

REV	DATE	DESCRIPTION	APP
4	11/14/06	REVIEW COMMENTS	JMC

COMM NO: 10075
ISSUE DATE: FEBRUARY 1, 2007
DESIGNED BY: DRAWN BY: MDD
CHECKED BY: SUBMITTED BY: JMC
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GENERAL

ROANOKE COUNTY
STANDARD
COVER SHEET

G005

QUANTITY + COST ESTIMATE

ITEM	UNIT	QUANTITY	UNIT COST	TOTAL COST
HEAVY DUTY PAVEMENT				
1.5" Surface Course (VDOT SM-9.5A)	SY	8838	\$3.79	\$33,496
2" Base Course (VDOT BM-25.0)	SY	8838	\$4.78	\$42,201
4" Replacement Aggregate (VDOT 21A or 21B)	SY	8838	\$5.10	\$45,073
LIGHT DUTY PAVEMENT				
1.5" Surface Course (VDOT SM-9.5A)	SY	13570	\$3.79	\$51,429
4" Replacement Aggregate (VDOT 21A or 21B)	SY	13570	\$5.10	\$69,206
GRAVEL				
3" Replacement Aggregate (VDOT 21A or 21B)	SY	4446	\$3.46	\$15,383
CONCRETE				
Sidewalks	SF	5159	\$2.75	\$14,187
Equipment Pads	SF	972	\$3.79	\$3,684
CURB & GUTTER				
CG-2	LF	1289	\$9.57	\$12,336
CG-6	LF	442	\$18.69	\$8,261
TDC	LF	16	\$9.57	\$153
FENCE				
10' CLF w/ Barbed Wire	LF	1176	\$16.06	\$18,887
12' CLF w/ Barbed Wire	LF	1650	\$19.27	\$31,799
Guard Rail (VDOT GR-2)	LF	18	\$18.21	\$328
Motorized Single Slide Gate (26' Opening)	EA	2	\$5,356.00	\$10,712
Single Swing Gate (14' Opening)	EA	3	\$3,290.00	\$9,870
Double Swing Gate (6' Opening)	EA	1	\$973.00	\$973
BIORETENTION				
Filter Fabric	SF	17824	\$0.11	\$1,961
Bioretention Soil Mixture	SF	12347	\$0.47	\$5,852
3" Mulch	CY	114	\$67.29	\$7,693
UTILITY PIPES				
6" Perforated PVC, Schedule 40	LF	373	\$2.49	\$929
8" PVC Pipe (Sanitary Force Main)	LF	4456	\$20.54	\$91,526
12" HDPE Pipe (Water Main)	LF	895	\$17.53	\$15,689
12" RCP	LF	27	\$20.51	\$554
36" RCP	LF	148	\$91.55	\$13,549
UTILITY STRUCTURES				
Trench Drain	EA	1	\$1,007.00	\$1,007
Yard Hydrants	EA	14	\$122.50	\$1,715
Water Line	LF	307	\$20.54	\$6,306
Rain Water Cistern	EA	4	\$31,250.00	\$125,000
Storm Manhole	EA	1	\$1,670.00	\$1,670
EROSION & SEDIMENT CONTROL				
Topsoil	SF	461275	\$0.47	\$217,312
Permanent Seeding	SF	461275	\$0.02	\$8,757
Temporary Seeding	SF	461275	\$0.01	\$4,379
Sodding	SF	11446	\$0.44	\$5,053
Mulching	SF	461275	\$0.04	\$18,128
MISCELLANEOUS				
Bike Rocks "Inverted U"	EA	6	\$500.00	\$3,000
Flagpoles	EA	2	\$1,738.00	\$3,476
Line Striping	LF	5898	\$0.26	\$1,533
Handicap Symbols	EA	8	\$40.20	\$322
Precast Wheel Stops	EA	53	\$176.00	\$9,328
Miscellaneous Signs	EA	11	\$133.25	\$1,466
Water Pumps	EA	1	\$—	\$120,000
Ballards	EA	8	\$147.84	\$1,183
Gravel Removal	CY	22408	\$11.25	\$252,086
SUBTOTAL =				\$1,287,452
10% CONTINGENCY =				\$128,745
TOTAL SITEWORK COST =				\$1,416,197

GENERAL NOTES

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

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 V.D.O.T. inspectors.

