

15900 HUBBARD RD

01313122

6/28/2007

duponbj

Groundwater and Wastewater Services File Imaging Project

May 2007

Barcode Font = IDAutomationHC39M

MECKLENBURG COUNTY

Land Use & Environmental Services Agency
Groundwater & Wastewater Services

Feburary 22, 2006

JoAnn Houser Ghant
15900 Hubbard Rd.
Huntersville, NC 28078

Dear Mrs. Ghant:

Re: Bacteriological Well Resample Results

Enclosed you should find a copy of the laboratory analysis of the water sample that was collected at 15900 Hubbard Road on Feburary 8, 2006. The laboratory analysis of the water sample was reported to be ABSENT for Total Coliform and E. COLI-PA bacteria. It is recommended that you perform an annual bacteriological analysis for your private well.

If you have questions or need assistance with your septic system or private well please contact our office at (704) 336-5103.

Sincerely,

Trevor Thomason, R.S.
Sr. Environmental Specialist

Enclosure: (1)

7342A

North Carolina State Laboratory of Public Health
Department of Health and Human Services
P. O. Box 28407 - 306 N. Wilmington St. - Raleigh, N. C. 27611-8047

COLIFORM ANALYSIS - PRIVATE WATER SUPPLY

Name of Owner or Tenant: Ghant, JoAnn Houser **County:** Mecklenburg

Address: 15900 Hubbard Dr Huntersville, NC **ZIP:** 28078

Source: Well **Type of Sampling Point:** Well head

Collected By: KG **Date:** 2/8/2006 **Time:** 2:18 PM

Signed By: Garrett, Kim **Analysis Type:** Private

Report To: Mecklenburg Co. Env. Health
700 North Tryon St., Suite 208
Charlotte, NC 28202 (704) 336-5101

BACTERIOLOGIC ANALYSIS

CONTAMINANTS	RESULT
Total Coliform (ColilertRoutine)	Absent

Sample No: AA92324 **Date Received:** 2/9/2006 **Time Received:** 8:30:00 AM

Date Reported: 2/10/2006 **Today's Date:** 2/10/2006

Comments:

NCPH

North Carolina Public Health
State Laboratory of Public Health

Mecklenburg Co. Env. Health
ATTN: Garrett, Kim
700 North Tryon St., Suite 208
Charlotte, NC 28202

Courier **05-16-21**

MECKLENBURG COUNTY HEALTH DEPARTMENT
Environmental Health Division
Groundwater & Wastewater Services

June 27, 2005

~~Donald Wright~~
15900 Hubbard Road
Huntersville, NC 28078

Dear Mr. Wright:

Re: Bacteriological Well Sample Results

Enclosed you should find a copy of the laboratory analysis of the well water sample that was collected at 15900 Hubbard Road on June 22, 2005.

The laboratory analysis of the well water sample was reported to be POSITIVE for total coliform bacteria.

At this time it is recommended that you chlorinate your well and then contact our office to have the well resampled. I am enclosing information for your review that outlines well chlorination procedures. There is no additional fee for resampling your well, one time, for total and fecal coliform bacteria.

A copy of the septic system inspection report is also being included for your review.

Please contact me at (704) 336-5568 if you have any questions concerning this matter.

Sincerely,

Trevor Thomason, R.S.I.
Managed Systems Program Coordinator
Groundwater & Wastewater Services

Enclosures (3):

CHARLOTTE
CHARLOTTE-MECKLENBURG UTILITIES

Laboratory Analysis Report
Report Date: 6/27/2005 11:15 AM

LABORATORY SERVICES DIVISION

LOCATION: GWS-7342A
LOC ID: G-GWS
SAMPLE DATE-TIME: 6/22/2005 13:00
SAMPLE DESCRIPTION: Grab

SAMPLE ID: AB40387
CHAIN OF CUSTODY #: 05060484

	Parameter	Result	Units	RL	Method	Start Date/ Time	Analyst
AB40387	E. COLI-PA	absent	P/A		SM 9223B	6/23/2005 8:40	KEK
AB40387	Total Coliform	present	P/A		SM 9223B	6/23/2005 8:40	KEK

Comment:

Laboratory Supervisor: W Kahl

Laboratory Certifications: McAlpine NC DENR No.146; Brookshire NC DENR No.162; Hal Marshall N.C. DENR No. 192, N.C. DHHS Laboratory No. 37527

CHARLOTTE-MECKLENBURG UTILITIES - LABORATORY SERVICES DIVISION

Hal Marshall Laboratory, 700 North Tryon St., Charlotte, NC 28202, 704/336-5460

CHAIN OF CUSTODY RECORD

CLIENT: MECKLENBURG COUNTY, LUESA - GROUNDWATER AND WASTEWATER SERVICES

FACILITY: GROUNDWATER (Potable Water) - Ghant Residence

LOCATION / ADDRESS: 15900 Hubbard Rd., Huntersville NC 28078

LAB CODE (circle one): REAL PRIV NEW TNC MPL (PME) OTHER

Send Report To: Trevor Thomason, 700N Tryon St. Ste. 205, Charlotte, NC 28202

COC#: 05060484

Sampled By (Print Name): Trevor Thomason

SAMPLE ID	Sample Collector's Initials	Sample Collection: Begin Date and Time	Sample Collection: End Date and Time	Chlorinated System	Sample Temperature: Collection Temp	Sample Temperature: Receipt Temp	Sample Type: Depth Composite	Sample Type: Auto Composite	Sample Type: Hand Comp	Sample Type: Grab	Sample Containers: Plastic	Sample Containers: Glass	Sample Containers: # Containers	Chemical Preservative: None	HNO3	H2SO4	NaOH	HCl	Na2S2O3	pH Correct	Analyses Requested: Total Coliform	Nitrate	Nitrite	Nitrate + Nitrite	Fluoride	Hardness	Metals	Fecal Coliform	Fecal Strep	Pest/PCB, EPA 608	Herb, EPA 8151	VOA, EPA 8260	Semis, EPA 8270
(B34838) GWS-7342A	TCT	6/22/2005 13:00		N						X	100 ml		1						X	X												

NOTES: Complete yellow shaded sections; each "X" needs to be circled.

Itemize requested Metals here:

COMMENTS: ****3-DAY TAT REQUESTED****

Relinquished By: (Signature)	Received By: (Signature)	Date	Time
		06-22-05	0835
Relinquished By: (Signature)	Received By: (Signature)	Date	Time
Relinquished By: (Signature)	Received By: (Signature)	Date	Time
Relinquished By: (Signature)	Received By: (Signature)	Date	Time

Form Revision 05; effective 03/15/2005

CODES: **REAL**=REAL ESTATE TRANSACTION **PRIV**=PRIVATE WELL SAMPLING BY REQUEST OR FOR REPAIR **NEW**=NEW WELL (PERMIT)

N.C. Department of Environment and Natural Resources
Division of Environmental Health

Inspection of Engineered Subsurface Wastewater System

Mecklenburg County **Health Department**	Ghant Residence **Name of Establishment**	7342A **Permit/Project No.**
15900 Hubbard Rd., Huntersville 28078 **Location**	2-Bedroom House **Type of Establishment**	240 GPD **Design Flow**
Donald Wright **Owner/Agent**	Same as location address **Address**	(704) 875-3793 **Phone**
Not Required (Installed 6/4/1991) **Operator**	**Address**	**Phone**
IV **System Type**	6/22/2005 **Date of Inspection**	June 2008 **Next Inspection Due**

