GENERAL NOTES

1. PROVIDE NEW MATERIALS AND WORKMANSHIP IN CONFORMANCE WITH ALL APPLICABLE CODES, STATE AND FEDERAL LAWS, LOCAL ORDINANCES, INDUSTRY STANDARDS, AND OTHER CRITERIA WHICH WOULD NORMALLY APPLY TO WORK OF THIS NATURE. NOTIFY THE ENGINEER IMMEDIATELY UPON DISCOVERING A CONFLICT IN CODES, ORDINANCES, STANDARDS, OR OTHER CRITERIA. APPLICABLE CODES AND STANDARDS INCLUDE, BUT ARE NOT NECESSARILY LIMITED TO, THE FOLLOWING:
   a. BOCA – BASIC CODES
   b. ROANOKE COUNTY
   c. VDOT – VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE STANDARDS AND SPECIFICATIONS
   d. VIRGINIA EROSION AND SEDIMENT CONTROL REGULATIONS AND HANDBOOK, LATEST EDITION
   e. OSHA – OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
   f. ASTM – AMERICAN SOCIETY FOR TESTING AND MATERIALS
2. MAINTAIN A SET OF APPROVED PLANS ON SITE AT ALL TIMES DURING CONSTRUCTION.
3. OBTAIN EACH REQUIRED PERMIT PRIOR TO COMMENCING THAT PART OF THE WORK. PAY REQUIRED FEES.
4. NOTIFY THE ENGINEER IMMEDIATELY UPON DISCOVERY OF CONDITIONS WHICH DIFFER FROM THOSE SHOWN ON THE PLANS.
5. COMPLY WITH LOCAL ORDINANCES FOR BURNING OF WASTE. TRANSPORT WASTE MATERIALS AND UNSUITABLE MATERIALS FROM OWNER'S PROPERTY.
6. COORDINATE BUILDING DIMENSIONS WITH ARCHITECTURAL PLANS.
7. A PRECONSTRUCTION MEETING MUST TAKE PLACE PRIOR TO COMMENCING WORK. AS A MINIMUM, THE CONTRACTOR, OWNER'S AGENT AND COUNTY'S AGENT MUST ATTEND.
8. VERIFY THE LOCATION AND ELEVATION OF EACH EXISTING UNDERGROUND UTILITY IN AREAS OF CONSTRUCTION PRIOR TO COMMENCEMENT OF WORK. CONTACT ENGINEER IMMEDIATELY IF THERE APPEARS TO BE A CONFLICT. UPON DISCOVERY OF A UTILITY WHICH IS NOT SHOWN, AND UPON DISCOVERY OF A LOCATION OR ELEVATION WHICH DIFFERS FROM THAT SHOWN. TO LOCATE UTILITIES, CALL "MISS UTILITY", 1–800–552–7001. UTILITY LOCATIONS SHOWN ARE THE RESULT OF A COMBINATION OF FIELD LOCATION AND EXISTING INFORMATION. LOCATIONS ARE APPROXIMATE.
9. REPAIR ALL DAMAGE TO ANY UTILITY, PUBLIC OR PRIVATE, CAUSED AS A RESULT OF CONSTRUCTION ACTIVITIES, AT NO ADDITIONAL COST TO OWNER.
10. NOTIFY OWNERS OF UTILITIES IN AREAS OF CONSTRUCTION PRIOR TO COMMENCEMENT OF EXCAVATION.
11. SIGNAGE SHALL COMPLY WITH THE APPLICABLE REGULATIONS OF THE COUNTY. A SEPARATE PERMIT IS REQUIRED.

