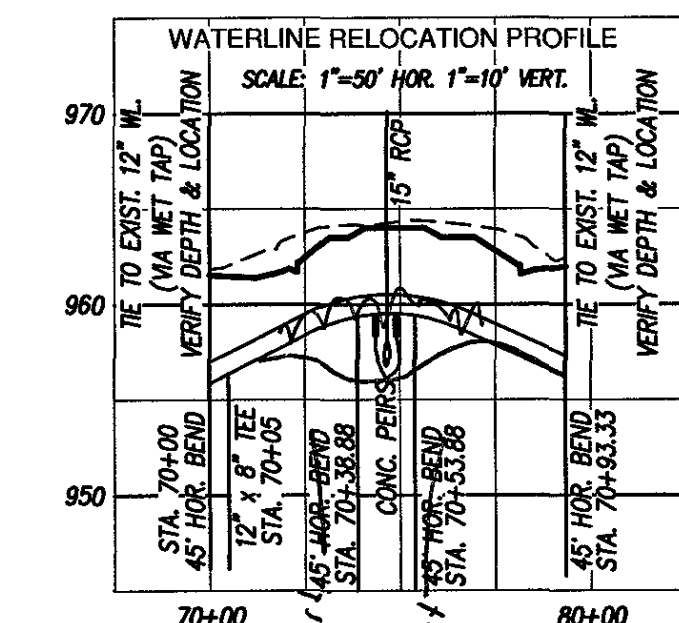
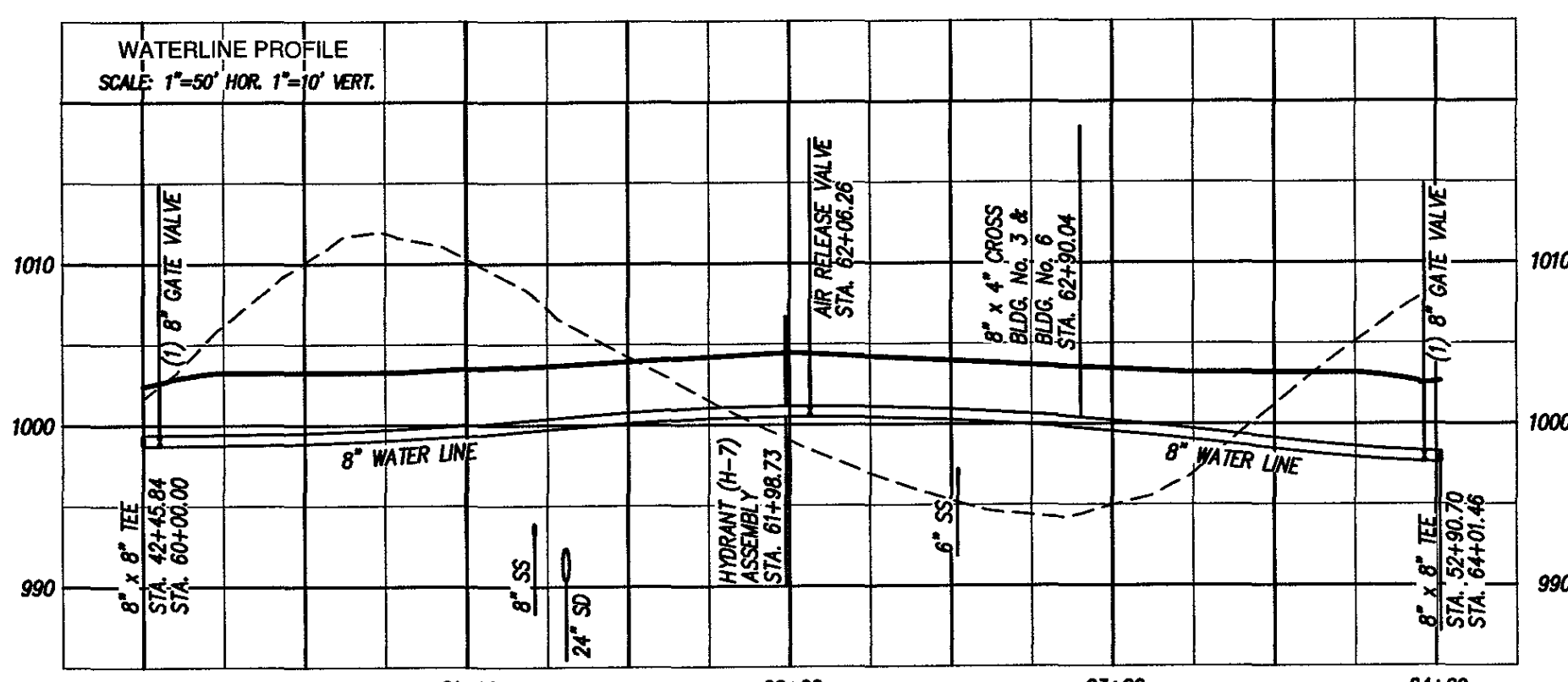
