

WAKE COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES WELL AND SEWAGE SITE LOCATION PERMIT

NO PERMIT(S) FOR CONSTRUCTION, LOCATION OR RELOCATION ACTIVITY SHALL BE ISSUED
UNTIL AN AUTHORIZATION FOR WASTEWATER SYSTEM CONSTRUCTION HAS BEEN ISSUED

PERMIT VOID IF NOT IN COMPLIANCE WITH ZONING REGULATIONS AND/ OR IF SITE IS ALTERED OR INTENDED USE CHANGED

PERMIT#: **D059309** STATUS: **A** APP. DATE: **03/05/2018** BLDG. PERMIT#: **0182885**
PIN: **1842 13 2317 000** TAX MAP: **0** RECORDED: **Y** ORIG. PERMIT#: _____
TOWNSHIP: **19 WAKE FOREST** JURISDICTION: **WC** ZONING: **R40W** SW DEVICE: **N S#:** _____
APPLICANT: **AV HOMES OF RALEIGH** (919) 313 - 2085
8025 CREEDMOOR RD STE100 RALEIGH, NC 27613
USE: HD USE: **101A CONVENTIONAL ONE-FAMILY HOUSE** EXIST USE: _____
LTAR: **0.30 0.30** BEDROOMS: **4** BASEMENT: **N** #EMPLOYEES: **0**
SITE: ADDRESS: **8412 ADAGIO CIR**
SUBDIVISION: **BERKLEE ESTATES** LOT: **49** ACRES: **0.75** EASEMENT: **N** LOC: **SYS:** _____
DIRECTION: **US1 TO DOLCE TO LEGATO TO ADAGIO**

Well System: WATER: COMMUNITY - TYPE:

WELL LOG INFORMATION: DEPTH: _____ CASING DEPTH: _____ YIELD: _____ STATIC LEVEL: _____
WELL CONTRACTOR: _____ REG.# _____ PUMP CONTRACTOR: _____ REG.# _____
Construction Compliance GROUT APPROVED ☐ DATE _____ EHS _____
WELLHEAD APPROVED ☐ DATE _____ EHS _____
SYSTEM FINALIZED ☐ DATE _____ EHS _____

COMMENTS:

Operation Permit

DESIGN FLOW: **26.13** gal./min. ACTUAL FLOW: **23.58** DOSE VOLUME: **197** gal. INNOVATIVE LETTER: _____
INSTALLED BY: **Bradley** INSTALLATION APPROVED BY: **M.B.**
PROPRIETARY SYSTEM: **E21203HC1** TYPE SYSTEM: **III B**

COMMENTS:

OPERATIONS PERMIT ISSUED? **Y** OP DATE: **10/22/18** BY: **M.B.**

Systems defined as either a Type IIIb, IIIg with a pump, IV, V or VI, in accordance with the North Carolina Administrative Code 15A NCAC 18A .1961, Table V as adopted by reference in the "Regulations Governing Wastewater Treatment and Dispersal Systems in Wake County", require Wake County Environmental Services to conduct periodic inspections on this type system, pursuant to 15A NCAC 18A .1961 (j). Fees for these inspections will be charged as per the approved Fee Schedule. In addition, all systems are to be operated and maintained as specified in 15A NCAC 18A .1961. This permit is based in part on information provided by the homeowner or his/her representative in the application submitted for this permit. The Environmental Health Specialist is not responsible for false or misleading information contained in the application. The Environmental Health Specialist is also not responsible for concealed conditions on the property or for statements in this report that may have resulted from false or misleading statements provided to him in the application. Neither Wake County nor the Environmental Health Specialist warrants that the septic tank system will continue to function satisfactorily in the future or that the water supply will remain potable.

