



CITY OF BRISTOL, VA
ENGINEERING DIVISION

WORK IN ROW PERMIT APPLICATION

Project Information

Project Name: _____ Date: _____
Location/Address: _____
Description of Work: _____

Facility Owner's Information

Full Name: _____
Last First M.I.
Address: _____
Street Address Apartment/Unit #

City State ZIP Code
Phone: () _____ E-mail Address: _____
Fax: () _____

Contractor's Information

Full Name: _____
Last First M.I. **City Business License #**
Address: _____
Street Address Apartment/Unit #

City State ZIP Code
Phone: () _____ E-mail Address: _____
Fax: () _____

Engineer's Information

Full Name: _____
Last First M.I.
Address: _____
Street Address Apartment/Unit #

City State ZIP Code
Phone: () _____ E-mail Address: _____
Fax: () _____ Facility Design Traffic Control Other

Contact for Project

Full Name: _____
Last First M.I.
Address: _____
Street Address Apartment/Unit #

City State ZIP Code
Phone: () _____ E-mail Address: _____
Fax: () _____

Signature of Submitter: _____

Conditions of Permit

- 1. All work shall be performed in compliance with the current editions of Virginia Department of Transportation Road and Bridge Specifications, Road and Bridge Standards, Virginia Work Area Protection Manual, the Manual on Uniform Traffic Control Devices (MUTCD) and the Conditions of the Permit. Trench backfill shall be placed in accordance with the procedures attached hereto.**
- 2. Permit is valid until expiration date shown on Permit. Extensions of time, not to exceed thirty (30) calendar days, may be granted by the City Engineer or his agent provided written application is made to the City Engineer prior to the expiration date indicated above.**
- 3. Portable storage containers no larger in dimension than 8 ft. wide x 8 ft. 6 in. height x 16 ft. in length can be placed in the public right-of-way. These containers include but are not limited to containers typically known as PODS, MODS, roll-offs and dumpsters. Any container placed in the public right-of-way must have 2x6, 2x8 lumber or plywood strips 6" – 8" wide minimum and 1 ½" in total thickness between the points where the container meets the underlying surface.**
- 4. Right-of-Way shall be restored to satisfactory condition in compliance with Conditions of the Permit on or before the expiration date of the permit or before the end of the extension of time, should such an extension of time have been granted. Failure to comply with this provision may result in the City's notification of the bonding company for appropriate remedial action.**
- 5. The Office of the City Engineer shall be notified upon completion of work. Final inspection and acceptance will be made by the City Engineer or agent. Periodic inspections will be made by the City Engineer or his agent to insure proper methods/materials have been employed to affect the closure.**
- 6. Should it become necessary to block the street and/or detour traffic, the Contractor or Utility owner shall immediately notify all Emergency Services and the Office of City Engineer, giving limits of the area to be closed, the duration of the closure and reason for the closure. Traffic control for detours and closures shall be in strict compliance with the current editions of the MUTCD and the Virginia Work Area Protection Manual.**
- 7. Should sidewalk or curb and gutter be removed, it shall be saw cut at the nearest joint and replaced as per the standards of the Virginia Department of Transportation.**
- 8. All pavement cuts shall be replaced with asphalt concrete as specified by the City Engineer. Identification markers of a type approved by the City Engineer shall be placed in the asphalt concrete prior to rolling of the final lift and rolled into the asphalt concrete surface.**
- 9. A smooth and uniform grade shall be maintained from the centerline of the roadway to the proposed or existing sidewalk, curb and gutter or shoulder to preclude the forming of false gutters or ponding of water on the roadway.**
- 10. Limits of resurfacing and/or cold planing, should it be required, shall be determined by the City Engineer or his agent.**
- 11. The Contractor or Utility owner shall ensure that streets are maintained in a mud and dust free condition at all times.**
- 12. The Contractor or Utility owner shall be responsible for the maintenance of the repair cut for a period of five years from the date of acceptance.**

PROCEDURE FOR BACKFILLING
OF UTILITY EXCAVATIONS
IN PUBLIC RIGHT-OF-WAY

Open cutting the roadway is considered as the least desirable alternative to boring, jacking or pushing and permits to open cut will not be issued until other methods of installation have been attempted and only then by special permission. All Contractors and Utility owners who perform work within the public rights-of-way of the City of Bristol, Virginia, shall take the following steps:

1. Obtain the required permit to work in the right-of-way.
2. Set up the required traffic control devices as per the current editions of the Virginia Work Area Protection Manual and the Manual On Uniform Traffic Control Devices. The Contractor or utility owner shall be responsible for all traffic control devices and manpower required to satisfactorily complete the job.
3. Bore, jack or push under the roadway for the proposed installation.
4. Should open cutting be permitted, the roadway shall be saw cut with squared corners, asphalt concrete and unsuitable material removed. All such materials shall be disposed of, off-site.
5. Perform the permitted work.
6. On pipes, cable and/or wire installations, place appropriately colored plastic ribbon tape, no less than 6 inches, nor more than 18 inches, directly over and parallel to the facility. Fill the excavated area according to one of the following accepted methods:

In the LIVE LOAD ZONE*

- VDOT No. 21a Aggregate (see Dwg. No. UTR-1).
- Flowable Fill (see Dwg. No. UTR-2).

