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 <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.
- 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
- 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

contained within the erosion and sediment control policies.

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)"

This sheet may not be modified.

30. All unsuitable material shall be removed from the construction limits of the roadway

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.



County of Roanoke, VA

I, LUGUSTRIES OF THE VALLETS INGUNERIDEVELOPER **GOODWILL** NAME OF DEVELOPMENT AM AWARE OF THE SITE DESIGN REQUIREMENTS IMPOSED BY THIS SITE DEVELOPMENT PLAN AND OTHER APPLICABLE ROANOKE COUNTY CODES. HEREBY CERTIFY THAT I AGREE TO COMPLY WITH THESE REQUIREMENTS AND THE THIRTY (30) POINTS SHOWN ON THIS COVER SHEET UNLESS MAGISTERIAL DISTRICT(S) HOLLINS MODIFIED IN ACCORDANCE WITH LOCAL LAW. AIRPORT ROAD HOLDINGS, LLC. 2404 ELECTRIC RD. SUITE B OWNER (name, address, telephone) ROANOKE, VA 24018 PIEDMONT COMPANIES INC. DEVELOPER (name, address, telephone) POST OFFICE BOX 1732 LINCOLNTON, NC 28093 (540) 962-8229 ATTN. DAVID JOHNSON BALZER AND ASSOCIATES, INC. ENGINEER, ARCHITECT OR SURVEYOR (name, address, telephone) 1208 CORPORATE CIRCLE ROANOKE, VA 24018 (540) 772-9580 ATTN: CHRIS BURNS, P.E. TAX MAP NO(S) 026.16-02-14.02-0000, 026.16-02-14.03-0000

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.)

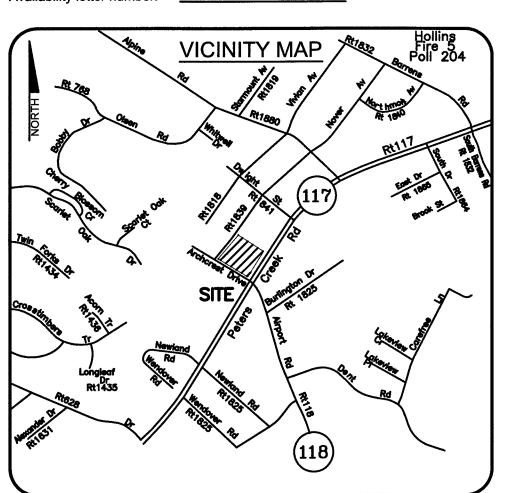
All trenches in existing or future highway right-of-ways shall be compacted according to Virginia Department of Transportation standards.

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: ___



<u>LEGEND</u>						
Property Line						
Right—of—way						
Centerline						
Minimum Building Line	— — — MBL — — —					
Existing Storm Sewer						
Existing Sanitary Sewer	8" ss					
Existing Water Main						
Existing Contour	— — — — — 1155 — — — — —					
Proposed Contour						
Proposed Drainage Divide						
Proposed Limits of Clearing						
Proposed Storm Sewer						
Proposed Sanitary Sewer	8" SS					
Proposed Water Main	8" W					

T.B.R.

TO BE REMOVED

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

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

- C1 COVER SHEET C2 EXISTING CONDITIONS & DEMO PLAN
- C3 PHASE 1 ESC PLAN C4 LAYOUT & UTILITY PLAN
- **C5** GRADING PLAN C6 PHASE 2 ESC PLAN
- **C7** ESC NOTES AND DETAILS UTILITY PROFILES & SCHEDULES
- C9 LANDSCAPE PLAN C10 DETAILS I
- C11 DETAILS II
- C12 GENERAL NOTES
- WESTERN VA REGIONAL DETAILS

SURVEY INFORMATION

Horizontal and vertical control su By: BALZER AND ASSOC			· · · · · · · · · · · · · · · · · · ·
	d to the National Geodetic Vertical Datum s are referenced to Roanoke County Dee		2, Pg. 69.
Source of topographic mapping i	s: ROANOKE COUNTY G.I.S.	dated:	1992
AND APPROVED PLAN FOR		dated:	8/30/2013
Boundary was performed by:	BALZER AND ASSOCIATES, IN	C. dated:	2009

Benchmark Information: EXISTING GATE VALVE ELEVATION = 1082.88'

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.

