



**TYPICAL APPLICATIONS OF TEMPORARY TRAFFIC CONTROL  
AS GIVEN IN THE VIRGINIA WORK AREA PROTECTION MANUAL**

**MAINTENANCE OF TRAFFIC NOTES**

- DURING CONSTRUCTION, CONTRACTOR SHALL LIMIT DISRUPTION TO RESIDENTIAL ACCESS DRIVEWAYS, COORDINATE CONSTRUCTION ACTIVITIES THAT MAY AFFECT DRIVEWAYS WITH THE PROPERTY OWNER, AND PROVIDE OWNER WITH ACCESS BY END OF WORK DAY OR SOONER AS POSSIBLE.
- ALL STANDARDS AND GUIDELINES OF THE VIRGINIA WORK AREA PROTECTION MANUAL (VWAPM) SHALL APPLY TO ANY TRAFFIC CONTROL MEASURES INCLUDING, BUT NOT LIMITED TO, ALL DEVICES, METHODS, AND DIMENSIONS.
- CONTRACTOR SHALL PROVIDE WARNING SIGNS, AND APPROVED PORTABLE SIGN STANDS AND INSURE AN UNRESTRICTED VIEW OF ADVANCE WARNING SIGN MESSAGES FOR SAFETY OF TRAFFIC AND IN ACCORDANCE WITH THE VWAPM.
- ALL WORK WITHIN THE RIGHT-OF-WAY SHALL BE APPROPRIATELY SIGNED REGARDLESS OF WHETHER A LANE OR SHOULDER CLOSURE IS NEEDED.
- DURING LANE CLOSURES, CONTRACTOR SHALL USE AT LEAST 2 FLAGMEN AT ALL TIMES AND IN ACCORDANCE WITH THE VWAPM.
- CONES MAY BE USED IN AREAS WHERE PERSONNEL WILL BE PRESENT TO INSURE THEIR PROPER ALIGNMENT; GROUP II DRUMS SHALL BE REQUIRED WHEN THE WORK ZONE IS UNMANNED. ALL CONES SHALL BE A MINIMUM OF 36" IN HEIGHT AND PLACED IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND THE VWAPM.
- ALL TRAFFIC CONTROL EQUIPMENT AND OBJECTS SHALL MEET NCHRP 350 CRASH TESTING CRITERIA.
- THESE NOTES ARE PROVIDED AS GUIDELINES ONLY. THE CONTRACTOR SHALL PREPARE A SPECIFIC TRAFFIC CONTROL PLAN THAT MATCHES HIS PLANNED OPERATIONS AND PROJECT SEQUENCING.

**COMMUNICATION NOTES**

- THE CONTRACTOR SHALL ADVISE THE LOCAL VIRGINIA DEPARTMENT OF TRANSPORTATION OFFICE OF PLANNED LANE CLOSURES A MINIMUM OF 72 HOURS IN ADVANCE OF PLANNED LANE CLOSURE.
- THE CONTRACTOR SHOULD IMMEDIATELY NOTIFY 911 FOR ANY EMERGENCY.
- IF AN EMERGENCY IS TRAFFIC RELATED, THE LOCAL VIRGINIA DEPARTMENT OF TRANSPORTATION OFFICE, OR HIS DESIGNEE SHOULD BE NOTIFIED IMMEDIATELY AFTER CALLING 911.

