

File: V:\PROJECTS\ANY\4\33834\CA00_33834-LEGEND AND GENERAL NOTES.DWG
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LEGEND		
DESCRIPTION	EXISTING	PROPOSED
5' OR 10' CONTOUR LINE		
1' OR 2' CONTOUR LINE		
RIGHT-OF-WAY		
SILT FENCE		
INLET PROTECTION		
EDGE OF PAVEMENT		
STORM SEWER		
STORM DRAIN		
SANITARY SEWER		
WATER MAIN		
GAS LINE		
OVERHEAD ELECTRIC		
WATER MAIN TO BE ABANDONED		
VALVE AND VAULT REMOVAL		
UNDERGROUND FIBER OPTIC		
GRADE		
FENCE		
PROPERTY LINE		
SURVEY POINT		
UTILITY POLE		
LIGHT POLE		
CLEANOUT		
CATCH BASIN		
HYDRANT		
WATER METER		
WATER VALVE/CONTROL VALVE		
SANITARY MANHOLE		
STORM MANHOLE		
SIGN - SINGLE FACED		
SIGN - DOUBLE FACED		
FULL DEPTH PAVEMENT REPLACEMENT		
MILL & OVERLAY PAVEMENT		
LIMIT OF DEMOLITION		
PERMANENT UTILITY EASEMENT		
TEMPORARY CONSTRUCTION EASEMENT		
DWELLING OR BUILDING		
TREES, SHRUBS, BUSHES		
DETAIL CALLOUT	<div><div>X</div><div>X-X</div></div> DETAIL IDENTIFICATION NO. SHEET NO. WHERE DETAIL IS SHOWN	
DETAIL IDENTIFICATION NO.	<div><div>X</div></div> DETAIL TITLE	
NOTE: SOME FEATURES IN THE LEGEND MAY NOT HAVE BEEN USED		

EROSION AND SEDIMENT CONTROL MEASURES*	
	TOP SOILING VAE&SCH STD & SPEC 3.30
	TEMPORARY SEEDING VAE&SCH STD & SPEC 3.31
	PERMANENT SEEDING VAE&SCH STD & SPEC 3.32
	MULCHING VAE&SCH STD & SPEC 3.35
	SOIL STABILIZATION BLANKETS AND MATTING TREATMENT 1 OR 2 AS APPLICABLE VAE&SCH STD & SPEC 3.36
* REFER TO VDEQ, EROSION AND SEDIMENT CONTROL HANDBOOK, 3RD EDITION FOR STANDARDS AND SPECIFICATIONS AS INDICATED.	

