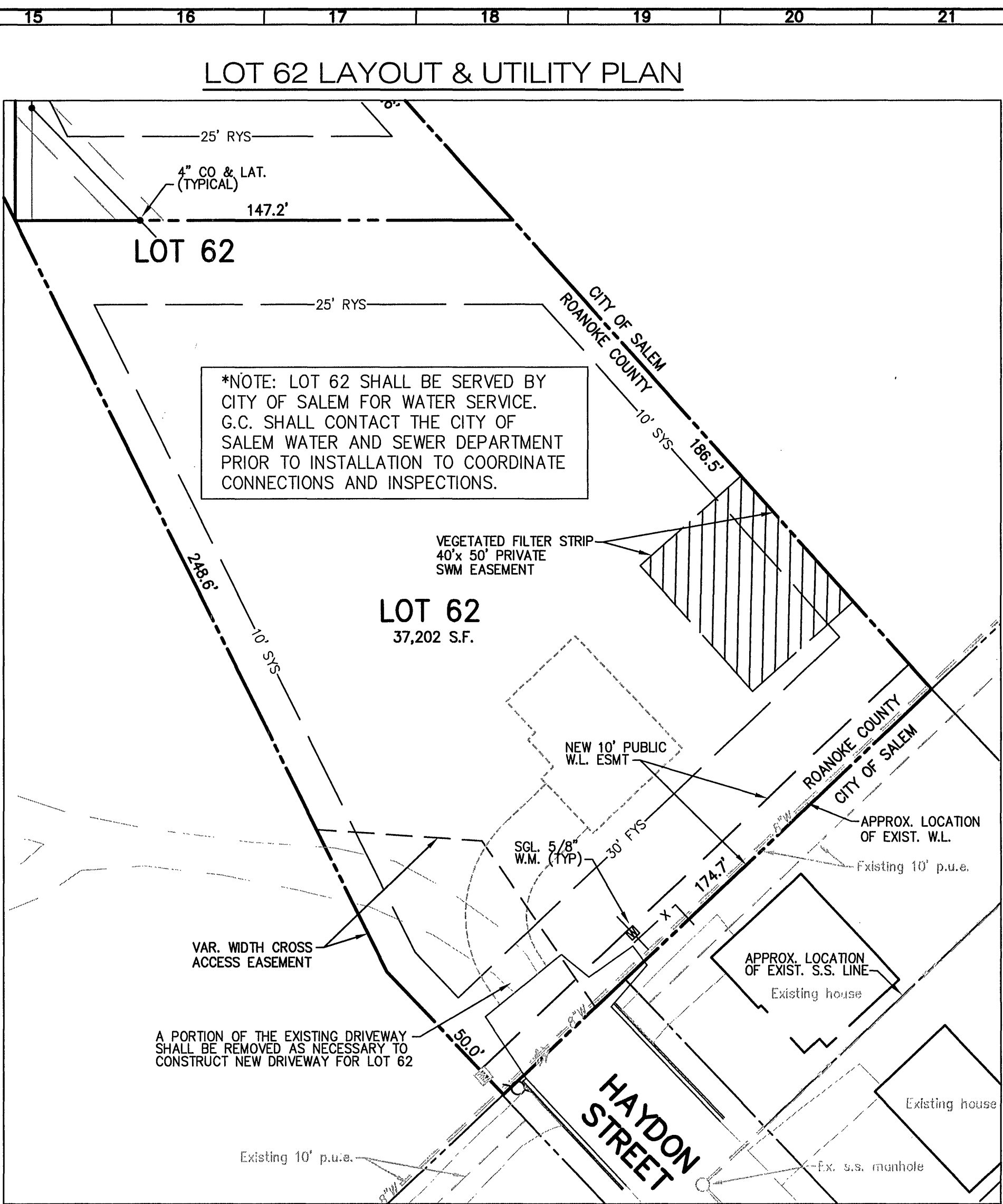
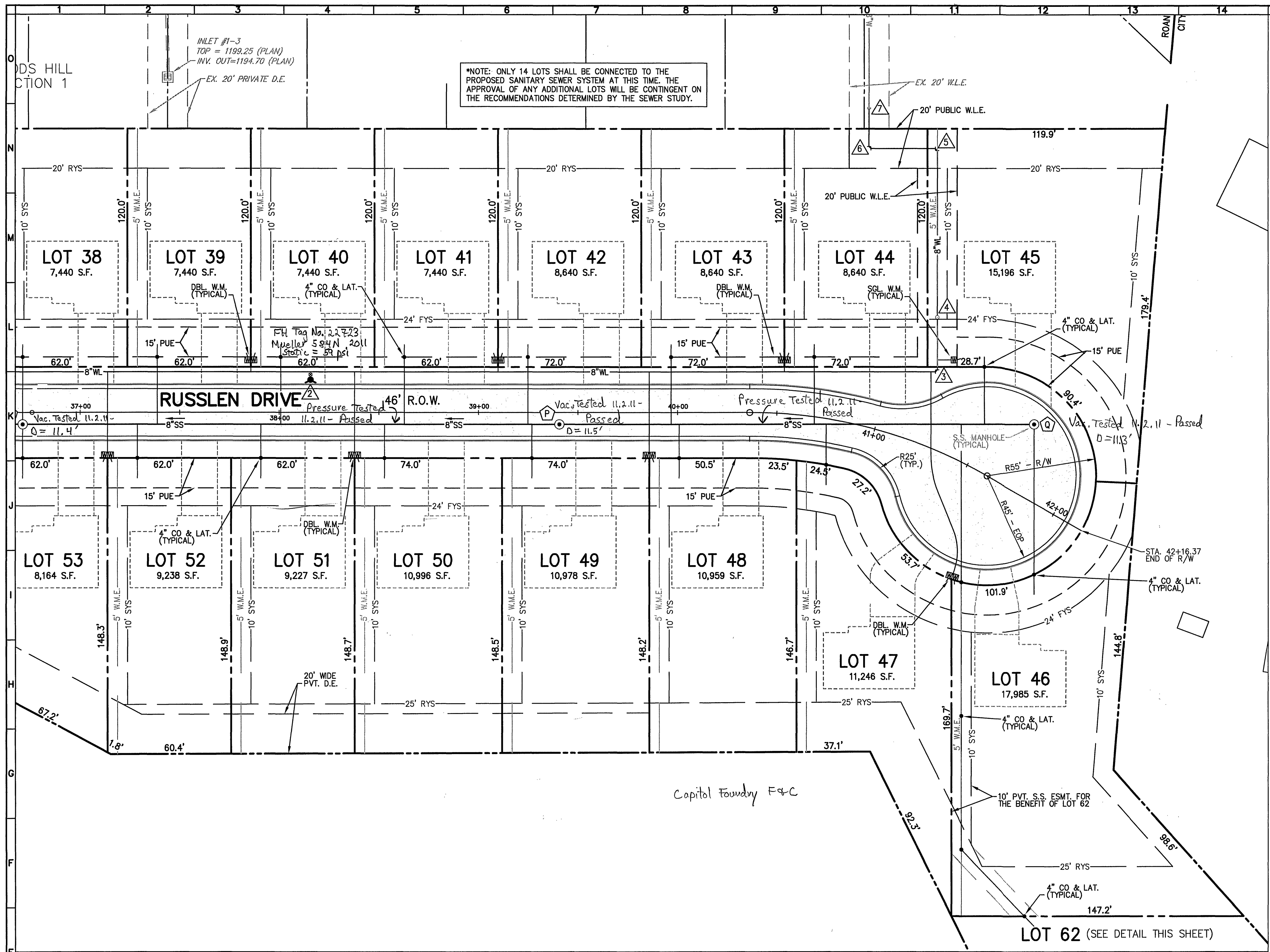




