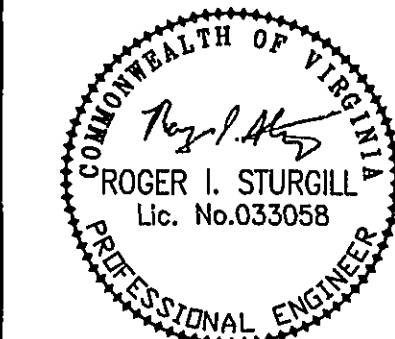
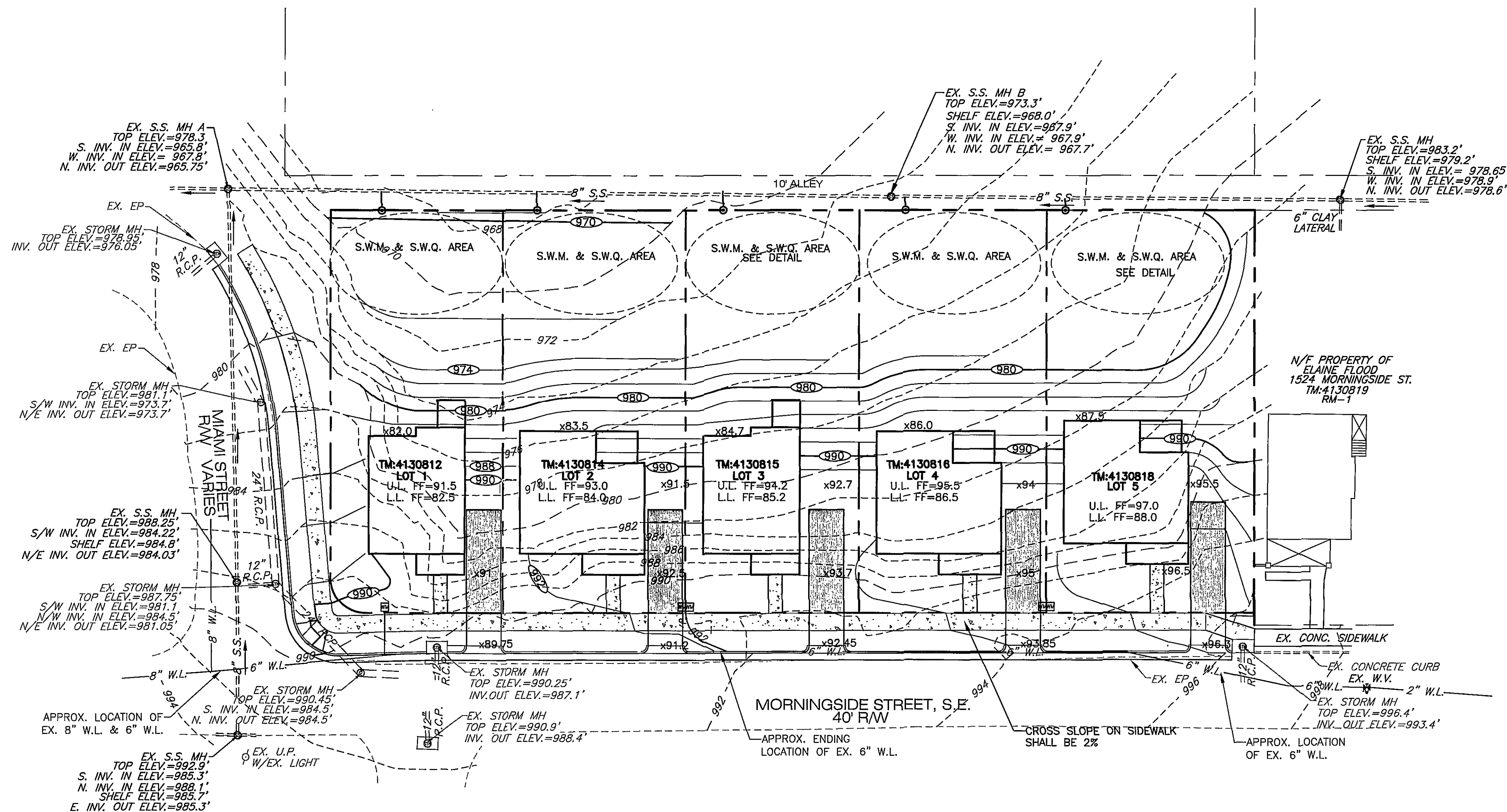