	Yes	No	N/A	Comments:
1. ESTABLISHMENT:				
a. Type, size, and sewage flow in accordance with permit?	☒	☐	☐	
2. COLLECTION SYSTEM:				
a. No evidence of leaks into or out from sewer lines/manholes?	☒	☐	☐	
b. Free of blockages/solids buildup in lines or manholes?	☒	☐	☐	
3. TANKAGE: (Grease Traps/Lift Stations/Septic/Dosing Tanks)				
a. Tank risers accessible and surface water diverted?	☒	☐	☐	
b. Tanks and access manholes structurally sound, watertight?	☒	☐	☐	3.b. Riser lid cracked on pump tank.
c. Sanitary tee(s) in good working condition?.....	☐	☐	☒	3.c. Sanitary tee not inspected.
d. Tanks pumped, cleaned out as needed?.....	☒	☐	☐	
4. RAW SEWAGE LIFT STATION (if present):				
a. Required pumps present, operating, and cycling properly	☐	☐	☒	
b. High-water alarm present and operating properly?	☐	☐	☒	
c. Floats/pipe/valves/disconnects in good condition?	☐	☐	☒	
5. EFFLUENT DOSING SYSTEM:				
a. Effluent appears clear, free of excess solids?	☒	☐	☐	5.a. Measured <4" of solids in the pump tank.
A. PUMP SYSTEMS:				
a. Required pumps present, operating, and cycling properly?	☒	☐	☐	5.A.a. Recommend raising control
b. High-water alarm present and operating properly?	☒	☐	☐	floats in pump tank.
c. Floats/pipe/valves/disconnects in good working condition?	☒	☐	☐	
d. Control panel enclosure/components in good condition?	☒	☐	☐	5.A.d. Place weatherproof cover
e. Elapsed time readings: _____ _____ _____ _____				over electrical receptacle.
B. SIPHON SYSTEMS:				
a. No evidence of overflow or siphon leakage?	☐	☐	☒	
b. Siphon(s) appear to be working/alternating properly?	☐	☐	☒	
c. Bells and vents free of debris and in good condition?	☐	☐	☒	

6. GROUND ABSORPTION FIELDS:

a. No evidence of effluent surfacing/reaching surface waters?	☒	☐	☐	
b. Minimal ponding in subsurface trenches?	☒	☐	☐	
c. Surface water being effectively diverted away?	☒	☐	☐	
d. Diversions/ditches/swales/tiles drains properly maintained?	☒	☐	☐	
e. Line cover/vegetation adequate/maintained as needed?	☒	☐	☐	
f. Protected from traffic, destructive uses?	☒	☐	☐	
g. Distribution devices in good condition, working properly?	☒	☐	☐	
h. Repair area properly reserved, maintained?	☒	☐	☐	

A. LOW PRESSURE PIPE DRAIN FIELDS:

a. Turnups/cleanouts/valves intact and accessible?	☒	☐	☐	
b. No effluent standing in lower laterals?	☒	☐	☐	
c. Laterals free of excess solids, cleaned out as needed?	☐	☐	☒	6.A.c.d. Services to be performed
d. Pressure head is properly adjusted?	☐	☐	☒	by a Certified Operator.

OVERALL CONDITION AND OPERATION OF SYSTEM:

No problems detected with system operation at the time of inspection.

No sewage observed on frond surface at time of inspection.

SUMMARY OF REPAIRS REQUIRED AT THIS TIME:

None

***REPAIR WITHIN N/A DAYS.**

SYSTEM MAINTENANCE/IMPROVEMENTS REQUIRED:

*The MCHD recommends having the tanks (septic & dosing) pumped out every 3 to 5 years to remove excess solids.

1. Raise pump control float to a level that maintains a minimum of 12" of effluent in the tank at all times.
2. Place weatherproof cover over receptacle to prevent damage from moisture.
3. Recommend hiring a Certified Operator to perfrom routine system maintenance.

DATE: 6/23/2005

SIGNED: _____, RSE AGENT

Division of Environmental Health

MECKLENBURG COUNTY
LAND USE AND ENVIRONMENTAL SERVICES
Payment Receipt

COPY

Receipt Information

Date:	05/23/05	**Amount:**	85.00
Receipt #:	34731	**Tendered:**	85.00
Check / Auth #:	CHECK 1717	**Returned:**	0.00
Received By:	CRAIGGY		

Account Information

Account #: 200000
Contractor: GHANT JOANN H
Attn:
Address: 15900 HUBBARD RD
Address:
City/State/Zip: HUNTERSVILLE, NC 28078

Item	Description	Permit#	Quantity	Unit Price	Total Price
0743	Hmeownr Maint Inspec-Type IIIB FILE #7342A/PH 7048753793		1	85.00	85.00

----------Outstanding Balances----------

Month-To-Date	Prior Month	30 Days	60 Days	90 Days	Balance

N. C. DEPARTMENT OF ENVIRONMENT, HEALTH, AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH

INSPECTION OF ENGINEERED SUBSURFACE SEWAGE SYSTEM

Mecklenburg — Health Department
Name of Establishment — 73424 — Permit/Project No.
15900 Hubbard Road — Location
residence — Type of Establishment
240 GPD — Design Flow
JoAnn Houser Ghant, 15900 Hubbard Rd, Huntersville, NC 28078 — Owner/Agent — Address — Phone
None at the present - system installed 6-4-91 (see note below) — Operator — Address — Phone
Remarks: Type IVa systems required a certified operator if installed after 7-1-96

	Yes	No	REMARKS
1. ESTABLISHMENT:			
Type, size, and sewage flow in accordance with permit?	☑	☐	
2. COLLECTION SYSTEM:			
No evidence of leaks into or out from sewer lines/manholes?	☐	☐	
Free of blockages/solids buildup in lines or manholes?	☐	☐	
3. TANKAGE (Grease Traps/Lift Stations/Septic/Dosing Tanks):			
Tank risers accessible and surface water diverted?	☐	☑	Could not remove pump tank riser lid. Riser is at and slightly above grade.
Tanks and access manholes structurally sound, watertight?	☐	☐	
Sanitary tee(s) in good working condition?	☐	☐	
Tanks pumped, cleaned out as needed?	☐	☐	Recommend pumping septic tank at every 3-5 years.
4. RAW SEWAGE LIFT STATION (If Present):			
Required pumps present, operating, and cycling properly?	☐	☐	
High-water alarm present and operating properly?	☐	☐	
Floats/pipe/valves/disconnects in good working condition?	☐	☐	
Control panel enclosure/components in good condition?	☐	☐	
5. EFFLUENT DOSING SYSTEM:			
Effluent appears clear, free of excess solids?	☐	☐	- Could not verify alarm status
PUMP SYSTEMS:			- Could not check floats/pipe/valves etc. due to riser lid
Required pumps present, operating, and cycling properly?	☑	☐	
High-water alarm present and operating properly?	☐	☐	
Floats/pipe/valves/disconnects in good working condition?	☐	☐	
Control panel enclosure/components in good condition?	☐	☑	- System has old "piggy back" electrical setup without Nema 4x weatherproof enclosure
Elapsed time readings: _____ _____ _____			
SIPHON SYSTEMS:			
No evidence of overflow or siphon leakage?	☐	☐	
Siphon(s) appear to be working/alternating properly?	☐	☐	
Bells and vents free of debris and in good condition?	☐	☐	
6. GROUND ABSORPTION FIELDS:			
No evidence of effluent surfacing/reaching surface waters?	☑	☐	- Portion of lowest line has front porch built over it.
Minimal ponding in subsurface trenches?	☑	☐	
Surface water being effectively diverted away?	☑	☐	- I would recommend that you have a certified operator flush and regulate the system every 6 months. It will help extend the life of the system. The new rule on maintenance was implemented due to past problems with lack of maintenance on these systems.
Diversions/ditches/swales/tile drains properly maintained?	☑	☐	
Line cover/vegetation adequate/maintained as needed?	☑	☐	
Protected from traffic, destructive uses?	☐	☑	
Distribution devices in good condition, working properly?	☐	☐	
Repair area properly reserved, maintained?	☑	☐	
LOW-PRESSURE PIPE DRAIN FIELDS:			
Turnups/cleanouts/valves intact and accessible?	☐	☑	
No effluent standing in lower laterals?	☑	☐	
Laterals free of excess solids, cleaned out as needed?	☐	☑	
Pressure head is properly adjusted?	☐	☐	

OVERALL CONDITION AND OPERATION OF SYSTEM: Looks good as far as no sewage is surfacing at this time.