WATER NOTES:

1. ALL MATERIALS, CONSTRUCTION, ETC. SHALL MEET ALL THE SPECIFICATIONS AND REQUIREMENTS OF THE COMMONWEALTH OF VIRGINIA/STATE BOARD OF HEALTH "WATERWORKS REGULATIONS", LATEST EDITION, AS WELL AS THOSE OF THE LOCAL GOVERNING AUTHORITY. PROVIDE QUALITY WORKMANSHIP.
2. MINIMIZE ANY DISTURBANCE TO EXISTING UTILITY SERVICES DURING CONSTRUCTION.
3. PROVIDE 3.0 FEET MINIMUM COVER.
4. WATER LINES SHALL BE D.I.P. CLASS 52 AS A MINIMUM. INSTALL WATER BOXES BEYOND THE CURB LINE AND STUB THE SERVICE LINE. THE COUNTY SHALL INSTALL THE METER.
5. MAKE ALL PIPE JOINTS IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
6. PRESSURE TEST THE WATER MAINS AT TWO TIMES THE WORKING PRESSURE FOR AT LEAST TWO HOURS WITH NO LEAKAGE.
7. LOCATE AND UNCOVER VALVE VAULTS AFTER PAVING

SANITARY SEWER NOTES

1. SEWER PIPE SHALL BE PVC SDR–35.
2. ALL SANITARY LATERALS WITHIN RIGHTS–OF–WAY AND EASEMENTS SHALL BE FOUR (4) INCH DIAMETER WITH A MINIMUM GRADE OF 2.08%, (1/4":1'). MATERIAL TO BE PVC SDR–35. THE COUNTY SHALL TAP THE EXISTING SANITARY LINE AND BRING LATERALS TO THE RIGHT–OF–WAY LINE; HOWEVER, THE COUNTY MAY ALLOW THE CONTRACTOR TO DO SEWER CONNECTIONS WITH COUNTY APPROVED MATERIALS AND COUNTY INSPECTION.

DIMENSIONAL NOTES

1. IN GENERAL DIMENSIONS ARE TO BOTTOM FACE OF CURB, CENTER OF PAINTED LINE, EDGE OF PAVEMENT, FACE OF WALL.

PAVING NOTES

1. SEE PAVEMENT SECTION ON SHEET C2.
2. SAW CUT EDGE OF EXISTING PAVEMENT WHERE NEW IS TO MEET EXISTING.
3. PROVIDE SMOOTH TRANSITION FROM EXISTING TO NEW PAVEMENT AND CURB.
4. THE PAVEMENT DESIGN SHOWN IS BASED ON A SUBGRADE RATING OF CBR 10 OR GREATER. SHOULD THE ACTUAL SUB GRADE CBR VALUES BE LESS THAN 10, AN ALTERNATE PAVEMENT DESIGN MUST BE APPROVED BY THE COUNTY OF ROANOKE.
5. DO NOT LAY PAVEMENT BASE STONE UNTIL ALL UTILITIES, INCLUDING STORM SEWER, ARE IN PLACE.

