

3327 WINTER HEATH WY

19507207

1/7/2008

duponbj

Groundwater and Wastewater Services File Imaging Project
May 2007
Barcode Font = IDAutomationHC39M

EHS PW

49473 County Permit Review Worksheet

Reviewer CBL

Rule or Law		1	2	3	4	5	6	7	8	9	10
	Permit Application										
.1937(d)	Is the Application complete	✓									
.1937(d)	Is there a Site plan/Plat with application	✓									
.1937(d)	Is the Facilityshown?	✓									
.1937(d)	Are appurtenances shown	✓									
	Site Evaluation Information										
.1939 (a)(1)	Topography and Landscape Position Recorded?										
.1940 (a-q)	Slope % Recorded?										
.1939 (a)(2)	Texture Class Recorded?										
.1939 (a)(2)	Structure type Recorded?										
.1939 (a)(2)	Consistence Recorded?										
.1939 (a)(2)	Mineralogy Recorded?										
.1939 (a)(3)	Soil Wetness Condition Recorded?										
.1939 (a)(4)	Soil Depth to Rock or Parent Material Recorded When Encountered?										
.1939 (a)(5)	Depth to Restrictive Horizons Recorded When Encountered?										
.1939 (a)(6)	Sufficient Available Space Recorded?										
.1937(m)	Are the Profile Locations Shown?										
.1939(a) & .1945(b)	Are the S/PS Profiles in system & in repair area?										
	Number of auger borings made:										
.1939(d), .1955, .1956, .1957	Were sufficient auger borings made?										
	LTAR										
	IP/CA										
G.S. 130A-336(a) & .1937(g)	Proposed System Type stated-Initial										
.1945(b)	Proposed System Type stated-Repair										
G.S. 130A-336(a)(3)	System location identifiable by setbacks - Initial										
.1937(g) & .1945(b)	System comoonents shown - Initial										
.1945(b)	Repair area shown										
.1937 (f)(g)	Does System design match facility, flow & WW characteristics?										
.1937 (f)(g)	*Is System design consistent with soil/site conditions?*										
.1937 (f)(g)	Is the System located in the approved area?										
G.S. 130A-336(a)	Is the Design flow (gpd) indicated?										
G.S. 130A-336(a)	Number of Bedrooms, employees, seats, etc. indicated?										
.1937(g)	Trench depth indicated?										
.1937(g)	Trench width indicated?										
.1937(g)	Trench length indicated?										
G.S. 130A-336(a)(1)	Proposed/existing well shown?										
G.S. 130A-336(a)(1)	Property line lengths shown?										
G.S. 130A-336(a)	Facility/appurtenance setbacks shown from fixed points?										
	OP										
.1937(i)	System type as described in table V(a) of rule .1961	✓									
.1937(i)	Conditions for system performance, operation, maintenance, monitoring and reporting.	✓									

If system design is incorrect or inconsistent with site conditions, indicate why for each below

2007 ABSAA

Mecklenburg County Groundwater & Wastewater Services
700 N. Tryon St., Suite 211 Charlotte, NC 28202
Phone: (704) 336-5103 Fax: (704) 336-6894

NC DENR
Division of Environmental Health
On-Site Wastewater Section

OPERATION PERMIT for an ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

File #: 4947B Permit #: _____ Tax Parcel #: 195 072 07

Property Owner: Jennings Lee

Job Location Address: 3327 Winter Heath Way Lot 39

City: Mint Hill State: NC Zip Code: 28227

Operation Permit Issuance Date: 4/9/07 Contractor Name: Water Management Sid Geskus

Permitted Design Flow: 480 GPD

Liquid Capacity of Septic Tank: 1500 Existing gallons

Liquid Capacity of Dosing Tank: 1000 Existing gallons

Effluent Pump Model: Existing

Drainfield Installation ☐ N/A

Trench Depth: 24 inches

Trench Width: 3 feet

Line Spacing: 9 feet (O.C.)

Total line length: 300 feet

# of Lines: 6 @ 60 feet

Depth of Media: 12 inches (Type) IIIg chambers

Depth of Cover: 12 inches

Distribution Device: pressure manifold

Bed Installation *(For Repair Installations ONLY.)* ☐ N/A

Bed Depth: _____ inches

Bed Width: _____ feet

Total line length: _____ feet

# of Lines: _____ @ _____ feet

Depth of Media: _____ inches (Type) _____

Depth of Cover: _____ inches

Distribution Device: _____

Water Supply Source

☐ Municipal ☐ Private Well ☒ Community Well

☐ Other _____

System Installation Setbacks

Distance from Building Foundation: 5 feet

Distance from Property Line: 10 feet

Distance from Water Supply Source: 10 feet

Inspection Dates

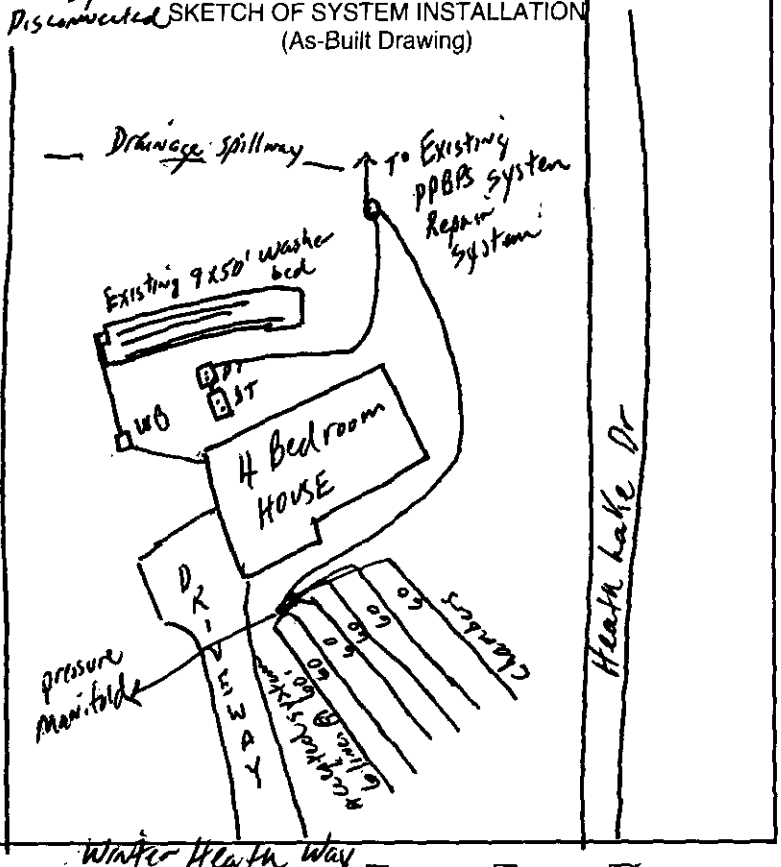
Tank(s) Inspected: NA

Excavation Inspected: 4/5/07

Pump & Controls Inspected: 4/9/07 supply line & manifold

PPBPS system Disconnected

SKETCH OF SYSTEM INSTALLATION
(As-Built Drawing)



The undersigned has inspected the Septic Tank System described above, and certifies it has been ☐ installed ☐ altered ☒ repaired ☒ as detailed in the plot above ☐ in accordance with the permit issued and meets the provisions of 15A NCAC 18A. 1900, "Laws and Rules for Sewage Treatment and Disposal Systems" in effect on the date of issuance of the permit. The issuance of this Operation Permit does not in any way guarantee that the system will operate properly or relieve any person now or hereafter owning, controlling, or using such system from any liability resulting from the failure of the system to operate properly. This document is issued subject to those restrictions and conditions shown on the permit(s) and the provisions of 15A NCAC 18A. 1900 in addition to those listed below under "Comments." This document shall be null and void if any information contained in the application is untrue or if any additions are made to the property which would increase the requirements for said system.

Notice: Disturbance of the designated repair area may result in the Suspension or Revocation of this permit.

Comments: System Classification & Type: Type IIIbg Pump to Accepted System This type of septic system requires an inspection once every 5 years by CWS office.

DENR Authorized Agent: Philo S. Walker Signature: Philo S. Walker RS

Mecklenburg County Groundwater & Wastewater Services
700 N. Tryon St., Suite 211 Charlotte, NC 28202
Phone: (704) 336-5103 Fax: (704) 336-6894

NC DENR
Division of Environmental Health
On-Site Wastewater Section

INSTALLATION APPROVAL for an
ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

File #: 4947B Permit #: _____ Tax Parcel #: 195 072 07

Property Owner: Jennings Lee

Job Location Address: 3327 Winter Heath Way Lot 39

City: Mint Hill State: NC Zip Code: 28227

Installation Approval Issuance Date: 2/7/07

Permission is hereby given to ☒ install ☐ alter ☐ repair an on-site wastewater treatment & and disposal system, with subsurface soil absorption and effluent discharge, as specified herein at the described location. This approval is granted based upon the application information submitted to our office. All work shall be completed on or before 2/7/07, after which date this approval shall be null and void. The system shall meet all of the construction requirements of 15A NCAC 18A .1900 which are in effect on the date of granting this approval. An **Operation Permit** must be obtained from the Mecklenburg County Health Department before any system can be covered up or placed into service. The issuance of this permit does not in any way guarantee that the system anticipated to be constructed will operate properly, or relieve any person now of hereafter owning, controlling or using such system from any liability resulting from the failure of the system to operate properly.

***NOTICE: This system shall not be installed while soils are in a wet condition.**

Permitted Design Flow: 480 GPD
Liquid Capacity of Septic Tank: Existing gallons
Site LTAR: NA GPD/ft² (For new installations only.)
Liquid Capacity of Dosing Tank: Existing gallons

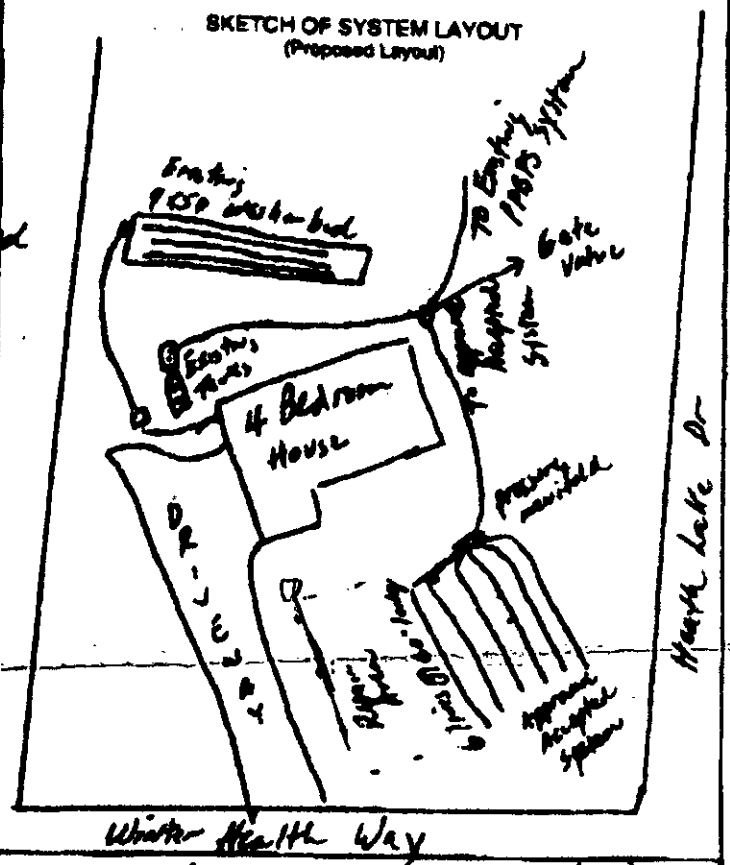
Drainfield Design ☐ N/A
Trench Depth: 24 inches
Trench Width: 3 feet
Line Spacing: 9 feet (O.C.)
Total line length: 300 feet
# of Lines: 6 @ 60 feet
Depth of Media: 12 inches (Type) Approved accepted
Distribution Device: pressure manifold

Bed Design *(For Repair Installations ONLY.)* ☒ N/A
Bed Depth: _____ inches
Bed Width: _____ feet
Total line length: _____ feet
# of Lines: _____ @ _____ feet
Depth of Media: _____ inches (Type) _____
Distribution Device: _____

Water Supply Source
☒ Municipal ☐ Private Well ☒ Community Well
☐ Other: _____

Minimum System Setbacks
Distance from Building Foundation: 5 feet
Distance from Property Line: 10 feet
Distance from Water Supply Source: 10 feet

SKETCH OF SYSTEM LAYOUT
(Proposed Layout)



Comments: System Classification & Type: Type IIIB Approved Accepted System w/ Gate valve & pressure manifold

DENR Authorized Agent: Phillip S. Walker LS Signature: Phillip S. Walker LS
Phillip S. Walker

TOTAL P.02

$3900 -

SEPTIC COST - $10

SEPTIC COST - LARGE

#885

GWS – RES. APP 12/04

SEPTIC FEE:
DATE:
CRT [ ]

PERMIT APPLICATION FOR A RESIDENTIAL SITE IMPROVEMENT PERMIT / CONSTRUCTION AUTHORIZATION FOR ON-SITE WASTEWATER SYSTEM NEW WELL INSTALLATION OR REPAIR OF EXISTING WELL MECKLENBURG COUNTY GROUNDWATER & WASTEWATER SERVICES

WELL FEE:
DATE:
CRT [ ]

FILE # 4947B

SEPTIC / TYPE APPLICATION: ☐ NONE ☐ NEW SYSTEM EXISTING SYSTEM: ☐ EXPANSION/ALTERATION ☑ REPAIR

WELL / TYPE APPLICATION: ☐ NONE ☐ NEW WELL ☐ MAJOR REPAIR ☐ ABANDONMENT

JOB LOCATION INFORMATION:

TAX/PARCEL #: 195 072 07
STREET ADDRESS: 3327 Winter Heath Way
CITY: Mint Hill
STATE: NC ZIP: 28227
SUBDIVISION OR MOBILE HOME PARK NAME:
LOT #:
TOWNSHIP:

☐ 0-MECKLENBURG ☐ 4-PINEVILLE
☐ 1-CHARLOTTE ☐ 5-MATTHEWS
☐ 2-DAVIDSON ☐ 6-HUNTERSVILLE
☐ 3-CORNELIUS ☑ 7-MINT HILL

BUILDING INFORMATION:

TYPE OF BUILDING:

☐ SINGLE MOBILE HOME (S) ☐ MODULAR HOME (M)
☐ DOUBLE WIDE (D) ☐ MULTIPLE FAMILY (U)
☐ HOUSE (H) ☐ OTHER

HEATED SQUARE FOOTAGE:
NUMBER OF BEDROOMS: 4
NUMBER OF OCCUPANTS: 5

FOUNDATION FOR RESIDENCE:

☐ CONCRETE SLAB ☐ BASEMENT WITH PLUMBING
☑ CRAWLSPACE ☐ BASEMENT WITH NO PLUMBING

IF PLANNING TO EXPAND/ALTER THE EXISTING SYSTEM INDICATE THE FOLLOWING CHANGES:

NUMBER OF BEDROOMS TO BE ADDED: NUMBER OF ADDITIONAL OCCUPANTS IN THE RESIDENCE:
WILL THERE BE A HOME BUSINESS IN THE RESIDENCE? ☐ YES ☐ NO TYPE:

WATER SUPPLY:

☐ MUNICIPAL (M) ☑ PUBLIC (C) ☐ PRIVATE WELL (P) ☑ SHARED WELL (S) ☐ OTHER 'SPRINGS' (O)

PROPOSED USE OF WELL: ☐ N/A ☐ IRRIGATION ☐ POTABLE ☐ GEOTHERMAL ☐ OTHER

ARE ANY OF THE FOLLOWING LOCATED ON THE PROPERTY? IF SO, PLEASE SHOW LOCATION ON SITE PLAN/PLAT.