SUMMARY OF IMPROVEMENTS NEEDED:

Improvement	Repair Within (Days)

DATE: 6-7-99 SIGNED: Larry B. Thompson, Jr. L.S. AGENT
Division of Environmental Health

DEHNR 3702 (Revised 9/91)
Environmental Health Services Section (Review 9/95)

SUMMARY OF IMPROVEMENTS NEEDED (*Continued*)

Improvement	Repair Within (Days)

INTENT TO SUSPEND OR REVOKE PERMIT

This is to notify you of intent to suspend/revoke (*circle one*) your operation permit/certificate of completion (*circle one*) 60 days from this date for the following violations:

_____
[Law or Rule(s)]

If suspended, the operation permit or certificate of completion remains suspended until violations are corrected. A hearing will be held prior to suspension or revocation if you file a petition for a hearing with the Office of Administrative Hearings, P. O. Drawer 27447, Raleigh, NC 27611-7447, in writing within the number of days specified above of your intent to attend the hearing. If you do not petition the Office of Administrative Hearings, the operation permit or certificate of completion will be suspended or revoked.

IMMEDIATE SUSPENSION OR REVOCATION OF PERMIT

This is to notify you of immediate suspension/revocation (*circle one*) of your operation permit/certificate of completion (*circle one*) for the following violations: _____
[Law or Rule(s)]

If suspended, the permit or certificate remains suspended until the violations are corrected. You will be notified of the day and location of a hearing on this suspension or revocation by a hearing officer from the Office of Administrative Hearings.

This the _____ day of _____, 19 ____

_____ Agent
DIVISION OF ENVIRONMENTAL HEALTH

INSTRUCTIONS

Purpose: Article 11 of Chapter 130A requires the Commission for Health Services to adopt rules governing the design, construction, and operation of sanitary sewage systems. 15A NCAC 18A .1937 specifies that the local health department shall determine whether systems with an Operation Permit are operating properly at a frequency specified in Rule .1961, Table V(a), and that systems which exceed 3,000 gallons per day and other systems which are required to be designed by a professional engineer shall be reinspected annually. This form is developed to be used in making inspections of engineered subsurface sewage systems.

Preparation: Local environmental health specialists shall complete the form every time they conduct an inspection. Prepare an original and two copies for:

1. Original to be left with the responsible person.
2. Copy for the local health department.
3. Copy for the Environmental Health Services Section, Division of Environmental Health.

In the event the permit is suspended or revoked, complete the portion above.

Disposition: This form may be destroyed in accordance with Standard 7, Inspection Records, of the *Records Disposition Schedule* published by the N. C. Division of Archives and History.

Additional forms may be ordered from:
Environmental Health Services Section
Division of Environmental Health
P. O. Box 27687
Raleigh, NC 27611-7687
(Courier 52-01-00)

Mecklenburg County Public Health Laboratory

Environmental Health Section

249 Billingsley Road • Charlotte, North Carolina 28211

III b

Microbiological Analyses

Owner, System or Establishment: Jo Ann Houser (Chg)

Address: 15900 Hubbard Rd

Huntersville Zip: 28078

Collected By: L Thompson

Date Collected: 6-7-99 Time: 1:20 AM (PM)

Sample Source: Outside tap

Date Delvd. to Lab: 6-7-99 Time: 3:47 AM (PM)

Delivered By: L. Thompson ☒ Received on Ice Initials LS

Type of Sample

Potable Water

- ☑ Individual Well
- ☐ Non-Community
- ☐ Community
- ☐ City
- ☐ Other (specify)

Treatment

- ☐ chlorinated
- ☑ nonchlorinated
- ☑ Initial Sample
- ☐ Recheck (chlorinated)
- ☐ Recheck (nonchlorinated)
- ☐ Other (specify) _____

Nonpotable Water

- ☐ Surface
- ☐ Storm
- ☐ Other (specify) _____

Analysis Requested:

- ☑ Total Coliform
- ☑ Fecal Coliform
- ☐ Fecal Strep
- ☐ Enterococcus
- ☐ Sulfate Reducing Bacteria
- ☐ Pseudomonas aeruginosa
- ☐ Other (specify) _____
- ☐ Food Analysis (specify) _____

Comments: _____

Laboratory Analysis Report

Method: _____ Membrane Filter ✓ Colilert _____ Multiple Tube Fermentation

Total Coliform Absent /100 ml.

Fecal Coliform Absent /100 ml.

Fecal Strep _____ /100 ml.

Enterococcus _____ /100 ml.

Non-Coliform _____ /100 ml.

Plate Count _____ /gm. or ml.

Coliform Count _____ /gm. or ml.

Pseudomonas aeruginosa _____ /100 ml.

Laboratory Comments:

Date Received: 6-7-99 Date Reported: 6-8-99

Received By: MV Analyst: MV Lab #: 514

Laboratory Identification #: 37518 DEHNR Division of Laboratory Services
#: 449 DEM

L 1.14 1/92
Rev. 10/96
4319

White - Lab Report Copy Yellow - Lab File copy

MAINTENANCE INSPECTION STATEMENT

MECKLENBURG COUNTY HEALTH DEPARTMENT

PAST DUE NOTICE

JoAnn Houser Ghant
15900 Hubbard Road
Huntersville, NC 28078

Please Make Check Payable To

Mecklenburg County Health Department
700 N. Tryon Street, Ste 211
Charlotte, NC 28202

Note: THIS COMPLETED FORM MUST ACCOMPANY PAYMENT!

N/a

DESCRIPTION OF PROPERTY

Name	Site Address	Tax Parcel	File #	# Bedrooms	System Type
JoAnn Houser Ghant	15900 Hubbard Road	013-131-22	7342A	2	IIIB

Total Amount Due: $85.00

Please use the space below, to make any corrections to property information.

Name N/A

Site Address

#

Bedrooms

RECEIVED
JUN 6 1999

BILL INFORMATION

Current Date	Billing Date	Payment Due Date
5/20/99	4/19/99	5/19/99

Direct Questions Concerning This Bill To ..... (704) 336-5102

☑ *Please check if you have a well.*

Make Check Payable To Mecklenburg County Health Department
Your Canceled Check Is Your Receipt

6-7-99
OSV - H2O
- portion of rock line underneath porch
- could not remove riser lid.

DO NOT SEND CASH

Mecklenburg County
Health Department

April 19, 1999

Jo Ann Houser Ghant
15900 Hubbard Road
Huntersville, NC 28078

Dear Ms. Ghant:

This letter is being sent to all home/business owners in Mecklenburg County with septic tank systems that utilize pumps. In 1990 the North Carolina Administrative Code governing septic tank systems was amended to require routine maintenance and inspection of certain septic tank systems. Research conducted on septic tank systems has shown that properly maintained systems perform better and protect the home/business owner's investment. These State rule changes required local health departments to perform additional inspections without additional resources. During the 1998-99 budget hearings, the Mecklenburg County Board of County Commissioners (BOCC) approved user fees to offset costs and to allow the local health department to comply with mandatory enforcement requirements in the State regulations.

Since you have a pump system, these new rules and fee requirements affect you. The fee is $85.00 and is due upon receipt of this notice. We will visit your property and make assessments and recommendations for the continued efficient operation of your septic tank system. In addition, if you have a well, a bacterial sample will be collected to help assess the quality of your water supply source. The process, including fee assessment, will be repeated every five (5) years. The fee amount may change in the future.

