

REFER TO BUILDING PLANS FOR SUBGRADE AND UTILITY TRENCHES WITHIN 5' OF THE BUILDING ENVELOPE.

BARRICADE OPEN EXCAVATIONS OCCURRING AS PART OF THIS WORK AND OPERATE WARNING LIGHTS AS RECOMMENDED BY AUTHORITIES HAVING JURISDICTION.

- a. CONFORM TO ELEVATIONS AND DIMENSIONS SHOWN WITHIN A TOLERANCE OF 0.1'
- b. PROVIDE TRUE AND STRAIGHT FOOTING EXCAVATIONS WITH UNIFORM AND LEVEL BOTTOMS OF THE WIDTH INDICATED TO ENSURE PROPER PLACEMENT AND COVER OF ALL REINFORCEMENT
- c. REMOVE ALL LOOSE MATERIALS FROM THE EXCAVATION PRIOR TO PLACEMENT OF CONCRETE.
- d. FOOTINGS WHICH SUPPORT CONCRETE MASONRY UNITS MAY BE STEPPED PROVIDED THE VERTICAL STEP DOES NOT EXCEED ONE HALF OF THE HORIZONTAL DISTANCE BETWEEN STEPS AND HORIZONTAL DISTANCE BETWEEN STEPS IS NOT LESS THAN TWO FEET
- e. IF ROCK IS ENCOUNTERED IN A FOOTING EXCAVATION, UNDERCUT IT AT A MINIMUM EXCAVATION WITH CONTROLLED FILL

PREVENT SURFACE WATER AND SUBSURFACE OR GROUND WATER FROM FLOWING INTO EXCAVATIONS AND FROM FLOODING PROJECT SITE AND SURROUNDING AREA. DO NOT ALLOW WATER TO ACCUMULATE IN EXCAVATIONS. REMOVE WATER TO PREVENT SOFTENING OF FOUNDATION BOTTOMS, UNDERCUTTING FOOTINGS, AND SOIL CHANGES DETRIMENTAL TO STABILITY OF SUBGRADES AND FOUNDATIONS. CONVEY WATER WHEN ATMOSPHERIC TEMPERATURE IS LESS THEN 35°F (1°C).

g. COMPACT THE BACKFILL AROUND THE OUTSIDE OF EACH BUILDING TO A MINIMUM OF 85% OF MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D 698 STANDARD PROCTOR. DO NOT ALLOW HEAVY COMPACTION EQUIPMENT SUCH AS ROLLERS, ETC., CLOSER TO ANY FOOTING THAN THE HORIZONTAL DISTANCE SUBTENDED BY A 45° ANGLE WITH THE TOP EDGE OF THE FOOTINGS AND THE SURFACE OF THE GROUND.

C. BACKFILL BEHIND WALLS AFTER PERMANENT CONSTRUCTION WHICH BRACES THE WALL IS IN PLACE OR TEMPORARY BRACING OF THE WALL IS PROPERLY INSTALLED AND AFTER ACCEPTANCE OF CONSTRUCTION BELOW FINISH GRADE INCLUDING DAMP-PROOFING, REMOVAL OF CONCRETE FORMWORK, AND REMOVAL OF TRASH AND DEBRIS.

GRADE SURFACE UNDER BUILDING SLABS SMOOTH AND EVEN, FREE OF VOIDS.  
PROVIDE FINAL GRADES WITHIN 1/2" OF THOSE INDICATED WHEN TESTED WITH A 10'  
STRAIGHT EDGE.

PROTECT GRADED AREAS FROM TRAFFIC AND EROSION. REPAIR AREAS WHICH HAVE SETTLED, ERODED, OR BECOME DAMAGED DUE TO CONSTRUCTION ACTIVITIES AT NO ADDITIONAL COST TO OWNER.

SPREAD TOPSOIL TO A DEPTH OF 4" OVER ALL DISTURBED AREAS NOT RECEIVING WALKS, PAVEMENT, WALLS OR BUILDING, INCLUDING TRENCHES. IMMEDIATELY FOLLOWING PLACEMENT OF TOPSOIL, DISK THE ENTIRE TOPSOILED AREA AND RAKE FREE OF STONES AND DEBRIS OVER 1/2" IN ANY DIMENSION. PROVIDE A FINISHED SURFACE FREE OF DEPRESSIONS OR HIGH SPOTS. SEED IMMEDIATELY.

OWNER (CONTRACTOR) SHALL EMPLOY QUALIFIED SOILS TESTING LABORATORY TO INSPECT EARTHWORK OPERATIONS. NOTIFY LABORATORY PRIOR TO PERFORMING EARTHWORK OPERATIONS.

