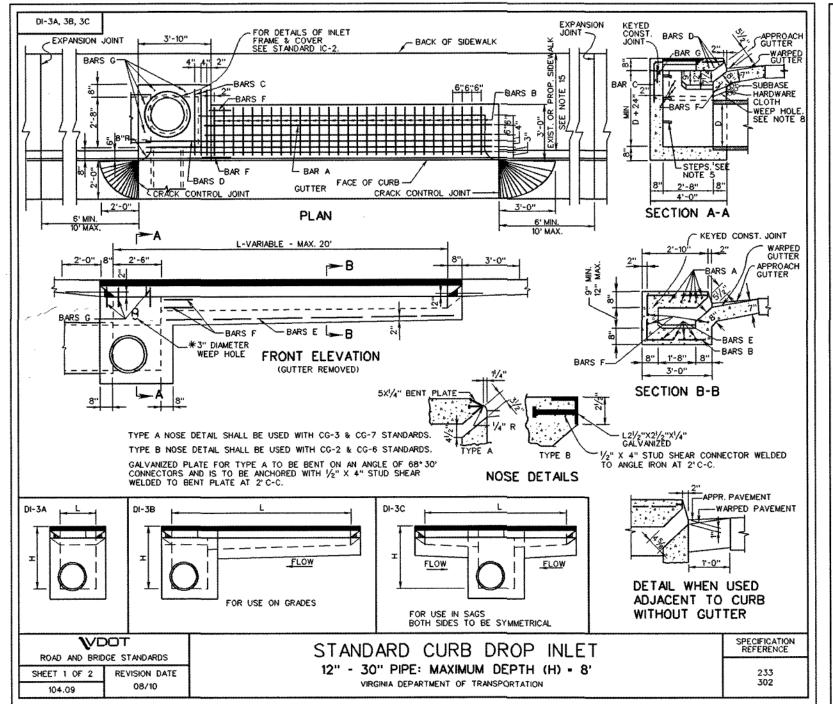
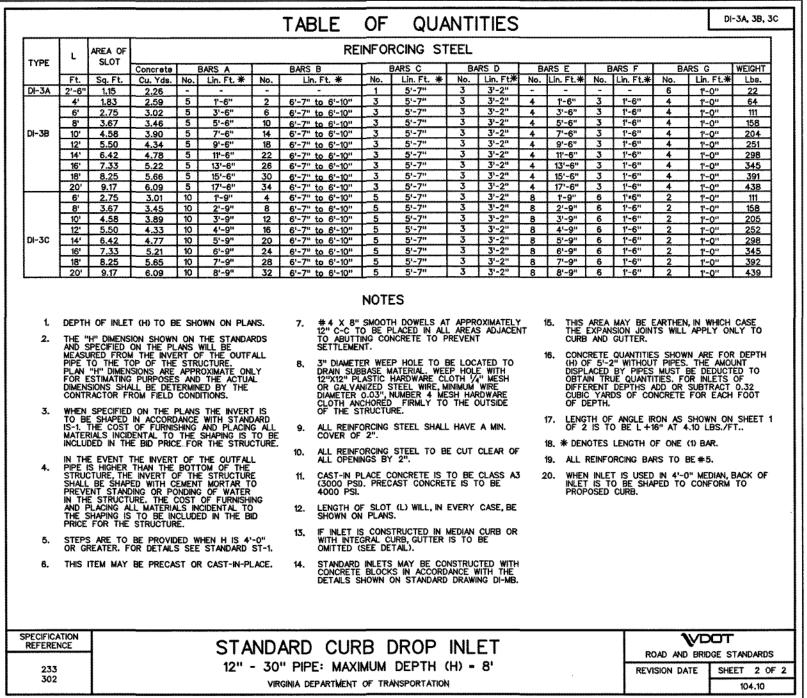
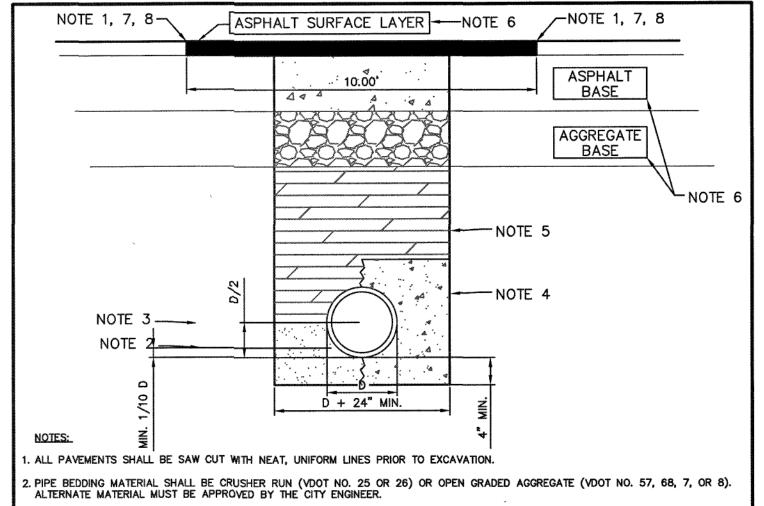