As Built Information:

Date: **10/19/18** Benchmark: _____ Rod reading: _____ Distance to Structure: _____
ST: **1250** gals ID#: **DB-323** D.O.M.: **6/25/18** Elev.: **5' 7 1/2"** Distance to Well: _____
PT: **1200** gals ID#: **DB-463** D.O.M.: **5/1/18** Elev.: **7' 2 1/2"** Distance to P/L: _____
GT: _____ gals ID#: _____ D.O.M.: _____ Elev.: _____ Pretreatment: _____
D-box/FD/PM elev.: **21"** Supply Line: **49** ft. Pump/Ctrl Panel: **Ashland 30/SJC** Filter: **Yellow Sym**
Line 1: **5'** Date: **10/22** Line 6: _____ Date: _____
Line 2: **6' 1"** Date: **↓** Line 7: _____ Date: _____
Line 3: **6' 8"** Date: _____ Line 8: _____ Date: _____
Line 4: _____ Date: _____ Line 9: _____ Date: _____
Line 5: _____ Date: _____ Line 10: _____ Date: _____
ETM1: **22** CC1: **999810** ETM2: _____ CC2: _____ OR: _____ AC: _____ WM: _____
Notes: _____

WAKE COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES WELL AND SEWAGE SITE LOCATION PERMIT

NO PERMIT(S) FOR CONSTRUCTION, LOCATION OR RELOCATION ACTIVITY SHALL BE ISSUED
UNTIL AN AUTHORIZATION FOR WASTEWATER SYSTEM CONSTRUCTION HAS BEEN ISSUED

PERMIT VOID IF NOT IN COMPLIANCE WITH ZONING REGULATIONS AND/ OR IF SITE IS ALTERED OR INTENDED USE CHANGED

PERMIT#: **D059309** STATUS: **A** APP. DATE: **03/05/2018** BLDG. PERMIT#: **0182885**
PIN: **1842 13 2317 000** TAX MAP: **0** RECORDED: **Y** ORIG. PERMIT#:
TOWNSHIP: **19 WAKE FOREST** JURISDICTION: **WC** ZONING: **R40W** SW DEVICE: **N S#:**
APPLICANT: **AV HOMES OF RALEIGH** (919) 313 - 2085
8025 CREEDMOOR RD STE100 RALEIGH, NC 27613
HD USE: **101A CONVENTIONAL ONE-FAMILY HOUSE** EXIST USE: DESIGN FEE REQ?: PAID?:
LTAR: **0.30 0.30** BEDROOMS: **4** BASEMENT: **N** #EMPLOYEES: **0** FOUNDATION DRAIN: **N**
SITE: ADDRESS: **8412 ADAGIO CIR**
SUBDIVISION: **BERKLEE ESTATES** LOT: **49** ACRES: **0.75** EASEMENT: **N** LOC: **SYS:**
DIRECTION: **US1 TO DOLCE TO LEGATO TO ADAGIO**

IMPROVEMENT PERMIT

[] As per GS 130A-335 (f), Improvement Permit is based on a Site Plan and is void Sixty (60) months from date of issuance.

[X] As per GS 130A-335 (f), Improvement Permit is based on a Plat and is valid without expiration.

Permit is subject to revocation if the site plan or plat, whichever is applicable, or the intended use changes.

TANK SIZE: **1200** gal. PUMP Tank: **1200** gal. GREASE TRAP: gal. SQ FT: **1215** **ACCEPTED STATUS** MAX DEPTH LINE: **19** in.
WASTEWATER: **INDIVIDUAL** SEWAGE: **DOMESTIC** TYPE SYSTEM: **III B** PUMP: **Y** P/M: **N** LP: **TD:**
DAILY FLOW: **480** gal/day WATER: **COMMUNITY** PRETREATMENT: **NA** FILL: **DAF: PB** DEEP: **REDUCE35%:**

COMMENTS:

IP ISSUED? **Y** DATE: **03/13/2018** BY: (RCW) *Robert Weaver* PHONE#: (919)-594-3069

AUTHORIZATION FOR WASTEWATER/WATER SYSTEM CONSTRUCTION
VALIDITY CONCURRENT WITH THE IMPROVEMENT PERMIT
AUTHORIZATION CONDITIONS:

Contractors shall install system on contours, see attached site plan for wastewater system design and well location. No underground utilities, water lines or sprinkler systems may be located in the original system or repair areas. A septic tank filter with a riser for access is required. The wastewater system shall not be covered or placed into use until inspected by the Wake County Department of Environmental Services and an Operation Permit issued. An Accepted Status System may be used in place of conventional system, if it can be placed in the permitted/authorized trench footprint (except reduction in line length and/or number as allowed for in approval) and the installation is in accordance with the accepted system approval, without unauthorized product alteration. If permit required use of an Accepted Status System, substitution with another accepted status system may be made, as long as no changes are necessary in the location of each nitrification line (including any increase in line length), trench depth or effluent distribution method. If changes are necessary, prior approval by this office is required before system installation.

