

GENERAL NOTES

- 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 STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 17TH EDITION, DATED 2002, AND ITS LATEST REVISIONS.
- DIMENSIONS, ANGLES, BEARINGS, AND ELEVATIONS OF THE EXISTING BRIDGE SHOWN ON THESE PLANS HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND LIMITED FIELD INVESTIGATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING FIELD MEASUREMENTS OF ALL EXISTING STRUCTURE COMPONENTS TO ASSURE CONSISTENCY WITH THE PROPOSED MODIFICATIONS. ANY DISCREPANCIES IN DIMENSIONS, CHARACTER OR EXTENT OF THE EXISTING FEATURES SHALL BE BROUGHT TO THE ATTENTION OF THE RESIDENT ENGINEER BEFORE ADVANCING THE WORK. WORKING DRAWINGS REQUIRED FOR VARIOUS ITEMS OF WORK SHALL INDICATE THE ACTUAL FIELD MEASUREMENTS AND SHALL BE SO NOTED.
- ALL DIMENSIONS ARE HORIZONTAL OR VERTICAL, AND ARE GIVEN AT 68 DEGREES FAHRENHEIT, UNLESS NOTED OTHERWISE.

CONSTRUCTION NOTES

- ALL UTILITY POLES ARE TO REMAIN UNDISTURBED UNLESS OTHERWISE NOTED IN THESE PLANS.
- NO BACKFILL WILL BE PLACED AGAINST ANY STRUCTURAL ELEMENTS UNTIL THE RESIDENT ENGINEER HAS APPROVED THIS WORK. THE HEIGHT OF BACKFILL BEHIND THE ABUTMENTS SHALL BE LIMITED TO THE BRIDGE SEAT ELEVATIONS UNTIL THE NEW STEEL GIRDERS HAVE BEEN SET.
- THE CONTRACTOR, AT THE EXPENSE OF THE CONTRACTOR, SHALL REPAIR DAMAGE TO CONCRETE WALLS RESULTING FROM IMPROPER BACKFILLING.
- FOLLOWING COORDINATION WITH THE VERMONT STUDIO CENTER AND THE ENGINEER, THE EXISTING LANDSCAPED AREA, INCLUDING EXISTING BENCHES, LARGE ROCK AND SIGNING AT STA. 4+50 LT SHALL BE CAREFULLY DISASSEMBLED AND MOVED TO A LOCATION IDENTIFIED BY THE VERMONT STUDIO CENTER. REASSEMBLY OF THE MATERIAL IS NOT THE RESPONSIBILITY OF THE CONTRACTOR. THE COST FOR THIS WORK SHALL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED INCIDENTAL TO ITEM 635.II, "MOBILIZATION / DEMOBILIZATION."
- THE EXISTING FENCE BORDERING LANDSCAPED AREA FROM STA. 4+35 LT TO STA. 4+61 LT SHALL BE REMOVED UNDER ITEM 620.55, "REMOVAL OF EXISTING FENCE."
- EXISTING DRAINAGE PIPES RUNNING FROM STA. 4+29.80 LT TO THE DI NEAR STA. 4+63.50 RT AND STA. 4+92.77 RT TO STA. 5+12.54 LT, SHALL BE REMOVED TO THE DI AND CAPPED AT THE DI. THIS WORK SHALL BE PAID FOR UNDER ITEM 204.20, "TRENCH EXCAVATION OF EARTH".
- THE CONTRACTOR SHALL USE EXTREME CAUTION WHILE CONSTRUCTING THE NEW WINGWALL NO. 4 NEAR THE EXISTING BUILDING FOUNDATION AND AVOID ANY DAMAGE TO THE FOUNDATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE TO THE FOUNDATION, AT THE SOLE COST TO THE CONTRACTOR.
- PRIOR TO PAVING OPERATIONS A MEETING SHALL TAKE PLACE BETWEEN THE ENGINEER, THE TOWN MANAGER AND THE CONTRACTOR TO DISCUSS TRAFFIC CONTROL AND TO ENSURE MINIMAL TRAFFIC DISRUPTIONS OCCUR ESPECIALLY DURING HIGH VOLUME HOURS. THE CONTRACTOR SHALL HAVE A PLAN FOR CONTROLLING TRAFFIC AND ADHERING TO THE 10 MINUTE MAXIMUM WAIT TIME AS STATED IN SUBSECTION 104.04(b) IN THE STANDARD SPECIFICATIONS.