BURIED CABLES, LANDFILLS, STUMPHOLES	☐ YES ☑ NO	WELLS, SPRINGS, OR WATER LINES	☐ YES ☑ NO
EXISTING WASTEWATER SYSTEMS	☑ YES ☐ NO	DESIGNATED WETLANDS	☐ YES ☑ NO
EASEMENTS OR RIGHT-OF-WAYS	☐ YES ☑ NO	GRADING/SOIL REMOVAL PERFORMED	☐ YES ☑ NO

PROPERTY OWNER:

NAME: Jennings Lee
ADDRESS: 3327 Winter Heath Way
CITY: Mint Hill NC
STATE: ZIP: 28227
HOME PHONE: 704-201-1539 WORK PHONE:
MOBILE PHONE: FAX:

LEGAL AGENT FOR PROPERTY OWNER, IF APPLICABLE:

NAME:
ADDRESS:
CITY:
STATE: ZIP:
HOME PHONE: WORK PHONE:
MOBILE PHONE: FAX:

WHAT DATE WAS THE PROPERTY ORIGINALLY DEEDED AND RECORDED?
WHAT IS THE ANTICIPATED CLOSING DATE FOR THIS PROPERTY?

*An Improvement Permit is subject to suspension or revocation if site plans or the intended use change or if information submitted in this application is falsified or changed. The undersigned, owner, or legal agent for the owner, of the property described above as the "Job Location" has read the foregoing application, acknowledges that the contents of same are true, and authorizes the Mecklenburg County Health Department to enter onto the property for the purpose of processing this request.

5/10/06
Owner's/Agent's Signature Date

NORTH CAROLINA DEPARTMENT OF
ENVIRONMENT & NATURAL RESOURCES DIVISION
OF ENVIRONMENTAL HEALTH ON-SITE
WASTEWATER SECTION

*A Well Permit is subject to suspension or revocation if site plans or the intended use change or if information submitted in this application is falsified or changed. The undersigned, owner, or legal agent for the owner, of the property described above as the "Job Location" has read the foregoing application, acknowledges that the contents of same are true, and authorizes the Mecklenburg County Health Department to enter onto the property for the purpose of processing this request.

Owner's/Agent's Signature Date

MECKLENBURG COUNTY HEALTH DEPARTMENT
GROUNDWATER & WASTEWATER SERVICES
700 N. TRYON ST., SUITE 211
CHARLOTTE, NC 28202
704-336-5103 / FAX: 704-336-6894

Mecklenburg County Groundwater & Wastewater Services
700 N. Tryon St., Suite 211 Charlotte, NC 28202
Phone: (704) 336-5103 Fax: (704) 336-6894

NC DENR
Division of Environmental Health
On-Site Wastewater Section

OPERATION PERMIT for an ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

File #: 4947B Permit #: _____ Tax Parcel #: 19507207

Property Owner: Jennings Lee

Job Location Address: 3327 Winter Heath Way

City: Mint Hill State: NC Zip Code: 28227

Operation Permit Issuance Date: 5/17/06 Contractor Name: RCS

Permitted Design Flow: _____ GPD Existing

Liquid Capacity of Septic Tank: _____ gallons

Liquid Capacity of Dosing Tank: _____ gallons

Effluent Pump Model: _____

Drainfield Installation ☒ N/A

Trench Depth: _____ inches

Trench Width: _____ feet

Line Spacing: _____ feet (O.C.)

Total line length: _____ feet

# of Lines: _____ @ _____ feet

Depth of Media: _____ inches (Type) _____

Depth of Cover: _____ inches

Distribution Device: _____

Inspection Dates

Tank(s) Inspected: Existing (Tank pumped)

Excavation Inspected: 5/17/06

Pump & Controls Inspected: NA

SKETCH OF SYSTEM INSTALLATION
(As-Built Drawing)

see installation approval

Bed Installation *(For Repair Installations ONLY.)* ☒ N/A

Bed Depth: _____ inches

Bed Width: 6 feet

Total line length: 100 feet

# of Lines: 2 @ 50 feet

Depth of Media: 24 inches (Type) Gravel

Depth of Cover: 12 inches

Distribution Device: Washer box + D-Box

Water Supply Source

☐ Municipal ☐ Private Well ☒ Community Well

☐ Other _____

System Installation Setbacks

Distance from Building Foundation: 5' feet

Distance from Property Line: 10' feet

Distance from Water Supply Source: > 10' feet

The undersigned has inspected the Septic Tank System described above, and certifies it has been ☐ installed ☐ altered ☒ repaired ☐ as detailed in the plot above ☒ in accordance with the permit issued and meets the provisions of 15A NCAC 18A. 1900, "Laws and Rules for Sewage Treatment and Disposal Systems" in effect on the date of issuance of the permit. The issuance of this Operation Permit does not in any way guarantee that the system will operate properly or relieve any person now or hereafter owning, controlling, or using such system from any liability resulting from the failure of the system to operate properly. This document is issued subject to those restrictions and conditions shown on the permit(s) and the provisions of 15A NCAC 18A. 1900 in addition to those listed below under "Comments." This document shall be null and void if any information contained in the application is untrue or if any additions are made to the property which would increase the requirements for said system.

Notice: Disturbance of the designated repair area may result in the Suspension or Revocation of this permit.

Comments: System Classification & Type: Type IIa Repair System Installed

DENR Authorized Agent: Phillip S. Walker Signature: Phillip S Walker RS

CONTRACTOR SHALL CONTACT GWS Before Installation

INSTALLATION, CONSTRUCTION, ALTERATION, AND/OR REPAIR APPROVAL

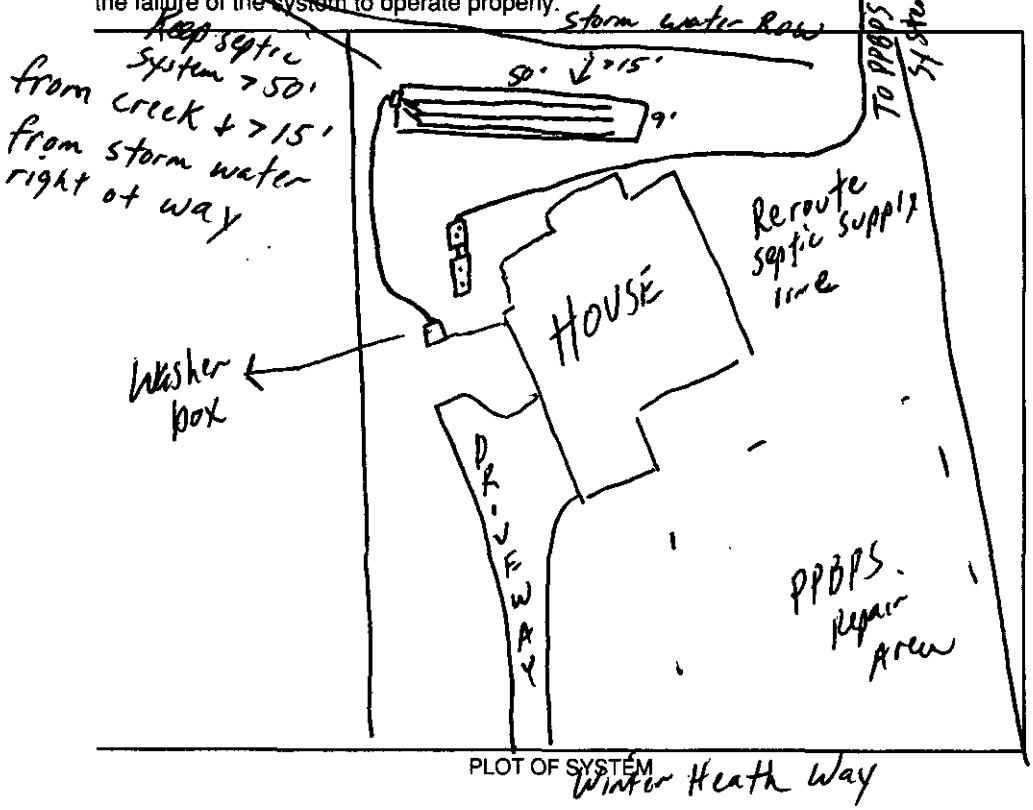
HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION
700 NORTH TRYON ST., SUITE 211
CHARLOTTE, NC 28202
PHONE (704) 336-5102

FILE: 4947B DATE: 3/9/06

TC: 195 072 07 ☐ L

SERIAL 19904

Permission is hereby given to _____ Install or Construct, ✓ Alter or Repair the individual septic tank wastewater treatment system with subsurface, soil absorption, effluent discharge as specified herein at the described location. This permit is granted based upon the information supplied in the application dated 3/9/06. All work shall be completed on or before 4/9/06, after which date this permit shall be null and void. The system shall meet all of the construction requirements of 15A NCAC 18A. 1900 which are in effect on the date of the granting of this permit. A Certificate of Completion or an Operation Permit must be obtained from the Mecklenburg County Health Department before any system can be covered up or placed into service. The issuance of this permit does not in any way guarantee that the system anticipated to be constructed will operate properly, or relieve any person now or hereafter owning, controlling or using such system from any liability resulting from the failure of the system to operate properly.



PLOT OF SYSTEM Winter Heath Way

Liquid Capacity of Septic Tank Existing gallons

Liquid Capacity of Dosing Tank Existing gallons

Tank Construction Existing

Trench Depth 36"

Absorption and/or Nitrification Lines:

Bed Trench Width 9' feet

Trench Walls Scored and Porous yes

Bed Total Line Length 150' feet

Bed Number of Lines 3(50')

Depth of Stone 24" inches

Distance from House 5' feet

Distance from Property Line 10' feet

Distance from Well > feet

NOTICE: This system shall not be installed while soils are in a wet condition.

NAME OF OWNER Ryan Homes

LOCATION OF PROPERTY 3327 Winter Heath Way

Comments: Keep the septic system >50' from pond & 15' from storm water ROW, Install Bed System, Washer box, D-Box, Bed 9'wd @ 50'long @ 24" Stone

Philo A. Walker RS

Environmental Health Specialist

WHITE - HEALTH DEPARTMENT's COPY • CANARY - E.H.S. COPY • PINK - OWNER OR AGENT's COPY

CERTIFICATE OF COMPLETION/OPERATION PERMIT

HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION
700 NORTH TRYON ST., SUITE 211
CHARLOTTE, NC 28202
PHONE (704) 336-5102

FILE: 49476 DATE: 8/19/04

TC: 195 072 07 ☐ L ☑ CRT

SERIAL 19695

Name of Owner Ryan Homes Juris.:

Address of Property 3327 Winter Heath Way

Inspection Data:

Tank Material PCC

Total Length of Drainfield 281' PPBPS

Number of Lines 4 @ 3(72') 1(55)

Cover Depth 12"

Water Supply Source Com well

Distance to Water Source >100'

Excavation Inspected 8/5/04

Tank(s) Inspected 8/5/04

Wash Line Inspected plumb to tank

High Water Alarm Inspected 8/5/04

PLOT

Design 2004, 1500ST, 1000DT, PI, MOD, 281' PPBPS CTR# RCS

The undersigned has inspected the Septic Tank System described above, and certifies it has been

☒ installed or constructed ☐ altered or repaired

☒ in accordance with the permit issued ☐ as detailed in the plot above

and meets the provisions of I5A NCAC 18A. 1900, "Laws And Rules For Sewage Treatment and Disposal Systems" in effect on the date of issuance of the permit. This issuance of this

☐ Certificate of Completion ☒ Operation Permit

does not in any way guarantee that the system will operate properly or relieve any person now or hereafter owning, controlling, or using such system from any liability resulting from the failure of the system to operate properly. This document is issued subject to those restrictions and conditions shown on the permit(s) and the provisions of I5A NCAC 18A. 1990 in addition to those listed below under "COMMENTS." This document shall be null and void if any information contained in the application is untrue or if any additions are made to the property which would increase the requirements for said system.

Notice: Disturbance of the designated repair area may result in the suspension/revocation of this permit.

COMMENTS: Septic System designed for 4 bedroom residence Type IV Certified Operator Required

Philo S. Walker
Environmental Health Specialist

Mecklenburg County services are available without regard to ethnic origin, sex, or disability.

INSTALLATION, CONSTRUCTION, ALTERATION, AND/OR REPAIR APPROVAL

HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION
700 NORTH TRYON ST., SUITE 211
CHARLOTTE, NC 28202
PHONE (704) 336-5102

FILE: 4947B DATE: 7/30/04

TC: 195 072 07 ☑ L

SERIAL 19724

Permission is hereby given to ✓ Install or Construct, _____ Alter or Repair the individual septic tank wastewater treatment system with subsurface, soil absorption, effluent discharge as specified herein at the described location. This permit is granted based upon the information supplied in the application dated 5/6/04. All work shall be completed on or before 8/30/04, after which date this permit shall be null and void. The system shall meet all of the construction requirements of 15A NCAC 18A. 1900 which are in effect on the date of the granting of this permit. A Certificate of Completion or an Operation Permit must be obtained from the Mecklenburg County Health Department before any system can be covered up or placed into service. The issuance of this permit does not in any way guarantee that the system anticipated to be constructed will operate properly, or relieve any person now or hereafter owning, controlling or using such system from any liability resulting from the failure of the system to operate properly.

Install system in accordance w/ approved plot plan

PLOT OF SYSTEM

Liquid Capacity of Septic Tank 1500 gallons

Liquid Capacity of Dosing Tank 1000 gallons

Tank Construction RCC

Trench Depth 42"

Absorption and/or Nitrification Lines:

Trench Width _____ feet

Trench Walls Scored and Porous Yes

Total Line Length 281 feet

Number of Lines 3 (Varias lengths)

Depth of Stone NA inches

Distance from House 5' feet

Distance from Property Line 10' feet

Distance from Well >100' feet
Community wells

NOTICE: This system shall not be installed while soils are in a wet condition.

