

PROJECT: 4230A
CLIENT: WESTERN VIRGINIA WATER AUTHORITY
HORIZONTAL DATUM: NAD83/2011 (EPOCH:2020.0212)
VERTICAL DATUM: NAVD88
SURVEY BY: T. W. CALDWELL
DRAWN BY: J. A. DETHLEFSEN
CHECK BY: T. W. CALDWELL
DATE: 12-13-2021
SCALE: 1" = 30'

SURVEY BASELINE

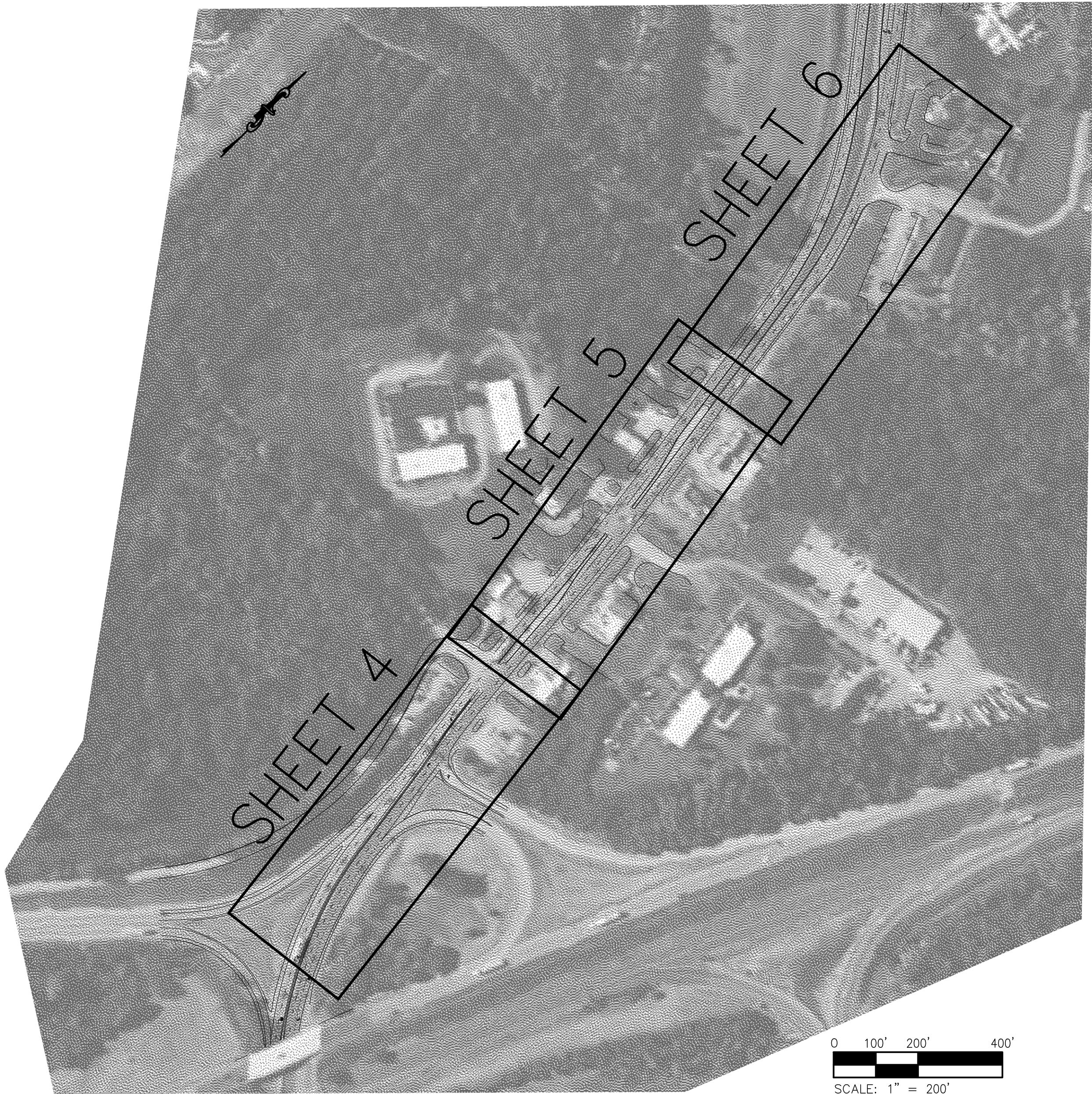
PT #1 N: 3669003.3010 E:11074394.1850 Z:1214.019
BEARING: S 01°25'34" E DIST:586.867
PT #2 N: 3668416.6158 E:11074408.7919 Z:1214.102