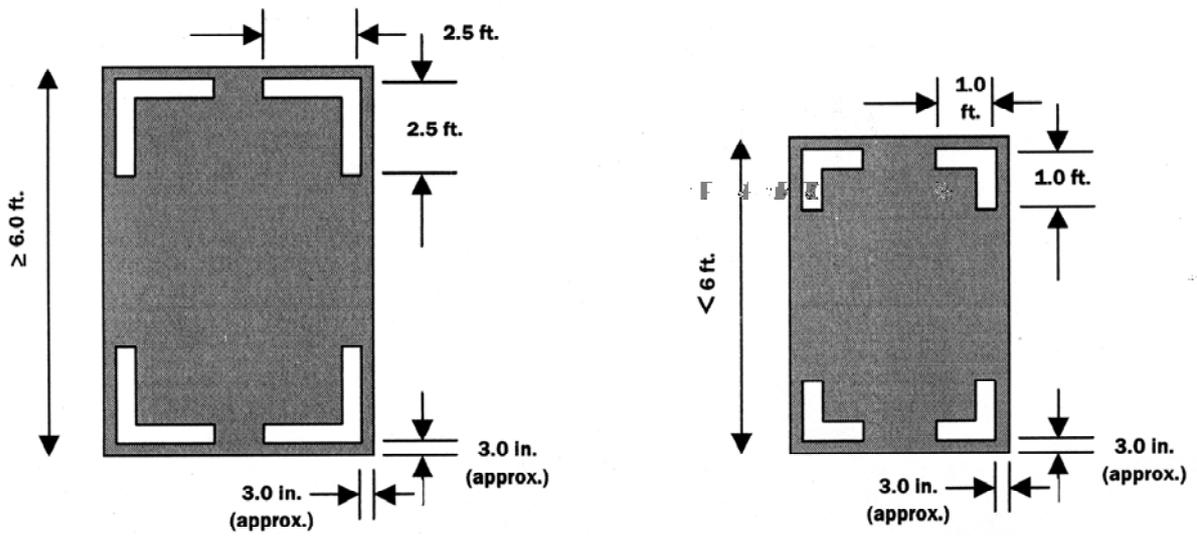
Outside the LIVE LOAD ZONE*

- Backfill shall be composed of suitable regular excavation, borrow, select material, or subbase material as directed by the City Engineer. (see Dwg. No. UTR-3).
- *Live Load Zone is defined as the zone beneath a roadway including the area within a 1:1 slope projected from the edge of pavement. (see Dwg. No. UTR-3).

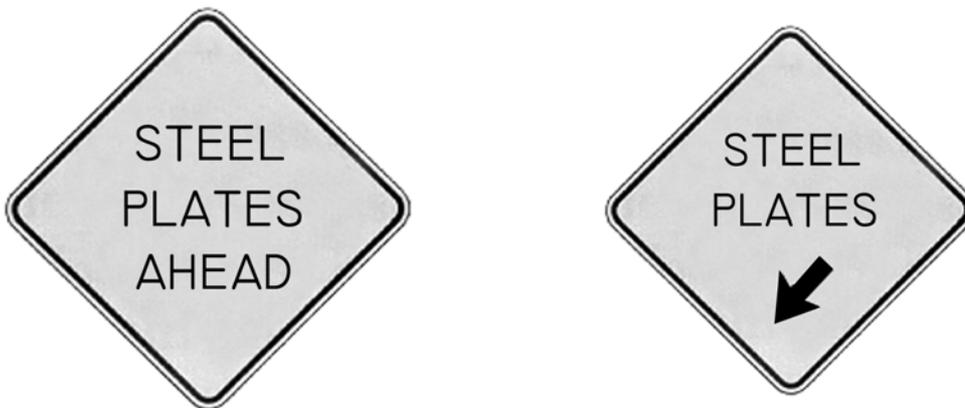
7. Where directed by the City Engineer, the Permittee shall place 1-inch thick steel plates over the excavation as per the attached drawings to allow the flowable fill sufficient time to set or if the asphalt surface cannot be full restored. Steel plates shall be pinned with spikes to ensure minimum movement of the plates. Reinforcing rods are not an

acceptable method for pinning plates. Along all edges of the steel plate place an 18" asphalt concrete wedge using "hot mix" materials. In the event that "hot mix" materials cannot be obtained due to asphalt plants being closed, "cold mix" materials may be substituted as a temporary measure. Restore normal traffic flow subject to placement of necessary warning devices as described below.