NAME OF OWNER Ryans Homes

LOCATION OF PROPERTY 3327 Winter Heath Way

Comments: Install system in accordance w/ approved plot plan

Philip S. Walker RS.
Environmental Health Specialist

WHITE - HEALTH DEPARTMENT's COPY • CANARY - E.H.S. COPY • PINK - OWNER OR AGENT's COPY

Department of Environment, Health, and Natural Resources
Division of Environmental Health
On-site Wastewater Section

Sheet: 1
Property ID: 195-072-07
Lot #: 39
File #: 4947B
Code: 2

ACS

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

Owner: NVR, Inc. dba Ryan Homes
Applicant:
Address: 10815 David Taylor Drive, Charlotte, N. C. 28262
Date Evaluated: 05/16/2002
Proposed Facility: Residence
Design Flow (.1949): 480gpd
Property Size: .72a.
Location of Site: 3327 Winter Heath Way
Property Recorded:
Water Supply: [x] Public [ ] Individual [ ] Well [ ] Spring [ ] Other
Evaluation Method: [x] Auger Boring [ ] Pit [ ] Cut
Type of Wastewater: [x] Sewage [ ] Industrial Process [ ] Mixed

PROFILE #	.1940 Landscape Position/ Slope%	Horizon Depth (IN.)	SOIL MORPHOLOGY .1941 .1941 Structure/ Texture	.1941 Consistence Mineralogy	OTHER PROFILE FACTORS .1942 Soil Wetness/ Color	.1943 Soil Depth (IN.)	.1956 Sapro Class	.1944 Restr Horiz	Profile Class & LTAR
1	LS, 8	0-5	GR/SCL	FR/SEXP/SS/SP	>47" TO SOIL WETNESS	47+	N/A	NONE	PS, IV .3GPD/GT
		5-44	SBK/C	FI/SEXP/S/P					
		44-47	SBK/CL	FR/SEXP/SS/SP					
			FLOATER	ROCK @47"					
2	"	0-7	GR/SCL	FR/SEXP/SS/SP	>49" TO SOIL WETNESS	49	"	"	"
		7-22	SBK/C	FI/SEXP/S/P					
		22-49	SBK/CL	FR/SEXP/SS/SP					
3	LS, 10	0-5	GR/SCL	FR/SEXP/SS/SP	>48" TO SOIL WETNESS	48	"	"	"
		5-29	SBK/C	FI/SEXP/S/P					
		29-48	SBK/CL	FR/SEXP/SS/SP					
4	"	0-3	GR/SCL	FR/SEXP/SS/SP	>37" TO SOIL WETNESS	37	"	"	PS, IV .35GPD/FT^2
		3-17	SBK/C	FI/SEXP/S/P					
		17-37	SBK/CL	FR/SEXP/SS/SP					
5	LS, 12	0-5	GR/CL	FR/SEXP/SS/SP	>31" TO SOIL WETNESS	31	"	"	US, IV .35GPD/FT^2
		5-20	SBK/C	FI/SEXP/S/P					
		20-31	SBK/CL	FR/SEXP/SS/SP					

Description	Initial System	Repair System
Available Space (.1945)	US	US
System Type(s)		
Site LTAR	.3GPD/FT^2	.3GPD/FT

Other Factors (.1946): _____
Site Classification (.1948): UNSUITABLE
Evaluated By: W. R. Marlin, LSS, 5/16/02. W.R. Marlin
Others Present:

FILE # 49470

COMMENTS 100% Repair

LANDSCAPE POSITION	GROUP	TEXTURE	.1955 LTAR
R-RIDGE	I	S-SAND	1.2-0.8
S-SHOULDER SLOPE		LS-LOAMY SAND	
L-LINEAR SLOPE			
FS-FOOT SLOPE	II	SL-SANDY LOAM	0.8-0.6
N-NOSE SLOPE		L-LOAM	
H-HEAD SLOPE			
CC-CONCLAVE SLOPE	III	SI-SILT	0.6-0.3
CV-CONVEX SLOPE		SICL-SILTY CLAY LOAM	
T-TERRACE		CL-CLAY LOAM	
FP-FLOOD PLAIN		SCL-SANDY CLAY LOAM	
	IV	SC-SANDY CLAY	0.4-0.1
		SIC-SILTY CLAY	
		O-ORGANIC	

CONSISTENCE	
MOIST	WET
VFR-VERY FRIABLE	NS-NON-STICKY
FR-FRIABLE	SS-SLIGHTLYSTICKY
FI-FIRM	S-STICKY
VFI-VERY FIRM	VS-VERY STICKY
EFI-EXTREMELY FIRM	NP-NON-PLASTIC
	SP-SLIGHTLYSTICKY
	P-PLASTIC
	VP-VERY PLASTIC

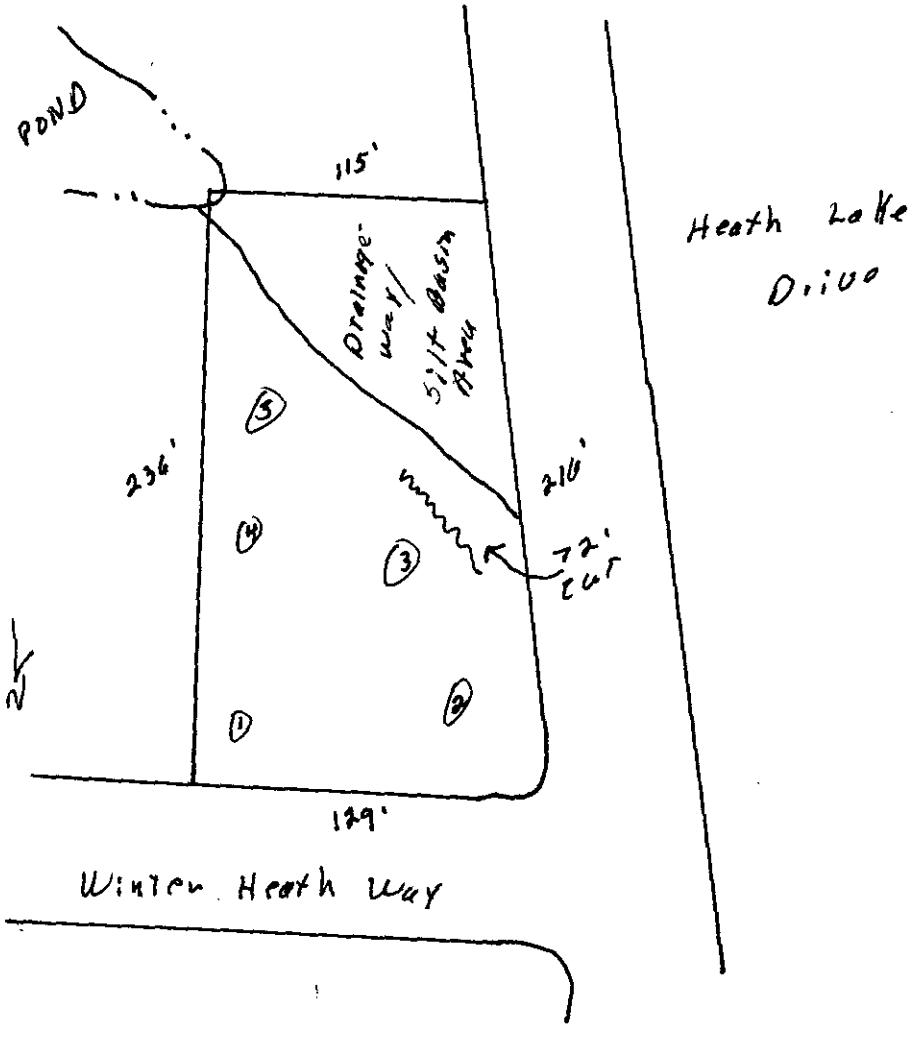
STRUCTURE

SG-SINGLE GRAIN
M-MASSIVE
CR-CRUMB
GR-GRANULAR
SBK-SUBANGULAR BLOCKY
ABK-ANGULAR BLOCKY
PL-PLATY
PR-PRISMATIC

MINERALOGY

SLIGHTLY EXPANSIVE

EXPANSIVE



1X33575

FEE: 300 / AUTHORIZATION FOR WASTEWATER SYSTEM CONSTRUCTION AC CD
DATE: 5/24/04 gc / VOID SIXTY (60) MONTHS FROM DATE OF ISSUANCE

DATE: 5/24/04 PERMIT NO: 4947B
PARCEL NO: 195 022 07

JOB LOCATION ADDRESS: 3327 Winter Heath Way
PROPERTY OWNER: Ryan Homes
BUILDING CONTRACTOR: Ryan Homes
SUBDIVISION NAME: Heathfield
AUTHORIZATION ISSUED BY: Phil A. Walker RS DATE: 5/24/04
DEHNR AUTHORIZED AGENT

AUTHORIZATION CONDITIONS

1. WASTEWATER SYSTEM CONSTRUCTION AND INSTALLATION MUST MEET ALL CONDITIONS AND SPECIFICATIONS AS SET FORTH IN IMPROVEMENT PERMIT NO. 4947B, AND THE ATTACHED SITE PLAN WITH SYSTEM DETAILS. CONSTRUCTION AND INSTALLATION MUST ALSO MEET ALL REQUIREMENTS SET FORTH IN THE RULES GOVERNING SANITARY SEWAGE COLLECTION, TREATMENT, AND DISPOSAL AND ANY OTHER APPLICABLE RULES AND LAWS.

2. AN INSTALLATION, CONSTRUCTION, ALTERATION AND/OR REPAIR APPROVAL MUST BE SECURED **PRIOR** TO INSTALLATION OF THE SEPTIC TANK SYSTEM. THE INSTALLER OF THE SYSTEM SHALL BE A REGISTERED SEPTIC TANK CONTRACTOR WITH MECKLENBURG COUNTY HEALTH DEPARTMENT.

3. ANY ALTERATION IN SITE OR SOIL CONDITIONS (INCLUDING LOCATION OF STRUCTURES AND APPURTENANCES) OR MODIFICATION IN USE, DESIGN WASTEWATER FLOW, OR WASTEWATER CHARACTERISTICS AS SPECIFIED IN THE ASSOCIATED IMPROVEMENT PERMIT AND APPLICATION, MAY SUBJECT THIS AUTHORIZATION AND ASSOCIATED PERMIT(S) TO REVOCATION.

4. OTHER CONDITIONS: Agreement forms required, Maintenance Contract w/ certified Operator shall be on file prior to Operations permit release.

OWNER CERTIFICATION

I CERTIFY THAT THERE HAVE BEEN NO ALTERATIONS IN SITE OR SOIL CONDITIONS OR MODIFICATIONS TO FACILITY, WASTEWATER FLOW, OR WASTEWATER CHARACTERISTICS FROM THOSE SPECIFIED IN THE ORIGINAL APPLICATION OR ASSOCIATED IMPROVEMENT PERMIT UNLESS AUTHORIZED IN WRITING BY THE MECKLENBURG COUNTY HEALTH DEPARTMENT. I ALSO UNDERSTAND THAT ANY SUCH ALTERATIONS, MODIFICATIONS, OR FALSE INFORMATION ARE GROUNDS FOR REVOCATION OF PERMITS AND AUTHORIZATION TO CONSTRUCT.

× Patrice Gainer 5/26/04
SIGNATURE OF OWNER/OWNER'S REPRESENTATIVE DATE

8/4/33

CONDITIONS OF IMPROVEMENT PERMIT

Permit Number: 4947B

Tax Number: 195 072 07

- The IMPROVEMENT PERMIT is subject to revocation if site plans or the intended use change. There is to be NO grading, filling or disturbance of the soil in the area of the septic tank system or repair area.
- CONSTRUCTION AUTHORIZATION must be obtained prior to receiving a Building Permit. The Construction Authorization is NOT transferable. Do not clear, grade, fill or disturb soil prior to obtaining a Construction Authorization.
- Domestic-type wastewater only. No industrial process wastewater may be discharged into the system.

Basement	___ Yes	✓ No	___ Partial Basement	
Type Primary Wastewater System Type (circle one): I II III (IV) V VI	✓ Conventional ___ Prefabricated, permeable block panel system ___ Shallow Placed Conventional	___ Low Pressure Pipe ___ Large Diameter Pipe ___ Fill ___ Other	___ Innovative or Experimental: ___ IWWS-93-1 ___ IWWS-93-2 ___ IWWS-94-1	
.3 Long-term acceptance rate	480 Max gallons/day wastewater flow	843 Absorption Area (sq ft)	8' Trench spacing (min. on centers)	
NO Serviced by private well (Comm well)	1500 Gallon septic tank	281' Total trench length (ft)	42" Maximum trench depth (At least 12" of provisionally suitable soil must remain between trench bottom and unsuitable soil conditions)	
4 Bedrooms in residence	1000 Gallon pump tank	NA Depth of stone		

Any surface waters present: yes Type: pond Minimum separation distance: 50'

Site modifications required: Keep the septic system > 50' from the pond

Additional Conditions: PPBPS Septic System Approval. Install in accordance w/ plot plan on file. Maintenance contract w/ certified Operator shall be on file prior to Operations Permit release

Repair Area System Type Type (circle one): I II III (IV) V VI	✓ Conventional ___ Prefabricated, permeable block panel system ___ Shallow Placed Conventional	___ Low Pressure Pipe ___ Large Diameter Pipe ___ Fill ___ Other	___ Innovative or Experimental: ___ IWWS-93-1 ___ IWWS-93-2 ___ IWWS-94-1	
281 Absorption Area (Sq ft) Total Trench Length (Ft)	NA Depth of Stone Trench	8' Trench spacing (min. on centers)	42 Maximum Trench Depth	

For existing system, enter the year originally installed:

The undersigned, an authorized agent of the MECKLENBURG COUNTY HEALTH DEPARTMENT, certifies that the Department has approved the Request for the Job Location contained in this document. This approval is granted in accordance with the provisions of Laws and Rules For Sewage, Treatment and Disposal in effect at the time of issuance of the permit and is subject to the following provisions:

- No work shall be conducted on the septic tank system until an Installation, Construction, Alteration and/or Repair Approval is granted by this Department.
- This Improvement permit is transferable.

