

Environmental Services - Water Quality
Onsite Wastewater Scan Data Entry Form

PERMIT #: 0030017

PIN #: 1832368793

OP DATE: 0812612004

SYSTEM USE:

- ☒ House
☐ Mobile Home
☐ Business
☐ Other

SEWAGE TYPE:

- ☒ Domestic
☐ Industrial

PUMP/SIPHON?:

- ☒ Yes
☐ No

PRESSURE MANIFOLD:

- ☒ Yes
☐ No

SYSTEM TYPE:

- ☐ I
☐ II
☒ III
☐ IV
☐ V
☐ VI
☐ Other

SUB TYPE:

- ☐ A
☒ B
☐ C
☐ D
☐ E
☐ F
☐ G

NBR BEDROOMS:

- ☐ 1
☐ 2
☐ 3
☒ 4
☐ 5
☐ 6
☐ Other

MAINT. SCHEDULE:

- ☐ Yes
☒ No

CERT. OPERATOR

- ☐ Yes
☒ No

GT	ST	PT	SIZE
☐	☐		750
☐	☐	☐	900
☐	☐	☐	1,000
☐	☒	☒	1,200
☐	☐	☐	1,500
☐	☐	☐	1,800
☐	☐	☐	2,100
☐	☐	☐	2,500
☐	☐	☐	3,000
☐	☐	☐	4,000
☐	☐	☐	5,000
☐	☐	☐	8,000
☐	☐	☐	10,000
☐	☐	☐	Other
☒		☐	None/NA GT or PT

DRAINFIELD SIZE(SQ. FT.)

01335

DRAIN TYPE:

- ☐ Stone
☒ EZ Flow
☐ Infiltrator
☐ Biodiffuser
☐ Cultec
☐ Drip
☐ Hancor
☐ Large Dia. Pipe
☐ Multi-Pipe
☐ Other

MAX DEPTH (IN.):

- ☐ 12 in. or less
☒ 18 in. or less
☐ 24 in. or less
☐ 26 in. or less
☐ 28 in. or less
☐ 30 in. or less
☐ 32 in. or less
☐ 36 in. or less
☐ Other

STONE DEPTH (IN.):

- ☐ 8 in. or less
☒ 12 in. or less
☐ 18 in. or less
☐ 24 in. or less
☐ Other

TRENCHES:

- ☒ Individual
☐ Bed

TRENCH WIDTH (IN.):

- ☐ 12 in. or less
☐ 18 in.
☐ 24 in.
☒ 36 in.
☐ 6 ft. or less
☐ 9 ft. or less
☐ Other

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#: D030017 STATUS: A APP. DATE: 04/05/2004 BLDG. PERMIT#: 0042919
PIN: 1832.01 36 8793 000 TAX MAP: 0174 0000 RECORDED: Y ORIG. PERMIT#:
TOWNSHIP: 19 WAKE FOREST JURISDICTION: WC ZONING: R40W
APPLICANT: KINNEY, MIKE
103 EAST G ST
BUTNER, NC 27509
(919) 556 - 7537
USE: HD USE: 101 ONE-FAMILY HOUSE
EXIST USE:
DISPOSAL: BEDROOMS: 4 BASEMENT: N #EMPLOYEES: 0
SITE: ADDRESS: 3100 DONLIN DR
SUBDIVISION: KIMMON PLACE LOT: 54 ACRES: 1.06
DIRECTION: US 1 N, TL SR 1909, TR SR 1923, TR INTO S/D

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:

DESIGN FLOW: 44.79 gal./min. ACTUAL FLOW: 38.9° Operation Permit
INNOVATIVE LETTER: R

INSTALLED BY: Ed Faison
PROPRIETARY SYSTEM: E-E-Z LAY PIPE
COMMENTS:

INSTALLATION APPROVED BY: Arnon L. L. L.
FILTER NO: _____

OPERATIONS PERMIT ISSUED? Y

OP DATE: 8/26/04

BY: Arnon L. L. L.

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: _____ Benchmark: _____ Rod reading: _____ Distance to Structure: _____
ST: 1200 gals ID#: SB-857 D.O.M.: 6-8-04 Elev.: _____ Distance to Well: _____
PT: 1200 gals ID#: PT-170 D.O.M.: 7/9/04 Elev.: _____
D-box/FD/PM elev.: _____ Supply Line: _____ ft. Pump/Control Panel: _____
Line 1: 6' 2 1/4" 6' 2 1/2" _____ Date: _____
Line 2: 6' 9" _____ Date: _____
Line 3: 7' 7" _____ Date: _____
Line 4: 8' 6 1/4" _____ Date: _____
Line 5: 9' 4 1/2" 9' 4 3/4" _____ Date: _____
Distance to P/L: 10' Notes: _____

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TOWNSHIP: **19 WAKE FOREST** JURISDICTION: **WC** ZONING: **R40W**
APPLICANT: **KINNEY, MIKE**
103 EAST G ST
BUTNER, NC 27509
(919) 556 - 7637
USE: **HD USE: 101 ONE-FAMILY HOUSE**
EXIST USE:
DISPOSAL: BEDROOMS: 4 BASEMENT: N #EMPLOYEES: 0 FOUND DRAIN: Y
SITE: **ADDRESS: 3100 DONLIN DR**
SUBDIVISION: KIMMON PLACE LOT: 54 ACRES: 1.05
DIRECTION: **US 1 N, TL SR 1909, TR SR 1923, TR INTO S/D**