SITE SUMMARY

OWNER: L.S. WALDROP
500E. 4TH STREET, SALEM, VA 24153
703–389–8101

DEVELOPER: SAME

TAX MAP NUMBER: 56.01–1–17.1

SIZE: 6.49 AC

ZONING: R1

MINIMUM LOT SIZE REQUIRED: 7200 SF

MINIMUM LOT FRONTAGE REQUIRED: 60 FEET

LOT FRONTAGE PROVIDED: 70 FEET

SETBACKS: FRONT 30 FEET
SIDE 10 FEET
REAR 25 FEET

MAXIMUM LOT COVERAGE ALLOWED:
BUILDINGS: 30%
TOTAL: 50%

GENERAL UTILITY NOTES

1. SUPPLY AND INSTALL ALL MATERIALS AND METHODS FOR WATERLINES, SANITARY SEWERS AND STORM DRAINAGE IN ACCORDANCE WITH THE SPECIFICATIONS AND REQUIREMENTS OF ROANOKE COUNTY AND THE VIRGINIA DEPARTMENT OF TRANSPORTATION "ROAD AND BRIDGE STANDARDS AND SPECIFICATIONS", LATEST EDITION.
2. OBTAIN ALL REQUIRED PERMITS AND NOTIFY APPROPRIATE OFFICIALS 48 HOURS PRIOR TO COMMENCEMENT OF WORK. OBTAIN INFORMATION FROM ROANOKE COUNTY CONCERNING PERMITS AND CONNECTIONS TO EXISTING LINES.
3. ALL WORK SHALL BE SUBJECT TO INSPECTION BY ROANOKE COUNTY. NOTIFY APPROPRIATE OFFICIALS PRIOR TO COMMENCEMENT OF WORK.
4. SITE SHALL BE TO SUB GRADE PRIOR TO INSTALLATION OF UTILITIES. ALL UTILITIES SHALL BE IN PLACE PRIOR TO PLACEMENT OF PAVEMENT BASE MATERIAL.
5. USE SELECT MATERIAL FREE FROM FROST, LARGE CLODS, STONES, AND DEBRIS FOR BACK FILL FROM THE BOTTOM OF THE TRENCH TO TWELVE (12) INCHES ABOVE THE PIPE.
6. MINIMIZE ANY DISTURBANCE TO EXISTING WATER SERVICE, SEWER LINES OR ANY OTHER UTILITY DURING CONSTRUCTION AND PROVIDE QUALITY WORKMANSHIP.
7. MAKE ALL PIPE JOINTS IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND THE COUNTY'S SPECIFICATIONS. MAKE JOINTS BETWEEN DIFFERENT PIPE MATERIALS WITH STANDARD FITTINGS MANUFACTURED FOR THE PURPOSE.
8. MAINTAIN ALL WATER LINES AT TEN (10) FEET HORIZONTAL SEPARATION FROM SEWER LINES AND MANHOLES; MEASURE THE DISTANCE EDGE–TO–EDGE. WHEN LOCAL CONDITIONS PREVENT THE DESIRED HORIZONTAL SEPARATION, THE WATERLINE MAY BE LAID CLOSER TO THE SEWER OR MANHOLE PROVIDED THAT THE BOTTOM OF THE WATERLINE SHALL BE AT LEAST EIGHTEEN (18) INCHES ABOVE THE TOP OF THE SEWER. WHERE THIS VERTICAL SEPARATION CANNOT BE OBTAINED, CONSTRUCT THE SEWER OF AWWA APPROVED WATER PIPE AND PRESSURE TREAT IN PLACE PRIOR TO BACKFILLING. THE SEWER MANHOLE SHALL BE OF WATERTIGHT CONSTRUCTION TESTED IN PLACE.
9. SEWER AND WATER TAPS SHALL BE LOCATED BY THE CONTRACTOR AND MADE BY THE COUNTY AT THE DEVELOPER'S EXPENSE.
10. LOCATE AND UNCOVER VALVE VAULTS AND MANHOLES AFTER PAVING AND ADJUST TO FINAL GRADE, IF NECESSARY.
11. VERIFY THE LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES SHOWN ON THE PLANS IN AREAS OF CONSTRUCTION PRIOR TO STARTING WORK. CONTACT THE ENGINEER IMMEDIATELY IF:

    ANY LOCATION OR ELEVATION IS DIFFERENT FORM THAT SHOWN ON THE PLANS.

    IF THERE APPEARS TO BE ANY CONFLICT.

    UPON DISCOVERY OF ANY UTILITY NOT SHOWN ON THE PLANS.

    TO MISS UTILITIES, CALL "MISS UTILITY" OF VIRGINIA (TOLL FREE 1–800–552–7001) 48 HOURS BEFORE YOU DIG. THE CONTRACTOR IS RESPONSIBLE FOR ALL

    DAMAGE CAUSED TO ANY UTILITY, PUBLIC OR PRIVATE, AS A RESULT OF THIS WORK. EXISTING UTILITY LOCATIONS SHOWN ARE A RESULT OF A COMBINATION