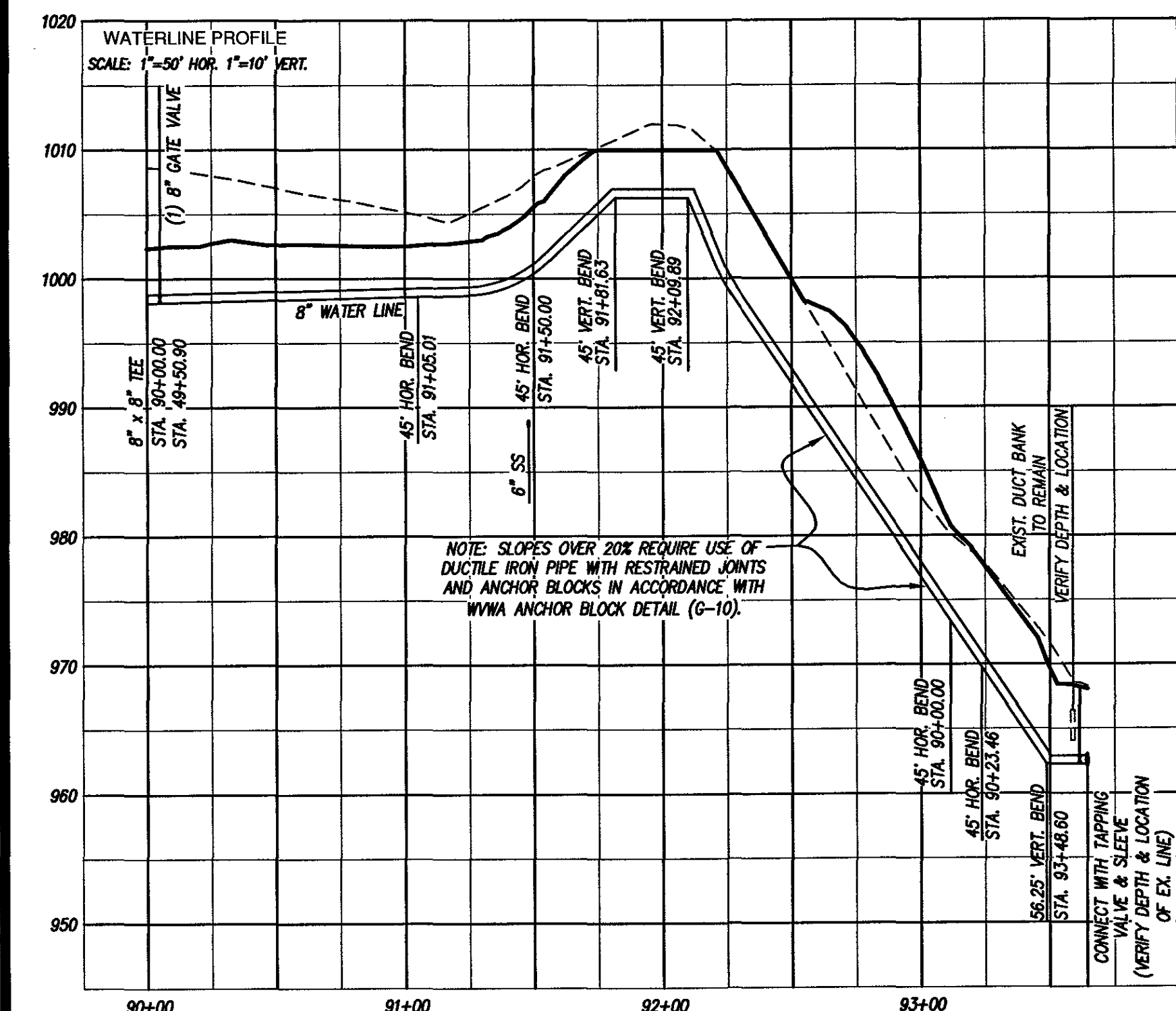
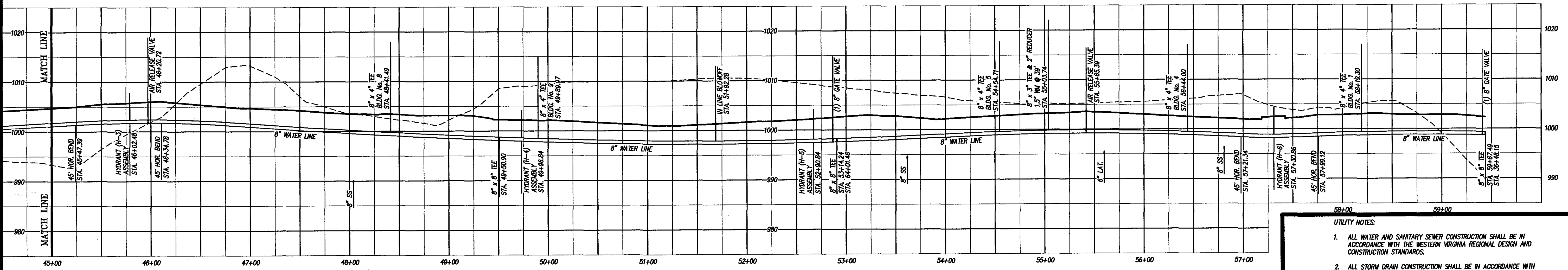
