Date Received 11-8-83

RECEIVED
NOV 7 1983

SB No. 21284

T. C. Rec. R2 001-121-03

Map Date _____

MECKLENBURG COUNTY
DEPARTMENT OF ENVIRONMENTAL HEALTH

APPLICATION FOR SOIL INVESTIGATION

1) NAME OF OWNER Knox Knox (LAST) Russell Bobby (FIRST) B B (MIDDLE)

2) ADDRESS OF OWNER P.O. Box 4 Davidson ZIP 28036

3) PHONE NO. Home 892-0248 Office 892-0196

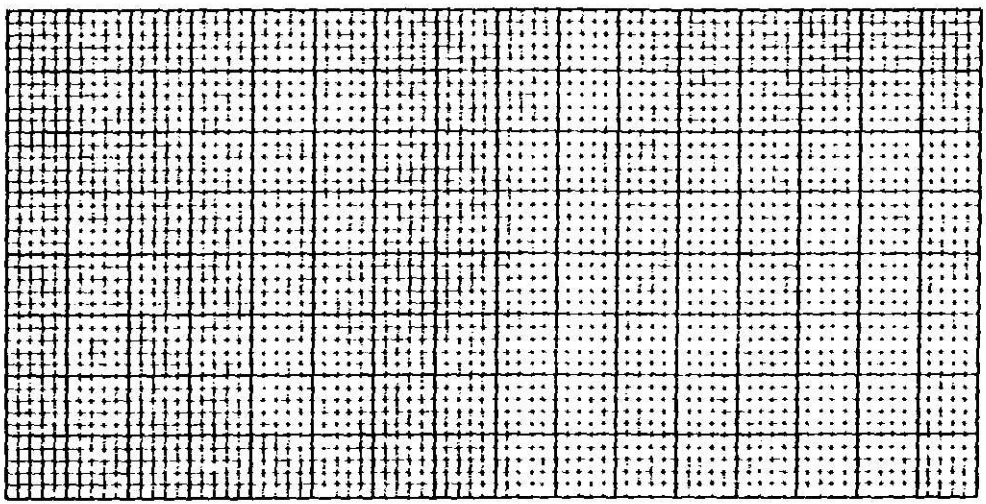
4) LOCATION OF PROPERTY Bethel Church Rd. (STREET OR COUNTY ROAD)

5) SUBDIVISION _____ LOT NO. 13 BLOCK NO. _____

MAP BOOK NO. _____ PAGE NO. _____

6) DEED REFERENCE: DEED BOOK _____ PAGE NO. _____

Application is hereby made to the Mecklenburg County Department of Environmental Health for the conduct of a soil investigation and an on site inspection of the lot hereinabove described for the purpose of determining if the lot is suitable for the installation of an individual septic tank wastewater treatment system with subsurface, soil absorption, effluent discharge.



7) ACCURATELY DIAGRAM & DIMENSION LOT

Bobby B. Knox
OWNER

EHD-S-76

ENVIRONMENTAL HEALTH DEPARTMENT'S COPY

DEPARTMENT OF ENVIRONMENTAL HEALTH
1200 BLYTHE BOULEVARD
CHARLOTTE, NORTH CAROLINA 28203

SIR. NO. 20284
T.C. NO. PO 001-121-03
DATE: 12-15-83

Russell B. Knox
P.O. Box 4
Davidson, NC 28036

Re: Property located at Bethel Church Road, Lot 13

Dear Mr. Knox:

At your request, a field investigation was conducted on the property designated above. The soils on the property were found to contain a limited area of provisionally suitable soil for the installation of a ground absorption sewage disposal system. A copy of the site evaluation report is enclosed for your information.

Should you desire to file for permission to install a ground absorption sewage disposal system, please submit plot plans for the proposed construction, well, and ground absorption sewage disposal system to this office. They will be reviewed and if it is found that there is an adequate area of provisionally suitable soil to accommodate the proposed installation, an Improvements Permit will be issued by this office.

If I may be of assistance, please feel free to call.

Sincerely,

Bill D. Hardister, Jr.

