### QUANTITY + COST ESTIMATE

| ITEM                | QUANTITY | UNIT  | UNIT PRICE | COST     | BONDABLE |
|---------------------|----------|-------|------------|----------|----------|
| WATER METER         | 1        | EACH. | 200.00     |          | \$200.0  |
| S.S. CLEANOUT       | 1        | EA.   | 250.00     |          | \$250.00 |
|                     |          |       |            |          |          |
|                     |          |       |            |          |          |
| ESTIMATED SUB-TOTAL |          |       |            | \$450.00 |          |
| 10% CONTINGENCY     |          |       |            | \$45.00  |          |
| ESTIMATED TOTAL     |          |       |            | \$495.00 |          |

HEREBY CERTIFY THAT THE FOREGOING ESTIMATE REFLECTS THE CURRENT IMPROVEMENT COSTS OF THIS PROJECT.

SIGNED:

#### **GENERAL NOTES**

All construction methods and materials shall conform to the Construction Standards and Specifications of Roanoke County, the Western Virginia Water Authority and/or the Virginia Department of Transportation.

The contractor or developer is required to notify the Roanoke County Engineering Division and the Western Virginia Water Authority in writing at least three (3) days prior to any construction, including, but not limited to the following:

- A. Installation of approved erosion control devices
- Clearing and grubbing Subgrade excavation
- Installing storm sewers or culverts
- Setting curb and gutter forms Placing curb and gutter
- G. Placing other concrete
- H. Placing gravel base I. Placing any roadway surface
- Installing water lines

K. Installing sanitary sewer lines A pre-construction conference should be scheduled with the Roanoke County Engineering Division and the Western Virginia Water Authority, to be held at least three days prior to any construction.

Measures to control erosion and siltation must be provided prior to plan approval. Plan approval in no way relieves the developer or contractor of the responsibilities contained within the erosion and siltation control policies.

A permit must be obtained from the V.D.O.T. Residency Office, Roanoke County, prior to construction in the highway right—of—way.

Plan approval does not augrantee issuance of any permits by V.D.O.T. An approved set of plans and all permits must be available at the

construction site. Field construction shall honor proposed drainage divides as shown

All unsuitable material shall be removed from the construction limits of the roadway before placing embankment.

All roadside ditches or grades of more than 5 percent shall be paved with cement concrete to the limits as indicated on the plans and as required at the field inspection.

Location of guard rails shall be determined at a joint field inspection by the County and V.D.O.T.

All springs shall be capped and piped to the nearest storm sewer or natural watercourse. The pipe shall be 6 inch minimum diameter and conform to V.D.O.T. Standard SB—1.

Standard street and traffic control signs shall be erected at each intersection by the developer prior to final street acceptance.

Construction debris shall be containerized in accordance with the Virginia Litter Control Act. No less than one litter receptacle shall be provided on site.

The contractor shall provide adequate means of cleaning mud from trucks and/or other equipment prior to entering public streets. It is the contractors responsibility to insure that the streets are in a clean, mud and dust free condition at all times.

The developer and/or contractor shall supply all utility companies with copies of approved plans, advising them that all grading and installation shall conform to approved plans.

Contractors shall notify utilities of proposed construction at least two (2), but not more than ten (10) working days in advance. Area public utilities may be notified thru "Miss Utility": 1—800—552—7001. The developer or contractor shall supply the County and the Western Virginia Water Authority with correct As—Built plans before final acceptance.

All work shall be subject to inspection by Roanoke County the Western Virginia Water Authority and/or V.D.O.T. inspectors.

Field corrections shall be approved by the Roanoke County Engineering Division and the Western Water Authority prior to such construction. 100 year floodway and floodplain information shall be shown where

Grade stakes shall be set for all curb and gutter, culvert, sanitary sewer and storm sewer.

## SEWER NOTES

AVAILABILITY # 08-040

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

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.O.T. standards.

Lines shall be staked prior to construction.

All sanitary sewer connections to existing lines shall be coordinated with and performed by the Western Virginia Water Authority. All water and sanitary sewer facilities are to be installed according to the Western Virginia Water Authority Design and Construction

# **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

All trenches in existing or future highway right—of—ways shall be compacted according to V.D.O.T. standards.

Lines shall be staked prior to construction.

Regulations, Section 12.05.03, where lines cross.