We are excited about the interest and support demonstrated by the BOCC. Past performance in this area was more enforcement oriented rather than supportive. One of our goals is to establish our department as a resource to you to aid and assist you with this and related public health concerns. The inspection program and the water analysis are important to the health of you and your family. This is a very important initiative intended to protect the public's health while improving and preserving our groundwater resources.

Your prompt fee payment will activate our inspection process. Your comments and questions regarding this matter are encouraged and welcomed.

Sincerely,

Larry B. Thompson, Jr., R.S.

Larry B. Thompson, Jr., R.S., Coordinator
Managed Systems Program
Individual Water and Wastewater Systems

Enclosure

cc: Fiscal Services Manager, HMHCS

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)

FILE: 7342A

TC: _____

SERIAL: No. 21978

☑ L ☑ CRT

JOB LOCATION

① ADDRESS: 15900 (STREET NO.) Hubbard Rd. (STREET) ② FILE: _____

③ JURISDICTION: _____ ④ TAX PARCEL NO.: 013-131-22

⑤ SUBDIVISION: _____ ⑥ LOT: _____ ⑦ BLOCK: _____

OWNER

⑧ NAME: JO ANN (FIRST) Houser (MIDDLE) GRANT (LAST)

⑨ MAILING ADDRESS: 619 Belton ST.

⑩ CITY: Charlotte ⑪ STATE: N.C. ⑫ ZIP: 28209

⑬ PHONE: (WORK) 525-1714 ⑭ (HOME) 521-8423

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? 3

㉖ Maximum number of employees? _____

㉔ Basement? ☐ yes ☒ no

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: JoAnn Houser Grant

Date: 4-5-91

IMPROVEMENT PERMIT

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 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 an Installation, Construction, Alteration and/or Repair permit is issued by this Department.

... This permit is not transferable, and shall become null and void 60 months from the date of issuance.

60

Environmentalist _____ Date _____

Director or Authorized Section Head Gene Vaughan SO Date 5/14/91

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

CERTIFICATE OF COMPLETION/OPERATION PERMIT

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

FILE: 7342-A DATE: 6/4/91

TC: 013 131 22 ☐ CRT

SERIAL № 12333

Name of Owner JOANN H. GRANT Juris.:

Address of Property 15900 Hubbard Rd.

Inspection Data:

Tank Material PCC

Total Length of Drainfield 135'

Number of Lines 3 @ 40, 45, 50

Cover Depth 6"

Water Supply Source P/WELL N/I

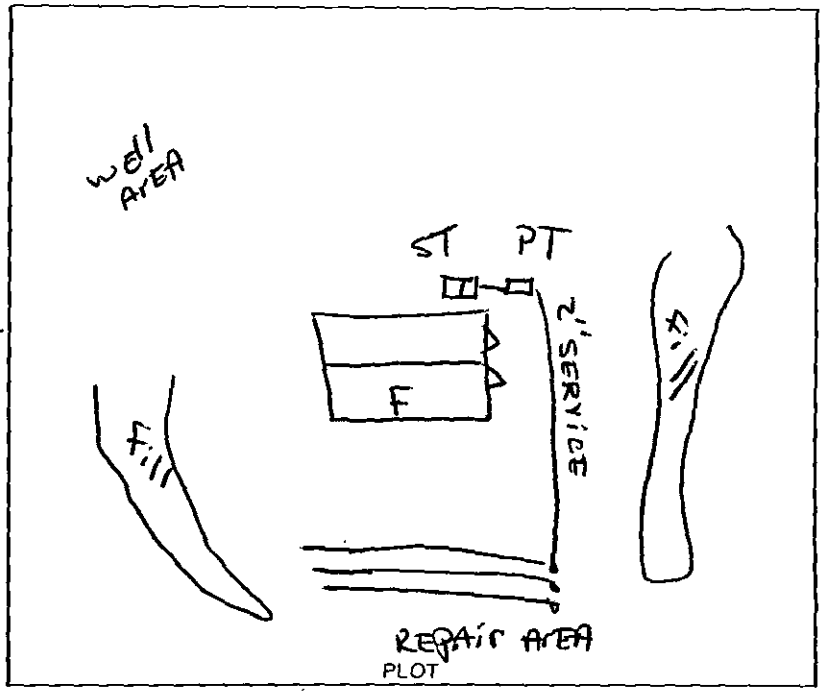
Distance to Water Source >50'

Excavation Inspected Y

Tank(s) Inspected Y, Y

Wash Line Inspected \

High Water Alarm Inspected INSTALLED



Design: 1500 ST, 1000 PT, PI, mod. 270 SFT, 24" SAND LEGISTAKE CTR# 99

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: Installed according to approved plan - 2 bedrm - PANEL, blk. system - Gould 1/3 hrs. pump.

Tim Whittaker, R.S.
Environmentalist

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

INSTALLATION, CONSTRUCTION, ALTERATION, AND/OR REPAIR PERMIT

PANEL Block

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

FILE: 7342-A DATE: 5/24/91

TC: 013 131 22 ☑ L

SERIAL Nº 15032

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 4/5/91. All work shall be completed on or before 6/24/91, 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 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.

* Panel Block sys. install according to approved plans. 5/7/91.

Liquid Capacity of Septic Tank 1500 gallons

Liquid Capacity of Dosing Tank 1000 gallons

Tank Construction PCC

Absorption and/or Nitrification Lines:

Trench Width 2' feet

Total Line Length 135'+ feet

Number of Lines 3

Depth of ~~Stone~~ Sand 24" inches

Distance from House 10' feet

Distance from Property Line 10' feet

Distance from Well >50 feet

PLOT OF SYSTEM

NAME OF OWNER JoAnn H. Ghant

LOCATION OF PROPERTY 15900 Hubbard Rd.

Comments: Panel Block for 2 bedrm. Install According to approved plans.

Division or Section Head

Tim Whitaker, R.S.
Environmentalist

* 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 Mecklenburg County Health Department in order to be valid. Only the signature of the Environmentalist is required where an existing system is being altered or repaired.

WHITE - HEALTH DEPARTMENT'S COPY • CANARY - ENVIRONMENTALIST'S COPY • PINK - OWNER OR AGENT'S COPY

Received 5-3-91
Calculations Approved on 5-6-91
Layout Approved. 5-7-91

Date: May 1, 1991

From: T J Systems
P.O. Box 73
Scott, N.C. 28699

To: Joann Ghant

Charlotte, N.C.
Phone 704-532-9648 or 525-1714 both work numbers

Subject: Lot 15900 Hubbard Road Mecklenburg County
File # : 7342 A
Parcel : 01313122

