

GENERAL NOTES

- ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO THE LATEST EDITION OF THE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS OF THE WESTERN VIRGINIA WATER AUTHORITY (AUTHORITY) AVAILABLE AT WWW.WESTERNVIAWATER.ORG OR BY CONTACTING THE AUTHORITY AT 540-853-5700, AND SUPPLEMENTAL SPECIFICATIONS. THE PROJECT SHALL ALSO COMPLY WITH THE GOVERNING JURISDICTION'S STANDARDS AND OTHER AGENCY STANDARDS (E.G., VDOT, DEQ, DCR, VDM, ETC.) WHERE APPLICABLE.
- ALL CONNECTIONS TO ANY EXISTING SANITARY SEWERLINES SHALL BE PERFORMED BY THE AUTHORITY. THE CONTRACTOR SHALL EXCAVATE TO THE EXISTING SEWERLINE, SHORING THE TRENCH PER OSHA REQUIREMENTS, AND CLEAN THE EXISTING SEWERLINE 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.
- THE CONTRACTOR SHALL PERFORM ALL MANHOLE CONNECTIONS. THE CORING AND BOOT INSTALLATION SHALL BE INSPECTED AND APPROVED BY AN AUTHORITY CONSTRUCTION INSPECTOR PRIOR TO ACTIVATING SEWER SERVICE. THE CONTRACTOR SHALL CONTACT THE AUTHORITY'S CONSTRUCTION INSPECTOR RESPONSIBLE FOR THE PROJECT AT LEAST ONE (1) DAY PRIOR TO INITIATING THE MANHOLE 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 WORK WITHIN THE CITY OF ROANOKE RIGHT-OF-WAY, THE CITY'S "RIGHT-OF-WAY EXCAVATION AND RESTORATION STANDARDS" SHALL BE ADHERED TO.
- FOR PROJECTS REQUIRING TRAFFIC CONTROL IN THE CITY OF ROANOKE, NOTIFY MANAGER OF TRANSPORTATION, MARK JAMISON, AT 540-853-5471 AT LEAST TWO WEEKS IN ADVANCE OF REQUIRING TRAFFIC CONTROL. FOR A LANE CLOSURE PERMIT IN THE CITY OF ROANOKE, CONTACT THE TRAFFIC ENGINEER, HONG LIU, AT 540-853-2686. 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 811.
- 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 WATERWORKS REGULATIONS, SECTION 12VAC5-590-1150, AND THE VIRGINIA STATE SEWAGE COLLECTION AND TREATMENT REGULATIONS WHERE LINES CROSS.
- SEWER LATERALS ARE SHOWN IN ASSUMED LOCATIONS. CONTRACTOR SHALL COORDINATE WITH THE AUTHORITY FOR MARKING OF ALL SEWER LATERALS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL VERIFY ACTIVE LATERALS WITH THE AUTHORITY. CONTRACTOR SHALL LOCATE EXISTING ACTIVE LATERALS AND REPLACE LATERAL AND CLEANOUT AT PROPERTY LINE AND CONNECT TO EXISTING PRIVATE LATERAL. LATERALS SHALL BE INSTALLED WITH MINIMUM COVER OF 3' AND A MINIMUM SLOPE OF 0.50% LATERALS SHALL BE EQUAL TO OR GREATER THAN THE PIPE DIAMETER AT THE PROPERTY LINE OR EASEMENT.
- PROPOSED SEWER LATERALS ARE SHOWN IN ASSUMED LOCATIONS. CONTRACTOR SHALL LOCATE EXISTING LATERALS AND REPLACE LATERAL AND CLEAN OUT AND CONNECT TO EXISTING PRIVATE LATERAL. PROVIDE NEW CLEAN OUT AT PROPERTY LINE (OR EASEMENT LINE) FOR ACTIVE LATERALS.
- 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 STORMWATER MANAGEMENT PERMIT FROM DCR (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, MID- 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.
- CONSTRUCTION CREWS MUST ALLOW FOR SOLID WASTE MANAGEMENT TO SERVICE TRASH, RECYCLING, BULK, AND BRUSH FOR THE ENTIRE PROJECT AREA.
- MANHOLE RIMS SHALL BE INSTALLED TO GRADE AND FLUSH WITH THE FINAL PAVEMENT. PAVEMENT ADJACENT ADJACENT STRUCTURE SHALL BE MILLED AS REQUIRED TO MATCH PAVEMENT TO EXISTING STRUCTURES.
