CONSTRUCTION NOTES

1. ALL SITE WORK SHALL BE IN CONFORMANCE WITH VERMONT AGENCY OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION", 2011 EDITION, EXCEPT AS MODIFIED IN THE DRAWINGS, SPECIFICATIONS AND NOTES.

2. SUBASE FOR THE ROADWAY SHALL CONSIST OF 12" MIN. OF COARSE GRAVEL FOR THE SUBASE (ITEM 703.04) WITH MAX. SIZE OF STONE OF 6 INCHES. SUBBASE MATERIALS TO BE COMPACTED TO ATTAIN AT LEAST 95% OF THE MAXIMUM DRY DENSITY (AASHTO T-99, METHOD C). SURFACE COURSE AND SHOULDERS SHALL CONSIST OF 6 INCHES OF AGGREGATE FOR SURFACE COURSE AND SHOULDERS (ITEM 704.12).

3. SITE PREPARATION AND ERATWORK SHALL BE AS FOLLOWS:

A. TOPSOIL AND ANY UNDERLYING SUBSOIL WHICH CONTAINS ORGANIC MATERIAL SHALL BE STRIPPED TO UNDISTURBED, FIRM, INO9RGANIC SUBGRADE. UNSUITABLE MATERIALS SHALL BE REMOVED FRON THE ROADWAY AND CULVERT AREAS, REGRADLESS OF IT'S THICKNESS.

B. GROUNDWATER CONTROL MEASURES SHALL BE PERMORMED SO THAT THE EXCAVATION ACTIVITIES CAN BE CONSTRUCTED IN-THE-DRY, THUS LIMITING THE POTENTIAL FOR THE DISTURBANCE OF SUBGRADE SOILS.

C. EXCAVATION SIDESLOPES SHOULD BE NO STEEPER THAN THOSE ALLOWED BY OSHA, UNLESS BRACING OR TRENCH BOXES ARE USED.

D. PROOFROLLING OF SUBGRADE SOILS SHALL BE CONDUCTED PRIOR TO PLACEMENT OF FILL. PROOFROLLING SHOULD NOT BE CONDUCTED WHEN DISTURBANCE OF THE SUBGRADE SOILS MAY OCCUR AS A RSULT OF PROOFROLLING, SUCH AS WHEN SUBGRADE SOILS ARE WET. LOOSE OR SOFT ZONES INDENTIFIED DURING PROOFROLLING SHOULD BE EXCAVATED AND REPLACED WITH COMPACTED COARSE GRAVEL FOR SUBBASE (ITEM 704.04).

E. FILL PLACED WITHIN BRIDGE AREAS SHALL CONSIST OF GRANULAR BACKFILL FOR STRUCTURES (ITEM 704.08) OR APPROVED EQUAL.

F. SOIL MATERIALS SHALL BE PLACED IN LOOSE LIFTS NOT TO EXCEED 12 INCHES THICKNESS AND SHOULD BE COMPACTED TOTHE FOLLOWING REQUIREMENTS (REFERENCE TO ASTM D-1557, METHOD D OR C):

AREA MINIMUM DEGREE OF COMPACTION

1. BELOW FOOTINGS	95
2. BASE COURSES	95
3. BELOW PAVEMENT SUBBASE AND BASE COURSES	95
4. BACKFILLOF FOOTINGS, WALLS AND CULVERT	95
5. ORDINARY FILL WITHING THE TOP 3 FEET OF GRADE IN GRASS AREAS	90

4. CONCRETE SHALL BE IN CONFORMACE WITH SECION 501, STURCTURAL CONCRETE, AND SECTION 507, REINFORCING STEEL. CONCRETE FOR THE FOOTINGS AND ABUTEMENTS SHALL BE CLASS B (3500 PSI) AND BAR REINFORCEMENT SHALL BE GRADE 60 UNLESS OTHERWISE NOTED. CONCRETE FOR THE SLAB BRIDGE DECK SHALL BE CLASS A (5000 PSI) AND BAR REINFORCEMENT SHALL BE GRADE 60.

5. RIP-RAP SHOWN ON PLAN SHALL BE PLACE IN CONFORMANCE WITH STONE FILL, RIP-RAPAND STONE PAVING, VTRANS SECTIN 613 AND STONE FILL TYPE II (SECTION 706.04) TO BE AS INDICATED ON PLANS.
6. THE SLAB BRIDGE SHALL BE CONSTUCTED IN ACCORDANCE SITH AASHTO LRFD DESIGN SPECIFICATIONS 2012. THE DESIGN LOAD IS HL-93.

BACKFILL

THE BACKFILL SHALL MEET THE REQUIREMENTS OF VTRANS 2011 STANDARD SPECIFICATION FOR CONSTRUCTION 404.08 GRANULAR BACKFILL FOR STRUCTURES. GRANULAR BACKFILL FOR STRUCTURES SHALL BE OBTAINED FROM APPROVED SOURCES. IT SHALL CONSIST OF SATISFACTORILY GRADED, FREE DRAINING GRANULAR MATERIAL REASONABLY FREE FROM LOAM, SILT, CLAY AND ORGANIC MATERIAL.

THE MATERIAL SHALL BE PLACED IN 8-INCH LOOSE LIFTS AND COMPACTED TO 90% OF AASHTO T99 STANDARD PROCTOR DENSITY. WHEN PLACING THE FIRST LIFTS OF BACKFILL IT IS IMPORTANT TO MAKE SURE THAT THE BACKFILL IS PROPERLY COMPACTED UNDER AND AROUD TEH PIPE HAUNCHES. THE BACKFILL SHALL BE ADVANCED ALONG THE LENGTH OF THE PIPE AT THE SAME RATE TO AVOID DIFFERENTIAL LOADING ON THE PIPE.
GRANULAR BACKFILL FOR STRUCTURES SHALL MEET THE GRADATION REQUIREMENTS OF THE FOLLOWING TABLE AS DETERMINED IN ACCORDANCE WITH AASHTO T 27 & 11.

