**NOTES**

- ALL WATER AND SANITARY SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE WESTERN VIRGINIA WATER AUTHORITY'S WATER AND SANITARY SEWER STANDARDS.
- ALL DIMENSIONS ARE TO THE FACE OF CURB, UNLESS OTHERWISE NOTED.
- SANITARY SEWER MATERIAL SHALL BE PVC, SDR 35, EXCEPT AS NOTED, OR APPROVED EQUAL.
- WATER METER SIZE SHALL BE 5/8".
- THE WESTERN VIRGINIA WATER AUTHORITY SHALL PERFORM TAP TO EXISTING WATER MAIN. THE CONTRACTOR SHALL PROVIDE TAPPING SLEEVE AND VALVE AND SHALL PERFORM EXCAVATION AND PROVIDE SHORING FOR THE TRENCH IN ACCORDANCE WITH OSHA STANDARDS.
- THE CONTRACTOR IS RESPONSIBLE FOR ANY REPAIRS FOR DAMAGE TO EXISTING STRUCTURES AS A RESULT OF CONSTRUCTION IN ACCORDANCE WITH VDOT, WESTERN VIRGINIA WATER AUTHORITY, AND/OR ROANOKE COUNTY STANDARDS AND SPECIFICATIONS.
- SANITARY SEWER CONNECTION TO EXISTING MANHOLE SHALL BE EXCAVATED BY THE CONTRACTOR AND CENTERMARKED FOR CORING. NOTE: IF REMOVAL OF EXISTING SEWER LATERAL PREVENTS EFFECTIVE CORING AND INSTALLATION OF NEW 8" SEWER, THE EXISTING SANITARY SEWER MANHOLE SHALL BE EVALUATED BY THE WESTERN VIRGINIA WATER AUTHORITY, AND MAY REQUIRE REPLACEMENT AT THE DIRECTION OF THE WVA.
- EXISTING SANITARY SEWER LATERALS TO BE ABANDONED USING FERNOCO PIPE PATCH KIT 8" DIAMETER RESIN IMPREGNATED FIBERGLASS MAT REPAIR KIT, OR AS DIRECTED BY THE WESTERN VIRGINIA WATER AUTHORITY. THE CONTRACTOR MAY REQUEST THAT THE WVA INSTALL INSERTION SLEEVES AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL COORDINATE WITH COX CABLE OF ROANOKE TO RELOCATE UNDERGROUND CABLE NEAR THE UNDERGROUND STORMWATER MANAGEMENT FACILITY AND ASSOCIATED STORM DRAIN.
- CONTRACTOR SHALL NOTIFY ROANOKE GAS COMPANY PRIOR TO INSTALLATION OF THE STORM DRAIN BETWEEN STRUCTURES WITHIN OR ADJACENT TO THE PRIVATE STREET RIGHT-OF-WAY.
- PVC ROOF LEADER MATERIAL SHALL BE SCHEDULE 40, UNLESS OTHERWISE NOTED, OR APPROVED EQUAL. HOPE PIPE MATERIAL SHALL BE ADS, N-12, OR APPROVED EQUAL. ALL CIP PIPE SHALL BE ALUMINIZED STEEL, TYPE II, 66" CIP SHALL BE 12 GAUGE WITH 5"x1" CORRUGATIONS. 15" CIP SHALL BE 16 GAUGE WITH 28"x1" CORRUGATIONS. 66" BANDS SHALL BE A MINIMUM OF 2" WIDE. ALL FITTINGS SHALL BE REINFORCED PER ASTM 908. ALL PIPE MATERIAL SHALL BE BEDDED PER VDOT STANDARDS.
- PRIOR TO INSTALLATION OF UNDERGROUND STORMWATER DETENTION FACILITY, SHOP DRAWINGS SHALL BE SUBMITTED TO ROANOKE COUNTY FOR REVIEW AND APPROVAL. SHOP DRAWING SHALL INCLUDE DETAIL FOR, BUT NOT LIMITED TO, WATERTIGHT WELDS, BRACING, FLOTATION PREVENTION, BEDDING AND BACKFILL REQUIREMENTS.
- MAINTENANCE OF THE STORMFILTER WATER QUALITY UNIT (STRUCTURE "G") LOCATED ON UTILITY LOT, AND WITHIN THE STORMWATER MANAGEMENT EASEMENT, SHALL BE THE RESPONSIBILITY OF THE QUAIL RIDGE HOME OWNERS ASSOCIATION.
- FIRE SUPPRESSION SPRINKLER SYSTEMS WILL BE REQUIRED FOR EACH TOWNHOME UNIT AND WILL BE SUBJECT TO THE REVIEW AND APPROVAL OF THE FIRE MARSHAL AND BUILDING COMMISSIONER PRIOR TO ISSUANCE OF BUILDING PERMIT.