- THE CONTRACTOR SHALL MATCH ALL OPEN CUT PAVEMENT IN ACCORDANCE WITH DETAIL G-12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND UNCOVERING ALL MANHOLES AFTER PAVING. MANHOLE RIMS SHALL BE 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.
- HORIZONTAL DATUM IS VIRGINIA STATE PLANE COORDINATE SYSTEM SOUTH ZONE NAD 83. VERTICAL DATUM IS NAVD 88.
- THE "OWNER" IS THE WESTERN VIRGINIA WATER AUTHORITY (AUTHORITY). THE TERMS "OWNER" AND "AUTHORITY" ARE USED INTERCHANGEABLY IN THESE CONTRACT DOCUMENTS. DURING CONSTRUCTION THE AUTHORITY WILL ACT AS THE "ENGINEER".
- CONTRACTOR SHALL OBTAIN REQUIRED PERMITS FROM CITY OF ROANOKE.
- PAVEMENT SHALL BE IN ACCORDANCE WITH CITY OF ROANOKE AND VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT) STANDARDS.
- CONTRACTOR SHALL EXCAVATE A TEST PIT TO DETERMINE THE DEPTH AND SIZE OF ALL CROSSING UNDERGROUND UTILITIES PRIOR TO THE START OF CONSTRUCTION.
- SITE IS LOCATED NEAR RESIDENTIAL AREAS AND EXISTING RESIDENCES ARE LOCATED IMMEDIATELY ADJACENT TO SITE. CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO MINIMIZE DISTURBANCES TO ADJACENT PROPERTIES, INCLUDING PREVENTION OF DUST/DEBRIS INTRUSION ONTO PROPERTIES.
- ANY FENCING WHICH IS DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE IMMEDIATELY REPLACED OR SUPPLEMENTED BY TEMPORARY FENCING OR BARRICADE SUITABLE FOR INTENDED PURPOSE OF EXISTING FENCING. CONTRACTOR SHALL PROMPTLY REPAIR AND/OR REPLACE DISTURBED FENCING TO EQUAL OR BETTER CONDITIONS.
- EQUIPMENT STAGING AND STORAGE SHALL OCCUR OUTSIDE OF CITY RIGHTS-OF-WAY.
- PAVED OR CONCRETE DRIVEWAYS WHICH ARE OPEN CUT OR DISTURBED SHALL BE RESTORED IN ACCORDANCE WITH THE APPLICABLE DETAILS. LIMITS OF DRIVEWAY PAVEMENT RESTORATION ARE NOT SHOWN ON THE PLAN AND PROFILE SHEETS.
- ALL DISTURBED AREAS SHALL BE RETURNED TO LIKE OR BETTER CONDITION WHETHER THEY ARE GRASSED, LANDSCAPED, GRAVELED, OR OTHER. ANY DISTURBED PLANTINGS SHALL BE REPLACED BY LIKE SPECIES.
- ROADS WHICH ARE OPEN CUT SHALL BE PROMPTLY REPAIRED AS REQUIRED BY THE CITY. OPEN CUTS SHALL NOT BE PERMITTED DURING WINTER MONTHS WHERE COLD WEATHER WILL NOT PERMIT PROMPT REPAIR OF THE PAVEMENT DUE TO TEMPERATURES. LIMITS OF PAVEMENT RESTORATION ARE SHOWN ON THE PLAN AND PROFILE SHEETS.
- SEWER PIPE MATERIAL SHALL BE PER AUTHORITY STANDARDS UNLESS OTHERWISE INDICATED ON THE PLANS.
- PROFILES SHOW SEWER SLOPES BASED ON SEWER LENGTH FROM MANHOLE CENTER TO MANHOLE CENTER. HOWEVER, PAYMENT SHALL BE MADE FOR LENGTH FROM INSIDE MANHOLE TO INSIDE MANHOLE.
- SEWER SLOPES ARE CALCULATED BASED ON SEWER LENGTH (LINEAR FEET) FROM MANHOLE CENTER TO MANHOLE CENTER. MANHOLE PENETRATION INVERTS AND SEWER SLOPES SHALL BE COORDINATED IN THE FIELD.
- PORTIONS OF THE SANITARY SEWER TO BE REPLACED PASS UNDER EXISTING STORM SEWER SYSTEMS. DURING CONSTRUCTION CONTRACTOR SHALL PROTECT AND SUPPORT EXISTING STORM SEWER PIPE. CONTRACTOR IS ENCOURAGED TO PERFORM THESE TASKS ONLY DURING DRY WEATHER TO AVOID COMPROMISING OF STORM SEWER SYSTEM DURING A RAINFALL EVENT.
- A MINIMUM OF 18" SEPARATION MUST BE MAINTAINED BETWEEN UTILITIES AT ALL PIPE CROSSINGS UNLESS OTHERWISE INDICATED ON THE DRAWINGS.