SANITARY SEWER MANHOLE AND MIN. F.F. ELEVATION

LINE	BEARING	DISTANCE
exist. 'G' to 'N'	N. 75°36'34" E.	274.0'
'N' to 'O'	N. 75°36'34" E.	274.0'
'O' to 'P'	N. 75°36'34" E.	269.5'
'P' to 'Q'	N. 75°36'34" E.	238.9'

LOT	DOWNSIDE MANHOLE	DIST.	TOP OF S.S. MAIN	MIN. F.F. ELEVATION	APPROX. F.F. ELEV.	WATER PRESSURES BASED ON CALC'S
30	G	63.7'	1195.2	1198.2	1200.0	55 psi
31	G	119.7'	1195.8	1198.8	1201.0	54 psi
32	G	181.7'	1196.4	1199.4	1202.0	54 psi
33	G	243.7'	1197.0	1200.0	1203.0	53 psi
34	N	26.7'	1198.0	1201.0	1204.0	53 psi
35	N	93.7'	1199.3	1202.3	1205.0	52 psi
36	N	155.7'	1200.5	1203.5	1206.0	51 psi
37	N	217.7'	1201.8	1204.8	1206.5	51 psi
38	O	0'	1203.0	1206.0	1207.0	50 psi
39	O	67.7'	1203.7	1206.7	1207.5	50 psi
40	O	129.7'	1204.3	1207.3	1208.0	49 psi
41	O	191.7'	1204.9	1207.9	1209.0	49 psi
42	O	253.7'	1205.6	1208.6	1210.0	48 psi
43	P	56.1'	1206.5	1209.5	1211.0	48 psi
44	P	128.1'	1207.5	1210.5	1212.0	47 psi
45	P	213.8'	1208.6	1209.6	1213.0	47 psi
46	Q	0'	1208.9	1211.9	1222.5	47 psi
47	P	134.1'	1207.6	1210.6	1222.0	47 psi
48	P	60.1'	1206.6	1209.6	1212.5	48 psi
49	O	255.7'	1205.6	1208.6	1212.0	48 psi
50	O	181.7'	1204.8	1207.8	1211.0	49 psi
51	O	119.7'	1204.2	1207.2	1210.0	49 psi
52	O	57.7'	1203.6	1206.6	1209.5	50 psi
53	O	0'	1203.0	1206.0	1208.5	50 psi
54	N	207.7'	1201.6	1204.6	1207.5	51 psi
55	N	145.7'	1200.3	1203.3	1206.5	51 psi
56	N	83.7'	1199.1	1202.1	1205.5	52 psi
57	N	21.7'	1197.9	1200.9	1204.5	53 psi