STRUCTURAL STEEL NOTES:

- ALL NEW STRUCTURAL STEEL SHALL BE AASHTO M 270M/M 270, GRADE 50 W UNLESS OTHERWISE NOTED.
- ALL STRUCTURAL STEEL SHALL BE DETAILED AND FABRICATED USING PROCEDURES AND TOLERANCES IN ACCORDANCE WITH APPLICABLE PUBLICATIONS OF THE "AMERICAN INSTITUTE OF STEEL CONSTRUCTION" (AISC).
- ALL BOLTED FIELD CONNECTIONS SHALL BE MADE WITH 7/8-IN DIA. HIGH-STRENGTH, TYPE 3 BOLTS, CONFORMING TO AASHTO M 164M IN 15/16-IN DIA. HOLES, UNLESS OTHERWISE NOTED.
- STRUCTURAL STEEL CONNECTIONS NOT DETAILED ON PLANS SHALL BE DETAILED BY FABRICATOR AND SUBMITTED TO THE ENGINEER FOR APPROVAL.
- ALL WELDS SHALL HAVE CORROSION RESISTANCE AND WEATHERING APPEARANCE AS SPECIFIED FOR WEATHERING STEEL.
- ALL WELDING AND DIMENSIONAL TOLERANCES OF WELDED MEMBERS SHALL BE IN ACCORDANCE WITH VTRANS REQUIREMENTS AND SHALL CONFORM TO THE LATEST ANSI/AASHTO/AWS CODES AND THEIR LATEST REVISIONS.
- SHEAR STUD CONNECTORS SHALL BE FIELD WELDED USING AUTOMATICALLY TIMED STUD WELDING EQUIPMENT AND SHALL BE PAID FOR UNDER ITEM 508.I5, SHEAR CONNECTORS.
- ANY HOLES IN FASCIA BEAMS WEBS NOT OTHERWISE FILLED SHALL BE FILLED WITH BUTTON HEAD OR HEX HEAD BOLTS PER AASHTO M 164M, TYPE 3.
- 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.
- THE ENDS OF THE GIRDERS, BEARING STIFFENERS AND CONNECTION PLATES SHALL BE VERTICAL UNDER FULL DEAD LOAD DEFLECTION.
- CONNECTION PLATES, DIAPHRAGMS AND UTILITY SUPPORT BEAMS SHALL BE PAID FOR UNDER ITEM 506.50, "STRUCTURAL STEEL, ROLLED BEAM".