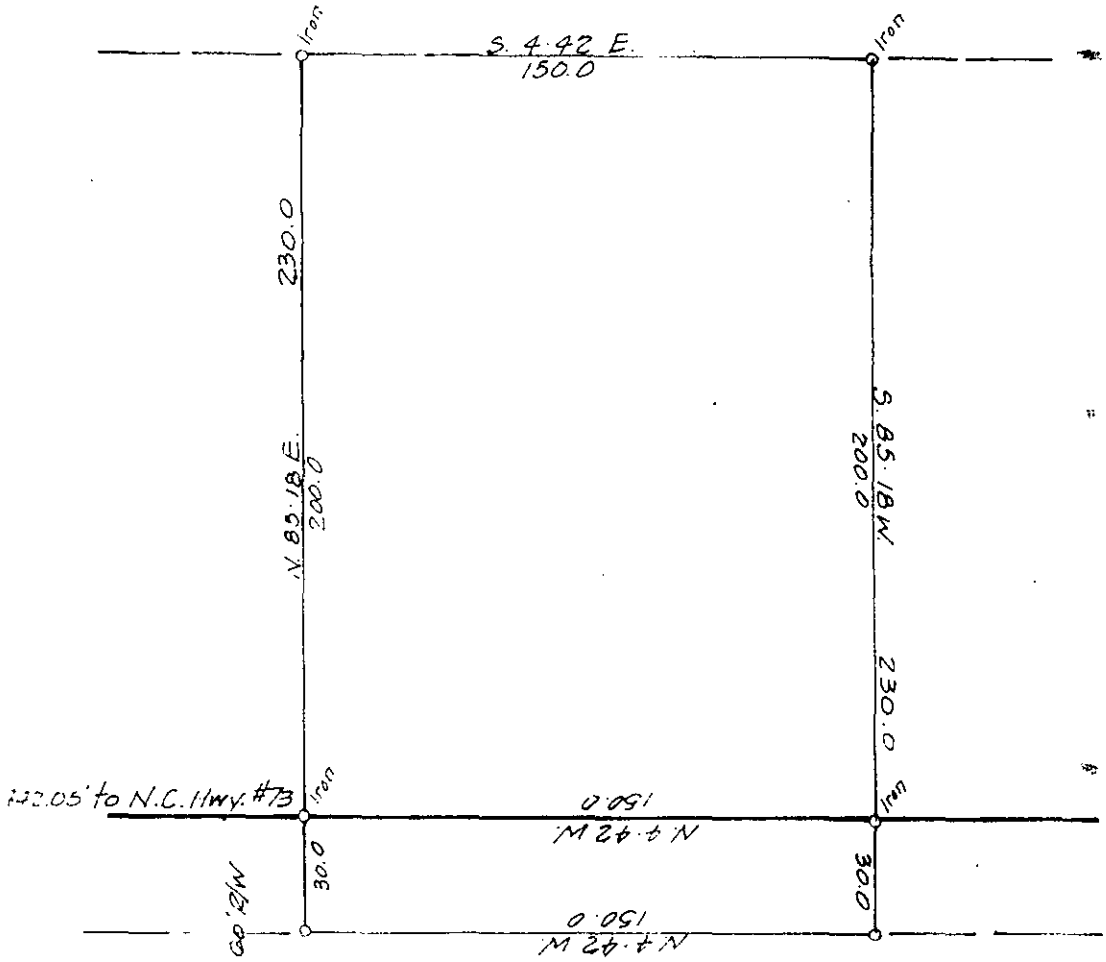
System type: 16 inch T & J Panel System with pressure distribution.

This system is designed for a two bedroom house at an application rate of .3 gpd. 240/.3 = 800/3 = 267 LF of conventional drainfield multiplied by .5 = 134 LF of 16 inch T & J Panel System. This system shall be installed in accordance with all state and local rules and regulations and in compliance manufacturer's installation guidelines. Soil evaluation was supplied by the county.

THIS IS TO CERTIFY THAT ON THE 22nd DAY OF June 19 70 I, SURVEYED THE PROPERTY SHOWN ON THIS PLAT, AND THAT THE TITLE LINES AND THE WALLS OF THE BUILDINGS IF ANY ARE SHOWN HEREON.

SIGNED [signature] REGISTERED SURVEYOR

~ A.W. Houser ~
1445-587



STATE ROAD #2134

Boundary SURVEY OF

As Shown

SCALE 1" = 40'

Lemley Township, Meck. Co., N.C.

THE PROPERTY OF _____

MAP RECORDED IN BOOK _____ AT PAGE _____ DEED RECORDED IN BOOK _____ PAGE _____

Southern Photo Print & Supply Co., Greensboro, N. C. 1000 #175 H—1-70

MECKLENBURG COUNTY HEALTH DEPARTMENT
SITE EVALUATION REPORT
SERIAL NUMBER 17089

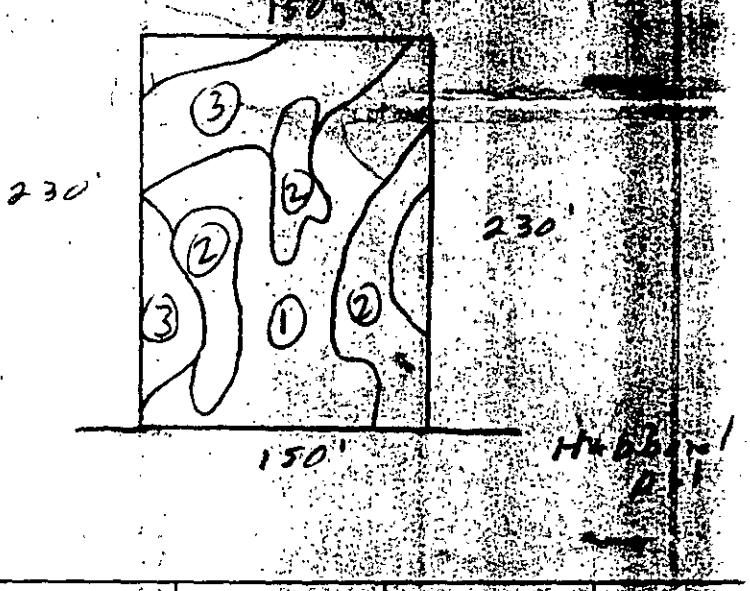
File: 7342A
Parcel: 013-131-22
Action 2

Location: 15900 Hubbard Road
Subdivision:
Lot: Block: Acres: .79

Owner:
Address: JoAnn Houser Ghant
619 Belton Street
Charlotte, NC 28209

Comments: MAY NEED TO DO REPAIR
MAY NEED LIFT PUMP

Described by: Wally Randall
Date: 4-2-97



***** EVALUATION KEY *****
S = Suitable U = Unsuitable
PS = Provisionally Suitable
The "Area Classification" below indicates the suitability of areas in the diagram.

FACTORS	AREA 1	AREA 2	AREA 3	AREA 4	AREA 5	AREA 6
Topography	S (PS) U 2-12%	S PS (U) GULLYS	S PS (U) DRAINAGEWAY DEPRESSION	S PS U	S PS U	S PS
Texture	S (PS) U CLAY	S PS U	S PS U	S PS U	S PS U	S PS
Structure	S (PS) U SUB ANG BLK	S PS U	S PS U	S PS U	S PS U	S PS
Drainage	S (PS) U >36"	S PS U	S PS U	S PS U	S PS U	S PS
Depth	S (PS) U >43"	S PS U	S PS U	S PS U	S PS U	S PS
Restrictive Horizons	S PS U NONE	S PS U	S PS U	S PS U	S PS U	S PS
Available Space	S PS (U) RESTRICTED	S PS U	S PS U	S PS U	S PS U	S PS
Other (specify)	S PS U	S PS U	S PS U	S PS U	S PS U	S PS
Soil Group/Series	CECIL LIKE	GULLYS	DRAINAGEWAY DEPRESSION			
Area Classification	S PS (U)	S PS (U)	S PS (U)	S PS U	S PS U	S PS

* On Installation Required Calculate Based on Pump Tank used to determine Demand

Line	# Panel	# Hole Per Panel	Size Hole	Line Head	Line Length	Hole Flow	Per min Line Flow
A	12	one	5/32	3ft	50 '	.50	6.00
B	10	one	5/32	3ft	45 '	.50	5.00
C	9	one	5/32	3ft	40 '	.50	4.50
E	repair	Note:			55 '		
F	repair	Only 78% repair space available.			50 '		
Totals	31				135'		15.50

CALCULATIONS FOR PUMPED SYSTEMS:

Head: Friction loss = 0.48
Total lift = 18.70 (99.00 + 3 - 83.30 = 18.70) elev.
TDH = 19.18
20% margin = 24 ft (19.18 / .8 = 23.97 = 24 ft)

Pump Size: 20 (15.5/.8) gallon per minute at 24 feet of head.

Pump cycle should be 7.2 min or 112 gallons.

Note: Each line shall have a globe valve at the start of the line for pressure adjustment. Valve shall be placed inside a plastic Valve box with a lid at ground surface.
Turn ups shall be cut just below ground surface and covered with a plastic cup and cover. The line shall be capped with a threaded fitting and plug. The ends that are cut off shall be marked as to the line they go to and saved for future system adjustment. Mark valve and turn up with marker as to what valve goes with what turn up.