Bill D. Hardister, Jr.
Environmental Health Supervisor

BDH/kbg

Enclosure

DEPARTMENT OF ENVIRONMENTAL HEALTH
MECKLENBURG COUNTY, NORTH CAROLINA

SITE EVALUATION

S.I.R. NO. 20284

T.C. NO. PO 001-1213

(Ground Absorption Sewage Disposal)

OWNER: Russell & Bobby Hunt
ADDRESS: Rt 4 Davidson N.C. 28036
LOCATION OF SITE: off Bailey Church Road

PLAT NO: Lot #13
LOT SIZE: 39,204

FACTORS	AREA 1	AREA 2	AREA 3	AREA 4
1. SLOPE (%)	S (PS) U 2-10%	S PS (U) complex slopes	S PS U	S PS U
2. SOIL TEXTURE (12-36 inches) Sandy, Loamy, Clayey (Note 2-1 Clay)	S (PS) U clay	S (PS) U clay	S PS U	S PS U
3. SOIL STRUCTURE (12-36 inches)	S (PS) U Blocky	S (PS) U Blocky	S PS U	S PS U
4. SOIL DEPTH (inches)	S (PS) U 36-48"	S PS (U) < 36"	S PS U	S PS U
5. RESTRICTIVE HORIZONS (Inches) (Impervious strata, Rock)	S (PS) U 36"	S PS (U) < 36"	S PS U	S PS U
6. SOIL DRAINAGE/GROUNDWATER (external and internal)	(S) PS U 48"	S PS (U) Eroded Areas Rapid runoff	S PS U	S PS U
7. OTHER (Specify)	S PS U see Note	S PS U	S PS U	S PS U
8. SOIL GROUP	1UA	1UA		
9. SITE CLASSIFICATION	Provisionally Suitable	unsuitable		
10. SOIL SERIES	Cuthbert Lilla	complex slopes		

S - Suitable PS - Provisionally Suitable U - Unsuitable

**See Diagram on Back (includes: soil areas, property lines, roads, streams, gullies, wet areas, fill areas, wells, water bodies, slopes)

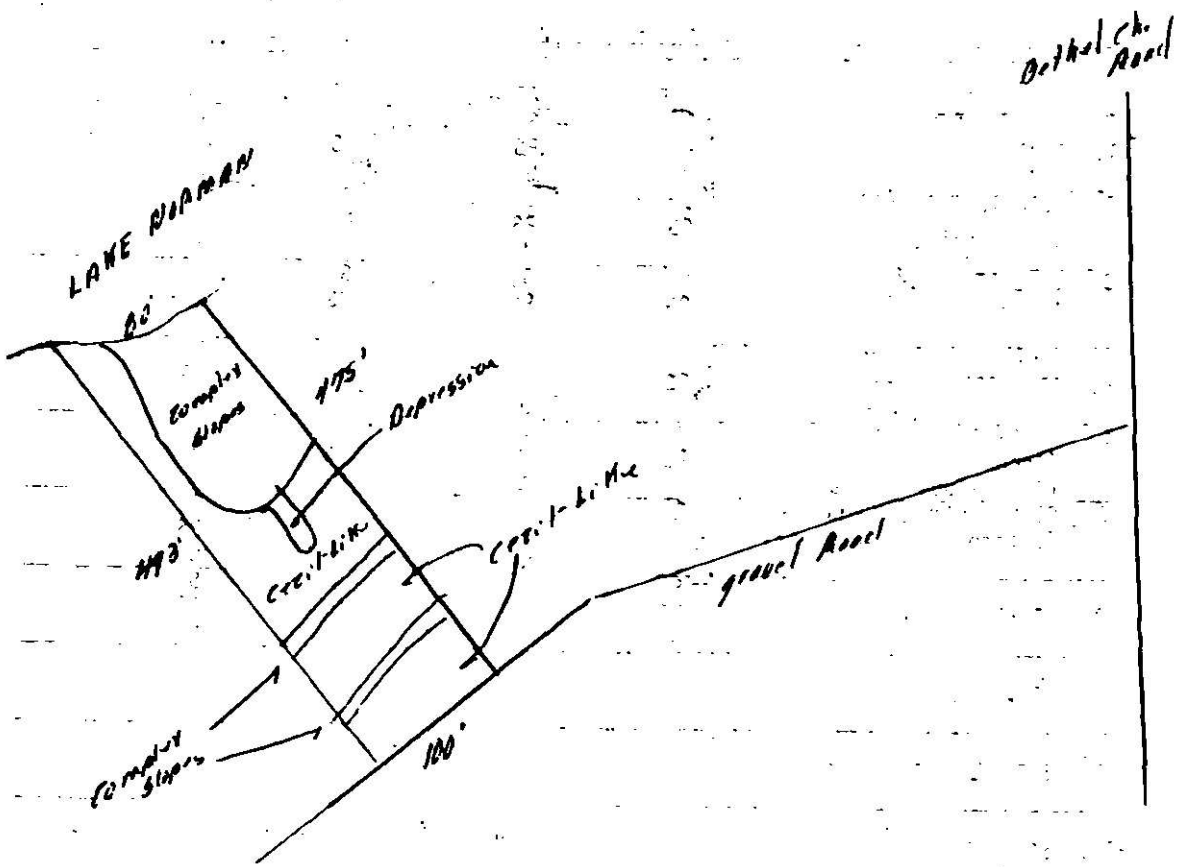
Recommendations/Comments: System may need lift station
Recommend plans for house & system locations be submitted