Philo L. Walker 5/24/04
DEHNR Authorized Agent Date

Patrice Garner 5/24/04
Owner/Agent Signature Date

MECKLENBURG COUNTY
HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION
c/o HAL MARSHALL CTR.
SUITE 211
700 N. TRYON ST.
CHARLOTTE, N.C. 28202.
(704) 336-5102

NORTH CAROLINA DEPARTMENT OF
ENVIRONMENTAL, HEALTH,
AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH
ON-SITE WASTEWATER SECTION

Project No. 81433

FILE COPY	
FILED FOR REGISTRATION	DOC. #
DATE 5/24/04	TIME 8:34 am
BOOK 17236	PAGE 1
STAMPS	REC FEE 20.00
JUDITH A. GIBSON, REGISTER OF DEEDS MECKLENBURG COUNTY, NC	

STATE OF NORTH CAROLINA

COUNTY OF MECKLENBURG

WASTEWATER TREATMENT AND DISPOSAL SYSTEM DESIGN AGREEMENT: 15A NCAC 18A .1948 AND ANY OF THE FOLLOWING RULES: .1956; .1957(a); .1957(b); or .1957(c); OR .1969

FILE # 49478
PARCEL # 195 072 07

The undersigned, NUR, INC DBA Ryan Homes, owner of property located at 3327 Winter Heath Way, (the "site") and described in an instrument recorded in Book 41 at Page 555, Mecklenburg Public Registry, hereby acknowledges that the undersigned applied to the Mecklenburg County Health Department (the "Department") for a permit to install a septic tank sewage disposal system on the site; that the Department evaluated the site for suitability for such a system in accordance with the regulations promulgated by the North Carolina Commission for Health Services as 15A NCAC 18A .1900 et seq.; that the Department originally classified the site as "unsuitable" pursuant to the standards set forth in the regulations; that the undersigned requested that the Department reclassify the site as "provisionally suitable" in light of the particular septic tank system proposed by the undersigned; that the Department considered various studies, data, and other information which indicate to the Department that the septic tank system proposed by the undersigned is allowed by the rules; and that the Department therefore reclassified the site as "provisionally suitable" and issued an appropriate permit for such proposed septic tank system.

The undersigned further acknowledges that the proper design, construction, operation and maintenance of such septic tank system is the responsibility of the designer, owner, developer, installer, or user of the system, as applicable, and that neither the Department nor its officials, employees, or agents warrant or guarantee that the said system installed pursuant to the permit issued by the Department will function in a satisfactory manner for any given period of time or that the Department, its officials, employees or agents assume any liability for any damages of any kind which are caused, or which may be caused, by a malfunction of such system.

The undersigned further acknowledges that the following conditions will apply to the site:

This instrument was prepared by: NUR, INC DBA Ryan Homes
Mail after recording to: 10815 David Taylor Dr
Charlotte, NC 28262

STATE OF NORTH CAROLINA
COUNTY OF ~~UNION~~
MECK.

T & S Panel System

THIS AGREEMENT is made and entered into this 17 day of September 2004 by and between Ryan Homes (hereinafter the "Owner") and R.C.S., Inc., Joe R. Hudson (hereinafter the "Contractor").

WITNESSETH

WHEREAS, the Owner owns or controls the property upon which a ground absorption sewage treatment (hereinafter the "system") is installed, such system being designated a Type lpp system under the Rules for Sanitary Sewage Collection, Treatment and Disposal found at 15A N.C. Admin. Code 18A.1900 et seq.; and

WHEREAS, 15A N.C. Admin.Code 18A.1961 requires a contract to be executed between the system owner and a management entity prior to the issuance of an Operation Permit for said system; and

WHEREAS, 15A N.C. Admin. Code 18A.1961 requires that a condition of the Operation Permit for said system be that a properly executed contract between the system owner and a management entity shall be in effect for as long as the system is in use; and

WHEREAS, the Contractor is a management entity of a type authorized by 15A N.C. Admin. Code 18A.1961 to manage a Type lpp system.

NOW THEREFORE, in consideration of the premises and of the mutual covenants and promises contained in this Agreement, it is hereby agreed by and between the Owner and the Contractor as stipulated below.

I. The Contractor's Obligations. The Contractor shall perform the following services on the Owner's system located at 3327 Winterkath Way

a. The Contractor shall inspect the system at least at the frequency required in Table V(b) of 15A N.C. Admin. Code 18A.1961(b) for a Type lpp system.

b. The Contractor shall perform th following routine maintenance procedures

STATE OF NORTH CAROLINA
COUNTY OF ~~UNION~~ Mecic

in accordance with the conditions of the Operation Permit:

(1) (from the operation permit)
(2)
(3)

a. The Contractor shall report the results of its inspections to the local health department at the frequency specified in Table V(b) of 15A N.C. Admin. Code 18A.1961(b) for a Type Ipp system.

b. If an inspection indicates the need for system repairs, the Contractor shall notify the local health department within 48 hours of the inspection.

c. The Contractor shall notify the Owner of needed repairs which are outside of the scope of routine maintenance described in subparagraph (b) above. The Contractor shall perform necessary repairs to the system at the request of the Owner and shall be entitled to payment therefor at the Contractor's normal charge for services and materials.

d. The Contractor shall employ of shall contract with a certified operator(s) as required by Table V(b) of 15A N.C. Admin. Code 18A.1961(b) for a Type Ipp System.

e. The Contractor shall respond to a request for a nonscheduled service or maintenance call within 24-48 hours after receipt of such request depending on the emergency of the request.

2 The Owner's Obligations.

a. The Owner shall pay to the Contractor the sum of $ 200.00 per year for periodic inspections, routine maintenance procedures and periodic reports. The annual fee may be amended upon sixty(60) days advance notice to the Owner but may not be increased more than 20 percent per year. The Owner shall pay to the Contractor his normal and customary fees for any work performed on the system as a result of nonscheduled service or maintenance calls. All fees are due and payable within thirty (30) days shall accrue interest from the due date until paid at a rate of 15 percent per month.

b. Within 10 days of receipt of notice of needed repairs pursuant to subparagraph 1.e. above, the Owner shall request the Contractor to complete needed repairs or shall provide to the Contractor evidence that the needed repairs were satisfactorily completed by another entity.

c. The Owner shall provide the Contractor with such acoess to the system

STATE OF NORTH CAROLINA
COUNTY OF ~~UNION~~ MECK

as is reasonably necessary tor the Contractor to comply with the terms of this Agreement.

3 Term. This Agreement shall remain in effect until terminated.

a Automatic Termination.
This agreement shall automatically terminate if the Operation Permit for the system is revoked and all appeals of the revocation are exhausted or time for taking an appeal; has passed.

b Termination by Mutual Consent.
The Parties may mutually agree to terminate this Agreement by giving written notice of termination by mutual consent to the local health department thirty (30) days in advance of the date of termination.

c Termination by the Owner.
The Owner may terminate this Agreement by giving notice to the Contractor and to the local health department thirty (30) days in advance to the date of termination.

d Termination by the Contractor.

(1.) The Contractor may terminate this Agreement for cause by giving written notice of intent to terminate this Agreement to the Owner and to the local health department thirty (30) days is advance of the date of termination. Cause shall be defined as;

(a) failure to remit payment for any bill for services performed under and in accordance with this Agreement if said bill is not is not paid within thirty (30) days of receipt by the Owner of the bill. If said bill is paid after notice of termination is given but prior to the date of termination of this Agreement, this Agreement shall continue in effect;

or

(b) failure of the Owner to provide to the Contractor authorization to complete needed repairs or satisfactory evidence that needed repairs to the system were completed by another entity within 10 days of receipt of notice of needed repairs pursuant ot paragraph 1.e. above. If said authorization to comlete needed repairs or evidence of completion of said repairs is provided after notice of termination is given but prior to the date of termination of this Agreement, this Agreement shall continue in effect;

STATE OF NORTH CAROLINA
COUNTY OF UNION MECK

(c) failure of the Owner to allow the Contractor such access to the system as is reasonably necessary in order for the Contractor to comply with the terms of this Agreement.

(2) The Contractor may not terminate this Agreement without cause, but may assign its rights and duties under this Agreement as provided in paragraph 4, below.

4. Assignment.

Assignment by the Owner. The Owner shall notify the Contractor of the name and address of any purchaser of the property on which the system is located. The Owner shall also notify any purchaser of the property on which the system is located of the existence of this Agreement and shall assign all rights and duties under this Agreement to said purchaser.

Assignment by the Contractor. The Contractor may assign its rights and duties under this Agreement to another management entity which is qualified pursuant to 15A NC Admin. Code 18A.1961 to manage a Type Ipp system upon thirty (30) days written notice to the Owner and to the local health department.

5. Use of Subcontractors. The Contractor may subcontract with such manufacturers, suppliers and contractors as it deems desirable to perform any of the Contractor's duties under this Agreement. The Contractor shall at all times remain responsible for the performance of and payment for all work performed by all subcontractors.

6. Representations. The Parties represent to each other that each has the power, authority and legal right to enter into and perform its obligations as set forth in this Agreement.

7. Regulatory Amendments. References in this Agreement to sections of the Administrative Code shall include such rules as they may be amended in the future.

8. No Implied Waiver. The waiver by either Party of a default or a breach by the other Party of any provision of this Agreement shall not operate or be construed to operate as a waiver of any subsequent default or breach. The failure at any time of either Party to enforce any provision of this Agreement (a) shall not be construed to be a waiver of such provisions, or of any other provision; and (b) shall not in any way affect the validity of this Agreement, or any part of this Agreement, or the right of either Party thereafter to enforce each and every provision of this Agreement.

9. Notices. Every notice required under this Agreement shall be in writing and shall be deemed sufficiently given if delivered in person or sent by certified or registered mail,

STATE OF NORTH CAROLINA
COUNTY OF UNION

return receipt requested, postage prepaid to the Party to be notified and addressed as follows:

To the Owner: Ryan Homes
10815 David Taylor Drive
Charlotte, N.C. 28262

To the Contractor:
R.C.S. ,Inc.
Joe R. Hudson
PO Box 708
Monroe, NC 28111

To the Local Health Department:
~~Union County Environmental Health Department~~
~~500 North Main Street~~
~~Monroe, NC 28112-4799~~
MECKLENBURG CO.
ENVIRONMENTAL HEALTH
700 N. TRYON ST. SUITE 211
CHARLOTTE, N.C. 28202

The date of any Notice shall be the date of personal delivery or the date shown on the return receipt as the date of delivery of attempted delivery, as the case may be. Changes in the respective addresses to which notice may be directed may be made form time to time by either Party by notice to the other party/

11. Place of Agreement. This Agreement and any questions concerning its validity, construction or performance shall be governed by the laws of the State of North Carolina, notwithstanding the place of execution, or the order in which the signatures of the Parties are affixed.

12. Entire Agreement and Amendment. This Agreement supersedes all prior negotiations, agreements and understandings between the Parties with respect to the subject matter hereof. To be effective, any amendment or modification to this Agreement must be in writing and must be signed by the Parties.

13. Severability. In the event that any provision of this Agreement shall, for any reason, be determined to be invalid, illegal or unenforceable in any respect, the Parties shall negotiate in good faith and agree to such amendments, modifications or supplements of or to this Agreement of such other appropriate actions as shall to the maximum extent practicable in light of such determination, implement and give effect to the intentions of the Parties as reflected in this Agreement, and the other provisions of this Agreement shall, as so amended, modified, supplemented or otherwise affected by such action, remain in full force and effect.

IN TESTIMONY WHEREOF, the Parties hereto have executed this Agreement in duplicate originals, one of which is retained by each of the Parties,

727.462 SYNN HOMES MILLSTONE 7042895560 PAGE 01 P.07

STATE OF NORTH CAROLINA
COUNTY OF UNION

the day and year first above written.

(Owner)

Attest:

(Contractor)

Attest:

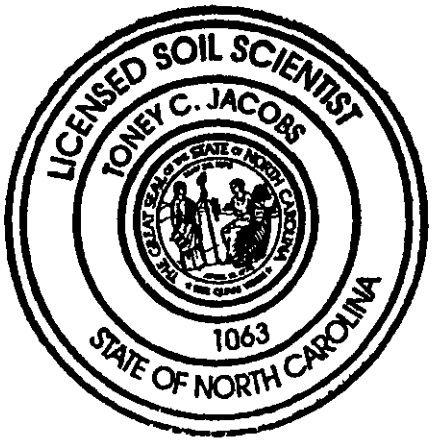
RESIDENTIAL LOW PRESSURE T & J PANEL SEPTIC SYSTEM FOR SUBSURFACE WASTEWATER DISPOSAL 3327 WINTER HEATH WAY HEATHFIELD SUBDIVISION - LOT 39

MCHD FILE # 4947B

Prepared for:
Ms. Kim Stanly
Ryan Homes
10815 David Taylor Drive
Charlotte, North Carolina 28027
and
Mr. Herb Jonkers
Rt. 2 Box 99E
Charlestown, West Virginia 25414

Prepared by:
Toney C. Jacobs & Associates, Inc.
168 Broadbill Drive
Mooresville, North Carolina 28117
office (704) 663-6905
fax (704) 662-9845
e-mail jacobs@i-america.net

May 20, 2004



Copy: Mr. Philo Walker, R.S.
Mecklenburg County Health Dept.-IWWS
700 N. Tryon Street
Charlotte, N.C. 28202

Toney C. Jacobs, CPSS, LSS

BACKGROUND

Lot 39 Heathfield is in a new subdivision in Mecklenburg County. This current lot is a combination of all the provisionally suitable soil area of old lot 38, plus all of 39. Lot 30 was unusable because of a space limitation. All combinations have been replatted. A copy of the soil evaluation (MCHD file 4947B) is enclosed. Mr. Bill Marlin, LSS, of the Mecklenburg County Health Department (MCHD), evaluated the soil on both of the lots. Mr. Marlin classified soils in a limited area on the right of lot 38 as provisionally suitable at a 0.3 gpd/ft^2 LTAR. Much of the lot was unsuitable for septic because of a pond and complex slopes.

Toney C. Jacobs and Associates, Inc. flagged and laid out the proposed system. The site requirements were provided by Ryan Homes. The supply pipe will cross a drainageway. In this area the pipe must have 3' of cover and follow 15ANCAC 18A .1950(h). A copy is enclosed and highlighted. Due to the limited available space on the lot, a T & J panel block system with 271ft of line for the primary system and required 100% repair. The proposed system will be a Type IV and require a maintenance contract with a certified operator. As stated previously, each line of the proposed system is flagged in the field, as shown on the attached site plan.

APPLICATION INFORMATION

1. Prepared for:

   Owners: Ryan Homes
   10815 David Taylor Drive
   Charlotte, North Carolina 28227

   Mr. Herb Jonkers
   Rt. 2 Box 99E
   Charlestown, West Virginia 25414

   Soil Scientists and Designers: Toney C. Jacobs, CPSS, LSS
   Toney C. Jacobs & Associates, Inc.
   168 Broadbill Drive
   Mooresville, NC 28117
   (704) 663-6905 (Office)
   (704) 662-9845 (fax)
   e-mail jacobs@i-america.net

2. Water supply is provided by a public water system.
3. Facility to be served by the proposed system is a 4-bedroom single family residence with a partial basement.