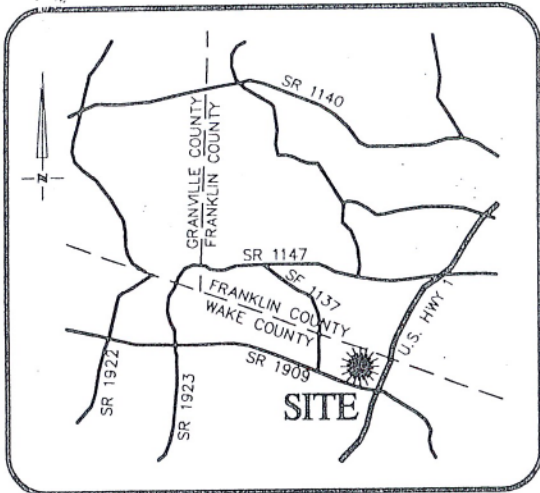
OTHER CONDITIONS: **INITIAL SYSTEM IS A PUMP TO MAINTENANCE, AND REPAIR IS PUMP TO MANIFOLD. SEPTIC AND PUMP TANK ARE 1200 GAL SIZE, WITH A MTD OF 19". MAINTAIN ALL SETBACKS AND INSTALL ON CONTOUR. IF FLAGS HAVE BEEN TAKEN UP OR MOWED OVER, CONTACT CENTRAL CAROLINA SOIL CONSULTING FOR RE-FLAGGING BEFORE INSTALLATION. CALL PRIOR TO INSTALLATION WITH ANY QUESTIONS OR CONCERNS, INSTALLATION SHOULD FOLLOW CONSULTANT DESIGN.**

TANK SIZE: **1200** gal. PUMP TANK: **1200** gal. GREASE TRAP: gal. SQ FT: **1215** **ACCEPTED STATUS** MAX DEPTH LINE: **19** in.
MAINT: **N** OPER: **N** L/O: **P** TRENCH#: **3** LENGTH: **135** ft. WIDTH: **36** in. DESIGNER:
SUBFIELDS: **___** DESIGN HEAD PRESSURE: **3** DESIGN FLOW: **26.13** gal/min DOSE VOLUME: **197** gal. PRETREATMENT: **NA**

CA ISSUED? **Y** DATE: **03/13/2018** BY: (RCW) *Robert Weaver* PHONE#: (919)-594-3069

** Permit contains Part A + B **

As-Built



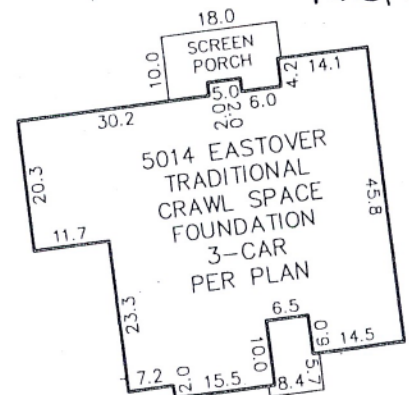
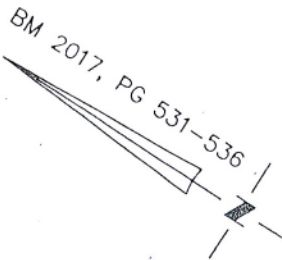
VICINITY MAP
Not To Scale

SETBACKS:

FRONT - 15'
SIDE - 7.5'
CORNER SIDE - 15'
REAR - 15'

IMPERVIOUS SURFACE AREA	
DESCRIPTION	AREA
HOUSE w/ PORCH	2,246 S.F.
PATIO/HVAC/MISC.	177 S.F.
DRIVEWAY & WALKS	1,117 S.F.
TOTAL (PROPOSED)=	3,540 S.F.
TOTAL (ALLOWED)=	9,656 S.F.

