QUANTITY + COST ESTIMATE

ITEM	QUANTITY	UNIT	UNIT PRICE	COST	BONDABLE
CURB INLET DI-3C SERIES	3	EACH	\$2,000.00		\$6,000.0
CURB INLET DI-1 SERIES	4	EACH	\$1,500.00		\$6,000.0
STORM MANHOLE	1	EACH	\$1,500.00		\$1,500.0
15 -IN. HDPE	350	LIN. FT.	\$30.00		\$10,500.0
24 -IN. HDPE	20	LIN. FT.	\$40.00		\$800.0
36 -IN. CMP	20	LIN. FT.	\$60.00		\$1,200.0
72 -IN. RCP	45	LIN. FT.	\$ 110.00		\$4,950.0
	1	EACH	\$1,800.00		
JUNCTION BOX	 	EACH	\$1,800.00		\$1,800.0
PAVEMENT — STANDARD	1000	6.4	\$ 10.00	:	#10,000
PAVEMENT - STANDARD PAVEMENT - HEAVY DUTY	1200 2200	S.Y.	\$10.00 \$12.00		\$12,000. \$26,400.
CONCRETE DRIVE THRU	270	S.Y.	\$20.00		\$5,400.
SONOREIE BRIVE TIMO	270	3.1.	Ψ20.00		\$0,700.
CURB & GUTTER CG-6	450	LIN. FT.	\$12.00		\$5,400
COMMERCIAL WATER METERS	2	EACH	\$800.00		\$ 1,600.
PRIVATE LATERAL	2	EACH.	400.00		\$800
S.S. CLEANOUT	2 2	EACH.	250.00		\$500.
	<u> </u>				
SAMPLING MANHOLE/PORT	2	EACH	\$1,000.00		\$2,000.
B" DI SANITARY SEWER PIPE	97	L.F.	\$28.00		\$2,716.
					
AS-BUILT PLANS	1	LUMP SUM	\$2,500.00		\$2,500.
LANDSCAPING (SEE SHEET C-9)	1	LUMP SUM	\$10,165.00		\$10,165.
STORMWATER MANAGEMENT	1	LUMP SUM	\$15,000.00		\$ 15 , 000.
OTE: ALL IMPROVEMENTS LOCATED WITHIN THE PUBLIC RIGH RAMBLETON AVE., COLONIAL AVE., & MERRIMAN ROAD WILL SEPARTE PERMIT AS SET FORTH BY VDOT STANDARDS.	T OF WAY ALONG BE COVERED BY				
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S. Comment of the Com				\$117,2	231.00
ESTIMATED SUB—TOTAL					
ESTIMATED SUB—TOTAL 25% CONTINGENCY				\$29,3	08.00
ESTIMATED SUB—TOTAL					08.00

GENERAL NOTES

All construction methods and materials shall conform to the Construction Standards and Specifications of Roanoke County, the Western Virginia Water Authority and/or the Virginia Department of Transportation.

The contractor or developer is required to notify the Roanoke County Engineering Division and the Western Virginia Water Authority in writing at least three (3) days prior to any construction, including, but not limited to the following:

- A. Installation of approved erosion control devices B. Clearing and grubbing
- C. Subgrade excavation
- D. Installing storm sewers or culverts Setting curb and gutter forms
- Placing curb and gutter
- G. Placing other concrete H. Placing gravel base
- I. Placing any roadway surface
 J. Installing water lines K. Installing sanitary sewer lines

A pre-construction conference should be scheduled with the Roanoke County Engineering Division and the Western Virginia Water Authority, to be held at least three days prior to any construction.

Measures to control erosion and siltation must be provided prior to plan approval. Plan approval in no way relieves the developer or contractor of the responsibilities contained within the erosion and siltation control policies.

A permit must be obtained from the V.D.O.T. Residency Office, Rognoke County, prior to construction in the highway right-of-way.

Plan approval does not guarantee issuance of any permits by V.D.O.T.

An approved set of plans and all permits must be available at the construction site.

All unsuitable material shall be removed from the construction limits

Field construction shall honor proposed drainage divides as shown

of the roadway before placing embankment. All roadside ditches or grades of more than 5 percent shall be paved with cement concrete to the limits as indicated on the plans and as

required at the field inspection. Location of guard rails shall be determined at a joint field inspection by the County and V.D.O.T.