**GENERAL UTILITY NOTES**

- ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO THE LATEST EDITION OF THE WESTERN VIRGINIA REGIONAL DESIGN AND CONSTRUCTION STANDARDS AVAILABLE AT WWW.WESTERNVAVATER.ORG OR BY CONTACTING THE AUTHORITY AT 540-853-5700. THE PROJECT SHALL ALSO COMPLY WITH THE GOVERNING JURISDICTION'S STANDARDS AND OTHER AGENCY STANDARDS (E.G., VDOT, DEQ, DCR, VDH, ETC.) WHERE APPLICABLE.
- ALL CONNECTIONS TO EXISTING WATERLINES SHALL BE PERFORMED BY THE AUTHORITY. THE CONTRACTOR SHALL PROVIDE FULL STAINLESS STEEL TAPPING SLEEVE(S) AND VALVE(S). THE CONTRACTOR SHALL EXCAVATE TO THE EXISTING WATERLINE, SHORE THE TRENCH PER OSHA REQUIREMENTS, CLEAN THE EXISTING WATERLINE, AND INSTALL THE TAPPING SLEEVE AND VALVE PRIOR TO THE AUTHORITY PERFORMING THE TAP. THE CONTRACTOR SHALL NOTIFY THE AUTHORITY'S UTILITY LINE SERVICES DIVISION AT 540-853-2792 AT LEAST SEVENTY-TWO (72) HOURS PRIOR TO REQUIRING THE CONNECTION.
- PRIOR TO CONSTRUCTION IN THE RIGHT-OF-WAY, ALL APPLICABLE PERMIT(S) FROM THE GOVERNING JURISDICTION AND/OR AGENCY MUST BE OBTAINED AND A COPY KEPT ON THE PROJECT SITE.
- FOR PROJECTS REQUIRING TRAFFIC CONTROL NOTIFY THE BEDFORD VDOT RESIDENCY, AT 540-586-7910 AT LEAST TWO WEEKS IN ADVANCE OF REQUIRING TRAFFIC CONTROL. TRAFFIC CONTROL REQUIREMENTS SHALL BE DETERMINED ONCE THE VDOT LAND USE PERMIT HAS BEEN ISSUED. TRAFFIC CONTROL SHALL BE PROVIDED IN ACCORDANCE WITH THE MOST RECENT MUTCD MANUAL AND THE VDOT WORK AREA PROTECTION MANUAL UNLESS OTHERWISE SPECIFIED.
- THE CONTRACTOR SHALL NOTIFY THE AUTHORITY'S ENGINEERING COORDINATOR, MARK SINK, AT 540-537-3460 AT LEAST THREE (3) DAYS PRIOR TO CONSTRUCTION.
- A PRE-CONSTRUCTION CONFERENCE SHALL BE SCHEDULED AT LEAST ONE (1) DAY PRIOR TO ANY CONSTRUCTION.
- THE CONTRACTOR SHALL HAVE A VALID MISS UTILITY TICKET PRIOR TO EXCAVATION. CONTACT MISS UTILITY AT 1-800-552-7001.
- ALL EXISTING UTILITIES MAY NOT BE SHOWN OR MAY NOT BE SHOWN IN THEIR EXACT LOCATION. CONTRACTOR SHALL LOCATE ALL UTILITIES AND DETERMINE ALL INVERTS PRIOR TO CONSTRUCTION TO ALLOW FOR ADJUSTMENTS DUE TO CONFLICTS WITH OTHER UTILITIES. THE CONTRACTOR SHALL COMPLY WITH THE VIRGINIA STATE WATER WORKS REGULATIONS, SECTION 12VAC5-590-1150, AND THE VIRGINIA STATE SEWAGE COLLECTION AND TREATMENT REGULATIONS WHERE LINES CROSS.
- AN APPROVED SET OF PLANS AND PERMITS MUST BE AVAILABLE AT THE CONSTRUCTION SITE AT ALL TIMES.
- CONSTRUCTION DEBRIS SHALL BE CONTAINERIZED IN ACCORDANCE WITH THE VIRGINIA LITTER CONTROL ACT.
- PRIOR TO COMMENCING WORK, THE CONTRACTOR'S CERTIFIED RESPONSIBLE LAND DISTURBER SHALL OBTAIN AN EROSION AND SEDIMENT CONTROL PERMIT FOR THE PROJECT FROM THE LOCAL GOVERNING JURISDICTION AND DEQ (IF REQUIRED). ALL EROSION AND SEDIMENT CONTROL MEASURES MUST BE IN ACCORDANCE WITH THE LATEST EDITION OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND SHALL BE INSTALLED PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL PROVIDE ADEQUATE MEANS OF CLEANING ALL VEHICLES AND EQUIPMENT PRIOR TO ENTERING PUBLIC STREETS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE STREETS ARE KEPT IN A CLEAN, MUD AND DUST FREE CONDITION AT ALL TIMES.
- FIELD CHANGES SHALL BE APPROVED BY THE AUTHORITY'S ENGINEERING DIVISION PRIOR TO SUCH CONSTRUCTION.
- THE CONTRACTOR SHALL MAKE PROVISIONS TO PROVIDE ACCESS TO ALL PROPERTIES DURING CONSTRUCTION AND SHALL MAINTAIN SAFE ACCESSIBILITY TO FIRE HYDRANTS AT ALL TIMES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND UNCOVERING ALL MANHOLES AFTER PAVING. MANHOLE RIMS SHALL BE INSTALLED TO GRADE AND FLUSH WITH THE FINAL PAVEMENT.
- UNREPAIRED ROADWAYS OPENED TO TRAFFIC SHALL HAVE, AT A MINIMUM, COMPACTED AGGREGATE MATERIAL VDOT 21A OR 21B FLUSH WITH THE ADJACENT ROADWAY SURFACE AND SHALL BE INSPECTED AND REPAIRED ON A DAILY BASIS. SOME AREAS WILL REQUIRE A TEMPORARY PATCH UNTIL FINAL PAVING CAN BE COMPLETED.
- THE CONTRACTOR SHALL NOT EXCAVATE MORE TRENCH LENGTH THAN CAN BE RESTORED WITHIN THE SAME WORK DAY. ALL TRENCHES SHALL BE BACKFILLED OR PLATED AT THE END OF EACH WORK DAY OR WHEN THE CONTRACTOR IS NOT ON SITE.
- THE CONTRACTOR SHALL SUPPLY THE AUTHORITY WITH CORRECT AS-BUILT PLANS BEFORE SUBSTANTIAL COMPLETION WILL BE GRANTED.
- ROAD OPEN/NOT PERMITTED. ALL ROAD CROSSINGS SHALL BE BY DIRECTIONAL DRILLING METHODS.
- ALL MANHOLE COVERS, VALVE BOX, ETC., SHALL BE INSTALLED TWO INCHES BELOW THE EXISTING GROUND LINE AND SHALL CONFORM TO EXISTING CONTOURS.

