

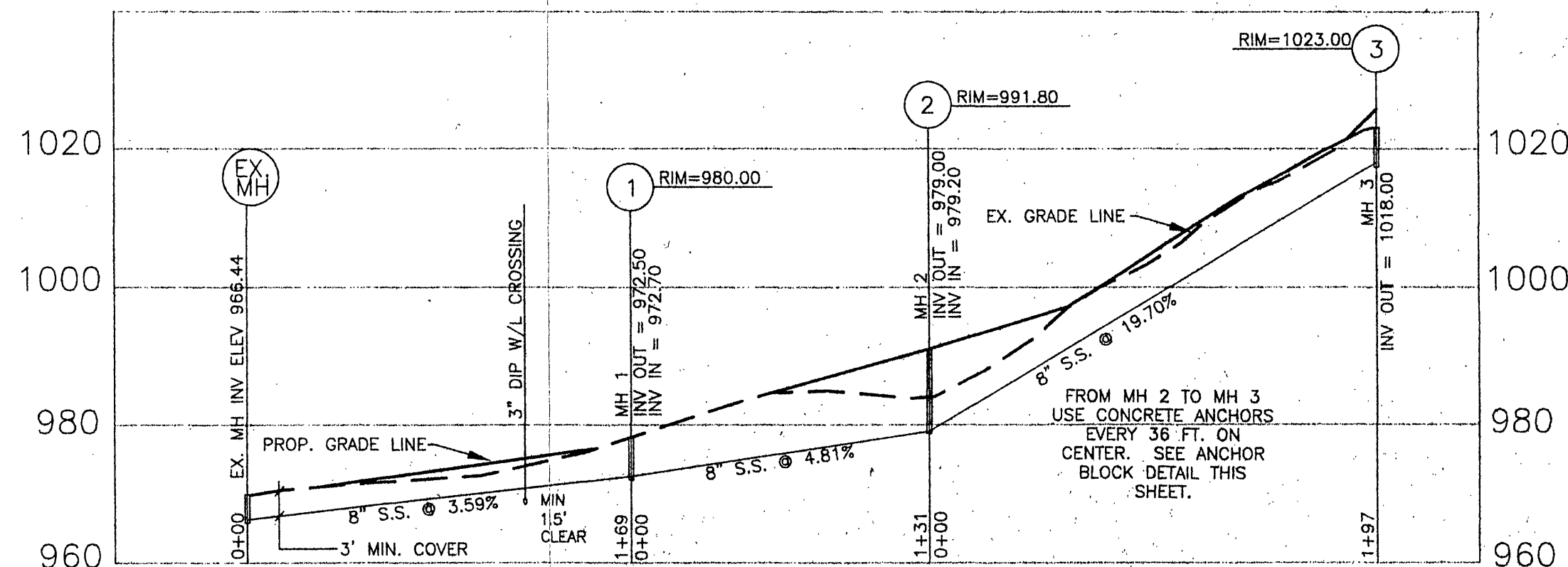
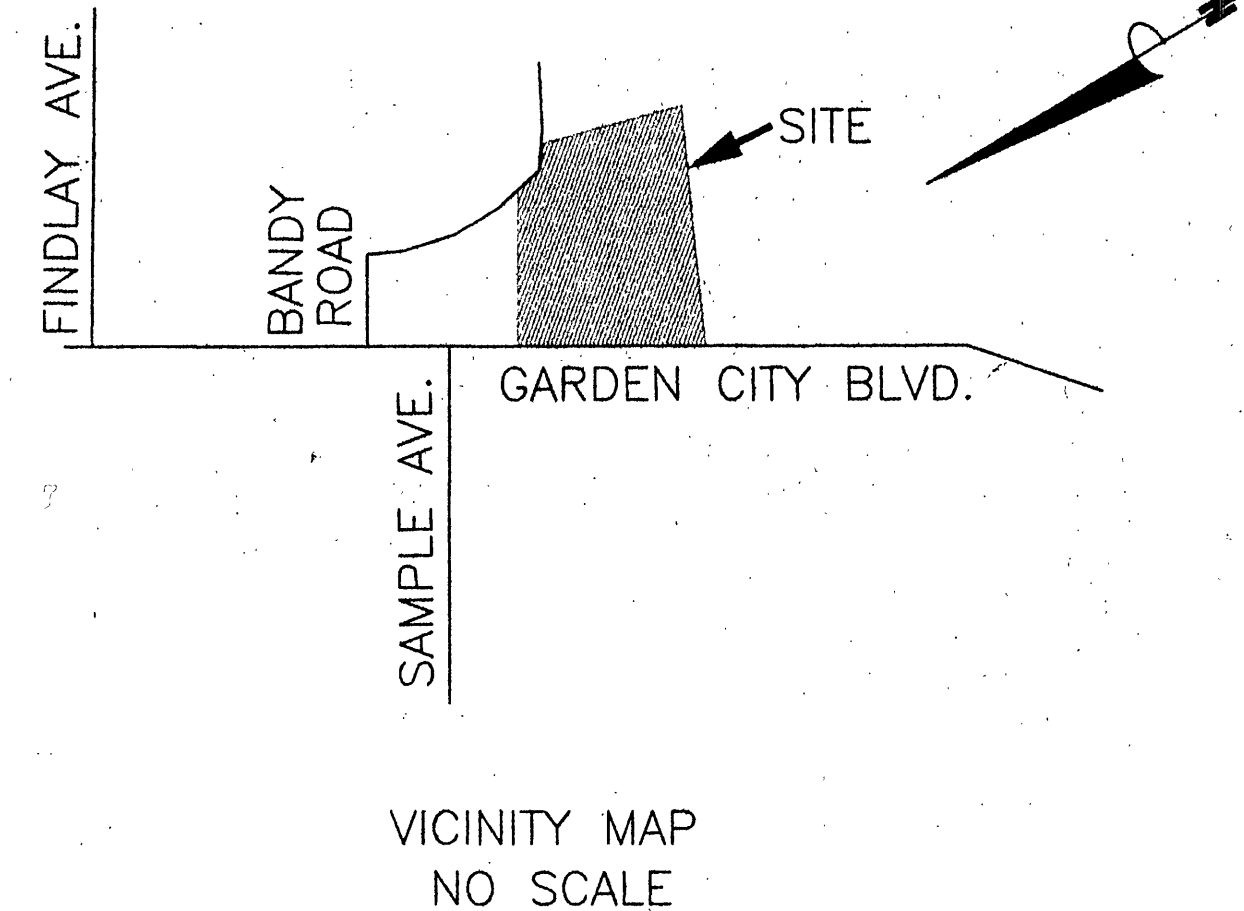