MISA



N/F
EARL B. BAREFOOT
FAMILY LIMITED PARTNERSHIP
DB 6995, PG 950

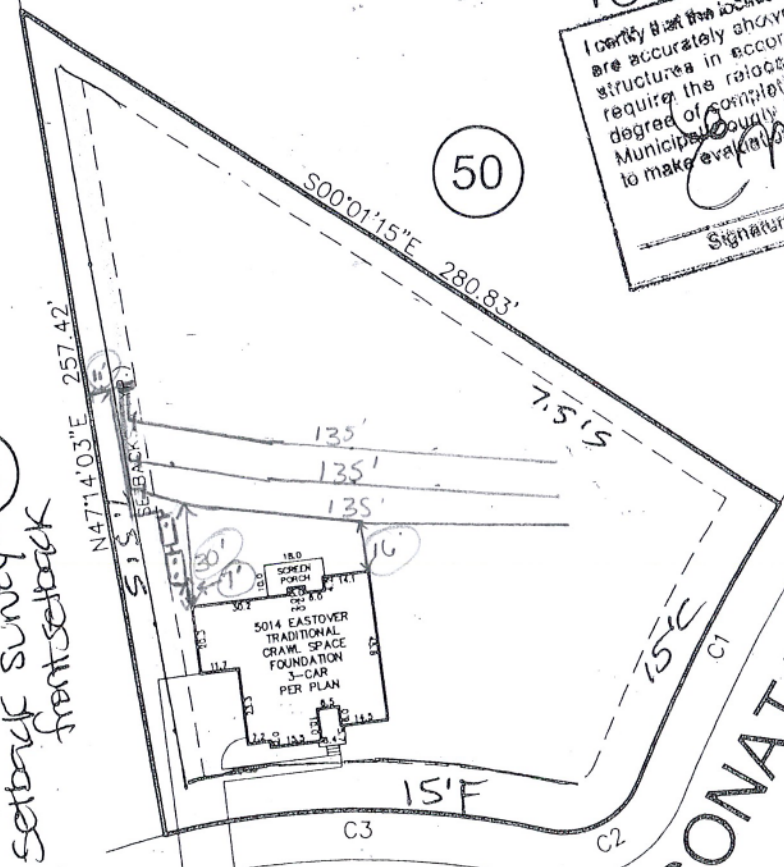
0182885
D059309

1842 13 2317
I certify that the location of planned or existing structure(s) are accurately shown. I understand failure to locate structures in accordance with this plot plan may require the relocation of structure(s) regardless of degree of completion.
Municipal Council hereby grants the right of entry to make evaluation of the location upon this property.
Signature: [Signature] Owner or Authorized Agent

50

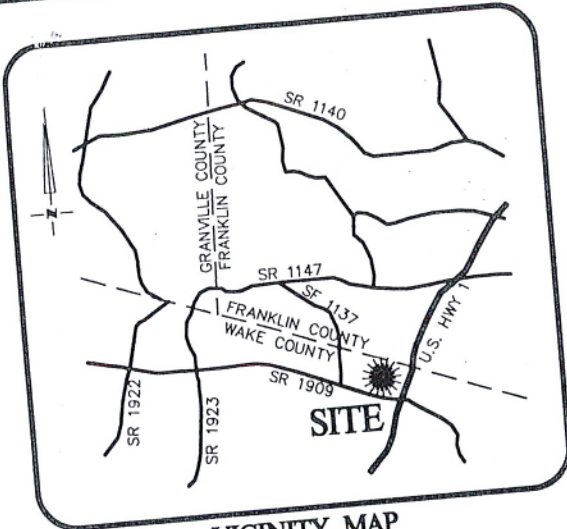
48

Planning RHOW by [Signature]
Approve [check] Date 3-2-18
Revise [check] use 101A
Reject [check] MBL
Front 15' Rear 15'
Side 7.5' Corner 15'
Comments: split-cluster setback survey - front setback