All springs shall be capped and piped to the nearest storm sewer or natural watercourse. The pipe shall be 6 inch minimum diameter and conform to V.D.O.T. Standard SB—1.

Standard street and traffic control signs shall be erected at each intersection by the developer prior to final street acceptance.

Construction debris shall be containerized in accordance with the Virginia Litter Control Act. No less than one litter receptacle shall be provided on site.

The contractor shall provide adequate means of cleaning mud from trucks and/or other equipment prior to entering public streets. It is the contractors responsibility to insure that the streets are in a clean, mud and dust free condition at all times.

The developer and/or contractor shall supply all utility companies with copies of approved plans, advising them that all gradina and installation shall conform to approved plans.

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.

The developer or contractor shall supply the County and the Western Virginia Water Authority with correct As—Built plans before final acceptance. All work shall be subject to inspection by Roanoke County the Western Virginia Water Authority and/or V.D.O.T. inspectors.

Field corrections shall be approved by the Roanoke County Engineering Division and the Western Water Authority prior to such construction. 100 year floodway and floodplain information shall be shown where

Grade stakes shall be set for all curb and gutter, culvert, sanitary sewer and storm sewer.

The preliminary pavement designs shown are based on a predicted sub-grade CBR value of 7.0 and 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 labratory and the results submitted to the Virginia Department of Transportation prior to base construction. Should the sub—grade CBR value and/or RF value be less than the predicted values, additional base material will be required in accordance with Department specifications. Refer to the same manual as the number and locations of the required soil samples to be tested. All pavement designs must be submitted to the Department for review and approval.

INDEX

ROANOKE COUNTY COVER SHEET

<u>C2</u>	SITE_INFORMATION & NOTES
C3 C4	EXISTING CONDITIONS & DEMOLITION PLAN
	LAYOUT & UTILITY PLAN
C5	EASEMENT PLAN
C6	GRADING PLAN
C7	EROSION & SEDIMENT CONTROL PLAN
Č8	ROANOKE COUNTY EROSION CONTROL
Ċ9	LANDSCAPE PLAN
C10	ENTRANCE & SIGHT DISTANCE PROFILES
Čii	UTILITY PROFILES
C12	NOTES
C13	SITE DETAILS I
C14	SITE DETAILS I
•	
C15	WVWA WATER DETAILS
C16	WVWA SANITARY SEWER DETAILS
C17	STRIPING PLAN

REVISED PER RKE. CO./WVWA/VDOT COMMENTS 1-9-08
REVISED PER RKE. CO./WVWA/VDOT COMMENTS 2-27-08

SEWER NOTES

AVAILABILITY # 07-350

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 arade

All existing utilities may not be shown or may not be shown in the exact location. The contractor shall comply with State Water Works Regulations, Section 12.05.03, where lines cross.

House connections are to be made with 4" pipe installed at a minimum arade of 1/4 inch to 1 foot in R/W.

Laterals from manholes shall be PVC or Ductile Iron of sufficient length to provide two (2) feet of bearing on natural ground. The transition from ductile iron to asbestos cement or concrete pipe shall be made with an adapter coupling in R/W.

All trenches in existing or future rights—of—way shall be compacted according to V.D.O.T. standards.

Lines shall be staked prior to construction.

All sanitary sewer connections to existing lines shall be coordinated with and performed by the Western Virginia Water Authority. All water and sanitary sewer facilities are to be installed according to the Western Virginia Water Authority Design and Construction

WATER NOTES

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 or may not be shown in the exact location. The contractor shall comply with the State Water Works Regulations, Section 12.05.03, where lines cross.

All trenches in existing or future highway right—of—ways shall be compacted according to V.D.O.T. standards.

Lines shall be staked prior to construction.