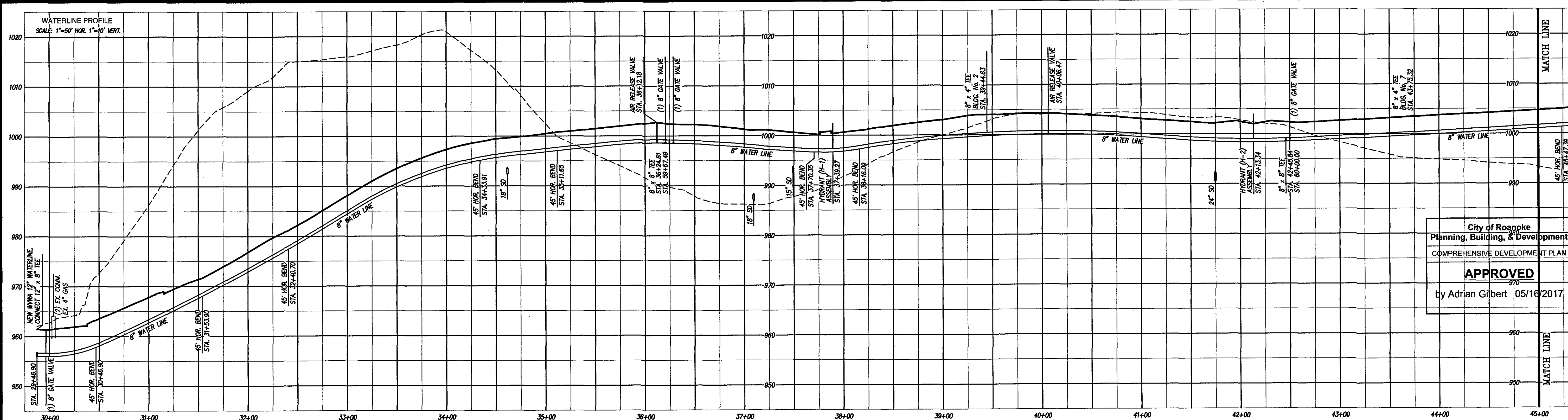
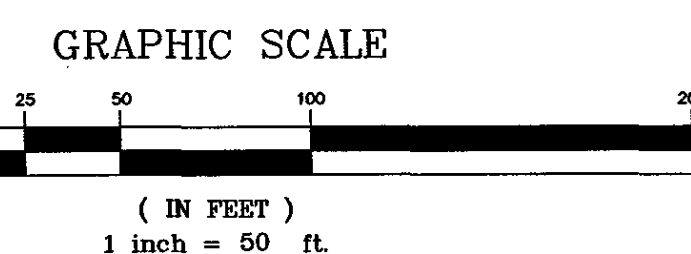




