

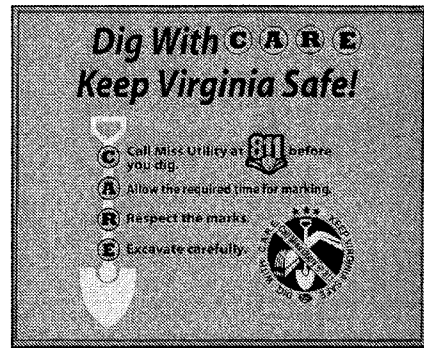
GENERAL NOTES

1. ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO THE LATEST EDITION OF THE WESTERN VIRGINIA REGIONAL DESIGN AND CONSTRUCTION STANDARDS AVAILABLE AT WWW.WESTERNVAWATER.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.
2. THE AUTHORITY WILL INSTALL ALL NEW WATER METERS AND REMOVE ALL EXISTING WATER METERS. THE CONTRACTOR SHALL INSTALL COMPLETE NEW WATER SERVICES INCLUDING THE METER SETTER AND BOX. FOLLOWING METER REPLACEMENT BY THE AUTHORITY, THE CONTRACTOR SHALL DEMOLISH THE EXISTING WATER METER SETTER AND BOX. THE CONTRACTOR SHALL COORDINATE EXISTING METER REMOVAL AND NEW METER INSTALLATION DIRECTLY WITH THE AUTHORITY. THE CONTRACTOR SHALL PROVIDE AT LEAST THREE (3) BUSINESS DAYS ADVANCE NOTICE TO THE AUTHORITY PRIOR TO NEEDING METER INSTALLATIONS. THE CONTRACTOR SHALL SEQUENCE CONSTRUCTION ACTIVITY TO PROVIDE A SERIES OF AT LEAST TEN (10) SERVICES THAT ARE READY TO RECEIVE NEW METERS BEFORE CONTACTING THE AUTHORITY FOR WATER METER REPLACEMENT.
3. 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.
4. ALL CONNECTIONS TO EXISTING SANITARY SEWERLINES SHALL BE PERFORMED BY THE AUTHORITY. THE CONTRACTOR SHALL EXCAVATE TO THE EXISTING SEWERLINE, SHORE 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.
5. 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.
6. 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.
7. 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. IN ROANOKE OR FRANKLIN COUNTIES, TRAFFIC CONTROL REQUIREMENTS SHALL BE DETERMINED ONCE THE VDOT LAND USE PERMIT HAS BEEN ISSUED. PLEASE CONTACT THE LOCAL VDOT OFFICE. TRAFFIC CONTROL SHALL BE PROVIDED IN ACCORDANCE WITH THE MOST RECENT MUTCD MANUAL AND THE VDOT WORK AREA PROTECTION MANUAL UNLESS OTHERWISE SPECIFIED.
8. THE CONTRACTOR SHALL NOTIFY THE AUTHORITY'S ENGINEERING COORDINATOR, MARK SINK, AT 540-537-3460 AT LEAST THREE (3) DAYS PRIOR TO CONSTRUCTION.
9. A PRE-CONSTRUCTION CONFERENCE SHALL BE SCHEDULED AT LEAST ONE (1) DAY PRIOR TO ANY CONSTRUCTION.
10. THE CONTRACTOR SHALL HAVE A VALID MISS UTILITY TICKET PRIOR TO EXCAVATION. CONTACT MISS UTILITY AT 1-800-552-7001.
11. 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.
12. AN APPROVED SET OF PLANS AND PERMITS MUST BE AVAILABLE AT THE CONSTRUCTION SITE AT ALL TIMES.
13. CONSTRUCTION DEBRIS SHALL BE CONTAINERIZED IN ACCORDANCE WITH THE VIRGINIA LITTER CONTROL ACT.
14. 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.
15. 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.
16. FIELD CHANGES SHALL BE APPROVED BY THE AUTHORITY'S ENGINEERING DIVISION PRIOR TO SUCH CONSTRUCTION.
17. THE CONTRACTOR SHALL MAKE PROVISIONS TO PROVIDE ACCESS TO ALL PROPERTIES DURING CONSTRUCTION AND SHALL MAINTAIN SAFE ACCESSIBILITY TO FIRE HYDRANTS AT ALL TIMES.
18. THE CONTRACTOR SHALL REPAIR 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 INSTALLED TO GRADE AND FLUSH WITH THE FINAL PAVEMENT.
19. 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.
20. 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.
21. THE CONTRACTOR SHALL SUPPLY THE AUTHORITY WITH CORRECT AS-BUILT PLANS BEFORE SUBSTANTIAL COMPLETION WILL BE GRANTED.
22. STEEL CASING PIPE SHALL BE SMOOTH WALL FOR JACKING AND SHALL MEET THE REQUIREMENTS OF ASTM A139 WITH A MINIMUM WALL THICKNESS OF 0.5-INCH AND SHALL BE IN ACCORDANCE WITH VDOT ROAD AND BRIDGE SPECIFICATIONS SECTION 232.
23. THE TEST PRESSURE SHALL BE 200 PSI.
24. CONTRACTOR SHALL EXCAVATE A TEST PIT TO DETERMINE THE DEPTH AND SIZE OF ALL CROSSING UNDERGROUND UTILITIES PRIOR TO THE START OF CONSTRUCTION.
25. HDPE PIPE FOR PIPE BURSTING SHALL BE IN ACCORDANCE WITH CONSTRUCTION SPECIFICATION CS-8 OF THE WESTERN VIRGINIA REGIONAL DESIGN AND CONSTRUCTION STANDARDS. PIPE BURSTING INSTALLATION SHALL BE IN ACCORDANCE WITH INDUSTRY STANDARD PRACTICES FOR PIPE BURSTING OF WATER MAINS, AWWA MANUAL M28, AND PIPE BURSTING MANUFACTURERS RECOMMENDED TRAINING AND PROCEDURES.
26. AT ALL CROSSING AND ADJACENT UTILITIES, STRUCTURES, AND UTILITY POLES WITHIN 2-FEET OF PIPE BURSTING OPERATION, REMOVE ALL SOIL WITHIN 6-INCHES OF PIPE TO BE BURST.