VIRGINIA DEPARTMENT OF TRANSPORTATION







3. MAXIMUM DEPTH OF PIPE BEDDING MATERIAL IF USING OPEN GRADED AGGREGATE FOR BEDDING.

4. OPTIONAL CONCRETE ENCASEMENT FOR POWER OR COMMUNICATION CONDUIT. PROVIDE A MINIMUM OF 4" CONCRETE COVER FROM ALL SIDES OF CONDUIT.

5. BACKFILL MATERIAL SHALL BE VDOT NO. 21A AGGREGATE, PLACED IN LOOSE LIFTS NOT EXCEEDING 6", AND COMPACTED TO AT LEAST 95% MAXIMUM DRY DENSITY WITHIN 2 PERCENTAGE POINTS OF OPTIMUM MOISTURE (VTM—1) WITH THE USE OF MECHANICAL TAMPERS OR VIBRATORY ROLLERS. WATER COMPACTION IS NOT PERMITTED. TYPE I SELECT MATERIAL MAY BE USED AS BACKFILL UPON PRIOR APPROVAL BY THE CITY ENGINEER. MATERIAL CLASSIFICATION SHALL BE PERFORMED ON THE ACTUAL SOIL TO VERIFY THAT SOIL MEETS VDOT SPECIFICATIONS FOR TYPE I SELECT MATERIAL BY A QUALIFIED TESTING LABORATORY AND TEST RESULTS SHALL BE CERTIFIED BY A VIRGINIA REGISTERED PROFESSIONAL ENGINEER. DENSITY REQUIREMENS ARE THE SAME AS ABOVE, HOWEVER, MOISTURE CONTENT FOR

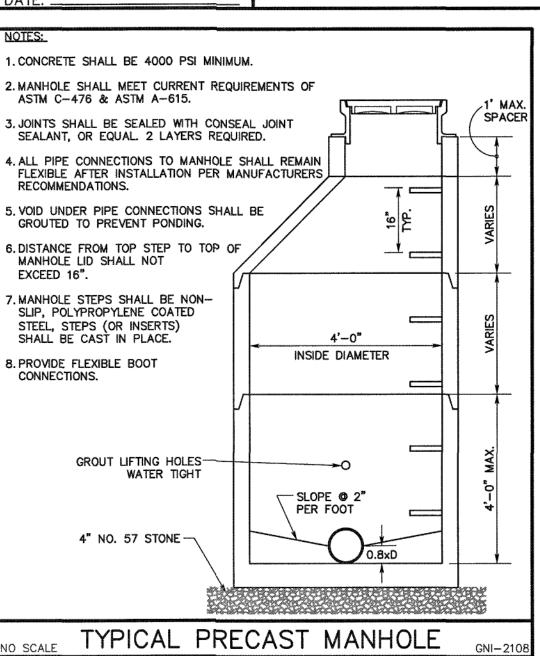
ALL TESTING SHALL BE PERFORMED AND CERTIFIED BY A GEOTECHNICAL ENGINEER OR A VDOT-CERTIFIED TECHNICIAN. RESULTS SHALL BE PROVIDED TO THE INSPECTOR WITHIN 24 HOURS OF TESTING COMPLETION. THE COST OF ALL TESTING IS THE RESPONSIBILITY OF THE PERMITTEE. FIELD DENSITY TESTING METHODS SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO PERFORMING ANY TESTING.

