

GENERAL NOTES



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 2006, AND ITS LATEST REVISIONS.
2. ACCESS TO ALL EXISTING SIDE ROADS, DRIVES, AND PARKING AREAS SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.
3. ALL DIMENSIONS SHOWN IN THE PLANS ARE HORIZONTAL OR VERTICAL AT 20 DEGREES CELSIUS, UNLESS NOTED OTHERWISE.

EARTHWORK AND RELATED ITEMS

4. THE STONE FILL TYPE UNDER THE BRIDGES SHALL BE PLACED BEFORE THE GIRDERS FOR EITHER BRIDGE ARE SET.
5. 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 FINISHED.

CONCRETE AND REINFORCING STEEL

6. CONCRETE FOR THE DECK, EXPANSION JOINT BLOCKOUT AND CURBS SHALL BE HIGH PERFORMANCE CLASS A AND WILL BE PAID FOR UNDER ONE OF THE ALTERNATE BID ITEMS, ITEM 501.33, CONCRETE, HIGH PERFORMANCE CLASS A (FPO) OR 501.33 CONCRETE, HIGH PERFORMANCE CLASS A (SIPCMF) (FPO). 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.
7. SURFACES OF BRIDGE SEATS UNDER BEARING DEVICES SHALL BE LEVEL. OTHER BRIDGE SEAT AREAS SHALL BE SLOPED 40mm PER METER. THE ABUTMENT SEATS SHALL BE SLOPED FULL WIDTH TOWARD MIDSPAN. THE ENTIRE BRIDGE SEAT SURFACE SHALL BE GIVEN A MAGNESIUM FLOAT FINISH.
8. 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.
9. 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 BR618 FOR DECK POUR SEQUENCE.
10. JOINTS AND SCORE MARKS IN CONCRETE SHALL BE CONSTRUCTED AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
11. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 25mm.
12. ITEM 514.0 WATER REPELLENT, SILANE SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES EXCEPT THE UNDERSIDE OF DECK BETWEEN DRIP BEADS.
13. ALL REINFORCING STEEL SHALL BE DETAILED AND FABRICATED USING PROCEDURES AND TOLERANCES IN ACCORDANCE WITH AND APPLICABLE PUBLICATIONS OF THE CONCRETE REINFORCING STEEL INSTITUTE.
14. MINIMUM COVER FOR REINFORCING STEEL IN THE ABUTMENTS AND WINGWALLS SHALL BE 50mm ALONG WALL FACES AGAINST EARTH, AND 75mm ELSEWHERE, UNLESS DETAILED OTHERWISE. MINIMUM COVER FOR REINFORCING STEEL IN THE PIER SHALL BE 100mm, UNLESS DETAILED OTHERWISE.
15. ALL REINFORCING STEEL IN THE CONCRETE DECK, PIER STEM, EXPANSION JOINT BLOCKOUT, APPROACH SLABS, BACKWALLS, WINGWALL CURBS AND BRIDGE CURB SHALL BE EPOXY COATED AND PAID FOR UNDER ITEM 507.07, 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.
16. REINFORCING PLACEMENT TOLERANCES SHALL BE:
SPACING +/- 25mm
CLEARANCE +/- 6mm
17. 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 BR617.
18. THE COST OF INSTALLING PVC WATERSTOPS, AS SHOWN IN THE PLANS, SHALL BE 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.

STRUCTURAL STEEL

19. ALL STRUCTURAL STEEL PAID FOR UNDER ITEM 506.55, STRUCTURAL STEEL, PLATE GIRDER AND 506.56 STRUCTURAL STEEL, CURVED PLATE GIRDER SHALL CONFORM TO AASHTO M 270M/M270 GRADE 345W UNLESS OTHERWISE NOTED.
20. THE CHARPY V-NOTCH TEST IS REQUIRED ONLY FOR THOSE MEMBERS DESIGNATED AS SUCH ON THE PLANS AND AS SPECIFIED IN SUBSECTION 714.01 OF THE STANDARD SPECIFICATIONS.
21. 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.
22. ALL FIELD CONNECTIONS IN UNPAINTED AREAS SHALL BE MADE USING 22mm DIAMETER BOLTS, CONFORMING TO AASHTO M 164M TYPE 3. IN PAINTED AREAS USE 22mm DIAMETER BOLTS CONFORMING TO AASHTO M 164M TYPE 1 GALVANIZED. HOLES SHALL BE 24mm DIAMETER, UNLESS OTHERWISE NOTED. CONNECTIONS NOT DESIGNED SHALL BE DETAILED BY THE FABRICATOR AND SUBMITTED TO THE ENGINEER FOR APPROVAL. BOLTS THAT HAVE BEEN FULLY TIGHTENED SHALL NOT BE REUSED.
23. FASCIA OVERHANG BRACKETS OR SIMILAR FALSE WORK SHALL BE SPACED AT A MAXIMUM OF 1200mm. THE DESIGN OF THE FALSE WORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
24. ANY HOLES IN THE FASCIA BEAMS NOT OTHERWISE FILLED SHALL BE FITTED WITH BUTTON HEAD OR HEX HEAD BOLTS CONFORMING TO AASHTO M 164M TYPE 3 (UNPAINTED AREA) OR TYPE 1 GALVANIZED (PAINTED AREA). THE BOLTS SHALL BE TIGHTENED IN ACCORDANCE WITH SUBSECTION 506.69 OF THE STANDARD SPECIFICATIONS.
25. 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.
26. STEEL CHANNELS AND CONNECTION ANGLES FOR UTILITY SUPPORTS WILL BE PAID FOR UNDER ITEM 506.56, STRUCTURAL STEEL, CURVED PLATE GIRDER. INSULATED WATER AND SEWER LINES, PIPE ROLLERS, HANGER RODS, NUTS AND WASHERS TO BE PAID FOR UNDER UTILITY ITEMS. SEE UTILITY PLANS U-02, U-03, AND U-06.

