County of Roanoke, VA

GENERAL NOTES

PRE-CONSTRUCTION MEETING AND CONSTRUCTION COMMENCEMENT:

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 must be available 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.
16. 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 depth, template, and compaction before the surface is applied.
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.
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.

See Sheet C06 for Stormwater Site Statistics Table.
See Sheet C06 for New BMP Information Table.

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.

NAME OF DEVELOPMENT	**H2GLO CAR WASH**
MAGISTERIAL DISTRICT(S)	WINDSOR HILLS
OWNER (name, address, telephone)	TGE, LLC 5216 RANCHCREST DRIVE (540) 556-8252 ROANOKE, VA 24018 H2GLOCarwash@gmail.com
DEVELOPER (name, address, telephone)	TGE, LLC 5216 RANCHCREST DRIVE (540) 556-8252 ROANOKE, VA 24018 H2GLOCarwash@gmail.com
ENGINEER, ARCHITECT OR SURVEYOR (name, address, telephone)	BALZER AND ASSOCIATES, INC. 1208 CORPORATE CIRCLE ROANOKE, VA 24018 540-772-9580 FAX 540-772-8050
TAX MAP NO(S)	067.18-01-02.01-0000

I, _____ OWNER/DEVELOPER, AM AWARE OF THE SITE DESIGN REQUIREMENTS IMPOSED BY THIS SITE DEVELOPMENT PLAN AND OTHER APPLICABLE ROANOKE COUNTY CODES. I HEREBY CERTIFY THAT I AGREE TO COMPLY WITH THESE REQUIREMENTS AND THE THIRTY (30) POINTS SHOWN ON THIS COVER SHEET UNLESS MODIFIED IN ACCORDANCE WITH LOCAL LAW.

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 12VAC5-590-1150, where lines cross.

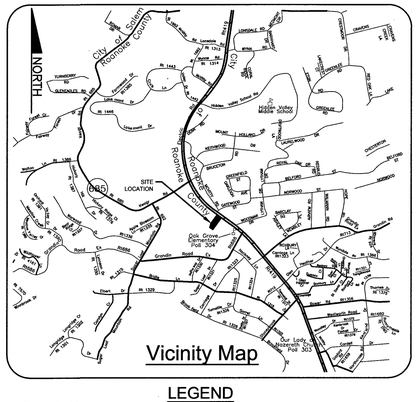
All trenches in existing or future highway right-of-ways shall be compacted according to Virginia Department of Transportation standards.

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: **14-129**



Vicinity Map

LEGEND

Property Line	
Right-of-way	
Centerline	
Minimum Building Line	
Existing Storm Sewer	
Existing Sanitary Sewer	8" SS
Existing Water Main	8" W
Existing Contour	1155
Proposed Contour	1155
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.
Existing	Ex.
Downspout	DS

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 in their exact location. The contractor shall comply with (State Water Works Regulations, Section 12VAC5-590-1150, 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.

PRIVATE UTILITIES

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.

Sheet Index

C01 COVER SHEET
C02 GENERAL NOTES
C03 EXISTING CONDITIONS & DEMO PLAN
C04 LAYOUT AND UTILITY PLAN
C05 GRADING PLAN
C06 E.S.C. PLAN
C07 E.S.C. NOTES & DETAILS
C08 E.S.C. NOTES & DETAILS
C09 LANDSCAPE PLAN
C10 DETAILS I
C11 DETAILS II
C12 LIGHTING PLAN
C13 RETAINING WALL DETAILS
C14 TRAFFIC CONTROL PLAN

SURVEY INFORMATION

Horizontal and vertical control surveys were performed in year: 2013
By: BALZER & ASSOCIATES, INC.

All vertical elevations are based on an assumed datum.
All horizontal elevations are based on an assumed datum.

Source of topographic mapping is dated BALZER & ASSOCIATES, INC. 2013 & ROANOKE COUNTY AERIAL MAPPING

Boundary was performed by BALZER & ASSOCIATES, INC. dated: 2013

Benchmark Information: EX. STORM SEWER MANHOLE LID = 1165.27'
SEE EXISTING CONDITIONS AND GRADING PLAN FOR EXACT LOCATION

The professional seal and signature certifies the boundary survey and topographic mapping to be accurate and correct.

