

Environmental Services - Water Quality
Onsite Wastewater Scan Data Entry Form

PERMIT #: 0034266

PIN #: 1756276309

OP DATE: 0510812006

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.)

01035

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 22"

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#: D034266 STATUS: A

APP. DATE: 06/24/2005

BLDG. PERMIT#: 0054328

PIN: 1756.01 26 5223 000

TAX MAP: 0386 0003

RECORDED: Y ORIG. PERMIT#:

TOWNSHIP: 17 ST MATTHEWS

JURISDICTION: WC

ZONING: R30

APPLICANT: CHRIS S WATT

3705 VALLEY PINE CT

WENDELL, NC 27591

(919) 295 - 9447

USE: HD USE: 101 ONE-FAMILY HOUSE

EXIST USE:

DISPOSAL: BEDROOMS: 3 BASEMENT: N #EMPLOYEES: 0

SITE: ADDRESS: 2908 MORNING RIDGE CT

SUBDIVISION: COLDWATER SPRIN LOT: 33

ACRES: 0.69

DIRECTION: HWY 64 E. TO KNIGHTDALE TL SMITHFIELD RD TL
FORESTVILLE RD TR OLD CREWS RD 4-5 MI S/D ON R

(IND.WELL/IND.SEPTIC)

Well System: WATER: INDIVIDUAL - TYPE: NEW

WELL LOG INFORMATION: DEPTH: 510 CASING DEPTH: 63 YIELD: 3.0 STATIC LEVEL: 20

WELLI CONTRACTOR: NW POOTE REG.# 4 PUMP CONTRACTOR: _____ REG.# _____

Construction Compliance

GROUT APPROVED ☒

DATE 12/9/05

EHS RSD

WELLHEAD APPROVED ☐

DATE _____

EHS _____

SYSTEM FINALIZED ☐

DATE _____

EHS _____

COMMENTS: WELL LOCATION BY ALE. KEEP WELL SETBACKS.

Operation Permit

DESIGN FLOW: 32.79 gal./min. ACTUAL FLOW: 28.4 INNOVATIVE LETTER: R

INSTALLED BY: QUALITY LANDSCAPE

TALLATION APPROVED BY: TXW by TAA

PROPRIETARY SYSTEM:

FILTER NO: _____

COMMENTS:

OPERATIONS PERMIT ISSUED? Y

OP DATE: 5-8-06

BY: Tom Whaley

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: _____ gals ID#: _____ D.O.M.: _____ Elev.: _____ Distance to Well: _____

PT: _____ gals ID#: _____ D.O.M.: _____ Elev.: _____

D-box/FD/PM elev.: _____ Supply Line: _____ ft. Pump/Control Panel: _____

Line 1: _____ Date: _____

Line 2: _____ Date: _____

Line 3: _____ Date: _____

Line 4: _____ Date: _____

Line 5: _____ Date: _____

Distance to P/L: _____ Notes: _____

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

PERMIT#: D034266 STATUS: A APP. DATE: 06/24/2005 BLDG. PERMIT#: 0054328
PIN: 1756.01 26 5223 000 TAX MAP: 0386 0003 RECORDED: Y ORIG. PERMIT#:
TOWNSHIP: 17 ST MATTHEWS JURISDICTION: WC ZONING: R30
APPLICANT: CHRIS S WATT
3705 VALLEY PINE CT
WENDELL, NC 27591
(919) 295 - 9447
USE: HD USE: 101 ONE-FAMILY HOUSE
EXIST USE:
DISPOSAL: BEDROOMS: 3 BASEMENT: N #EMPLOYEES: 0 FOUND DRAIN:
SITE: ADDRESS: 2908 MORNING RIDGE CT
SUBDIVISION: COLDWATER SPRING LOT: 33 ACRES: 0.69
DIRECTION: HWY 64 E. TO KNIGHTDALE TL SMITHFIELD RD TL
FORESTVILLE RD TR OLD CREWS RD 4-5 MI S/D ON R
(IND.WELL/IND.SEPTIC)

IMPROVEMENT PERMIT

TANK SIZE: 1000 gal. PUMP Tank: 1000 gal. SQ FT: 1035 INNOVATIVE MAX DEPTH LINE: 22 in.
WASTEWATER: INDIVIDUAL SEWAGE: DOMESTIC TYPE SYSTEM: III G PUMP: Y P/M: Y
DAILY FLOW: 360 gal/day DESIGN FEE REQ?: Y PAID?: Y WATER: INDIVIDUAL

COMMENTS: INSTALL TRENCHES AS THEY WERE LAID OUT. SCARIFY TRENCHES BEFORE INSTALLING INNOVATIVE PRODUCT.
KEEP TRENCHES AT 22" DEEP. PLEASE CALL PRIOR TO INSTALLATION WITH ANY QUESTIONS. 868-4995.

