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 Roanoke County, 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. 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 Environmental Quality. The Responsible Land Disturber can be anyone from the Project team that is certified by the Commonwealth 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, Storm Water Pollution Prevention Plan (SWPPP), VSMP coverage letter, 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 or Combined Erosion Control & VSMP Permit is given to the developer at this pre-construction meeting.
11. Notify Roanoke County prior to beginning installation of ESC measures. The County will inspect initial installations to ensure compliance with approved plan prior to start of grading. The developer SHALL contact the project inspector 24 hours before beginning any grading or construction on the property.
12. County inspectors must inspect storm drain / stormwater management / BMP installations during the process of installation. Please contact the site inspector 24 hours in advance.
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 or VA 811.
15. 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. Roanoke County 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 or stormwater management policies.
21. Field construction shall honor proposed drainage divides as shown on plans.
22. Field corrections shall be approved by the Roanoke County 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:

1. Plan approval by Roanoke County does not guarantee issuance of any permits by the Virginia Department of Transportation.
2. A permit must be obtained from the Virginia Department of Transportation, Salem Residency Office prior to construction in the highway right-of-way.
3. The preliminary pavement designs should be based on a predicted sub-grade CBR value of 7.0 and with a Resiliency Factor (RF) of 2.0 as shown in the current edition of the 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.
4. 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 current edition of the VDOT Road and Bridge Standards as part of this development.
5. Standard street and traffic control signs shall be erected at each intersection by the developer prior to final street acceptance.
6. All traffic devices shall be in accordance with current edition of the "Manual on Uniform Traffic Control Devices" (MUTCD).
7. All unsuitable material shall be removed from the construction limits of the roadway before placing embankment.

See Sheet C9 for Stormwater Site Statistics Table.
See Sheet C9 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.
The notes on this sheet shall not be modified.

NAME OF DEVELOPMENT	**RIVER OAKS SECTION 4**
MAGISTERIAL DISTRICT(S)	CATAWBA
OWNER (name, address, telephone)	RUSSLEN FARMS LAND CO LLC. PO BOX 7038 ROANOKE, VA 24019
DEVELOPER (name, address, telephone)	RUSSLEN FARMS LAND CO LLC. PO BOX 7038 ROANOKE, VA 24019
ENGINEER, ARCHITECT OR SURVEYOR (name, address, telephone)	BALZER AND ASSOCIATES, INC. 1208 CORPORATE CIRCLE ROANOKE, VA 24018 ATTN: CHRIS BURNS, P.E. 540-772-9580 FAX 540-772-8050
TAX MAP NO(S)	056.03-05-10.01-0000

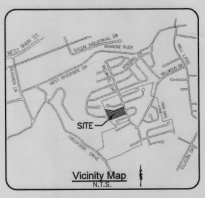
I, [signature], OWNER/DEVELOPER, APPROVE OF THE SITE DESIGN REQUIREMENTS IMPOSED BY THIS SITE DEVELOPMENT PLAN, ALL REVISIONS THEREOF, AND OTHER APPLICABLE ROANOKE COUNTY CODES AND ORDINANCES.

I HEREBY CERTIFY THAT I AGREE TO COMPLY WITH THESE REQUIREMENTS SHOWN ON THIS COVER SHEET UNLESS MODIFIED IN ACCORDANCE WITH LOCAL LAW.

WATER AND SEWER NOTES

1. All construction methods and materials shall conform to the latest edition of the Design and Construction Standards and Specifications of the Western Virginia Water Authority (WVWA) available at www.westernvwater.org or by contacting the authority at 540-853-5700. The project shall also comply with the governing jurisdiction's standards and other agency standards (e.g. VDOT, DEQ, DCR, VDH, etc.) where applicable.
2. A minimum cover of three (3) feet is required on all WVWA water and sewer lines.
3. All existing utilities may not be shown in their exact locations. The contractor shall notify Miss Utility and shall verify location and elevation of all underground utilities in the areas of construction prior to starting work.
4. Please show all WVWA water and sewer utilities on any development plan.
5. The location of existing utilities across or along the line of proposed work are not necessarily shown on the plans and where shown are only approximately correct. The contractor shall on his own initiative and at no extra cost, locate all underground lines and structures and potholes as necessary. The contractor shall be responsible for any damage to underground structures. All damage incurred to existing utilities during construction shall be repaired at the contractor's expense.
6. Plan approval by the WVWA does not remove the contractor's responsibility to remove or relocate any existing conflicts found during construction.
7. The contractor shall maintain a minimum of 18" clearance vertically and two (2) feet minimum horizontally from the outside of pipe to outside of pipe with all other underground utilities. Where this cannot be achieved, additional measures in accordance with the WVWA standards shall be enforced.
8. All utility grade adjustments shall be in accordance with WVWA standards and are the responsibility of the contractor.
9. Field changes shall be submitted by the engineer of record to the locality and approved by the WVWA.

Western Virginia Water Authority
Availability letter number: _____



Vicinity Map
N.T.S.

LEGEND

Property Line	P
Right-of-way	R/W
Centerline	CL
Minimum Building Line	MBL
Existing Storm Sewer	SS
Existing Sanitary Sewer	SS
Existing Water Main	W
Existing Contour	1045
Proposed Contour	1045
Proposed Drainage Divide	
Proposed Limits of Clearing	
Proposed Storm Sewer	24" S.D.
Proposed Sanitary Sewer	8" M.H.
Proposed Water Main	HYDRANT VALVE BLOWOFF

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 (including amendments). 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.

