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 inspections 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 36 for Stormwater Site Statistics Table.
See Sheet 36 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	HUNTRIDGE MULTIFAMILY PHASE 2 APARTMENTS
MAGISTERIAL DISTRICT(S)	HOLLINS DISTRICT
OWNER (name, address, telephone)	ORCHARDS EF LLC PO BOX 7038 ROANOKE, VA 24019
DEVELOPER (name, address, telephone)	R. P. FRALIN, INC. PHONE: 540-761-6371 5211 SOUTH CONCOURSE DR. ROANOKE, VA 24019
ENGINEER, ARCHITECT OR SURVEYOR (name, address, telephone)	ENGINEERING CONCEPTS, INC. BOBBY WAMPLER 94 GREENFIELD STREET PHONE: 540-473-1253 DALEVILLE, VA 24083
TAX MAP NO(S)	039.02-04-27.05-0000

I, Jason Finn, OWNER/DEVELOPER, AM AWARE OF THIS 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.westernwater.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 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.

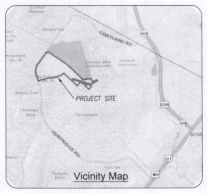
Western Virginia Water Authority
Availability letter number: _____

PRIV.:TE 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



Vicinity Map

1 – COVER
2 – GENERAL NOTES
3 – ZONING SUMMARY
4 – PARKING PLAN
5 – E&S NOTES
6 – WVWA NOTES
7 – EXISTING CONDITIONS PLAN
8 – EXISTING CONDITIONS PLAN
9 – OVERALL PLAN
10 – E&S PHASE 1 PLAN
11 – E&S PHASE 1 PLAN
12 – E&S PHASE II PLAN
13 – E&S PHASE II PLAN
14 – GRADING PLAN
15 – GRADING PLAN
16 – SITE DIM & UTILITIES PLAN
17 – SITE DIM & UTILITIES PLAN
18 – TEMPORARY GRADING PLAN
19 – ROAD PLAN & PROFILE
20 – OVERALL LANDSCAPE & OPEN SPACE PLAN
21 – LANDSCAPE PLAN
22 – LANDSCAPE PLAN
23 – SWM BASIN PLAN
24 – SWM BASIN PLAN
25 – SWM BASIN DETAILS & CALCS
26 – STORM PROFILES
27 – STORM PROFILES
28 – STORM PROFILES
29 – SANITARY PROFILES
30 – SANITARY PROFILES
31 – WATERLINE PROFILE
32 – WATERLINE PROFILE
33 – WVWA DETAILS
34 – WVWA DETAILS
35 – EROSION CONTROL DETAILS
36 – STORMWATER QUALITY
37 – VDOT TRANSPORTATION MANAGEMENT PLAN
38 – VDOT TRANSPORTATION MANAGEMENT PLAN
39 – RETAINING WALL DETAILS

Sheet Index

LEGEND

Property Line
Right-of-way
Centerline
Minimum Building Line
Existing Storm Sewer
Existing Sanitary Sewer
Existing Water Main
Existing Contour (1045)
Proposed Contour (1045)
Proposed Drainage Divide
Proposed Limits of Clearing
Proposed Storm Sewer (24" RCP)
Proposed Sanitary Sewer (8" M.H.)
Proposed Water Main (HYDRANT, VALVE, BLOWOFF)

SURVEY INFORMATION

Horizontal and vertical control surveys were performed in year 2021
By: ENGINEERING CONCEPTS, 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: NGVD88

Source of topographic mapping is dated: FEBRUARY 2021 & RECORD DRAWINGS

Boundary was performed by: N/A dated: _____

Benchmark Information: BM #1 = EX. SAN. SEWER MH #108-3299 TOP EL 1191.00'
BM #2 = EX. SAN. SEWER MH #108-3296 TOP EL = 1174.11'

