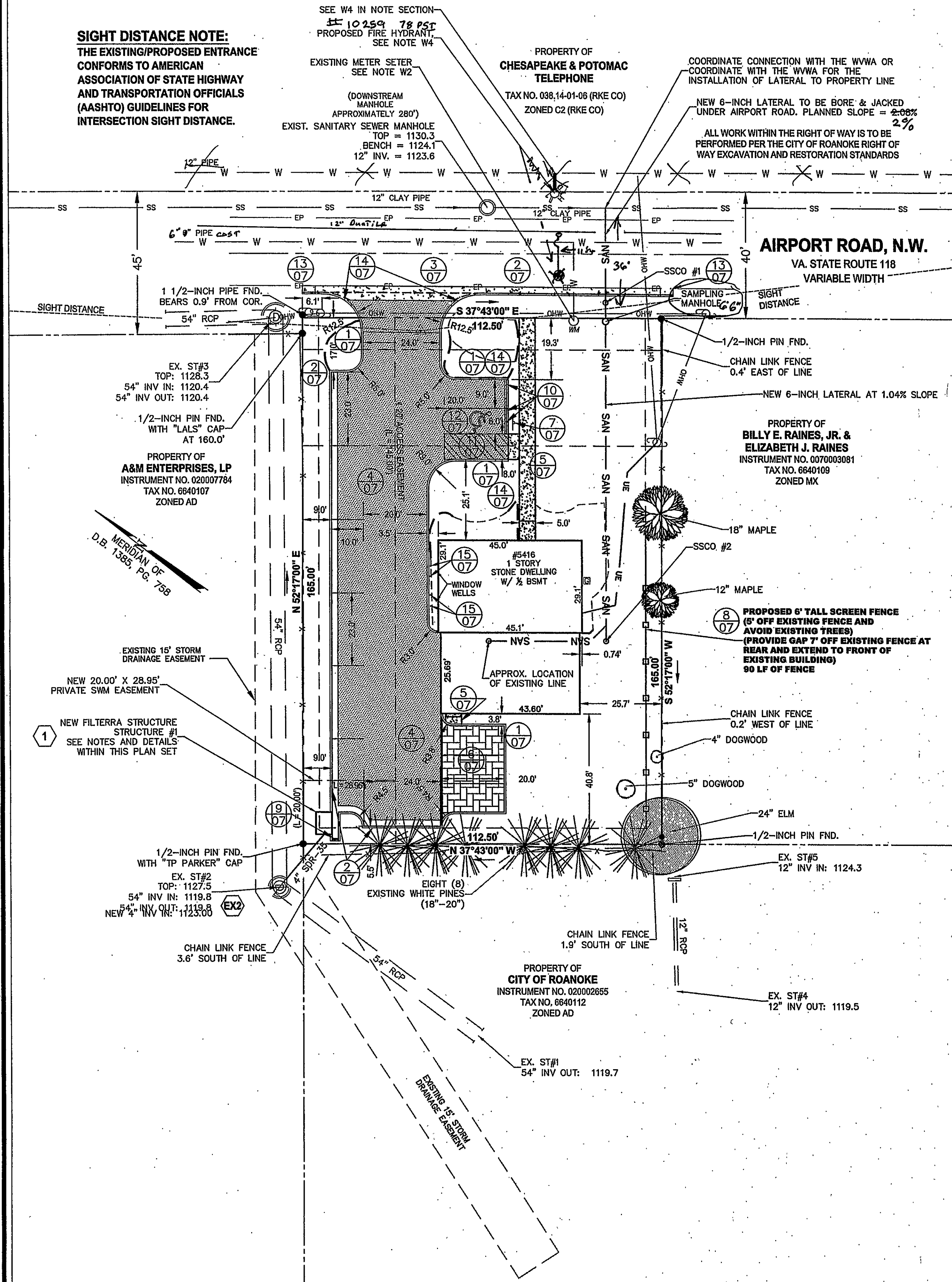


**SIGHT DISTANCE NOTE:**  
THE EXISTING/PROPOSED ENTRANCE  
CONFORMS TO AMERICAN  
ASSOCIATION OF STATE HIGHWAY  
AND TRANSPORTATION OFFICIALS  
(AASHTO) GUIDELINES FOR  
INTERSECTION SIGHT DISTANCE.