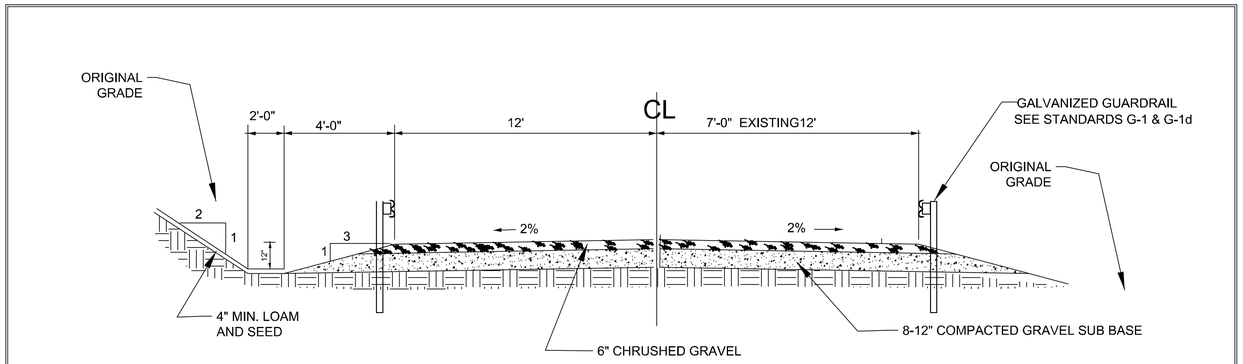
SIEVE DESIGNATION	PERCENTAGE BY MASS PASSING SQUARE MESH SIEVES
75 MM (3 INCH)	100
4.75 MM (NO. 4)	45 TO 75
150 UM (NO. 100)	0 TO 12
75 UM (NO. 200)	0 TO 6

RIP RAP FOR STREAMBED & SLOPE PROTECTION

TYPE E2. THE LONGEST DIMENSION OF THE STONE SHALL BE AT LEAST 24", AND AT LEAST 50 PERCENT OF THE VOLUME OF THE STONE IN PLACE SHALL HAVE A LEAST DIMENSION OF 18 INCHES, AND AT LEAST 25 PERCENT OF THE PARTICLES SHALL HAVE A MAXIMUM DIMENSION OF 2 INCHES AND BE WELL GRADED MATERAIL

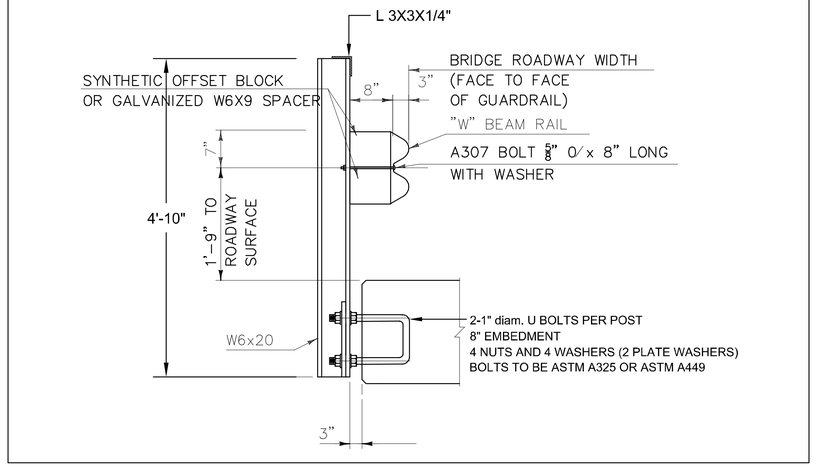
TYPE E3. THE LONGEST DIMENSION OF THE STONE SHALL BE AT LEAST 36", AND AT LEAST 50 PERCENT OF THE VOLUME OF THE STONE IN PLACE SHALL HAVE A LEAST DIMENSION OF 24 INCHES, AND AT LEAST 25 PERCENT OF THE PARTICLES SHALL HAVE A MAXIMUM DIMENSION OF 2 INCHES AND BE WELL GRADED MATERAIL

- The streambed stone fill shall be hard, blasted, angular rock other than serpentine rock containing the fibrous variety chrysotile (asbestos). Similar sized river sediment is an acceptable alternative as is a mixture of angular material and river sediment.
- Stone placed inside of a closed structure shall be placed such that the structure is not damaged.
- Care shall be taken to limit segregation of the materials.
- Add sand borrow item as needed to seal the bed and prevent subsurface flow.
- There shall be no subsurface flow upon final inspection.



TYPICAL ROAD RECONSTRUCTION SECTION

(NOT TO SCALE)



BRIDGE RAIL IN CURB DETAIL, NTS

BELL ENGINEERING
CIVIL & ENVIRONMENTAL
17 ECHO COVE WAY-SPOFFORD, NH 03462
(603) 363-9966
bellengineering@myfairpoint.net
PLAN BY:

REVISIONS:

PROJECT:
TOWN OF DOVER
TAFT BROOK ROAD
CULVERT REPLACEMENT

SHEET TITLE:
SPECIFICATIONS & DETAILS

SCALE:
AS NOTED

DATE:
JULY 31, 2018

SHEET
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