

CALCULATED FIRE FLOW NOTES:

THE INFORMATION BELOW IS TAKEN FROM THE WESTERN VIRGINIA WATER AUTHORITY MEMO ENTITLED "PHEASANT RIDGE PHASE II" DATED JUNE 7, 2017:

- NEW HYDRANT HYD-184291 HAS A CALCULATED FLOW OF 2,875 GPM AT 20 PSI RESIDUAL PRESSURE. (FIGURE 3 - HYDRANT AVAILABLE FIRE FLOW MAINTAINING 20 PSI RESIDUAL PRESSURE AT THE FLOWING HYDRANT, HYD-184291)
- THE AVAILABLE FIRE FLOW FOR EACH OF THE NEW HYDRANTS (FIGURE 4) IS AS FOLLOWS:
HYD-184291 2,875.0 GPM
HYD-222365 2,994.6 GPM
HYD-184292 2,797.2 GPM
- THE SYSTEM ALLOWS 2,250 GPM TWO HOUR FIRE FLOW FOR THE DEVELOPMENT WHILE MAINTAINING 20 PSI IN THE 1550 ZONE. (CONCLUSION)

UTILITIES LOCATION NOTE:

ALL UTILITY SERVICE LATERALS, INCLUDING ELECTRIC, SHALL BE LOCATED UNDERGROUND.

WATER & SEWER NOTES:

- ALL WATER AND SANITARY SEWER CONNECTIONS TO EXISTING LINES SHALL BE COORDINATED WITH AND PERFORMED BY THE WESTERN VIRGINIA WATER AUTHORITY.
- ALL WATER AND SANITARY SEWER LINES SHALL HAVE A MINIMUM OF 3.0 FEET OF COVER.
- MAINTAIN A MINIMUM OF 18" CLEARANCE FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE AT ALL WATER, SANITARY SEWER AND STORM DRAIN CROSSINGS. WHERE THIS CLEARANCE CANNOT BE ACHIEVED, CONCRETE PIERS SHALL BE UTILIZED IN ACCORDANCE WITH THE STANDARDS OF THE WESTERN VIRGINIA WATER AUTHORITY.
- SANITARY SEWER MAIN PIPE MATERIAL SHALL BE PVC, SDR-35 OR CLASS 350 DUCTILE IRON PIPE, EXCEPT WHERE NOTED. WHERE DUCTILE IRON PIPE IS USED, IT SHALL BE LINED WITH 401 PROTECTO, 401 EPOXY OR APPROVED EQUAL.
- NEW WATERLINE MAIN PIPE MATERIAL SHALL BE C900 PVC DR14, UNLESS OTHERWISE INDICATED.
- WATER METER SIZES SHALL BE 3" DOMESTIC AND 6" FIRE

STORM DRAIN NOTES:

- ALL NEW STORM DRAIN PIPE SHOWN ON THIS PLAN IS 15" HDPE, ADS N-12, EXCEPT WHERE OTHER DIAMETERS AND/OR MATERIALS ARE INDICATED.
- ALL VDOT STANDARD STORM DRAIN INLET AND MANHOLE STRUCTURES SHALL INCLUDE S-1 INLET SHAPING UNLESS INDICATED OTHERWISE.
- WHERE STORM DRAIN MANHOLES ARE INDICATED AS STEP-DOWN STRUCTURES, CONTRACTOR SHALL INSTALL 1/2" STEEL PLATE ARMORING TO BASE OF MANHOLE, PER VDOT DDM1.
- ALL DRAINAGE STRUCTURES DEEPER THAN 4.0 FEET SHALL HAVE STEPS (VDOT STD. ST-1) INSTALLED.
- SAFETY SLABS (VDOT STD. SL-1) ARE REQUIRED IN ALL DRAINAGE STRUCTURES WITH A DEPTH OF 12.0 FEET OR GREATER. SPACING OF THE SAFETY SLABS SHOULD BE 8 TO 12 FEET WITH NO SLAB LOCATED WITHIN 6.0 FEET OF THE TOP OR BOTTOM OF THE STRUCTURE.

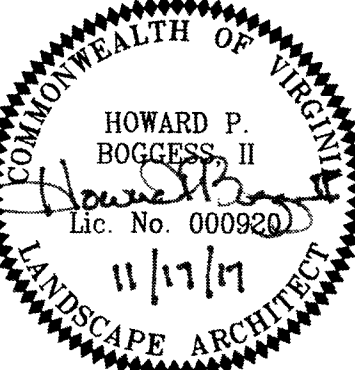
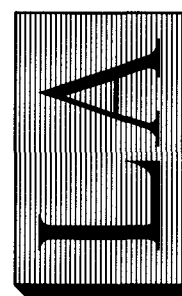
AVAILABLE FIRE FLOW NOTE:

FIRE FLOW MODELING WAS PERFORMED BY THE WESTERN VIRGINIA WATER AUTHORITY, AND IS REFLECTIVE OF CALCULATED CHANGES TO THE SYSTEM BEING CONSTRUCTED AS OF THE DATE OF THESE PLANS. THE FIRE FLOWS LISTED ON THIS SHEET ARE CALCULATED AT 20 PSI RESIDUAL PRESSURE FOR EACH OF THE PROPOSED NEW HYDRANTS.

FIRE PROTECTION NOTES:

- THE PROPOSED CONSTRUCTION IS OCCUPANCY USE GROUP I-2.
- CONTRACTOR SHALL PROVIDE A KNOX BOX KEY BOX, MODEL 3200 SERIES OR ABOVE, TO BE INSTALLED AT THE MAIN ENTRANCE TO THE STRUCTURE. THE CONTRACTOR SHALL VERIFY MOUNTING LOCATION WITH THE ROANOKE CITY FIRE MARSHAL.
- FIRE DEPARTMENT CONNECTION (FDC) IS LOCATED IN FRONT OF THE ACCESSIBLE PARKING SPACES, NEAR THE MAIN ENTRANCE AREA.
- THE FDC SHALL HAVE A KNOX BOX LOOKING CAP.
- PROPOSED FIRE HYDRANTS ON FRONT SIDE OF THE BUILDING SHALL BE PUBLIC. THE PROPOSED HYDRANT ON REAR SIDE OF THE BUILDING SHALL BE PRIVATE.
- EXISTING AND PROPOSED FIRE HYDRANT FLOW RATES HAVE BEEN PROVIDED BY THE WESTERN VIRGINIA WATER AUTHORITY AND ARE UNDERSTOOD TO BE CALCULATED AT 20 PSI RESIDUAL PRESSURE.
- THE PROPOSED FACILITY IS A THREE-STORY STRUCTURE, AND AN ELEVATOR IS PROPOSED. THE ELEVATOR LOCATION IS SHOWN ON THIS PLAN. THE FIRE DEPARTMENT ACCESS INFORMATION SHALL BE FOUND ON THE ARCHITECTURAL PLANS AND IS NOT INCLUDED IN THIS PLAN SET.

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



SITE AND UTILITIES LAYOUT

COMPREHENSIVE DEVELOPMENT PLAN
FOR
PHEASANT RIDGE ASSISTED LIVING
PREPARED FOR
SMITH/PACKETT MED-COM, L.L.C.
SITUATED AT 4414 PHEASANT RIDGE ROAD, SW
CITY OF ROANOKE, VIRGINIA

NO.	DATE	DESCRIPTION	REVISIONS
1	11/7/17	REVISION: SANITARY SEWER	
DATE: June 23, 2017			
SCALE: 1" = 30'			
COMMISSION NO. 16-218			
SHEET 3 OF 19			