    OF EXISTING INFORMATION AND FIELD LOCATION OF SURFACE FEATURES. LOCATIONS ARE APPROXIMATE.
12. REPAIR ALL DAMAGE CAUSED TO ANY UTILITY, PUBLIC OR PRIVATE, AS A RESULT OF THIS WORK AT NO ADDITIONAL COST TO OWNER.
13. PROVIDE A CONTINUOUS AND UNIFORM BEDDING IN THE TRENCH FOR ALL PIPE. REMOVE STONES AND ROCKS FOUND IN THE TRENCH FOR A DEPTH OF AT LEAST SIX (6) INCHES BELOW THE BOTTOM OF THE PIPE AND TAMP SELECT FILL BEDDING PROVIDED. AFTER THE PIPE HAS BEEN PLACED IN THE TRENCH, BACK FILL THE TRENCH WITH SELECT MATERIAL, THOROUGHLY COMPACT TO 90% (95% UNDER PAVEMENT) OF THE STANDARD PROCTOR (ASTM D–698) USING CARE NOT TO DAMAGE THE PIPE. USE VDOT STANDARD PB–1 TRENCH FOR STORM SEWER AND UB–1 FOR SANITARY SEWER AND WATER.
14. PLACE BACK FILL FOR ALL UTILITIES IN ACCORDANCE WITH THE COUNTY'S SPECIFICATIONS, AND THE FOLLOWING CRITERIA:

    (1) BACK FILL NO TRENCH UNTIL AUTHORIZED BY THE COUNTY. MATERIALS USED FOR BACK FILL FROM THE BOTTOM OF THE TRENCH TO TOP OF THE PIPE SHALL BE CRUSHER RUN, OR APPROVED EQUAL MATERIAL. THOROUGHLY AND CAREFULLY COMPACT THE BACK FILL MATERIAL.

    (2) COMPACT BACK FILL BY MECHANICAL TAMPING THROUGHOUT THE DEPTH OF THE TRENCH TO INSURE A SUITABLE SUBBASE ACCEPTABLE TO THE ROAD ENGINEER. IF THE MATERIAL TAKEN FROM THE DITCH IS NOT SUITABLE FOR BACK FILLING, REMOVE IT AND USE AN ACCEPTABLE MATERIAL FOR BACK FILLING THE TRENCH.
15. IN AREAS OF WATER LINE CONSTRUCTION, GRADES SHALL BE WITHIN SIX (6) INCHES OF FINISHED SUB GRADE PRIOR TO THE COMMENCEMENT OF THIS WORK.
16. MINIMUM COVER OVER WATER AND SANITARY SEWER LINES SHALL BE THREE (3) FEET.
17. THE COUNTY OF ROANOKE COUNTY SHALL MAKE ALL CONNECTIONS TO EXISTING WATER MAINS.
18. THE CONTRACTOR SHALL INSTALL ALL WATER SERVICE CONNECTIONS AND METER BOXES.
19. WATER PIPE SHALL BE DUCTILE IRON.
20. PIPES AND FITTINGS SHALL BE POLYVINYL.
21. CONNECT PIPE TO MANHOLES THROUGH PRE CAST OPENINGS AND JOIN WITH EITHER A FLEXIBLE BOOT ADAPTER OR A PIPE SEAL GASKET.
22. MAKE RESIDENTIAL SERVICE CONNECTIONS WITH A FOUR (4) INCH PIPE THROUGH A WYE OR TEE–WYE BRANCH FITTING AND SHALL BE INSTALLED ON A MINIMUM GRADE OF ONE–QUARTER (1/4") INCH PER ONE (1) FOOT FROM THE SEWER PIPE OR MANHOLE TO THE PROPERTY OR EASEMENT LINE WHERE A CLEANOUT SHALL BE PLACED AND THE SERVICE LATERAL PLUGGED / CAPPED UNTIL EXTENSION.
23. FIELD MARK FUTURE SERVICE CONNECTIONS BY A TREATED, SOLID WOODED (2"X4") MARKER THREE (3) FEET LONG SET VERTICALLY PLUMB WITH THE END OF THE CAPPED EXTENSION. PAINT THE TOPS OF THE MARKERS YELLOW AND SET FLUSH WITH THE FINISHED GRADE. SHOW THE LOCATION AND INVERT DEPTH OF THE SERVICE CONNECTION ON THE AS–BUILT PLANS.

