

QUANTITY + COST ESTIMATE

ITEM	QUANTITY	UNIT	UNIT PRICE	COST	BONDABLE
CLEARING AND GRUBBING	5	ACRES	3,000	15,000	
EXCAVATION	16,900	C.Y.	2.50	42,250	
EMBANKMENT	33,200	C.Y.	2.50	83,000	
CURB INLET DI-36	5	EACH	2,200	11,000	
CURB INLET DI-		EACH			
MANHOLE MH-2	1	EACH	1,500	1,500	
MANHOLE MH-POND RISER	1	EACH	1,500	1,500	
15 -IN. CONCRETE PIPE, CLASS III	328	LIN. FT.	21.00	6,844	
18 -IN. CONCRETE PIPE, CLASS III	118	LIN. FT.	27.00	2,714	
24 -IN. CONCRETE PIPE, CLASS III	33	LIN. FT.	30.00	990	
8 -IN. PVC ROOF DRAIN	520	LIN. FT.	8.00	4,160	
10 -IN. PVC ROOF DRAIN	602	LIN. FT.	9.00	5,418	
12 -IN. PVC ROOF DRAIN	91	LIN. FT.	11.00	1,001	
BOX CULVERT		LUMP SUM			
PAVED DITCH		LIN. FT.			
RIPRAP - CLASS		S.F.			
SODDED SWALE		S.Y.			
-IN. CONCRETE ENDWALL EW-		EACH			
-IN. END SECTION ES-		EACH			
HEADER CURB & GUTTER CG-		LIN. FT.			
CURB & GUTTER CG-8	2,700	LIN. FT.	13.00	35,100	
VALLEY GUTTER		EACH			
GRAVEL BASE		S.Y.			
GRAVEL SHOULDER		S.Y.			
SURFACE TREATMENT		S.Y.			
2 -IN. BIT. CONC.: TYPE SM9.5A	2,889	S.Y.	3.96	11,440	
1-1/2 -IN. BIT. CONC.: TYPE SM9.5A	875	S.Y.	2.97	2,589	
8-IN. BASE MATERIAL	2,169	C.Y.	18.00	39,042	
-IN. SUBBASE MATERIAL		C.Y.			
TRAFFIC BARRICADE		EACH			
8" WATER LINE	1,225	LIN. FT.	23.00	28,175	
8" WATER LINE		LIN. FT.			
WET TAP	1		2,500	2,500	
FIRE HYDRANT ASSEMBLIES	2	EACH	1,500	3,000	
BLOW OFFS W/VAULT, FRAME & COVER		EACH			
-IN. GATE VALVES, W/VAULT, FRAME & COVER		EACH			
-IN. GATE VALVES, W/VAULT, FRAME & COVER		EACH			
ARV	1		1,200	1,200	
8" SANITARY SEWER	1,425	LIN. FT.	22.00	31,350	
STANDARD MANHOLE W/FRAE & COVER	9	EACH	1,500	13,500	
SAMPLING MANHOLE/PORT		EACH			
AS-BUILT PLANS		LUMP SUM			
STORMWATER MANAGEMENT	1	LUMP SUM	5,000	5,000	
10% CONTINGENCY				34,829	
ESTIMATED TOTAL				383,122	

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

SIGNED: W. S. Bower DATE: 11/4/04

GENERAL NOTES

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

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

- 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
- Placing other concrete
- Placing gravel base
- Placing any roadway surface
- Installing water lines
- Installing sanitary sewer lines

A pre-construction conference should be scheduled with the Roanoke County Engineering Division, to be held at least one (1) day 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 guarantee 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 on plans.

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

Pavement sections on approved plans are based on a minimum CBR of 10. CBR tests are to be performed by the engineer and submitted to V.D.O.T. and to the Roanoke County Engineering Division prior to placement. CBR values < 10 will require revised pavement sections.

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 8 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 contractor's 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 with correct As-Built plans before final acceptance.

All work shall be subject to inspection by Roanoke County and/or V.D.O.T. inspectors.

Field corrections shall be approved by the Roanoke County Engineering Division prior to such construction.

100 year floodway and floodplain information shall be shown where applicable.

