

GENERAL

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2011, AND ITS LATEST REVISIONS, AND THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, DATED 2014, AND ITS LATEST REVISIONS.
2. DIMENSIONS, ANGLES, AND ELEVATIONS SHOWN ON THESE PLANS HAVE BEEN OBTAINED FROM SURVEY INFORMATION AND LIMITED FIELD INVESTIGATION AND MAY NOT ACCURATELY REFLECT FIELD MEASUREMENTS FOR ALL STRUCTURE COMPONENTS IMPACTED BY THE WORK (EXISTING OR PROPOSED) 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 ENGINEER BEFORE ADVANCING THE WORK. FABRICATION DRAWINGS REQUIRED FOR VARIOUS ITEMS OF THE WORK SHALL INDICATE THE ACTUAL FIELD MEASUREMENTS AND SHALL BE SO NOTED.
3. ALL DIMENSIONS SHOWN IN THE PLANS ARE HORIZONTAL OR VERTICAL AND ARE GIVEN AT 68 DEGREES FAHRENHEIT, UNLESS NOTED OTHERWISE.
4. ALL PG BINDER USED IN BITUMINOUS CONCRETE PAVEMENT SHALL BE INCLUDED IN THE WEARING COURSE PAY ITEM.
5. EMULSIFIED ASPHALT SHALL BE APPLIED ON COLD PLANED SURFACES AT THE RATE OF 0.040 GAL/SY AND BETWEEN ALL COURSES OF PAVEMENT AT THE RATE OF 0.025 GAL/SY OR AS DIRECTED BY THE ENGINEER.
6. ANY REQUIRED SAWCUT OF EXISTING PAVEMENT WILL BE CONSIDERED INCIDENTAL TO THE WEARING COURSE PAY ITEM 490.30, "SUPERPAVE BITUMINOUS CONCRETE PAVEMENT".
7. THE CONTRACTOR SHALL BE MADE AWARE THAT EXISTING UTILITIES ARE WITHIN THE CONSTRUCTION LIMITS OF BRIDGE 126. THE UTILITIES WILL BE RELOCATED BY OTHERS PRIOR TO THE START OF CONSTRUCTION. NO CLAIMS ARE MADE AS TO THE ACCURACY OR COMPLETENESS OF THE UTILITIES SHOWN. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR LOCATING AND PROTECTION FROM DAMAGE ALL UTILITIES ON SITE DURING ALL STAGES OF CONSTRUCTION.
8. THE CONTRACTOR SHALL REVIEW AND UNDERSTAND ALL APPLICABLE ENVIRONMENTAL PERMITS AND ENSURE THAT ALL CONSTRUCTION CONDITIONS ARE MET.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE TO PRIVATE OR PUBLIC PROPERTY CAUSED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE AND TO THE SATISFACTION OF THE ENGINEER.
10. UPON COMPLETION OF THE BRIDGE CONSTRUCTION, THE CONTRACTOR SHALL REMOVE THE DETOUR, RESTORE THE DETOUR SITE TO THE ORIGINAL GRADE OR PROPOSED GRADE AS APPLICABLE, AND STABILIZE AS SHOWN ON THE EPSC FINAL CONDITIONS PLAN.
11. MARKER POST: TO BE PLACED AS INDICATED OR AS DIRECTED BY THE ENGINEER.
12. SLOPE ROUNDING: ALL CUT SLOPES TO BE ROUNDED IN ACCORDANCE WITH VAOT STANDARD SHEET B-5.
13. DRIVEWAYS: ALL DRIVEWAYS SHALL BE CONSTRUCTED IN ACCORDANCE WITH VAOT STANDARD SHEET B-71.

CONCRETE

14. PRECAST CONCRETE SHALL MEET THE REQUIREMENTS OF SECTION 540 AND WILL BE PAID UNDER CONTRACT ITEM 540.10.
15. CAST-IN-PLACE CONCRETE USED FOR MAT FOUNDATION, FOOTINGS, AND PEDESTAL WALLS SHALL BE HIGH PERFORMANCE CONCRETE CLASS B AND WILL BE PAID FOR UNDER CONTRACT ITEM 501.34.
16. ITEM 514.10, "WATER REPELLENT, SILANE", SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES, EXCEPT THE INTERIOR OF THE PRECAST CONCRETE ARCH, TO 1'-0" BELOW GRADE.
17. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1" X 1".