8412
ADAGIO CIRCLE
50' PUBLIC R/W

SONATA STREET
50' PUBLIC R/W



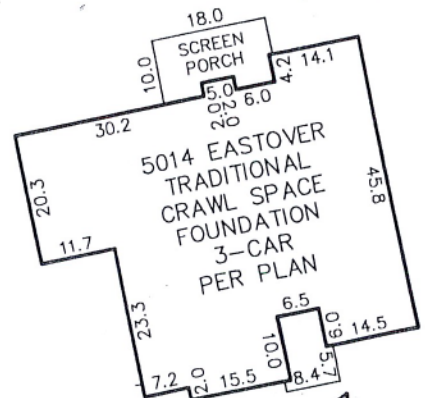
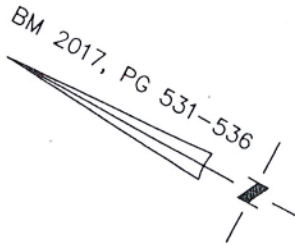
VICINITY MAP
Not To Scale

SETBACKS:

FRONT - 15'
SIDE - 7.5'
CORNER SIDE - 15'
REAR - 15'

IMPERVIOUS SURFACE AREA	
DESCRIPTION	AREA
HOUSE w/ PORCH	2,246 S.F.
PATIO/HVAC/MISC.	177 S.F.
DRIVEWAY & WALKS	1,117 S.F.
TOTAL (PROPOSED)=	3,540 S.F.
TOTAL (ALLOWED)=	3,658 S.F.

MISA



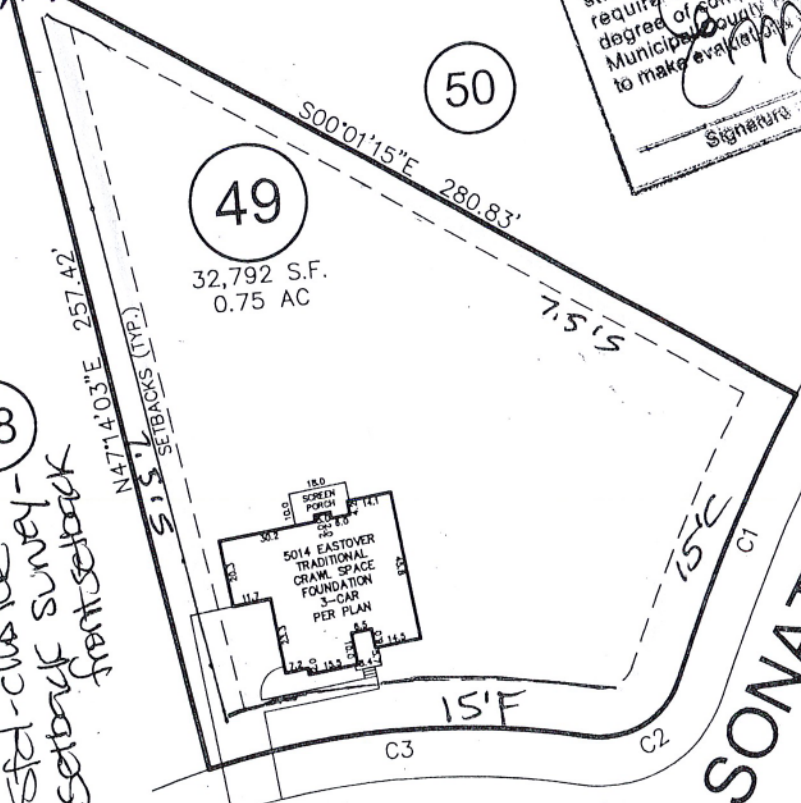
N/F
EARL B. BAREFOOT
FAMILY LIMITED PARTNERSHIP
DB 6995, PG 950

0182885
D059309

CA Site Plan Part A of C

I certify that the location of planned or existing structure(s) are accurately shown. I understand failure to locate structures in accordance with this plot plan may require the relocation of structure(s) regardless degree of completion. I hereby grant permission to Municipal Authority to make any necessary changes to make evaluation of this plan upon this property.

