

GENERAL NOTES

GENERAL

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE AGENCY OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR CONSTRUCTION, DATED 2001, AND ITS LATEST REVISIONS, AND THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, SEVENTEENTH EDITION, AND ITS LATEST REVISIONS.
2. BRIDGE IS DESIGNED FOR HS-25 LIVE LOAD WITH NO ALLOWANCE FOR FUTURE PAVEMENT.
3. ALL DIMENSIONS ARE HORIZONTAL OR VERTICAL AND ARE GIVEN AT 68 DEGREES F UNLESS OTHERWISE NOTED.

STRUCTURAL STEEL

4. ANY CONNECTIONS THAT ARE NOT DETAILED ON THE PLANS SHALL BE DETAILED BY THE FABRICATOR AND SUBMITTED TO THE STRUCTURES ENGINEER FOR APPROVAL.
5. ANY HOLES IN THE WEBS OF THE FASCIA BEAMS/GIRDERS THAT ARE NOT OTHERWISE FILLED, SHALL BE FILLED WITH EITHER BUTTON HEAD OR HEX HEAD BOLTS. THESE BOLTS SHALL BE TIGHTENED IN ACCORDANCE WITH VERMONT SPECIFICATION 506.19.
6. ALL FIELD CONNECTIONS SHALL BE MADE WITH 7/8" DIAMETER ASTM DESIGNATION A-325 TYPE III BOLTS IN 15/16" DIAMETER HOLES.
7. AFTER THE SUPERSTRUCTURE HAS BEEN ERECTED, ELEVATIONS SHALL BE TAKEN ALONG THE TOP OF THE BEAMS/GIRDERS, AS DIRECTED BY THE RESIDENT ENGINEER, FOR USE IN DETERMINING THE FINISHED GRADE.

TEMPORARY DETOUR

8. DURING CONSTRUCTION TRAFFIC SHALL BE MAINTAINED ON A TWO-WAY TEMPORARY BRIDGE LOCATED UPSTREAM OF THE EXISTING STRUCTURE. THE CONTRACTOR SHALL NOTIFY THE TOWN OF RANDOLPH A MINIMUM OF TWO WEEKS PRIOR TO DIVERTING TRAFFIC TO THE TEMPORARY BRIDGE. THE RANDOLPH TOWN OFFICE CAN BE REACHED BY TELEPHONE AT (802-728-5682).
9. THE ROADWAY APPROACHES AND THE TEMPORARY BRIDGE WILL BE PAVED. SEE TYPICAL SECTION ON SHEET 38 OF 135.
10. THE REMOVAL AND/OR RESETTING OF TRAFFIC SIGNS, AS DEEMED NECESSARY BY THE RESIDENT ENGINEER, WILL BE CONSIDERED INCIDENTAL TO ITEM 641.10 "TRAFFIC CONTROL".
11. THE CONTRACTOR SHALL ERECT AND MAINTAIN ALL TEMPORARY SIGNS AND TEMPORARY BARRICADES AS SHOWN ON THE PLANS AND AS DIRECTED BY THE RESIDENT ENGINEER. PAYMENT FOR THIS WORK SHALL BE INCIDENTAL TO ITEM 641 "TRAFFIC CONTROL".
12. WHERE EXISTING PAVEMENT MARKINGS ARE NOT APPROPRIATE TO THE MOVEMENT OF TRAFFIC THROUGH THE CONSTRUCTION AREA, THE MARKINGS SHALL BE REMOVED IN A MANNER APPROVED BY THE RESIDENT ENGINEER.
13. THE EXPOSED END OF THE TEMPORARY BARRIER SHALL BE PLACED BEYOND THE CLEAR ZONE.
14. PRINCE STREET SHALL BE CLOSED TO THRU TRAFFIC DURING THE CONSTRUCTION PERIOD. THE TOWN SHALL BE NOTIFIED TWO WEEKS PRIOR TO PRINCE STREET BEING CLOSED.
15. ACCESS TO THE ICE RINK SHALL BE MAINTAINED AT ALL TIMES.
16. A SIDEWALK SHALL BE INCORPORATED IN THE DESIGN AND CONSTRUCTION OF THE TEMPORARY BRIDGE AND INCLUDED IN THE BID PRICE FOR ITEM 528.11. PEDESTRIAN TRAFFIC THROUGH THE PROJECT SHALL BE MAINTAINED AT ALL TIMES.
17. BLANK