EROSION & SEDIMENT CONTROL NOTES

- UNLESS OTHERWISE INDICATED, CONSTRUCT AND MAINTAIN ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, AND VIRGINIA REGULATIONS VFR 625-02-00 EROSION AND SEDIMENT CONTROL REGULATIONS.
- WWVA INSPECTORS WILL MAKE A CONTINUING REVIEW AND EVALUATION OF THE METHODS AND EFFECTIVENESS OF THE EROSION AND SEDIMENT CONTROL PLAN. WWVA MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITY, AND ONE WEEK PRIOR TO THE FINAL INSPECTION.
- PLACE ALL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO OR AS THE FIRST STEP IN CLEARING, GRADING, OR LAND DISTURBANCE.
- MAINTAIN A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN ON THE SITE AT ALL TIMES.
- PRIOR TO COMMENCING LAND-DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING, BUT NOT LIMITED TO, OFF-SITE BORROW OR WASTE AREA), SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN TO THE ARCHITECT/ENGINEER FOR REVIEW AND APPROVAL.
- PROVIDE ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE WWVA.
- ALL DISTURBED AREAS SHALL DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND-DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT.
- DURING DETERIORATION OPERATIONS, PUMP WATER INTO AN APPROVED FILTERING DEVICE.
- THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES DAILY AND AFTER EACH RUNOFF-PRODUCING RAINFALL EVENT. MAKE ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES IMMEDIATELY.

EROSION & SEDIMENT CONTROL LEGEND

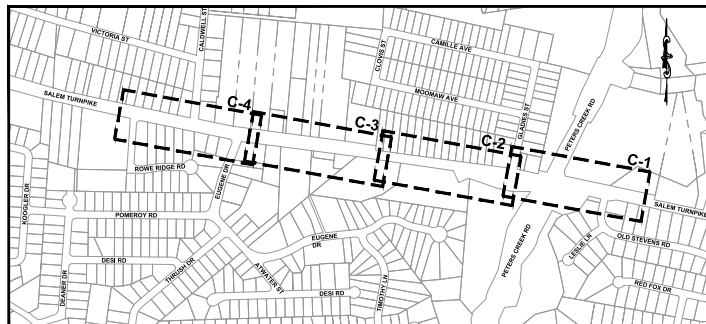
No.	TITLE	KEY	SYMBOL
3.05	SILT FENCE	SF	X X
3.07	STORM DRAIN INLET PROTECTION	IP	⊗
3.08	CULVERT INLET PROTECTION	CIP	⊗
3.32	PERMANENT SEEDING	PS	PS
3.36	SOIL STABILIZATION BLANKETS & MATTING	B/M	B/M

(SEE ES-1 FOR EROSION AND SEDIMENT CONTROL NARRATIVE AND DETAILS)