GRADING NOTES

1. REMOVE TREES, SHRUBS, GRASS, AND OTHER VEGETATION, IMPROVEMENTS OR OBSTRUCTIONS AS REQUIRED TO PERMIT INSTALLATION OF NEW CONSTRUCTION. REMOVE TREES AND OTHER VEGETATION, INCLUDING STUMPS AND ROOTS, COMPLETELY IN AREAS REQUIRED FOR SUBSEQUENT SEEDING. CUT OFF TREES AND STUMPS IN AREAS TO RECEIVE FILL MORE THAN THREE FEET IN DEPTH TO WITHIN EIGHT INCHES OF THE ORIGINAL GROUND SURFACE.
2. BARRICADE OPEN EXCAVATIONS OCCURRING AS PART OF THIS WORK AND OPERATE WARNING LIGHTS AS RECOMMENDED BY AUTHORITIES HAVING JURISDICTION.
3. EXCAVATION FOR STRUCTURES:
   a. CONFORM TO ELEVATIONS AND DIMENSIONS SHOWN WITHIN A TOLERANCE OF PLUS OR MINUS 0.10 FOOT.
   b. PROVIDE TRUE AND STRAIGHT FOOTING EXCAVATIONS WITH UNIFORM LEVEL BOTTOMS OF THE WIDTH INDICATED TO ENSURE PROPER PLACEMENT AND COVER OF ALL REINFORCEMENT.
   c. REMOVE ALL LOOSE MATERIALS FROM THE EXCAVATION PRIOR TO PLACEMENT OF CONCRETE.
   d. PROVIDE A MINIMUM OF 2'–0" FROM FINISHED GRADE TO TOP OF ALL EXTERIOR WALL FOOTINGS.
   e. IF ROCK IS ENCOUNTERED IN A FOOTING EXCAVATION, UNDERCUT IT A MINIMUM OF 12" BELOW THE BOTTOM OF THE FOOTINGS AND FILL THE RESULTING OVER–EXCAVATION WITH CONTROLLED FILL.
4. CUT SURFACE UNDER PAVEMENTS TO COMPLY WITH CROSS SECTIONS, ELEVATIONS, AND GRADES AS INDICATED.
5. EXCAVATE TRENCHES TO UNIFORM WIDTH CONFORMING TO VDOT STANDARD PB–1 FOR STORM DRAINAGE PIPING. BACKFILL TRENCHES WITH CONTROLLED FILL.
6. PREVENT SURFACE WATER AND SUBSURFACE OR GROUND WATER FROM FLOWING INTO EXCAVATIONS AND FROM FLOODING PROJECT SITE AND SURROUNDING AREA. DO NOT ALLOW WATER TO ACCUMULATE IN EXCAVATIONS. REMOVE WATER TO PREVENT SOFTENING OF FOUNDATION BOTTOMS, UNDERCUTTING FOOTINGS, AND SOIL CHANGES DETRIMENTAL TO STABILITY OF SUBGRADES AND FOUNDATIONS. CONVEY WATER REMOVED FROM EXCAVATIONS AND RAIN WATER TO COLLECTING OR RUNOFF AREAS. ESTABLISH AND MAINTAIN TEMPORARY DRAINAGE DITCHES AND OTHER DIVERSIONS OUTSIDE EXCAVATION LIMITS FOR EACH STRUCTURE. DO NOT USE TRENCH EXCAVATIONS AS TEMPORARY DITCHES.
7. PROTECT EXCAVATED BOTTOMS OF ALL FOOTINGS AND TRENCHES AGAINST FREEZING WHEN ATMOSPHERIC TEMPERATURE IS LESS THEN 35°F (1°C).
8. BACKFILLING:
   a. COMPACT THE BACKFILL AROUND THE OUTSIDE OF EACH BUILDING TO A MINIMUM OF 85% OF MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D 698 STANDARD PROCTOR. DO NOT ALLOW HEAVY COMPACTION EQUIPMENT SUCH AS ROLLERS, ETC., CLOSER TO ANY FOOTING THAN THE HORIZONTAL DISTANCE SUBTENDED BY A 45° ANGLE WITH THE TOP EDGE OF THE FOOTINGS AND THE SURFACE OF THE GROUND.
