

## GENERAL NOTES CONT.

### SUBSTRUCTURES

26. BACKFILL BEHIND ABUTMENT 1 AND ABUTMENT 2 SHALL BE LIMITED TO AN ELEVATION OF 479.0 UNTIL THE GIRDERS ARE SET AND THE DECK IS PLACED.
27. PHASE CONSTRUCTION OF THE NEW SUBSTRUCTURES MAY BE NECESSARY IF THE CONSTRUCTION OF COFFERDAMS INTERFERES WITH THE EXISTING TRUSS STRUCTURE. IF PHASE CONSTRUCTION IS REQUIRED THE CONTRACTOR SHALL NOT BE ENTITLED TO ADDITIONAL COMPENSATION ABOVE THE UNIT BID PRICE FOR LOST TIME OR EXTRA COSTS.
28. THE TOP SURFACES OF BRIDGE SEAT PEDESTALS UNDER THE BEARING DEVICES SHALL BE LEVEL. THE TOPS OF THE ABUTMENTS AND PIER AROUND THE BRIDGE SEAT PEDESTALS SHALL BE SLOPED AS SHOWN ON THE CONTRACT PLANS TOWARDS THE BRIDGE SEAT DRAIN. THE ENTIRE BRIDGE SEAT SURFACE SHALL BE GIVEN A MAGNESIUM FLOAT FINISH.
29. THE BEARING PEDESTALS ON THE BRIDGE SEATS OF THE SUBSTRUCTURES MAY BE PLACED IN SEPARATE POURS. HOWEVER, THE TOP OF THE BRIDGE SEAT UNDER THE BEARING PEDESTAL SHALL BE ROUGHENED TO 1/4" AMPLITUDE PRIOR TO THE SET OF THE BRIDGE SEAT CONCRETE.
30. CONCRETE PORTIONS OF THE ABUTMENT AND WINGWALLS ABOVE THE ADJACENT BRIDGE SEAT ELEVATIONS SHALL NOT BE PLACED UNTIL THE GIRDERS HAVE BEEN PLACED AND THE BEAM PROFILES HAVE BEEN TAKEN AND THE FINISH GRADES HAVE BEEN DETERMINED BY THE RESIDENT ENGINEER.
31. HP 14X73 PILES SHALL BE DRIVEN TO LEDGE WITH AN ULTIMATE CAPACITY OF 425 KIPS AS DETERMINED BY THE RESIDENT ENGINEER. THE ALLOWABLE DESIGN LOAD IS 155 KIPS PER PILE.
- 31a. STEEL H-PILES SHALL CONFORM TO AASHTO M 223/M 223M GR. 36. ALL REQUIRED SPLICE PLATES SHALL ALSO CONFORM TO AASHTO M 223/M 223M GR. 36.

### SUBSTRUCTURES ON LEDGE

32. FOR ALL SUBSTRUCTURES, WHERE LEDGE IS 4'-0" OR LESS BELOW THE DESIGN TOP OF FOOTING ELEVATION, THE FOOTING SHALL BE POURED FROM THE TOP OF THE LEDGE AS SHOWN USING "CONCRETE CLASS B".
33. THE SUBSTRUCTURE UNITS HAVE BEEN DESIGNED FOR THE TOP OF FOOTING ELEVATIONS AS SHOWN ON THE PLANS. IF THE LEDGE ELEVATION IS GREATER THAN 4' BELOW THE DESIGN TOP OF FOOTING, THE PROJECT MANAGER SHALL BE NOTIFIED AND PROVIDED WITH A LEDGE PROFILE. NO FURTHER WORK SHALL BE DONE UNTIL A REPLY IS RECEIVED.
34. THE FOOTING SHALL BE FOUNDED ON LEDGE, WHICH HAS BEEN CLEANED OF ALL LOOSE ROCK AND OTHER DEBRIS. THE LEDGE SHALL BE REMOVED AS REQUIRED TO ENSURE THE FOOTINGS ARE PLACED ON COMPETENT ROCK.
35. #8 DOWELS SHALL BE DRILLED AND GROUTED INTO LEDGE AS SHOWN ON THE PLANS. THE DOWELS SHALL HAVE A 2'-0" EMBEDMENT IN THE LEDGE AND SHALL EXTEND IN THE FOOTING A MINIMUM OF 1'-6" UNLESS NOTED OTHERWISE. THE DRILLING AND GROUTING SHALL BE PAID FOR UNDER THE ITEM 507.16 "DRILLING AND GROUTING DOWELS", HOWEVER THE DOWELS SHALL BE PAID FOR UNDER THE ITEM 507.15 "REINFORCING STEEL".
36. FOR ALL SUBSTRUCTURE UNITS, WHERE THE LEDGE ELEVATION IS BETWEEN THE DESIGN TOP OF FOOTING AND 2'-6" BELOW THE DESIGN TOP OF FOOTING ELEVATION, THE LEDGE SHALL BE EXCAVATED DOWN TO 2'-6" BELOW THE DESIGN TOP OF FOOTING. ALL OVERBREAKAGE BELOW THIS ELEVATION SHALL BE REPLACED WITH "CONCRETE CLASS B". A MAXIMUM OF 6" AVERAGE DEPTH OF OVERBREAKAGE REPLACEMENT SHALL BE PAID FOR AS "CONCRETE CLASS B". ANY ADDITIONAL CONCRETE SHALL BE PAID FOR AT THE CONTRACTORS EXPENSE. ALL LEDGE REMOVAL IS PAID FOR UNDER THE ITEM 208.35 "COFFERDAM EXCAVATION, ROCK".
37. IF LEDGE IS ABOVE THE DESIGN TOP OF FOOTING, THE FOOTING ELEVATION MAY BE RAISED. BEFORE ANY ADJUSTMENT IS MADE IN FOOTING ELEVATIONS THE PROJECT MANAGER SHALL BE CONTACTED FOR APPROVAL OF THE CONFIGURATION.
38. IF BLASTING IS REQUIRED AND/OR PERMISSIBLE IN THIS LOCATION THEN THE CONTRACTOR SHALL ACT IN ACCORDANCE WITH VERMONT STANDARD SPECIFICATION 501.10 (f).