LOCATION

The property is located on the left of Heath Lake Drive, just past the Winter Health Way.

REFERENCES

Design and Installation of Low Pressure Pipe Waste Treatment Systems by: Craig Cogger, Bobby L. Carlile, Dennis Osborne, Ed Holland; published by UNC Sea Grant College Pub. UNC-SC-82-03, May 1982.

Law and Rules for Sewage Treatment and Disposal Systems, 15A NCAC 18A, Section .1900, Department of Environment Health and Natural Resources, August 1, 1998.

T & J Design Manual.

PLANS AND SPECIFICATIONS FOR SPECIFIC SYSTEM COMPONENTS

Septic Tank

1. The septic tank receives wastewater directly from the house.
2. A septic tank shall be watertight, structurally sound, and not subject to excessive corrosion or decay.
3. The septic tank must be of two-compartment design for maximum solids retention. The inlet compartment of two-compartment tank shall hold between two-thirds and three-fourths of the total tank capacity.
4. Effluent from the two-compartment septic tank flows by gravity through a State approved effluent filter and a four-inch solid PVC pipe to the pumping tank.
5. Both the septic tank and pumping tank must be provided with above ground approved manhole risers to provide easy access for clean-out and pump service.
6. When prefabricated concrete tanks or tanks of other material are used, they shall be constructed in accordance with the plans which have been approved by the State and shall comply with all requirements of Section .1953 of 15A NCAC 18A.
7. On the outlet tee of the septic tank an effluent filter must be installed. This filter should be equivalent to a Zabel Model A1800 or other State approved unit supplied by the tank manufacturer.

Pumping Tank

1. The pumping tank shall have an access manhole extending at least 6 inches above finished grade.
2. A septic tank effluent pump that will not be corroded by sewage shall be used in the pumping tank.

3. The pump must be placed on two concrete blocks set next to each other on the bottom of the tank. This prevents the pumping of any solid particles that can clog the system.
4. A piece of nylon rope or other non-corrodible material should be attached to the pump and to the outlet pipe for lifting the pump in and out of the chamber.
5. The lower level control or "pump-off" must be positioned above the pump, so that the pump remains submerged at all time.
6. The pump outlet pipe should be connected to the supply manifold with a threaded PVC union to allow quick removal.
7. Pump and Simplex control circuits shall be provided with manual circuit disconnects within a watertight, corrosion-resistant, outside enclosure (NEMA 4X or equivalent) adjacent to the pump tank, securely mounted at least 12 inches above finished grade. Pump control (Simplex) may be mounted on side of house if long cord pump is used. The pump shall be manually operable without requiring the use of special tools or entrance into the tank for testing purposes. Conductors shall be conveyed to the disconnect enclosure through water proof, gas proof, and corrosion-resistant conduits, with no splices or junction boxes provided inside the tank. Wire grips, duct seal or other suitable material shall be used to seal around wire and wire conduit openings inside the pump tank and disconnect enclosure. There shall be two electric circuits for controls: one for pump power, one for the alarm. These will require 2 circuit breakers.
8. The pump tank shall have a properly functioning high-water alarm. The alarm circuit shall be supplied ahead of any pump overload and short circuit protective devices. It should be on a separate electrical circuit from the pump power line. The alarm shall be audible and visible by system users and included in the pump and control enclosure (Simplex Panel). The alarm is activated if the water level in the pump tank rises above the "pump-on" float control. The tank provides at least one day or more of excess storage capacity (depending on water use in the home) during which time the system must be repaired.
9. Float switch for the high water alarm shall be set no more than 3 inches above the high water level of pump cycle.
10. Float switch tie downs to be made of corrosion resistant material, no tape or metal hose clamps. For maintenance flexibility, tree must be used to set floats.
11. Watertight testing per .1900 rules shall be required on two piece pump tanks.
12. Wiring between the pumping tank and the house should meet State and local code requirements.

Pipe and Fittings

1. All pipes and fitting should be made of SCH 40 PVC.
2. All joints must be sealed with appropriate PVC-solvent cement.
3. There should be a threaded PVC union above the pump to allow easy removal or replacement.
4. A gate valve for final pressure adjustment is installed in the supply line inside the pumping tank.
5. Manifold and valve as shown in specifications.
6. Lateral lines are made of 1 1/4 inch SCH 40 PVC placed in T & J panels. Holes in laterals are drilled on-site.
7. The end of each lateral is equipped with a capped "turn-up" that provides above

ground access for clean-out or back flushing of the laterals. Using (2) 45-degree elbows rather than a 90-degree elbow for the turn-ups will make clean-out easier.

CONSTRUCTION INSTALLATION

Site Preparation

1. One of the most important concerns for an on-site system is to protect the site from soil disturbance by heavy equipment. The house site has been cleared, but the drainfield has not. No heavy equipment should be on drainfields until installation of septic system.
2. Now that the absorption area has been designed and flagged, it should be roped off and protected from construction traffic. Flags should be protected to save on re-staking labor.
3. The site will have some clearing of brush and small trees. **Do Not Grade!**

Tank Installation

1. The two-compartment septic tank is installed.
2. The pumping tank is installed next to the septic tank.
3. The tanks are connected with an appropriate length of solid, four-inch PVC pipe.

Supply Manifold

1. The supply manifold conveys effluent from the pump to the distribution laterals.
2. Design of the manifold is shown on attached diagrams.
3. After the supply manifold has been placed in its trench and lateral lines connected, it should be backfilled with tightly tamped soil. The supply manifold trench must not be backfilled with gravel, or the trench may become a conduit for downslope flow effluent from the laterals.

T & J Lateral Lines

1. Install T & J Panels per cited reference material and this plan.
2. Trenches shall be 24" wide, and 8' minimum on center. This layout has a minimum 9' o.c. Trenches shall be "level" from end to end.
3. There should be one 5/32 inch hole near the center of each panel, pointed up. (Note this system uses five valves; one on each lateral.)
4. A short turn-up with a capped end is at the end of each lateral. The capped end must be brought up above or flush with the final grade. Using two 45-degree elbows for constructing cleanouts is recommended. A larger diameter sleeve with cap or approved box with lid shall be placed over the turn-up.

PROPER OPERATION CHECK AND PRESSURE HEAD ADJUSTMENT

1. After all connections have been installed and connected, the system should be checked for proper operation. With electrical power turned off, fill the pump tank with a garden hose until the liquid rises to the level of the high-water alarm float.
2. Turn on the electrical power. The alarm light should go off when the liquid level falls below the high-water float. The pump should turn off when the liquid reaches the lowest float control. Be sure the pump is still completely submerged.
3. The pressure head is measured as the height liquid will rise above the turned-up elbow when the pump is running. To set or check the pressure head:

    - Glue a three-foot length of pipe (preferable clear) to a threaded adapter that will screw onto the turn-ups at the end of each lateral.
    - Replace each turn-up cap with the pipe and adapter.
    - Turn the power on to allow liquid to rise in the pipe.
    - Adjust the gate valves until the effluent reaches the desired height in the pipe. Remember to include the distance below the ground surface to the lateral line when measuring the height.

FINAL LANDSCAPING

1. After the system is installed, the following should be checked to ensure that the system will not be overloaded with excess rainwater and runoff:
    - The distribution field is shaped to shed rainwater and is free of low areas.
    - Grassy swales or ditches for diverting surface water are properly installed.
    - Gutter and downspout drains are directed away from the system.

2. Finally, the entire area should be planted with grass in order to prevent erosion. The soil should be properly tilled, limed (if necessary) and fertilized before planting. After applying an appropriate grass seed, the area should be heavily mulched with straw or other suitable material.

QUALITY ASSURANCE REQUIREMENTS

The system must be installed by a qualified, contractor that is on the Mecklenburg County list of competent contractors. Critical stages of the installation, which should be checked, are:

1. System layout
2. Septic and pump tank installation prior to backfilling.
3. Manifold and lateral installation prior to backfilling.
4. Final landscaping, operation and pressure head check.

The system design is based on a maximum waste flow of 480 gallons per day.

Homeowners should pay particular attention to the section titled Homeowner Suggestions for ways to minimize the burden on the system.

OPERATION AND MAINTENANCE PROCEDURE

The system is classified as **Type IV and DOES require a maintenance contract** with a certified operator. The contract shall be executed between the system owner and a management entity prior to the issuance of an Operation Permit. The contract shall include the specific requirements for maintenance and operation, responsibilities of the owner and system operator, and provisions that the contract shall be in effect for as long as the system in use.

Operating, Maintenance and Inspection procedures shall include, but not be limited to the following:

- Minimum inspection/maintenance frequency shall be 2 times per year, with reporting frequency every 6 months to the local health department.
- Septic system shall be pumped every 4 years or when solids accumulate to 1/3 the volume of the tank.
- At 6-month intervals, inspect the effluent filter. When washing the filter, debris must be sprayed directly back into the septic tank and not onto the lawn.
- All laterals shall be checked and if necessary, flushed annually with clean water.
- Pressure head for laterals should be checked and adjusted one month after installation and semi-annually thereafter.
- All piping and fittings shall be checked annually for damage and/or proper operation and corrections made immediately.
- The property should be inspected to insure all surface water is diverted away from the fields and tank. Any ponding of surface water should be corrected.
- Grasses shall be mowed and maintained and any erosion shall be corrected promptly.
- The nitrification field area shall be checked for leakages, blowouts or malfunction, indications of damp or mushy areas compared to surrounding area or evidence of noticeable odor of sewage. Repairs shall be made immediately.
- The pump electrical should be checked to insure tight, clean connections with no corrosion and proper operation.
- Pump switches shall be checked for free operation and proper level set.
- Pump draw down depth and delivery rate shall be checked each year.
- Check septic tank and pump tank for evidence of damage or leakage. Check the quality of effluent including grease and sludge accumulation.

The system operator, in conjunction with the local Health Department shall establish an operation and maintenance program and procedure based on experience obtained from similar installations.

HOMEOWNER SUGGESTIONS

Most systems do not require much effort to operate and maintain. Even though the effort is small, the system must be maintained properly so that it operates reliably and at a minimum cost. Following are suggestions for the homeowner to minimize the burden on the septic system.

1. Garbage disposals should not be used in on-site systems. The ground garbage adds large amounts of solids to a septic tank, causing sludge to build up at a quicker rate than without. If disposal is installed, use should be limited.
2. Grease, cooking oils and coffee grounds should never be put into a septic tank.
3. Items such as disposable diapers, cigarettes, facial tissues and other solid or paper wastes should not be flushed into the on-site system.
4. Used motor oil and other such oily liquids should not be put into a septic tank.
5. Using less water can reduce the amount of water flowing to the treatment and disposal field.
6. Water-saving fixtures and devices can be installed on sinks, toilets and showers to reduce the rate at which the water flows from the fixture.
7. Dishwashers and washing machines should only be run with full loads.
8. Leaky faucets and toilets can add large volumes of water to the daily flow of water into the on-site system. Repair the leaks to save water and give the treatment and disposal field a rest.
8. Roof drains, basement sump pumps, foundation drains, and other such drains should not empty into or onto the surface above the on-site system. These drains should be directed to another part of the lot away from the treatment and disposal field.

DESIGN SPECIFICATIONS

Lot 39 Heathfield Subdivision

Daily design flow:	480 gpd.
Septic tank size:	1500 gal. (2 compartments)
Pumping tank size:	1000 gal.
Effluent loading rate, Initial system	0.3 gpd/ft^2
Effluent loading rate, Repair system	0.3 gpd/ft^2
Total length and diameter of supply pipe:	approx. 195 ft. 2" SCH 40 PVC)
Number and length of laterals:	4 total, 3 @72' & 1 @ 55', end-fed (1¼ SCH 40 PVC) 281' total
Hole size:	5/32"
Hole spacing:	1 per panel
Total number of holes:	62 (one in each T & J Panel near the center with the hole turned up) (approx. 1 panel per 54" of run)
Flow rate through the system:	31 gpm
Elevation head:	Approx. 20'
Pressure head:	3.0'
Friction head:	4.0'
20% contingency	5.4'
Total head:	32.4'
Pump requirements:	31 gpm at 32.4' of head; use Goulds WE 07H pump or equivalent with compatible electrical
Dosing volume:	220 gal. – 2.2 doses/day at design flow*
Depth of water pumped per dose:	calculated to specific tank by measure or dealer engineering specifications (1 cubic ft. of water equals 7.48 gal.)
Pump run per dose:	approx. 7.1 min
Check valve:	Yes
Siphon break hole:	No

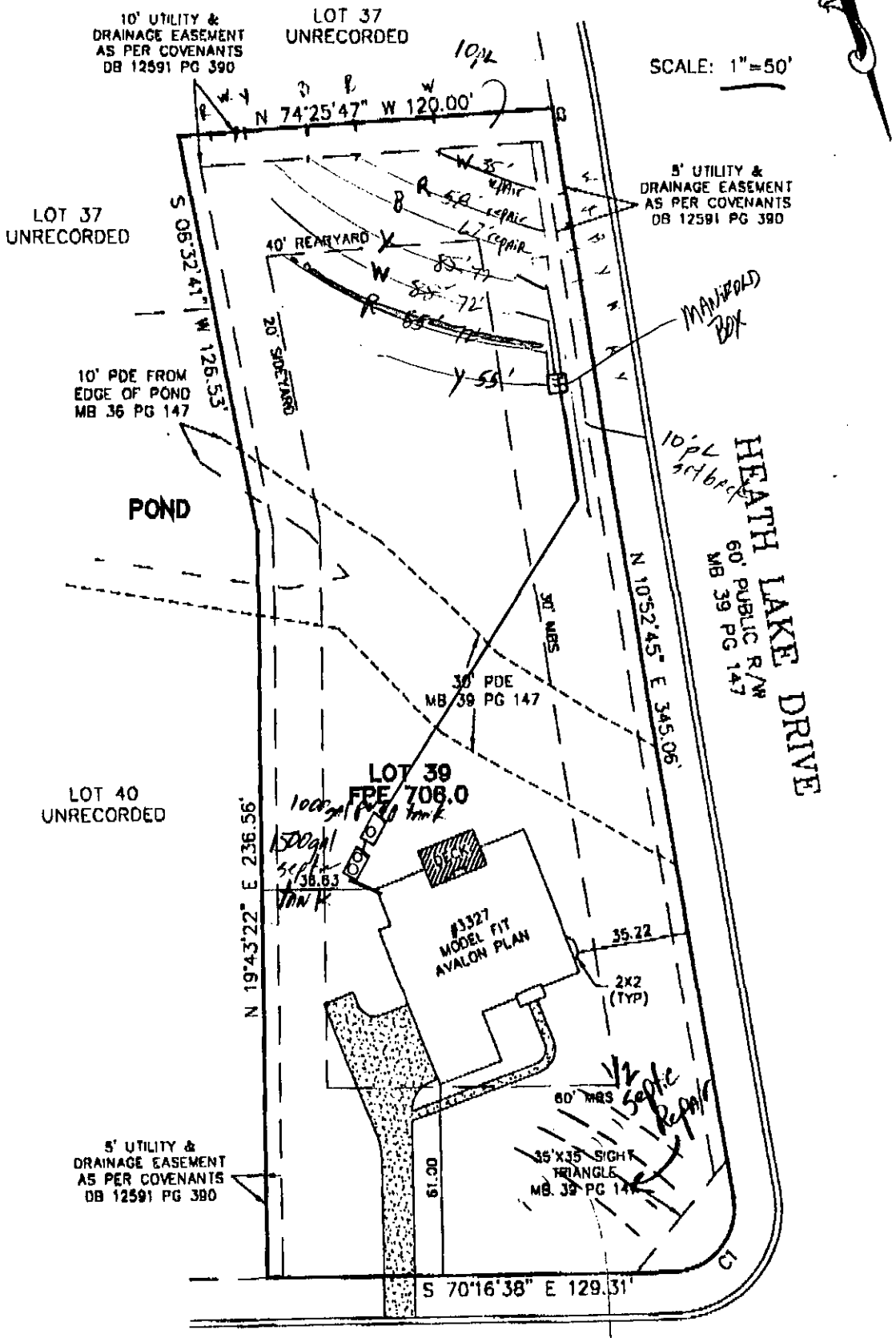
- Before placement of cap block, one panel on each line near the center of the field should be observed filling to make certain that it does not overflow top chamber into air chambers of panel. If overflow occurs, reduce floats by 25 gallons and reset until no overflow is observed.