LEDGE

18. FINAL LEDGE GRADE TO COMPETENT ROCK WILL BE DETERMINED BY THE SOILS AND FOUNDATIONS ENGINEER. LEDGE ELEVATIONS SHOWN ON PLANS ARE APPROXIMATE AND MAY VARY FROM ACTUAL FINAL LEDGE GRADE. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH THE SOILS AND FOUNDATIONS ENGINEER AND THE RESIDENT ENGINEER, IN DETERMINING ACTUAL FINAL LEDGE GRADE. THE AGENCY WILL NOT GRANT ANY EXTENSION OF TIME DUE TO THE CONTRACTOR'S FAILURE TO PROPERLY COORDINATE THE FINAL LEDGE GRADE DETERMINATION.
19. WHERE LEDGE IS 6" OR LESS BELOW THE DESIGN BOTTOM OF FOOTING ELEVATION, THE FOOTING SHALL BE PLACED FROM THE TOP OF THE LEDGE USING "CONCRETE, HIGH PERFORMANCE, CLASS B".
20. ABUTMENT #2, WINGWALL #3, AND WINGWALL #4 HAVE BEEN DESIGNED FOR THE TOP OF FOOTING ELEVATIONS SHOWN ON THE PLANS. IF LEDGE IS GREATER THAN 6" BELOW THE DESIGN BOTTOM OF FOOTING, THE CONTRACTOR SHALL PLACE A

SUB-FOOTING TO THE INDICATED DESIGN BOTTOM OF FOOTING ELEVATION. THE SUB-FOOTING SHALL BE "CONCRETE, CLASS C".

21. IF LEDGE IS LESS THAN 2'-0" ABOVE THE DESIGN BOTTOM OF FOOTING ELEVATION, THE LEDGE SHALL BE EXCAVATED TO THE BOTTOM OF THE FOOTING ELEVATION.
22. IF LEDGE IS GREATER THAN 2'-0" ABOVE THE DESIGN BOTTOM OF FOOTING ELEVATION, THE FOOTING ELEVATION MAY BE RAISED WITH PERMISSION OF THE PROJECT MANAGER. THE PROJECT MANAGER SHALL BE NOTIFIED WITH A LEDGE PROFILE AND WILL PROVIDE REVISED DESIGN IF THE FOOTING ELEVATION IS APPROVED TO BE RAISED.
23. DOWELS SHALL BE DRILLED AND GROUTED INTO LEDGE AS SHOWN ON THE PLANS, OR AS DIRECTED BY THE RESIDENT ENGINEER. THE DOWELS SHALL HAVE A 1'-6" EMBEDMENT INTO THE LEDGE AND SHALL EXTEND INTO THE FOOTING A MINIMUM OF 2'-0" UNLESS OTHERWISE NOTED.
24. FOOTINGS OR SUB-FOOTINGS SHALL BE FOUNDED ON LEDGE, WHICH HAS BEEN CLEANED OF ALL LOOSE ROCK AND OTHER DEBRIS. THE LEDGE SHALL BE PREPARED TO ENSURE THE FOOTINGS ARE PLACED ON COMPETENT ROCK.
25. ABUTMENT NO. 2 AND WINGWALLS NO. 3 & 4 ARE DESIGNED FOR A MAXIMUM FOOTING PRESSURE OF 10 KSF.

STONE FILL

26. THE STONE FILL, TYPE III SHALL BE PLACED IN FRONT OF THE ABUTMENTS BEFORE THE STRUCTURAL STEEL HAS BEEN SET.
27. THE STONE FILL, TYPE III SHALL BE PLACED AROUND THE PIER(S) BEFORE THE STRUCTURAL STEEL HAS BEEN SET.

CONCRETE

28. THE KEY IN CONCRETE CONSTRUCTION JOINTS SHALL BE MONOLITHIC AND CONTINUOUS FOR THE FULL LENGTH OF THE JOINT, ANY UPWARD KEY SHALL BE PLACED INTEGRALLY WITH THE CONCRETE BELOW THE JOINT.
29. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1" BY 1".
30. JOINTS AND SCORE MARKS IN CONCRETE SHALL BE CONSTRUCTED AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
31. REINFORCING PLACEMENT TOLERANCES SHALL BE:
SPACING + - 1"
CLEARANCE + - 1/4"
32. MINIMUM COVER FOR REINFORCING STEEL SHALL BE TWO (2) INCHES ALONG THE BACK FACES OF WALLS AGAINST EARTH, ONE AND ONE-HALF INCHES (1 1/2") ALONG THE BOTTOM SURFACE OF THE DECK AND THREE INCHES (3") ELSEWHERE, UNLESS OTHERWISE NOTED.
33. SURFACES OF BRIDGE SEATS UNDER BEARING DEVICES SHALL BE LEVEL, OTHER BRIDGE SEAT AREAS SHALL BE SLOPED 1/4" PER FOOT TOWARDS MID-SPAN. THE ENTIRE BRIDGE SEAT SURFACE SHALL BE SMOOTHED WITH A MAGNESIUM FLOAT FINISH.
34. THE HEIGHT OF FILL BEHIND ABUTMENTS WILL BE LIMITED TO THE BRIDGE SEAT ELEVATION UNTIL THE DECK HAS BEEN POURED AND THE CURING PERIOD IS UP.
35. NO TRAFFIC SHALL BE ALLOWED ON THE NEW DECK UNTIL THE CURE PERIOD IS UP AND THE 28 DAY DESIGN STRENGTH IS ATTAINED, AS EVIDENCED BY TEST CYLINDERS CURED UNDER FIELD CONDITIONS.
36. WATER REPELLENT (MOD.-SILANE) SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES EXCEPT THE UNDERSIDE OF THE DECK BETWEEN THE DRIP BEADS.
37. NO CONCRETE IN THE ABUTMENTS OR WINGWALLS SHALL BE PLACED ABOVE THE BRIDGE SEAT ELEVATIONS UNTIL THE BEAMS/GIRDERS HAVE BEEN PROFILED AND THE FINISHED GRADE OF THE DECK HAS BEEN DETERMINED.
38. FOR BRIDGE DECK POURS, THE MAXIMUM TIME LIMIT FOR ANY COMBINATION OF POURS DONE IN ANY ONE DAY SHALL BE EIGHT HOURS. THERE SHALL BE A MINIMUM OF 96 HOURS BETWEEN THE COMPLETION OF ONE DAY'S POUR AND THE BEGINNING OF OTHER ADJACENT POURS. ALL INDIVIDUAL DECK POURS SHALL START FROM THE LOW END OF THE BRIDGE.
39. FLEMING BRACKETS OR SIMILAR FALSEWORK SHALL BE PLACED AT A MAXIMUM SPACING OF 4'-0".