Described by: William A Martin
Title: Soil Scientist

Date: 12-14-83

EHD 539 (Revised: 6/82)

1H


Bethel Ch. Road
LAKE NORMAN
80'
Complex slopes
475'
Depression
Crest-line
Crest-line
gravel Road
493'
100'
Complex slopes

APPLICATION FOR AN IMPROVEMENT PERMIT

MECKLENBURG COUNTY ENVIRONMENTAL HEALTH

1200 BLYTHE BOULEVARD
CHARLOTTE, NC 28203
PHONE (704) 376-4603

Mecklenburg County services are available without regard to

(OFFICE USE ONLY)
FILE: 20284
TC:
SERIAL: № 12682
☒ PL ☐ CRT

JOB LOCATION

① ADDRESS: 20438 (STREET NO) Bethelwood Dr Lane (STREET) ② FILE: SIR. 20284
③ JURISDICTION: ④ TAX PARCEL NO.: 001-121-68
⑤ SUBDIVISION: Bethelwood ⑥ LOT: 13 ⑦ BLOCK:

OWNER

⑧ NAME: CHRISTOPHER (FIRST) HARVEY (MIDDLE) HOLCOMBE (LAST)
⑨ MAILING ADDRESS: RT. 7 BOX 341 H
⑩ CITY: MOORESVILLE ⑪ STATE: N.C. ⑫ ZIP: 28115
⑬ PHONE: (WORK) (704) 663-0182 ⑭ (HOME) (704) 663-0182

REQUEST

This request is for a(n):

⑮ ☒ New permit
⑯ ☐ Repair or alteration permit
⑰ ☐ Authorization for mobile home exchange
⑱ ☐ Other (specify)

DESIGN CRITERIA

System will serve:

⑲ ☒ Residence ⑳ ☐ Mobile home
㉑ ☐ Business or place of public assembly
㉒ Number of bedrooms? 3
㉕ Type?
㉓ Maximum occupancy? 6
㉖ Maximum number of employees?
㉔ Basement? ☒ yes ☐ no UNFINISHED
㉗ Maximum number of seats?

WATER SUPPLY

㉘ Water supply from (present or proposed):

A ☒ Individual well
B ☐ Municipal system
C ☐ Community well
D ☐ Community system

㉙ The undersigned, 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 DEPARTMENT OF ENVIRONMENTAL HEALTH to enter onto the property for the purpose of processing this request.

Signed: Christopher H Holcombe
Date: 3/12/87

IMPROVEMENT PERMIT

The undersigned, an authorized agent of the MECKLENBURG COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH, 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 Sanitary Sewage Collection, 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 a valid Installation, Construction, Alteration and, or Repair permit is issued by the Department.

. . . This permit is not transferable, and shall become null and void 12 months from the date of issuance. Lift station required

D.R. Ferguson — Environmentalist — 3-20-87 — Date

Director or Authorized Section Head — 3 23 87 — Date

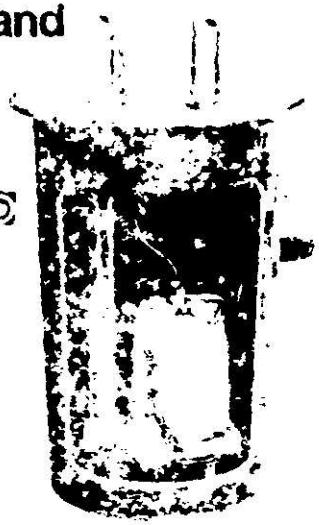
*This permit must be signed by the Director of Environmental Health or his authorized section head in order to be valid.