Friction loss:

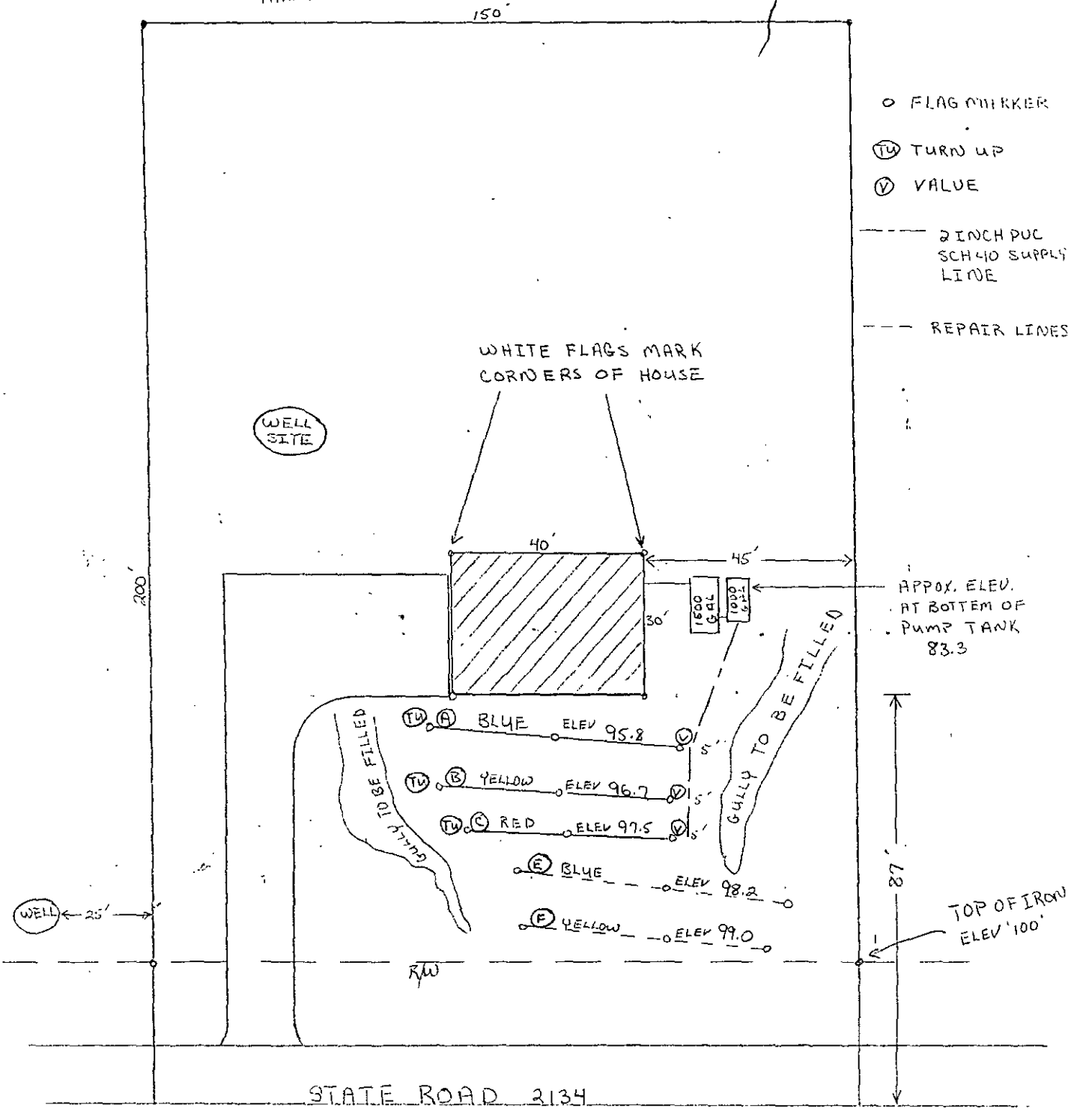
2" @ 16gpm

supply line = 80 lf = 0.80 * 0.50 = 0.40
fittings = 0.40 * .2 = .08
total 0.48

MECKLENBURG COUNTY
15900 HUBBARD ROAD
FILE # 7342 A

#5
(Road) Proposed well Location unsatisfactory Must be Located 50' from any Source of Contamination
Vogler

NOTE: ALL TRASH IN GULLIES SHALL BE CLEANED OUT AND GULLY FILLED WITH GOOD RED SOIL. DO NOT DISTURB AREA WHERE DRAINFIELD IS MARKED.



DESIGN, INSTALLATION AND MAINTENANCE

OF THE

T & J PANEL WASTEWATER TREATMENT SYSTEM

FOR

SANITARIANS

AND

SEPTIC TANK INSTALLERS

Although this manual is sectioned for specific user groups, we at T & J Panel suggest that you familiarize yourself with the complete manual.

Sanitarians

In the early days of the T & J Panel System, when it was still considered an experimental system, the primary reason for permitting the Panel System was because of insufficient space for a conventional system. Now with inclusion in the Sewage Regulations(10NCAC 10A .1956(3)(a)(ii)), the Panel System should be considered when a quality effluent may be needed, space is limited, usable soil is limited, or there are indications that at some future time, space may be needed for other uses. When there is a trend for added development such as additions to homes, pools, or other special landscaping development the T & J Panel System may prevent insufficient space later. As an example, there was a subdivision where three of five homes in the same block added in-ground pools. Each of these pools impacted the existing nitrification lines. As a sanitarian, if you can foresee such a trend developing, discuss the Panel System with the home owner.

As noted in the regulations, the PPBPS is only permitted where soils are suitable for a conventional system, however, only one-half of the space is needed. The Panel System will allow the use of the best soils on the lot. This system may be gravity fed or pumped using the LP Panel System as described. Most of the concepts for a T & J Panel layout are the same as for a conventional system. The biggest differences are areal area needs and quality of effluent being introduced into the soil.

Conversion

A three bedroom house with a 0.4 gpd application rate. (First three steps are the same as the conventional line)

1) 120 gallons per bedroom x 3 bedrooms = 360 gallons per day design flow rate.

2) 360 flow rate/0.4 application rate = 900 sq. ft. of trench bottom.

3) 900 sq. ft./3 ft. wide trench = 300 lineal feet of conventional system.

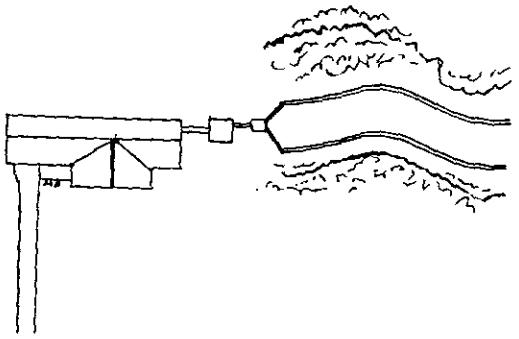
This conventional layout requires 2700 sq. ft. of area on the lot and equal space for repair for a total of 5400 sq. ft. of suitable and usable area. To calculate the T & J Panel System size, the above calculations must be made with an additional fourth step as described in 10NCAC 10A .1956 (3)(a)(ii)(B) for a PPBPS (the T & J Panel System)

4) 300 lineal feet of conventional system x 0.5 for a 16 inch high Panel System = 150 lineal feet of T & J Panel trench.