CONCRETE NOTES

- CONCRETE PAYMENT AND CLASSIFICATION SHALL BE AS FOLLOWS:
ITEM 501.33, CONCRETE, HIGH PERFORMANCE CLASS A (DECK, CURTAIN WALLS, BRIDGE SIDEWALKS)
ITEM 501.34, CONCRETE, HIGH PERFORMANCE CLASS B (APPROACH SLABS, ABUTMENTS, PIER)
- ITEM 514.I0, WATER REPELLENT, SILANE SHALL BE APPLIED TO ALL EXPOSED CONCRETE ON THE BRIDGE SUPERSTRUCTURE AND SUBSTRUCTURE, EXCEPT THE BOTTOM OF THE DECK BETWEEN THE DRIP NOTCHES.
- ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1/2 INCH BY 1/2 INCH, UNLESS OTHERWISE NOTED. A ONE-HALF INCH RADIUS SHALL BE USED ON THE TOP INSIDE CORNER OF THE CURBS.
- JOINTS AND SCORE MARKS IN CONCRETE SHALL BE CONSTRUCTED AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- THE KEY IN CONCRETE CONSTRUCTION JOINTS SHALL BE MONOLITHIC AND CONTINUOUS FOR THE FULL LENGTH OF THE JOINT UNLESS OTHERWISE INDICATED. ANY UPWARD KEY SHALL BE PLACED INTEGRALLY WITH THE CONCRETE BELOW THE JOINT.
- THE CONCRETE DECK SHALL BE PLACED IN ACCORDANCE WITH THE POUR SEQUENCE SHOWN IN THE PLANS.
- A THOROUGH JOINT INSPECTION WITH THE CONTRACTOR AND ENGINEER SHALL BE MADE OF SUBSTRUCTURES THAT ARE TO BE RETAINED. AREAS OF CONCRETE FOUND TO BE SPALLED, DELAMINATED OR OTHERWISE UNSOUND SHALL BE REPAIRED. THE AREAS THAT NEED TO BE REPAIRED SHALL BE PAID FOR UNDER ITEM 580.J3, "REPAIR OF CONCRETE SUBSTRUCTURE CLASS I", ITEM 580.I4, "REPAIR OF CONCRETE SUBSTRUCTURE CLASS II" AND ITEM 580.I5, "REPAIR OF CONCRETE SUBSTRUCTURE CLASS III" IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS AND DETAILS SHOWN ON SHEET 40.
- FOOTINGS OR SUBFOOTINGS FOR SUBSTRUCTURES FOUNDED ON BEDROCK SHALL BE PLACED ON CLEAN COMPETENT ROCK. ALL LOOSE ROCK AND DEBRIS SHALL BE REMOVED.
- UPON COMPLETION OF THE EXCAVATION FOR SUBSTRUCTURES FOUNDED ON BEDROCK AND PRIOR TO PLACING FORMWORK, THE RESIDENT ENGINEER SHALL CONTACT THE VTRANS SOILS AND FOUNDATION ENGINEER TO INSPECT THE BEDROCK. THE STRUCTURES ENGINEER WILL ALSO BE NOTIFIED THAT THE BEDROCK IS READY FOR INSPECTION. THE SOILS AND FOUNDATION ENGINEER WILL DETERMINE IF THE BEDROCK IS COMPETENT TO OBTAIN THE NOMINAL BEARING RESISTANCE AS SHOWN ON THE PLANS. FIVE (5) WORKING DAYS FROM NOTIFICATION SHALL BE ALLOWED TO MAKE THE INSPECTION AND THE DETERMINATION FOR THE COMPETENCY OF THE BEDROCK.
- IF COMPETENT BEDROCK IS WITHIN 1'-0" BELOW THE DESIGN BOTTOM OF FOOTING FOR THE EXTENT OF THE SUBSTRUCTURE AS SHOWN IN THE CONTRACT PLANS, THE FOOTING MAY BE PLACED INTEGRALLY TO THE TOP OF THE BEDROCK USING THE CONCRETE ITEM SPECIFIED FOR THE FOOTING AT THE CONTRACT UNIT PRICE.
- WHERE COMPETENT BEDROCK IS BELOW THE DESIGN BOTTOM OF FOOTING BY MORE THAN 1'-0" FOR ANY PORTION OF THE SUBSTRUCTURE AND A SUBFOOTING IS NOT SHOWN IN THE CONTRACT PLANS, THE STRUCTURES ENGINEER SHALL BE CONTACTED TO DETERMINE WHETHER OR NOT THE FOOTING SHALL BE LOWERED OR IF THE CONSTRUCTION OF A SUBFOOTING IS REQUIRED. IF THE DESIGN BOTTOM OF FOOTING ELEVATION IS TO BE LOWERED THE CONTRACTOR SHALL PROVIDE A BEDROCK PROFILE TO THE STRUCTURES ENGINEER, THREE (3) WORKING DAYS FROM RECEIPT OF THE BEDROCK PROFILE SHALL BE ALLOWED TO MAKE THIS DETERMINATION. NO WORK SHALL BE DONE ON THE FOOTINGS UNTIL A REPLY IS RECEIVED.
- THE LIMITS OF SUBFOOTINGS SHALL BE 1'-0" OUTSIDE OF THE HORIZONTAL LIMITS OF THE FOOTING. IF A SUBFOOTING IS REQUIRED AND NOT SHOWN IN THE CONTRACT IT SHALL BE DONE AS EXTRA WORK. THE TOP SURFACE OF ALL SUBFOOTINGS SHALL BE INTENTIONALLY ROUGHENED TO 1/4" AMPLITUDE.
- WHERE COMPETENT BEDROCK IS ABOVE THE DESIGN BOTTOM OF FOOTING ELEVATION, IT SHALL BE REMOVED WITH CONTRACT PAY ITEMS OR A BEDROCK PROFILE SHALL BE PROVIDED BY THE CONTRACTOR TO THE STRUCTURES ENGINEER TO DETERMINE WHETHER THE DESIGN BOTTOM OF FOOTING ELEVATION MAY BE RAISED. THREE (3) WORKING DAYS FROM RECEIPT OF THE BEDROCK PROFILE SHALL BE ALLOWED TO MAKE THE DETERMINATION. FOOTING ELEVATIONS SHALL NOT BE ADJUSTED WITHOUT APPROVAL OF THE STRUCTURES ENGINEER.
- OVERBREAKAGE AND REPLACEMENT WITH THE FOOTING CONCRETE BEYOND THE AVERAGE MAXIMUM ALLOWANCE SPECIFIED IN SUBSECTIONS 204.09(B)(I) AND 208.II(C) WILL BE AT THE CONTRACTOR'S EXPENSE.
- DOWELS SHALL BE DRILLED AND GROUTED INTO BEDROCK WHEN SHOWN ON THE PLANS OR AS ORDERED BY THE ENGINEER. THE DOWELS SHALL HAVE A 2'-0" MINIMUM EMBEDMENT IN THE BEDROCK AND SHALL EXTEND IN THE FOOTING OR SUBFOOTING A MINIMUM OF 1'-6" , UNLESS NOTED OTHERWISE.