#### DIMENSIONAL NOTES:

1. THE CONTRACTOR SHALL VERIFY BUILDING DIMENSIONS WITH ARCHITECT PLANS.
2. THE DIMENSIONS SHOWN ARE FROM FACE OF CURB TO FACE OF CURB UNLESS OTHERWISE NOTED.

#### DETAIL LEGEND (SEE SHEET C07 FOR DETAILS)

1. VDOT CG-2 CURB
2. VDOT CG-6 CURB
3. CITY OF ROANOKE ENTRANCE (ENTR. ONLY)
4. REGULAR PAVEMENT
5. CONCRETE SIDEWALK
6. PERVIOUS PAVER SYSTEM (40% MIN. VOID RATIO)
7. HANDICAP SIGN
8. SCREEN FENCE DETAIL
9. CURB FLUME DETAIL
10. WHEEL STOP DETAIL
11. ADA PAVEMENT MARKING DETAIL
12. HANDICAP SYMBOL DETAIL
13. CG-6 CURB TAPER
14. CG-2 CURB TAPER
15. BOLLARD DETAIL

#### STORMWATER MANAGEMENT CONSIDERATIONS:

THIS DEVELOPMENT UTILIZES A FILTERRA STRUCTURE TO MEET SWM QUALITY REQUIREMENTS FOR THE CITY OF ROANOKE. THE SITE IMPROVEMENTS INCREASE THE AMOUNT OF STORMWATER RUNOFF LEAVING THE SITE; HOWEVER, THE SITE IS ADJACENT TO A STORMWATER MANAGEMENT POND. THE INCREASED RUNOFF FROM THE SITE IS MEASURED IN BOTH FLOW RATE AND TOTAL VOLUME. THE RESULTS OF THE INCREASE ARE SUMMARIZED BELOW.

STORM EVENT	INCREASE IN RATE	INCREASE IN VOLUME
2	0.14 CFS	277 CF
10	0.17 CFS	461 CF
100	0.20 CFS	1,071 CF

THE STORMWATER MANAGEMENT POND ADJACENT TO THE SITE IS 15' IN DEPTH. THERE ARE MULTIPLE PIPES DISCHARGING INTO THE SYSTEM, INCLUDING A 54-INCH PIPE. BASED ON RECORDS, THE POND IS EVALUATED AT THE TOP TWO FOOT OF THE POND STORAGE AND HAS A CAPACITY OF 82,800 C/F. THE RESULTANT INCREASE IN RUNOFF VOLUME AFFECTS THE POND STORAGE BY RAISING THE WATER SURFACE ELEVATION BY 0.01 FOOT FOR THE 10-YEAR STORM EVENT AND 0.02 FOOT FOR THE 100-YEAR STORM EVENT. NO SWM QUANTITY MEASURES ARE PLANNED FOR THIS PROJECT.

#### DRAINAGE SUMMARY

1. NEW FILTERRA STRUCTURE (6'x4')  
TOP=1126.80  
THROAT=1126.30  
NEW 4" OUT=1123.30
1. 19 LF 4" SDR-35 PVC @ 1.58% SLOPE  
4" INV IN=1123.30  
4" INV OUT=1123.00
- EX2. EXISTING BASE WITH MH-2 TOP  
TOP=1127.7  
4" INV. IN=1123.00  
54" INV.=1119.80

#### ITEMS WITH WVWA PRIOR TO SANITARY SEWER CONNECTION:

PRIOR TO ANY SANITARY SEWER FEES OR CONNECTION TO THE PUBLIC SANITARY SEWER LINE, THE OWNER/CONTRACTOR SHALL COORDINATE WITH THE WVWA FOR AN INSPECTION OF INFLOW & INFILTRATION ISSUES. CONTACT LEE JOHNSON (540.853.5661). THE TIME FOR INSPECTION COORDINATION MAY BE CONSIDERABLE. PLEASE CONTACT AS SOON AS POSSIBLE.