   b. BACKFILL BEHIND WALLS AFTER PERMANENT CONSTRUCTION WHICH BRACES THE WALL IS IN PLACE OR TEMPORARY BRACING OF THE WALL IS PROPERLY INSTALLED, AND AFTER ACCEPTANCE OF CONSTRUCTION BELOW FINISH GRADE INCLUDING DAMP–PROOFING, REMOVAL OF CONCRETE FORMWORK, AND REMOVAL OF TRASH AND DEBRIS.
9. UNIFORMLY GRADE AREAS WITHIN LIMITS OF GRADING INCLUDING ADJACENT TRANSITION AREAS. SMOOTH FINISHED SURFACES WITHIN SPECIFIED TOLERANCES, COMPACT WITH UNIFORM LEVELS OR SLOPES BETWEEN POINTS WHERE ELEVATIONS ARE SHOWN, OR BETWEEN SUCH POINTS AND EXISTING GRADES. GRADE AREAS ADJACENT TO BUILDING LINES TO DRAIN AWAY FROM STRUCTURES AND TO PREVENT PONDING.
10. FINISH LAWN AREAS TO WITHIN ONE INCH ABOVE OR BELOW REQUIRED SUBGRADE ELEVATIONS. SHAPE SURFACE UNDER WALKS AND PAVEMENTS TO LINE, GRADE, AND CROSS SECTION, WITH NOT MORE THAN 1/2" ABOVE OR BELOW REQUIRED SUBGRADE ELEVATION.
11. GRADE SURFACE UNDER BUILDING SLABS SMOOTH AND EVEN, FREE OF VOIDS. PROVIDE FINAL GRADES WITHIN 1/2" OF THOSE INDICATED WHEN TESTED WITH A 10' STRAIGHT EDGE.
12. PROTECT GRADED AREAS FROM TRAFFIC AND EROSION. REPAIR AREAS WHICH HAVE SETTLED, ERODED, OR BECOME DAMAGED DUE TO CONSTRUCTION ACTIVITIES AT NO ADDITIONAL COST TO OWNER.
13. PLACE ALL FILL AND BACKFILL AS CONTROLLED FILL AS FOLLOWS:
   a. ESTABLISH SUITABLE SUBGRADE CONDITIONS PRIOR TO PLACING FILL BY PROOFROLLING, UNDERCUTTING AND COMPACTING AS NECESSARY.
   b. PLACE FILL MATERIALS IN LAYERS NOT MORE THAN 8" IN LOOSE DEPTH FOR HEAVY COMPACTION EQUIPMENT, AND NOT MORE THAN 4" FOR HAND TAMPERS.
   c. PRIOR TO COMPACTION, PROVIDE MOISTURE CONTENT TO WITHIN 3% OF OPTIMUM BY MOISTENING OR AERATING EACH LAYER. DO NOT PLACE FILL MATERIAL ON SURFACES WHICH ARE MUDDY, FROZEN OR CONTAIN FROST OR ICE.
   d. COMPACT SOIL TO NOT LESS THAN THE FOLLOWING PERCENTAGES OF MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D 698 (STANDARD PROCTOR):
      i. 95% UNDER PAVEMENT
      ii. 85% UNDER LAWN OR UNPAVED AREAS
14. SPREAD TOPSOIL TO A DEPTH OF 4" OVER ALL DISTURBED AREAS NOT RECEIVING WALKS, PAVEMENT, WALLS OR BUILDING, INCLUDING TRENCHES. IMMEDIATELY FOLLOWING PLACEMENT OF TOPSOIL, DISK THE ENTIRE TOPSOILED AREA AND RAKE FREE OF STONES AND DEBRIS OVER 1/2" IN ANY DIMENSION. PROVIDE A FINISHED SURFACE FREE OF DEPRESSIONS OR HIGH SPOTS. SEED IMMEDIATELY.
15. OWNER (CONTRACTOR) SHALL EMPLOY QUALIFIED SOILS TESTING LABORATORY TO INSPECT EARTHWORK OPERATIONS. NOTIFY LABORATORY PRIOR TO PERFORMING EARTHWORK OPERATIONS.

