

GENERAL

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO STATE OF VERMONT, AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION 2006, AND ITS LATEST REVISIONS, AND THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, DATED 2002, AND ITS LATEST REVISIONS.
2. DIMENSIONS SHOWN ON THESE PLANS WERE DEVELOPED USING DESIGN PLANS FROM THE EXISTING STRUCTURE IN COMBINATION WITH TOPOGRAPHIC SURVEY PERFORMED BY VAOT. THE ORIGINAL DESIGN PLAN ARE INCLUDED IN THIS SET. THE CONTRACTOR IS RESPONSIBLE FOR CHECKING ANY AND ALL DIMENSIONS APPLICABLE TO THIS PROJECT.
3. ALL DIMENSIONS SHOWN IN THE PLANS ARE HORIZONTAL OR VERTICAL AT 68 DEGREES FAHRENHEIT, UNLESS NOTED OTHERWISE.

EARTHWORK/REMOVAL OF EXISTING BRIDGE

4. THE CONTRACTOR SHALL REMOVE THE EXISTING BRIDGE RAILING UNDER ITEM 525.I0 "REMOVAL OF EXISTING RAILING". THE EXISTING RAIL POSTS SHALL BE SALVAGED AND DELIVERED TO THE VTRANS DISTRICT 2 HIGHWAY GARAGE (870 US ROUTE 5 DUMMERSTON, VT 05301) PHONE: (802) 254-5011; COST INCIDENTAL TO ITEM 525.I0. THE REMAINING COMPONENTS SHALL BECOME THE PROPERTY OF THE CONTRACTOR.
5. ITEM 529.20, "PARTIAL REMOVAL OF STRUCTURE" SHALL BE USED FOR THE FOLLOWING:
 - (A) THE COMPLETE REMOVAL OF EXISTING SUPERSTRUCTURE INCLUDING BRIDGE RAILING, CURB, DECK, STEEL FRAMING AND BRACING, BEARINGS, EXPANSION JOINTS AND ALL COMPONENTS ABOVE THE BRIDGE SEATS; AND
 - (B) THE COMPLETE REMOVAL OF CONCRETE APPROACH SLABS.
 - (C) THE REMOVAL OF ABUTMENTS AND WINGWALLS ABOVE THE EXISTING FOOTING WITH THE EXCEPTION VERTICAL REINFORCEMENT AS NOTED ON SHT 4I; AND
 - (D) THE COMPLETE REMOVAL OF THE PIER CAPS AND PARTIAL REMOVAL OF THE PIER COLUMNS AS SHOWN ON SHEET 46.
6. 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 STATE, ITS OFFICERS, AND EMPLOYEES HARMLESS CONCERNING THE CONTRACTOR'S USE OR DISPOSITION OF THE STRUCTURAL STEEL.
7. ITEM 613.I0, STONE FILL SHALL BE USED IN THE FOLLOWING LOCATIONS:
 - (A) APPROXIMATELY 1 FOOT THICK BY 8 FOOT BY 10 FOOT PAD AT THE OUTLET OF THE CULVERT AT STATION 212 LEFT.
 - (B) APPROXIMATELY 1 FOOT THICK ON THE FILL SLOPES IN FRONT OF EACH ABUTMENTS AND WING WALLS AS SHOWN ON SHEET XX OR AS DIRECTED BY THE ENGINEER.