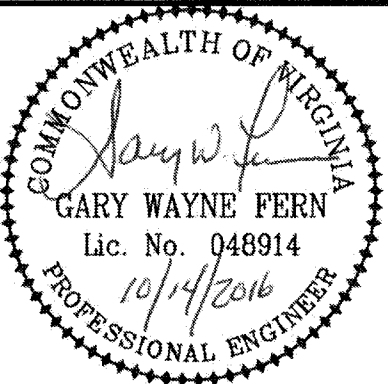
SYMBOL LEGEND (EXISTING)	
	Property Corner
	Property Monument
	Property Line
	Sanitary Sewer Manhole
	Storm Drainage Manhole
	Utility Pole
	Guy Wire
	Street Light
	Tree
	Tree Conifer
	Shrub
	Bollard
	Traffic Arrows
	Mailbox
	Sign
	Telephone Pedestal
	Blow-Off Valve
	Gate Valve
	Water Meter
	Fire Hydrant
	Gas Valve
	Paper Box
	Sewer Clean Out
	Electric Box
	Utility Pole
	Underground Fiber Optics
	Underground Telephone Line
	Water Line
	Sanitary Sewer Line
	Storm Drain Line
	Storm Drain Line
	Storm Drain Line
	R/W and Property Boundary
	Gas Line
	Underground Electric Line
	Water
	Fence
	Guardrail
	Railroad -- Active
	Existing Major Contours
	Existing Minor Contours
	Unknown Utility

SYMBOL LEGEND (PROPOSED)	
	Blow-Off Valve
	Type 5 Commercial Water Service 24" Meter Box
	Air Release Valve
	Valve
	Fire Hydrant
	Inlet Protection
	Water Service Connection, 1" Diameter unless shown otherwise
	Concrete Sidewalk, Curb & Gutter and Curb Removal and Replacement in kind
	Water Main To Be Abandoned
	Silt Fence
	Pavement Patch for Removed Valve Vault
	Water Main
	Test Pit