LIST OF ATTACHMENTS

1. Site Plan
2. Pump curve
3. Gate valve box detail
4. Pump tank detail
5. Trench detail
6. Site evaluation form for Lot 38
7. NCDENR-DEH rule for stream crossing

MODEL FIT ONLY
NOT TO BE USED
FOR CONSTRUCTION
OR STAKING

6033 FLORENCE AVENUE, SUITE 100
CHARLOTTE, NORTH CAROLINA 28212
(704) 536-6190



CURVE TABLE					
CURVE	RADIUS	LENGTH	CHORD	BEARING	DELTA
C1	20.00	34.50	30.38	S60°17'14"W	98°50'57"
C2	470.00	5.42	5.42	S10°32'54"W	00°39'39"

NOT FOR RECORDATION, CONVEYANCES OR SALES

Subdivision HEATHFIELD SUBDIVISION, PHASE 1, MAP 1, LOTS 37, 38, AND 40 (UNRECORDED) County MECKLENBURG
RYAN HOMES

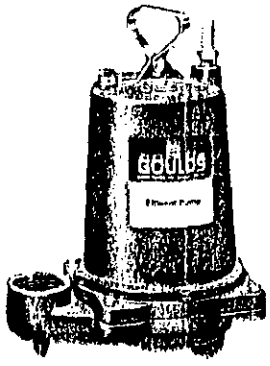
GOULDS PUMPS

Submersible Effluent Pump

MODEL

3885

PROSURANCE AVAILABLE FOR RESIDENTIAL APPLICATIONS.



APPLICATIONS

Specifically designed for the following uses:

- Homes
- Farms
- Trailer courts
- Motels
- Schools
- Hospitals
- Industry
- Effluent systems

SPECIFICATIONS

Pump

- Solids handling capabilities: ¾" maximum.
- Discharge size: 2" NPT.
- Capacities: up to 140 GPM.
- Total heads: up to 128 feet TDH.
- Temperature: 104°F (40°C) continuous 140°F (60°C) intermittent.
- See order numbers on reverse side for specific HP, voltage, phase and RPM's available.

FEATURES

■ **Impeller:** Cast iron, semi-open, non-clog with pump-out vanes for mechanical seal protection. Balanced for smooth operation. Silicon bronze impeller available as an option.

■ **Casing:** Cast iron volute type for maximum efficiency. 2" NPT discharge.

■ **Mechanical Seal: SILICON CARBIDE VS. SILICON CARBIDE** sealing faces. Stainless steel metal parts, BUNA-N elastomers.

■ **Shaft:** Corrosion-resistant, stainless steel. Threaded design. Locknut on three phase models to guard against component damage on accidental reverse rotation.

■ **Fasteners:** 300 series stainless steel.

■ Capable of running dry without damage to components.

■ Designed for continuous operation when fully submerged.

MOTORS

■ Fully submerged in high-grade turbine oil for lubrication and efficient heat transfer.

■ **Class B insulation.**

Single phase:

- Built-in overload with automatic reset.
- All single phase models feature capacitor start motors for maximum starting torque.
- ⅓ and ½ HP – 16/3 SJTOW with 115 V or 230 V three prong plug.
- ¾-2 HP – 14/3 STOW with bare leads.

Three phase:

- Overload protection must be provided in starter unit.
- ½-2 HP – 14/4 STOW with bare leads.

■ **Designed for Continuous Operation:** Pump ratings are within the motor manufacturer's recommended working limits, can be operated continuously without damage.

■ **Bearings:** Upper and lower heavy duty ball bearing construction.

■ **Power Cable:** Severe duty rated, oil and water resistant. Epoxy seal on motor end provides secondary moisture barrier in case of outer jacket damage and to prevent oil wicking. 20 foot standard with optional lengths available.

■ **O-ring:** Assures positive sealing against contaminants and oil leakage.

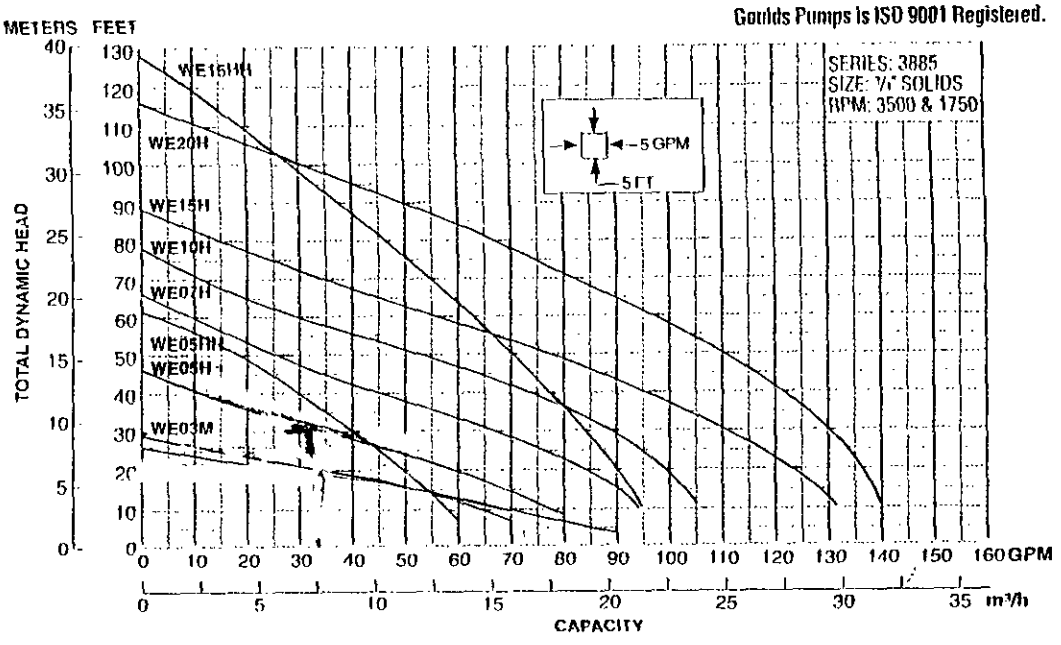
■ Consult factory for information on CSA listed models.

AGENCY LISTINGS

Canadian Standards Association File #LR38549

Underwriters Laboratories File #83318

Goulds Pumps is ISO 9001 Registered.