- WATER LINE RELOCATION NOTES:
1. VERIFY LOCATION AND DEPTH OF EXIST. WATER LINE.
 2. PORTION OF EXIST. WATER LINE TO BE ABANDONED IN PLACE.
 3. COORDINATE INTERRUPTION IN WATER SERVICE WITH THE WMA AND CITY OF ROANOKE.



- UTILITY NOTES:
1. ALL WATER AND SANITARY SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE WESTERN VIRGINIA REGIONAL DESIGN AND CONSTRUCTION STANDARDS.
 2. ALL STORM DRAIN CONSTRUCTION SHALL BE IN ACCORDANCE WITH VDOT'S ROAD AND BRIDGE STANDARDS AND SPECIFICATIONS.
 3. ALL WATER AND SANITARY SEWER LINES SHALL HAVE A MINIMUM OF 3.0 FEET OF COVER.
 4. 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 CAN NOT BE ACHIEVED, CONCRETE PIERS SHALL BE UTILIZED IN ACCORDANCE WITH THE WESTERN VIRGINIA WATER AUTHORITY'S WATER AND SANITARY SEWER STANDARDS.
 5. SANITARY SEWER MAIN PIPE MATERIAL SHALL BE PVC, SDR-35, EXCEPT AS NOTED, OR APPROVED EQUAL.
 - 5.1. ALL SANITARY SEWER LATERAL PIPE MATERIAL SHALL BE, PVC SDR-26.
 6. CONNECTION TO EXISTING SANITARY SEWER MANHOLE WILL BE BY MEANS OF A CORE DRILL WITH NEW RUBBER BOOT INSTALLED. A WESTERN VIRGINIA WATER AUTHORITY INSPECTOR MUST BE ON SITE DURING CONNECTION TO MANHOLE. 48 HOUR NOTICE REQUIRED.
 7. NEW WATERLINE MAIN PIPE MATERIAL SHALL BE C900 PVC DR14 8" WATERLINES, UNLESS OTHERWISE INDICATED, OR APPROVED EQUAL.
 8. ALL STORM DRAIN CONSTRUCTION SHALL BE IN ACCORDANCE WITH VDOT STANDARDS.
 - 8.1. ALL CMP PIPE SHALL BE ALUMINIZED STEEL, TYPE II.
 - 8.2. 96" CMP PIPE SHALL BE 12 GAUGE, SEE PROFILE FOR SPECIFIED GAUGE FOR ALL OTHER CMP PIPE.
 - 8.3. CMP PIPE BANDS SHALL BE MIN. 2" WIDE & ALL FITTINGS SHALL BE REINFORCED PER ASTM 998.
 - 8.4. ALL HOPE PIPE SHALL BE ADS N-12, OR APPROVED EQUAL.
 - 8.5. ALL RCP PIPE SHALL BE CLASS III UNLESS OTHERWISE INDICATED.
 9. ALL NEW DROP INLETS AND STORM DRAIN MANHOLES SHALL HAVE VDOT STD. IS-1, INLET SHAPING.
 10. ALL DRAINAGE STRUCTURES DEEPER THAN 4.0 FEET SHALL HAVE STEPS (VDOT STD. ST-1) INSTALLED.
 11. SAFETY SLABS (VDOT STD. SL-1) ARE REQUIRED IN ALL NEW DRAINAGE STRUCTURES WITH A DEPTH OF 12.0 FEET OR GREATER. THE SPACING OF THE SLABS SHOULD BE 8 TO 12 FEET WITH NO SAFETY SLAB LOCATED WITHIN 6 FEET FROM THE TOP OR BOTTOM OF THE STRUCTURE.
 12. NYLOPLAST DRAIN BASINS ARE A PRODUCT OF ADS. CONTACT ADS FOR ORDERING INFORMATION.
 13. NEW STORM PIPE SHALL BE CUT OR CORE DRILLED INTO EXISTING STORM STRUCTURES AND SEALED WITH MORTAR, AND CONCRETE MASONRY UNITS IF NEEDED, IN THE PUBLIC RIGHT-OF-WAY. SEALING SHALL BE COMPLETED ON INSIDE OF STORM STRUCTURE OR INSIDE AND OUTSIDE OF STRUCTURE.

COMPREHENSIVE DEVELOPMENT PLAN
FOR
DISTRICT VUE APARTMENTS
PREPARED FOR
SOUTHEASTERN SITE ACQUISITIONS
SITUATED ALONG ORANGE AVENUE
THE CITY OF ROANOKE, VIRGINIA

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

PHONE: (540) 774-4411
FAX: (540) 772-9445
P.O. BOX 20669
ROANOKE, VIRGINIA 24018
E-MAIL: MAIL@LUMSDENPC.COM

COMMONWEALTH OF VIRGINIA
ANDREW P. LUMSDEN
Lic. No. 052216
4/6/17
PROFESSIONAL ENGINEER

REVISIONS	
NO.	DESCRIPTION
1	
2	
3	
4	
5	

DATE: April 6, 2017
SCALE: AS SHOWN
COMMISSION NO.: 15-005
SHEET 12 OF 22