#### UNDERGROUND UTILITY NOTE:

THE OVERHEAD ELECTRIC SERVICE SHALL BE INSTALLED AS AN UNDERGROUND SERVICE. ADDITIONALLY, ANY TELEPHONE AND CABLE SHALL BE INSTALLED AS UNDERGROUND SERVICE.

#### UTILITY NOTES:

1. WHILE CERTAIN UTILITIES ARE SHOWN, OTHER UNDERGROUND UTILITIES MAY BE ENCOUNTERED DURING CONSTRUCTION. PARKER DESIGN GROUP DOES NOT WARRANT LOCATION OR DEPTH OF ANY UTILITIES SHOWN. THE CONTRACTOR SHALL COORDINATE WITH "MISS UTILITY" PRIOR TO CONSTRUCTION AND ALL UTILITY DEPARTMENTS TO DETERMINE IF THE ENCOUNTERED UTILITY IS PUBLIC OR PRIVATE AND TAKE PROPER AND ADEQUATE METHODS TO PROTECT, IF NECESSARY.
2. WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE GOVERNING AUTHORITIES FOR UTILITY INSTALLATIONS. ALL NEW UTILITIES SHALL BE INSTALLED UNDERGROUND.
3. REFERENCE IS DIRECTED TO THE WESTERN VIRGINIA WATER AUTHORITY (WVWA) WATER & SEWER DESIGN & CONSTRUCTION STANDARDS, AS REVISED, FOR WATER AND SANITARY SEWER NOTES AND DETAILS. REFER TO "SITE SPECIFIC" NOTES PERTAINING TO EACH UTILITY.
4. DOWN SPOUT LOCATIONS ARE SHOWN ON THE ARCHITURAL PLANS. ALL DOWNSPOUTS SHALL BE DISCHARGED TO SURFACE, USING SPLASH BLOCKS. ALL ROOF RUNOFF DRAINS TO THE REAR OF THE SITE. RUNOFF FROM THE RIGHT SIDE OF THE BUILDING DRAINS TO THE PAVEMENT AND IS COLLECTED BY THE "FILTERRA" DEVICE..
5. THE CONTRACTOR SHALL INVESTIGATE EXISTING WATER AND SEWER MAINS TO VERIFY THE SIZE, LOCATION AND DEPTH OF EACH UTILITY. THE LOCATIONS SHOWN ARE BASED ON VISUAL INSPECTION OR RECORDS.

#### SITE SPECIFIC WATER LATERAL AND METER NOTES:

W1. CONTRACTOR SHALL PROTECT THE EXISTING METER SETER (RECORDS INDICATE A 5/8-INCH METER). THIS PROJECT WILL UTILIZE THE EXISTING METER SETER AND EXISTING LATERAL TO THE STRUCTURE.

W2. CONTRACTOR SHALL PLAN FOR DEMOLITION AND RECONSTRUCTION OF THE WATER LATERAL INSIDE THE STRUCTURE AS SHOWN ON THE ARCHITECTURAL PLANS. MEETING APPLICABLE BUILDING CODES.

W3. BASED ON WVWA GIS INFORMATION, THE HYDRAULIC GRADE LINE IS 1263. THE BUILDING ELEVATION IS ELEVATION 1132. THE STATIC PRESSURE IS 56 PSI AND DOES NOT REQUIRE A PRESSURE REDUCING VALVE.