Installation and Operation Instructions

Goulds

MODELS

3885
3885D
3886
3886D



IMPORTANT

1. Inspect unit for damage. Report damage to carrier.
2. Electrical supply must be adequate to avoid motor overheating. Use proper fuses or circuit breakers, and size wire to carry motor load. Comply with National and Local Electrical Codes. Power supply voltage, phase, and cycle must match pump nameplate.
3. **Always** disconnect electrical power supply when handling pump or controls.
4. **Do not** use pump in swimming pools or bathing areas.
5. Liquid temperature not to exceed 160°F (71°C).
6. Do not remove ground prong or use extension cords.
7. Use Goulds Pumps accessories.

Pump & Piping

1. Thread discharge pipe into discharge connection. If a check valve is used, try it out before installing it vertically. If it must be installed horizontally or at a 45° angle with valve pivot on top. This guards against small solids lodging on valve preventing it from opening. Drill a ⅛" hole in discharge pipe 2" above pump discharge connection to prevent air locking the pump. A gate valve should be installed in the system, after the check valve, to permit removal of pump or check valve for service. A union should be installed between check valve and pump.
2. **Rotation:** Check rotation after wiring is complete. Rotation must be *counter-clockwise looking into* suction.
   Caution: Do not run dry for rotation check. May cause severe injury.
3. **Single-phase** pumps have built-in thermal overload protection with automatic reset. **Three-phase** units must be protected by a starter with proper overload protection.

Furnas Overloads Sizes Starter Size 00, 14BF32BCB1				
HP, Ph., Volts	HP	Volts	Heaters	
			E	K
0632	½	230	E41	K32
0634		460	E29	K22
0732	¾	230	E48	K30
0734		460	E38	K28
1032	1	230	E51	K43
1034		46	E41	K32
1532	1½	230	E55	K50
1534		460	E46	K35

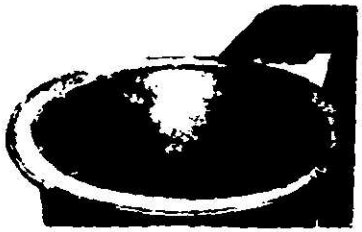
Basin

Basin should have a sturdy bottom to give legs of pump adequate support. Leg height elevates pump above bottom of basin to allow effluent to enter suction opening.

When using basin without hubs, punch 4" inlet and inlet hub as required for proper basin. Seal second hub if not used.

Basin Cover

Remove protective strip from gasket and press onto recessed portion of basin cover. With a pointed tool, push holes through gasket into tapped holes. Do not damage threads. Route electrical cords through appropriate opening in basin cover.



Fit basin cover over discharge pipe. Power cords are sealed with split rubber plug or. Rubber ring is placed over discharge pipe and compressed between base and cover by the flange (chamfered side down) to form a seal. Thread vent pipe into flange on basin cover.

Manual Operation

On pumps equipped with a molded plug, insert into a suitable outlet controlled by a switch. If a separate controller is used, turn "Hand-Off-Auto" switch to "Hand" operation.

Automatic Operation

1. Diaphragm Control Switch: A pressure activated switch providing automatic operation with 6" differential in liquid level. Turns on when liquid is 10" above bottom of switch and turns off at 4" above bottom of switch.

Caution: This switch has a vent tube which must be unobstructed and protected from moisture, dirt, etc. Mount power cord so vent tube points down.

NOTE: ¼-½HP 1ø pumps require Switch only.
½-2HP 1ø pumps require a Contactor.
All 3ø pumps require a Mag Starter.

2. Mercury Switches: Single float switches. As the liquid-level rises or falls, the float changes angle until the mercury switch makes or breaks the circuit. See NOTE 1A above.

Float Switch Model	Application	HP Range	Electrical Rating	Wiring Configuration
A2-3	Pilot Duty	½-5	Single or Three Phase w/Contactor or Starter	Bare Leads
A2-6	Direct Connection, Diaphragm Level	¼-½	115 V.1 Phase	3-Prong Series Plug
A2-5		½-¾	230 V.1 Phase	
A2-7	Pilot Duty Differential Level	½-5	Single or Three Phase w/Contactor or Starter	Bare Leads
A2-9	Direct Connection, Diaphragm Level	¼-½	115 V.1 Phase	3-Prong Series Plug

Dual-Seal Units

Two (2) Mechanical Shaft Seals are separated by an oil-filled seal chamber. If Lower seal begins to leak, Upper seal will still be lubricated by oil in the motor. Lower seal is protecting the motor. Normal operation can continue until prompt replacement of Lower seal, which is now being temporarily lubricated by the water/oil emulsion in the seal chamber.