**WATERLINE NOTES**

- INSTALL WATERLINE AND APPURTENANCES IN ACCORDANCE WITH THE DETAILS SHOWN ON THESE DRAWINGS AND ALL OTHER AUTHORITY REGULATIONS.
- A TYPICAL MINIMUM COVER OF THREE (4) FEET IS REQUIRED OVER PROPOSED WATERLINES UNLESS OTHERWISE INDICATED ON PLANS.
- WATER MAINS SHALL BE A MINIMUM CLASS 350 DUCTILE IRON PER AWWA C151, UNLESS OTHERWISE INDICATED ON PLANS.
- ALL WATERLINES SHALL BE INSTALLED ACCORDING TO THE PROFILES INCLUDED WITH THESE PLANS AND WITHOUT ANY ADDITIONAL HIGH POINTS OTHER THAN THOSE INDICATED ON PROFILES. SHOULD THE CONTRACTOR CONSTRUCT WATERLINE WITH HIGH POINTS NOT SHOWN ON PROFILES, THE CONTRACTOR SHALL INSTALL ADDITIONAL AIR RELEASE VALVES AT SUCH HIGH POINTS AND IN-LINE BLOW-OFFS AT ADJACENT LOW POINTS WITH NO ADDITIONAL COST TO THE AUTHORITY.
- ALL SERVICE LATERALS CROSSING ROADWAYS SHOULD BE BORED ACROSS TO A POINT PAST OPPOSITE EDGE OF PAVEMENT WITH MINIMAL ADDITIONAL DAMAGE TO ROAD SURFACE. (NONE PROPOSED)
- THE TOPS OF ALL VALVE BOXES, VALVE VAULTS, AND ACCESS MANHOLES SHALL BE INSTALLED TO GRADE AND FLUSH WITH PAVED SURFACES.
- ALL WATERLINES SHALL BE PROPERLY RESTRAINED WITH THRUST BLOCKS OR JOINT RESTRAINTS AS SHOWN ON AUTHORITY'S DETAILS.
- WHERE WATERLINE MUST CROSS UNDER STORM DRAINS, PIPES SHALL HAVE A MINIMUM OF 18" OF SEPARATION, OR THE STORM PIPE SHALL BE SUPPORTED IN ACCORDANCE WITH THE AUTHORITY'S STANDARDS.
- ALL WATERLINES AND SERVICE LATERALS SHALL BE PRESSURE TESTED, AFTER BACKFILLING, TO A HYDROSTATIC PRESSURE OF NOT LESS THAN 100psi ABOVE THE DESIGN WATER PRESSURE FOR THE SYSTEM OR 200psi, WHICHEVER IS GREATER. TESTING PROCEDURE AND ALLOWABLE LEAKAGE SHALL BE ACCORDING TO AUTHORITY STANDARDS.