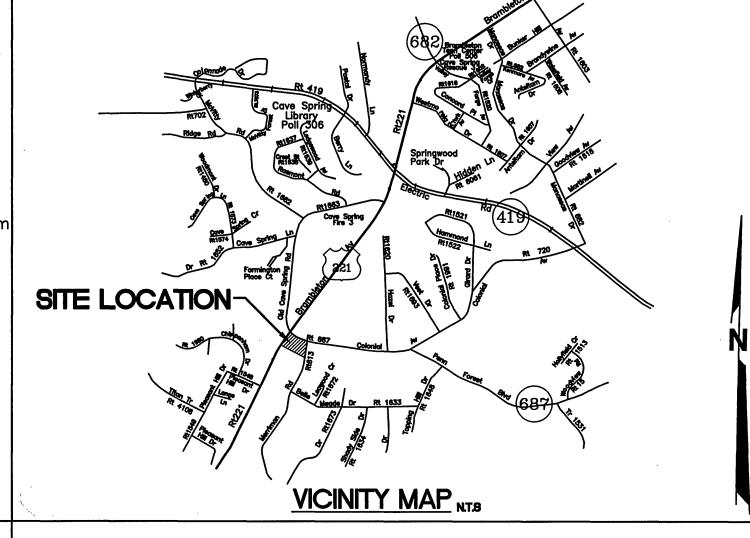
Water main shall be minimum Class 52 Ductile Iron in accordance to AWWA C151 or DR-14 PVC in accordance with AWWA C-900. Availability number 07–350

All water connections to existing lines shall be coordinated with and performed by the Western Virginia Water Authority.

All water and sanitary sewer facilities are to be installed according to the Western Virginia Water Authority Design and Construction

Ductile Iron pipe in compliance with the WVWA design and construction standards shall be required for all pipe with a working pressure equal to or greater than 100 psi.

LEGEND Property Line Right-of-way Centerline Minimum Building Line Existing Storm Sewer Existing Sanitary Sewer Existing Water Main **Existing Contour** Proposed Contour Proposed Drainage Divid Proposed Limits of Clearing Proposed Storm Sewer Proposed Sanitary Sewer Proposed Water Main



SURVEY INFORMATION

Horizontal and vertical control surveys were performed in 2007 by BALZER AND ASSOCIATES & CWA

All elevations must be referenced to the National Geodetic Vertical Datum of 1929.

Source of topographic mapping is CWA dated 2007

Boundary was performed by CWA

dated 2007

The professional seal and signature below topographic mapping to be accurate and

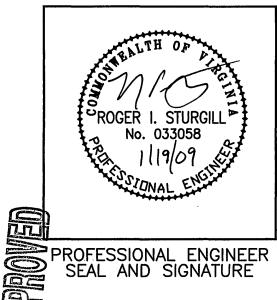
C	ertifies the coundary survey and orrect. BY ROANOKE COUNTY							
	Department		Date					
	Development Review	B	2/17/19					
	Engineering	me	2/13/09					
	Water & Sewer	RRB	2/23/09					
	Planning & Zoning	HW	2/13/09					

DEVELOPMENT PLAN APPROVED

I AM CERTIFIED BY THE STATE OF VIRGINIA AS A "RESPONSIBLE LAND DISTURBER." SHALL BE RESPONSIBLE FOR THE IMPLEMENTATION OF THE EROSION AND SEDIMENT CONTROL PLAN AS SHOWN. SIGNITURE ___ PRINTED NAME

CERTIFICATE DATE-TELEPHONE NUMBER-

RESPONSIBLE LAND DISTURBER



COUNTY OF ROANOKE

AS - BUILT 09/01/2009

NAME OF DEVELOPMENT BOJANGLES- BRAMBLETON

____OWNER/DEVELOPER, AM AWARE OF THE/SITE DESIGN REQUIREMENTS IMPOSED BY THIS SITE DEVELOPMENT PLAN AND OTHER APP-LICABLE COUNTY CODES. I HEREBY CERTIFY THAT I AGREE TO COMPLY WITH THESE REQUIREMENTS, UNLESS MODIFIED IN ACCORDANCE WITH LOCAL LAW.

SEASIDE HEIGHTS L.L.C.— ATTN: STAN SEYMOUR OWNER (name, address, telephone)

MAGISTERIAL DISTRICT(S)

TAX MAP NO(S)

7611 RICKENBACKER DRIVE GAITHERSBURG, MD 20879 540-537-6194

SEASIDE HEIGHTS L.L.C.- ATTN: STAN SEYMOUR 5960 Coleman Road DEVELOPER (name, address, telephone) ROANOKE, VA 24018

ENGINEER. ARCHITECT OR SURVEYOR (name, address, telephone) ROANOKE, VA 24018

86.08

CAVE SPRING

540-537-6194 BALZER AND ASSOCIATES, INC. 1208 CORPORATE CIRCLE

BLOCK NO(S)

540-772-9580 FAX 540-772-8050

PARCEL NO(S) 34.00, 35.00, 35.01, 36.01