W4. BASED ON WVWA GIS INFORMATION, NO FIRE HYDRANT EXISTS ALONG AIRPORT ROAD. A NEW FIRE HYDRANT WILL NEED TO BE INSTALLED. THE CONTRACTOR SHALL COORDINATE WITH THE WVWA TO PROVIDE A FIRE HYDRANT, CONNECTED TO THE EXISTING 12-INCH LINE (AT OWNER COST) OR COORDINATE WITH THE WVWA FOR THE CONNECTION TO THE 12-INCH LINE AND THE CONTRACTOR INSTALL A FIRE HYDRANT WITH A 12-INCH STUB. FOR ADDITIONAL INFORMATION, THE WVWA CONTACT IS AARON SHEARER (540.857.1588).

#### SITE SPECIFIC FIRE MARSHALL NOTES:

FM1. BASED ON THE WVWA GIS INFORMATION, NO HYDRANT EXISTS ON AIRPORT ROAD. THIS PROJECT PLANS TO INSTALL A FIRE HYDRANT ON THE EXISTING 12-INCH LINE (NORTHEAST OF AIRPORT ROAD). THE LOCATION FROM THE PROPOSED HYDRANT TO THE REAR OF THE BUILDING IS LESS THAN 200 FEET.

FM2. BASED ON THE WVWA GIS INFORMATION, AN EXISTING HYDRANT EXISTS ON THE SAME SYSTEM. HYDRANT 10860 EXISTS BEHIND TOWNE SQUARE SHOPPING CENTER. THE HYDRANT PROVIDES THE FOLLOWING FLOW AND RESIDUAL PRESSURES:  
1,714 GPM @ 20 PSI  
2,134 GPM @ 0 PSI  
HYDRANT ELEVATION=1136

AFTER FURTHER INVESTIGATION, HYDRANT 11535 EXISTS ALONG PRECISION CIRCLE IS ON A DIFFERENT PRESSURE SYSTEM AND WAS NOT UTILIZED AS PART OF THE FIRE HYDRANT MODEL.

THE PROPOSED HYDRANT IS ESTABLISHED AT ELEVATION 1132. THE FIRE FLOW MODEL SHOWS THAT 2,000 GPM CAN BE PROVIDED WITH A RESIDUAL PRESSURE OF 50 PSI.

FM3. THE USE GROUP CLASSIFICATION OF THE BUILDING IS "B" PER SECTION 304. THE FIRE FLOW REQUIREMENT IS 2,000 GPM WITH HYDRANT NO FURTHER THAN 350 FEET. NO AUTOMATED SPRINKLER SYSTEM IS PLANNED. NO MANUAL FIRE ALARM IS REQUIRED OR PLANNED. SHOULD A FIRE ALARM BE INSTALLED, A KNOX BOX SHALL BE PLANNED, WITH THE LOCATION OF THE KNOX BOX COORDINATED WITH THE FIRE MARSHALL.

FM4. NO FIRE LANES ARE PLANNED AT THIS TIME. ONCE CONSTRUCTION HAS OCCURRED AND USE OF THE PROPERTY BEGINS, THE FIRE MARSHALL RESERVES THE RIGHT TO REQUIRE A FIRE LANE ADJACENT TO THE BUILDING (NORTHWEST SIDE OF THE BUILDING).

#### SITE SPECIFIC SANITARY SEWER SERVICE NOTES AND DESIGN:

S1. THE BUILDING CURRENTLY UTILIZES A PRIVATE SEPTIC AND DRAINFIELD. THE EXISTING SEPTIC TANKS SHALL BE ABANDONED AND DEMOLISHED PER NOTES ON THE DEMOLITION PLAN. THE EXISTING DRAINFIELD SHALL BE ABANDONED IN PLACE.