Signature: [Signature] Date: 10/4/2013



Training RYON 3-2-18
Approve [Signature] Date 10/18/18
Revise [Signature] MBL
Reject [Signature] Rear 15'
Front 15'
Side 7.5'
Corner 15'
Comments: Std-cluster setback survey - front setback

ADAGIO CIRCLE
50' PUBLIC R/W

SONATA STREET
50' PUBLIC R/W

C.A Part B of B

D# 59309

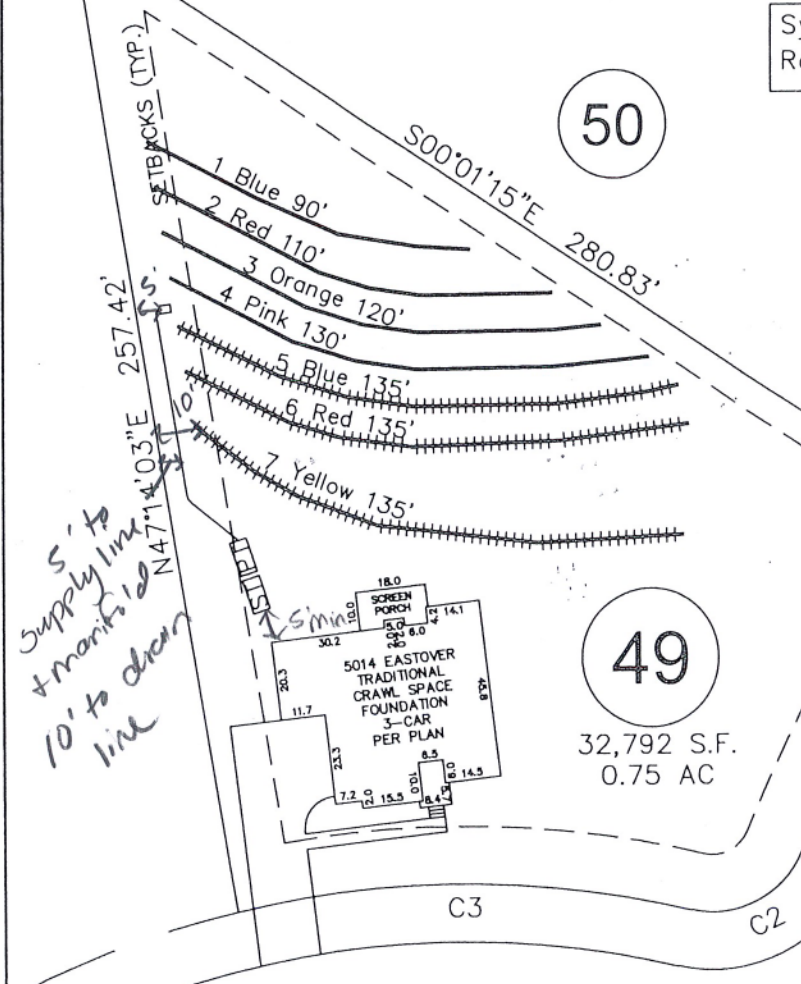
System: 
Repair: 

* Maintain all Setbacks *
* MTD = 19" *
* Remain on Contar *
* 1200 gal S.I.T. & P.T.
3 (3'x135') lines. Flagged in field by consultant

* No foundation drains on back of house
* Accepted status, 25% reduction taken

System: Pump to Manatee
Lines: 5-7, (405')
Accepted Status System
0.3 Soil LTAR
19" Trench Bottom
Repair: Pressure Manifold
Lines: 1-4, (450')
Accepted Status System
0.3 Soil LTAR
19" Trench Bottom

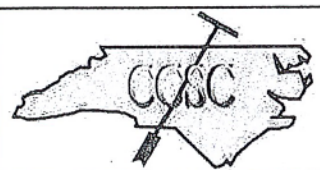
GRAPHIC SCALE
1" = 50'



ADAGIO CIRCLE
50' PUBLIC R/W

SONATA STREET
50' PUBLIC R/W

- *Keep tanks and drain lines 10' from property lines.
- *Not a survey.
- *Not a guarantee of a septic permit.
- *Keep supply lines >5' from property lines.
- *Some lines are flagged longer in the field than lengths indicate.
- *No grading septic area.