PR #:	NOTES:

Revision Table

C1	COVER SHEET
C2	OVERALL PLAN
C3	NOTES
C4	LAYOUT & UTILITY PLAN
C5.1	OVERALL GRADING PLAN
C5.2	OVERLOT GRADING PLAN
C6.1	ROAD PROFILE
C6.2	UTILITY PROFILES
C7.1	E.S.C. PLAN PHASE I
C7.2	E.S.C. PLAN PHASE II
C7.3	BORROW AREA GRADING & ESC PLAN
C7.4	E.S.C. NOTES
C7.5	E.S.C. DETAILS I
C7.6	E.S.C. DETAILS II
C8	DETAILS
C9.1	WVWA DETAILS I
C9.2	WVWA DETAILS II

Sheet Index

SURVEY INFORMATION

Horizontal and vertical control surveys were performed in year: 2021
by: BALZER AND ASSOCIATES, INC.

All vertical elevations must be referenced to the National Geodetic Vertical Datum of 1929 or 1988.
All horizontal elevations must be referenced to the North American Datum of 1927 or 1983.

Horizontal Datum: NAD83 Vertical Datum: NAVD88

Source of topographic mapping is dated 2021

Boundary was performed by BALZER AND ASSOCIATES, INC dated: DECEMBER 2021

Benchmark Information: EXISTING CURB INLET. ELEVATION 1318.4

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

QUANTITY & COST ESTIMATE

ITEM	QUANTITY	UNIT	UNIT PRICE	COST	BONDABLE
CLEARING AND GRUBBING		ACRES			
EARTHWORK	15,000	C.Y.	$3.00		$45,000.00
S.W.M. EMBANKMENT		C.Y.			
VDOT STD. DI-3B TOP	1	EACH	$1,000.00		$1,000.00
VDOT STD DI-3B	2	EACH	$3,500.00		$7,000.00
VDOT STD. DI-1		EACH	$1,500.00		
VDOT STD. DI-7		EACH	$1,500.00		
15" TYPE S HDPE PIPE	149	LIN. FT.	$30.00		$4,470.00
VDOT STD ES-1	1	EACH	$1,000.00		$1,000.00
BOX CULVERT		LUMP SUM			
PAVED DITCH		LIN. FT.			
RIPRAP - CLASS		S.F.			
SODDED SWALE		S.Y.			
-4L CONCRETE ENDWALL EW-		EACH			
ASPHALT PAVEMENT SECTION	2,240	SY	$20.00		$44,800.00
CURB & GUTTER CG-6	1,329	LIN. FT.	$18.00		$21,120.00
GRAVEL SHOULDER		S.Y.			
SURFACE TREATMENT		S.Y.			
-4L BIT. CONC.: TYPE B-		S.Y.			
-4L BIT. CONC.: TYPE B-		S.Y.			
-4L BASE MATERIAL		C.Y.			
-4L SUBBASE MATERIAL		C.Y.			
RESIDENTIAL WATER SERVICE - SINGLE	3	EACH	$750.00		$2,250.00
RESIDENTIAL WATER SERVICE - DOUBLE	9	EACH	$1,000.00		$9,000.00
8-IN. WATER LINE	710	LIN. FT.	$40.00		$28,400.00
FIRE HYDRANT ASSEMBLIES	1	EACH	$3,500.00		$3,500.00
8-IN. GATE VALVE, WVAULT, FRAME & COVER	1	EACH	$1,200.00		$1,200.00
8" SANITARY SEWER	820	LIN. FT.	$50.00		$28,000.00
STANDARD MANHOLE W/FRAME & COVER	2	EACH	$3,000.00		$6,000.00
SANITARY SEWER LATERAL - SINGLE	9	EACH	$1,500.00		$13,500.00
SANITARY SEWER LATERAL - DOUBLE	6	EACH	$2,000.00		$12,000.00
AS-BUILT PLANS - STORM SEWER	1	LUMP SUM	$1,000.00		$1,000.00
SUB-TOTAL					$227,240
10% CONTINGENCY					$22,724
ESTIMATED TOTAL					$249,964

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

BALZER & ASSOCIATES
PLANNERS / ARCHITECTS
ENGINEERS / SURVEYORS
Roanoke / Richmond
New River Valley / Staunton
Harrisonburg / Lynchburg
www.balzer.cc
1208 Corporate Circle
Roanoke, VA 24018
540.772.9580

COMMONWEALTH OF VIRGINIA
CHRISTOPHER P. BURNS
Lic. No. 47036
5/2/2022
PROFESSIONAL ENGINEER

Contractor: Bowman Excavating
Sub: Wells Construction
Inspector: Bruce Peters
As-builts: 3-14-2023

APPROVED

DRAWN BY:	KAM
DESIGNED BY:	CPB
CHECKED BY:	CPB
DATE:	1/31/2022
REVISIONS:	3/14/2022 4/21/2022 5/2/2022

PLAN APPROVED
REVIEW COORDINATOR, 6/20/22

RIVER OAKS SECTION 4
MILLWHEEL DRIVE
ROANOKE COUNTY, VIRGINIA

C1

JOB No.: 04210091.00