- 1. All construction methods and materials shall conform to the Construction Standards and Specifications of Roanoke County, the Western Virginia Water Authority, and the Virginia Department of Transportation.
- 2. Stormwater Management Agreements with an attached 8 1/2" x 11" or 8 1/2" x 14" plat must be approved and recorded prior to the pre-construction meeting.
- 3. Once all required items are submitted to the County of Roanoke, the developer must contact the Development Review Coordinator to indicate that a pre-construction meeting needs to be scheduled. The pre-construction meeting will be scheduled with the owner/developer two (2) working days later.
- 4. Please note the 2001 General Assembly revisions to Va Erosion and Sediment Control Law. Effective July 1, 2001, all land disturbing projects that require approval of an erosion and sediment control plan, grading or clearing permit shall require that the applicant provide the name of an individual who will be responsible for land disturbing activities and that this individual hold a Responsible Land Disturber (RLD) Certificate from the Department of Conservation and Recreation. The Responsible Land Disturber can be anyone from the Project team that is certified by the State of Virginia to be in charge of carrying out the land disturbing activity for the project.
- 5. It is the responsibility of the owner/developer to notify the certified Responsible Land Disturber and the Utility Contractor to attend the pre-construction meeting.
- 6. The Development Review Coordinator will schedule the pre-construction meeting with the County Review Engineer, the County Inspector, and the Western Virginia Water Authority and the Town of Vinton Public Works Department if applicable.
- 7. An approved set of plans and all permits <u>must be available</u> at the construction site at all times.
- 8. 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.
- 9. The project engineer will inform the owner/developer verbally and in writing of the County's obligation to perform inspections on site. Everyone in the meeting will be required to sign a pre-construction checklist indicating their knowledge of Roanoke County's obligation to perform inspections on site.
- 10. The Erosion Control Permit is given to the developer at this pre-construction meeting.
- 11. The developer MUST contact the project inspector 24 hours before beginning any grading or construction on the property.
- 12. The project inspector will visit the site within 48 hours of the developer's call to ensure that all necessary erosion and sediment control measures are properly installed according to the approved plan.
- 13. All work shall be subject to inspection by Roanoke County, the Western Virginia Water Authority and the Virginia Department of Transportation Inspectors.
- 14. 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.
- 15. 100 year Floodway and Floodplain information shall be shown where applicable. FIRM index Date shall be shown on the plans. The 100 year Floodway shall be staked prior to any construction.
- Grade stakes shall be set for all curb and gutter, culvert, sanitary sewer and

storm sewer at all times of construction.

- 17. The Department of Community Development shall be notified when a spring is encountered during construction.
- 18. Construction debris shall be containerized in accordance with the Virginia Litter Control Act. No less than one litter receptacle shall be provided on site.
- 19. The contractor shall provide adequate means of cleaning mud from trucks and/or other equipment prior to entering public streets or rights of ways. It is the contractors responsibility to insure that the streets are in a clean, mud and dust free condition at all times.
- 20. Plan approval in no way relieves the developer or contractors of the responsibilities contained within the erosion and sediment control policies.
- 21. Field construction shall honor proposed drainage divides as shown on plans.
- 22. Field corrections shall be approved by the Roanoke County Engineering Division and/or the Western Virginia Water Authority and the Professional of Record. prior to such construction.
- 23. The developer or contractor shall supply the County and the Western Virginia Water Authority with correct As-Built plans before final acceptance.