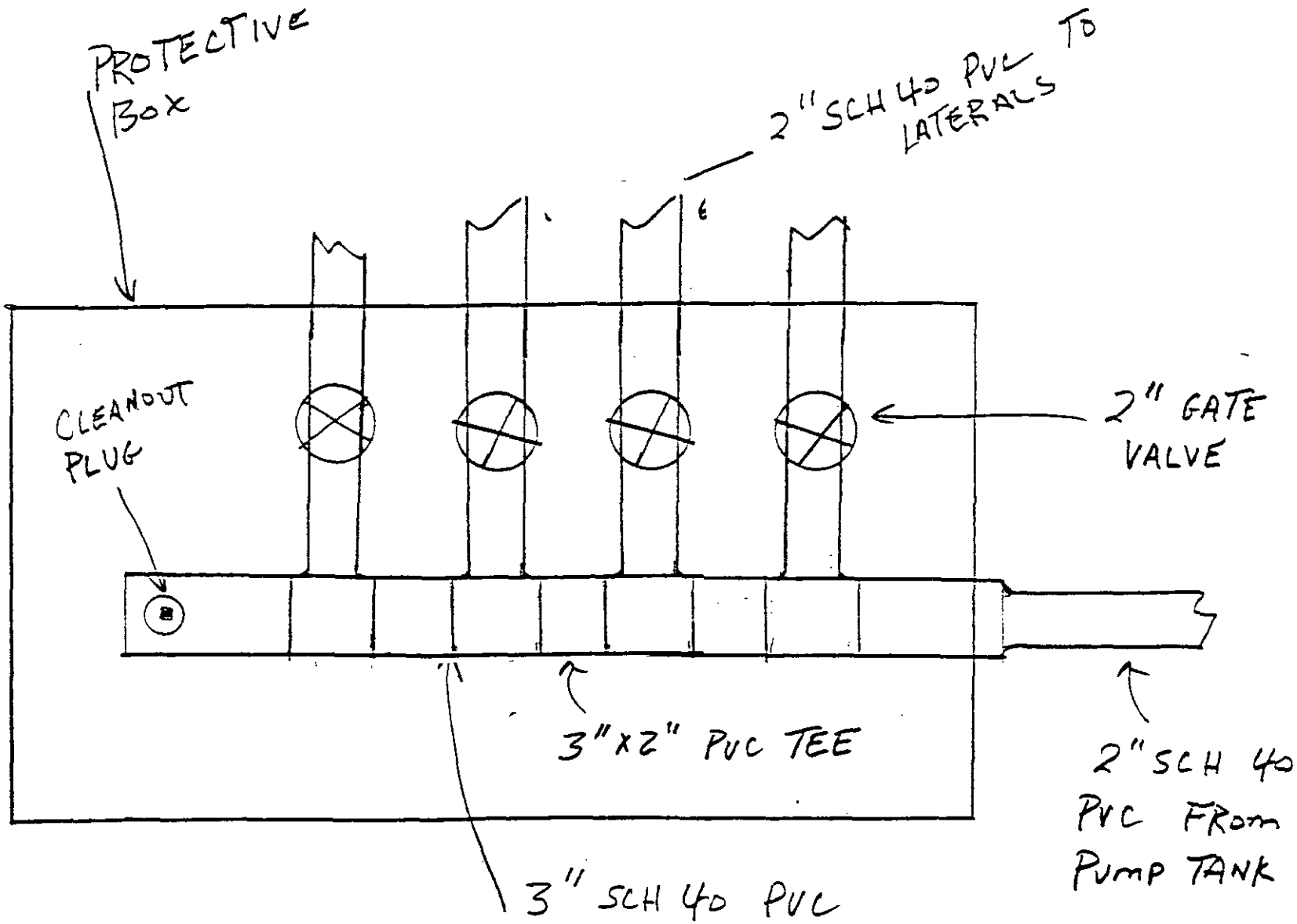


Goulds Pumps

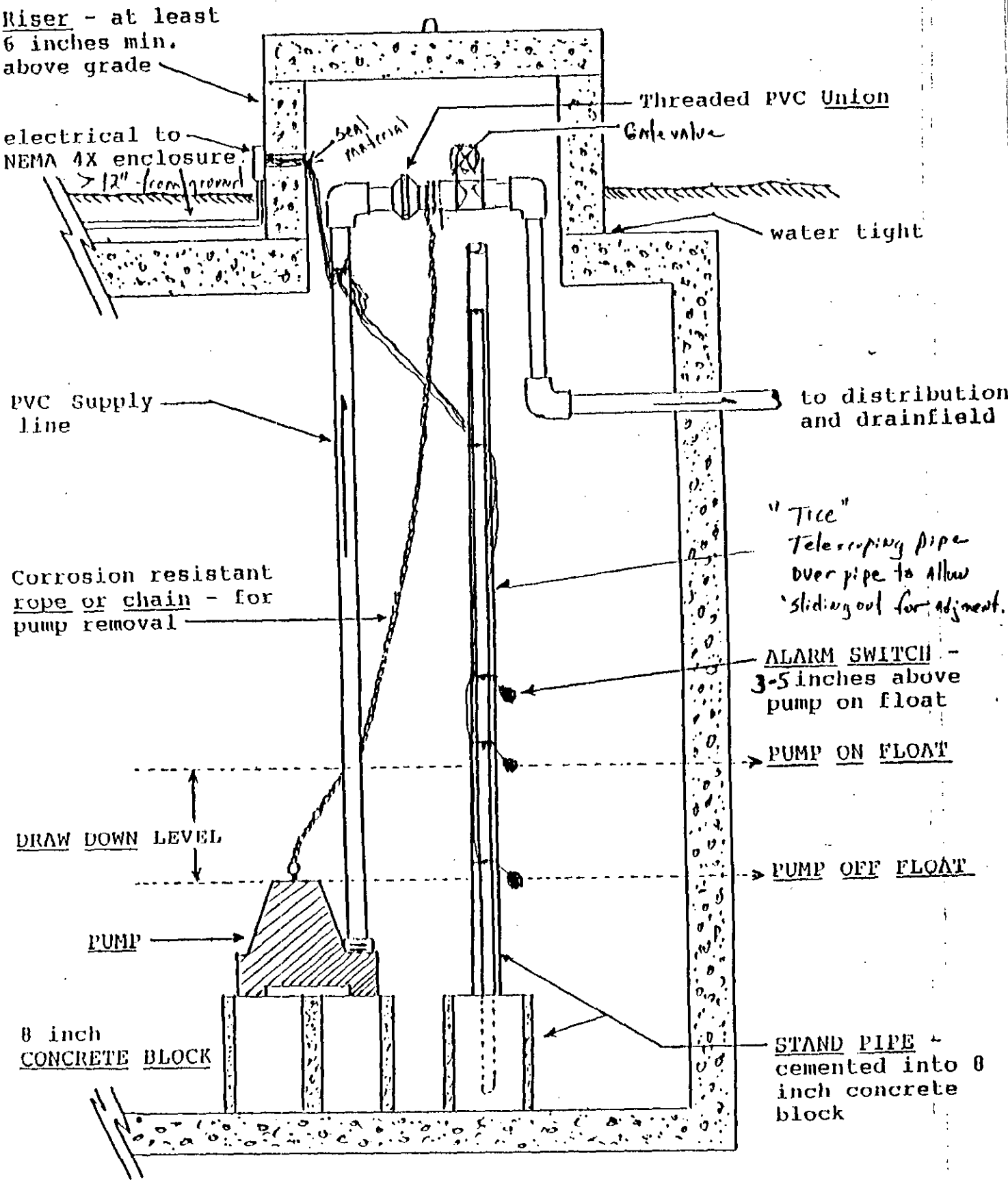
ITT Industries

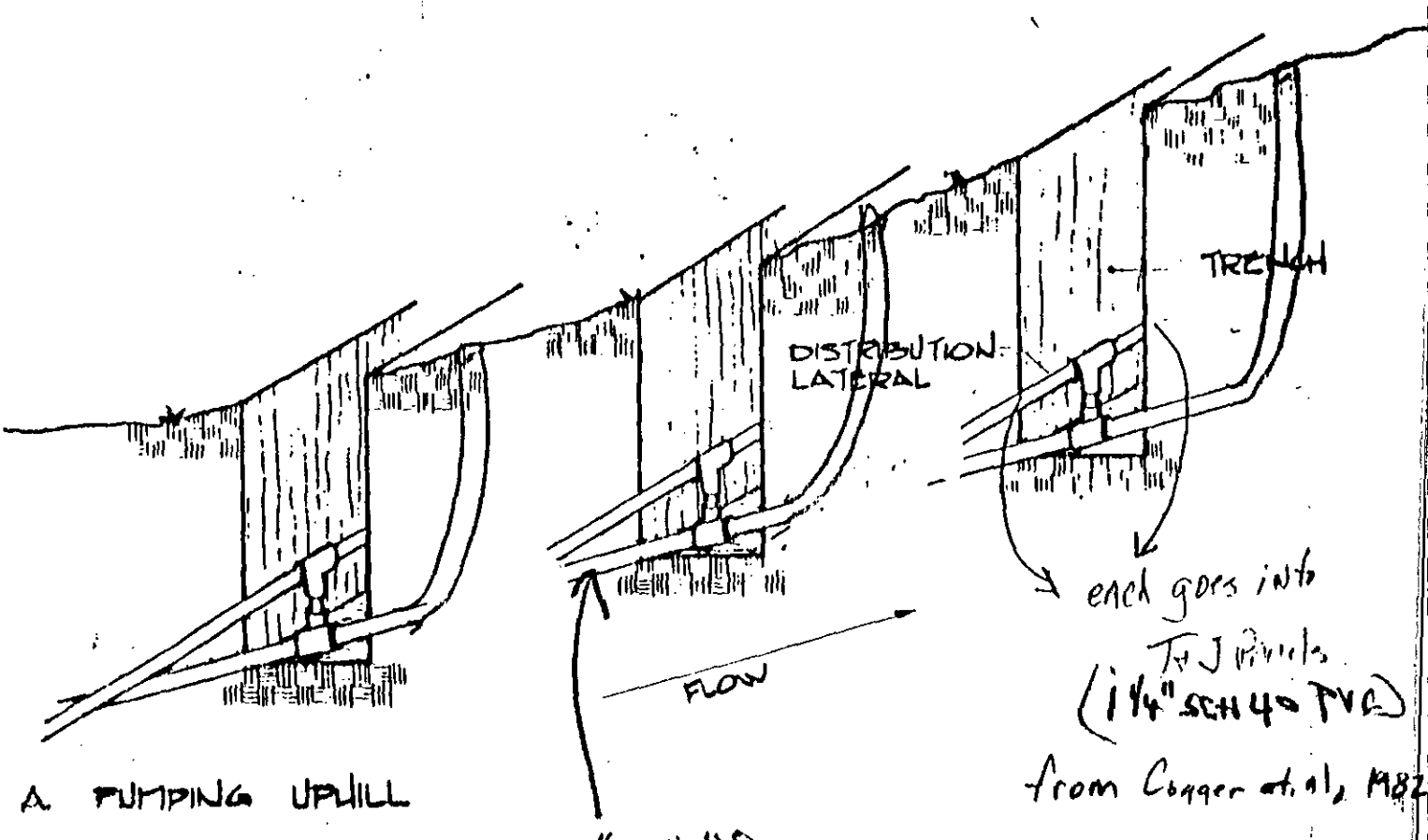
© 1999 Goulds Pumps
Effective January, 1999
B3885

CENTRAL VALVE BOX DETAIL



PUMP DIAGRAM





A PUMPING UPHILL

2" SCH 40 PVC

Department of Environment, Health and Natural Resources
Division of Environmental Health
Onsite Wastewater Section

Sheet: 98458
Property ID: 19[illegible]
Lot #: 38
Plan #: 98458
Code: 2

SOIL-SITE EVALUATION for ON-SITE WASTEWATER SYSTEM

Owner: NVR, Inc. dba Ryan Homes — Applicant
Address: 10815 David Taylor Drive, Charlotte, N.C. 28262
Date Evaluated: 5/20/2002
Proposed Facility: Residence — Design Flow (1949): 440gpd — Property Size: 0.19 ac.
Location of Site: 2512 Heath Lake Circle — Property Recorded?
Water Supply: [x] Public [ ] Individual [ ] Well [ ] Spring [ ] Other
Evaluation Method: [x] Auger Boring [ ] Pit [ ] Cut
Proposed Use: [x] Sewage [ ] Industrial Process [ ] Mixed

Soil Group (1949)	Horizon Depth (in.)	SOIL MORPHOLOGY (1941) Color, Structure, Texture	SOIL MORPHOLOGY (1941) Consistence, Mineralogy	OTHER PROFILE FACTORS (1949) Soil Wetness Class	(1949) Soil Depth (in.)	(1949) Slope Class	(1941) Flood Hazard	(1941) Erosion & Lateral Movement
3	0-4	TOP	FRI SEXP SS SP	>60" TO SOIL WETNESS	54+	1-6	NONE	PERM 30" DEPT
3	4-31	SBK/C	FI SEXP S/P					
3	31-54	SBK/C	FR SEXP SS/SP					
1	54+	SBK/C	FR SEXP SS SP	>60" TO SOIL WETNESS	54+			
1	0-4	SBK/C	FR SEXP SS SP					
1	4-31	SBK/C	FI SEXP S/P					

Description	Initial Proposal	Repair System
Space (1945)	3	3

Other Factors (1949):
Site Classification (1949): SUITABLE
Evaluated By: [illegible]

MMENTS Will Be Repair

LANDSCAPE POSITION

R-RIDGE
S-SHOULDER SLOPE
L-LINEAR SLOPE
FS-FOOT SLOPE
N-NOSE SLOPE
H-HEAD SLOPE
CC-CONCLAVE SLOPE
CV-CONVEX SLOPE
T-TERRACE
FP-FLOOD PLAIN

GROUP	TEXTURE	1/3-15 BAR
I	S-SAND LS-LOAMY SAND	1.2-0.8
II	SL-SANDY LOAM L-LOAM	0.8-0.6
III	SI-SILT SICL-SILTY CLAY LOAM CL-CLAY LOAM SCL-SANDY CLAY LOAM	0.6-0.3
IV	SC-SANDY CLAY SIC-SILTY CLAY O-ORGANIC	0.4-0.1

CONSISTENCE MOIST

VFR-VERY FRIABLE
FR-FRIABLE
FI-FIRM
VFI-VERY FIRM
EFI-EXTREMELY FIRM

WET

NS-NON-STICKY
SS-SLIGHTLYSTICKY
S-STICKY
VS-VERY STICKY
NP-NON-PLASTIC
SP-SLIGHTLYSTICKY
P-PLASTIC
VP-VERY PLASTIC

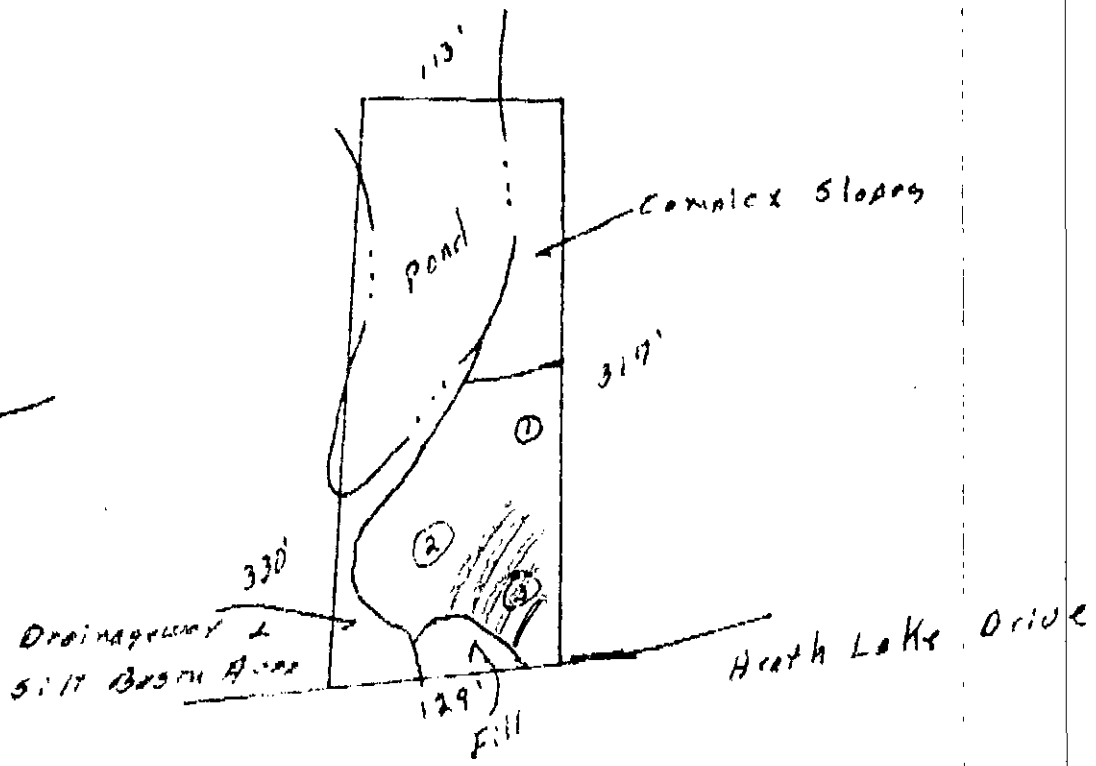
STRUCTURE

SG-SINGLE GRAIN
M-MASSIVE
CR-CRUMB
GR-GRANULAR
SBK-SUBANGULAR BLOCKY
ABK-ANGULAR BLOCKY
PL-PLATY
PR-PRISMATIC

MINERALOGY

SLIGHTLY EXPANSIVE

EXPANSIVE



		pipe with mechanical joints equivalent to water main standards, in which case the minimum setback may be reduced to 50 feet;
(2)	Any private water supply source, including wells and springs	50 feet, unless constructed of similar leakproof pipe, such as ductile iron pipe with mechanical joints equivalent to water main standards, in which case the minimum setback may be reduced to 25 feet;
(3)	Any waters classified as WS-I, WS-II, WS-III, B, SA, or SB	50 feet, unless constructed of similar leakproof pipe, such as ductile iron pipe with mechanical joints equivalent to water main standards, in which case the minimum setback may be reduced to 10 feet;
(4)	Any other stream, canal, marsh, coastal waters, lakes and other impoundments, or other surface waters	10 feet;
(5)	Any basement	10 feet;
(6)	Any property line	5 feet;
(7)	Top of slope of embankments or cuts of two feet or more vertical height	10feet;
(8)	Drainage Systems:	
	(A) Interceptor drains, storm drains, and storm water diversions	5 feet;
	(B) Ground-water lowering ditches and devices	10 feet;
(9)	Any swimming pool	10 feet;
(10)	Any other nitrification field	5 feet.

(f) Sewer lines may cross a water line if 18 inches clear separation distance is maintained, with the sewer line passing under the water line. When conditions prevent an 18-inch clear separation from being maintained or whenever it is necessary for the water line to cross under the sewer, the sewer line shall be constructed of ductile iron pipe or its equivalent and the water line shall be constructed of ferrous materials equivalent to water main standards for a distance of at least ten feet on each side of the point of crossing, with full sections of pipe centered at the point of crossing.

(g) Sewer lines may cross a storm drain if:

(1) 12 inches clear separation distance is maintained; or

(2) the sewer is of ductile iron pipe or encased in concrete or ductile iron pipe for at least five feet on either side of the crossing.

(h) Sewer lines may cross a stream if at least three feet of stable cover can be maintained or the sewer line is of ductile iron pipe or encased in concrete or ductile iron pipe for at least ten feet on either side of the crossing and protected against the normal range of high and low water conditions, including the 100-year flood/wave action. Aerial crossings shall be by ductile iron pipe with mechanical joints or steel pipe. Pipe shall be anchored for at least ten feet on either side of the crossing.

(i) Septic tanks, lift stations, wastewater treatment plants, sand filters, and other pretreatment systems shall not be located in areas subject to frequent flooding (areas inundated at a ten-year or less frequency) unless designed and installed to be watertight and to remain operable during a ten-year storm. Mechanical or electrical components of treatment systems shall be above the 100-year flood level or otherwise protected against a 100-year flood.