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

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- C01 Cover Sheet
- C02 Overall Plan
- C03 Entrance Road Demolition, Utility Plan
- C04 Entrance Road Grading & Profile Sheet
- C05 Site Demolition
- C06 Site Dimensional & Utility Plan
- C07 Grading and Erosion & Sediment Control Plan
- C08 Road & Sanitary Sewer Profiles
- C09 Sanitary and Storm Sewer Profiles
- C10 Storm Sewer Details and Narrative
- C11 Water Details
- C12 Sewer Details
- C13 Erosion and Sediment Control Details
- L01 Site Landscape Plan
- L02 Landscape Notes and Details

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 PVC pipe shall be made with an adapter coupling in R/W.

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

Lines shall be staked prior to 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 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.O.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.

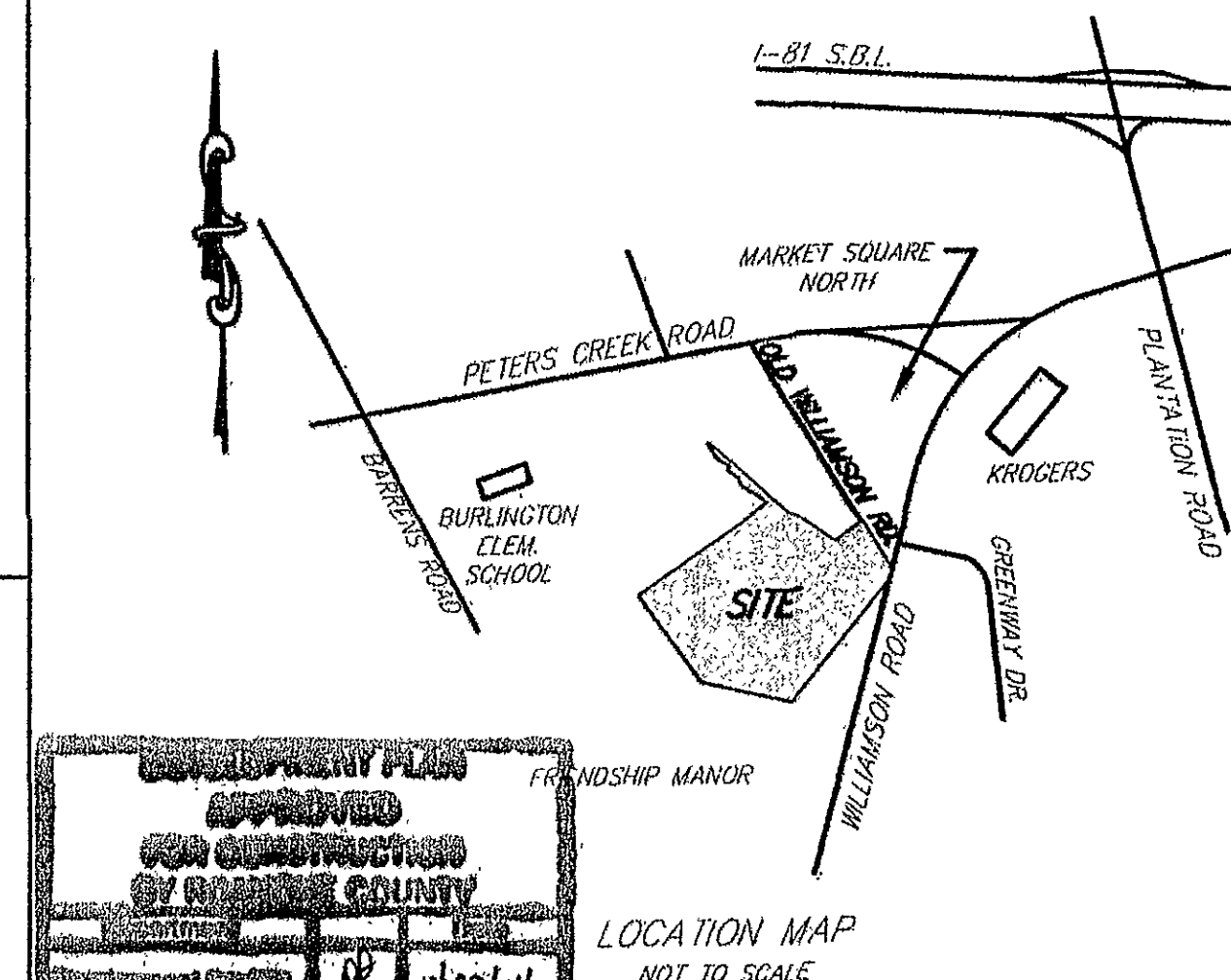
Availability number 04-4

LEGEND

SURVEYED PROPERTY LINE PROPOSED PROPERTY LINE DEED PROPERTY LINE EXIST. OVERHEAD POWER EXIST. WATER LINE EXIST. OVERHEAD CABLE EXIST. CENTERLINE OF ROAD EXIST. STORM SEWER EXIST. SANITARY SEWER PROF. UNDERGROUND ELEC. LINE PROF. UNDERGROUND ELEC. SERVICE PROF. WATERLINE PROF. AUDIO CABLE EXIST. TREE LINE EXIST. EDGE OF PAVEMENT	PROF. TELEPHONE LINE PROF. GAS LINE PROF. SANITARY SEWER LINE PROF. STORM SEWER LINE PROF. CONTOURS EXIST. 2' CONTOURS EXIST. 