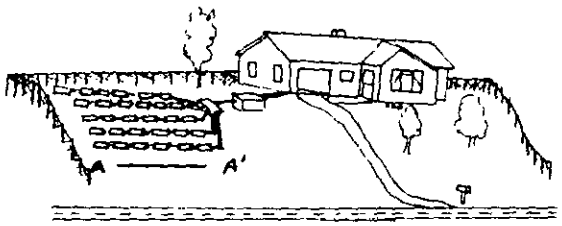
A Panel System requires only a 1200 sq. ft area on the lot for the system and equal area for repair. With the Panel System the installation and repair can go into the same space as the initial area required by a conventional gravel trench system.

Window Effect

Areal space should always be a consideration for any system, however, it is especially notable with the Panel System as with any system that reduces the size of the areal area drainfield. The following is a simplistic example of this concept.



RIGHT

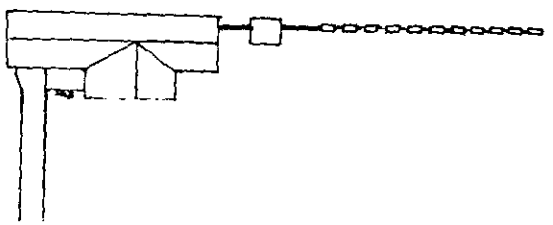


WRONG

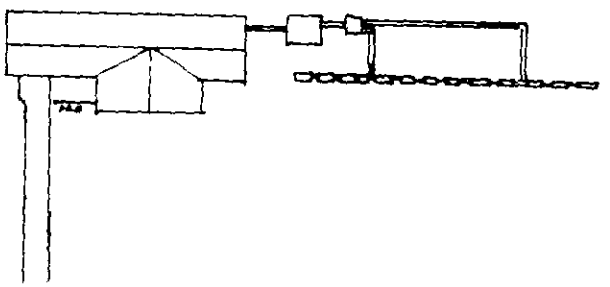
While both systems have the same lineal footage of trench the lower diagram is not a desireable design. The effluent must pass through the area A-A' which can cause a strain on that area and even a failure because of hydraulic overloading.

Distribution

Another extreme would be the use of a long single trench fed from only one end. In the first example, below the areal space is good and the chance of hydraulic overloading is greatly reduced. However downline distribution in the panel line will not give optimum treatment.



WRONG



RIGHT

In the lower example we see that the trench has been feed from multiple points. Because the Panel lines are put in as level as possible, never exceeding 1/4 inch of fall in 10 feet of run, they feed both ways equally. T & J recommends that no gravity line exceed 50 feet, unless it is fed from multiple points. In both of these examples, we are specifying the Panel System, but the logic applies to the conventional system as well.

COUNTY HEALTH DEPARTMENT

(SEPTIC TANK) IMPROVEMENTS PERMIT AND CERTIFICATE OF COMPLETION
(Ground Absorption Sewage Disposal System -- G. S. Chapter 130-A-Article 11)

OWNER OR CONTRACTOR _____ DATE _____ PERMIT NO. _____

PHONE: Business _____ Home _____

LOCATION _____

_____ S. R. No. _____

SUBDIVISION NAME _____ LOT NO. _____ SECTION OR BLOCK NO. _____

House (✓) Mobile Home ( ) Business ( ) Other _____

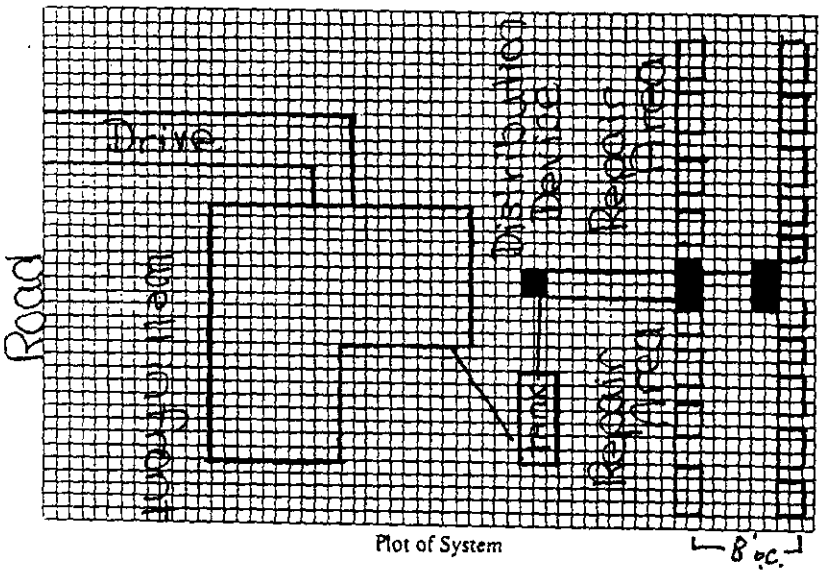
No. Bedrooms 3 No. Bathrooms 2 1/2

Garbage Disposal Unit	N/A	Yes ( )	No ( )
Auto. Dishwasher		Yes (✓)	No ( )
Auto. Wash. Machine		Yes (✓)	No ( )
Site Suitable		Yes (✓)	No ( )

Character & Porosity of Soil: clay loam over clay
Percolation Rate: 0.4 gal/ft²/day
Topography: 6% slope
Depth to Water Table: >60"
Rock or other impervious formations: none

Lot Area _____

_____ Basement with Plumbing _____ Basement without Plumbing ✓ No Basement



Size of Tank 1000 Gals.
Nitrification Field:
No. of Lines (2) 75' lines of
Sq. Ft. 900 Linear Ft. 150 trenches
Depth of Stone in Lines 24" of Stone
Water Supply: Individual (✓)
Public ( )

Installed by _____

I understand and agree to install septic tank system as specified on this Improvements Permit.

Signed: _____

IMPROVEMENTS PERMIT BY _____

COMMENTS: 2 lines with 17 panels each line flow split by flow divider. 2' wide and 75' long each split in middle by D-box. 25 tons sand

CERTIFICATE OF COMPLETION BY _____ DATE _____

EXISTING SYSTEM CHECKED BY: _____ DATE _____

CONSTRUCTION MUST COMPLY WITH ALL OTHER APPLICABLE STATE AND LOCAL REGULATIONS.

Permit is VOID if any unauthorized changes are made in installation of system and/or if any false information is supplied in making Improvements Permit.

Health Dept. Copy: White Inspection Dept. Copy: Yellow Sanitarian's Copy: Pink Owner's Copy: Gold

COUNTY HEALTH DEPARTMENT

(SEPTIC TANK) IMPROVEMENTS PERMIT AND CERTIFICATE OF COMPLETION
(Ground Absorption Sewage Disposal System -- G. S. Chapter 130-A Article 11)

OWNER OR CONTRACTOR _____ DATE _____ PERMIT NO. _____

PHONE: Business _____ Home _____

LOCATION _____

_____ S. R. No. _____

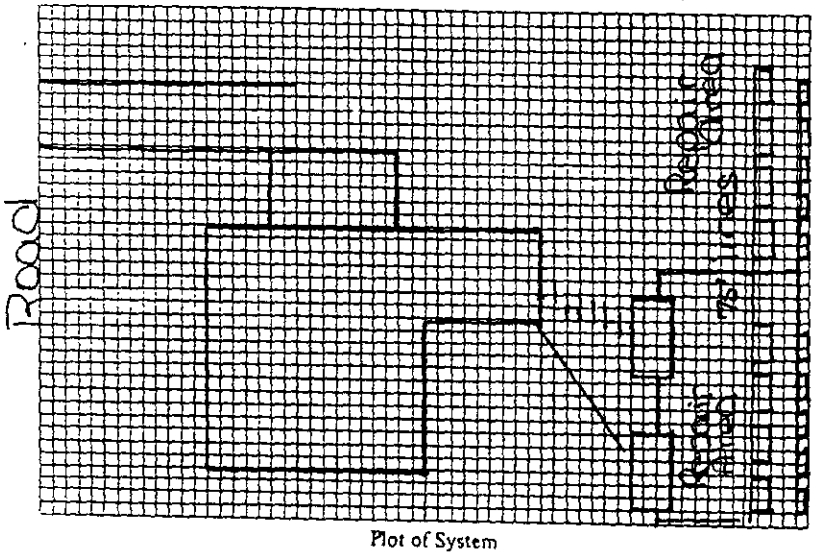
SUBDIVISION NAME _____ LOT NO. _____ SECTION OR BLOCK NO. _____