History Note: *Authority G.S. 130A-335(e) and (f);*

FEE: 200.00 CHK 5014
DATE: 5/10/02 735

APPLICATION FOR IMPROVEMENT PERMIT
FOR RESIDENTIAL SITE
INDIVIDUAL WATER AND WASTEWATER
SYSTEMS PROGRAM

[ ] CRT

TYPE APPLICATION: ___ NEW SYSTEM __ EXPANSION/ ALTERATION OF EXISTING SYSTEM ___ REPAIR OF EXISTING SYSTEM

NORTH CAROLINA
DEPARTMENT OF ENVIRONMENT,
HEALTH, AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH
ON-SITE WASTEWATER SECTION

FILE #: 49478

PROPERTY INFORMATION (FROM ENGINEERING FORM) FOR JOB LOCATION:

TAX/PARCEL NUMBER: 195-072-07

STREET ADDRESS: 3327 Winter Heath Way

SUBDIVISION OR MOBILE HOME PARK NAME: Heathfield

LOT NUMBER: 39

TOWNSHIP (CHECK ONE):

__ 0 MECKLENBURG
__ 1 CHARLOTTE
__ 2 DAVIDSON
__ 3 CORNELIUS
__ 4 PINEVILLE
__ 5 MATTHEWS
__ 6 HUNTERSVILLE
X 7 MINT HILL

CLOSING DATE_____

TYPE OF BUILDING (CHECK ONE):

__ SINGLE MOBILE HOME(S)
__ DOUBLE WIDE (D)
X HOUSE (H)
__ MODULAR HOME (M)
__ MULTIPLE FAMILY (U)
__ OTHER (O)

HEATED SQUARE FOOTAGE:

NUMBER OF BEDROOMS: NUMBER OF OCCUPANTS:

FOUNDATION FOR RESIDENCE:

__ WITHOUT BASEMENT ON SLAB
X CRAWL SPACE
__ WITH BASEMENT /PLUMBING
__ WITH BASEMENT /NO PLUMBING

IF EXPANSION/ALTERATION OF EXISTING SYSTEM, DESCRIBE THE PROPOSED BUILDING ADDITION:

WILL THERE BE A HOME BUSINESS IN THE RESIDENCE: __ YES X NO TYPE: _____

WATER SUPPLY (CHECK ONE):
X COMMUNITY (C)
__ MUNICIPAL (M)
__ PRIVATE WELL (P)
__ SHARED WELL (S)
__ OTHER 'SPRINGS' (O)

IF ANY OF THE FOLLOWING ARE LOCATED ON THE PROPERTY, PLEASE SHOW LOCATION ON PLAT:

BURIED CABLES, LANDFILLS, STUMPHOLES: __ YES X NO
EXISTING WASTEWATER SYSTEMS: __ YES X NO
EASTMENTS OR RIGHT-OF-WAYS: X YES __ NO
WELL, SPRINGS OR WATERLINES: X YES __ NO
DESIGNATED WETLANDS: X YES __ NO

PROPERTY OWNER: NVR, INC DBA Ryan Homes

NAME: (LAST) (FIRST) (MI)

ADDRESS: 10815 David Taylor Dr

CITY Charlotte STATE: NC ZIP: 28262

DAYTIME PHONE: 704 - 548-3534

LEGAL AGENT FOR PROPERTY OWNER, IF APPLICABLE:

NAME: (LAST) (FIRST) (MI)

DAYTIME PHONE: ( ) -

WHAT DATE WAS THE PROPERTY ORIGINALLY DEEDED AND RECORDED? _____

An Improvement Permit is subject to suspension or revocation if site plans or the intended use change or if information submitted in this application is falsified or changed. The undersigned, owner, or legal agent for the owner, of the property described above as the "Job Location" has read the foregoing application, acknowledges that the contents of same are true, and authorizes agents of the Mecklenburg County Health Department to enter onto the property for the purpose of processing this request.

SIGNED: Darleen Warner DATE:

MECKLENBURG COUNTY HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION
c/o HAL MARSHALL CTR., SUITE 211, 700 N. TRYON ST., CHARLOTTE, N.C. 28202., (704) 336-5102

HF 1039

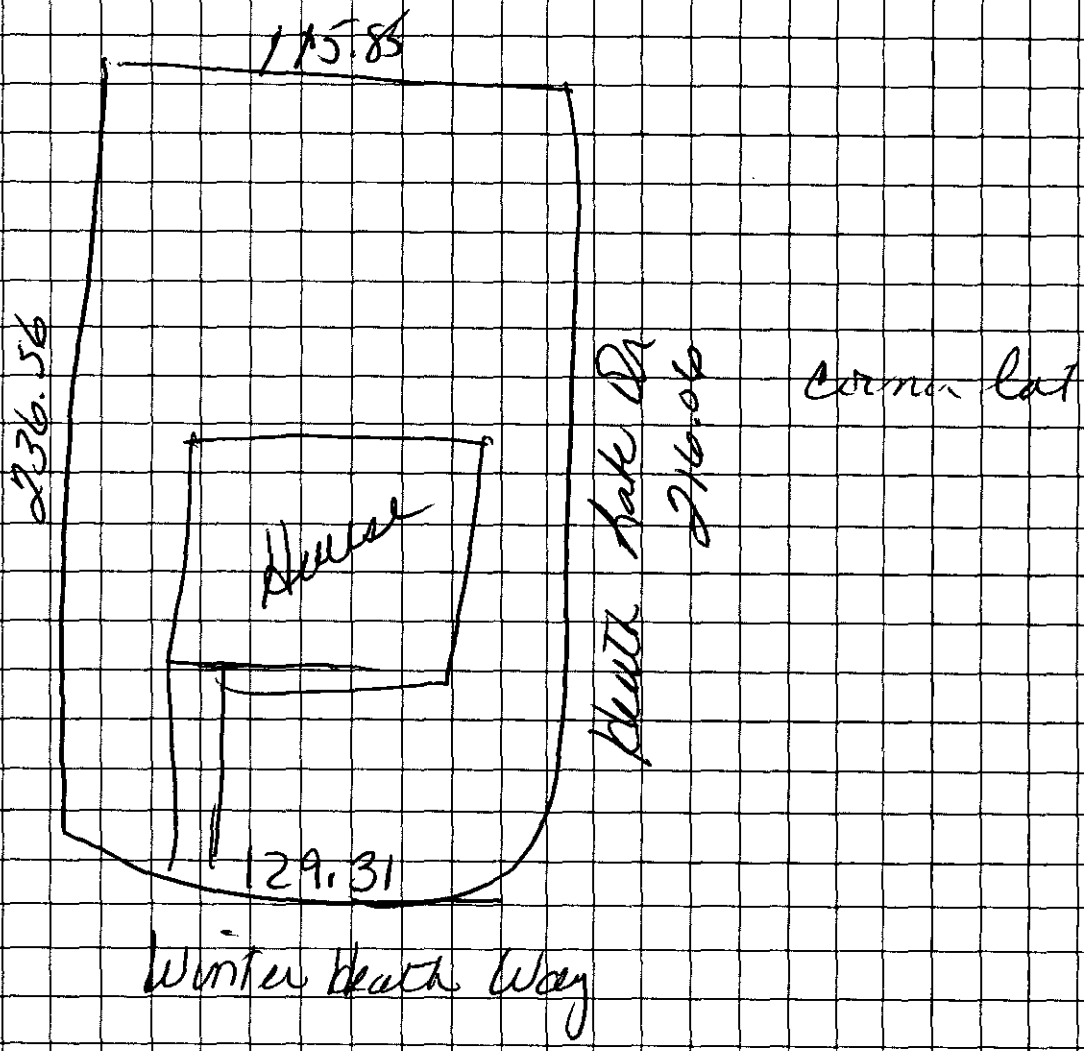
PROPOSED PLOT PLAN

HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION
700 NORTH TRYON STREET
CHARLOTTE, NC 28202
PHONE (704) 336-5102

FILE: 4947B

TC: 195-072-07

Draw in and name all roads adjoining the property. Draw in and accurately dimension the lot concerned. Accurately indicate property boundaries proposed and/or existing structures and driveways, underground utilities, and wells and springs within 100 feet of the proposed building or drainfield.



Kathleen Warner
OWNER/AGENT SIGNATURE

DATE 5/6/02

APPROVAL DATE _____

White - Health Department's Copy Canary - E.H.S. Copy Pink - Owner's Copy

HF1039

file # 49478

Water Management

INSPECTION AND MAINTENANCE AGREEMENT

STATE OF NORTH CAROLINA

This agreement is made and entered into this 23rd day of April, 2007, by and between NVR, Inc. (hereinafter referred to as the "Owner") and **Water Management** (hereinafter referred to as the "Contractor").

WITNESSETH

WHEREAS, the Owner owns or controls the property upon which a ground absorption sewage treatment system (hereinafter "system") is installed, with components designated a Type IV(a) system under the Rules for Sanitary Sewage Collection, Treatment and Disposal found at 15A N.C. Administrative Code 18A.1900 et seq.; and

WHEREAS, the Contractor is a management entity, of a type authorized by 15A N.C. Administrative Code 18A.1961 to manage the system.

NOW THEREFORE, in consideration of the premises and of the mutual covenants and promises contained in this Agreement, it is hereby agreed by and between the Owner and the Contractor as stipulated below.

1. The Contractor's Obligations. The Contractor shall perform the following services on the system located at:
3327 Winter Heath Way (Lot 39), Mint Hill, Mecklenburg County, NC.

   a) The contractor shall inspect, document, and report the system at least at the frequency required in Table V(b) of 15A N.C. Admin. Code 18A.1961(b), to satisfy conditions of the Operation Permit and to comply with manufacturers' operation requirements.

   b) If an inspection indicates the need for system repairs, the Contractor shall notify the local health department within 48 hours of the inspection.

   c) The Contractor shall notify the Owner of needed repairs, which are outside of the scope of routine maintenance described in this contract. The Contractor shall perform necessary repairs to the system at the request of the Owner and shall be entitled to payment therefor at the Contractor's normal charge for services and materials.

   d) The Contractor shall respond to a request for a nonscheduled service or maintenance call within 48 hours after receipt of such request.

2. The Owner's Obligations.

a) The Owner shall pay to the Contractor:

- **$250 per year, billed at $125.00 twice per year;**
- **Any charges for necessary replacement parts.**
- **Any charges for pumping/removal of solids from tanks.**
- **Any fees charged by the Mecklenburg County Health Department.**

The annual fee may be amended upon sixty (60) days advance notice to the Owner. The Owner shall pay to the Contractor his normal and customary fees for any work performed on the system as a result of nonscheduled service or maintenance calls. All fees are due and payable within thirty (30) days of billing. Payments due to the Contractor and unpaid by the Owner after thirty (30) days shall accrue interest from the due date until paid at a rate of 1.5% per month.

b) Within 30 days of receipt of notice of needed repairs, the Owner shall request the Contractor to complete needed repairs or shall provide to the Contractor evidence that the needed repairs were satisfactorily completed by another entity.

c) The Owner shall provide the Contractor with such access to the system as is reasonably necessary for the Contractor to comply with the terms of this Agreement.

3. Term. This Agreement shall remain in effect until terminated.

a) Automatic Termination.
This agreement shall automatically terminate if the Operation Permit for the system is revoked and all appeals of the revocation are exhausted or the time for taking an appeal has passed.

b) Termination by Mutual Consent.
The Parties may mutually agree to terminate this Agreement by giving written notice of termination by mutual consent to the local health department thirty (30) days in advance of the date of termination.

c) Termination by the Owner.
The Owner may terminate this Agreement by giving notice to the Contractor and to the local health department thirty (30) days in advance of the date of termination.

d) Termination by the Contractor.

1) The Contractor may terminate this Agreement for cause by giving written notice of intent to terminate this Agreement to the Owner and to the local health department thirty (30) days in advance of the date of termination. Cause shall be defined as:

a) failure to remit payment for any bill for services performed under and in accordance with this Agreement if said bill is not paid within thirty (30) days of receipt by the Owner of the bill. If said bill is paid after notice of termination of this Agreement, but prior to the date of termination of this Agreement, this Agreement shall continue in effect; or

b) failure of the Owner to provide to the Contractor authorization to complete needed repairs or satisfactory evidence that needed repairs to the system were completed by another entity. If said authorization to complete needed repairs or evidence of completion of said repairs is provided after notice of termination is given but prior to the date of termination of this Agreement, this Agreement shall continue in effect; or

c) failure of the Owner to allow the Contractor such access to the system as is reasonably necessary in order for the Contractor to comply with the terms of this Agreement.

2) The Contractor may terminate this Agreement without cause, by notification to the Owner no less than ninety (90) days in advance of the termination date. The Contractor may also assign its rights and duties under this Agreement as provided in paragraph 4, below.

4. Assignment.

a) Assignment by the Owner.
The Owner shall notify the Contractor of the name and address of any purchaser of the property on which the system is located. The Owner shall also notify any purchaser of the property on which the system is located of the existence of this Agreement and shall assign all rights and duties under this Agreement to said purchaser.

b) Assignment by the Contractor.
The Contractor may assign its rights and duties under this Agreement to another management entity, which is qualified pursuant to 15A N.C. Admin. Code 18A.1961 to manage the system upon thirty (30) days written notice to the Owner and to the local health department.

5. Use of Subcontractors. The Contractor may subcontract with such manufacturers, suppliers and contractors as it deems desirable to perform any of the Contractor's duties under this Agreement. The Contractor shall at all times remain responsible for the performance of and payment for all work performed by all subcontractors.

6. Representations. The Parties represent to each other that each has the power,

authority and legal right to enter into and perform its obligations as set forth in this Agreement.

7. Regulatory Amendments. References in this Agreement to sections of the Administrative Code shall include such rules as they may be amended in the future.

8. No Implied Waiver. The waiver by either Party, of the default or a breach by the other Party of any provision of this Agreement shall not operate or be construed to operate as a waiver of any subsequent default or breach. The failure at any time of either Party to enforce any provision of this Agreement (a) shall not be construed to be a waiver of such provisions, or of any other provision; and (b) shall not in any way affect the validity of this Agreement, or any part of this Agreement, or the right of either Party thereafter to enforce each and every provision of this Agreement.

9. Notice. Every notice required under this Agreement shall be in writing and shall be deemed sufficiently given if delivered in person or sent by certified or registered mail, return receipt requested, postage prepaid to the Party to be notified and addressed as follows:

To the Owner: _____
_____
_____

To the Contractor: **Water Management**
4744 Celia Creek Road
Lenoir, NC 28645

To the Local Health Department: **Mecklenburg County Environmental Health**
700 N. Tryon Street
Suite 211
Charlotte, NC 28202

The date of any Notice shall be the date of personal delivery or the date shown on the return receipt as the date of delivery or attempted deliver, as the case may be. Changes in the respective addresses to which notice may be directed may be made from time to time by either Party by notice to the other party.

10. Place of Agreement. This Agreement and any questions concerning its validity, the system construction or performance shall be governed by the laws of the State of North Carolina. notwithstanding the place of execution, or the order in which the signatures of the Parties are affixed.

11. Entire Agreement and Amendment. This Agreement supersedes all prior negotiations, agreements and understandings between the Parties with respect to the subject matter hereof and constitutes the entire Agreement between the Parties with respect to the subject matter hereof. To be effective, any amendment or modification to this Agreement must be in writing and must be signed by the Parties.

12. Severability. In the event that any provision of this Agreement shall, for any reason, be determined to be invalid, illegal or unenforceable in any respect, the Parties shall negotiate in good faith and agree to such amendments, modifications or supplements of or to this Agreement or such other appropriate actions as shall, to the maximum practicable in light of such determination, implement and give effect to the intentions of the Parties as reflected in this Agreement, and the other provisions of this Agreement shall, as so amended, modified, supplemented or otherwise affected by such actions, remain in full force and effect.

IN TESTIMONY WHEREOF, the Parties hereto have executed this Agreement in duplicate originals, one of which is retained by each of the Parties, the day and year first above written.

(Owner)

4/24/07
(Date)

Water Management

(Contractor)

Sidney L. Gaskins, Jr. 4/23/07
(Sidney L. Gaskins, Jr.) (Date)