10' CONTOURS PROF. SPOT ELEVATION SILT FENCE PROF. TREE LINE RESOURCE MANAGEMENT AREA BOUNDARY RESOURCE PROTECTION AREA BOUNDARY DITCH LINE	CONCRETE ASPHALT PAVING PAVEMENT REPLACEMENT GRAVEL PAVERS WETLAND AREA YARD LIGHT (S.M.H.) TYPICAL YARD HYDRANT PROF. FIRE HYDRANT PROF. AIR RELEASE VALVE PROF. GATE VALVE PROF. BLOW OFF VALVE	EX. POWER POLE EX. TELEPHONE EX. TELEPHONE PEDESTAL EX. LIGHT POLE BENCHMARK
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SEE SHEET C12 FOR EROSION AND SEDIMENT CONTROL LEGEND.

VICINITY MAP



DEVELOPMENT PLAN	
Development Phase	11/09/04
Design	11/09/04
Construction	11/09/04
Planning & Zoning	11/09/04

COUNTY OF ROANOKE

NAME OF DEVELOPMENT: THE COTTAGES AT STONELYN

MAGISTERIAL DISTRICT: HOLLINS MAGISTERIAL DISTRICT

OWNER/DEVELOPER: STONELYN LLC, CONTACT: WILLIAM POTTER
180 FREEBOARD DRIVE, MONETA, VA 24121

ENGINEER: BARNES GROGAN BOWER & TAYLOR DESIGN GROUP, PC, CONTACT: SHELDON BOWER
201 EAST MAIN STREET, SALEM, VA; 540-387-9100

SURVEYORS: LUMSDEN ASSOCIATES, PC
4664 BRAMBLETON AVENUE, SW, ROANOKE, VA; 540-774-4411

WARNER-EVERETT LAND SURVEYORS
74 SCRUGGS ROAD, SUITE 104, MONETA, VA; 540-721-5611

TAX MAP NO. 27.14

BLOCK NO. 02

PARCEL NO. 12.00 & 14.00

I, W. S. Bower OWNER/DEVELOPER, AM AWARE OF THE SITE DESIGN REQUIREMENTS IMPOSED BY THIS SITE DEVELOPMENT PLAN AND OTHER APPLICABLE COUNTY CODES. I HEREBY CERTIFY THAT I AGREE TO COMPLY WITH THESE REQUIREMENTS, UNLESS MODIFIED IN ACCORDANCE WITH LOCAL LAW.

REVISIONS:
VDDT, E&C, and Client Comments
August 9, 2004
Roanoke County Comments
August 23, 2004
VDDT Comments
Oct. 8, 2004

DESIGNED BY: SRB

DRAWN BY: SRB

CHECKED BY: GST

SCALE: N/A

DATE: MAY 28, 2004

SHEET TITLE:

Cover Sheet

C01
01 OF 15
PROJECT NUMBER:
S03060-02

AS-BUILT
10/20/2005

WWW.ID# 6HJWPV

SHEET 01 OF 15