Central Carolina Soil Consulting, PLLC
1900 South Main Street, Suite 110
Wake Forest, North Carolina 27587
Phone (919)569-6704 Fax (919)569-6703

4-Bedroom Septic Layout
Lot 49, Berklee Subdivision
Wake County, North Carolina

Job# : 1857
Drawn By : JR
Date : 02/16/2018
Revision:

Initial e.A. Site Plan Part C.

WAKE COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES 3 TAP PRESSURE MANI-TEE DESIGN

Name: AV HOMES OF RALEIGH, LLC

P.I.N. #: 1842 13 2317

D#: 059309

Address: 8412 ADAGIO CIR

Subdiv: BERKLEE EST

Lot#: 49

of BDR: 4 Daily Flow: 480 gal/day L.T.A.R.: 0.30 gal/day/sq.ft

Septic Tank: 1200 gals Pump Tank: 1200 gals Sq. Foot: 1215 Stone Depth: AS

Number of Taps: 3 Length of Trenches: 405 ft(See Tap Chart for Details)

Depth of Trenches: 19 in Manifold Length: 36 in

Manifold Diameter: 2in sch 40pvc Mani-Tee Tap Configuration: 6 in spacing 1 side(s) of manifold

Supply Line: length: 0 ft Diameter: 2 in sch 40pvc

Friction Loss + Fitting Loss: 1.13 ft(supply line length + 70' for fittings in pump tank)

Design Head: 3 ft Elevation Head: 6.00 ft

Total Head: 10.13 ft Pump to Deliver: 26.13 gals/min at 10.13 ft head

Dosing Volume: 197 gals,

Drawdown: 197 gals divided by 20 gals/in = 9.9 inches

Simplex Control Panel required; elapsed time meter and cycle counter required; Floats to be determined by type of pump tank used. A septic tank filter is required.

TAP CHART

Bench Mark		is = 100.00	set at					Design Head:	3	
Pump tank elev.			100.00	Pump elev.	95.00			Manifold elev.	101.00	
line	color	rod read	Elevation	length	hole size	flow/tap	gal/day	trench area	LINE LTAR	
1	BLUE		100.00	135	1/2in SCH 40	8.71	160.00	405	0.395	
2	RED		100.00	135	1/2in SCH 40	8.71	160.00	405	0.395	
3	YELLOW		100.00	135	1/2in SCH 40	8.71	160.00	405	0.395	
		total	feet =	405	gal/min =	26.13		LTAR =	0.30	
% of Dose Vol.		75		Des. Flow	480			(ltar + 5%)	0.32	
Dose Volume		197		Pump Run=	18.37			(ltar W/ INOV)	0.40	
Dose Pump Time		7.56		Tank Gal/IN	20			(ltar + 5%)	0.42	
Drawdown in Inches		9.9		Elev. Head	6.00					
Supply Line Length										
Comments:										

Hydraulic Profile

Manifold Elevation	101.00	0
Pump tank elev.	100.00	2
Pump elev.	95.00	0



**Environmental
Services**

TEL 919 858 7400

Water Quality Division

338 Fayetteville St. • P.O. Box 550 • Raleigh, NC 27602

Purpose: This forms is to be completed when making changes to a pending or active Well, Septic, or Building Permit.

D# 059309 BUILDING PERMIT # 0182005 PIN # 1842 13 2317

Change of Bedrooms from ... _____ to _____
*Site Plan May Be Required

Change Applicant Name to _____
*Attach Owner Authorization

Change of Applicant Address to _____

Change of Applicant Phone Number to _____

Change of Building Footprint _____
* Site Plan Will Be Required

Foundation Drain ☐ Yes ☒ No
* No Site Plan Required

Change # of Employees _____
* Business, Schools, Daycares, etc.

Change of Basement: Add Basement _____ or Remove Basement _____

Comments _____

Project (Site) Address 8412 Adagio Cr.

* — Applicant Signature [Signature] Date 3.13.18

Wake County Permit Processor _____ Date _____

☐ Sent to Plan Review Staff

Note: Any change made where a Wake County Building Permit is involved requires that this document be forwarded through the Wake County Building Permits Department. All other revision forms can be forwarded to Environmental Services representatives on the 1st floor. Be aware revision fee may be required before processing can begin.