8. Proper traffic control warning devices shall remain in place to advise motorists and pedestrians of the work area. This shall include STEEL PLATES AHEAD signage placed at a minimum of 100' in advance of the steel plates and STEEL PLATES / ARROW signage placed at the steel plates. All steel plates shall be marked with durable, highly reflective white pavement marking tape, no less than 4" in width, conforming to Type B, Class VI VDOT specifications and shall be recommended for turning movements by the manufacturer. See attached drawings for sign and tape details.
9. When flowable fill has set up, remove steel plates. Fill the remaining excavation with 6 inches of asphalt concrete, in compacted lifts, not to exceed 3 inches. Place the required identification marker in the center of the repair prior to rolling of the final lift of asphalt concrete. Any subcontractor performing work for a Utility owner shall place the appropriate identification marker in the center of the repair prior to rolling of the final lift of asphalt concrete. The finished surface shall be smooth and uniform. The City Engineer shall determine the type of asphalt concrete to be used and this designation shall appear on the permit.
10. The Contractor or Utility owner shall notify the Office of City Engineer upon completion of the work. Periodic inspections will be made to ensure those proper methods and specified materials have been employed to effect closure. The City Engineer or his agent shall make final inspection for acceptance.
11. Depending on the location and nature of the work and to ensure a smooth and uniform transition, the Contractor or Utility owner may be required to cold plane and resurface an area larger than that of the excavated area.
12. Due to the volume of traffic on certain streets in the City of Bristol, work may be restricted during periods when traffic is heaviest. The hours of restriction will appear on the permit, should it be required.
13. The Contractor or Utility owner shall be responsible for maintenance of the repair for a period of five years from the date of acceptance.



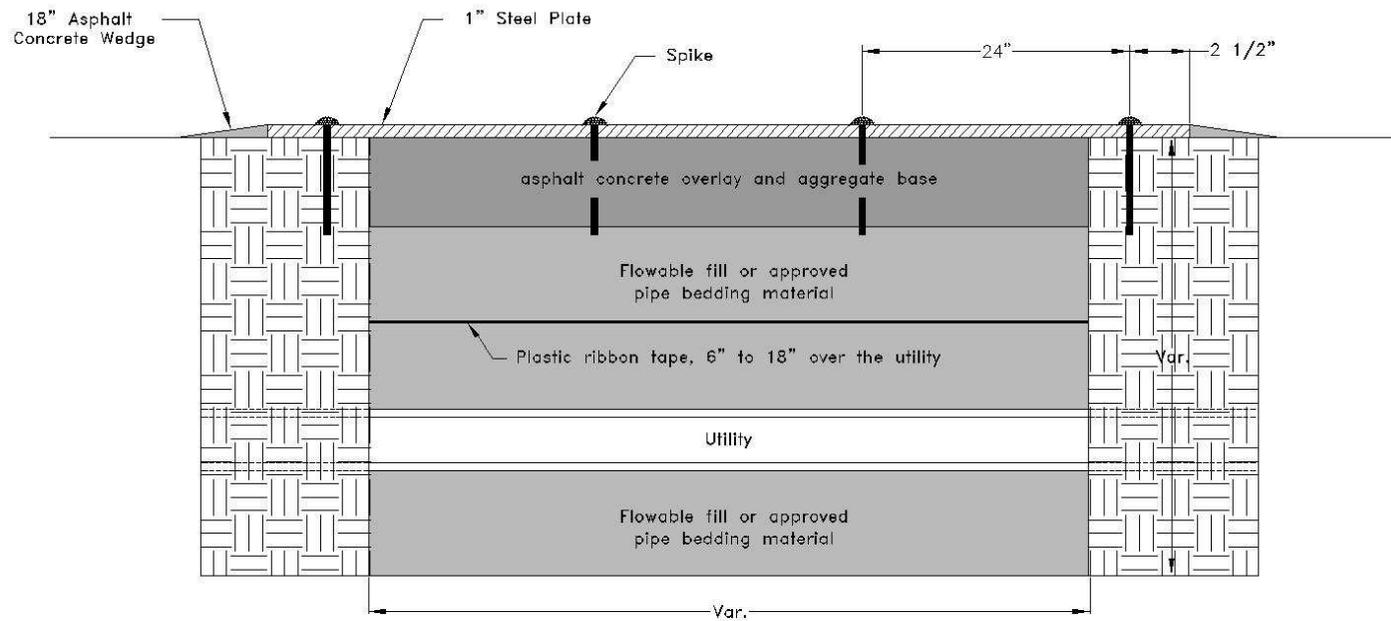
Steel Plate Reflective White Tape Detail