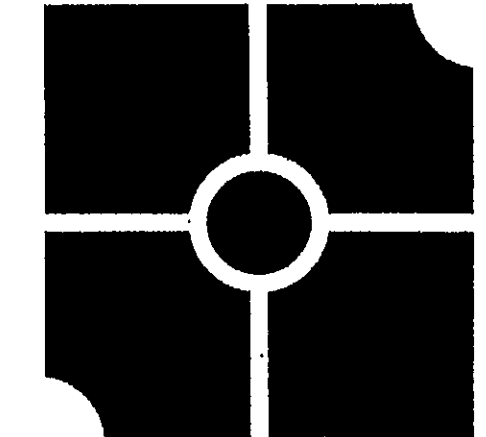
S2. CONTRACTOR SHALL PROVIDE A NEW LATERAL FROM THE EXISTING SANITARY SEWER AND COORDINATE WITH THE WVWA FOR THE CONNECTION TO THE EXISTING SANITARY SEWER MAIN (NORTHEAST SIDE OF AIRPORT ROAD). THE LATERAL SHALL INCLUDE AT A MINIMUM THE FOLLOWING MEASURES:  
INSTALLATION OF A NEW 6" LATERAL,  
SAMPLING MANHOLE,  
AND CLEANOUTS PER THE BUILDING CODE, AS SHOWN ON THE PLANS,  
COORDINATE WITH THE WVWA TO PROVIDE A LATERAL (AT OWNER'S EXPENSE) AT THE PROPERTY LINE, OR PROVIDE LATERAL UNDER AIRPORT ROAD (BORE AND JACK) & COORDINATE CONNECTION TO THE EXISTING MAIN. (NO OPEN CUT OF AIRPORT ROAD IS PLANNED FOR THIS PROJECT).

SPECIAL NOTE FOR DESIGN OF LATERAL: THE DESIGN SHOWN INCORPORATES MINIMUM SLOPE PARAMETERS AND FILL MATERIAL OVER THE LATERAL TO MEET COVER REQUIREMENTS. SHOULD THE ELEVATION OF THE EXISTING SERVICE FROM THE BUILDING BE AT AN ELEVATION LOWER THAN PLANNED, CONTACT THE ENGINEER FOR ALTERNATIVE DESIGN MEASURES. THE ALTERNATIVE DESIGN WILL REQUIRE RESUBMITTAL TO THE WVWA.

S3. NEW 6-INCH LATERAL SHALL BE A CONSTANT SLOPE FROM THE PUBLIC CLEANOUT, BEYOND THE SAMPLING MANHOLE TO THE NEXT CLEANOUT. PLEASE NOTE THE ENTIRE DESIGN UTILIZES THE MINIMUM SLOPE FOR A 6-INCH LATERAL (1.04% SLOPE).

S4. CONTRACTOR TO PROVIDE A SAMPLING MANHOLE PER THE WVWA REQUIREMENTS. SEE DETAIL ON THIS PLAN SET.

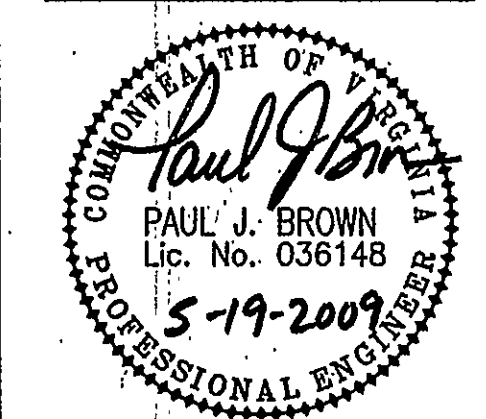
S5. THE CONTRACTOR SHALL PROVIDE CLEANOUTS PER DETAIL ON THIS SET OF PLANS. THE TOPS & INVERTS OF THE CLEANOUTS ARE SHOWN IN THE "SANITARY SEWER PROFILE" OF THIS PLAN SET.



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**Comprehensive Site Plan for  
Oakley's Renovations & Addition**  
5416 Airport Road, N.W.  
Tax No. 6640108  
City of Roanoke, Virginia

#### REVISIONS:

Address City Review Comments  
PUB 05-19-2009

DESIGNED BY: PJB

DRAWN BY: PJB

CHECKED BY: PJB

SCALE: 1" = 20'

DATE: April 22, 2009

SHEET TITLE:

Site  
Dimensional &  
Utility Plan

**C03**  
03 OF 09  
PROJECT NUMBER:  
08-0306-03