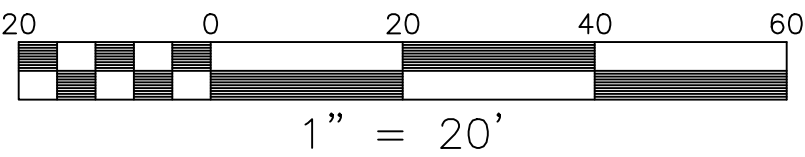
NO CONSTRUCTION/FIELD CHANGES WITHOUT THE APPROVAL OF THE CONSULTING ENGINEER AND CITY OF ROANOKE PLANNING, BUILDING, AND DEVELOPMENT DEPARTMENT.

THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES WITH EXISTING UTILITIES ARE LOCATED DURING THE GRADING PROCESS FOR THE SITE PRIOR TO PROCEEDING WITH ANY FURTHER WORK.

G.C. SHALL BE RESPONSIBLE FOR CONFIRMING THE ELEVATIONS PRIOR TO ANY CONSTRUCTION TO CONFIRM EXISTING CONDITIONS. G.C. SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY QUESTIONS/CONCERNS OR DISCREPANCIES FOUND ON-SITE.

	EXISTING	PROPOSED
TOTAL DISTURBED AREA (AC)	---	2.55 AC
TOTAL SITE AREA (AC)	2.55 AC	2.55 AC
IMPERVIOUS AREA (AC)	---	1.52 AC
MANAGED TURF AREA (AC)	2.55 AC	1.03 AC
OPEN SPACE/FOREST (AC)	---	---
RIGHT OF WAY DISTURBANCE (SF)	---	250 SF
KARST PRESENT (Y/N)	UNDETERMINED	UNDETERMINED

	BMP #1
BMP TYPE	NUTRIENT BANK CREDIT
NAME OF AUTHORIZED NUTRIENT BANK	HALIFAX NUTRIENT BANK
REQUIRED PHOSPHORUS TO BE REMOVED (LB/YR)	2.84 LBS
AMOUNT OF PHOSPHORUS CREDIT PURCHASED (LB/YR)	2.84 LBS
TECHNICAL REQUIREMENTS MET (PART IIB OR IIC)	PART IIB
TOTAL AREA TREATED (AC)	2.55 AC.
IMPERVIOUS AREA TREATED BY BMP (AC)	1.52 AC.
MANAGED TURF AREA TREATED BY BMP (AC)	1.03 AC.
OPEN SPACE / FOREST AREA TREATED BY BMP (AC)	---
SURFACE AREA OF BMP (AC)	N/A
STORAGE VOLUME OF BMP (AC-FT)	N/A
QUALITY, QUANTITY, OR BOTH?	QUALITY
TMDL ADDRESSED? (PHOSPHORUS, BACTERIA, SEDIMENT, ETC)	PHOSPHORUS
NAME OF RECEIVING WATER (PROJECT SITE)	CARVIN CREEK
HYDROLOGIC UNIT CODE FOR PROJECT SITE (ALPHANUMERIC CODE RU14, ETC)	RU 12



N/F  
NATIONAL RETAIL PROPERTIES LP  
INST. #201107503  
IT.M. #018.18-01-06.00  
PARCEL A-1  
INST. #200807582

N/F  
KAIVAL LLC  
INST. #200504899  
T.M. #018.18-01-02.01  
PARCEL 2  
P.B. 26, PG. 161

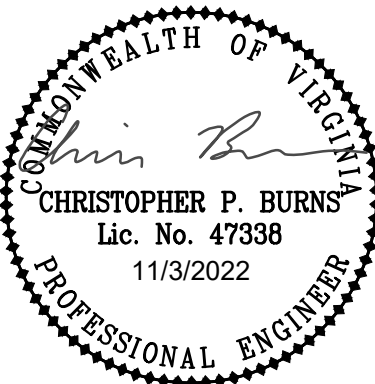


**BALZER**  
**& ASSOCIATES**  
PLANNERS / ARCHITECTS  
ENGINEERS / SURVEYORS

Roanoke / Richmond  
New River Valley / Staunton

**www.balzer.cc**

1208 Corporate Circle  
Roanoke, VA 24018  
540.772.9580



# SPRINGHILL SUITES BY MARRIOTT

8171 GANDER WAY  
GRADING PLAN

HOLLINS MAGISTERIAL DISTRICT  
ROANOKE COUNTY, VIRGINIA

DRAWN BY EJE  
DESIGNED BY BT  
CHECKED BY CPE  
DATE 12/18/2019  
SCALE 1" = 20'  
REVISIONS  
2/6/2020

F.R. #1 - 3/31/2022

F.R. #2 - 11/3/2022

# C4

PROJECT NO. 04190043.00