Lubrication

Caution: Disconnect all electrical power when handling pump or controls.

Important: Submersible pump motor units are oil-filled. On a regular schedule, depending on usage, check oil quantity and condition as follows.

Caution: If there has been leakage, the motor cavity may be under pressure. Hold a rag over inspection plug to prevent splatter when loosening it. Take a sample of the oil with a dipstick. If oil is emulsified (cloudy, milky, or watery), it indicates a leak.

For Dual-Seal Units, lay unit on its side and also make same checks of oil in lower seal chamber through its inspection plug.

Possible causes of leakage: Worn inspection plug, loose cord entry, weak or O-ring (if used) worn shaft seal(s).

After problem corrected and motor or seal cavity refilled to 90% full (1/4" minimum above motor).

For Dual-Seal Unit, the lower seal cavity must also be refilled to 90% full.

Limited Warranty

This warranty applies to all pumps and related accessories manufactured and/or supplied by Goulds.

Any part or parts found to be defective within the warranty period shall be replaced at no charge to the buyer or any subsequent owner during the warranty period. The warranty period shall exist for a period of twelve (12) months from date of installation or eighteen (18) months from date of manufacture, whichever period is shorter.

A user who believes that a warranty claim exists must contact the authorized Goulds dealer from whom the equipment was originally purchased and furnish complete details regarding the claim. The dealer is authorized to adjust any warranty claims utilizing Goulds Customer Relations Department and facilities for organization.

This warranty excludes:

(a) Labor, transportation and related costs incurred by the consumer to make the allegedly defective equipment available to the dealer for inspection.

(b) Re-installation costs of repaired equipment.

(c) Re-installation costs of replacement equipment.

(d) Consequential damages of any kind.

(e) Reimbursement for loss caused by interruption of service.

GOULDS PUMPS, INC.
SENECA FALLS, NEW YORK 13148

Form No. 426-25F Litho in U.S.A.

Problem Tracing Guide

PROBLEM	PROBABLE CAUSES	CORRECTIVE ACTION
Pump Will Not Shut Off	Diaphragm Switch: Weak rubber diaphragm.	Replace switch.
Note: Before trouble shooting automatic control check to see that pump operates on manual control. If it does, automatic controls are at fault. If not, fault is in pump or power supply.	Plugged vent tube.	Clear vent tube of any obstruction.
	Dirt or sediment lodged between retaining and rubber diaphragm causing contacts to remain closed.	Clean switch thoroughly. Flush diaphragm.
	Pump is air locked.	Shut power off for approximately 1 min. then restart. Repeat several times to eliminate air from pump. If system includes a check valve a hole should be drilled in discharge pipe approximately 12" above discharge flange connection.
	Liquid inflow matches pump capacity.	Larger pump required.
Pump Runs But Does Not Discharge Liquid.	Check valves installed backwards.	Check flow direction arrow on check valve body to insure it is installed properly.
	Suction valve stuck or plugged.	Remove check valve and inspect for proper operation.
	Lift too high for pump.	Check rating table.
	Inlet to impeller plugged.	Pull pump and clean.
	Wrong rotation.	Change rotation.
	Pump is air locked.	(See corrective action above)
Pump Does Not Deliver Rated Capacity.	Lift too high for pump.	Check rating table.
	Low voltage/ speed too low.	Check for proper supply voltage to make certain it corresponds to nameplate voltage.
	Impeller or discharge pipe is clogged.	Pull pump and clean. Check pipe for scale or corrosion.
	Impeller may be rotating in the wrong direction.	**Single Phase Units** — Shut off power and allow impeller to stop rotating. Then pump on again. This pump should self-correct rotation. Long discharge pipe without check valve allows liquid to drain back to sewage basin, rotating impeller backwards. If pump starts while impeller is rotating in the wrong direction, it will continue to operate in that direction. **Three Phase Units** — Interchange any two (2) power lead connections.
	Impeller worn due to abrasives or corrosion.	Replace worn impeller.
Pump Runs Continuously.	No check valve or long discharge pipe allowing liquid to drain back to sewage basin.	Install a check valve in discharge line.
	Check valve leaking.	Inspect check valve for correct operation.
	Sewage basin too small for inflow.	Install larger size sewage basin.

