT NO COST TO THE STATE.
- G-4. ALL WORK SHALL BE COMPLETED WITHIN THE EXISTING R.O.W SHOWN IN THESE PLANS. THE RIGHT-OF-WAY SHOWN IS ASSUMED TO BE APPROXIMATELY CENTERED ABOUT THE EXISTING CENTER LINE OF THE BRIDGE AND ROADWAY. NO PROVISIONS HAVE BEEN MADE FOR WORK OR ACTIVITIES OUTSIDE THE EXISTING RIGHT-OF-WAY LIMITS. SHOULD THE CONTRACTOR REQUIRE ANY ADDITIONAL RIGHT-OF-WAY IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL EASEMENTS, AND BEAR THE COSTS OF SUCH EASEMENTS WITHOUT FURTHER COMPENSATION.
- G-5. THESE CONTRACT DOCUMENTS HAVE BEEN PREPARED BASED ON FIELD INSPECTIONS AND OTHER INFORMATION AVAILABLE AT THE TIME OF BIDDING. ALL DIMENSIONS SHOWN ON THE PLANS SHALL BE CHECKED BY THE CONTRACTOR IN THE FIELD PRIOR TO COMMENCING THE WORK. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM THE DIMENSIONS AND DETAILS OF EXISTING BRIDGE FEATURES AND COMPONENTS PRIOR TO THE FABRICATION OF NEW BRIDGE COMPONENTS. ACTUAL WORK SHALL MATCH FIELD CONDITIONS UNLESS NOTED OTHERWISE. ANY DISCREPANCIES IN DIMENSIONS, CHARACTER OR EXTENT OF THE EXISTING FEATURES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE WORK.
- G-6. BRIDGE NO.1 SHALL REMAIN CLOSED TO VEHICULAR TRAFFIC FOR THE DURATION OF CONSTRUCTION.
- G-7. EXCEPT AS NOTED OTHERWISE, ITEM 529.20, PARTIAL REMOVAL OF STRUCTURE SHALL INCLUDE ANY WORK NECESSARY TO FACILITATE AND ACCOMPLISH THE SCOPE OF PROJECT WORK AS INDICATED BY THE CONTRACT DOCUMENTS AND DIRECTED BY THE ENGINEER: REMOVING AND DISPOSING OF SUPERSTRUCTURE MEMBERS AND PORTIONS OF MEMBERS; AS WELL AS REMOVING AND STOCKPILING MEMBERS AND PORTIONS OF MEMBERS FOR RE-USE, INCLUDING REMOVING AND STOCKPILING MEMBERS AND PORTIONS OF MEMBERS FOR THE CONTRACTOR'S METHODS OF REHABILITATION.
- G-8. NO BURNING OF REMOVED MATERIALS AT THE PROJECT SITE WILL BE ALLOWED. THE EXISTING COVERED BRIDGE TIMBERS AND LUMBER MAY CONTAIN HAZARDOUS WOOD PRESERVATIVES. THE CONTRACTOR SHALL INDEMNIFY AND HOLD THE STATE, ITS OFFICERS AND EMPLOYEES HARMLESS REGARDING THE CONTRACTOR'S HANDLING OF THESE MATERIALS AND SUBSEQUENT USE, RE-USE, OR DISPOSAL OF THESE MATERIALS.
- G-9. THE COST OF INSTALLING AND MAINTAINING ALL TEMPORARY CONSTRUCTION SIGNS SHALL BE INCLUDED IN ITEM 641.10, TRAFFIC CONTROL. THE REMOVAL AND/OR RESETTING OF TRAFFIC SIGNS, AS DEEMED NECESSARY BY THE RESIDENT ENGINEER SHALL ALSO BE INCLUDED IN THE TRAFFIC CONTROL ITEM.
- G-10. SPECIAL CARE SHALL BE TAKEN TO AVOID DAMAGE TO MEMBERS THAT ARE TO REMAIN AND TO AVOID MOVEMENT OF THE TRUSS THAT COULD RESULT IN DISTORTION OR MISALIGNMENT OF THE TRUSS AND ITS JOINTS. MEMBERS DAMAGED BY THE CONTRACTOR SHALL BE REPLACED AS DIRECTED BY THE ENGINEER AT CONTRACTOR'S EXPENSE.
- G-11. ALL JOINTS IN REPLACED MEMBERS SHALL MATCH THE EXISTING JOINT, INCLUDING ALL NAILS, BOLTS OR SCREWS REQUIRED UNLESS NOTED OTHERWISE.
- G-12. ALL EXISTING MEMBERS SHOWN TO BE REPLACED ARE TO BE REPLACED "IN-KIND" WITH NEW MEMBERS IDENTICAL IN DIMENSIONS AND CONFIGURATIONS AS THE MEMBERS ORIGINALLY USED IN THE COVERED BRIDGE (INCLUDING MORTISES, TENONS, NOTCHES, HOLES, ETC.) UNLESS NOTED OTHERWISE IN THESE PLANS.