CONCRETE AND REINFORCING STEEL

8. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1/4 INCH. WHEN NEW CONCRETE IS PLACED AGAINST EXISTING CONCRETE, THE EXISTING CONCRETE SHALL BE CLEANED IN ACCORDANCE WITH SUBSECTION 501.13 B.
9. JOINTS AND SCORE MARKS IN CONCRETE SHALL BE CONSTRUCTED AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
10. REINFORCING PLACEMENT TOLERANCES SHALL BE:
 - SPACING 1/4 INCH
 - CLEARANCE +/- 1/4 INCH
11. ALL NEW REINFORCING STEEL IN THE CONCRETE DECK, EXPANSION JOINT BLOCKOUT, APPROACH SLABS, BACKWALLS, WINGWALL CURBS AND BRIDGE CURB SHALL BE EPOXY COATED AND PAID FOR UNDER ITEM 507.I7, EPOXY COATED REINFORCING STEEL. WHEN EPOXY COATED REINFORCING STEEL IS TO BE CUT, THE UNCOATED ENDS SHALL BE REPAIRED WITH MATERIALS AND PROCEDURES APPROVED BY THE COATING MANUFACTURER. FLAME CUTTING OF EPOXY COATED REINFORCING STEEL WILL NOT BE PERMITTED.
12. ITEM 514.I0 WATER REPELLENT, SILANE SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES EXCEPT THE UNDERSIDE OF DECK BETWEEN DRIP BEADS.
13. CONCRETE FOR THE DECK, EXPANSION JOINT BLOCKOUT AND CURBS SHALL BE HIGH PERFORMANCE CLASS A AND WILL BE PAID FOR UNDER ITEMS, ITEM 501.33, CONCRETE, HIGH PERFORMANCE CLASS A. ALL OTHER CONCRETE SHALL BE HIGH PERFORMANCE CLASS B AND WILL BE PAID FOR UNDER ITEM 501.34, CONCRETE, HIGH PERFORMANCE CLASS B UNLESS OTHERWISE NOTED.
14. SURFACES OF BRIDGE SEATS UNDER BEARING DEVICES SHALL BE LEVEL. OTHER BRIDGE SEAT AREAS SHALL BE SLOPED 1/4 INCH PER FOOT. THE ABUTMENT SEATS SHALL BE SLOPED FULL WIDTH TOWARD MIDSPAN. THE ENTIRE BRIDGE SEAT SURFACE SHALL BE GIVEN A MAGNESIUM FLOAT FINISH.

15. NO CONCRETE SHALL BE PLACED IN THE ABUTMENTS OR WINGWALLS ABOVE THE ADJACENT BEAM SEAT ELEVATIONS UNTIL THE BEAMS HAVE BEEN PROFILED AND THE FINISHED GRADE OF THE DECK HAS BEEN DETERMINED BY THE ENGINEER.
16. THE CURB POUR SEQUENCE SHALL FOLLOW THE ORDER OF THE DECK POUR SEQUENCE. THE ENTIRE DECK SHALL BE POURED PRIOR TO THE CURB. SEE BRIDGE SHEET 27 FOR DECK POUR SEQUENCE.
17. ALL REINFORCING STEEL SHALL BE DETAILED AND FABRICATED USING PROCEDURES AND TOLERANCES IN ACCORDANCE WITH AND APPLICABLE PUBLICATIONS OF THE CONCRETE REINFORCING STEEL INSTITUTE.
18. MINIMUM COVER FOR REINFORCING STEEL IN THE ABUTMENTS AND WINGWALLS SHALL BE 3 INCHES UNLESS DETAILED OTHERWISE. MINIMUM COVER FOR REINFORCING STEEL IN THE PIER CAPS SHALL BE 4 INCHES, UNLESS DETAILED OTHERWISE.
19. POLYURETHANE JOINT SEALER SHALL BE USED IN CURB CONSTRUCTION JOINTS OR AT FIXED END CURB JOINTS AS DIRECTED BY THE ENGINEER, IN ACCORDANCE WITH THE CURB JOINT DETAILS SHOWN IN THE TYPICAL BRIDGE DETAILS, BRIDGE SHEET 27.
20. INCIDENTAL TO ITEM 501.34 CONCRETE, HIGH PERFORMANCE CLASS B. THE TYPE OF PVC WATERSTOP TO BE USED SHALL BE SUBMITTED BY THE CONTRACTOR TO THE ENGINEER FOR APPROVAL.
21. FASCIA OVERHANG BRACKETS OR SIMILAR FALSE WORK SHALL BE SPACED AT A MAXIMUM OF 4 FEET. THE DESIGN OF THE FALSE WORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
22. ITEMS 580.I3 AND 580.I4, REPAIR OF CONCRETE SUBSTRUCTURE SURFACE (CLASS I AND CLASS II) HAVE BEEN INCLUDED AS ESTIMATED QUANTITIES. AFTER THE CONTRACTOR HAS COMPLETED PARTIAL REMOVAL OF PIERS, THE RESIDENT ENGINEER SHALL INSPECT THE PIER COLUMNS TO DETERMINE THE NEED FOR REPAIRS USING THESE ITEMS.