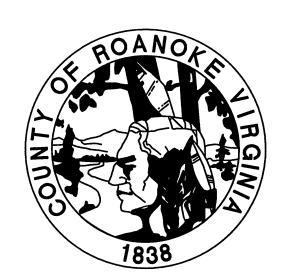
VIRGINIA DEPARTMENT OF TRANSPORTATION:

- 24. Plan approval by Roanoke County does not guarantee issuance of any permits by the Virginia Department of Transportation.
- 25. A permit must be obtained from the Virginia Department of Transportation, Salem Residency Office prior to construction in the highway right-of-way.
- 26. The preliminary pavement designs should be based on a predicted sub-grade CDR value of 7.0 and with a Resiliency Factor (RF) of 2.0 as shown in Appendix I of the 2000 Virginia Department of Transportation Pavement Design Guide for Subdivision and Secondary Roads. The sub-grade soil is to be tested by an independent laboratory and the results submitted to the Virginia Department of Transportation prior to base construction. Should the sub-grade CBR value and/or the RF value be less than the predicted values, additional base material will be required in accordance with Departmental specifications. Refer to the same manual as the number and locations of the required soil samples to be tested. All pavement designs shall be submitted to the Department for review and approval. The sub-grade shall be approved by the Virginia Department of Transportation prior to placement of the base. Base shall be approved by the Virginia Department of Transportation for
- 27. Standard guardrail with safety end sections may be required on fills or in areas where hazards exist as deemed necessary. After completion of rough grading operations, the County Engineer and Virginia Department of Transportation shall be contacted to schedule a field review. Where guard rail is warranted, the standard shoulder width shall be provided and the guard rail shall be installed in accordance with the 2001 VDOT Road and Bridge Standards as part of this development.

depth, template, and compaction before the surface is applied.

- 28. Standard street and traffic control signs shall be erected at each intersection by the developer prior to final street acceptance.
- 29. All traffic devices shall be in accordance with current edition of the manual: "Uniform Traffic Control Devices (MUTCD)"
- 30. All unsuitable material shall be removed from the construction limits of the roadway before placing embankment.

The Project Engineer shall provide electronic copies of the approved plans to the Development Review Coordinator within 5 working days of the pre-construction meeting. This sheet may not be modified



County of Roanoke, VA

NAME OF DEVELOPMENT KROGER FUI	EL CENTER R-4	DEVELOP	OWNER/DEVELOPER, JE OF THE SITE DESIGN REQUIREMENTS IMPOSED BY THIS SITE MENT PLAN AND OTHER APPLICABLE ROANOKE COUNTY CODES.
MAGISTERIAL DISTRICT(S) WINDSOR HILLS		AND THE	CERTIFY THAT I AGREE TO COMPLY WITH THESE REQUIREMENTS THIRTY (30) POINTS SHOWN ON THIS COVER SHEET UNLESS IN ACCORDANCE WITH LOCAL LAW.
OWNER (name, address, telephone) RENEE TURNER MARTI P.O. BOX 315 CROZET, VA 22932	N-WITH A LIFE ESTATE RESERV	"ED FOR DONALD GUY	TURNER
THE KROGER CO. — DEVELOPER (name, address, telephone) 3631 PETERS CREEK ROANOKE, VA 24019		540-563-3645	FAX 540-563-3638
ENGINEER, ARCHITECT OR SURVEYOR (name, address, telephone)	BALZER AND ASSOCIATES, INC. 1208 CORPORATE CIRCLE ROANOKE, VA 24018	540-772-9580	FAX 540-772-8050

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

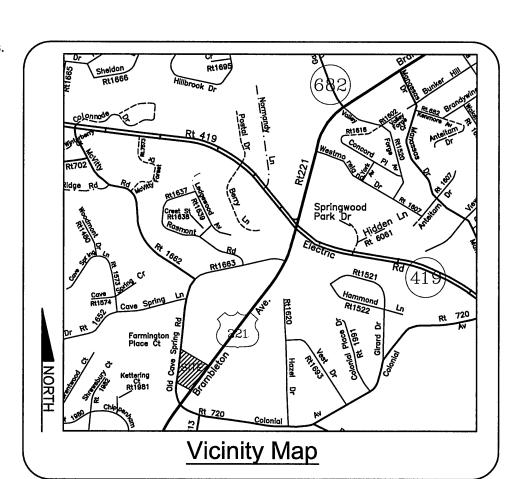
All trenches in existing or future highway right-of-ways shall be compacted according to Virginia Department of Transportation standards.