REINFORCING STEEL NOTES:

- ALL REINFORCING STEEL SHALL BE DETAILED AND FABRICATED USING PROCEDURES AND TOLERANCES IN ACCORDANCE WITH APPLICABLE PUBLICATIONS OF THE "CONCRETE REINFORCING STEEL INSTITUTE" (CRSI).
- REINFORCING STEEL IN THE DECK, CURTAIN WALL, SIDEWALK, RAILING, CURB AND APPROACH SLAB SHALL BE EPOXY COATED.
- MINIMUM CLEAR COVER FOR REINFORCING STEEL SHALL BE AS FOLLOWS:
ALONG BACK FACES OF WALLS AGAINST EARTH: 2-IN
ALONG TOP SURFACE OF DECK SLAB: 2 1/2-IN
ALONG BOTTOM SURFACE OF DECK SLAB: 1 1/2-IN
BRIDGE RAILING: 2-IN
ELSEWHERE UNLESS OTHERWISE INDICATED: 3-IN
- REINFORCEMENT STEEL PLACEMENT TOLERANCES SHALL BE:
SPACING = +/- 1-IN
CLEARANCE = +/- 1/4-IN
BRIDGE RAIL CLEARANCE = 0-IN
- DRILLING AND GROUTING DOWELS SHALL BE PAID AS ITEM 507.I6, "DRILLING AND GROUTING DOWELS". ALL DRILLED HOLES SHALL HAVE A MINIMUM OF 6-INCH CLEAR COVER.

