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
- 15. The 100 year Floodway shall be staked prior to any construction.

Utility": 1-800-552-7001 or VA 811.

- 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
- 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 C8.1 for Stormwater Site Statistics Table. See Sheet <u>C8.1</u> 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

The notes on this sheet shall not be modified



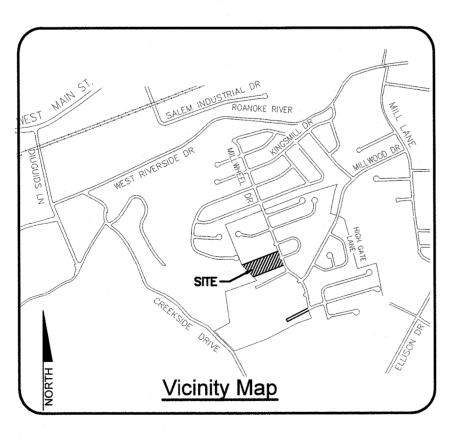
OUNTY OF ROANOKE, VA

			X 2 9	100
NAME OF DEVELOPMENT RIVER	OAKS SECTION	13	I, AMAWARE OF THE SITE DESIGN REQU DEVELOPMENT PLAN, ALL REVISIONS ROANOKE COUNTY CODES AND ORDIN	THEREOF, AND OTHER APPLICABLE
MAGISTERIAL DISTRICT(S) CATAWBA			• • • • • • • • • • • • • • • • • • • •	COMPLY WITH THESE REQUIREMENTS SHOWN
OWNER (name, address, telephone) 3922 El	N FARMS LAND CO LLC. LECTRIC ROAD E, VA 24018	-		
DEVELOPER (name, address, telephone) 130 E.	THOMAS HOMES MAIN ST. VA 24153 ATTN. JOE THOMAS	S		
ENGINEER, ARCHITECT OR SURVEYOR (name, add	BALZER AND ASSOC dress, telephone) 1208 CORPORATE (ROANOKE, VA 2401	CIRCLE	URNS, P.E. 540-772-95	580 FAX 540-772-8050
TAX MAP NO(S)056.030510.01	0000			

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.westernvawater.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 pothole 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
- 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
- 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

Western Virginia Water Authority Availability letter number: N/A



LEGEND

			Ð	
roperty Line				
ight-of-way			R/W	
enterline			CL	
linimum Building Line		MBL		MBL
xisting Storm Sewer		SD		——SD ————
xisting Sanitary Sewer	~~~	ss		
xisting Water Main		W	-	W
xisting Contour			—1045 —	
roposed Contour			 1045	
roposed Drainage Divide		\leftarrow	-	
roposed Limits of Clearing	. !			
roposed Storm Sewer			24" S.D.	
roposed Sanitary Sewer			8" M.H.	
roposed Water Main	HYDRANT	VAL	VE	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

C6.2 UTILITY PROFILES C7.1 E.S.C. PLAN PHASE I C7.2 E.S.C. PLAN PHASE II C7.3 E.S.C. NOTES C7.4 E.S.C. DETAILS C8.1 DETAILS I	C1 COVER SHEET C2 OVERALL PLAN C3 NOTES C4 LAYOUT & UTILITY PLAN C5 GRADING PLAN C6.1 ROAD PROFILE
I CR 1 DETAILS I	C7.1 E.S.C. PLAN PHASE I C7.2 E.S.C. PLAN PHASE II C7.3 E.S.C. NOTES C7.4 E.S.C. DETAILS

SURVEY INFORMATION

By: BALZER A	ND ASSOCIATES, INC.		
			etic Vertical Datum of 1929 or 1988 ican Datum of 1927 or 1983.
Horizontal Datum:	NAD83	Vertical Datum:	NAVD88
Source of topograp	ohic mapping is dated_	2020 BY BALZER	AND ASSOCIATES, INC.
Boundary was per	formed by BALZER AND A	SSOCIATES, INC. dated:	2020
Benchmark Inform	ation: CENTER OF WAT	ER MANHOLE LID	
	ELEVATION = 12	203.68	