PROPOSED PLOT PLAN

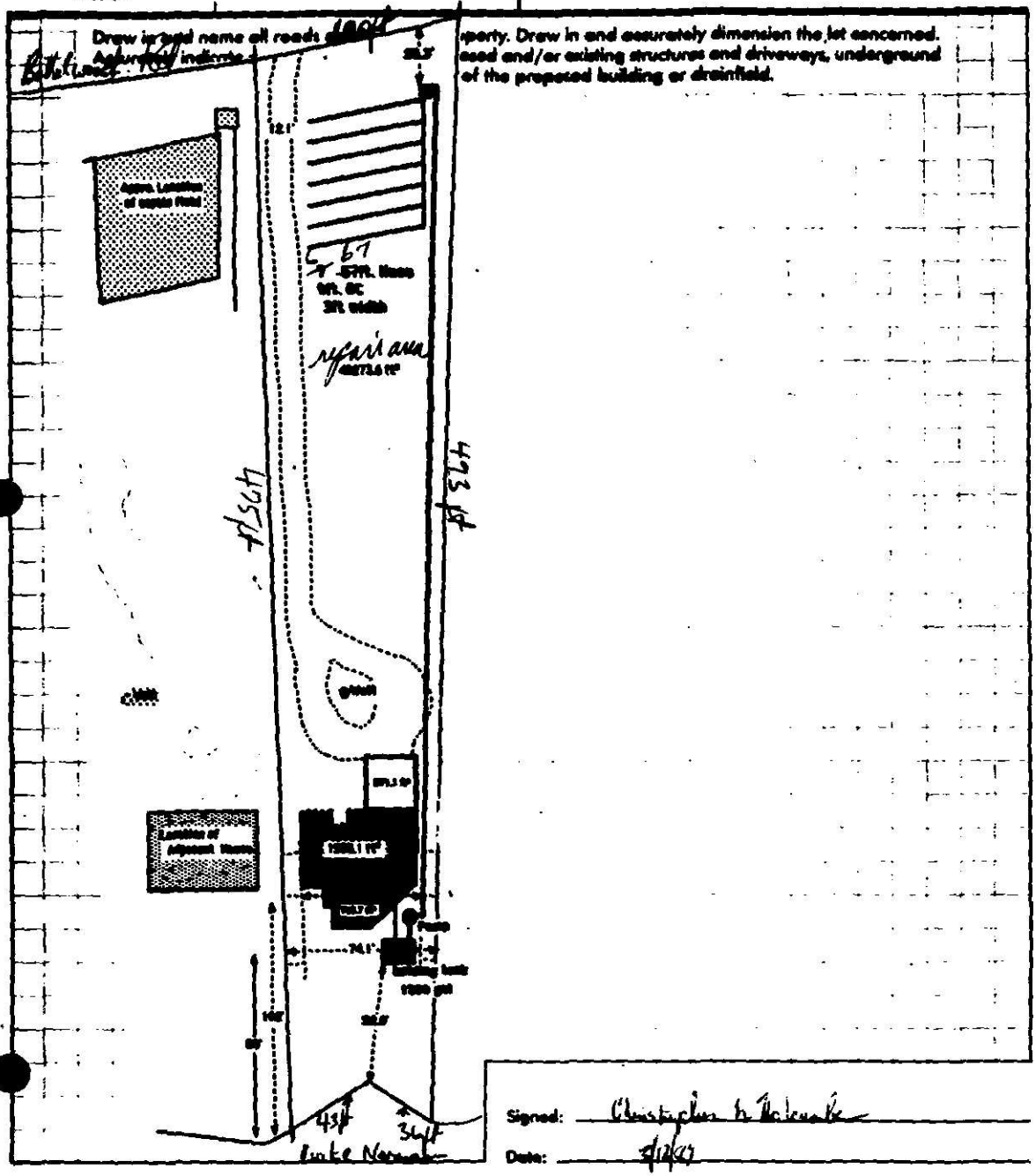
MECKLENBURG COUNTY · ENVIRONMENTAL HEALTH

1200 BLYTHE BOULEVARD
CHARLOTTE, NC 28203
PHONE (704) 376-4603

FILE: 20284

TC: 001-121-68

Draw in and name all roads adjoining property. Draw in and accurately dimension the lot concerned. Indicate any proposed and/or existing structures and driveways, underground utilities and the proposed building or drainfield.