STRUCTURAL STEEL

23. DOWNSPOUTS SHALL CONFORM TO ASTM A500 OR 501 AND SHALL BE PAID FOR UNDER ITEM 506.60 "STRUCTURAL STEEL". ALL OTHER STRUCTURAL STEEL SHALL BE PAID FOR UNDER ITEM 506.56 "STRUCTURAL STEEL, CURVED PLATE GIRDER" AND SHALL CONFORM TO AASHTO M 270M/M270 GRADE 50W UNLESS OTHERWISE NOTED.
24. AFTER THE SUPERSTRUCTURE STEEL HAS BEEN ERECTED, ELEVATIONS SHALL BE TAKEN ALONG THE TOP OF EACH GIRDER UNDER THE DIRECTION OF THE ENGINEER. THESE ELEVATIONS SHALL BE USED IN DETERMINING FINAL GRADE.
25. ALL CONNECTIONS IN UNPAINTED AREAS SHALL BE MADE USING 3/8 INCH DIAMETER BOLTS, CONFORMING TO AASHTO M 164 TYPE 3. IN PAINTED AREAS USE 1/2 INCH DIAMETER BOLTS CONFORMING TO AASHTO M 164 TYPE 1 GALVANIZED. HOLES SHALL BE 1/8 INCH DIAMETER, UNLESS OTHERWISE NOTED. BOLTS THAT HAVE BEEN FULLY TIGHTENED SHALL NOT BE REUSED.
26. ANY HOLES IN THE FASCIA BEAMS NOT OTHERWISE FILLED SHALL BE FITTED WITH BUTTON HEAD OR HEX HEAD BOLTS CONFORMING TO AASHTO M 164 TYPE 3 (UNPAINTED AREA) OR TYPE 1 GALVANIZED (PAINTED AREA). THE BOLTS SHALL BE TIGHTENED IN ACCORDANCE WITH SUBSECTION 506.19 OF THE STANDARD SPECIFICATIONS.
27. WHERE GALVANIZING HAS BEEN REMOVED BY ANY MEANS FROM BRIDGE COMPONENTS INCLUDING DOWNSPOUTS AND ASSOCIATED HARDWARE, IT SHALL BE REPAIRED IN ACCORDANCE WITH SECTION 513 OF THE SPECIFICATIONS. COSTS FOR THIS WORK SHALL BE INCIDENTAL TO THE ITEM UNDER WHICH THE GALVANIZED COMPONENT IS PROVIDED.
28. CONNECTIONS NOT DETAILED SHALL BE DETAILED BY THE FABRICATOR AND SUBMITTED TO THE ENGINEER FOR APPROVAL.

TRAFFIC CONTROL

29. ROLLING ROADBLOCKS ON I-91 ARE ANTICIPATED FOR ERECTION OF TEMPORARY BRIDGE AND INSTALLATION OF SOME STEEL MEMBERS.
30. ONE LANE CLOSURES ON I-91 ARE ALSO ANTICIPATED TO COMPLETE BRIDGE CONSTRUCTION AND PROTECT TRAFFIC UNDER THE BRIDGE FROM FALLING OBJECTS.
31. A TWO-WAY TEMPORARY BRIDGE LOCATED NORTH OF THE EXISTING STRUCTURE WILL BE USED TO MAINTAIN TRAFFIC ON US ROUTE 5. THE BRIDGE SHALL SPAN THE INTERSTATE IN ACCORDANCE WITH THE REQUIREMENTS INDICATED ON THE US 5 TRAFFIC CONTROL PLAN.
32. SEE HIGHWAY SHEETS FOR SCHEMATIC TRAFFIC CONTROL AND PROTECTION PLANS. THE TRAFFIC CONTROL AND PROTECTION PLANS ARE SCHEMATIC ONLY AND SHOULD BE USED AS A REFERENCE. THE CONTRACTOR SHALL DEVELOP AND IMPLEMENT SITE SPECIFIC TRAFFIC CONTROL AND PROTECTION PLANS FOR TEMPORARY DETOURS, ROLLING ROADBLOCKS AND ONE LANE CLOSURES PER THE LATEST VERSION OF THE MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES. THE CONTRACTOR SHALL ALLOW THE RESIDENT ENGINEER 14 CALENDAR DAYS TO REVIEW AND ACCEPT THE PROPOSED PLANS BEFORE THEY ARE TO BE IMPLEMENTED. NO WORK SHALL COMMENCE UNTIL THE TRAFFIC CONTROL AND PROTECTION PLAN HAS BEEN APPROVED.