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.

Western Virginia Water Authority Availability letter number: _____



	LEGEND
Property Line	
Right-of-way	
Centerline	
Minimum Building Line	
Existing Storm Sewer	=======================================
Existing Sanitary Sewer	8" ss
Exjsting Water Main	
Existing Contour	
Proposed Contour	
Proposed Drainage Divide	
Proposed Limits of Clearing	
Proposed Storm Sewer	
Proposed Sanitary Sewer	8" SS
Proposed Water Main	8" W
To Be Removed	T.B.R.

Ex.

DS

Existing

Downspout

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

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 Virginia Department of Transportation standards.

Lines shall be staked prior to construction.

Underground utilities installed on private property or in private utility easements and building related storm drains shall be designed and installed per the current edition of the Virginia Uniform Statewide Building Code. Design and installation requirements issued by the Western Virginia Water Authority that meet or exceed the USBC requirements are acceptable for private utilities. All private utilities are to be permitted through and inspected by the Roanoke County Inspections Office. Vaults, valves and other devices installed by or under the control of the Western Virginia Water Authority may not substituted for the code required devices.

EXISTING CONDITIONS AND DEMO. PLAN

C-5	GRADING PLAN
C-6	ESC. PLAN (PHASE I)
C-7	ESC PLAN (PHASE II)
C-8	ESC NOTES`& DETAILS
C-9	PROFILES
C-10	INTERSECTION SIGHT DISTANCE
C-11	LANDSCAPE PLAN
C-12	DETAILS
C-13	DETAILS II
C-14	DETAILS III
C-15	WWW. WILL DETITIES
C-16	WVWA SANITARY SEWER DETAILS
C-17	GENERAL NOTES
C-18	LIGHTING/PHOTOMETRIC PLAN
C-19	(====,
C-20 C-21	···· ··· · · · · · · · · · · · · · · ·
0 21	Sheet Index
	<u> </u>

	Sileet index
	SURVEY INFORMATION
Horizontal and ve	ical control surveys were performed in year:
	ns are based on an assumed datum. tions are based on an assumed datum.
Source of topogra	hic mapping is dated BALZER & ASSOCIATES INC., 2009
Boundary was pe	ormed by BALZER & ASSOCIATES, INC. dated: 2009
	ation: EX. LID OF TELEPHONE MANHOLE= 300.36

The professional seal and signature certifies the boundary survey and topographic mapping to

be accurate and correct.

if necessary.

All existing utilities may not be shown in their exact location.