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

S.W.M. EMBANKMENT		C.Y.
VDOT STD. DI-3B TOP	1	EACH
VDOT STD. DI-3C TOP	1	EACH
VDOT STD, DI-1	1	EACH
VDOT STD. DI-7	1	EACH
15" TYPE S HDPE PIPE	378	LIN. FT.
	·	
		-
BOX CULVERT		LUMP SUM
PAVED DITCH		LIN. FT.
RIPRAP - CLASS		S.F.
SODDED SWALE		S.Y.
/DOT STD. DI-3B TOP //DOT STD. DI-3C TOP //DOT STD. DI-1 //DOT STD. DI-7 I5" TYPE S HDPE PIPE BOX CULVERT PAVED DITCH RIPRAP - CLASS SODDED SWALE -IN. CONCRETE ENDWALL EW-		EACH
ASPHALT PAVEMENT SECTION	2,000	SY
CURB & GUTTER CG-6	1,140	LIN. FT.

CLEARING AND GRUBBING

GRAVEL SHOULDER

SURFACE TREATMENT -IN, BIT, CONC,; TYPE B-

-IN. BIT. CONC.; TYPE S-

AS-BUILT PLANS - STORM SEWER

SUB-TOTAL

10% CONTINGENCY

ESTIMATED TOTAL

EARTHWORK

-IN. BIT. CONC TIPE 3-		3.1.			
-IN. BASE MATERIAL		C.Y.			
-IN. SUBBASE MATERIAL		C.Y.			
			·		
RESIDENTIAL WATER SERVICE - SINGLE	1	EACH	\$750.00		\$750.00
RESIDENTIAL WATER SERVICE - DOUBLE	4	EACH	\$1,000.00		\$4,000.00
8-IN. WATER LINE	415	LIN. FT.	\$40.00		\$16,600.00
FIRE HYDRANT ASSEMBLIES	1	EACH	\$3,500.00		\$3,500.00
8-IN. GATE VALVE, W/VAULT, FRAME & COVER	1	EACH	\$1,200.00		\$1,200.00
8" SANITARY SEWER	449	LIN. FT.	\$50.00		\$22,450.00
STANDARD MANHOLE W/FRAME & COVER	2	EACH	\$3,000.00		\$6,000.00
SANITARY SEWER LATERAL - SINGLE	7	EACH	\$1,500.00		\$10,500.00
SANITARY SEWER LATERAL - DOUBLE	1	EACH	\$2,000.00		\$2,000.00
					·
				-	
					1

QUANTITY & COST ESTIMATE

ACRES

C.Y.

S.Y.

S.Y.

LUMP SUM

\$1,000.00

\$20.00

QUANTITY

25,000

UNIT UNIT PRICE COST

\$3.00

\$1,000.00

\$1,000.00

\$1,500.00

\$1,500.00

\$30.00

BONDABLE

\$75,000,00

\$1,000.00

\$1,000.00

\$1,500.00

\$11,340,00

\$40,000.00

\$18,240.00

\$1,000.00

\$217,580.00

\$21,758.00

\$239,338.0

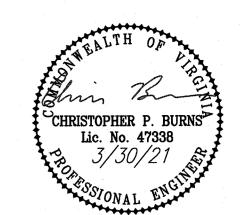
BY SEALING THE PLANS, THE DESIGN PROFESSIONAL HEREBY CERTIFIES THAT THE FOREGOING ESTIMATE REFLECTS THE CURRENT IMPROVEMENT COSTS OF THIS PROJECT



& 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



SIG

KAM DRAWN BY: CPB DESIGNED BY: CHECKED BY: CPB 1/6/2021 DATE: **REVISIONS:**

3/8/2021

3/30/2021





SHEET JOB No.: 04200041.00