IMPROVEMENT PERMIT

TANK SIZE: **1200** gal. PUMP Tank: **1200** gal. SQ FT: **1335** INNOVATIVE MAX DEPTH LINE: **18** in.
WASTEWATER: **INDIVIDUAL** SEWAGE: **DOMESTIC** TYPE SYSTEM: **III G** PUMP: **Y** P/M: **Y**
DAILY FLOW: **480** gal/day DESIGN FEE REQ?: **Y** PAID?: **Y** WATER: **COMMUNITY**

COMMENTS:

IP ISSUED? **Y** DATE: **06/21/2004** BY: (EFG) *Eric Green by Brett A. Martin* PHONE#:

AUTHORIZATION FOR WASTEWATER/WATER SYSTEM CONSTRUCTION

VOID SIXTY (60) MONTHS FROM DATE OF ISSUANCE

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. **OTHER CONDITIONS:**

INNOVATIVE REDUCTION HAS ALREADY BEEN TAKEN IN DESIGN OF BOTH INITIAL AND REPAIR SYSTEMS. PLEASE SEE DESIGN PLANS BY S&EC, INC (APPROVED 06-24-04 BY BSM) FOR INSTALLATION INFORMATION. INITIAL SYSTEM IS A VARIED LENGTH LINE PRESSURE MANIFOLD WITH 18 INCH TRENCH BOTOMS. INSTALL DRAINLINES 9FT ON CENTER AND ON CONTOUR. REPAIR SYSTEM IS A VARIED LENGTH LINE PRESSURE MANIFOLD WITH 18 INCH TRENCH BOTTOMS. A NEMA4X CONTROL PANEL WITH 2 BREAKERS, 2 POWER SUPPLIES, ELAPSED TIME METER, AND CYCLE COUNTER IS REQUIRED. SUFACE SWALE MUST BE INSTALLED ABOVE DRAINFIELD AREA AS SHOWN ON IP/CA SITE PLAN PART B. PLEASE CALL IF ANY QUESTIONS OR PROBLEMS ARISE.

TANK SIZE: **1200** gal. PUMP TANK: **1200** gal. SQ FT: **1335** INNOVATIVE MAX DEPTH LINE: **18** in.
MAINT: OPER: **U/O: P** TRENCH#: **6** LENGTH: **445** ft. WIDTH: **36** in. DESIGNER: **S&EC, INC.**
SUBFIELDS: **1** DESIGN HEAD PRESSURE: **2** DESIGN FLOW: **44.79** gal/min DOSE VOLUME: **231** gal.

CA ISSUED? **Y** DATE: **06/25/2004** BY: (BSM) *Brett A. Martin* PHONE#: **856-7463**

IP/CA Site Plan Part B

PIN# 1832.01368793

D30017

Kimmon Place Lot 54

Septic Tank = 1200gal
Pump Tank = 1200gal

5T filters risers are required

*See IP/CA Site Plan Part A + Design Plans for additional Repair info.

Install trenches on contour + ≥ 9 ft from center

DONLIN DRIVE
50' PUBLIC R/W

SUNFLOWER MEADOWS LANE 50' PUBLIC R/W

54

Surface
4 BR SWALE
HOUSE

TANKS

Pressure Manifold
 $\geq 10'$ off PL

— SYSTEM LINE
- - - REPAIR LINE

50' 0 50'

FEATURES LOCATED WITH SUB-METER GPS UNIT AS SHOWN

PROJECT NO. 4891	SCALE 1" = 50'	SHEET TITLE SEPTIC SYSTEM LAYOUT
PROJECT MGR RP	FIELD WORK WC	PROJECT NAME: LOT 54, KIMMON PLACE SUBD. WAKE FOREST TOWNSHIP WAKE COUNTY, NORTH CAROLINA MAY 2004
DRAWN BY WC	USE OF SET FILE SHOWN DWG	



Soil & Environmental Consultants, PA
11010 Raven Ridge Road • Raleigh, North Carolina 27614 • Phone: (919) 846-3900 • Fax: (919) 846-9467
www.SandEC.com

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www.SandEC.com

Attached is a proposed design for a Pressure Manifold Septic System for a 4 bedroom house, located at Kimmon Place, Lot #54 Wake Co., NC

<u>Contents:</u>	<u>Page</u>
Information for the Installer -----	1
Design Specifications-----	2 - 4
Site Plan-----	5 - 6
Septic Tank Diagram-----	7
Pump Tank Diagram -----	8
Pressure Manifold Diagram-----	9
Control Panel Specifications-----	10 - 11
Pump Specifications-----	12 - 13
Repair Tap Sheet-----	14

() APPROVED
☒ APPROVED AS NOTED
() DISAPPROVED

06-09-04, S&EC PROJECT # 4591 S-1, DESIGN - W. Cole
PROJECT MGR - R. Pontello

Review of this document has been made only for conformance with the design concept of the project and approval or approval as noted shall not relieve the designer and/or contractor from responsibility for any errors therein or for furnishing the materials, and equipment of proper dimension, size, quantity, quality and all performance characteristics to meet the requirements and intent of the contract documents.