Steel Plate Warning Signs Detail

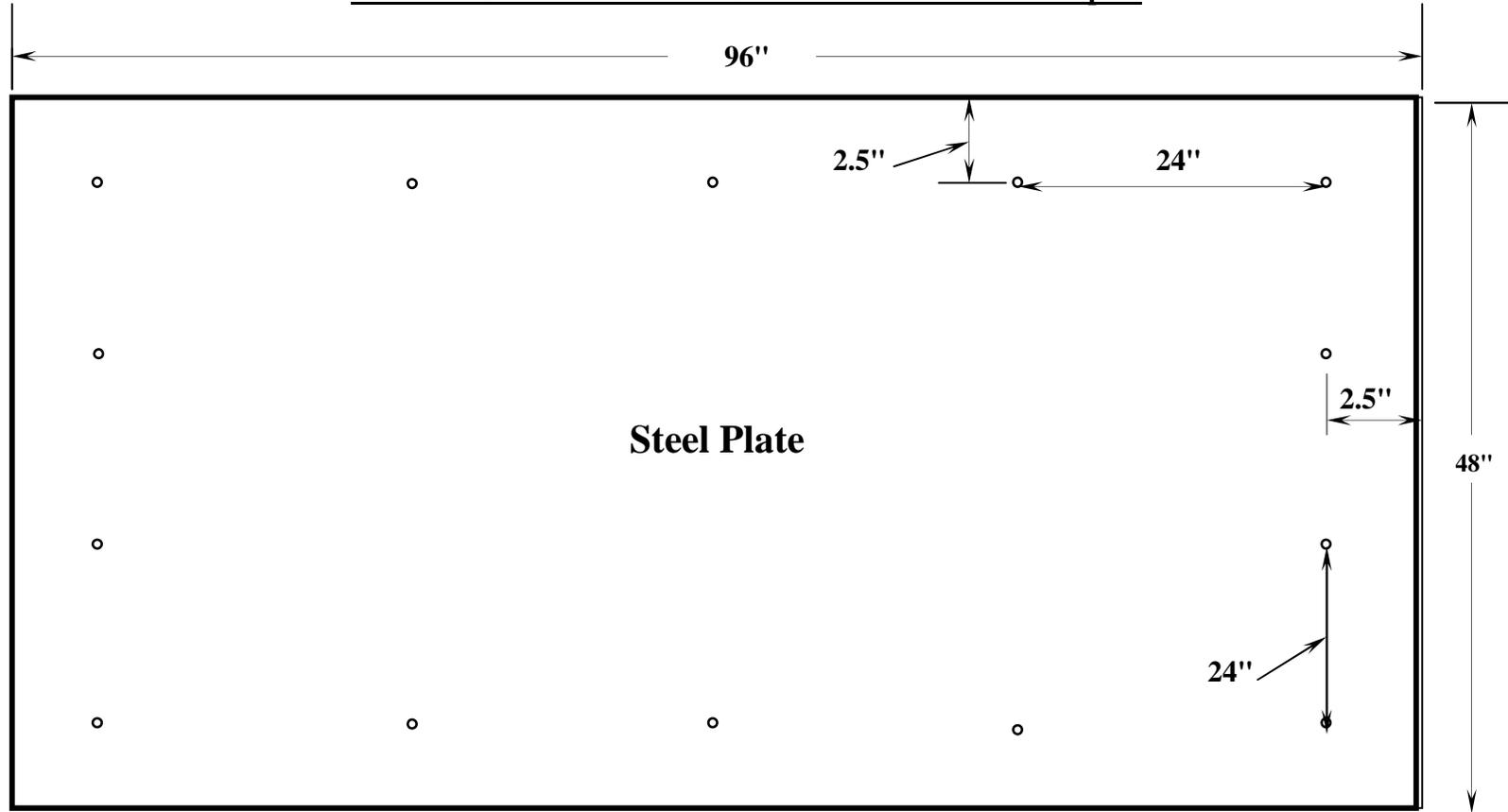
DETAIL OF PLATE STEEL PLACEMENT AND
TYPICAL BACKFILLING METHOD
FOR OPEN CUT REPAIR

Asphalt concrete overlay shown under steel plate only to denote dimensions and location. Placed after removal of plate.
Asphalt concrete wedge shall provide a smooth transition from existing asphalt concrete to steel plate travel surface.
Bituminous sealer shall be placed around holes and on bottom of spike heads.