58	G	233.7'	1197.0	1200.0	1203.0	53 psi
59	G	171.7'	1196.3	1199.3	1210.5	54 psi
60	G	109.7'	1195.7	1198.7	1209.0	54 psi
61	G	52.2'	1195.1	1198.1	1208.0	55 psi
62	P	202'	1208.4	1211.4	1225.0	C.O.S. WATER

NOTES

STATIONS AND OFFSETS ARE MEASURED ALONG A BASELINE FROM CENTER OF MANHOLE TO CENTER OF MANHOLE WITH 0+00.0 BEING THE BEGINNING AT THE LOWER MANHOLE.

CLEANOUT ELEVATIONS ARE BASED ON A MINIMUM SLOPE OF 2.08% WITHIN THE RIGHT-OF-WAY OR EASEMENTS AND MAY BE INCREASED AS DICTATED BY THE SURROUNDING TOPOGRAPHY.

THE MIN. FLOOR ELEVATION IS BASED ON SEC. 200.02-2-G-1-h OF THE WESTERN VIRGINIA WATER AUTHORITY WATER & SEWER REGULATIONS. LOT OWNERS REQUESTING A LOWER SERVICE ELEVATION WILL REQUIRE THE USE OF A PRIVATE SEWAGE PUMP FACILITY, INSTALLED AND MAINTAINED BY THE HOMEOWNER.

STORM DRAIN STRUCTURES & NOTES

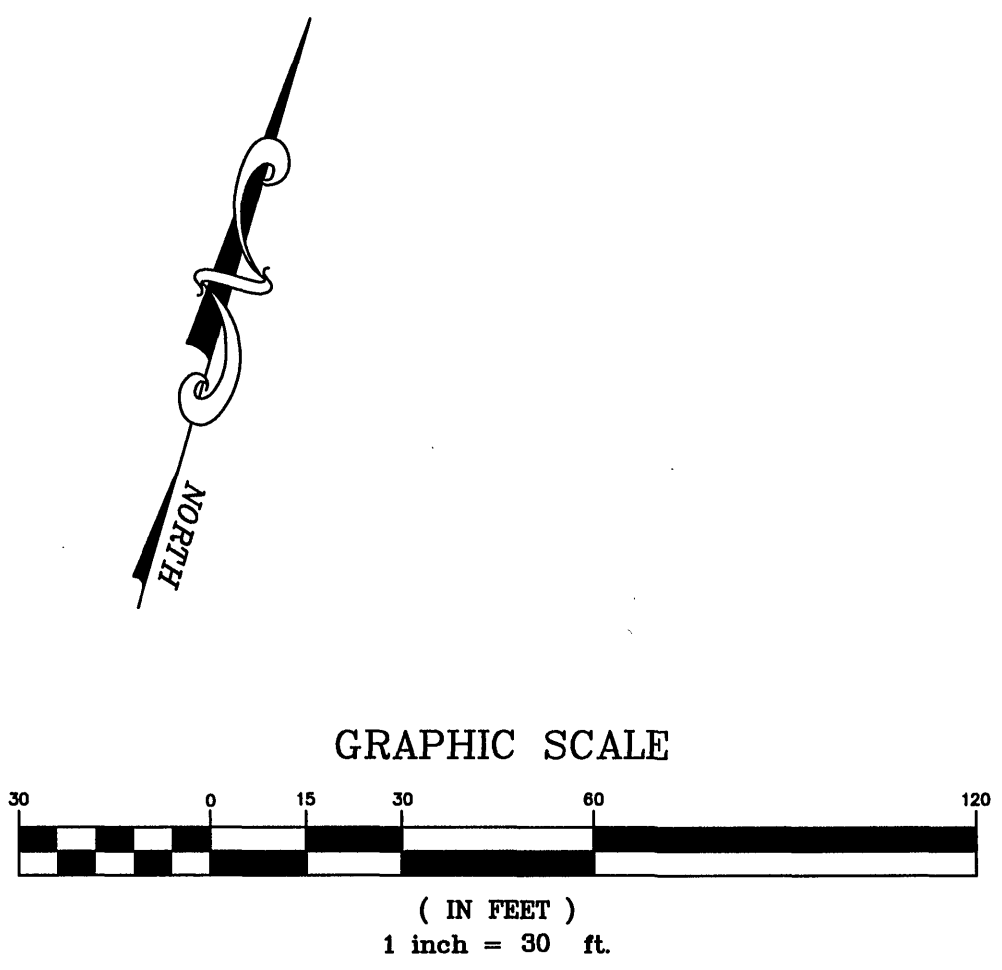
- 2-3 STA. 34+30.7; 15.5' LEFT VDOT STANDARD DI-38 W/ IS-1 THROAT LENGTH = 12 FT. TOP ELEVATION = 1209.54 INVERT OUT ELEV. = 1205.0
- 2-4 STA. 34+26.2; 15.5' RIGHT VDOT STANDARD DI-38 W/ IS-1 THROAT LENGTH = 12 FT. TOP ELEVATION = 1209.45 INVERT IN ELEV. = 1204.6 INVERT OUT ELEV. = 1204.5
- 2-5A STA. 31+61.47; 15.5' LEFT VDOT STANDARD DI-38 W/ IS-1 THROAT LENGTH = 10 FT. TOP ELEVATION = 1204.88 INVERT OUT ELEV. = 1198.0
- 2-5 STA. 31+54.83; 15.5' RIGHT VDOT STANDARD DI-38 W/ IS-1 THROAT LENGTH = 10 FT. TOP ELEVATION = 1204.76 INVERT IN ELEV. = 1197.4 INVERT OUT ELEV. = 1197.25