IP ISSUED? Y DATE: 09/15/2005 BY: (ALE)

PHONE#: 868-4995

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. 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:**

FOLLOW PLANS AND APPROVAL LETTER. NOTE THAT TAP 1 FEEDS LINE 1 AND 4 VIA FLOW DIVIDER. CALL IF YOU HAVE QUESTIONS.

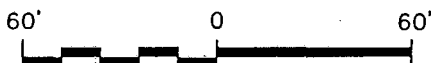
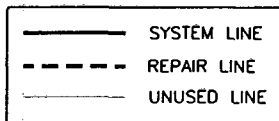
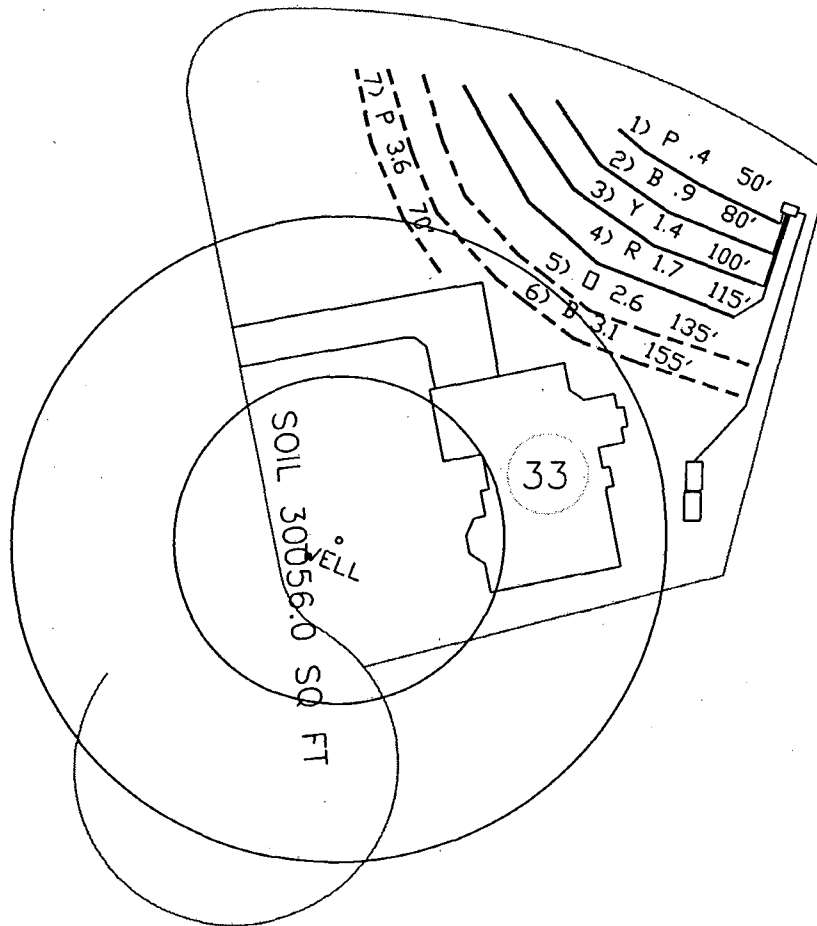
TANK SIZE: 1000 gal. PUMP TANK: 1000 gal. SQ FT: 1035 INNOVATIVE MAX DEPTH LINE: 22 in.
MAINT: N OPER: N L/O: Y TRENCH#: 4 LENGTH: 345 ft. WIDTH: 36 in. DESIGNER: S&EC, PA
SUBFIELDS: 1 DESIGN HEAD PRESSURE: 2 DESIGN FLOW: 3279 gal/min DOSE VOLUME: 168 gal.

CA ISSUED? Y DATE: 10/25/2005 BY: (SWB)

PHONE#: 856-7432

3-BEDROOM PRESSURE MANIFOLD SYSTEM
 LINES 1,2,3,4 (.265 LTAR) W-EZFLOW

3-BEDROOM PRESSURE MANIFOLD REPAIR
 LINES 5,6,7 (.285 LTAR) W-EZFLOW



PROJECT NO. 8339.S1	SCALE 1" = 60'	SHEET TITLE: LOT 33 SEPTIC SYSTEM LAYOUT	 Soil & Environmental Consultants, PA 11010 Raven Ridge Road • Raleigh, North Carolina 27614 • Phone: (919) 846-5900 • Fax: (919) 846-9467 www.SandEC.com
PROJECT MGR. MB	FIELD WORK AH,JB	PROJECT NAME:	
DRAWN BY AH		- COLDWATER SPRINGS - WAKE COUNTY, NORTH CAROLINA MARCH 2005	
\\SEC\SECFILES\8339.S1\LOT 33.DWG			



Soil & Environmental Consultants, PA

11010 Raven Ridge Road • Raleigh, North Carolina 27614 • Phone: (919) 846-5900 • Fax: (919) 846-9467
www.SandEC.com

WAKE
D 34266

Attached is a proposed design for a Pressure Manifold Septic System for a 3-bedroom house, located at LOT 33 COLDWATER SPINGS S/D, Wake Co., N.C.