**SITE AND ZONING TABULATIONS**

CURRENT ZONING: LOTS SURROUNDING THE WATERLINE EXTENSION ARE ZONED EITHER: A1--AGRICULTURAL, R1--RESIDENTIAL SUBURBAN SUBDIVISION, RPD--RESIDENTIAL PLAN UNIT DEVELOPMENT

PROPOSED USE: WATERLINE EXTENSION TO CONNECT TO EXISTING WATERLINE THAT IS GOING FROM PRIVATE TO PUBLIC.

SITE ACREAGE: LOT SIZE VARIES.

PROPOSED NUMBER OF LOTS: NO CHANGE IN NUMBER OF LOTS.

**GENERAL NOTES**

- OWNER/DEVELOPER: WESTERN VIRGINIA WATER AUTHORITY  
ATTN: (JEFF ROGERS)  
601 SOUTH JEFFERSON STREET, SUITE 300  
ROANOKE, VA 24011  
(540) 855-4679
- NO PORTION OF THIS PROJECT IS LOCATED WITHIN THE LIMITS OF A 100 YEAR FLOOD BOUNDARY AS DESIGNATED BY FEMA. THIS OPINION IS BASED ON AN INSPECTION OF THE FLOOD INSURANCE RATE MAP #51067C0120D, DATED JANUARY 6, 2010.
- THE PROPERTY LINES AND RIGHT OF WAY SHOWN ARE THE RESULT OF REPRODUCING RECORDED SUBDIVISION PLATS FOR THE LOTS INVOLVED AND JUSTIFYING THESE WITH PROPERTY CORNERS AS LOCATED BY FIELD SURVEY PERFORMED BY LUMSDEN ASSOCIATES, P.C. IN 2019.
- TOPOGRAPHIC DATA IS BASED ON A FIELD SURVEY PERFORMED BY LUMSDEN ASSOCIATES, P.C. IN 2019.
- A TITLE REPORT WAS NOT FURNISHED FOR THESE PROPERTIES.
- THE PROPERTIES SHOWN ON THESE PLANS ARE ACCESSED BY PUBLIC ROADS.
- AN APPROVED SET OF PLANS SHALL BE KEPT ON SITE AT ALL TIMES.

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**NOTES & DETAILS**

**STAROVER LAKE  
WATERLINE EXTENSION**  
PREPARED FOR  
WESTERN VIRGINIA WATER AUTHORITY  
SITUATED IN  
FRANKLIN COUNTY, VIRGINIA

REVISIONS		DESCRIPTION	DATE
NO.	DATE	DESCRIPTION	DATE
1			
2			
3			
4			
5			

DATE: January 6, 2021

SCALE: NONE

COMMISSION NO: 19-285

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