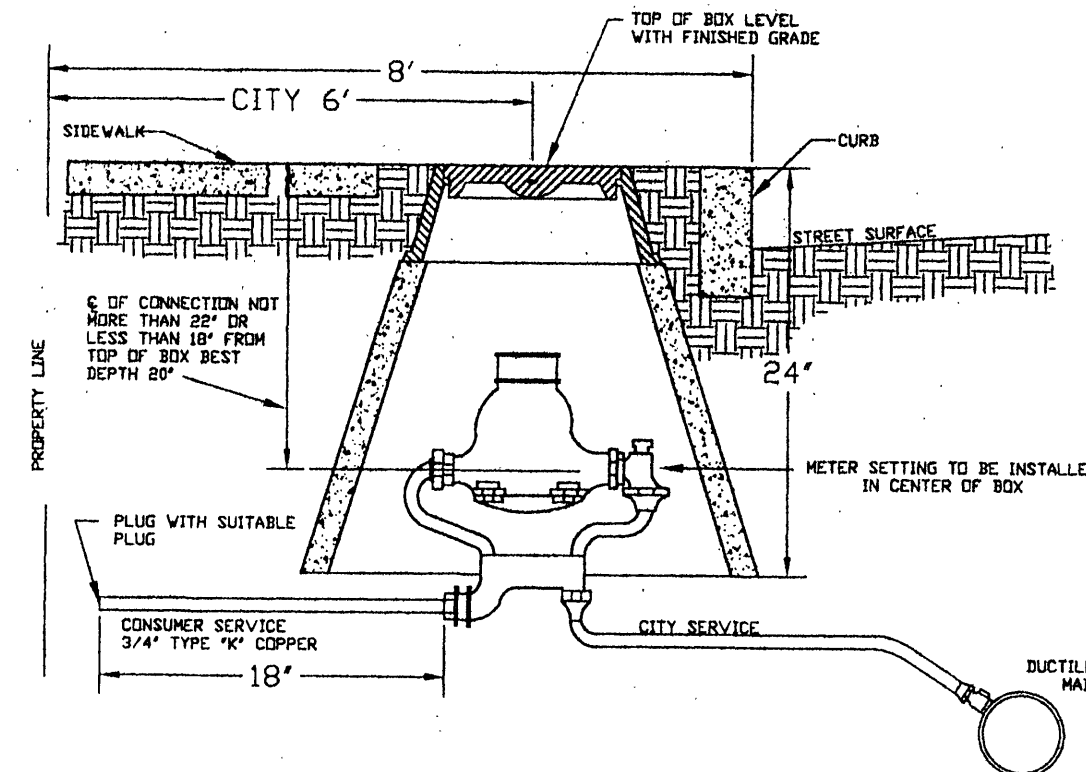
# GENERAL SITE NOTES:

- THIS SITE DOES NOT LIE WITHIN A FEMA DESIGNATED FLOOD ZONE.
- TOPOGRAPHIC INFORMATION FROM CITY OF ROANOKE PLANIMETRIC MAPS (5.0' CONTOUR INTERVAL) THE UTILITY CONTRACTOR SHALL CONTACT ENGINEERING CONCEPTS, INC. FOR STAKING OF S.S. MHS. THE CONTRACTOR SHALL CONTACT ENGINEERING CONCEPTS, INC. FOR STAKING OF THE SANITARY SEWER PRIOR TO ORDERING MANHOLES. FIELD VERIFICATION OF DESIGN LOCATION AND DEPTH REQUIRED PRIOR TO CONSTRUCTION.
- CROSS ACCESS EASEMENTS SHOWN SHALL BE MAINTAINED BY THE GARDEN CITY ESTATES HOMEOWNERS ASSOCIATION.
- ALL SANITARY SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY STANDARDS.
- SEE SUBDIVISION PLAT FOR LOT DELINEATIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS.
- THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION TO ELIMINATE THE POSSIBILITY OF ANY DISTURBANCE OR DAMAGE TO PUBLIC OR PRIVATELY OWNED UTILITIES, STRUCTURES, OTHER FACILITIES OR OBSTRUCTIONS RESULTING FROM HIS ACTIVITIES. TO THIS END, CONTRACTOR SHALL, AT NO ADDITIONAL COST TO THE OWNER, TAKE ALL MEASURES NECESSARY TO PROVIDE, AND SHALL BE SOLELY RESPONSIBLE FOR, TEMPORARY SUPPORT AND SHORING, ADEQUATE PROTECTION, AND MAINTENANCE OF CONTINUOUS OPERATION OF ALL UNDER AND ABOVE GROUND UTILITY SERVICES. THE CONTRACTOR SHALL CALL MISS UTILITY AT 1-800-552-7001 48 HOURS PRIOR TO DIGGING. ALL UTILITY TIE-INS ARE TO BE COORDINATED WITH THE APPROPRIATE PUBLIC OR PRIVATE UTILITY AUTHORITY BEFORE COMMENCING WORK ON EXISTING UTILITIES. THE CONTRACTOR SHALL SUPPLY ALL UTILITY COMPANIES WITH APPROVED PLAN COPIES FOR COORDINATION OF EXTENSION AND TIE-IN EFFORTS.
- SITE CONDITIONS MAY NECESSITATE SLIGHT DEVIATIONS IN ALIGNMENT, GRADE, AND/OR LOCATION OF NEW FACILITIES FROM THE PLAN ALIGNMENT. THE CONTRACTOR SHALL CONSTRUCT THE NEW FACILITIES TO SUCH DEVIATIONS AS DIRECTED BY THE ENGINEER WITHOUT ADDITIONAL COST OR FINE TO THE OWNER. SHOULD PLAN DEVIATIONS BE REQUIRED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO UNDER TAKING ANY REVISION.
- ALL CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE CURRENT BOCA AND/OR STATE AND LOCAL BUILDING CODES AS WELL AS THE CONSTRUCTION STANDARDS AND SPECIFICATIONS OF THE VIRGINIA DEPARTMENT OF TRANSPORTATION.
- THE CONTRACTOR SHALL MAINTAIN THE CONSTRUCTION AREA IN A SAFE AND ACCEPTABLE MANNER AND SHALL BE RESPONSIBLE FOR REMEDIATING ANY DAMAGES RESULTING FROM HIS FAILURE TO DO SO.
- THE CONTRACTOR SHALL MAINTAIN LIMITS OF CONSTRUCTION WITHIN THE PROPERTY BOUNDARIES OR EASEMENTS AS INDICATED.
- AN APPROVED SET OF PLANS SHALL BE KEPT ON THE SITE AT ALL TIMES.
- ALL CONSTRUCTION DEBRIS SHALL BE CONTAINERIZED IN CONFORMANCE WITH THE VIRGINIA LITTER CONTROL ACT AND DISPOSED OF IN A MANNER AND LOCATION ACCEPTABLE TO THE GOVERNING JURISDICTION. AT LEAST ONE TRASH RECEPTACLE SHALL BE ONSITE DURING CONSTRUCTION.
- TEMPORARY TOILETS SHALL BE PROVIDED ONSITE AT A RATIO OF ONE TOILET PER 30 WORKERS DURING THE CONSTRUCTION PERIOD.
- GRADE STAKES SHALL BE SET FOR PRIVATE DRIVE AND SANITARY SEWER.
- HOUSE LOCATIONS ARE SUBJECT TO THE MINIMUM REQUIREMENTS OF CITY OF ROANOKE ZONING ORDINANCE RM-1 DISTRICT.