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

QUANTITY & COST ESTIMATE

ITEM	PHASE 2 QUANTITY	UNIT	UNIT PRICE	BONDABLE	PHASE 3 QUANTITY	UNIT	UNIT PRICE	BONDABLE
CLEARING AND GRUBBING	5.5	AC	12,800	70,400				
EXCAVATION	36,000	C.Y.	5	180,000				
CURB INLET DI-3B	9	EA	6,900	62,100	1	EA	6,900	6,900
CURB INLET DI-3C	6	EA	6,900	41,400				
CURB INLET DI-7	1	EA	6,800	6,800				
MANHOLE MH-2	1	EA	4,500	4,500				
15 IN HDPE PIPE	791	LF	82	64,862	44	LF	82	3,608
18 IN HDPE PIPE	315	LF	82	25,830				
24 IN HDPE PIPE	60	LF	82	4,920				
15IN END SECTION ES-1	2	EA	1,048	2,096	1	EA	1,048	1,048
18IN END SECTION ES-1	1	EA	1,048	1,048				
24IN END SECTION ES-1	1	EA	1,048	1,048				
DETECTABLE WARNING SURFACE CG-12	7	SY	500	3,500	4	SY	500	2,000
CURB & GUTTER CG-6	3,400	LF	28	95,200	2,633	LF	28	73,724
SIDEWALK/CONCRETE	847	SY	70	59,290	639	SY	70	44,730
PAVING	8,574	SY	46	394,404	5,636	SY	46	259,256
8" WATER LINE	844	LF	81	68,364	856	LF	81	69,336
6" WATER LINE	195	LF	81	15,795	75	LF	81	6,075
COMBINATION AIR VALVE					2	EA	6,800	13,600
FIRE HYDRANT ASSEMBLIES	3	EA	9,200	27,600	2	EA	9,200	18,400
BLOW OFFS W/ VAULT, FRAME & COVER	2	EA	3,000	6,000				
8-IN GATE VALVES, W/ VAULT, FRAME & COVER	5	EA	2,500	12,500	4	EA	2,500	10,000
TEMPORARY BLOW OFF ASSEMBLY	2	EA	3,000	6,000	1	EA	3,000	3,000
SANITARY LATERAL AND SSCO	266	LF	70	18,620	64	LF	70	4,480
8" SANITARY SEWER	422	LF	81	34,182	428	LF	81	34,668
4' DIA. SANITARY MANHOLE	1	EA	10,000	10,000				
LANDSCAPING	1	LS	105,000	105,000	1	LS	48,000	48,000
RETAINING WALL	1,240	SF	20	24,800				
STORMWATER MANAGEMENT	3	LS	30,000	60,000				
AS-BUILT PLANS (STORM SEWER SYSTEMS)	1	LS	1,125	1,125	1	LS	1,125	1,125
AS-BUILT PLANS (STORMWATER MANAGEMENT)	1	LS	1,125	1,125	1	LS	1,125	1,125
10% CONTINGENCY				140,851				60,108
ESTIMATED TOTAL				1,549,360				661,183

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

ENGINEERING CONCEPTS, INC.
94 Greenfield Street
Daleville, Virginia 24083
540.473.1253

1	PER ROANOKE COUNTY COMMENTS DATED 7/18/22
2	PER ROANOKE COUNTY COMMENTS DATED 9/26/22
3	PER VDOT COMMENTS DATED 11/17/22
4	OWNER REVISIONS 5/3/23
5	PER ROANOKE COUNTY COMMENTS DATED 6/20/23

COMMONWEALTH OF VIRGINIA
BOBBY R. WAMPLER, JR.
LIC. No. 34713
7/20/23
PROFESSIONAL ENGINEER

Approved

PLAN APPROVED
REVIEW COORDINATOR, 7/27/2023

New Facility for
Huntridge Multifamily
Phase 2 Apartments
0 Crumpacker Drive
Roanoke, VA 24012

SHEET
1
OF
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