

DELANEY COURT WATERLINE REPLACEMENT ROANOKE COUNTY, VIRGINIA

GENERAL NOTES:

1. 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.WESTERNVAVATER.ORG OR BY CONTACTING THE AUTHORITY AT 540-853-5700. THE PROJECT SHALL ALSO COMPLY WITH THE GOVERNING JURISDICTION'S STANDARDS AND AGENCY STANDARDS (E.G., VDOT, DEQ, DCR, VDH, ETC.) WHERE APPLICABLE.
2. 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.
3. 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.
4. 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.
5. 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.
6. 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, GARY BOWMAN, AT 540-853-5834. TRAFFIC CONTROL SHALL BE PROVIDED IN ADVANCE WITH THE MOST RECENT MUTCD MANUAL AND THE VDOT WORK AREA PROTECTION MANUAL UNLESS OTHERWISE SPECIFIED BY THE CITY.
7. THE CONTRACTOR SHALL NOTIFY THE AUTHORITY'S ENGINEERING COORDINATOR, CHUCK CLARK, AT 540-537-3243 AT LEAST THREE (3) DAYS PRIOR TO CONSTRUCTION.
8. A PRE-CONSTRUCTION CONFERENCE SHALL BE SCHEDULED AT LEAST ONE (1) DAY PRIOR TO ANY CONSTRUCTION.
9. THE CONTRACTOR SHALL HAVE A VALID MISS UTILITY TICKET PRIOR TO EXCAVATION. CONTACT MISS UTILITY AT 1-800-552-7001.
10. 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 12.05.03, AND THE VIRGINIA STATE SEWAGE COLLECTION AND TREATMENT REGULATIONS WHERE LINES CROSS.
11. AN APPROVED SET OF PLANS AND PERMITS MUST BE AVAILABLE AT THE CONSTRUCTION SITE AT ALL TIMES.
12. CONSTRUCTION DEBRIS SHALL BE CONTAINERIZED IN ACCORDANCE WITH THE VIRGINIA LITTER CONTROL ACT.
13. 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 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.
14. 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.
15. FIELD CHANGES SHALL BE APPROVED BY THE AUTHORITY'S ENGINEERING DIVISION PRIOR TO SUCH CONSTRUCTION.
16. THE CONTRACTOR SHALL MAKE PROVISIONS TO PROVIDE ACCESS TO ALL PROPERTIES DURING CONSTRUCTION AND SHALL MAINTAIN SAFE ACCESSIBILITY TO FIRE HYDRANTS AT ALL TIMES.
17. 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.
18. UNREPAIRED ROADWAYS OPENED TO TRAFFIC SHALL HAVE, AT A MINIMUM, COMPACTED AGGREGATE MATERIAL VDOT 21A OR 21B FLUSH WITH THE ADJACENT ROADWAY SURFACE. CRACKS SHALL BE REPAIRED ON A DAILY BASIS. SOME AREAS WILL REQUIRE A TEMPORARY PATCH UNTIL FINAL PAVING CAN BE COMPLETED.
19. 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.
20. THE CONTRACTOR SHALL SUPPLY THE AUTHORITY WITH CORRECT AS-BUILT PLANS BEFORE SUBSTANTIAL COMPLETION WILL BE GRANTED.

EROSION CONTROL SYMBOLS:

SF	3.05 SILT FENCE
CIP	3.08 CULVERT INLET PROTECTION
USC	3.25 UTILITY STREAM CROSSING
TS	3.31 TEMPORARY SEEDING
PS	3.32 PERMANENT SEEDING
MU	3.35 MULCHING
DC	3.39 DUST CONTROL

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as BUILT
C.A. C
8-5-09

LEGEND:

	LIMITS OF DISTURBANCE LINE		EXISTING TELEPHONE PEDESTAL
	PROPERTY LINE		EXISTING GAS VALVE
	EXISTING 2' CONTOURS		EXISTING GAS METER
	PROPOSED 2' CONTOURS		EXISTING LIGHT POLE
	EXISTING SPOT ELEVATION		EXISTING WELL
	PROPOSED SPOT ELEVATION		DRILL HOLE
	PROPOSED TOP CURB ELEVATION		EXISTING FIRE HYDRANT
	PROPOSED BOTTOM CURB ELEVATION		PROPOSED FIRE HYDRANT
	EXISTING SANITARY SEWER		EXISTING WATER VALVE
	PROPOSED SANITARY SEWER		PROPOSED WATER VALVE
	EXISTING WATERLINE		EXISTING WATER METER
	PROPOSED WATERLINE		PROPOSED WATER METER
	EXISTING STORM SEWER		EXISTING SEWER CLEANOUT
	PROPOSED STORM SEWER		PROPOSED SEWER CLEANOUT
	EXISTING EDGE OF PAVEMENT		EXISTING SEWER MANHOLE
	PROPOSED PAVEMENT		PROPOSED SEWER MANHOLE
	PROPOSED GRAVEL		EXISTING SHRUB
	PROPOSED CONCRETE/SIDEWALK		EXISTING TREE
	EXISTING BUILDING		PROPOSED TREE
	PROPOSED BUILDING		EXISTING SIGN
	EXISTING OVERHEAD ELECTRIC		PROPOSED SIGN
	EXISTING BURIED ELECTRIC		BORE HOLE/TEST PIT
	EXISTING BURIED CABLE TV LINE		CONTROL POINT
	EXISTING GAS LINE		IRON ROD FOUND
	EXISTING BURIED TELEPHONE LINE		IRON ROD SET
	EXISTING FENCE LINE		PROPERTY CORNER
	EXISTING TREELINE		FENCE POST
	BENCHMARK LOCATION		TO BE REMOVED
	EXISTING UTILITY POLE		EXISTING MAILBOX
	EXISTING GUY WIRE		