Signed: Christopher M Blackwelder

Date: 4/26/01

6/14/88

APPLICATION FOR AN IMPROVEMENT PERMIT

HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION
1200 BLYTHE BOULEVARD
CHARLOTTE, NC 28203
PHONE (704) 376-4603

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

(OFFICE USE ONLY) ENVIRONMENTAL HEALTH DIVISION
FILE: 20284 PAID
TC: JUN 28
SERIAL: № 16355 CRT

JOB LOCATION

① ADDRESS: 20438 (STREET NO) BETHECWOOD (STREET) LN. ② FILE: SIA 20284
③ JURISDICTION: ④ TAX PARCEL NO.: 001-121-68
⑤ SUBDIVISION: BETHECWOOD ⑥ LOT: 13 ⑦ BLOCK:

OWNER

⑧ NAME: EDWARD (FIRST) D. (MIDDLE) GOLDMAN (LAST)
⑨ MAILING ADDRESS: 20438 BETHECWOOD LN.
⑩ CITY: DAVIDSON ⑪ STATE: N.C. ⑫ ZIP:
⑬ PHONE: (WORK) 892-3916 ⑭ (HOME) 892-7052

REQUEST

This request is for a(n):

⑮ ☑ New permit
⑯ ☐ Repair or alteration permit
⑰ ☐ Autherization for mobile home exchange
⑱ ☐ Other (specify)

DESIGN CRITERIA

System will serve:

⑲ ☑ Residence ⑳ ☐ Mobile home
㉑ ☐ Business or place of public assembly
㉒ Number of bedrooms? 3
㉓ Maximum occupancy? 6
㉔ Basement? ☑ yes ☐ no
㉕ Type?
㉖ Maximum number of employees?
㉗ Maximum number of seats?

WATER SUPPLY

㉘ Water supply from (present or proposed):

A ☑ Individual well
B ☐ Municipal system
C ☐ Community well
D ☐ Community system

㉙ The undersigned, 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: Edward D Goldman
Date: 6/12/88

IMPROVEMENT PERMIT

The undersigned, an authorized agent of the MECKLENBURG COUNTY HEALTH DEPARTMENT, certifies that the Department has approved Request for the Job Location contained in this document. This approval granted in accordance with the provisions of Laws And Rules For Sanitary Sewage Collection, 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 a Installation, Construction, Alteration and/or Repair permit is issued by Department.
... This permit is not transferable, and shall become null and void months from the date of issuance.

Sanitarian (s) — Date

Director or Authorized Section Head — Date 6/27/88

This permit must be signed by the Director of Mecklenburg County Department or an authorized section head in order to be valid.

INSTALLATION, CONSTRUCTION, ALTERATION, AND/OR REPAIR PERMIT

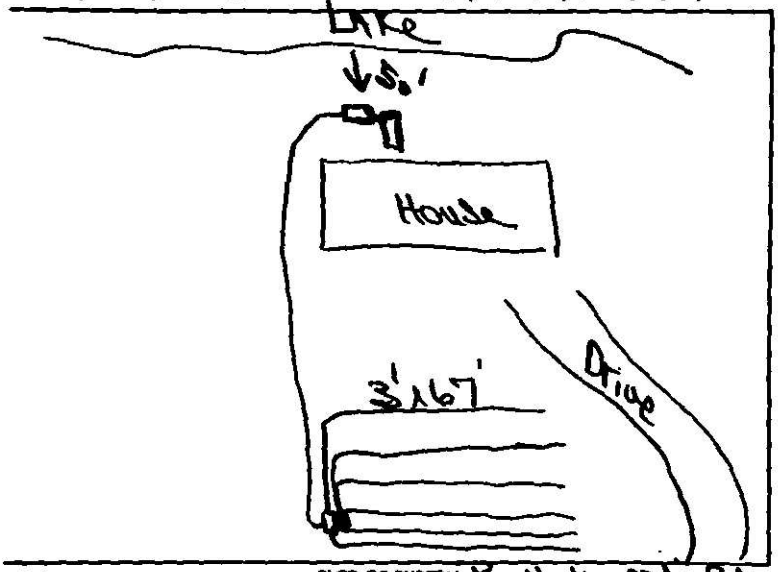
MECKLENBURG COUNTY ENVIRONMENTAL HEALTH
1200 BLYTHE BOULEVARD
CHARLOTTE, NC 28203
PHONE (704) 376-4603

FILE: 20284 DATE: 8/15/88

TC: 001-121-08 ☒ L

SERIAL Nº 12117

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 8/12/88. All work shall be completed on or before 11-15-88, after which date this permit shall be null and void. The system shall meet all of the construction requirements of 10 NCAC 10A .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 Department of Environmental Health 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

Liquid Capacity of Septic Tank 1500 gallons

Liquid Capacity of Dosing Tank 1000 gallons

Tank Construction _____

Absorption and/or Nitrification Lines:

Trench Width 3' feet

Total Line Length 402' feet

Number of Lines 6

Depth of Stone 12 inches

Distance from House 15 feet

Distance from Property Line 10 feet

Distance from Well Not IN feet
50' minimum

NAME OF OWNER Goodman Edward D.