TRAFFIC CONTROL

27. SEE HIGHWAY SHEETS FOR TEMPORARY DETOUR

ASPHALTIC PLUG BRIDGE JOINT INSTALLATION NOTES

28. THE JOINT SHALL BE LOCATED CENTRALLY OVER THE DECK EXPANSION GAP OR FIXED JOINT MARKED OUT TO THE MANUFACTURER'S RECOMMENDED WIDTH.
29. THE JOINT SHALL BE EXCAVATED AS SHOWN ON THE PLANS BY USE OF SAWS AND PNEUMATIC HAMMER OR A HAMMER AND A CHISEL.
30. THE JOINT AREA SHALL BE BLAST CLEANED OF DEBRIS AND ASPHALT. THE JOINT AREA SHALL BE THOROUGHLY DRIED USING HOT COMPRESSED AIR PRIOR TO APPLYING BINDER MATERIAL.
31. SPALLED AND DEFECTIVE CONCRETE SHALL BE REPAIRED WITH AN APPROVED MATERIAL AS AGREED UPON BY THE ENGINEER.
32. PROPERLY SIZED HEAT RESISTANT BACKER ROD SHALL BE PLACED IN THE MOVEMENT GAP ALLOWING FOR 25mm (1 INCH) +/- OF BINDER ABOVE THE ROD.

THE BINDER MATERIAL SHALL BE HEATED AND PLACED AS RECOMMENDED BY THE MANUFACTURER.
33. PLACE 6mm (1/4 INCH) THICK BY 200mm (8 INCH) WIDE SECTIONS OF STEEL PLATE OVER THE CENTER OF THE MOVEMENT GAP. SECURE PLATES FROM MOVING BY INSERTING LOCATING PINS THROUGH THE PRESTAMPED HOLES INTO BACKER ROD AND COVER WITH HOT BINDER.

A. THE STEEL PLATES MAY BE OMITTED WHERE THE APPROACH SLAB IS COVERED WITH A STONE BASE OR BITUMINOUS PAVEMENT AND VERTICAL MOVEMENT OF THE PLATES MIGHT OCCUR.
34. THE BINDER MATERIAL AND AGGREGATE SHALL BE HEATED AND MIXED AS RECOMMENDED BY THE MANUFACTURER.
35. THE INSTALLATION OF MATERIAL, COMPACTION, AND TOPCOATING SHALL BE AS RECOMMENDED BY THE MANUFACTURER.
36. IMMEDIATELY AFTER TOPCOATING, AN ANTI-SKID MATERIAL SHALL BE CAST OVER THE JOINT TO REDUCE THE RISK OF TRACKING.
37. JOINT SHALL BE PROTECTED FROM TRAFFIC UNTIL THE MATERIAL HAS COOLED TO 52°C +/- (125°F).
38. BINDER MATERIAL SHALL BE APPLIED ONLY WHEN THE FOLLOWING CONDITIONS PREVAIL:
 - A. THE AMBIENT AIR TEMPERATURE IS AT LEAST 10°C (50°F) AND RISING
 - B. THE ROAD SURFACE IS SUFFICIENTLY DRY.
 - C. WEATHER CONDITIONS OR OTHER CONDITIONS ARE FAVORABLE AND ARE EXPECTED TO REMAIN SO FOR THE PERFORMANCE OF SATISFACTORY WORK.

STATE OF VERMONT AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. B11
Highway No. TH 5	Log Sta.
	Surv. Sta.
EAST ROAD OVER VT ROUTE 279	

GENERAL NOTES

Designed By S. BURBANK	Drawn By J. SOTER
Checked By S. BURBANK	Date 02/06
	Bridge Design Supervisor G. BOGUE
	Date 03/07
PROJECT BENNINGTON	PROJECT NO. AC NH 019-1(53)
Dgn: ... \Design\ER\ER-Notes.dgn	Plot Date: 5/25/2011
Bridge Sheet No. BR616	Sheet 263 of 577



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