ABBREVIATION LEGEND:

S	AT	LB	FOUND
A/C	AIR CONDITIONER	M	METER
AC	ACRE(S)	M.B.L.	MINIMUM BUILDING LINE
ALT.	ALTERNATE	MAG.	MAGISTERIAL
APPROX.	APPROXIMATE	MAX.	MAXIMUM
AVG.	AVERAGE	MB	MAIL BOX
B.M.	BENCHMARK	MH	MANHOLE
BC	BOTTOM OF CURB	MI	MILE
BLVD.	BOULEVARD	MIN.	MINIMUM
BSMT	BASEMENT	MON.	MONUMENT
BW	BOTTOM OF WALL	MTL.	METAL
C.F.	CUBIC FEET	N.I.C.	NOT IN CONTRACT
C.I.	CURB INLET	N.S.	NORFOLK & SOUTHERN
C.M.U.	CONCRETE MASONRY UNIT	N.T.	NOT TO SCALE
C.V.	CHECK VALVE	N/F	NOW OR FORMERLY
C.Y.	CUBIC YARD	NBL	NORTHBURTON LANE
CA	CALIPER	NBR	NUMBER
CATV	CABLE TELEVISION	NRV	NEW RIVER VALLEY
CHD	CHORD	O.D.	OUTSIDE DIAMETER
CHP	CORRUGATED METAL PIPE	O.F.G.I.	OWNER FURNISHED CONTRACTOR INSTALLED
CO	CLEAN-OUT	OH	OVERHEAD
CO	COUNTY	OHE	OVERHEAD ELECTRIC
CONC.	CONCRETE	P.B.	PLAT BOOK
CRK.	CREEK	P.U.	PUBLIC UTILITY
D.B.	DEED BOOK	P.U. & D.E.	PUBLIC UTILITY AND DRAINAGE EASEMENT
D.B.	DRAINAGE EASEMENT	P.U.E.	PUBLIC UTILITY EASEMENT
D.I.	DROP INLET	P.V.	POLYETHYLENE
D.I.P.	DUCTILE IRON PIPE	PED.	PEDESTAL
D.S.	DOWN SPOUT	PGE	PAGE
DECID.	DEODOROUS	PROP.	PROPOSED
DEG.	DEGREES	PSI	POUNDS PER SQUARE INCH
DET.	DETAIL	PVC	POLYVINYLCHLORIDE
DFC	DRAINFIELD CORNER	PWMT	PAVEMENT
DI	DROP INLET	R	RADIUS
DIA.	DIAMETER	R.R.	RAILROAD
DIST.	DISTRICT	R/W	RIGHT-OF-WAY
DR	DRIVE	RCP	REINFORCED CONCRETE PIPE
DWG	DRAWING	RD	ROAD
DWL.G	DWELLING	REF.	REFERENCE
E.G.	EDGE OF GRAVEL	REQ'D	REQUIRED
E.P.	EDGE OF PAVEMENT	RET.	RETAINING
EA	EACH	REV.	REVISION
EBL	EASTBOUND LANE	RTI.	ROUTE
ELEV.	ELEVATION	RWP.	RAILWAY
EDW	EDGE OF WATER	S.D.	STORM DRAIN
ESMT.	EASEMENT	SDMH	STORM DRAIN MANHOLE
E.V.G.	EVERGREEN	S.F.	SQUARE FEET
EXIST.	EXISTING	SBL	SOUTHBOUND LANE
EXT.	EXTENSION	SOH	SCHEDULE
F.E.M.A.	FEDERAL EMERGENCY MANAGEMENT AGENCY	SHEET	SHEET
F.H.	FIRE HYDRANT	SPEC.	SPECIFICATION
F.I.R.M.	FLOOD INSURANCE RATE MAP	SPTK	SEPTIC TANK
F/L	FLOW LINE	SW	SANITARY SEWER
FF	FINISH FLOOR	SSMH	SANITARY SEWER MANHOLE
FND	FOUND	ST.	STREET
FR	FRAME	STA.	STATION
FT.	FEET	STD.	STANDARD
G.M.	GAS METER	STY.	STORY
G.V.	GATE VALVE	SWME	STORMWATER MANAGEMENT EASEMENT
GNI	GAY AND NEEL, INC.	SWMF	STORMWATER MANAGEMENT FACILITY
GPM	GALLONS PER MINUTE	TC	TOP OF CURB/CONCRETE
GRAV.	GRAVEL	TOC	TERRA COTTA PIPE
GRD	GROUND	TEL	TELEPHONE
HP	HIGH POINT	TOB	TOP OF BANK
H.U.D.	HOUSING AND URBAN DEVELOPMENT	TOS	TOP OF SLOPE
H/C	HANDICAPPED	TW	TOP OF WALL
HCR	HANDICAPPED RAMP	TYP.	TYPICAL
HOPE	HIGH DENSITY POLYETHYLENE PIPE	U.G.	UNDERGROUND
HR	HANDRAIL	UTL	UTILITY POLE
HW	HEADWALL	U.S.	UNITED STATES
HYD.	HYDRANT	VA	VIRGINIA
ID	INSIDE DIAMETER	VDOT	VIRGINIA DEPARTMENT OF TRANSPORTATION
IN.	INCH	VESCH	VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK
INST.	INSTRUMENT	W.B.	WELL BOOK
INT.	INTERSECTION	W.F.P.	WELDING WIRE FABRIC
INV.	INVERT	W/	WITH
InvInt	INVERT IN	WBL	WESTBOUND LANE
InvOut	INVERT OUT	WM	WATER METER
L.F.	LINEAR FOOT	WTNK	WATER TANK
LP	LIGHT POLE	WV	WATER VALVE
LP.	LOW POINT	WVW	WOVEN WIRE
L.S.I.	LANDSCAPED ISLAND	XFR	TRANSFORMER