BENCHMARK

BM-1: IRON PIN IN GRASS MEDIAN @ INTERSECTION OF
ROANOKE ROAD AND TINKER MOUNTAIN ROAD
ELEV: 1214.02'

NOTES:

- THIS LOCATION SURVEY OF EXIT 150 FOR WESTERN VIRGINIA WATER AUTHORITY WAS COMPLETED UNDER THE DIRECT AND RESPONSIBLE CHARGE OF TIMOTHY W. CALDWELL, L.S. FROM AN ACTUAL GROUND AND AIRBORNE SURVEY MADE UNDER MY DIRECT SUPERVISION; THAT THE IMAGERY AND/OR ORIGINAL DATA WAS OBTAINED FROM NOVEMBER 1, 2021 THRU DECEMBER 3, 2021; THAT THIS PLAT, MAP, OR DIGITAL GEOSPATIAL DATA INCLUDING METADATA MEETS MINIMUM ACCURACY STANDARDS UNLESS OTHERWISE NOTED.
- PROPERTY INFORMATION IS BASED ON PLATS OF RECORD AND PHYSICAL EVIDENCE FOUND.
- HORIZONTAL (NAD 83/2011) AND VERTICAL (NAVD88) CONTROL WAS ESTABLISHED BY STATIC GPS USING CORS CONTROL STATION "LS04".
- CONTOURS AS SHOWN HEREON ARE AT 1-FOOT INTERVALS.
- UNDERGROUND UTILITIES LOCATION BASED ON DESIGNATION BY MISS UTILITY TICKET NO. A128701622.



STORM DRAINAGE TABLE

(D1) Catch Basin Top of Grate = 1183.51 Inv. In 36" RCP (D2) = 1178.06 Inv. In 36" RCP (D6) = 1177.26 Inv. Out 42" RCP = 1176.36 Ties to Underground Box Culvert	(D11) Catch Basin Top of Grate = 1187.82 Inv. Out 15" RCP (D10) = 1184.87
(D2) In Pl. 36" RCP Inv. In = 1179.91 Inv. Out = 1178.06	(D12) In Pl. 15" RCP Inv. In (D13) = 1184.91 Inv. Out (D9) = 1184.11
(D3) Catch Basin Top of Grate = 1185.35 Inv. Out 36" RCP (D2) = 1179.91	(D13) Catch Basin Top of Grate = 1188.06 Inv. Out 15" RCP (D12) = 1184.91
(D4) In Pl. 30" RCP Inv. In = 1206.24 Inv. Out = 1204.23	(D14) In Pl. 36" RCP Inv. In (D15) = 1180.75 Inv. Out (D7) = Unknown
(D5) Catch Basin Top of Grate = 1210.09 Inv. Out 30" RCP (D4) = 1206.24	(D15) Catch Basin Top of Grate = 1185.75 Inv. In 36" RCP (D16) = 1181.20 Inv. Out 36" RCP (D14) = 1180.75
(D6) In Pl. 36" RCP Inv. In (D7) = Unknown Inv. Out (D1) = 1177.26	(D16) In Pl. 36" RCP Inv. In (D17) = 1184.31 Inv. Out (D15) = 1181.20
(D7) Unknown Storm Structure Could Not Be Located Location based on previous survey	(D17) Catch Basin Top of Grate = 1187.81 Inv. Out 36" RCP (D16) = 1184.31
(D8) In Pl. 15" RCP Inv. In (D9) = 1184.01 Inv. Out (D7) = Unknown	(D18) In Pl. 24" RCP Inv. In (D19) = 1186.88 Inv. Out = 1182.33
(D9) Catch Basin Top of Grate = 1187.86 Inv. In 15" RCP (D10) = 1184.11 Inv. In 15" RCP (D12) = 1184.11 Inv. Out 15" RCP (D8) = 1184.01	(D19) Catch Basin Top of Grate = 1194.68 Inv. In 18" x 30" (D20) = 1191.00 Inv. Out 24" RCP (D18) = 1186.88
(D10) In Pl. 15" RCP Inv. In (D11) = 1184.87 Inv. Out (D9) = 1184.11	(D20) In Pl. 18" x 30" Oval Inv. In (D21) = 1206.78 Inv. Out (D19) = 1191.00