REINFORCING STEEL

18. ALL REINFORCING STEEL IN THE FOOTINGS AND PEDESTAL WALLS SHALL BE LEVEL 1 - PLAIN REINFORCING STEEL AND WILL BE PAID FOR UNDER CONTRACT ITEM 507.11.
19. ALL REINFORCING STEEL SHALL BE DETAILED AND FABRICATED USING PROCEDURES AND TOLERANCES IN ACCORDANCE WITH APPLICABLE PUBLICATIONS ON THE "CONCRETE REINFORCING INSTITUTE".
20. REINFORCING PLACEMENT TOLERANCES SHALL BE:
SPACING: +/- 1 INCH
CLEARANCES: +/- 1/4 INCH
21. MINIMUM CLEAR COVER FOR REINFORCING STEEL SHALL BE AS FOLLOWS:
a. WALL FACES NOT EXPOSED TO DEICING SALTS: 2.0 INCH
b. CAST AGAINST EARTH: 3.0 INCH
c. ELSEWHERE UNLESS OTHERWISE INDICATED: 3.0 INCH
22. TEST BARS SHALL BE PROVIDED IN ACCORDANCE WITH THE "VERMONT AGENCY OF TRANSPORTATION MATERIALS SAMPLING MANUAL".

EARTHWORK AND RELATED ITEMS

23. 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.
24. BACKFILL ARCH EVENLY.
25. THE INTENT OF THE STONE FILL INSIDE THE CULVERT AND IN THE UPSTREAM AND DOWNSTREAM CHANNELS IS TO CREATE A NATURAL-LIKE STREAM CHANNEL THROUGH THE PROJECT AREA AND WITHIN THE ARCH THAT WILL RESIST SCOUR DURING EXTREME FLOOD EVENTS.
26. THE STONE IN THE UPSTREAM AND DOWNSTREAM CHANNELS SHALL CONSIST OF WELL-GRADED, 4'-0" MAXIMUM DIMENSION NATURAL STREAM BED MATERIAL. PAYMENT FOR THIS MATERIAL WILL BE MADE UNDER ITEM 900.608, "SPECIAL PROVISION (STONE FILL, STREAM BED MATERIAL)".
27. THE STONE FILL WITHIN THE ARCH SHALL CONSIST OF WELL-GRADED, 3'-0" MAXIMUM DIMENSION NATURAL STREAM BED MATERIAL. PAYMENT FOR THIS MATERIAL WILL BE MADE UNDER ITEM 900.608, "SPECIAL PROVISION (STONE FILL, CULVERT LINING)".
28. 35 TO 40 BOULDERS WITH MIDDLE AXIS MEASURING 2-6" TO 3-0" SHALL BE DISTRIBUTED THROUGHOUT THE ARCH LENGTH, WITH THE REMAINING SPECIAL PROVISION (STONE FILL, CULVERT LINING) PLACED AROUND THEM. PAYMENT FOR THESE BOULDERS WILL BE CONSIDERED INCIDENTAL TO ITEM 900.608, "SPECIAL PROVISION (STONE FILL, CULVERT LINING)".
29. THE STONE FILL SHALL BE PLACED SUCH THAT THERE ARE NO DISCRETE VERTICAL DROPS IN EXCESS OF 3 INCHES, AND SO THE FLOW OF WATER IS GENERALLY CONCENTRATED IN THE CENTER OF THE ARCH RATHER THAN DISPERSED ACROSS THE ENTIRE WIDTH.
30. THE UPSTREAM AND DOWNSTREAM CHANNELS FROM THE ARCH INVERTS TO THE LIMITS OF CHANNEL WORK SHALL BE REGRADED TO PROVIDE A GRADUAL TRANSITION TO THE ARCH. PRESERVE LARGE COBBLES (IF APPLICABLE). AVOID DISCRETE ELEVATION CHANGES GREATER THAN 3 INCHES.

COFFERDAM NOTES

31. ACTUAL EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR. HOWEVER, ONLY THE EXCAVATION BETWEEN THE LIMITS SHOWN WILL BE PAID FOR UNDER ITEM 208.30, "COFFERDAM EXCAVATION, EARTH (FPQ)" OR ITEM 208.35, "COFFERDAM EXCAVATION, ROCK".
32. THE CONTRACTOR IS TO DETERMINE THE COFFERDAM SIZE. PAYMENT FOR ANY COFFERDAMS REQUIRED FOR EXCAVATION AND/OR PHASING WILL BE MADE UNDER ITEM 208.40, "COFFERDAM (ARCH AND WINGWALLS - PHASE 1)" OR ITEM 208.40, "COFFERDAM (ARCH AND WINGWALLS - PHASE 2)", AS APPLICABLE.