QUANTI	TY & COS	IESIIM	AIE		
ITEM	QUANTITY	UNIT	UNIT PRICE	COST	BONDABLE
CLEARING AND GRUBBING		ACRES	\$		\$
GRADING - ROADWAYS ONLY		C.Y.	\$		\$
DEMOLITION		LUMP SUM	\$		\$
GRATE INLET DI-1 SERIES		EACH	\$ 1,000.00		\$
CURB INLET DI-3 SERIES		EACH	\$ 1,500.00		
GRATE INLET DI-5,7 SERIES		EACH	\$ 1,200.00		\$
			.,		•
MANHOLE MH-2 SERIES	••	EACH	\$ 1,200.00		\$
MANHOLE MH-	••	EACH	\$		\$
15 -IN. HDPE PIPE	352	LIN. FT.	\$ 25.00		\$ 8,800.00
18 -IN. HDPE PIPE	••	LIN. FT.	\$ 30.00		\$
30 -IN. HDPE PIPE		LIN. FT.	\$ 50.00		\$
15 -IN. ALLUMINIZED CMP		LIN. FT.	\$ 30.00		\$
18 -IN. ALLUMINIZED CMP		LIN. FT.	\$ 35.00		\$
60 -IN. ALLUMINIZED CMP		LIN. FT.	\$ 90.00		\$
BOX CULVERT		LUMP SUM	\$		\$
			<u> </u>		<u> </u>
EC-2 DITCH LINING	••	LIN. FT.	\$ 4.00		\$
EC-3A DITCH LINING	••	LIN. FT.	\$ 5.00		\$
RIPRAP - CLASS I					
RIPRAP - CLASS II					
SODDED SWALE		S.Y.	\$		\$
					