EROSION & SEDIMENT CONTROL NOTES

1. PROVIDE CONSTRUCTION MATERIALS AND METHODS IN ACORDANCE WITH ALL STATE AND LOCAL REGULATIONS, INCLUDING THE STANDARDS AND SPECIFICATIONS OF THE "VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK", LATEST EDITION. REFER TO THIS HANDBOOK FOR DETAILS AND SPECIFICATIONS OF EROSION CONTROL DEVICES.
2. SCHEDULE A PRECONSTRUCTION MEETING INVOLVING THE ENGINEER, DEVELOPER'S REPRESENTATIVE AND SELECTED CONTRACTOR ON SITE PRIOR TO BEGINNING CONSTRUCTION.
3. ADHERE TO THE EROSION AND SEDIMENT CONTROL NARRATIVE AS PART OF THIS CONTRACT. INSTALL EROSION CONTROL DEVICES AS PER THE NARRATIVE/PLAN.
4. NOTIFY THE PROJECT ENGINEER WHEN THE LOCAL GOVERNING OFFICIAL HAS INSPECTED AND APPROVED ALL IN–PLACE EROSION AND SEDIMENT CONTROL DEVICES, REQUIRED BY LOCAL ORDINANCES TO BE IN PLACE PRIOR TO LAND DISTURBANCE.
5. NOTIFY THE PROJECT ENGINEER 24 HOURS IN ADVANCE OF BEGINNING CLEARING AND GRADING OPERATIONS.
6. DISPOSE OF EXCESS EXCAVATION, AS WELL AS ALL ORGANIC MATTER AND DEBRIS, OFF SITE.
7. SEED AND MULCH OR TEMPORARILY STABILIZE ALL DENUDED AREAS WITHIN SEVEN DAYS OF DISTURBANCE. SEED TRENCHES IMMEDIATELY FOLLOWING BACKFILL.
8. REMOVE ALL DEMOLISHED MATERIAL FROM THE PROJECT SITE AND DISPOSE OF IN AN ACCEPTABLE LOCATION.
9. REINSTALL ANY STRUCTURE(S) RELOCATED AND/OR REMOVED DURING THE INSTALLATION OF THE PROPOSED IMPROVEMENTS AT NO ADDITIONAL COST TO OWNER.
10. INSPECT ESC MEASURES WEEKLY AND AFTER EACH RAINFALL TO INSURE PROPER FUNCTIONING.
11. AVOID CONSTRUCTION TRAFFIC IN NATURAL STREAMS AND DRAINAGE WAYS WHENEVER POSSIBLE.
12. REMOVE ALL SILT FROM STREAMS AND DRAINAGE WAYS PRIOR TO BOND RELEASE.

EROSION AND SEDIMENT CONTROL NARRATIVE

PROJECT DESCRIPTION

The project consists of the construction of 18 lots. Public utilities are planned. Total project area is 6.4 acres. Total disturbed area is approximately 1.8 acres.

EXISTING SITE CONDITIONS

This site is currently undeveloped. The site is wooded with a knoll in the center. Slopes run east to west from the knoll approximately at 10 percent.

ADJACENT PROPERTIES

Properties to the north, east and west are residential. The property to the south is agricultural.

OFF–SITE AREAS

Lot 1, Section 8 of Woodbridge will receive run off from this development. This water will leave Woodbridge 18 through a ditch which will flow into the existing pipe on Lot 1. Areas to the west drain into existing detention pond. Areas to the east will drain into the City of Salem system.

SOILS

On site soils were identified on the "Generalized Soil Parent Material Map" of Roanoke, Virginia. Soils in this area are generally identified as 40C, classified as shottower lobby loam.

CRITICAL EROSION AREAS

Erosion control should be properly maintained along the north and east property lines to prevent run off into existing residential areas.

