NOTES:

1. ALL PAVEMENTS SHALL BE SAW CUT WITH NEAT, UNIFORM LINES PRIOR TO EXCAVATION.
2. PIPE BEDDING MATERIAL SHALL BE CRUSHER RUN (VDOT No. 25 OR 26) OR OPEN GRADED AGGREGATE (VDOT NO. 57, 68, 7, OR 8). ALTERNATE MATERIAL MUST BE APPROVED BY THE CITY ENGINEER.
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 REQUIREMENTS ARE THE SAME AS ABOVE, HOWEVER, MOISTURE CONTENT FOR SOILS MAY WITH WITHIN 20% OF OPTIMUM.

   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.
6. ALL PAVEMENTS SHALL BE RESTORED TO MATCH DEPTHS OF EXISTING SURFACE, BASE, AND AGGREGATE LAYERS. THE ASPHALT SURFACE LAYER SHALL BE A MINIMUM OF 2" THICK AND 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.
7. 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. THE FINISHED PATCH SURFACE SHALL BE WITHIN 1/4 INCH AT ANY POINT ACROSS THE 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: Philip C. Bowman (for) CITY ENGINEER

DATE: 12/01/04

UTILITY TRENCH REPAIR IN PAVEMENT USING VDOT NO. 21A AGGREGATE — UTR-1

APPROVED

WESTERN VIRGINIA WATER AUTHORITY
ENGINEERING SERVICES
601 S JEFFERSON ST, SUITE 300
ROANOKE, VA 24011
540-853-5700

COMMONWEALTH OF VIRGINIA — Lic No. 035867 — Christopher D. Allen — PROFESSIONAL ENGINEER

Berkley Road
Waterline Relocation

TRAFFIC PLAN

Rev	Description	Date	By
2h	Respond to City Comments Rev 1	4/5/10	CDA

Designed: CDA
Drawn: CDA
Checked: AAS
Approved: JGR
Date: 22 MAR 2010
Project:

T1
Sheet 9 of 9