LOCATION OF PROPERTY 20438 Bethelwood Ln.

Comments: INSTALL 6 Trenches 3'x67', 12" Stone, Straw Cover.

Division or Section Head

Environmentalist Judy J. Kiser R.S.

* If this permit is for the installation or construction of a new system, it must be signed by the division or a section head of the Department of Environmental Health in order to be valid. Only the signature of the Environmentalist is required where an existing system is being altered or repaired.

WHITE - ENVIRONMENTAL HEALTH DEPARTMENT'S COPY ● CANARY - ENVIRONMENTALIST'S COPY ● PINK - OWNER OR AGENTS COPY

CERTIFICATE OF COMPLETION/OPERATION PERMIT

MECKLENBURG COUNTY ENVIRONMENTAL HEALTH
1200 BLYTHE BOULEVARD
CHARLOTTE, NC 28203
PHONE (704) 376-4503

FILE: 20284 DATE: 8/19/88
TC 001-24-08 ☒ L ☐ CRT
SERIAL № 11339

Name of Owner Goodman Edward D Juris.:
Address of Property 20438 Bethelwood Ln.

Inspection Data:

Tank Material Pre Cast
Total Length of Drainfield 402'
Number of Lines 6 @ 67'
Cover Depth 18"
Water Supply Source Well
Distance to Water Source Not In 100' required
Excavation Inspected 8/19/88
Tank(s) Inspected 8/19/88
Wash Line Inspected
High Water Alarm Inspected ✓

PLOT

Design: 1988 1500 St 1000 Dt, Pl, 1206 SFt, 12"6, Conv CTR# 69

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 10 NCAC 10A .1900, "Laws And Rules For Sanitary Sewage Collection, Treatment, And Disposal" in effect on the date of issuance of the permit. The 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 10 NCAC 10A .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.

COMMENTS: Pump Malfunction in file

Judy A Kwin R.S. 1/14
Environmentalist

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

Date Received _____ Apt. No. (S) _____ Application No. (W) _____

T. C. No. _____

Map Date _____

MECKLENBURG COUNTY
DEPARTMENT OF ENVIRONMENTAL HEALTH

APPLICATION FOR WELL WATER SUPPLY PERMIT

NAME OF OWNER Neill Barnett, Builder, Inc
LAST FIRST MIDDLE

ADDRESS OF OWNER 2239 Cross Country Rd Kingsville SC 29105

PHONE NO. Home _____ Office [illegible]

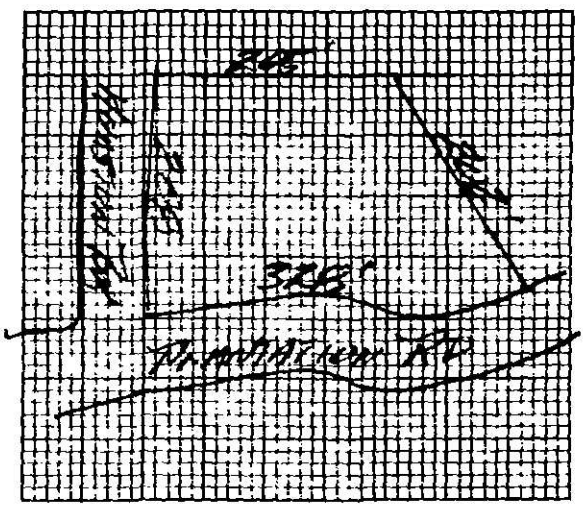
LOCATION OF PROPERTY Plantation Rd
STREET OR COUNTY ROAD

WELL CONTRACTOR [illegible] LICENSE NO. _____

Application is hereby made to the Mecklenburg County Department of Environmental Health for a permit to drill a water well on the hereinabove described lot to be used as a source of _____ individual, _____ semi public, or _____ public water supply.

11-7-83
DATE OF APPLICATION

[signature]
OWNER



Remarks: Lot 5-H

ACCURATELY DIAGRAM & DIMENSION LOT

Application approved and permit hereby granted

Permit No: _____

_____
ENVIRONMENTALIST

EHD-5-76

Environmental Health Department's Copy