(D21) Catch Basin Top of Grate = 1200.93 Inv. In 15" RCP (D22) = 1195.93 Inv. In 24" CMP (D23) = 1195.23 Inv. Out 18" x 30" Oval = 1195.08	(D22) In Pl. 15" RCP Inv. In = 1197.99 Inv. Out (D21) = 1195.93	(D23) In Pl. 24" CMP Inv. In (D24) = Unknown Inv. Out (D21) = 1195.23	(D24) Catch Basin (Paved Over) Top of Grate = 1211.32	(D25) In Pl. 24" CMP Inv. In = 1209.23 Inv. Out (D24) = Unknown	(D26) In Pl. 18" CMP Inv. In (D27) = 1215.96 Inv. Out (D24) = Unknown	(D27) Catch Basin Top of Grate = 1220.66 Inv. In 12" RCP (D28) = 1216.26 Inv. In 15" CMP (D30) = 1217.06 Inv. In 18" CMP (D32) = 1216.11 Inv. Out 18" CMP (D26) = 1215.96	(D28) In Pl. 12" RCP Inv. In (D29) = 1221.26 Inv. Out (D27) = 1216.26	(D29) Catch Basin Top of Grate = 1224.26 Inv. In 4" PVC Lateral = 1221.90 Inv. In 12" RCP (D28) = 1221.26	(D30) In Pl. 15" CMP Inv. In (D31) = 1218.45 Inv. Out (D27) = 1217.06
(D31) Curb Inlet Top of Rim = 1223.65 Inv. Out 15" CMP (D30) = 1218.45	(D32) In Pl. 18" CMP Top of Rim = 1222.52 Inv. Out (D27) = 1216.11	(D33) In Pl. 15" CMP Inv. In (D34) = 1228.41 Inv. Out = 1228.07	(D34) Catch Basin Top of Grate = 1231.31 Inv. In 12" RCP (D35) = 1228.86 Inv. Out 15" CMP (D33) = 1228.41	(D35) In Pl. 12" RCP Inv. In (D36) = 1229.35 Inv. Out (D34) = 1228.86	(D36) Catch Basin Top of Grate = 1232.23 Inv. Out 12" RCP = 1229.35	(D37) In Pl. 18" CMP Top of Rim = 1233.75 Inv. Out = 1231.41	(D38) In Pl. 24" CMP Top of Rim = 1234.18 Inv. In (D43) = 1235.82 Inv. In 15" RCP (D41) = 1235.44 Inv. Out 18" CMP (D50) = 1230	(D39) In Pl. 15" CMP Inv. In (D49) = 1241.53 Inv. Out (D47) = 1231.28	(D40) Curb Inlet Top of Rim = 1239.42 Inv. In 15" RCP = 1235.47 Inv. Out 15" RCP (D41) = 1235.22