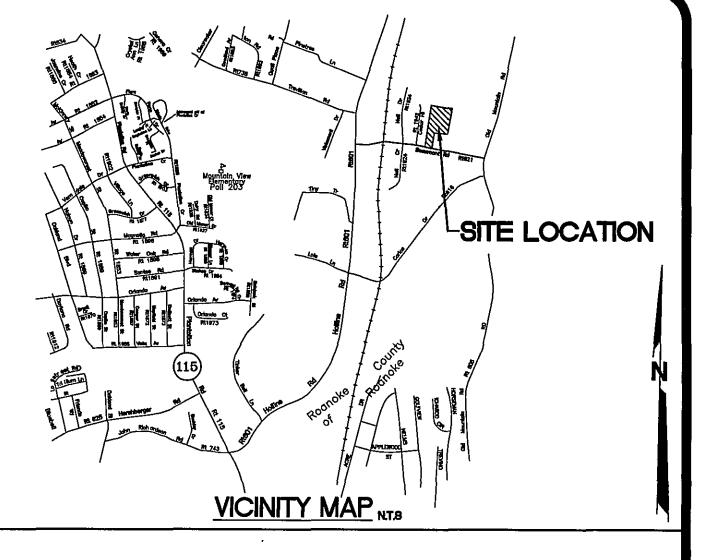
Water main shall be minimum Class 52 Ductile Iron in accordance to AWWA C151 or DR-14 PVC in accordance with AWWA C-900. Availability number 08-040

All water connections to existing lines shall be coordinated with and performed by the Western Virginia Water Authority.

All water and sanitary sewer facilities are to be installed according to the Western Virginia Water Authority Design and Construction

Ductile Iron pipe in compliance with the WVWA design and construction standards shall be required for all pipe with a working pressure equal to or greater than 100 psi.

## **LEGEND** Property Line Right-of-way Centerline Minimum Building Line Existing Storm Sewer Existing Sanitary Sewer Existing Water Main Existing Contour Proposed Contour Proposed Limits of Clearing Proposed Storm Sewer Proposed Sanitary Sewer



# SURVEY INFORMATION

| Horizontal and                | vertical | control | surveys | were | performed | in | 2008 |  |  |
|-------------------------------|----------|---------|---------|------|-----------|----|------|--|--|
| by BALZER AND ASSOCIATES INC. |          |         |         |      |           |    |      |  |  |

All elevations must be referenced to the National Geodetic Vertical Datum of 1929

Source of topographic mapping is BALZER & ASSOCIATES INC. dated 2008

Boundary was performed by BALZER & ASSOCIATES INC. dated\_2008

DEVELOPMENT PLAN APPROVED
The professional seal and signature below certifies the boundary survey and topographic mapping to be accurate and correct. RUCTION
BY ROANOKE COUNTY

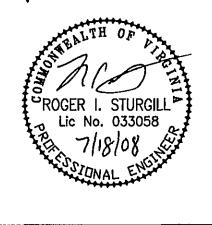
Department A Date Development Review AS - BUILT Engineering 1161 161 00 10/22/2008 RRB 7/21/08 Nater & Sewer

anning & Zoning DAM CERTIFIED BY THE STATE OF VIRGINIA AS A "RESPONSIBLE LAND DISTURBER." I SHALL BE RESPONSIBLE FOR THE IMPLEMENTATION OF THE EROSION AND SEDIMENT CONTROL PLAN AS SHOWN. SIGNITURE \_ CERTIFICATE DATE-

RESPONSIBLE LAND DISTURBER

TELEPHONE NUMBER-

COUNTY OF ROANOKE



PROFESSIONAL ENGINEER SEAL AND SIGNATURE

OWNER/DEVELOPER, AM AWARE

### **INDEX**

ROANOKE COUNTY COVER SHEET

LAYOUT PLAN & PROFILE

ESC NOTES & DETAILS

WVWA DETAILS

5-07-08 - REVISED PER OWNER REQUEST 6-20-08 - REVISED PER RKE. CO & WVWA COMMENTS 7-10-08 - REVISED PER OWNER REQUEST

NAME OF DEVELOPMENT BEAUMONT UTILITY EXTENSION

HOLLINS MAGISTERIAL DISTRICT(S)

Proposed Water Main

EDMOND P. & BETTYE R. DEBERRY

1340 BEAUMONT ROAD OWNER (name, address, telephone)

540-366-8123 HOLLINS, VA 24019

ED DEBERRY

ENGINEER, ARCHITECT OR SURVEYOR (name, address, telephone)

DEVELOPER (name, address, telephone) 1340 BEAUMONT ROAD HOLLINS, VA 24019

BALZER AND ASSOCIATES, INC.

540-366-8123

1208 CORPORATE CIRCLE

ROANOKE, VA 24018

540-772-9580 FAX 540-772-8050

OF THE SITE DESIGN REQUIREMENTS IMPOSED BY

THIS SITE DEVELOPMENT PLAN AND OTHER APP-LICABLE COUNTY CODES. I HEREBY CERTIFY THAT

I AGREE TO COMPLY WITH THESE REQUIREMENTS,

UNLESS MODIFIED IN ACCORDANCE WITH LOCAL LAW.

06.01 28.03 BLOCK NO(S) PARCEL NO(S) TAX MAP NO(S)

SHEET 1 OF 4