SANITARY SEWER STRUCTURES & NOTES

- N STA. 33+97.1; 6.0' RIGHT WWA STANDARD MANHOLE TOP ELEVATION = 1208.66 INVERT IN ELEV. = 1199.7 INVERT OUT ELEV. = 1196.6
- O STA. 36+71.09; 6.0' RIGHT WWA STANDARD MANHOLE TOP ELEVATION = 1209.94 INVERT IN ELEV. = 1199.6 INVERT OUT ELEV. = 1199.5
- P STA. 39+40.6; 6.0' RIGHT WWA STANDARD MANHOLE TOP ELEVATION = 1216.62 INVERT IN ELEV. = 1205.1 INVERT OUT ELEV. = 1205.0
- R STA. 31+69.77; 6.0' RIGHT REMOVE TEMPORARY PLUG & EXTEND 8" SANITARY SEWER SERVICE THROUGH VILLAS at WOODS HILL, SECTION 1

WATER UTILITY STRUCTURES & NOTES

- Δ STA. 31+84.1; 20.5' LEFT REMOVE TEMPORARY PLUG & EXTEND WATER UTILITY SERVICE THROUGH WOODS HILL, SECTION 2
- Δ STA. 41+19.2; 37.5' LEFT 90° HORIZONTAL BEND IN WATERLINE
- Δ STA. 40+95.5; 144.2' LEFT 90° HORIZONTAL BEND IN WATERLINE
- Δ STA. 40+72.7; 157.6' LEFT REMOVE CAP ON EXISTING 8" WATERLINE AND TIE TO NEW WATERLINE
- Δ STA. 38+19.9; 16.5' LEFT WWA STANDARD W-18 FIRE HYDRANT ASSEMBLY W/ 6" GATE VALVE
- Δ STA. 41+12.3; 63.1' LEFT WWA STANDARD W-12 AUTOMATIC AIR RELEASE ASSEMBLY AT HIGH POINT
- Δ STA. 40+74.9; 138.4' LEFT 90° HORIZONTAL BEND IN WATERLINE



New River Valley
Richmond
Roanoke
Shenandoah Valley

RESIDENTIAL LAND DEVELOPMENT ENGINEERING
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COMMONWEALTH OF VIRGINIA
CHRISTOPHER P. BURNS
Lic. No. 047338
8-5-2011
PROFESSIONAL ENGINEER

WOODS HILL, SECTION 2
LAYOUT & UTILITY PLAN
CATAWBA DISTRICT
ROANOKE COUNTY, VIRGINIA

DRAWN BY CPB
DESIGNED BY CPB
CHECKED BY BTC
DATE 04/20/2011
SCALE 1"=30'

REVISIONS:
06/03/2011
07/06/2011
08/05/2011

SHEET NO.
C05

JOB NO. R0500271.01

As-Built 6.15.12 K. Winslow