(D41) In Pl. 15" RCP Inv. In (D40) = 1235.22 Inv. Out (D42) = 1229.58	(D42) Curb Inlet Top of Rim = 1233.2 Inv. In 15" RCP (D41) = 1229.58 Inv. Out 15" RCP = 1229.48	(D43) Curb Inlet Top of Rim = 1239.22 Inv. Out 15" CMP (D44) = 1235.82	(D44) In Pl. 15" CMP Inv. In (D43) = 1235.82 Inv. Out (D45) = 1235.44	(D45) Catch Basin Top of Grate = 1237.99 Inv. In 15" CMP (D44) = 1235.44 Inv. Out 18" CMP (D46) = 1235.09	(D46) In Pl. 18" CMP Inv. In (D45) = 1235.09 Inv. Out (D47) = 1231.38	(D47) Curb Inlet Top of Rim = 1234.18 Inv. In 18" CMP (D46) = 1231.38 Inv. In 15" CMP (D48) = 1231.28 Inv. Out 18" CMP (D50) = 1230	(D48) In Pl. 15" CMP Inv. In (D49) = 1241.53 Inv. Out (D47) = 1231.28	(D49) Catch Basin Top of Grate = 1243.83 Inv. In 6" RCP = 1242.13 Inv. In 12" RCP = 1241.63 Inv. Out 15" RCP (D48) = 1241.53	(D50) In Pl. 18" CMP Inv. In (D47) = 1230 Inv. Out (D52) = 1224.26	(D51) In PL. 15" CMP Inv. In = 1226.18 Inv. Out (D52) = 1225.64
(D52) Storm Drain Manhole Top of Rim = 1227.84 Inv. In 15" CMP = 1225.79 Inv. In 18" CMP (D50) = 1224.26 Inv. In 15" CMP (D51) = 1225.64 Inv. Out 24" CMP (D53) = 1223.74	(D53) In Pl. 24" CMP Inv. In (D52) = 1223.74 Inv. Out = 1179.12	(D54) Unknown Pipe Blind Ties To (D53)	(D55) Curb Inlet Top of Rim = 1217.67 Invert Full of Debris	(D56) Curb Inlet Top of Rim = 1247.48 Inv. Out 15" CMP (D57) = 1244.62	(D57) In Pl. 15" CMP Inv. In (D56) = 1244.62 Inv. Out = 1243.61	(D58) Catch Basin Top of Grate = 1218.58 Inv. Out 18" RCP (D59) = 1214.41	(D59) In Pl. 18" RCP Inv. In (D58) = 1214.41 Inv. Out = 1210.28	(D60) In Pl. 15" CMP Inv. In = 1241.60 Inv. Out = 1241.52 (Inv. Buried)	(D61) In Pl. 15" CMP Inv. In = 1240.65 Inv. Out = 1240.67 (Inv. Buried)	(D62) In Pl. 15" HDP Inv. In = 1243.77 (Block) Inv. Out = 1242.30

WATER TABLE

(W1) Water Valve Top of Rim = 1186.31 Top of Nut = 1179.32	(W2) Water Manhole Top of Rim = 1182.30 Top of Nut = 1179.12	(W3) Water Valve Top of Rim = 1181.33 Top of Nut = 1179.24	(W4) Water Manhole Top of Rim = 1182.16 Top of Nut = 1180.21	(W5) Water Valve Top of Rim = 1184.97 Top of Nut = 1184.67	(W6) Water Valve Top of Rim = 1228.17 Top of Nut = 1223.66	(W7) Water Valve Top of Rim = 1231.73 Top of Nut = 1225.56	(W8) Water Manhole Conc. Water Vault Top of Rim = 1230.32 Top of Nut = 1227.93	(W9) Water Manhole Conc. Water Vault Top of Rim = 1230.05 Top of Pipe = 1226.55	(W10) Water Valve Top of Rim = 1235.88 Top of Nut = 1233.38	(W11) Water Manhole For 48" Circular Conc. Vault Top of Rim = 1235.30 Top of Pipe = 1231.80
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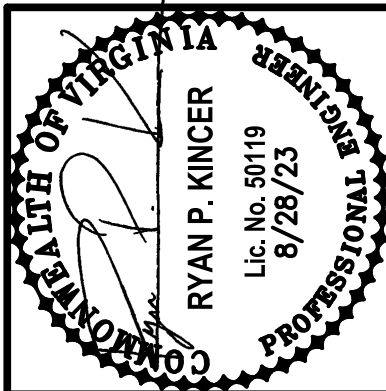
TICKET : A128701622 REV: 00A TAKEN: 10/14/21 12:06 PM

STATE: VA CNTY: BOTETOURT PLACE:
SUBDIVISION: DALEVILLE
ADDRESS : ROANOKE RD
RESPONSES DUE BY: 11/08/21 07:00 AM EXPIRES:

MARKING CODE	DESCRIPTION	RESPONSE
AEP	APPALACHIAN POWER (AEP111) NO CONFLICT; UTILITY IS OUTSIDE OF STATED WORK AREA. FIELD CONTACT: BRIAN DOWDY UDP (540)204-5732 IN THE EVENT OF DAMAGE TO A FACILITY CALL: (800)956-4237	10/15/21 10:08 AM 30
CMC	COMCAST (CMC503) NO CONFLICT; UTILITY IS OUTSIDE OF STATED WORK AREA. FIELD CONTACT: CABLE PROTECTION SERVICES (804)562-3861 IN THE EVENT OF DAMAGE TO A FACILITY CALL: (877)359-1821 EXT OPT 1	10/18/21 01:37 PM 30
COX	COX COMMUNICATIONS (COX668) NO CONFLICT; UTILITY IS OUTSIDE OF STATED WORK AREA. FIELD CONTACT: UTILIQUEST (703)754-2116 IN THE EVENT OF DAMAGE TO A FACILITY CALL: (540)915-2603 ALT. (855)349-7889	10/14/21 03:20 PM 30
CRN	CROWN CASTLE COMM (CRN207) NO CONFLICT; UTILITY IS OUTSIDE OF STATED WORK AREA. FIELD CONTACT: STAKE CENTER LOCATING (801)364-1063 IN THE EVENT OF DAMAGE TO A FACILITY CALL: (888)632-0931	10/18/21 02:15 PM 30
CTC	CITIZENS TELEPHONE (CTC291) NO CONFLICT; UTILITY IS OUTSIDE OF STATED WORK AREA. FIELD CONTACT: RUSSELL JANNEY (540)745-9513 IN THE EVENT OF DAMAGE TO A FACILITY CALL: (540)745-2115	10/18/21 02:23 PM 30
LMS	LUMOS TELEPHONE (LMS545) NO CONFLICT; UTILITY IS OUTSIDE OF STATED WORK AREA. FIELD CONTACT: STAKE CENTER LOCATING (801)364-1063 IN THE EVENT OF DAMAGE TO A FACILITY CALL: (877)411-6930	10/18/21 02:19 PM 30
MBC	MID-ATLANTIC BROADBAND (MBC487) NO CONFLICT; UTILITY IS OUTSIDE OF STATED WORK AREA. FIELD CONTACT: STAKE CENTER LOCATING (801)364-1063 IN THE EVENT OF DAMAGE TO A FACILITY CALL: (866)480-1934	10/18/21 02:19 PM 30
RGC	ROANOKE GAS (RGC540) MARKED; ABANDONED UTILITY LINES MAY BE IN AREA FIELD CONTACT: ZACH BECKNER (540)655-0280 IN THE EVENT OF DAMAGE TO A FACILITY CALL: (540)777-4427	11/03/21 02:57 PM 11
STC	SHENTEL CABLE (STC555) NO CONFLICT; UTILITY IS OUTSIDE OF STATED WORK AREA. FIELD CONTACT: CABLE PROTECTION SERVICES (804)562-3861 IN THE EVENT OF DAMAGE TO A FACILITY CALL: (540)984-5531	10/18/21 01:38 PM 30
TRV	TROUTVILLE - WATER (TRV529) NO CONFLICT; UTILITY IS OUTSIDE OF STATED WORK AREA. FIELD CONTACT: SCOTT PADERICK (540)992-4401 IN THE EVENT OF DAMAGE TO A FACILITY CALL: (540)293-0081	10/14/21 12:34 PM 30
VZN	VERIZON (VZN804) NO CONFLICT; UTILITY IS OUTSIDE OF STATED WORK AREA. FIELD CONTACT: UTILIQUEST (804)286-1721 IN THE EVENT OF DAMAGE TO A FACILITY CALL: (888)483-1233	10/14/21 03:20 PM 30
WW	WESTERN VA-BOTETOURT WTR (WWV181) MARKED UP TO PRIVATELY OWNED UTILITY; CONTACT PRIVATE UTILITY OWNER FOR LOCATE FIELD CONTACT: MICHELLE NIDAY (540)283-2981 IN THE EVENT OF DAMAGE TO A FACILITY CALL: (540)283-2981	11/04/21 11:51 AM 12
WW	WESTERN VA-BOTETOURT SWR (WWV182) MARKED UP TO PRIVATELY OWNED UTILITY; CONTACT PRIVATE UTILITY OWNER FOR LOCATE FIELD CONTACT: MICHELLE NIDAY (540)283-2981 IN THE EVENT OF DAMAGE TO A FACILITY CALL: (540)283-2981	11/04/21 11:51 AM 12