<u>LOT</u>	<u>DOWNSTREAM MANHOLE</u>	<u>DIST.</u>	<u>TOP OF S.S. MAIN</u>	<u>MIN. F.F. ELEVATION</u>
1	A	44.25'	966.9	969.9
2	A	90'	967.35	970.35
3	A	143.25'	967.88	970.88
4	B	4'	968.98	971.98
5	B	53.75'	972.96	975.96

THE MIN. FLOOR ELEVATION IS BASED ON SEC. 200.02-2-G-1-h OF THE  
WESTERN VIRGINIA WATER AUTHORITY WATER & SEWER REGULATIONS.

1. PROVIDE NEW MATERIALS AND WORKSMANSHIP 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 CITY
  - c. VDOT - VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE STANDARDS AND SPECIFICATIONS
  - d. VIRGINIA EROSION AND SEDIMENT CONTROL REGULATIONS AND HANDBOOK,
  - 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.
4. NOTIFY THE ENGINEER IMMEDIATELY UPON DISCOVERY OF CONDITIONS WHICH DIFFER
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 CITY'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, 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
11. SIGNAGE SHALL COMPLY WITH THE APPLICABLE REGULATIONS OF THE CITY. A
12. SITE LIGHTING SHALL CONFORM TO THE APPLICABLE REGULATIONS OF THE
13. SCREEN ALL TRANSFORMERS, HEAT PUMPS, AND OTHER MECHANICAL EQUIPMENT.
14. NOISE LEVELS LOCATED NEAR THE BASE FLOOD ELEVATION AT THE STRUCTURE
15. ACOUSTICALLY SCREENED FROM ADJOINING PROPERTIES.
16. TRASH TO BE HANDLED BY INDIVIDUAL CANS.
17. AN ELEVATION CERTIFICATE WILL NEED TO BE COMPLETED FOR THE NEW BUILDING AND THE ADDITION BEFORE A CERTIFICATE OF OCCUPANCY WILL BE ISSUED. THIS ELEVATION CERTIFICATE SHOULD INCLUDE THE BASE FLOOD ELEVATION AT THE STRUCTURE.

1. REFER TO BUILDING PLANS FOR SUBGRADE AND UTILITY TRENCHES WITHIN 5' OF BUILDING ENVELOPE.
2. 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.
3. BARRICADE OPEN EXCAVATIONS OCCURRING AS PART OF THIS WORK AND OPERATE WARNING LIGHTS AS RECOMMENDED BY AUTHORITIES HAVING JURISDICTION.
4. 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. FOOTINGS WHICH SUPPORT CONCRETE MASONRY UNITS MAY BE STEPPED PROVIDED THE VERTICAL STEP DOES NOT EXCEED ONE HALF OF THE HORIZONTAL DISTANCE BETWEEN STEPS AND HORIZONTAL DISTANCE BETWEEN STEPS IS NOT LESS THAN TWO FEET.
  - f. 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.
5. CUT SURFACE UNDER PAVEMENTS TO COMPLY WITH CROSS SECTIONS, ELEVATIONS, AND GRADES AS INDICATED.
6. EXCAVATE TRENCHES TO UNIFORM WIDTH CONFORMING TO VDOT STANDARD PB-1 FOR STORM DRAINAGE PIPING. BACKFILL TRENCHES WITH CONTROLLED FILL.
7. 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 EXISTING 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.



**BALZER**  
AND ASSOCIATES INC.

**REFLECTING TOMORROW**  
[www.balzer.cc](http://www.balzer.cc)

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Verona, Virginia 24482  
Phone: 540/248-3220  
FAX 540/248-3221

MORNINGSIDE SUBDIVISION

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GRADING PLAN

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CITY OF ROANOKE, VIRGINIA

DRAWN BY: BTC  
DESIGNED BY: BTC  
CHECKED BY: SMH  
DATE: 1-25-08  
REVISIONS:  
3-12-08  
4-9-08  
7-11-08

SCALE: 1"=20'

SHEET NO.

A C-5

JOB NO.  
R0700289.00