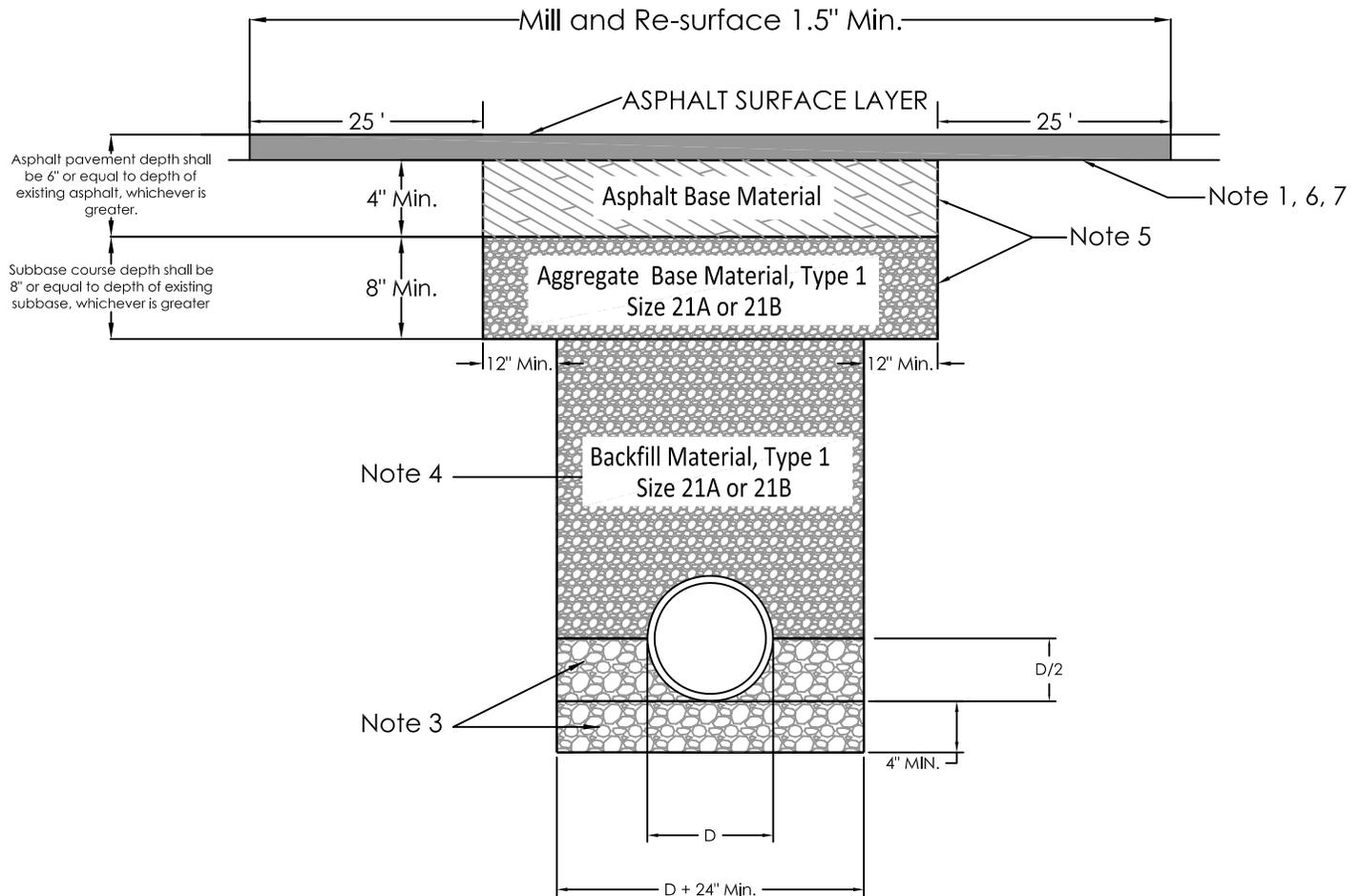


Drill Hole Pattern Detail

Note: Holes shall be drilled to accommodate common rail spike



Effective Date 11/11/11



NOTES:

1. ALL PAVEMENTS SHALL BE SAW CUT WITH NEAT UNIFORM LINES PRIOR TO EXCAVATION. MILL AND RESURFACE 1.5" MINIMUM.
2. SHOULD CONCRETE PAVEMENT BE ENCOUNTERED DURING EXCAVATION PLEASE CONTACT THE CITY ENGINEER IMMEDIATELY.
3. PIPE BEDDING MATERIAL SHALL BE CRUSHER RUN (VDOT NO. 25 OR 26). ALTERNATE MATERIAL MUST BE APPROVED BY THE CITY ENGINEER. (Pipe bedding shall be lightly and uniformly compacted and shall be carefully shaped so that the lower section of the pipe exterior is in full contact with the bedding material for at least 10 percent of the overall height of the pipe. Bedding material shall be shaped to accommodate the bell portion of the pipe when bell and spigot pipe is used. The depth of bedding material shall be at least 4 inches, or as specified on the plan or as directed by the Engineer.)
4. BACKFILL MATERIAL SHALL BE VDOT NO. 21A or 21B 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 COMP ACTION IS NOT PERMITTED.
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 TESTS.
5. DEPTHS FOR AGGREGATE BASE , ASPHALT BASE AND ASPHALT SURFACE COURSE SHALL BE DETERMINED BY EACH LOCATION AND THE DEPTHS OF MATERIAL ON THE EXISTING STREET. THE CONTRACTOR SHALL CALL THE INSPECTOR AFTER THE TRENCH HAS BEEN OPENED TO DETERMINE THE DEPTHS REQUIRED. THE MINIMUM DEPTHS IN ANY CASE SHALL BE 8" OF AGGREGATE BASE, 4" ASPHALT BASE AND 2" ASPHALT SURFACE COURSE.
6. 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 25' BEYOND THE UNDERMINED AREA. ANY INITIAL PAVEMENT REPAIR WITH AN AREA GREATER 40 SQUARE FEET MAY BE NON-RECTANGULAR, HOWEVER, THE REPAIR SHALL BE SAW CUT IN STRAIGHT, UNIFORM LINES.
7. TACK COAT IS REQUIRED ON ALL SURFACES THAT WILL CONTACT THE NEW SURFACE LAYER.
8. PARTIAL LANE MILLING IS NOT ALLOWED.