		~			
15 -IN. HDPE END SECTION	••	EACH	\$ 200.00		\$
18 -IN. HDPE END SECTION		EACH	\$ 250.00		\$
24 -IN. END SECTION ES-1 30 -IN. END SECTION ES-1		EACH	\$ 300.00		\$
30 -IN, END SECTION ES-1	••	EACH	\$ 400.00		\$
SIDEWALK		LIN. FT.	\$ 5.00	!	\$
CURB & GUTTER CG-6	900	LIN. FT.	\$ 14.00		\$ 12,600.00
VDOT STD. CG-9D ENTRANCES	2	EACH	\$ 1,000.00		\$ 2,000.00
STD. PAVEMENT SECTION	1,500	S.Y.	\$ 12.00		\$ 18,000.00
HEAVY-DUTY PAVEMENT SECTION	3,200	S.Y.	\$ 15.00		\$ 48,000.00
PAVEMENT REPLACEMENT		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.	\$		\$
6 -IN. WET TAP		EACH	\$ 250.00		\$
8 -IN. PVC WATERLINE	230	LIN. FT.	\$ 40.00		\$ 9,200.00
6 -IN. PVC FIRE LINE		LIN. FT.	\$ 30.00	 	\$
AIR RELEASE VALVE	1	EACH	\$ 1,200.00		\$ 1,200.00
FIRE HYDRANT ASSEMBLY 1.5 -IN. PVC DOMESTIC WATERLINE	1	EACH	\$ 3,500.00		\$ 3,500.00
6 -IN. GATE VALVE, W/ VAULT, FRAME & COVER	1	EACH	\$ 500.00		\$ 500.00
12 -IN. GATE VALVE, W/ VAULT, FRAME & COVER	•	EACH EACH	\$ 850.00 \$ 600.00		\$
COMMERCIAL WATER METTER SETTER & PRV	1	EACH	\$ 500.00		\$ 500.00
DOUBLE WATER METTER SETTER		EACH	\$ 350.00		•
8-IN. CHECK VALVE		EACH	\$ 500.00		\$
					<u> </u>
8 -IN. SDR-35 SANITARY SEWERLINE	••	LIN. FT.	\$ 50.00		\$
8 -IN. DUCTILE IRON SANITARY SEWERLINE		LIN. FT.	\$ 25.00		\$
6 -IN. COMMERCIAL LATERAL AND CLEANOUTS	1	LUMP SUM	\$ 3,000.00		\$ 3,000.00
STANDARD MANHOLE W/ FRAME & COVER	••	EACH	\$ 3,000.00		\$
INSIDE DROP MANHOLE W/ FRAME & COVER	••	EACH	\$ 3,500.00		\$
LANDSCAPING		LUMP SUM	\$		\$ 6,479.00
AMENITIES (INCLUDING BUT NOT LIMITED TO TRAILS, ETC)		LUMP SUM	\$		\$
	4	EACH	\$ 6,500.00		\$ 26,000.00
FILTERRA INLET W/ BOXLESS FILTER		LUMP SUM	\$ 1,000.00	<u> </u>	\$
CONVERSION OF SEDIMENT BASIN TO SWM FACILITY	 		\$ 8.00		 \$
CONVERSION OF SEDIMENT BASIN TO SWM FACILITY SWM FENCING	••	LIN. FT.			
CONVERSION OF SEDIMENT BASIN TO SWM FACILITY SWM FENCING DOUBLE GATE		EACH	\$ 500.00		\$
CONVERSION OF SEDIMENT BASIN TO SWM FACILITY SWM FENCING DOUBLE GATE AS-BUILT PLANS (STORM SEWER SYSTEMS)		EACH LUMP SUM	\$ 500.00 \$ 1,000.00		\$ \$ 1,000.00
CONVERSION OF SEDIMENT BASIN TO SWM FACILITY SWM FENCING DOUBLE GATE		EACH	\$ 500.00		\$
CONVERSION OF SEDIMENT BASIN TO SWM FACILITY SWM FENCING DOUBLE GATE AS-BUILT PLANS (STORM SEWER SYSTEMS) AS-BUILT PLANS (STORMWATER MANAGEMENT)		EACH LUMP SUM	\$ 500.00 \$ 1,000.00		\$ \$ 1,000.00 \$
CONVERSION OF SEDIMENT BASIN TO SWM FACILITY SWM FENCING DOUBLE GATE AS-BUILT PLANS (STORM SEWER SYSTEMS)		EACH LUMP SUM	\$ 500.00 \$ 1,000.00		\$ \$ 1,000.00 \$
CONVERSION OF SEDIMENT BASIN TO SWM FACILITY SWM FENCING DOUBLE GATE AS-BUILT PLANS (STORM SEWER SYSTEMS) AS-BUILT PLANS (STORMWATER MANAGEMENT) SUB-TOTAL		EACH LUMP SUM	\$ 500.00 \$ 1,000.00		\$ \$ 1,000.00 \$

I HEREBY CERTIFY THAT THE FOREGOING ESTIMATE REFLECTS THE CURRENT IMPROVEMENT COSTS OF THIS PROJECT.



www.balzer.cc PLANNERS • ARCHITECTS ENGINEERS • SURVEYORS

FAX: 540/772-8050

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

Christiansburg, Virginia 24073 Phone: 540/381-4290 FAX: 540/381-4291

1561 Commerce Road Suite 401 Verona, Virginia 24482 Phone: 540/248-3220 FAX: 540/248-3221

REFLECTING TOMORROW

1208 Corporate Circle Roanoke, Virginia 24018 Phone: 540/772-9580

15871 City View Drive

448 Peppers Ferry Road

Signatu

DRAWN BY: **CPB** CPB DESIGNED BY: CHECKED BY: BTC DATE: 12/13/2013 **REVISIONS:**

01/08/2014 01/27/2014

These are not as-builts but the utilities were installed by Southwest Excavating, Inc.

Substantial Completion: 08/07/2014

SHEET No.:

JOB No.: R1300149.00