PILES

40. THE PILES FOR ABUTMENT #1 WILL REQUIRE PILE SHOES. THE SHOES SHALL BE CAST STEEL AND SHALL CONFORM TO SECTION 505.
41. THE PILES SHALL BE DRIVEN TO LEDGE WITH AN ULTIMATE CAPACITY OF 365 KIPS AS DETERMINED BY THE RESIDENT ENGINEER.

STAY-IN-PLACE CORRUGATED METAL FORMS

42. THE USE OF STAY-IN-PLACE CORRUGATED METAL FORMS IS ALLOWED ON THIS PROJECT AS AN ALTERNATIVE USING ITEM 501.33 "CONCRETE, HIGH PERFORMANCE, CLASS A (SIPCMF) (MOD.-FPQ)". SEE SPECIAL PROVISIONS FOR SPECIFICATIONS FOR THE FORMS.
43. THE CONTRACTOR MAY CHOOSE TO COMBINE STAY-IN-PLACE CORRUGATED METAL FORMS AND REMOVABLE FORMS AS ALLOWED IN THE SPECIAL PROVISIONS. IF ANY PORTION OF THE DECK IS TO BE FORMED WITH STAY-IN-PLACE CORRUGATED METAL FORMS, THE ENTIRE DECK PAYMENT SHALL BE UNDER THE "CONCRETE, HIGH PERFORMANCE, CLASS A (SIPCMF) (MOD.-FPQ) ITEM.

REMOVAL OF STRUCTURE

44. THE ITEM 529.20 "PARTIAL REMOVAL OF STRUCTURE (BRIDGE)" SHALL BE PAYMENT FOR REMOVAL OF THE EXISTING SUPERSTRUCTURE AND ANY PORTION OF THE SUB-STRUCTURE NOT REMOVED UNDER THE ITEMS 208.30 "COFFERDAM EXCAVATION EARTH", 208.35 "COFFERDAM EXCAVATION ROCK, AND 203.27 "UNCLASSIFIED CHANNEL EXCAVATION.
45. ITEM 529.20 "PARTIAL REMOVAL OF STRUCTURE (BRIDGE)" SHALL INCLUDE PAYMENT FOR DEMOLITION OF EXISTING UTILITY FACILITIES AND ANY ADDITIONAL OVERBURDEN ON THE BRIDGE. THE EXISTING BRIDGE PAVEMENT SHALL BE REMOVED UNDER ITEM 529.10 "REMOVAL OF BRIDGE PAVEMENT".
46. THE EXISTING PIERS SHALL BE REMOVED A MINIMUM OF 2'-0" BELOW FINISHED GRADE IN CHANNEL LOCATIONS. AT THE COMPLETION OF THE PIER REMOVALS IN CHANNEL LOCATIONS, THE DISTURBED AREAS SHALL BE STABILIZED WITH STONE FILL, TYPE II. THE EXISTING PIER LOCATED UNDER THE NEW PRINCE STREET ALIGNMENT SHALL BE REMOVED TO 2'-0" BELOW THE BOTTOM OF SUBBASE. ABUTMENT #1 SHALL BE REMOVED DOWN TO ELEVATION 668.0.
47. ITEM 529.20 - "PARTIAL REMOVAL OF STRUCTURE (RETAINING WALL)" SHALL BE PAYMENT FOR REMOVAL OF PORTIONS OF THE EXISTING RETAINING WALL. THE CONTRACTOR SHALL MAINTAIN THE INTEGRITY OF THOSE PORTIONS OF THE EXISTING EXISTING WALL TO BE RETAINED. ANY DAMAGE TO RETAINED PORTIONS WILL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

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