Field corrections shall be approved by the Roanoke County Engineering Division and/or the Western Virginia Water Authority 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, culvert, sanitary sewer and storm sewer.

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SEWER NOTES

All sanitary sewer facilities shall be installed according to the Western Virginia Water Authority Design and Construction Standards. (Latest Edition).

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 their exact location. The contractor shall comply with (State Water Works Regulations, Section 12.05.03, where lines cross.)

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.

WATER NOTES

All water facilities shall be installed according to the Western Virginia Water Authority Design and Construction Standards/ (Latest Edition).

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 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.

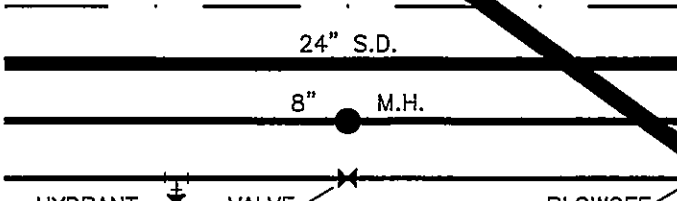
Water main shall be minimum Class 350 Ductile Iron in accordance to AWWA C151 or DR-14 PVC in accordance with AWWA C-900.

Ductile Iron Pipe in accordance with the Western Virginia Water Authority Design and Construction Standards shall be required for all pipe with a working pressure equal to or greater than 100 p.s.i.

Availability letter number _____

LEGEND

Property Line	---
Right-of-way	---
Centerline	---
Minimum Building Line	---
Existing Storm Sewer	---
Existing Sanitary Sewer	---
Existing Water Main	---
Existing Contour	---
Proposed Contour	---
Proposed Drainage Divide	---
Proposed Limits of Clearing	---
Proposed Storm Sewer	---
Proposed Sanitary Sewer	---
Proposed Water Main	---



SEE SHT G001

VICINITY MAP

SURVEY INFORMATION

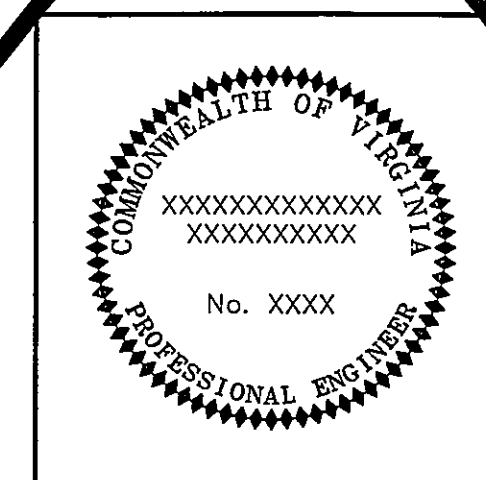
Horizontal and vertical control surveys were performed in (year) _____ by _____ dated _____

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

Source of topographic mapping is _____ dated _____

Boundary was performed by _____ dated _____

The professional seal and signature of _____ topographic mapping to be accurate and correct.



PROFESSIONAL ENGINEER
SEAL AND SIGNATURE

COUNTY OF ROANOKE

NAME OF DEVELOPMENT

MAGISTERIAL DISTRICT(S)

OWNER (name, address)

DEVELOPER (name, address)

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

TAX MAP NO(S)

BLOCK NO(S)

PARCEL NO(S)

I, _____ 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, LOCAL LAW.

SEE SHT C001

SHEET _____ OF _____

GRAPHIC SCALES