NOTE: THIS COST ESTIMATE TABLE IS PROVIDED FOR BONDING PURPOSES ONLY. VERIFICATION OF ALL QUANTITIES AND PRICES FOR BIDDING PURPOSES SHALL BE THE RESPONSIBILITY OF THE BIDDER.

QUANTITY & COST ESTIMATE

ITEM	QUANTITY	UNIT	UNIT PRICE	COST	BONDABLE
CLEARING AND GRUBBING		ACRES			
S.W.M. EXCAVATION		C.Y.			
S.W.M. EMBANKMENT		C.Y.			
DROP INLET DI-1		EACH			
VDOT ST'D DI-3B	1	EACH	$ 2,200.00		$ 2,200.00
ACCESS PORT W/ MH-1 FRAME AND COVER	1	EACH	$ 2,000.00		$ 2,000.00
MODIFIED GRATE	1	LUMP SUM	$ 1,000.00		$ 1,000.00
NYLOPLAST DRAIN BASIN & COVER	1	EACH	$ 450.00		$ 450.00
15" HDPE PIPE	206	LIN. FT.	$ 25.00		$ 5,150.00
24" HDPE PIPE		LIN. FT.			
48" ALLUMINIZED CMP S.W.M. PIPE		LIN. FT.			
ACCESS PORT W/ MH-1 FRAME AND COVER		EACH			
BOX CULVERT		LUMP SUM			
PAVED DITCH		LIN. FT.			
RIPRAP - CLASS		S.F.			
SODDED SWALE		S.Y.			
-IN. CONCRETE ENDWALL EW-		EACH			
VDOT ST'D. CG-9D COMM. ENTRANCE	1	LUMP SUM	$ 5,000.00		$ 5,000.00
PAVEMENT (INCLUDING SUB-BASE)		S.Y.			
VDOT ST'D CG-6 CURB	222	LIN. FT.	$ 15.00		$ 3,330.00
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.			
COMMERCIAL WATER METER		EACH			
		EACH			
FIRE HYDRANT ASSEMBLIES		EACH			
BLOW OFFS W/VAULT, FRAME & COVER		EACH			
8 -IN. GATE VALVE, W/VAULT, FRAME & COVER		EACH			
-IN. GATE VALVE, W/VAULT, FRAME & COVER		EACH			
SANITARY SEWER MANHOLE		EACH			
8" PVC SANITARY SEWER MAIN		LIN. FT.			
LANDSCAPING (SEE SHEET C-09)	1	LUMP SUM	$ 2,445.00		$ 2,445.00
AS-BUILT PLANS	1	LUMP SUM	$ 1,000.00		$ 1,000.00
(STORMWATER MANAGEMENT & STORM SEWER)					
SUB-TOTAL					$ 22,575.00
10% CONTINGENCY					$ 2,258.00
ESTIMATED TOTAL					$ 24,833.00

BY SEALING THE PLANS, THE DESIGN PROFESSIONAL HEREBY CERTIFIES THAT THE FOREGOING ESTIMATE REFLECTS THE CURRENT IMPROVEMENT COSTS OF THIS PROJECT.

BALZER AND ASSOCIATES INC.
REFLECTING TOMORROW
www.balzer.cc
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ENGINEERS • SURVEYORS

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

COMMONWEALTH OF VIRGINIA
CHRISTOPHER P. BURNS
Lic. No.047338
11/7/14
PROFESSIONAL ENGINEER

APPROVED 02/12/2015 H2GLO Car Wash

APPROVED

DRAWN BY:	BTC
DESIGNED BY:	BTC
CHECKED BY:	CPB
DATE:	9/11/2014
REVISIONS:	10/10/2014 11/7/2014

DATE RECEIVED 10/22/2014 COMMUNITY DEVELOPMENT

DEVELOPMENT PLAN APPROVED FOR CONSTRUCTION BY ROANOKE COUNTY

Department		Date
Development Review	KG	11/20/14
Engineering	KG	11/20/14
Water & Sewer		11/20/14
Planning & Zoning		11/20/14

As-Built 07/22/2015

H2GLO CAR WASH

1905 ELECTRIC ROAD
County of Roanoke, Virginia

SHEET No.: C01

JOB No.: R1300142.01