ABBREV.	DESCRIPTION
APCO	Appalachian Power Company
B.W.L.	Broken White Line
DIP	Ductile Iron Pipe
D.Y.L.	Double Yellow Line
EX	Existing
FO	Underground Fiber Optic
OU	Overhead Utilities
PVC	Polyvinyl Chloride Pipe
RCP	Reinforced Concrete Pipe
SS	Sanitary Sewer Line
TCP	Terra Cotta Pipe
UG	Underground Gas Line
UT	Underground Telephone
TS	Traffic signal



SHEET	DRAWING	TITLE
1.	G-1	COVER SHEET
2.	G-2	LEGEND, ABBREVIATIONS, & NOTES
3a.	G-3	SELECTED WESTERN VIRGINIA REGIONAL CONSTRUCTION DETAILS
3b.	G-4	SELECTED WESTERN VIRGINIA REGIONAL CONSTRUCTION DETAILS
3c.	G-5	SELECTED WESTERN VIRGINIA REGIONAL CONSTRUCTION DETAILS
1. ORANGE AVENUE (11TH STREET TO 13TH STREET)		
4.	1-1	EXISTING UTILITY NOTES
5.	1-2	PROPOSED WATER MAIN PLAN - PROFILE, STA. 10+00 TO STA. 14+64
6.	1-2a	PROPOSED WATER MAIN PLAN
7.	1-3	PROPOSED WATER MAIN PLAN - PROFILE, STA. 14+64 TO STA. 19+16
8.	1-4	PROPOSED WATER MAIN PLAN - PROFILE, STA. 19+16 TO STA. 23+36 STA. 30+00 TO STA. 30+92
9.	1-5	TINKER CREEK BRIDGE WATER MAIN CROSSING DETAILS & NOTES
10.	1-6	TEMPORARY TRAFFIC CONTROL PLAN NOTES
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10B.	1-6B	TEMPORARY TRAFFIC CONTROL PLAN FIGURE 2A
10C.	1-6C	TEMPORARY TRAFFIC CONTROL PLAN FIGURE 2B
10D.	1-6D	TEMPORARY TRAFFIC CONTROL PLAN FIGURE 2B
10E.	1-6E	TEMPORARY TRAFFIC CONTROL PLAN FIGURE 2C
10F.	1-6F	TEMPORARY TRAFFIC CONTROL PLAN FIGURE 3
10G.	1-6G	TEMPORARY TRAFFIC CONTROL PLAN FIGURE 4
10H.	1-6H	TEMPORARY TRAFFIC CONTROL PLAN FIGURE 4
10I.	1-6I	TEMPORARY TRAFFIC CONTROL PLAN FIGURE 5
10J.	1-6J	TEMPORARY TRAFFIC CONTROL PLAN FIGURE 5
10K.	1-6K.	TEMPORARY TRAFFIC CONTROL PLAN DETOUR MAP
2. PETERS CREEK ROAD & HERSHBERGER ROAD		
11.	2-1	EXISTING UTILITY NOTES
12.	2-2	PROPOSED WATER MAIN, PLAN
13.	2-3	PROPOSED WATER MAIN PROFILE, STA. 9+80 TO STA. 12+10 STA. 20+00 TO STA. 23+01
14.	2-4	TEMPORARY TRAFFIC CONTROL PLAN NOTES
14A.	2-4A	TEMPORARY TRAFFIC CONTROL PLAN FIGURE 1
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14D.	2-4D	TEMPORARY TRAFFIC CONTROL PLAN DETOUR MAP 1
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3. MELROSE AVENUE & COUNTRY CLUB DRIVE		
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17D.	3-3D	TEMPORARY TRAFFIC CONTROL PLAN FIGURE 3
17E.	3-3E	TEMPORARY TRAFFIC CONTROL PLAN FIGURE 4



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DES: PJM	SCALE: N/A
DRAWN: JES	HORIZ: N/A
CHECK: GWF	VERT: N/A
DATE: 10/14/16	

2016 12-INCH WATER MAIN REPLACEMENTS
1. ORANGE AVENUE (11TH STREET TO 13TH STREET)
2. PETERS CREEK ROAD & HERSHBERGER ROAD
3. MELROSE AVENUE & COUNTRY CLUB DRIVE

INDEX, LEGEND, ABBREVIATIONS & NOTES

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