EROSION AND SEDIMENT CONTROL MEASURES

All measures to be in accordance with the Virginia Erosion and Sediment Control Handbook, latest edition.

Construction Entrance – 3.02

A gravel construction entrance will prevent mud and dust entering Millwheel Drive and Stone Mill Drive.

Construction Road Stabilization – 3.03

Construction roads will be stabilized with 6" of crusher run gravel prior to paverhent placement.

Silt Fence – 3.05

Silt fence will protect downstream property from sediment laden runoff.

Storm Drain Inlet Protection – 3.07.

Each inlet will be protected from sediment until the site has stabilized.

Temporary Diversion Dike – 3.09

A temporary diversion dike will divert runoff from potentially critical erosion areas.

Temporary Sediment Trap – 3.13

Temporary sediment traps will allow sediment to settle out of runoff before the runoff leaves the site during the construction phase.

Temporary Seeding – 3.31

Permanent Seeding – 3.32

Areas not receiving buildings, paving or landscaping will be seeded.

MANAGEMENT STRATEGIES

1. Construction will be sequenced so that grading operations can begin and end as quickly as possible.
2. The gravel construction entrance will be installed as a first step in construction.
3. Sediment traps will be installed as a second step in construction.
4. Other measures will be installed as work progresses into those areas.
5. Temporary seeding or other stabilization will follow immediately after grading.
6. The job superintendent shall be responsible for the installation and maintenance of all erosion and sediment control practices.
7. After achieving adequate stabilization, the temporary erosion and sediment control measures will be cleaned and removed.

PERMANENT STABILIZATION

All areas disturbed by construction which do not receive paving shall be stabilized with permanent seeding as specified. All seeding shall be tacked and mulched and placed immediately after reaching finished grade. The roadway shall receive paving.

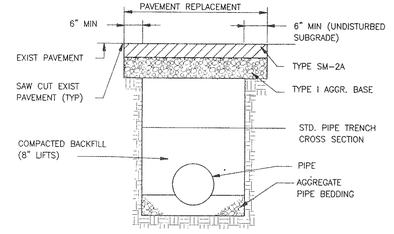
STORMWATER MANAGEMENT

Stormwater management is achieved through the use of existing structures and drainage systems. The undetained area will flow through a ditch and into an existing pipe.

MAINTENANCE

In general, all erosion and sediment control measures will be checked daily and after each significant rainfall. In particular:

1. Silt fence will be checked regularly for undermining or deterioration of the fabric. Sediment shall be removed when the level of sediment deposition reaches halfway to the top of the barrier.
2. The seeded areas will be checked regularly to ensure that a good stand is maintained. Areas should be fertilized and reseeded as needed.
3. The contractor shall inspect all erosion control devices immediately after each significant rainfall and daily during periods of prolonged or heavy rainfall and repair all structures as necessary within 48 hours.



PAVEMENT REPLACEMENT DETAIL

NO SCALE

COMMONWEALTH OF VIRGINIA
D.J. BALZER, JR.
012991
PROFESSIONAL ENGINEER

BALZER AND ASSOCIATES INC.
REFLECTING TOMORROW
• PLANNERS • ARCHITECTS
• ENGINEERS • SURVEYORS

1208 Corporate Circle
Roanoke, Virginia 24018
Phone: 540/772-9580
FAX: 540/772-8050

501 Branchway Road
Suite 100
Richmond, Virginia 23236
Phone: 804/794-0571
FAX: 804/794-2635

11038 Lakeridge Parkway
Suite 1
Ashland, Virginia 23005
Phone: 804/550-2888
FAX: 804/550-2057

WOODBRIDGE
SECTION 18

NOTES AND DETAILS

CATAWBA MAGISTERIAL DISTRICT
ROANOKE COUNTY, VIRGINIA

DRAWN BY: DRB
DESIGNED BY: DRB
CHECKED BY: DJB
DATE: SEPT. 27, 1999
REVISIONS:
(1) 11–5–99
(2) 11–30–99
(3) 12–3–99

SCALE: AS_NOTED

SHEET NO.
C4

JOB NO.
R99147

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