LOT AREA TABLE	
LOT / UNIT NUMBER	LOT AREA (SF)
1	7,189
2	3,576
3	3,005
4	3,510
5	3,830
6	6,199
UTILITY LOT	3,855

*MINIMUM LOT SIZE: 1,800 SF FOR INTERIOR LOTS,
2,300 SF FOR END LOTS (SEC. 30-82-14-(E)-(6))

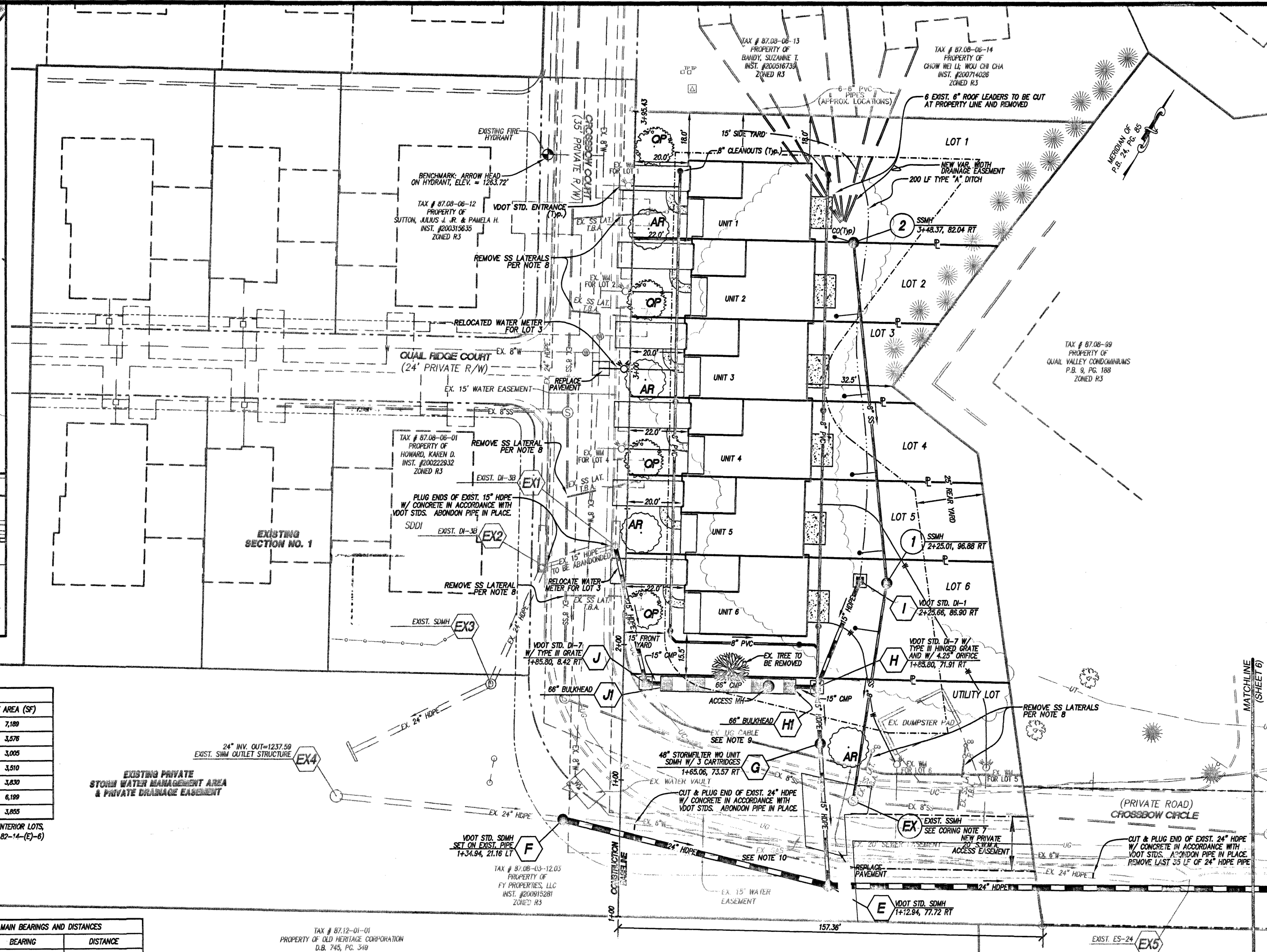
SANITARY SEWER MAIN BEARINGS AND DISTANCES		
LINE	BEARING	DISTANCE
EX TO 1	N 20°42'32" W	81.28'
1 TO 2	N 35°02'40" W	124.25'

CANOPY COVERAGE:

SITE AREA: 31,165 SF (0.72 AC.)
CANOPY COVERAGE REQUIRED (35%): 10,908 SF
EXISTING CANOPY COVERAGE TO REMAIN:
15 - 6" LEYLAND CYPRESS: 250 SF X 15 = 3,750 SF
TOTAL EXISTING CANOPY: 3,750 SF
NEW CANOPY COVERAGE REQUIRED: 10,908 - 3,750 = 7,158 SF
NEW CANOPY CANOPY PROVIDED: 10,000

LANDSCAPE NOTES:

- ALL TREE MATERIALS SHALL MEET THE MINIMUM REQUIREMENTS AS DESCRIBED IN THE MOST RECENT EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK, ANSI Z60.1, AS PUBLISHED BY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION.
- THE PLANTING OF TREES AND SHRUBS SHALL BE DONE IN ACCORDANCE WITH THE STANDARDIZED LANDSCAPE SPECIFICATIONS JOINTLY ADOPTED BY THE VA NURSERYMEN'S ASSOCIATION, THE VA SOCIETY OF LANDSCAPE DESIGNERS AND THE VA CHAPTER OF THE ASLA.
- AT THE TIME OF DELIVERY, ALL PLANT MATERIALS NOT IMMEDIATELY PLACED IN THEIR FINAL PLANTING LOCATION MUST BE STORED IN A SHADED LOCATION WITH ADEQUATE AIR CIRCULATION, AND BE KEPT MOIST.
- THIS PLAN IS TO SATISFY THE MINIMUM REQUIREMENTS OF THE ROANOKE COUNTY ZONING ORDINANCE. THE DEVELOPER MAY INCREASE PLANTING DENSITY BEYOND THE MINIMUM REQUIREMENTS.

**LANDSCAPE MATERIALS**

SYMBOL & KEY	SCIENTIFIC NAME	COMMON NAME	SIZE	CONTAINER	QUANTITY	CANOPY	TOTAL CANOPY
AR	Acer rubrum 'Red Sunset'	RED MAPLE	2" CAL.	B&B	4	1,250	5,000
QP	Quercus phellos	WHITE OAK	2" CAL.	B&B	4	1,250	5,000
						TOTAL CANOPY	10,000

ABBREVIATIONS

D.E.	DRAINAGE EASEMENT
W.L.E.	WATER LINE EASEMENT
S.S.E.	SANITARY SEWER EASEMENT
P.U.E.	PUBLIC UTILITY EASEMENT
ESM.T.	EASEMENT
M.B.L.	MINIMUM BUILDING LINE
S.Y.S.	SIDE YARD SETBACK
R.Y.S.	REAR YARD SETBACK
R/W	RIGHT OF WAY
VAR.	VARIABLE
EXST.	EXISTING
D.B.	DEED BOOK
P.G.	PAGE
No.	NUMBER
TYP.	TYPICAL
STA	STATION
L.T.	LEFT
R.T.	RIGHT
RCP	REINFORCED CONCRETE PIPE
SD	STORM DRAIN
SDMH	STORM DRAIN MANHOLE
SS	SANITARY SEWER
SSMH	SANITARY SEWER MANHOLE
T.B.A.	TO BE ABANDONED
W	WATER LINE

LEGEND

ITEM	EXISTING	PROPOSED
Pavement	---	---
Curb and Gutter	---	---
Storm Drain Line	---	---
Sanitary Sewer Manhole	---	---
Sanitary Sewer Line	---	---
Waterline	---	---
Hydrant	---	---
Overhead Electric Line	---	---
Underground Cable	---	---
Underground Gas Line	---	---
Underground Telephone Line	---	---
Contours	---	---
Treeline	---	---

APPROVED

LUMSDEN ASSOCIATES, P.C.
ENGINEERS/SURVEYORS-PLANNERS
ROANOKE, VIRGINIA

COMMONWEALTH OF VIRGINIA
HOWARD P. BOGGESS, II
Professional Engineer
Lic. No. 000920
5/19/11
LANDSCAPE ARCHITECT

**DIMENSIONAL LAYOUT
AND
LANDSCAPE PLAN**

**SITE DEVELOPMENT PLANS FOR
QUAIL RIDGE TOWNHOMES
PREPARED FOR
FYG PROPERTIES, L.L.C.
CAVE SPRING MAGISTERIAL DISTRICT
ROANOKE COUNTY, VIRGINIA**

REVISIONS		DATE	DESCRIPTION
NO.	DATE	DESCRIPTION	
1	5/19/2011	ADD/REVISE NOTES PER WVA COMMENT	
2			
3			
4			
5			

DATE: April 18, 2011
SCALE: 1" = 20'
COMMISSION NO: 10-111
SHEET 3 OF 11

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