- NOTES:
- Source of Meridian: Virginia State Plane, South Zone, (NAD 83) based upon existing GPS control network.
 - Vertical datum: NAVD 88 based upon existing GPS control network.
 - This survey was prepared without the benefit of a title commitment or title report and all easements and encumbrances that might be disclosed in a title search may not be shown.
 - Utilities shown are based upon:
 - SUE Quality Level D, ASCE 38-02 - compiled records only.
 - SUE Quality Level C, ASCE 38-02 - visible evidence in conjunction with compiled records.
 - X SUE Quality Level B, ASCE 38-02 - field designation of underground utilities performed by (Miss Utility, Ticket #A800201542;) and visible evidence in conjunction with compiled records.
 - SUE Quality Level A, ASCE 38-02 - test pits at locations shown hereon performed by (DAA; Other) in conjunction with field designation of underground utilities performed by (DAA; Miss Utility, Ticket # - ; Other), visible evidence and compiled records.No SUE was performed or requested for this survey. Utilities shown hereon are based on field observation only.
 - This topographic survey along Salem Turnpike was completed under the direct and responsible charge of Loren W. Knighting from an actual ground survey made under our supervision; that the imagery and/or original data was obtained on the weeks of Jan. 01 thru Jan. 12, 2018; and that this plot and/or map meets minimum accuracy standards unless otherwise noted.
 - Contour interval: 1'.
 - This survey was prepared for Western Virginia Water Authority. Draper Aden Associates assumes no liability for reuse or modification of this document.
 - Property lines shown hereon are compiled from record information.
 - Draper Aden Associates provides benchmarks for the construction of the improvements shown on these plans. All other existing elevations are for reference to existing conditions only. Do not use spot elevations, finish floor elevations, elevations on manholes, elevations on survey nails, survey hubs, control points (horizontal points provided) or any other points for construction other than the provided benchmarks. Failure to utilize and verify the provided benchmarks could result in damages and additional cost that are the contractor's responsibility.

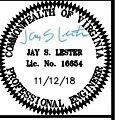
PROJECT KEY

1" = 400'



GENERAL LEGEND

EXISTING	PROPOSED
---1000---	1000
---x 1561.3---	CONTOURS
---	GROUND ELEVATION
---	TREE LINE
---	STREAM
---	DECIDUOUS TREE
---	CONIFEROUS TREE
---	SHRUB
---	EDGE OF PAVEMENT
---	FENCE
---	PROPERTY LINE/ROW
---	IRON ROD FOUND
---	IRON ROD SET
---	MONUMENT FOUND
---	MONUMENT SET
---	EASEMENT
---	SIGN
---	METAL POST
---	WOOD POST
---	STORM SEWER
---	STORM MANHOLE
---	STORM DRAINAGE INLET
---	STORM STRUCTURE KEY
---	SANITARY SEWER
---	SANITARY SEWER CLEANOUT
---	SANITARY SEWER MANHOLE
---	SANITARY STRUCTURE KEY
---	UNDERGROUND ELECTRIC
---	OVERHEAD POWER
---	GROUND LIGHT
---	LIGHT POLE
---	UTILITY POLE
---	ELECTRIC MANHOLE
---	ELECTRIC MARKER
---	ELECTRIC BOX
---	GUY WIRE
---	WATER
---	GATE VALVE
---	AIR RELEASE VALVE
---	BLOW OFF VALVE
---	FIRE HYDRANT
---	WATER METER & BOX
---	UNDERGROUND FIBER OPTIC
---	FIBER OPTIC PEDESTAL
---	FIBER OPTIC HANDHOLE
---	GENERIC COMMUNICATION
---	UNDERGROUND COMMUNICATION
---	OVERHEAD COMMUNICATIONS
---	CABLE TV
---	CABLE TV MANHOLE
---	CABLE TV PEDESTAL
---	TELEPHONE LINE
---	OVERHEAD TELEPHONE
---	UNDERGROUND TELEPHONE
---	TELEPHONE BOX
---	TELEPHONE MANHOLE
---	TELEPHONE PEDESTAL
---	TELEPHONE POLE
---	GAS LINE
---	GAS DRIP
---	GAS METER
---	GAS VALVE
---	GAS VENT
---	GAS MANHOLE
N/A	ASPHALT DRIVEWAY RESTORATION
N/A	CONCRETE DRIVEWAY RESTORATION
N/A	GRAVEL DRIVEWAY RESTORATION
N/A	PAVEMENT REMOVAL



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GENERAL NOTES AND LEGEND
SALEM TURNPIKE SANITARY SEWER
ROANOKE CITY, VIRGINIA

REVISIONS

DESIGNED BY: BSC / JSL
DRAWN BY: BSC / JVG
CHECKED BY: MSH
DATE: AS SHOWN
SEPTEMBER 2018
PROJECT NUMBER: 17010596-010301

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