WAKE COUNTY DEPARTMENT OF
ENVIRONMENTAL SERVICES

Date 6-24-04 By [Signature]

Charlotte Office:
236 LePhillip Court, Suite C
Concord, NC 28025
Phone: (704) 720-9405

Greensboro Office:
3817-E Lawndale Drive
Greensboro, NC 27455
Phone: (336) 540-8734

Hickory Office:
622 Coon Mountain Lane
Taylorsville, NC 28681
Phone: (828) 635-5820

**PRESSURE MANIFOLD SYSTEM
FOR WASTEWATER TREATMENT**

Owner's name: BOB PACE @ NORTHWINDS PROP. **Phone:** 556 - 4100
Mailing address: 2804 KIMMON PLACE
WAKE FOREST, NC 27587
System location: LOT 50 KIMMON PLACE
County: Wake
Source of Wastewater Flow: 4 BEDROOM HOUSE
Estimated Daily Wastewater Production: 480 gpd
System Flow: 44.79gpm

DESIGN PARAMETERS

Drainfield size: 445 feet	Loading rate: 0.3 (w/EZFLOW) gpd/sq ft
Depth of gravel in trench: n/a	Gravel size: n/a
Trench depth: 18"	(EZFLOW)
Trench width: 36"	
Septic tank size: 1200 gal	Pump tank size: 1200 gal
Supply line length: apprx. 100ft	Pump tank dimensions: 48" lq. depth
Supply line diameter: 2"sch40pvc	9' length
Supply line volume: ~17.40 gal	5' width
Dosing volume: ~231.67@80%	Drawdown: ~11.0" (1200 gal tank)
Supply manifold: 4"sch80pvc	Drawdown based on 21gal per inch
Supply manifold length: 4.5 min.ft	
Supply manifold volume: n/a	
Recommended float controls: SJE Pumpmaster(or County approved)	Elev. head : ~7.1'
	Pressure head: 2 ft
Threaded union: in tank	Friction head: ~ 3.77ft
	(TDH)Total dynamic head: ~14.8' (w/15% fittings)
Gate valves: 1 in pump tank, 1 @ pres.manifold	

Check valves: in pump tank

Anti-siphon hole: in pump tank

Recommended high water alarm: American NEMA4X panel&floats, or County aprv.

Recommended Pump: Myers effluent pump, model #ME50, or county approved effluent rated pump: must be able to deliver ~15ft of head at ~45gpm total flow

Additional Comments: Soil Suitability was performed by the Wake County Health Department.

KIMMON PLACE LOT 54 **SYSTEM**

<u>Line #</u>	<u>Color</u>	<u>Elevation</u>	<u>Length</u>	<u>Hole Size</u>	<u>Flow/Tap</u>	<u>gpd</u>	<u>Trench Area</u>	<u>Line LTAR</u>
6	PINK	7.7	50	SCH 80 1/2	5.48	58.73	150	0.39
7	YELLOW	8.6	120	SCH 40 3/4	12.5	133.96	360	0.37
8	ORANGE	9.4	80	SCH 40 1/2	7.11	76.20	240	0.32
9	RED	10.6	80	SCH 40 1/2	7.11	76.20	240	0.32
10	BLUE	11.8	65	SCH 40 1/2	7.11	76.20	195	0.39
11	PINK	12.2	50	SCH 80 1/2	5.48	58.73	150	0.39

total feet = 445 gal/min = 44.79

Des. Flow 480

Pump Run= 10.72

soil LTAR 0.28

(EZLAY Itar +5%) 0.294

LTAR with INNOV. + 5% 0.37333333

LTAR with INNOV. 0.392

100% Dose Volume 289.59

Percent Dose Volume 80%

Total 231.67

Pump Run Time 5.17

KIMMON PLACE LOT 54
REPAIR

<u>Line #</u>	<u>Color</u>	<u>Elev</u>	<u>Length</u>	<u>Hole Size</u>	<u>Flow/Tap</u>	<u>gpd</u>	<u>Trench Area</u>	<u>Line LTAR</u>
1	PINK	2	50	SCH 80 1/2	5.48	56.28	150	0.3752
2	ORANGE	3.1	50	SCH 80 1/2	5.48	56.28	150	0.3752
3	BLUE	6.3	50	SCH 80 1/2	5.48	56.28	150	0.3752
4	RED	7.0	180	SCH 40 1 IN.	20.2	207.45	540	0.3842
5	PINK	7.7	100	SCH 80 3/4	10.1	103.72	300	0.3457
total		feet =	430	gal/min =	46.74			
				Des. Flow	480			
				Pump Run=	10.27			
				LTAR	0.28			
				LTAR + 5%	0.294			
				LTAR w / INNOV	0.37333333			
				LTAR w / INNOV + 5%	0.392			