GENERAL NOTES

- THE "OWNER" IS THE WESTERN VIRGINIA WATER AUTHORITY (WVWA). THE TERMS "OWNER" AND "AUTHORITY" ARE USED INTERCHANGEABLY TO REFER TO THE WVWA IN THESE CONTRACT DOCUMENTS. THE "OWNER" SHALL SERVE AS "ENGINEER" AS STIPULATED AS PART OF THE CONTRACT AGREEMENT.
- 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.
- CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITE SAFETY AND FOR COMPLIANCE WITH ALL FEDERAL, STATE AND LOCAL HEALTH AND SAFETY CODES, LAWS, REGULATIONS AND ORDINANCES INCLUDING, BUT NOT LIMITED TO THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)
- CONTRACTOR SHALL FIELD VERIFY ALL SITE CONDITIONS PRIOR TO COMMENCING WORK AND SHALL NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
- SEWER LATERALS AND WATER SERVICE LINES ARE SHOWN IN ASSUMED LOCATIONS. CONTRACTOR SHALL COORDINATE WITH THE AUTHORITY FOR MARKING OF ALL LATERALS PRIOR TO CONSTRUCTION. CONTRACTOR TO VERIFY ACTIVE LATERALS WITH THE AUTHORITY'S ASSISTANCE.
- ALL EXISTING UTILITIES MAY 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.
- THE CONTRACTOR SHALL HAVE A VALID MISS UTILITY TICKET PRIOR TO EXCAVATION. CONTACT MISS UTILITY AT 1-800-552-7001.
- PRIOR TO CONSTRUCTION IN THE RIGHT-OF-WAY, ALL APPLICABLE PERMITS FROM THE GOVERNING JURISDICTIONS AND/OR AGENCIES MUST BE OBTAINED AND A COPY KEPT ON THE PROJECT SITE. CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS AND PAY ALL FEES OF SUCH, PRIOR TO COMMENCING WORK.
- CONTRACTOR SHALL OBTAIN REQUIRED PERMITS FROM THE CITY OF ROANOKE OR COUNTY OF ROANOKE AS APPLICABLE..
- ACCESS TO PRIVATE, PUBLIC, AND COMMERCIAL BUSINESSES AFFECTED BY THE UTILITY CONSTRUCTION SHALL BE MAINTAINED AT ALL TIMES DURING THEIR RESPECTIVE NORMAL BUSINESS HOURS.
- WORK IN THE RIGHT-OF-WAY IS TO BE PERFORMED PER THE COUNTY OF ROANOKE RIGHT-OF-WAY EXCAVATION AND RESTORATION STANDARDS OR VDOT AS APPLICABLE.
- CONTRACTOR SHALL PROVIDE ANY SHORING REQUIRED TO PROTECT EXISTING FACILITIES DURING EXCAVATION FOR INSTALLATION OF PROPOSED STRUCTURES AND UTILITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR SHORING DESIGN. DESIGN SHALL BE PERFORMED BY A REGISTERED PROFESSIONAL ENGINEER LICENSED TO PRACTICE IN THE COMMONWEALTH OF VIRGINIA. ALL ANTICIPATED COSTS FOR SHORING AND DESIGN SHALL BE INCLUDED IN THE CONTRACTOR'S BASE BID PRICE.
- FOR PROJECTS REQUIRING TRAFFIC CONTROL IN THE CITY OF ROANOKE, NOTIFY THE CITY AT LEAST TWO (2) WEEKS IN ADVANCE WHEN TRAFFIC CONTROL IS REQUIRED. CONTRACTOR SHALL CONTACT THE CITY FOR A LANE CLOSURE PERMIT. TRAFFIC CONTROL SHALL BE PROVIDED IN ACCORDANCE WITH THE MOST RECENT MUTCD MANUAL AND THE VDOT WORK AREA PROTECTION MANUAL UNLESS OTHERWISE SPECIFIED BY THE CITY.
- FOR PROJECTS REQUIRING TRAFFIC CONTROL IN ROANOKE COUNTY, NOTIFY VDOT AT LEAST TWO (2) WEEKS IN ADVANCE WHEN TRAFFIC CONTROL IS REQUIRED. CONTRACTOR SHALL CONTACT VDOT FOR A LANE CLOSURE PERMIT. TRAFFIC CONTROL SHALL BE PROVIDED IN ACCORDANCE WITH THE MOST RECENT MUTCD MANUAL AND THE VDOT WORK AREA PROTECTION MANUAL, UNLESS OTHERWISE SPECIFIED BY VDOT.
- ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO THE LATEST EDITION OF THE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS OF THE AUTHORITY 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. CONTRACTOR SHALL PROVIDE A COPY OF THE CONTRACTOR'S DESIGNATED CERTIFIED VIRGINIA RESPONSIBLE LAND DISTURBER CERTIFICATE TO THE OWNER 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.
- 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 STORM WATER 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 MAKE PROVISIONS TO PROVIDE ACCESS TO ALL PROPERTIES DURING CONSTRUCTION AND SHALL MAINTAIN SAFE ACCESSIBILITY TO FIRE HYDRANTS AT ALL TIMES.
- 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.
- CONTRACTOR SHALL RESTORE ALL AREAS DISTURBED BY CONSTRUCTION; INCLUDING ACCESS AND SITE ROADWAYS, DITCHES, DRAINAGE STRUCTURES AND OTHER EXISTING FEATURES TO THEIR ORIGINAL CONDITION OR TO A CONDITION SATISFACTORY TO THE ENGINEER.
- ALL REQUIRED TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED BY THE CONTRACTOR IN ACCORDANCE WITH THE APPROVED SEDIMENT AND EROSION CONTROL PLAN.
- CONSTRUCTION CREWS MUST ALLOW FOR SOLID WASTE MANAGEMENT TO SERVICE TRASH, RECYCLING, BULK, AND BRUSH FOR THE ENTIRE PROJECT AREA.
- PROVIDE TEMPORARY SUPPORT TO EXISTING UTILITY POLES, AS NEEDED.
- DEFLECT PIPE JOINTS NO GREATER THAN 3' TO ACCOMPLISH ALIGNMENT.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE STAKING AND LAYOUT OF ALL PROPOSED STRUCTURES AND IMPROVEMENTS.
- 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.
- PAVEMENT SHALL BE IN ACCORDANCE WITH ROANOKE COUNTY OR VDOT STANDARDS, WHICHEVER IS APPLICABLE AT THE PROJECT LOCATION.
- 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.
- UN-REPAIRED 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.
- ANY FENCING DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE IMMEDIATELY REPLACED OR SUPPLEMENTED BY TEMPORARY FENCING TO MAINTAIN A SECURE SITE THROUGHOUT CONSTRUCTION. UPON COMPLETION OF CONSTRUCTION ACTIVITIES, FENCING SHALL BE RESTORED TO ORIGINAL CONDITIONS.
- A MINIMUM OF 18" VERTICAL SEPARATION MUST BE MAINTAINED BETWEEN UTILITIES AT ALL PIPE CROSSINGS. A MINIMUM OF 10' HORIZONTAL SEPARATION MUST BE MAINTAINED BETWEEN WATER AND SEWER UTILITIES, UNLESS OTHERWISE INDICATED.
- ANY TREES GREATER THAN 2" IN DIAMETER SHALL NOT BE REMOVED WITHOUT WRITTEN PERMISSION FROM THE AUTHORITY.
- 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.
- FIELD CHANGES SHALL BE APPROVED BY THE AUTHORITY'S ENGINEERING DIVISION AND ENGINEER PRIOR TO CONSTRUCTION.
- ALL WORK TO BE CONTAINED WITHIN THE EXISTING RIGHT OF WAY AND/OR EASEMENTS.
- ALL EXCAVATION, INCLUDING ROCK, SHALL BE UNCLASSIFIED. NO ADDITIONAL PAYMENT WILL BE MADE FOR ROCK. PER WVWA STANDARD SPECS, SECTION CS-6, "ALL ROCK EXCAVATION SHALL BE PAID FOR AS AN INCIDENTAL PART OF THE ITEMS ON WHICH THE WORK IS DONE".
- THE CONTRACTOR SHALL FURNISH AND INSTALL ANY SUPPLEMENTAL OR MISCELLANEOUS ITEMS, APPURTENANCES AND DEVICES INCIDENTAL TO OR NECESSARY FOR A SOUND AND COMPLETELY OPERATIONAL INSTALLATION PER THE DESIGN INTENT.
- EXISTING WATER PIPING IS NOT TO BE REUSED AND SHALL BE ABANDONED IN PLACE.
- THE PLANS AND SPECIFICATIONS SHALL GOVERN FOR THIS PROJECT; HOWEVER, IF THESE DOCUMENTS DO NOT COVER A PARTICULAR ITEM OR PORTION OF THE WORK, THE WESTERN VIRGINIA REGIONAL DESIGN AND CONSTRUCTION STANDARDS, LATEST EDITION SHALL BE FOLLOWED.