<u>Contents:</u>	<u>Page</u>
Information for the Installer -----	1
Design Specifications-----	2 - 5
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Repair specifications-----	7
Septic Tank Diagram-----	8
Pump Tank Diagram-----	9
Pressure Manifold Diagram-----	10
Control Panel Specifications-----	11- 14
Pump Specifications-----	15

() APPROVED
(X) APPROVED AS NOTED
() DISAPPROVED

F.D. / ETM & CC

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 10/25/05 By

[Signature]

Charlotte Office:
236 LePhillip Court, Suite C
Concord, NC 28025
Phone: (704) 720-9405
Fax: (704) 720-9406

Greensboro Office:
3817-E Lawndale Drive
Greensboro, NC 27455
Phone: (336) 540-8234
Fax: (336) 540-8235

**PRESSURE MANIFOLD SYSTEM
FOR WASTEWATER TREATMENT**

Owner's name: CHRIS WATTS **Phone** (919) 795-9447

Mailing address: 4408 DEER POINTE DRIVE
RALEIGH, NC 27616-7213

System location: LOT 33 COLDWATER SPRINGS

Source of Wastewater Flow: 3 Bedroom House

Estimated Daily Wastewater Production: 360 gpd

System Flow: 32.79gpm

$4.75 = 1020$
 $\div 3$
340LF

$360 / 0.265 =$

DESIGN PARAMETERS

Drainfield size: 345feet

Depth of gravel in trench: NA"

Trench depth: 24"

Trench width: 36"

Septic tank size: 1000-gal

Supply line length: apprx. 88ft

Supply line diameter: 2"sch40pvc

Supply line volume: ~15.31gal

Dosing volume: ~168.39 @ 75%

Supply manifold: 4"sch80pvc

Supply manifold length: 3.0ft

Supply manifold volume: n/a

Recommended float controls: SJE-RHOMBUS MODEL 112(or County approved)

Elev. head: 0.0FT'

Pressure head: 2.0ft

Friction head: ~ 1.9

Threaded union: in tank

(TDH)Total dynamic head: 4.4ft W 15% FOR FITTINGS

Gate valves: 1 in pump tank, 1 @ pres.manifold

Check valves: in pump tank

Anti-siphon hole: in pump tank

Recommended control panel: SJE-RHOMBUS MODEL 12 (OR COUNTY APPROVED)

****Elapsed-time meter and cycle control are required**

Recommended Pump: Myers effluent pump, county approved effluent rated pump: must be able to deliver ~5ft of head at ~33 gpm total flow

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

COLDWATER SPRINGS LOT 33 SYSTEM

Line #	Color	Elevation	Length	Hole Size	Flow/Tap	gpd	Trench Area	Line LTAR
1	PINK	0.4	50	fd/34in SCH80	5.05	55.44	150	0.370
2	BLUE	0.9	80	SCH 40 1/2	7.11	78.06	240	0.325
3	YELLOW	1.4	100	SCH 80 3/4	10.1	110.89	300	0.370
4	RED	1.7	115	SCH80+1/2in	10.53	115.61	345	0.335

total feet =

345

gal/min =

32.79

Des. Flow

360

Pump Run=

10.98

soil LTAR

0.265

(EZLAY Itar +5%)

0.27825

LTAR with INNOV. + 5% 0.35333333

LTAR with INNOV.

0.371

100% Dose Volume 224.51

Percent Dose Volume 75%

Total 168.38

Pump Run Time

5.14

0.370
0.325
0.370
0.335

5.05 → 5.48
5.18
10.53

OK

OK

OK

OK

COLDWATER SPRINGS LOT 33 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>
4	ORANGE	2.6	135	SCH 80 3/4	10.1	129.49	405	0.3197
5	BLUE	3.1	155	SCH 40 3/4	12.5	160.26	465	0.3446
6	PINK	3.6	70	SCH 80 1/2	5.48	70.26	210	0.3346

total feet = 360 gal/min = 28.08

Des. Flow 360

Pump Run= 12.82

LTAR 0.285

LTAR + 5% 0.29925

LTAR w / INNOV 0.38

LTAR w / INNOV + 5% 0.399

340
MEW

on

100% Dose Volume 234.27
Percent Dose Volume 70%
Total 163.99

Pump Run Time 5.84