STRUCTURAL STEEL NOTES:

- S-1. EXCEPT AS NOTED OTHERWISE IN THE CONTRACT PLANS, ITEM 506.75, STRUCTURAL STEEL SHALL INCLUDE THE FOLLOWING:
 - NEW LOWER LATERAL BRACING TIE RODS (INCLUDING NUTS, PLATES, WASHERS AND TURNBUCKLES)
 - ALL NEW INTERIOR TRUSS TIE RODS (INCLUDING NUTS AND OEGE WASHERS)
 - ALL NEW STEEL THROUGH BOLTS (INCLUDING NUTS AND WASHERS) THAT ARE TO CONNECT THE ARCHES TO TRUSS VERTICAL MEMBERS
 - NEW CARRIAGE BOLTS WITH HEAVY SQUARE NUTS AND OEGE WASHERS THAT ARE TO CONNECT THE UPPER LATERAL BRACING MEMBERS

- ALL NEW STEEL STRAP PLATES AND HARDWARE AT VERTICAL TO TOP CHORD CONNECTION
 - NEW LAG SCREWS TO CONNECT EXISTING WOOD MEMBERS
 - FLOOR BEAM HOLD DOWN STAINLESS STEEL STRAPS
- FABRICATION DRAWINGS AND ERECTION PLAN SUBMITTALS ARE NOT REQUIRED FOR ITEM 506.75, STRUCTURAL STEEL.
- S-2. ALL NEW STRUCTURAL STEEL, EXCEPT STAINLESS STEEL BELOW DECK LEVEL, SHOWN IN THE PLANS INCLUDING PLATES, BOLTS, LAG BOLTS, TURNBUCKLES, NUTS, WASHERS, RODS, ANGLES AND MISCELLANEOUS STEEL, SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH AASHTO M 232/M 232M EXCEPT FOR PLATES WHICH SHALL BE GALVANIZED PER AASHTO M 111/ M 111M. ALL STEEL PLATES AND RODS, EXCEPT STAINLESS STEEL BELOW DECK LEVEL, SHALL BE ASTM A36.
 - S-3. ALL STEEL PLATES AND WASHERS BELOW DECK LEVEL SHALL BE STAINLESS STEEL, UNLESS NOTED OTHERWISE IN THE PLANS, CONFORMING TO THE REQUIREMENTS OF ASTM A 240/A 240M, TYPE 304. ALL BOLTS BELOW DECK LEVEL SHALL BE STAINLESS STEEL, UNLESS NOTED OTHERWISE IN THE PLANS, CONFORMING TO THE REQUIREMENTS OF ASTM F 593M/F 593, TYPE 304. ALL NUTS BELOW DECK LEVEL SHALL BE STAINLESS STEEL, UNLESS NOTED OTHERWISE IN THE PLANS, CONFORMING TO ASTM F 594/F 594M, TYPE 304. PAYMENT FOR ALL STAINLESS STEEL BELOW DECK LEVEL, EXCEPT FLOOR BEAM HOLD DOWN STRAPS, TO CONNECT NEW LUMBER AND TIMBER MEMBERS IS INCLUDED IN RESPECTIVE LUMBER AND TIMBER PAY ITEMS.
 - S-4. EXPOSED ENDS OF ALL STRUCTURAL STEEL AND HARDWARE BELOW DECK LEVEL SHALL BE COATED WITH 2 COATS OF A-H COAL TAR EPOXY 210 BY ANTI-HYDRO COMPANY, BITUMASTIC 300-M BY CARBOLINE, DURAL 306 BY TAMMS INDUSTRIES OR OTHER EQUIVALENT APPROVED EQUAL COAL TAR EPOXY. ALL COST FOR THIS WORK IS CONSIDERED INCIDENTAL TO ITEM 506.75, STRUCTURAL STEEL.