- THE CONTRACTOR SHALL FIELD VERIFY SIZE, LOCATION, AND INVERTS OF ALL EXISTING UTILITIES AND PROVIDE INFORMATION AS PART OF THE SHOP DRAWINGS SUBMITTAL.
- THE CONTRACTOR SHALL REPLACE ALL WATER SERVICE LINES AND METERS WITH NEW AS APPROVED BY THE AUTHORITY. CONTRACTOR SHALL COORDINATE WITH THE AUTHORITY AND THE PROPERTY OWNER TO DETERMINE LOCATION OF THE NEW WATER METER. ALL WATER SERVICES UNDER THE ROADWAY SHALL BE PLACED VIA BORING TECHNIQUES. EXISTING SERVICE LINES SHALL BE ABANDONED IN PLACE AND WATER METERS SHALL BE REMOVED.
- THE CONTRACTOR SHALL INSTALL TEST (OBSERVATION) PITS AT ALL WATER SERVICE AND GAS UTILITY CROSSINGS. THE CONTRACTOR SHALL REPAIR PAVEMENT DISTURBED DURING TEST PITTING ACTIVITIES AS DEPICTED ON THE DRAWINGS PER THE COUNTY OF ROANOKE OR VDOT STANDARDS, WHICHEVER IS APPLICABLE. THE CONTRACTOR WILL BE COMPENSATED PER EACH PIT INSTALLED AT BASE BID PRICE FOR SUCH ITEM.
- WATER SERVICES MAY BE OPEN-CUT ACROSS ROADWAY AFTER THREE FAILED BORE ATTEMPTS SOLELY AT THE DISCRETION AND APPROVAL FROM THE OWNER AT NO ADDITIONAL COST TO THE OWNER.
- NOT ALL GAS, SEWER, AND WATER SERVICE LATERALS ARE SHOWN IN PLAN AND PROFILE SHEETS. CONTRACTOR SHALL FIELD LOCATE ALL GAS, SEWER, AND WATER SERVICE LATERALS AND SHALL ADJUST PROPOSED WATER MAIN VERTICAL ALIGNMENT AS NEEDED AT NO ADDITIONAL COST TO THE AUTHORITY.
- CONTRACTOR SHALL COORDINATE WORK ACTIVITIES TO MINIMIZE DISTURBANCE TO SERVICE(S) AT CRITICAL CUSTOMER LOCATIONS INDICATED IN THE DRAWINGS OR AS DETERMINED DURING CONSTRUCTION. ACCOMMODATIONS SHALL BE MADE AS NECESSARY TO THE IMPACTED CUSTOMERS WHILE SERVICE(S) ARE TEMPORARILY UNAVAILABLE UNTIL THE SERVICE(S) CAN BE RESTORED.
- ALL JOINTS SHALL BE RESTRAINED IN ACCORDANCE TO MINIMUM THRUST RESTRAINT OF PIPE JOINTS DETAILED IN W-18 AND W-19.
- PER THE DIRECTION OF THE AUTHORITY, VERTICAL AND HORIZONTAL BENDS WERE NOT LABELED IN PLAN AND PROFILE. REQUIRED BENDS, PER THE INTENT OF DESIGN, ARE DENOTED ON THE PLANS AS TYPICAL. VERTICAL BENDS SHALL BE PLACED IN THE FIELD AS DETERMINED BY THE CONTRACTOR TO MAINTAIN REQUIRED WATER MAIN COVER AND TO AVOID CONFLICTS. THE CONTRACTOR SHALL PROVIDE VERTICAL AND HORIZONTAL BENDS IN ORDER TO FURNISH AND COMPLETE THE WORKING SYSTEM AT NO ADDITIONAL COST TO THE OWNER.

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WESTERN VIRGINIA
WATER AUTHORITY

WESTERN VIRGINIA WATER AUTHORITY
ROANOKE, VIRGINIA

IT IS A VIOLATION OF 46A-29, AN ANTI-BORNE LAWS, FOR ANY PERSON, FIRM OR ENTITY, WHOSE NAME OR FIRM OR ENTITY NAME IS LISTED ON THIS PLAN, TO REUSE OR REPRODUCE ANY PART OF THIS PLAN OR ANY PART OF THE WORK OR DESIGN OR INVENTION OR INTELLECTUAL PROPERTY OR ANY OTHER INFORMATION CONTAINED HEREIN, WITHOUT THE WRITTEN PERMISSION OF THE AUTHORITY.

WESTERN VIRGINIA WATER AUTHORITY
SUNNYBROOK DRIVE
WATER MAIN REPLACEMENT
ROANOKE COUNTY, VIRGINIA

Submitter / Revision	App'd By	Date
1 90% SUBMITTAL	SMS/MBH	5-18-18
2 CLIENT REVIEW	SMS/MBH	5-25-18

LEGEND AND GENERAL NOTES

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MBH

Drawn By
RAS

Checked By
LES

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