WESTERN VIRGINIA WATER AUTHORITY NOTES:
WATERLINE NOTES

1. A MINIMUM COVER OF THREE (3) FEET IS REQUIRED OVER PROPOSED LINES.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND UNCOVERING VALVE VAULTS AFTER PAVING AND ADJUSTMENT TO FINAL GRADE IF NECESSARY.
3. ALL EXISTING UTILITIES MAY NOT BE SHOWN, OR MAY NOT BE SHOWN IN THE EXACT LOCATION. THE CONTRACTOR SHALL COMPLY WITH STANDARD WATER WORKS REGULATIONS, SECTION 12.05.03, WHERE LINES CROSS.
4. ALL TRENCHES IN EXISTING OR FUTURE HIGHWAY RIGHTS-OF-WAY SHALL BE COMPACTED ACCORDING TO WESTERN VIRGINIA WATER AUTHORITY STANDARDS.
5. LINES SHALL BE STAKED PRIOR TO CONSTRUCTION.
6. ALL WATER METERS SHALL BE ¾" METERS, UNLESS OTHERWISE NOTED.
7. STUB OUTS FOR FUTURE FIRE HYDRANT ASSEMBLIES SHALL INCLUDE VALVE AND VAULT WITH RESTRAINED CAP ONLY.

GENERAL EROSION & SEDIMENT CONTROL NOTES:

- ES-1: UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND VIRGINIA REGULATIONS VR 625-02-00 EROSION AND SEDIMENT CONTROL REGULATIONS.
- ES-2: THE PLAN APPROVING AUTHORITY 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.
- ES-3: ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CLEARING.
- ES-4: A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
- ES-5: PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN IDENTIFIED ON THESE PLANS (INCLUDING, BUT NOT LIMITED TO, OT-SITE BORROW OR WASTE CLEANUP), THE APPLICANT SHALL SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN TO THE OWNER FOR REVIEW AND APPROVAL BY THE PLAN APPROVING AUTHORITY.
- ES-6: THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE PLAN APPROVING AUTHORITY.
- ES-7: ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES UNTIL ALL LAND DISTURBING AND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED.
- ES-8: DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO AN APPROVED FILTERING DEVICE.
- ES-9: THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF-PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.

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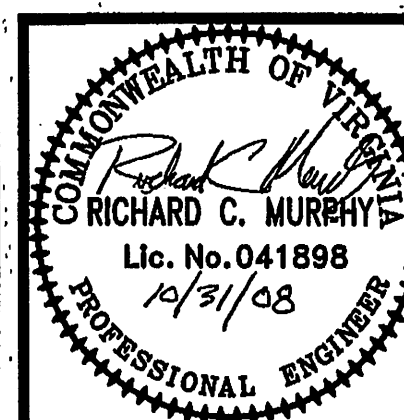
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Cover Sheet

**Delaney Court
Waterline Extension**



REVISED:
10/28/08

DESIGNED/CALC.: WWA
CHECKED: RCM, WWA
DRAWN: RWA
SCALE: N/A
DATE: 09/29/08

JOB NO.	2032.0
SHEET 1	OF 12