33. DEVELOPMENT AND IMPLEMENTATION OF THE TRAFFIC CONTROL AND PROTECTION PLAN FOR ONE LANE CLOSURES ON INTERSTATE 91 SHALL BE PAID UNDER ITEM 641.I0 TRAFFIC CONTROL (ONE LANE CLOSURES).
34. DEVELOPMENT AND IMPLEMENTATION OF THE TRAFFIC CONTROL AND PROTECTION PLAN FOR ROLLING ROADBLOCKS ON INTERSTATE 91 SHALL BE PAID UNDER ITEM 641.I0 TRAFFIC CONTROL (ROLLING ROADBLOCKS).
35. DEVELOPMENT AND IMPLEMENTATION OF THE TRAFFIC CONTROL AND PROTECTION PLAN FOR TEMPORARY DETOUR OF US ROUTE 5 SHALL BE PAID UNDER ITEM 641.I0 TRAFFIC CONTROL (TEMPORARY DETOUR).
36. TEMPORARY TRAFFIC CONTROL DETAILS PROVIDED IN THE PLANS ARE INTENDED FOR DAYTIME USE ONLY. ANY COSTS ASSOCIATED WITH PROVIDING AN OVERNIGHT TRAFFIC CONTROL PACKAGE, IF PROPOSED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER, WILL BE INCLUDED IN THE UNIT PRICE BID FOR CONTRACT ITEMS 641.I0.
37. ALL SIGNS, PAVEMENT MARKINGS, BARRELS, BARRICADES, AND OTHER INCIDENTALS REQUIRED FOR ROLLING ROADBLOCKS AND ONE LANE CLOSURES ON INTERSTATE 91 SHALL BE PAID FOR UNDER ITEM 641.I0 TRAFFIC CONTROL (ROLLING ROADBLOCK) AND ITEM 641.I0 TRAFFIC CONTROL (ONE LANE CLOSURES), RESPECTIVELY.
38. ALL SIGNS, PAVEMENT MARKINGS, BARRELS, BARRICADES, AND OTHER INCIDENTALS REQUIRED FOR THE TEMPORARY DETOUR OF U.S. ROUTE 5 SHALL BE PAID FOR UNDER ITEM 641.I0 TRAFFIC CONTROL (TEMPORARY DETOUR).
39. ACCESS TO ALL EXISTING SIDE ROADS, DRIVES, AND PARKING AREAS SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.
40. LIMITED ACCESS HIGHWAY FENCE DISTURBED BY THE DETOUR OR TEMPORARY BRIDGE SHALL BE REMOVED AND RESET AS NECESSARY DURING CONSTRUCTION. COST TO REMOVE AND RESET FENCE SHALL BE CONSIDERED INCIDENTAL TO ITEM 528.II TWO WAY TEMPORARY BRIDGE.
41. LIMITS OF US 5 TEMPORARY DETOUR MUST BE WITHIN THE RIGHT-OF-WAY OR STATE OWNED LANDS. ALL WORK NECESSARY TO MEET THIS CONDITION SHALL BE CONSIDERED INCIDENTAL TO ITEM 528.II.
42. EXISTING HEADWALL AND DRAINAGE PIPE WILL NEED TO BE REMOVED TO CONSTRUCT SOUTHERN TEMPORARY BRIDGE ABUTMENT. HEADWALL AND PIPE SHALL BE REPLACED IN-KIND TO ORIGINAL INVERT GRADE AT END OF CONSTRUCTION. HEADWALL SHALL BE CONSTRUCTED IN ACCORDANCE WITH VTRANS STANDARD D-33. PAYMENT TO REMOVE PIPE AND HEADWALL SHALL BE INCIDENTAL TO ITEM 528.II. SEE EROSION CONTROL PLANS FOR LOCATIONS. PAYMENT TO REPLACE PIPE AND HEADWALL SHALL BE MADE UNDER ITEMS 507.I5, 541.25, 601.0920. PAYMENT FOR EXCAVATION AND BACKFILL REQUIRED FOR PIPE AND HEADWALL SHALL BE INCIDENTAL TO 528.II.