## SITE TABULATION

TOTAL AREA:-----11.9 ACRES  
CURRENT ZONING:-----RM-1  
MIN. LOT SIZE:-----5000 S.F.  
MIN. FRONTAGE:-----50 FT.  
MIN. FRONT YARD:-----30 FT.  
MIN. REAR YARD:-----25 FT.  
MIN. SIDE YARD:-----20% OF TOTAL LOT WIDTH OR 10 FT. WHICHEVER IS LEAST, BUT NO LESS THAN 4 FT.  
PROPOSED USE:-----S.F. DETACHED

## WATER METER STANDARD SETTING FOR 5/8"



## SANITARY SEWER PROFILE

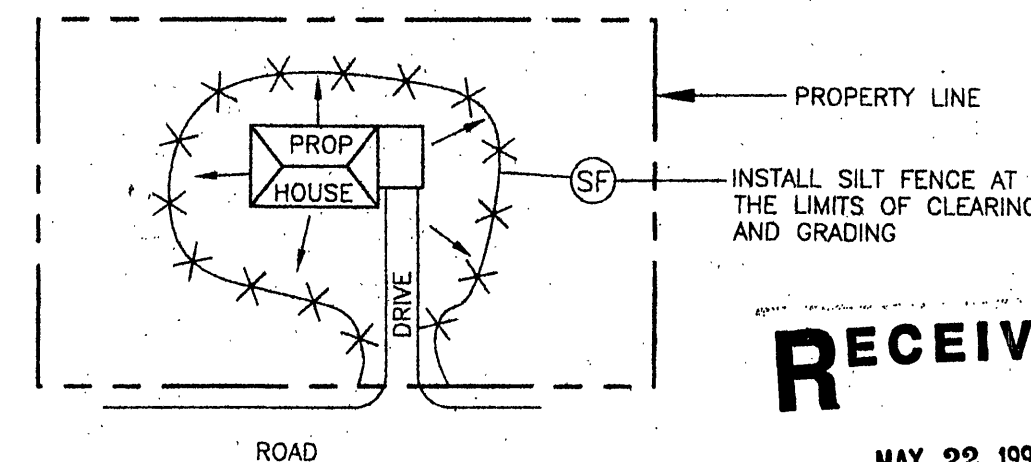
SCALE: 1"= 60' HOR  
1"= 20' VERT

NOTE: THE CONTRACTOR SHALL CONTACT ENGINEERING CONCEPTS, INC. FOR STAKING OF THE SANITARY SEWER PRIOR TO ORDERING MANHOLES. FIELD VERIFICATION OF DESIGN LOCATION AND DEPTH REQUIRED PRIOR TO CONSTRUCTION.

## E & S NOTES

- ALL E&S MEASURE SHALL BE IN ACCORDANCE WITH CITY AND STATE STANDARDS.
- THE CITY OF ROANOKE INSPECTOR RESERVES THE RIGHT TO REQUIRE ADDITIONAL E&S MEASURES DURING CONSTRUCTION.
- THERE SHALL NOT BE MORE THAN 500 FT. OF UTILITY TRENCH OPEN AT ONE TIME.