TIMBER CONNECTORS NOTES:

- TC-1. EXCEPT AS SPECIFIED IN THE STRUCTURAL STEEL NOTES, PAYMENT FOR STRUCTURAL LUMBER AND TIMBER AND NON-STRUCTURAL LUMBER QUANTITIES SHALL BE FULL COMPENSATION FOR DETAILING, FURNISHING, TRANSPORTING, HANDLING, PLACING AND INSTALLING NEW AND REUSED TIMBER CONNECTORS WHICH ARE USED TO CONNECT NEW LUMBER AND TIMBER MEMBERS WITH EXISTING LUMBER AND TIMBER MEMBERS.
- TC-2. EXCEPT AS SPECIFIED IN THE STRUCTURAL STEEL NOTES, DETAILING, FURNISHING, TRANSPORTING, HANDLING, AND INSTALLING NEW AND REUSED TIMBER CONNECTORS WHICH ARE USED TO CONNECT EXISTING LUMBER AND TIMBER MEMBERS SHALL BE CONSIDERED INCIDENTAL TO THE WORK REQUIRED FOR ITEM 900.645 SPECIAL PROVISION (REHABILITATING COVERED BRIDGE SUPERSTRUCTURE).

WOOD NOTES:

- W-1. ALL WOOD CONSTRUCTION SHALL COMPLY WITH THE LATEST AASHTO SPECIFICATIONS, THE NATIONAL DESIGN SPECIFICATION (NDS) AND SUPPLEMENT FOR WOOD CONSTRUCTION, AND THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION (AITC) SPECIFICATION, 5TH EDITION.
- W-2. THE MAXIMUM IN PLACE MOISTURE CONTENT OF THE WOOD USED SHALL BE AS FOLLOWS:

MEMBERS LESS THAN 5" THICK	16%
MEMBERS GREATER THAN 5" THICK	19%
TRUNNELS	10%
ALL HARDWOOD 2" AND THICKER MAY BE GREEN	
- W-3. ALL NEW WOOD TRUNNELS SHALL BE MADE OF WHITE OAK. TRUNNELS SHALL BE DRIVEN IN A MANNER WHICH AVOIDS SPLITTING THE TRUNNELS OR THE MEMBER CONNECTED BY THEM. HOLES SHALL BE SIZED 1/16" IN DIAMETER SMALLER THAN THE TRUNNEL TO PROVIDE A FRICTION FIT. TRUNNELS SHALL BE DIPPED IN BOILED LINSEED OIL, MINERAL OIL OR AN APPROVED WAX PRIOR TO DRIVING. ALL NEW OR EXISTING WOOD TRUNNELS IN SOUND CONDITION THAT ARE TO BE RE-USED WITH PERMISSION OF THE RESIDENT ENGINEER FOR CONNECTING NEW OR REPLACED MEMBERS ARE CONSIDERED INCIDENTAL TO ITEM 522.20, STRUCTURAL LUMBER AND TIMBER, UNTREATED. TRUNNELS WHICH ARE SALVAGED AND REUSED IN CONJUNCTION WITH EXISTING MEMBERS THAT ARE TO REMAIN ARE PAID FOR UNDER ITEM 900.645, SPECIAL PROVISION (REHABILITATING COVERED BRIDGE SUPERSTRUCTURE).
- W-4. DOWEL HOLES IN EXISTING ARCH AND TRUSS MEMBERS SHALL BE PLUGGED WITH AN APPROVED WOOD EPOXY OR HARDWOOD DOWEL AS APPROVED BY THE ENGINEER (COST OF SUCH REPAIRS IS INCLUDED UNDER ITEM 900.645, SPECIAL PROVISION (REHABILITATING COVERED BRIDGE SUPERSTRUCTURE). APPROXIMATELY 300 LOCATIONS HAVE BEEN IDENTIFIED FOR BIDDING PURPOSES. AN ADDITIONAL 20 DOWEL HOLE REPAIRS ARE INCLUDED.
- W-5. THE REPAIR OF APPROXIMATELY 5 SPLITS AND CHECKS IN EXISTING CROSS BEAMS SHALL BE MADE WITH AN APPROVED WOOD EPOXY TO ACHIEVE FULL STRENGTH OF THE