43. ALL EXISTING DITCHES IMPACTED BY TEMPORARY DETOUR SHALL BE RESTORED TO ORIGINAL GRADE. PAYMENT TO RESTORE DITCHES SHALL BE INCIDENTAL TO ITEM 528.II. SEE EPSC FINAL CONDITIONS PLAN FOR LOCATIONS.
44. TEMPORARY BRIDGE APPROACHES CONSTRUCTED FROM STATION 405+12.42 TO STATION 412+48.52 SHALL BE REMOVED AFTER COMPLETION OF BRIDGE #17 CONSTRUCTION AND THE AREA DISTURBED SHALL BE RE-GRADED AND RE-VEGETATED PER THE EPSC FINAL CONDITIONS PLAN. TAYLOR ROAD SHALL BE RESTORED TO ORIGINAL 18' PAVED WIDTH AT END OF CONSTRUCTION. THE EXISTING DITCH ALONG THE EAST SIDE OF TAYLOR ROAD SHALL BE RESTORED TO ORIGINAL GRADE. PAYMENT FOR REMOVAL OF TEMPORARY BRIDGE APPROACHES, RE-GRADEING, AND RESTORING TAYLOR ROAD INCLUDING BUT NOT LIMITED TO REMOVING WIDENED PAVEMENT AND RESTORING DITCH LINE SHALL BE INCIDENTAL TO ITEM 528.II. SEE EPSC FINAL CONDITIONS PLAN.
45. TAYLOR ROAD SHALL BE RE-PAVED WITH 1-1/2" OVERLAY OF MEDIUM DUTY BITUMINOUS PAVEMENT, TYPE I FROM INTERSECTION WITH U.S. 5 TO STATION 600+71 AFTER PAVEMENT WIDENING AND BRIDGE APPROACHES ARE REMOVED. PAYMENT SHALL BE MADE UNDER ITEM 406.27.
46. A 3' DEEP X 10' WIDE TRENCH SHALL BE DUG ALONG TAYLOR ROAD IN LOCATIONS SHOWN ON EPSC FINAL CONDITIONS PLAN. THE TRENCH SHALL BE BACKFILLED WITH TOPSOIL FOR FUTURE LANDSCAPING BY THE TOWN. PAYMENT SHALL BE MADE UNDER ITEM 651.35 TOPSOIL. PAYMENT FOR EXCAVATING THE TRENCH SHALL BE INCIDENTAL TO ITEM 651.35.
47. TWO EXISTING TREES AT STATION 601+08 LT. AND 601+15 LT. SHALL BE REMOVED. PAYMENT SHALL BE INCIDENTAL TO ITEM 528.II.

**STATE OF VERMONT
AGENCY OF TRANSPORTATION**

Town Of	PUTNEY	Bridge No.	I9A
Highway No.		Log Sta.	
		Surv. Sta.	
U.S. ROUTE 5 OVER I-91			
PROJECT NOTES			
Designed By	T. KNIGHT	Drawn By	R. WALKER
Checked By	Date	Bridge Design Supervisor	Date
T. KNIGHT	7/09	G. BOGUE	7/09
PROJECT	PUTNEY	PROJECT NO.	IM 091-I(31)
CAD Drawing Name:	... \Plot Files\25 293810\NO 25 293810.dwg		
Bridge Sheet No.	Sheet 25 of 75		