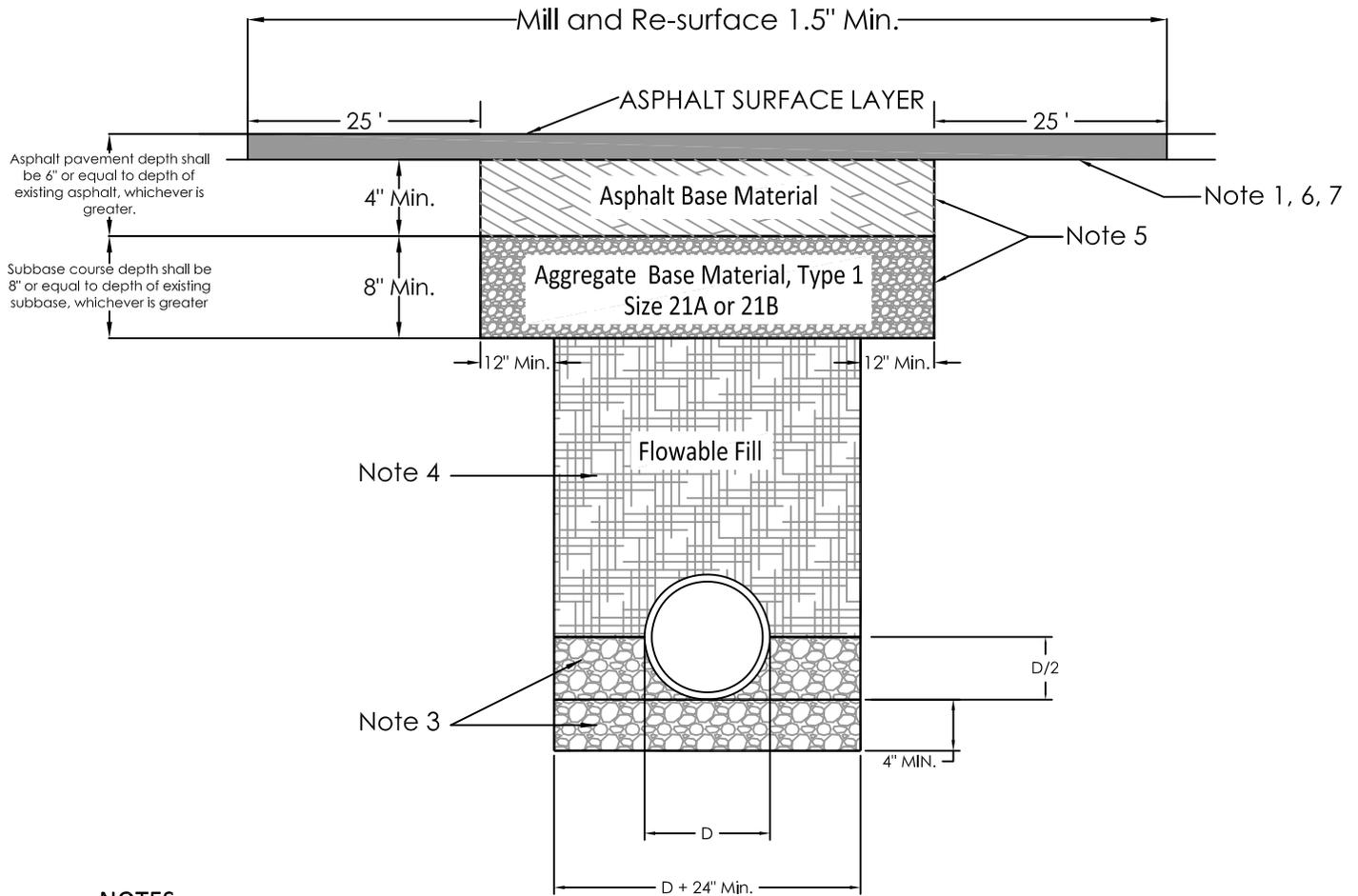
CITY OF
BRISTOL, VIRGINIA

300 LEE STREET
BRISTOL, VA 24201
PH. (276) 645-7360 FAX (276) 645-7365

**UTILITY TRENCH REPAIR IN PAVEMENT
USING VDOT NO. 21A AGGREGATE**

DATE: JULY 1, 2012 (Rev.2018)
SCALE: N.T.S.