- REPAIRED MEMBER (PAY ITEM 900.620, SPECIAL PROVISION (WOOD EPOXY REPAIRS)). AN ADDITIONAL 5 ROTTED MEMBER REPAIRS (AS SHOWN ON "EPOXY REPAIR DETAIL" ON SHEET 27) ARE INCLUDED FOR BIDDING PURPOSES. SEE THE RECOMMENDED REPAIR SEQUENCE NOTES ON SHEET 27 FOR MORE INFORMATION.
- W-6. EACH PIECE OF NEW LUMBER AND TIMBER SHALL BE GRADED, BY A RECOGNIZED LUMBER GRADING AGENCY. INDIVIDUAL PIECES SHOULD NOT BE STAMPED WITH A GRADE STAMP. MATERIAL CERTIFICATIONS SHALL BE SUBMITTED FOR ALL WOOD IN ACCORDANCE WITH SECTION 709.
- W-7. THE QUANTITY OF ITEM 522.20, STRUCTURAL LUMBER AND TIMBER, UNTREATED ASSUMES REPLACEMENT OF 2 ADDITIONAL TRUSS VERTICAL MEMBERS, 2 ADDITIONAL TRUSS DIAGONAL MEMBERS, 5 ADDITIONAL KNEE BRACES, 100 FEET OF 2"x4" NAILERS, AND 5 ADDITIONAL RAFTERS FOR BIDDING PURPOSES THAT HAVE NOT BEEN IDENTIFIED IN THE PLANS. THE CONTRACTOR AND RESIDENT ENGINEER SHALL JOINTLY INSPECT ALL TRUSS CHORDS, WEB MEMBERS AND ALL ROOF RAFTERS AT THE TIME OF CONSTRUCTION TO IDENTIFY ADDITIONAL MEMBERS TO BE REPLACED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL LUMBER AND TIMBER DIMENSIONS AND SIZES REQUIRED FOR CONSTRUCTION.
- W-8. THE QUANTITY OF ITEM 522.25, STRUCTURAL LUMBER AND TIMBER, TREATED ASSUMES REPLACEMENT OF 5 ADDITIONAL FLOOR BEAMS FOR BIDDING PURPOSES THAT HAVE NOT BEEN IDENTIFIED IN THE PLANS.
- W-9. THE QUANTITY OF ITEM 522.30, NONSTRUCTURAL LUMBER, UNTREATED ASSUMES REPLACEMENT OF ALL UPSTREAM, DOWNSTREAM AND PORTAL SIDING AND 20% OF EXISTING ROOF BOARDS. THE CONTRACTOR AND RESIDENT ENGINEER SHALL JOINTLY INSPECT ALL ROOF BOARDS AFTER THE REMOVAL OF THE EXISTING METAL ROOF TO IDENTIFY ADDITIONAL MEMBERS TO BE REPLACED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL LUMBER DIMENSIONS AND SIZES REQUIRED FOR CONSTRUCTION.
- W-10. ITEM 900.645, SPECIAL PROVISION (REHABILITATING COVERED BRIDGE SUPERSTRUCTURE) SHALL INCLUDE ALL COSTS ASSOCIATED WITH RE-INSTALLING STOCKPILED COMPONENTS (FROM ITEM 529.20, PARTIAL REMOVAL OF STRUCTURE) ON THE SUPERSTRUCTURE. SEE PLAN NOTES ON SHEET 29 AND CAMBER NOTES ON SHEET 47 FOR ADDITIONAL INFORMATION.