SANITARY SEWER TABLE

(W12) Water Valve Top of Rim = 1238.86 Top of Nut = 1234.69	(S1) Sanitary Sewer Manhole Top of Rim = 1192.23 Inv. In 8" PVC (S2) = 1174.53 Inv. Out 8" PVC = 1174.33	(S8) Sanitary Sewer Manhole Top of Rim = 1204.59 Inv. In 8" PVC (S9) = 1196.59 Inv. Out 8" PVC (S6) = 1196.39
(W13) Water Valve Top of Rim = 1242.37 Top of Nut = 1240.54	(S2) Sanitary Sewer Manhole Top of Rim = 1185.13 Inv. In 8" PVC (S3) = 1177.13 Inv. In 8" PVC (S4) = 1175.13 Inv. Out 8" PVC (S1) = 1175.09	(S9) Sanitary Sewer Manhole Top of Rim = 1221.91 Inv. In 8" PVC (S10) = 1215.49 Inv. Out 8" PVC (S8) = 1215.50
(W14) Water Valve Top of Rim = 1244.70 Top of Nut = 1243.03	(S3) Sanitary Sewer Manhole Manhole set for Boring Under I-81 Top of Rim = 1185.65 Top of Closed Pipe = 1178.55	(S10) Sanitary Sewer Manhole Top of Rim = 1238.19 Inv. In 8" PVC (S11)= 1231.89 Inv. Out 8" PVC (S9)= 1231.74
(W15) Water Meter (On Trail) Top of Rim = 1259.59 Top of Meter = 1258.71	(S4) Sanitary Sewer Manhole Top of Rim = 1185.21 Inv. In 8" PVC (S5) = 1176.85 Inv. Out 8" PVC (S2) = 1175.81	(S11) Sanitary Sewer Manhole Top of Rim = 1244.97 Inv. Out 8" PVC (S10) = 1236.62
(W16) Water Manhole Top of Rim = 1246.39 Top of Pipe = 1243.39	(S5) Sanitary Sewer Manhole Top of Rim = 1190.45 Inv. In 8" PVC (S6) = 1179.10 Inv. Out 8" PVC (S4) = 1179.10	(S12) Sanitary Sewer Manhole Top of Rim = 1242.42 Inv. In 4" PVC Lateral = 1237.12 Inv. In 6" PVC Lateral = 1236.52 Inv. In 8" PVC (S13) = 1231.94 Inv. Out 8" PVC (S7) = 1229.92
(W17) Water Valve Top of Rim = 1244.79 Top of Nut = 1242.25	(S6) Sanitary Sewer Manhole Top of Rim = 1202.98 Inv. In 8" PVC (S7) = 1195.34 Inv. In 8" PVC (S8) = 1195.55 Inv. Out 8" PVC (S5) = 1195.14	(S13) Sanitary Sewer Manhole Top of Rim = 1237.74 Manhole Paved Over Invert information from WVA GIS Inv. In 8" PVC (S14) = 1233.00 Inv. Out 8" PVC (S12) = 1233.00
(W18) Water Manhole Top of Rim = 1244.86 Top of Nut = 1242.81	(S7) Could Not Find Manhole	(S14) Sanitary Sewer Manhole Top of Rim = 1242.70 Manhole Paved Over Invert information from WVA GIS Inv. Out (S13) = 1236.82
(W19) Water Valve Top of Rim = 1244.36 Top of Nut = 1242.04		
(W20) Water Valve Top of Rim = 1242.77 Top of Nut = 1240.72		
(W21) Water Valve Top of Rim = 1240.74 Top of Nut = 1237.69		
(W22) Water Valve Top of Rim = 1240.08 Top of Nut = 1237.40		



Date									
Revisions									

Issue Date: AUG. 28, 2023	Drawn By: BAU Designed By: RPK	Checked By: RPK Date: 8/28/2023
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EXIT 150 WATERLINE REPLACEMENT
INDEX SHEET & SURVEY DATA
BOTETOURT COUNTY, VIRGINIA

Vertical Scale:
Horizontal Scale: 1"=200'
Commission Number: 4230A
Sheet No.: 3