COFFERDAM NOTES (CONTINUED)

33. THE PAY LIMITS OF (COFFERDAM EXCAVATION, EARTH) (FPQ), (COFFERDAM EXCAVATION, ROCK), AND GRANULAR BACKFILL FOR STRUCTURES (FPQ) SHALL BE TWO FEET OUTSIDE THE PERIMETER OF THE FOOTING OR ANCHOR, AS APPLICABLE.
34. USE A 1'-0" MINIMUM UNDERCUT ON TILL AND 2'-0" MINIMUM UNDERCUT ON CLAY BELOW THE MAT FOUNDATION AS DETERMINED BY THE ENGINEER OR DEEMED NECESSARY BASED ON BORINGS.
35. ALL EXCAVATION AND BACKFILLING SHALL BE CONDUCTED IN DRY CONDITIONS. DEWATERING SHALL BE CONTINUOUS UNTIL THE PRECAST CONCRETE ARCH AND WINGWALLS ARE BACKFILLED TO THE SURROUNDING WATER TABLE, UNLESS OTHERWISE NOTED.
36. DEWATERING OF EXCAVATION AREAS SHALL MAINTAIN GROUNDWATER LEVELS 2'-0" BELOW THE EXCAVATION SUBGRADE IN AREAS WHERE LEDGE IS NOT ENCOUNTERED, WHICH MAY REQUIRE THE USE OF WELL POINTS OR DEEP WELLS.

TEMPORARY RELOCATION OF STREAM NOTES

37. THE CONTRACTOR SHALL PROVIDE TEMPORARY STREAM RELOCATION BY STREAM RELOCATION PUMPING OR OTHER APPROVED METHODS AS REQUIRED DURING CONSTRUCTION.
38. THE SPECIAL PROVISION (TEMPORARY STREAM RELOCATION) DETAIL ON SHEET 7 ARE SCHEMATIC ONLY. ACTUAL LOCATIONS OF THE PUMPS, PIPING, COFFERDAMS (IF APPLICABLE), CHECKDAMS, AND OTHER EQUIPMENT REQUIRED TO COMPLETE THE TEMPORARY STREAM RELOCATION SHALL BE ADJUSTED TO MATCH FIELD CONDITIONS AS DESIGNED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER. THE DESIGN AND PLANS SHALL BE STAMPED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF VERMONT AND SHALL BE APPROVED BY THE PROJECT MANAGER. ALL WORK AND EQUIPMENT SHALL BE PERFORMED AND PLACED WITHIN THE PROJECT SLOPE LIMITS.
39. THE SPECIAL PROVISION (TEMPORARY STREAM RELOCATION) DETAIL ON SHEET 7 SHOW POTENTIAL STREAM RELOCATION METHODS. THE CONTRACTOR IS RESPONSIBLE FOR DEVELOPING ITS OWN SITE SPECIFIC PLAN AND DESIGN FOR DEWATERING AND STREAM RELOCATION. SEE SPECIAL PROVISION FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
40. THE WORK WITHIN THE STREAM SHALL BE PERFORMED DURING THE SEASONAL LOW FLOW PERIOD (JUNE 1 TO OCTOBER 1). THE DESIGN OF THE SITE SPECIFIC SITE PLANS SHALL BE CAPABLE OF PUMPING AT LEAST TWICE THE FLOWS ASSOCIATED WITH THE AVERAGE DAILY FLOW. THE WORK RELATED TO THE CONSTRUCTION OF THE CULVERT SHALL BE PLANNED ACCORDING TO THE WEATHER AND SHALL NOT BE PERFORMED DURING A PERIOD DURING WHICH A BAD WEATHER EVENT IS FORECAST.
41. PAYMENT FOR ITEM 900.645, "SPECIAL PROVISION (TEMPORARY RELOCATION OF STREAM)" WILL INCLUDE, BUT IS NOT LIMITED TO, THE FOLLOWING WORK:
 - A. PREPARATION OF THE SITE SPECIFIC TEMPORARY RELOCATION PLAN.
 - B. THE DAM FOR CONTROLLING WATER.
 - C. THE BY-PASS PUMP(S), BY-PASS PIPE(S), SLEEVE(S), AND HARDWARE.
 - D. ANY EXCAVATION NEEDED TO PLACE AND REMOVE THE BY-PASS PIPE THAT FALLS OUTSIDE THE PAY LIMITS OF STRUCTURE OR COMMON EXCAVATION AS DEFINED IN THE PLANS.
 - E. ANY BACKFILL NEEDED TO PLACE THE BY-PASS PIPE SUCH THAT THE EXISTING STREAM ELEVATIONS WILL MAINTAIN THE FLOW OF WATER AT ALL TIMES.
 - F. MATERIAL AND LABOR TO PLACE THE BACKFILL WHICH FALLS OUTSIDE THE PAY LIMITS OF THE ROADWAY SUBBASE AND GRANULAR BACKFILL FOR STRUCTURES AS DEFINED ON THE PLANS.
 - G. INCIDENTALS USED TO DIVERT THE WATER TO THE BY-PASS PIPE(S) (SANDBAGS, CHECK DAM, ETC.), TO CONSTRUCT THE CULVERT, AND TO RESTORE THE STREAM BED IN DRY CONDITIONS.



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