- W-11. ALL NUTS, BOLTS, WASHERS, AND SCREWS SHALL CONFORM TO ASTM A307, ALL NAILS AND SPIKES SHALL CONFORM TO ASTM F1667 AND BE DOUBLE HOT DIPPED GALVANIZED IN ACCORDANCE WITH AASHTO M 232/M 232M. THE USE OF ELECTRO GALVANIZED NAILS WILL NOT BE ALLOWED. STAINLESS STEEL NAILS ARE REQUIRED IF NAIL GUNS ARE USED.
- W-12. ALL STRUCTURAL LUMBER AND TIMBER NOT SHOWN ON THE WOOD MATERIALS LIST TABLE ON SHEET 26 SHALL BE DOUGLAS FIR NO.1 OR BETTER. LIKEWISE, ALL HARDWOOD SHALL BE WHITE OAK NO.1 OR BLACK LOCUST NO.1 OR BETTER WHERE THE SPECIES IS NOT NOTED.
- W-13. ALL FIELD CUTS AND BORINGS OF TREATED WOOD SHALL BE TREATED WITH TWO COATS OF COPPER NAPHTHENATE LIBERALLY APPLIED PER SECTION 522.
- W-14. EXISTING TOP CHORD, ROOF RAFTER, KNEE BRACING AND CROSS BEAM JOINTS SHALL BE REPLICATED ON ALL STRUCTURE MEMBERS TO BE REPLACED UNLESS NOTED OTHERWISE IN THE CONTRACT DOCUMENTS.
- W-15. THE WOOD CURB BLOCKING, CURB, TRUSS BOTTOM CHORD, DISTRIBUTION BEAMS, BOTTOM LAYER OF DECKING AND SLEEPER BEAMS SHALL COMPLY WITH SUBSECTION 726.01 FOR TYPE III PENTACHLOROPHENOL TYPE C.
- W-16. ALL LAG BOLTS AND NUTS FOR THROUGH BOLTS SHALL BE TIGHTENED SNUGLY BUT NOT SO TIGHTLY AS TO CAUSE CRUSHING OF THE WOOD UNDER THE WASHER OR PLATE.
- W-17. TOP LAYER OF DECKING SHALL BE SURFACED THREE SIDES (S3S) (ROUGH SIDE ON TOP). BOTTOM LAYER OF DECKING SHALL BE SURFACED FOUR SIDES (S4S). BOTTOM CHORD MEMBERS SHALL BE SURFACED TWO SIDES (S2S) (WIDE FACE AGAINST TRUSS VERTICAL AND TOP NARROW FACE). ALL OTHER NEW LUMBER AND TIMBER SHALL BE ROUGH SURFACED.
- W-18. DIMENSIONS OF ALL LUMBER AND TIMBER MEMBERS SHOWN IN THESE PLANS ARE THE ACTUAL SIZES AFTER SEASONING UNLESS NOTED OTHERWISE IN THE CONTRACT DOCUMENTS. THE DIMENSIONS OF NARROW AND WIDE FACES OF NEW BOTTOM CHORD MEMBERS SHALL BE THE ACTUAL DIMENSIONS SPECIFIED IN THE CONTRACT DOCUMENTS. FOR ALL NEW MEMBERS THAT ARE NOT SURFACED S4S, S3S OR S2S, CROSS-SECTIONAL DIMENSION VARIATIONS OF UP TO 1/8" WILL BE ALLOWED.



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PROJECT LEADER: M.D.SARGENT	DRAWN BY: J.B.McQUAD
DESIGNED BY: J.BICJA	CHECKED BY: S.T.JAMES
PROJECT NOTES SHEET (1 OF 2)	
SHEET 25 OF 66	

HTA PROJECT NO. 904217	MODEL Notes
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