. ALL ASPHALT PAVEMENT DEPTHS SHALL BE DETERMINED BY THE PRESENCE OF LANE STRIPING ON THE STREET. FOR STREETS WITH LANE STRIPING, THE MINIMUM DEPTH SHALL BE 8" AND CONSIST OF TWO 3" LIFTS OF ASPHALT BASE MIX AND ONE 2" LIFT OF ASPHALT SURFACE MIX. FOR STREETS WITHOUT LANE STRIPING, THE MINIMUM DEPTH SHALL BE 4 INCHES AND CONSIST OF ONE 2-1/2" LIFT OF ASPHALT BASE MIX AND ONE 1-1/2" LIFT OF ASPHALT SURFACE MIX. THE ASPHALT SURFACE LAYER SHALL EXTEND OVER UNDISTURBED BASE A MINIMUM OF 12" ON ALL SIDES. ALL PAVEMENT MATERIALS SHALL MEET VDOT REQUIREMENTS FOR SURFACE MIX (SM-9.5AL, SM-9.5A, OR SM-12.5D), BASE MIX (BM-25), AND STONE AGGREGATE (21A OR 21B). PLANT CERTIFICATION FOR EACH MIX INCORPORATED INTO THE WORK SHALL BE PROVIDED TO THE INSPECTOR. WHEN MATCHING NON-STANDARD MATERIALS, THE INSPECTOR SHALL DETERMINE AN ACCEPTABLE MATERIAL.

THE REPAIR SHALL BE RECTANGULAR AND SAW CUT IN STRAIGHT, UNIFORM LINES THAT ARE ALIGNED WITH THE STREET CENTERLINE. WHEN EDGES OF PAVEMENT HAVE BEEN UNDERMINED, PAVEMENT SHALL BE REMOVED TO A NEAT LINE 12" BEYOND THE UNDERMINED AREA. ANY INITIAL PAVEMENT REPAIR WITH AN AREA GREATER THAN 40 SQUARE FEET MAY BE NON-RECTANGULAR, HOWEVER, THE REPAIR SHALL BE SAW CUT IN STRAIGHT, UNIFORM LINES. ANY OTHER DEVIATION ON PATCH SHAPE MUST BE APPROVED BY THE INSPECTOR PRIOR TO THE REPAIR BEING MADE. THE FINISHED PATCH SURFACE SHALL BE WITHIN 1/4 INCH AT ANY POINT ACROSS TI PATCH AS IT RELATES TO THE SURROUNDING STREET SURFACE.

8. A FULL COVERAGE TACK COAT IS REQUIRED ON ALL SURFACES THAT WILL CONTACT THE NEW SURFACE LAYER.

OFFICE OF THE CITY ENGINEER - ROANOKE, VIRGINIA APPROVED UTILITY TRENCH REPAIR IN PAVEMENT UTR-1 USING VDOT NO. 21A AGGREGATE

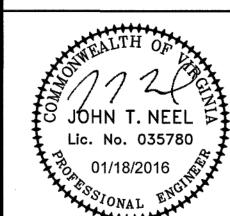


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REVISIONS				
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PROJECT TEAM				
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PM	M	ATTHEW P. TOMLINSON, PE		
DESIGN	SE	EC, MBL		
ISSUE DATE				
01/18/2016				
GNI JOB NO.				
2521.2				
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STORM DETAILS				
1. days = 1. day				
SHEET-NUMBER				
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