PLOTTED 2/11/2009

REMOVAL NOTES

- ITEM 529.20, "PARTIAL REMOVAL OF STRUCTURE" SHALL INCLUDE:
a) REMOVAL AND DISPOSAL OF EXISTING BRIDGE AND APPROACH RAILING AND POSTS, CONCRETE BRIDGE DECK AND CURTAIN WALLS.
b) PARTIAL REMOVAL OF CONCRETE ABUTMENTS AND PIER.
c) SAWCUTTING OF CONCRETE.
d) REMOVAL AND DISPOSAL OF STRUCTURAL STEEL BEAMS AND DIAPHRAGMS.
e) REMOVAL AND DISPOSAL OF BEARING DEVICES.
f) ERECTION, MAINTENANCE, AND REMOVAL OF TEMPORARY STRUCTURES TO PREVENT DEBRIS FROM FALLING INTO THE WATERWAY.
- REMOVAL OF BRIDGE PAVEMENT SHALL BE PAID FOR UNDER ITEM 529.I0, "REMOVAL OF BRIDGE PAVEMENT".
- ELEVATIONS SHOWING THE LIMITS OF ABUTMENT AND WINGWALL REMOVAL ARE APPROXIMATE. THE ENGINEER SHALL ESTABLISH ACTUAL LIMITS AFTER A COOPERATIVE INSPECTION BY THE CONTRACTOR AND THE ENGINEER. EXISTING ELEVATIONS SHALL BE FIELD VERIFIED TO ENSURE THAT THE REMOVAL LIMITS ARE ADEQUATE TO OBTAIN THE REQUIRED DIMENSIONS AND ELEVATIONS OF THE NEW CONSTRUCTION.
- PRIOR TO PARTIAL REMOVAL OF THE EXISTING PIER, THE CONTRACTOR SHALL MEASURE ALL ELEMENTS OF THE PIER TO ENSURE THAT THE NEW PIER CAP IS CONSTRUCTED TO MATCH THE EXISTING. THE CONTRACTOR SHALL REVIEW ALL MEASUREMENTS WITH THE ENGINEER AND OBTAIN PERMISSION FROM THE ENGINEER PRIOR TO PARTIAL REMOVAL OF THE PIER. THIS WORK SHALL BE INCIDENTAL TO ITEM 592.20 "PARTIAL REMOVAL OF STRUCTURE".
- REMOVAL OF THE PORTIONS OF THE EXISTING ABUTMENT NO. 1, ABUTMENT NO. 2 AND THE PIER WITHIN THE LIMITS OF A COFFERDAM, SHALL BE PAID FOR UNDER ITEM 208.35, "COFFERDAM EXCAVATION ROCK". PORTIONS OF THE ABUTMENTS OUTSIDE THE COFFERDAM LIMITS SHALL BE PAID FOR UNDER ITEM 529.20 "PARTIAL REMOVAL OF STRUCTURE". EXCAVATION OF SOILS SURROUNDING THE ABUTMENTS WITHIN THE LIMITS OF A COFFERDAM SHALL BE PAID FOR UNDER ITEM 208.30, "COFFERDAM EXCAVATION, EARTH".
- THE EXISTING STRUCTURAL STEEL ON THIS PROJECT WAS PAINTED WITH A MATERIAL WHICH MAY CONTAIN LEAD. THE REMOVED STRUCTURAL STEEL IS THE PROPERTY OF THE CONTRACTOR. THE CONTRACTOR SHALL INDEMNIFY AND HOLD THE TOWN, STATE, THEIR OFFICERS, AND EMPLOYEES HARMLESS CONCERNING THE CONTRACTOR'S USE OR DISPOSITION OF THE STRUCTURAL STEEL.
- REMOVAL OF EXISTING DROP INLETS SHALL BE PAID FOR UNDER ITEM 204.21, "TRENCH EXCAVATION OF ROCK."
- REMOVAL OF THE EXISTING SIDEWALK IN THE PROPOSED ROADWAY / SIDEWALK LIMITS SHALL BE PAID UNDER ITEM 203.I5, "COMMON EXCAVATION."
- REMOVAL OF THE EXISTING SIDEWALK AND PAVEMENT OUTSIDE OF THE PROPOSED ROADWAY / SIDEWALK LIMITS SHALL BE PAID FOR UNDER ITEM 203.28, "EXCAVATION OF SURFACES AND PAVEMENTS".

STATE OF VERMONT AGENCY OF TRANSPORTATION

Town Of	JOHNSON	Bridge No.	5
Highway No.	1	Log Sta.	
		Surv. Sta.	

TH NO. 1 OVER THE GIHON RIVER

GENERAL NOTES

Designed By	A.P. GUYETTE	Drawn By	A.P. GUYETTE
Checked By	Date	Bridge Design Supervisor	
J. W. TUCKER	2/09	J. W. TUCKER	Date 2/09
PROJECT	JOHNSON	PROJECT NO.	BHO 1448 (29)
I.G.C. Info.	z98J372notes.dgn	D & K DWG NO.	
Bridge Sheet No.		Sheet 25	of 68