DRAWING NO: UTR-1



NOTES:

1. ALL PAVEMENTS SHALL BE SAW CUT WITH NEAT UNIFORM LINES PRIOR TO EXCAVATION
2. SHOULD CONCRETE PAVEMENT BE ENCOUNTERED DURING EXCAVATION PLEASE CONTACT THE CITY ENGINEER IMMEDIATELY.
3. PIPE BEDDING MATERIAL SHALL BE CRUSHER RUN (VDOT NO. 25 OR 26). ALTERNATE MATERIAL MUST BE APPROVED BY THE CITY ENGINEER. (Pipe bedding shall be lightly and uniformly compacted and shall be carefully shaped so that the lower section of the pipe exterior is in full contact with the bedding material for at least 10 percent of the overall height of the pipe. Bedding material shall be shaped to accommodate the bell portion of the pipe when bell and spigot pipe is used. The depth of bedding material shall be at least 4 inches, or as specified on the plan or as directed by the Engineer.)
4. BACKFILL MATERIAL SHALL BE FLOWABLE FILL MEETING THE REQUIREMENTS OF VDOT SPECIAL PROVISION FOR FLOWABLE BACKFILL. THE MATERIAL MUST BE PLANT CERTIFIED TO PROVIDE A 28-DAY COMPRESSIVE STRENGTH BETWEEN 30 AND 200 PSI. A CERTIFICATE OF MIX DESIGN MUST BE SUBMITTED TO THE INSPECTOR PRIOR TO PLACING THE MATERIAL IN THE TRENCH. A MINIMUM OF FOUR 6X12 TEST CYLINDERS SHALL BE TAKEN EVERY 50 CY OF PLACEMENT. CYLINDERS SHALL BE TESTED BY A QUALIFIED TESTING LABORATORY FOR 28-DAY STRENGTH. RESULTS SHALL BE PROVIDED TO THE INSPECTOR WITHIN 24 HOURS OF TESTING COMPLETION. THE COST OF THE TESTING IS THE RESPONSIBILITY OF THE PERMITTEE. IF THE REPORT INDICATES THE COMPRESSIVE STRENGTHS ARE NOT BETWEEN 30 AND 200 PSI, THE PERMITTEE WILL BE RESPONSIBLE FOR REMOVING AND REPLACING THE BACKFILL WITH ACCEPTABLE BACKFILL AND COMPLETING THE RESTORATION OF THE STREET AT NO COST TO THE CITY.
5. DEPTHS FOR AGGREGATE BASE , ASPHALT BASE AND ASPHALT SURFACE COURSE SHALL BE DETERMINED BY EACH LOCATION AND THE DEPTHS OF MATERIAL ON THE EXISTING STREET. THE CONTRACTOR SHALL CALL THE INSPECTOR AFTER THE TRENCH HAS BEEN OPENED TO DETERMINE THE DEPTHS REQUIRED. THE MINIMUM DEPTHS IN ANY CASE SHALL BE 8" OF AGGREGATE BASE, 4" ASPHALT BASE AND 2" ASPHALT SURFACE COURSE.
6. 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 25' BEYOND THE UNDERMINED AREA. ANY INITIAL PAVEMENT REPAIR WITH AN AREA GREATER 40 SQUARE FEET MAY BE NON-RECTANGULAR, HOWEVER, THE REPAIR SHALL BE SAW CUT IN STRAIGHT, UNIFORM LINES.
7. TACK COAT IS REQUIRED ON ALL SURFACES THAT WILL CONTACT THE NEW SURFACE LAYER.
8. PARTIAL LANE MILLING IS NOT ALLOWED.