### CONCRETE

39. THE MINIMUM COVER FOR REINFORCING STEEL IN THE SUBSTRUCTURES SHALL BE TWO INCHES ALONG WALL FACES AGAINST EARTH, AND THREE INCHES ELSEWHERE UNLESS DETAILED OTHERWISE.
40. REINFORCING STEEL PLACEMENT TOLERANCES SHALL BE AS FOLLOWS:  
SPACING +/- 1"  
CLEARANCE +/- 1/4"
41. THE KEY IN CONCRETE CONSTRUCTION JOINTS SHALL BE MONLITHIC AND CONTINUOUS FOR THE FULL LENGTH OF THE JOINT. UPWARD KEYS SHALL BE PLACED INTEGRALLY WITH THE CONCRETE BELOW THE JOINT. JOINTS AND SCORE MARKS IN THE CONCRETE SHALL BE CONSTRUCTED AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
42. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1"X1".
43. THE DECK, SIDEWALK AND CURB CONCRETE SHALL BE CONCRETE, CLASS A QC/QA (MOD). ALL OTHER CONCRETE SHALL BE CLASS "B" UNLESS NOTED OTHERWISE.
44. THE ITEM 501.221 "CONCRETE, CLASS A QC/QA" SHALL BE MODIFIED TO MAKE THE LOWER SPECIFICATION LIMIT FOR 28 DAY COMPRESSIVE STRENGTH 5500 PSI.
45. ALL REINFORCING STEEL IN THE CONCRETE DECK AND BRIDGE CURBS SHALL BE EPOXY COATED AND PAID FOR UNDER THE ITEM 507.17. WHEN EPOXY COATED REINFORCING STEEL IS 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.
46. ALL CONCRETE SURFACES OF THE SUBSTRUCTURE THAT ARE TO BE EXPOSED SHALL BE GIVEN A RUBBED FINISH PER VAOT STANDARD SPECIFICATIONS SUB-SECTION 501.16 (a) 2. PAYMENT FOR THE RUBBED FINISH SHALL BE SUBSIDIARY TO THE ITEM 501.25 "CONCRETE, CLASS B".
47. EXPOSED AREAS OF CONCRETE ON THE SUBSTRUCTURES AND THE CAPS ON THE DECK TOWERS AND SUBSTRUCTURES SHALL BE STAINED GREY. THE AREAS TO BE STAINED WILL NOT RECEIVE WATER REPELLENT, INSTEAD THEY WILL BE SEALED WITH A CLEAR SEALANT. THE STAIN AND SEALANT WILL BE APPLIED TO ALL SURFACES AT THE SAME TIME TO THE SAME SHADE OF GREY. CARE SHALL BE TAKEN TO PREVENT STAINING OF ANY COMPLETED STONE MANONRY FACING. ANY STAIN ON THE FACING WILL BE REMOVED AT THE EXPENSE OF THE CONTRACTOR. ALL STAINING AND SEALANT WILL BE PAID FOR UNDER THE ITEM 513.20 "STRUCTURE PAINTING (MOD)". SEE SPECIAL PROVISIONS FOR MORE INFORMATION.

### GRANITE CURBING ON BRIDGE

48. IN ADDITION TO THE REQUIREMENTS OF THE VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION FOR THE GRANITE BRIDGE CURB, THE GRANITE USED SHALL BE FROM THE SAME QUARRY AS THE GRANITE USED FOR STONE MANSONRY FACING.
49. THE ITEM 616.22 "GRANITE BRIDGE CURB" SHALL INCLUDE THE COSTS OF MORTAR, TYPE 1, EPOXY MORTAR, #4 EPOXY COATED ANCHORS, AND EPOXY USED TO SECURE THE ANCHORS TO THE GRANITE BRIDGE CURB.
50. BEFORE INSTALLATION OF THE GRANITE BRIDGE CURB THE CONTRACTOR SHALL PROVIDE THE RESIDENT ENGINEER WITH A TECHNICAL DATA SHEET FOR THE PROPOSED EPOXY FOR SECURING ANCHORS TO THE GRANITE CURBING. THE TECHNICAL DATA SHEET SHALL INCLUDE SPECIFICATIONS, AND MANUFACTURERS APPLICATION INSTRUCTIONS. THE RESIDENT ENGINEER SHALL APPROVE THE PRODUCT PRIOR TO ANY INSTALLATION.
51. THE EPOXY COATED ANCHORS SHALL BE SHIPPED FROM THE SUPPLIER CUT TO LENGTH WITH A TOTAL SHOP APPLIED EPOXY COATING MEETING THE REQUIREMENTS FOR EPOXY COATED REINFORCING STEEL.
52. THE BLOCKS FOR THE GRANITE BRIDGE CURB MAY BE SHOP ASSEMBLED WITH THE ANCHORS WITH PERMISSION FROM THE RESIDENT ENGINEER.

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