## TYPICAL E&S FOR INDIVIDUAL RESIDENTIAL LOTS



**RECEIVED**

MAY 22 1997

CITY OF ROANOKE  
DEPARTMENT OF PLANNING AND  
COMMUNITY DEVELOPMENT

## WATER NOTES

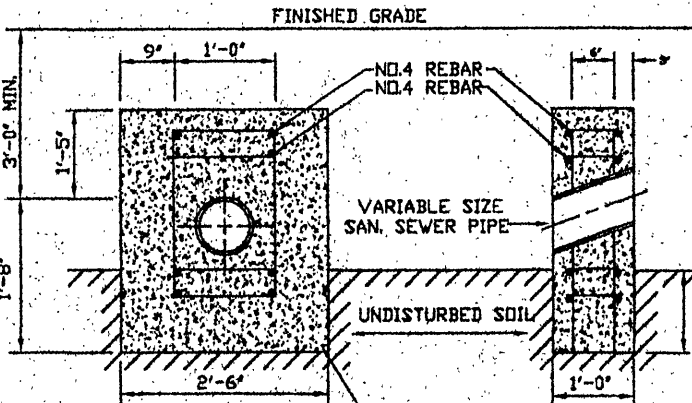
- A minimum cover of three (3) feet is required over proposed lines.
- Contractor shall be responsible for locating and uncovering valve vaults after paving and adjustment to final grade if necessary.
- All existing utilities may not be shown or may not be shown in the exact location. The contractor shall comply with the State Water Works Regulations, Section 12.05.03, where lines cross.
- All trenches in existing or future highway right-of-ways shall be compacted according to V.D.D.T. standards.
- Lines shall be staked prior to construction.
- Water main shall be minimum Class 52 Ductile Iron in accordance to AWWA C151 or DR-14 PVC in accordance with AWWA C-900.

## SEWER NOTES

- A minimum cover of three (3) feet is required over proposed lines.
- Contractor shall be responsible for locating and uncovering all manholes after paving. Manhole tops shall be adjusted to grade if necessary.
- All existing utilities may not be shown or may not be shown in the exact location. The contractor shall comply with State Water Works Regulations, Section 12.05.03, where lines cross.
- House connections are to be made with 4" pipe installed at a minimum grade of 1/4 inch to 1 foot in R/W.
- Laterals from manholes shall be PVC or Ductile Iron of sufficient length to provide two (2) feet of bearing on natural ground. The transition from ductile iron to asbestos cement or concrete pipe shall be made with an adapter coupling in R/W.
- All trenches in existing or future rights-of-way shall be compacted according to V.D.D.T. standards.
- Lines shall be staked prior to construction.

## DEVELOPMENT PLAN

1"=60'

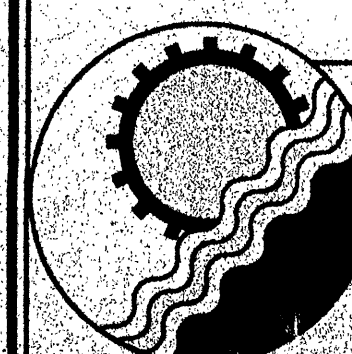


## ANCHOR BLOCK

- GRADES 80% TO 35% --- 36" FT ON CENTER
- GRADES 35% TO 50% --- 54" FT ON CENTER
- GRADES 50% TO 60% --- 72" FT ON CENTER
- WITH WRITTEN APPROVAL OF UTILITY DIRECTOR

## GENERAL UTILITY NOTES:

- ALL UTILITY CONSTRUCTION SHALL CONFORM TO THE CITY OF ROANOKE STANDARDS & SPECIFICATIONS AND ALL OTHER GOVERNING REQUIREMENTS.
- CONSTRUCTION AND START-UP OF ALL WORK SHALL NOT INTERFERE WITH THE OPERATION OF WATER AND SEWERAGE FACILITIES. THE CONTRACTOR SHALL COORDINATE AND SCHEDULE ALL WORK WITH THE APPROPRIATE AGENCIES AS REQUIRED.
- MINIMUM COVER ON ALL PIPE SHALL BE 3 FEET, UNLESS OTHERWISE INDICATED IN THESE PLANS.
- WHERE IT IS NECESSARY TO DEFLECT PIPE EITHER HORIZONTALLY OR VERTICALLY, PIPE JOINT DEFLECTION SHALL NOT EXCEED 75% OF THE MAXIMUM MANUFACTURER'S RECOMMENDATION.
- ALL PIPING SHALL BE PROPERLY SUPPORTED. ALL PIPING WHICH WILL BE PRESSURIZED DURING OPERATION SHALL BE RESTRAINED.



## ENGINEERING CONCEPTS, INC.

20 S. ROANOKE ST., PO BOX 619  
FINCASLE, VIRGINIA 24090  
540.473.1253 FAX: 540.473.1254

4656 BRAMBLETON AVE. SW  
ROANOKE, VIRGINIA 24018  
540.776.5715 FAX: 540.776.8543

Drawn: CEV  
Designed: CEV/JDE  
Checked: LWW/JDE  
Approved: LWW

DEVELOPMENT PLAN  
GARDEN CITY ESTATES  
JAMES R. & AUGUSTINE D. SMITH  
CITY OF ROANOKE, VIRGINIA

AS SHOWN  
MAY 97  
PROJECT: 96032  
1 of 1

TAX NO. 4260511

PRELIMINARY