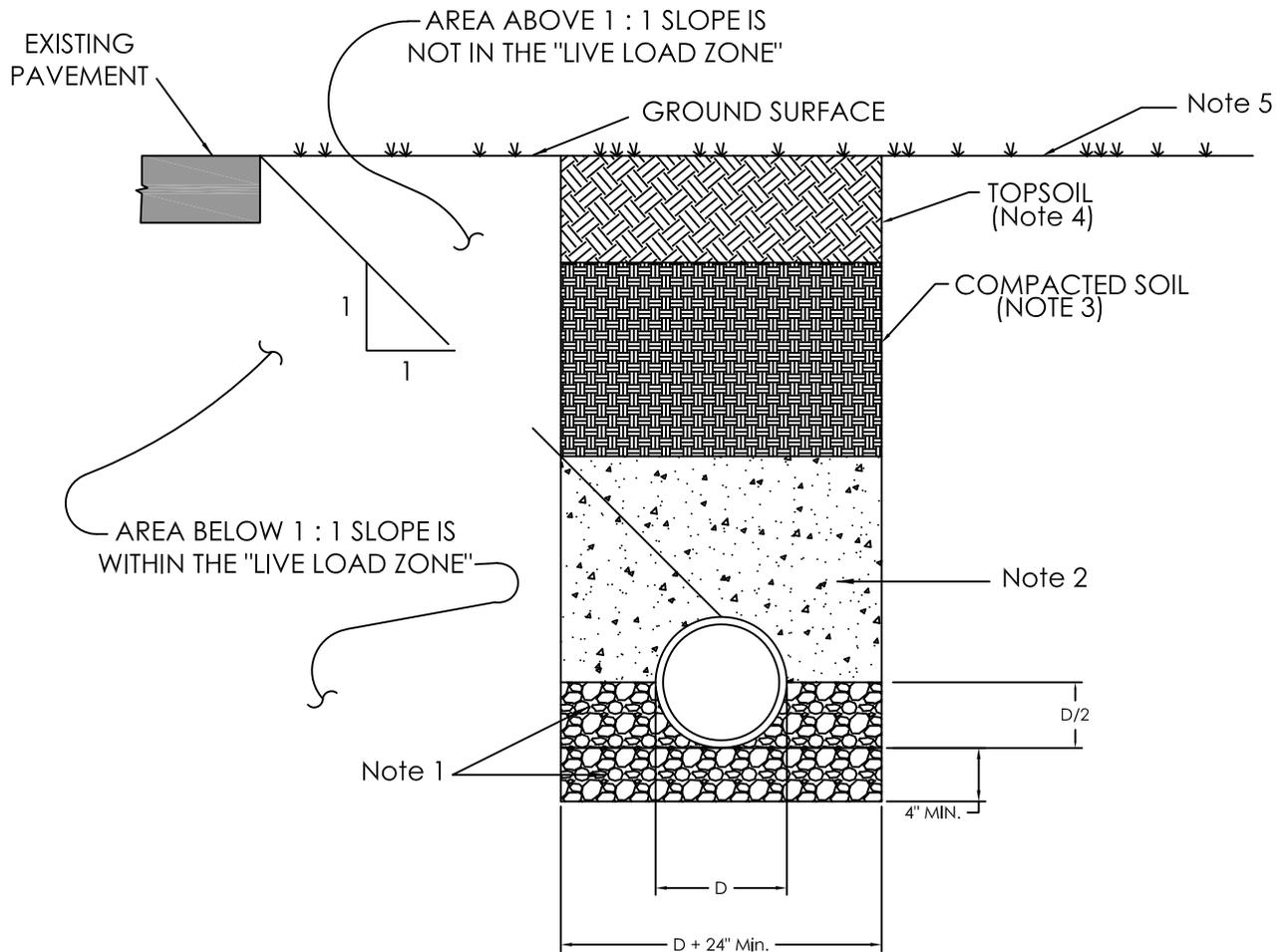


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**UTILITY TRENCH REPAIR IN PAVEMENT
 USING FLOWABLE FILL**

DATE: JULY 1, 2012(Rev.2018)
 SCALE: N.T.S.

DRAWING NO: UTR-2



NOTES:

1. PIPE BEDDING MATERIAL SHALL BE CRUSHER RUN (VDOT NO. 25 OR 26). ALTERNATE MATERIAL MUST BE APPROVED BY THE CITY ENGINEER. (Pipe bedding shall be lightly and uniformly compacted and shall be carefully shaped so that the lower section of the pipe exterior is in full contact with the bedding material for at least 10 percent of the overall height of the pipe. Bedding material shall be shaped to accommodate the bell portion of the pipe when bell and spigot pipe is used. The depth of bedding material shall be at least 4 inches, or as specified on the plan or as directed by the Engineer.)
2. BACKFILL MATERIAL IN THE LIVE LOAD ZONE SHALL BE VDOT NO. 21A OR 21B 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 COMP ACTION IS NOT PERMITTED.
3. OUTSIDE THE LIVE LOAD ZONE, BACKFILL MATERIAL SHALL BE FINE COMPATIBLE SOIL FREE OF SOD, BRUSH, ROOTS, AND OTHER PERISHABLE MATERIAL AND STONES HAVING A MAXIMUM DIMENSION OF MORE THAN SIX (6) INCHES. ALSO, THIS MATERIAL SHALL BE COMPACTED IN LAYERS OF NOT MORE THAN SIX INCHES TO 95% OF THE STANDARD PROCTOR DENSITY AT THE OPTIMUM MOISTURE CONTENT AS DETERMINED BY AASHTO T99, Method D. 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 TESTS.
4. A 4" LAYER OF TOPSOIL SHALL BE PLACED IN THE EXCAVATION AND CONTOURED TO RESTORE THE GROUND SURFACE TO AS CLOSE TO A PRE-CONSTRUCTION CONDITION AS POSSIBLE.
5. SEED AND MULCH ALL DISTURBED AREAS.



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**UTILITY TRENCH REPAIR IN NONPAVED
AREAS USING VDOT NO. 21A AGGREGATE**

DATE: JULY 1, 2012 (Rev.2018)
SCALE: N.T.S.

DRAWING NO: UTR-3