COVER SHEET

EASEMENT PLAN

LAYOUT & UTILITY PLAN

PRIVATE UTILITIES

15" HDPE END SECTION	1	EACH	200.00		200.00
6" SDR-35 PIPE	150	LIN. FT.	8.00		1,200.00
24" RCP PIPE W/GASKETS	22	LIN. FT.	40.00		880.00
24" END SECTION	1	EACH	350.00		350.00
			····		
ORIFICE PLATE	1	EACH	25.00		25.00
UNDERGROUND STORMWATER MANAGEMENT (ALLUM. CMP)	1	EACH	12,000		12,000.0
FILTERRA S.W.Q. UNIT	2	EACH	8,000		16,000.0
CONTECH S.W.Q. UNIT	1	EACH	3,500.00		3,500.0
-IN. C.M. CULVERT		LIN. FT.			
-IN. C.M. CULVERT		LIN. FT.			
BOX CULVERT		LUMP SUM			
PAVED DITCH		LIN. FT.			
RIPRAP - CLASS		S.F.			
					MS.
SODDED SWALE		S.Y.		1	
		0.1.			
IN CONCERTS THE WAY THE					
-IN. CONCRETE ENDWALL EW-		EACH		Think,	1
				- Mish	<u> </u>
				(T)	
-IN. END SECTION ES-		EACH			
PAVEMENT (INCLUDING SUB-BASE)	1,800	S.Y.	15.00		27,000.00
CURB & GUTTER CG-6	515	LIN. FT.	12.00		6,180.00
VALLEY GUTTER	-	EACH	-	1	1
GRAVEL BASE		S.Y.			
NATARINA ANTONIA					
GRAVEL SHOULDER		S.Y.			
SURFACE TREATMENT		S.Y.			
-IN. BIT. CONC.: TYPE B-		S.Y.			
-IN. BIT. CONC.: TYPE S-		S.Y.			
-IN. BASE MATERIAL		C.Y.			
-IN. SUBBASE MATERIAL		C.Y.			
TRAFFIC RAPPICADE		F40U			
TRAFFIC BARRICADE		EACH			
WATER VAULT		EACH			
6" WATER LINE		LIN. FT.			
FIRE HYDRANT ASSEMBLIES	1	EACH	800.00		800.00
BLOW OFFS W/VAULT, FRAME & COVER		EACH			
-IN. GATE VALVES, W/VAULT, FRAME & COVER		EACH			
-IN. GATE VALVES, W/VAULT, FRAME & COVER		EACH			
CANITADY OF MED MANUAL TO			4 500 55		
SANITARY SEWER MANHOLE	2	EACH	1,500.00		3,000.00
B" PVC SANITARY SEWER MAIN	86	LIN. FT.	40.00		3,440.00
6" SANITARY SEWER LATERAL	1	EACH	300.00		300.00
SAMPLING MANHOLE/PORT	1	EACH	500.00		500.00
LANDSCAPING	1	LUMP SUM (C-11)			5,970.00
AS-BUILT PLANS	1	LUMP SUM			1,000.00
(STORMWATER MANAGEMENT & STORM SEWER)					
SUB-TOTAL					89,889.0
					22,472.0
25% CONTINGENCY	· · · · · · · · · · · · · · · · · · ·				112,361.0

QUANTITY & COST ESTIMATE

UNIT

ACRES

C.Y.

C.Y.

EACH

EACH

UNIT PRICE

1,600.00

COST

BONDABLE

2,400.00

3,200.00

1,944.00

QUANTITY

ITEM

CLEARING AND GRUBBING

S.W.M. EXCAVATION

CURB INLET DI-3C

VDOT ST'D MH-2

15" HDPE PIPE

S.W.M. EMBANKMENT

REFLECTING TOMORROW www.balzer.cc PLANNERS • ARCHITECTS ENGINEERS • SURVEYORS 1208 Corporate Circle 15871 City View Drive, Suite 200

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

Midlothian, Virginia 23113 Phone: 804/794-0571 FAX: 804/794-2635

448 Peppers Ferry Road Christiansburg, Virginia 24073 Phone: 540/381-4290 FAX: 540/381-4291

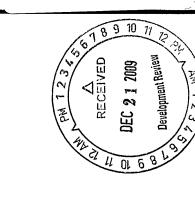
1561 Commerce Road Verona, Virginia 24482 Phone: 540/248-3220 FAX: 540/248-3221

DRAWN BY:

REVISIONS:

BTC BTC AJS

DESIGNED BY: CHECKED BY: 9-16-09 10-23-09 11-20-09



,	prostativa.	-	: N-01 (0-0/1977	Karata ka	y- nas-retus ,	AND THE RESERVE	(<u>)</u> _	2	gracer,
	LAN		NOI	JNTY	Date	40/1/2/d	12/23/09	1-6-405010	
	ENT P)VED	IRUCT	E COL	\cup	(A)	Me	75	5
	DEVELOPMENT PLAN	APPROVED	FOR CONSTRUCTION	BY ROANOKE COUNTY	Department	Development Review	Engineering	Water & Sewer	

SHEET No.:

of 21

JOB No.: **R0800418.00**