House (✓) Mobile Home ( ) Business ( ) Other _____

No. Bedrooms 3 No. Bathrooms 2 1/2
Garbage Disposal Unit N/A Yes ( ) No ( )
Auto Dishwasher Yes (✓) No ( )
Auto Wash Machine Yes (✓) No ( )
Site Suitable Yes (✓) No ( )
Lot Area 20,000

Character & Porosity of Soil clay loam over clay
Percolation Rate 0.4 gal/ft²/day
Topography mod slope
Depth to Water Table >60"
Rock or other impervious formations _____

_____ Basement with Plumbing _____ Basement without Plumbing ✓ No Basement Pressure Distributn



Plot of System

Size of Tank 1000 septic/1000 pump Gals.
Nitrification Field:
No. of Lines 3(75') lines of T-J
Sq. Ft. 900 Linear Ft. 150
Depth of Stone in Lines 24" sand
Water Supply: Individual ( )
Public ( )

Installed by _____

I understand and agree to install septic tank system as specified on this Improvements Permit.

Signed: _____

IMPROVEMENTS PERMIT BY _____

COMMENTS: pump sized by head 2-4' at turn up

CERTIFICATE OF COMPLETION BY _____ DATE _____

EXISTING SYSTEM CHECKED BY: _____ DATE _____

CONSTRUCTION MUST COMPLY WITH ALL OTHER APPLICABLE STATE AND LOCAL REGULATIONS.

Permit is VOID if any unauthorized changes are made in installation of system and/or if any false information is supplied in making Improvements Permit.

Health Dept Copy: White Inspection Dept. Copy: Yellow Sanitarian's Copy: Pink Owner's Copy: Gold

How Many Panels Do You Need?

To calculate the number of 16 inch high panels needed for a 150 foot line, multiply 150'x 12" = 1800" then divide by 52" which is 46 inches for the panel and 6 inches for the space between the panels in the trench. 1800" /52" = 34.6 panels, so you would call for 34 panels. (A material order chart is included in the installer section of this manual.) If there is to be more than one trench, the sizing of the lines should be as equal as possible with as close to the same number of panels in each trench as is practical. A permit will normally show the panel as small blocks on the line. The following two pages are sample copies of permits for Panel systems.

Gravity or Pressure

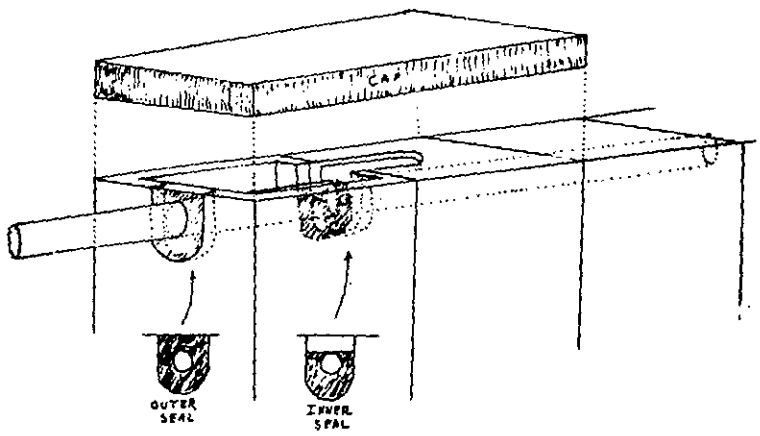
The T & J Panel System can be installed as either gravity or a low pressure distribution system. When designing a pressure system the principles of low pressure distribution are as described in the LPP manual. There is further discussion on pressure systems in the installer section of this manual. One of the attached permits is for a LP Panel drainfield.

Backfill

Backfill sand shall be a clean, washed, medium sand that is naturally occurring and falls within the gradation of ASTM C-33 specification. This specification is one that is used in the ready mix industry and is readily available in all areas. The second type of sand that you will need is a clean particle sand to coat the bottom of each panel's top chamber with a bed of sand one inch thick. This sand is a medium grade of sand blasting sand. Each one hundred pound bag should cover eight panels. Backfill sand calculations should be taken from the material sheet.

Tar Seals

The two drawings below illustrate the inner and outer seal. Note that while the outer seal is a complete seal, the inner seal is only up to the top of the connecting pipe. This is to allow for over flow of the effluent at peak use periods into the lower air chambers. At this point the air chambers become additional storage chambers for the effluent.



Trench Preparation

Trench grade should be established so that backfill cover will be four to six inches over the tops of the panels. (Note on severe slopes system depth should be adjusted to protect against brakeout of effluent) In clay type soils the trench side walls should be raked to bring slicked over areas back as near to original structure as possible. A light dusting of lime on the side walls is required to promote the soil structure.

Final Inspection

The following list of points are things that an inspector should look for before issuing an completion permit.

1) Is depth of the panels within guidelines?

2) Are drain lines level or less than 1/4 inch fall in ten feet?

3) Have seals been properly constructed?

4) Was the proper sand used in the trench backfill?

5) If in clay type soils were the side walls raked and limed?

(For Pumped Systems)

6) Have pump size, head pressure, and dose cycle been properly sized and set?

(Set dose cycle for 3.6 gallons per 16 inch high panel.)

Installer

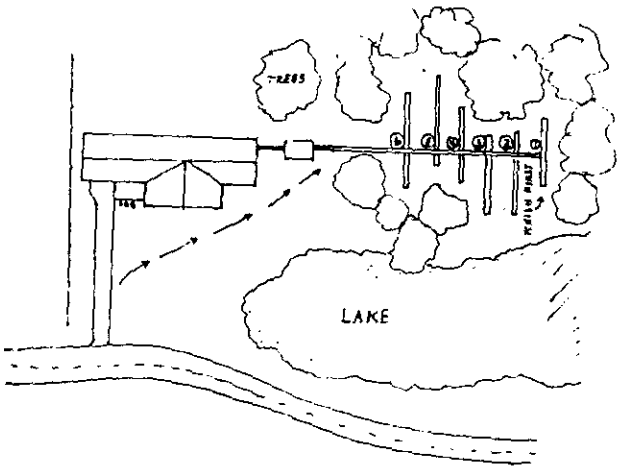
Generally, on level open land, a Panel System can be installed in about the same time as a conventional system; however, traditionally, Panel Systems have been installed where space and topography have restricted use of a conventional system. For this reason Panel System installations have required more time. Many installers enjoy the change of working with panels, not handling gravel, and the satisfaction of knowing a system is being installed where previously a conventional system was not possible.

Ordering Materials

Enclosed on following two pages you will find an order sheet for the T & J Panel System and a materials chart for 16 inch high Panel System. The distributor in your area will lead you through these sheets when ordering or pricing the system. For information on the distributor located closest to you call 1-800-222-2577 (inside N.C.) or 704-872-9566. After ordering, your panels will be shipped to the job site banded together on pallets.

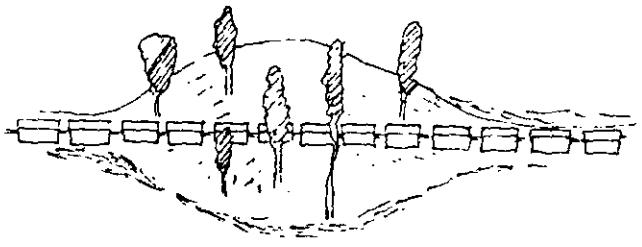
Installation Tips

Installation for multiple line systems should begin in the most confining area and be worked to the more open areas.

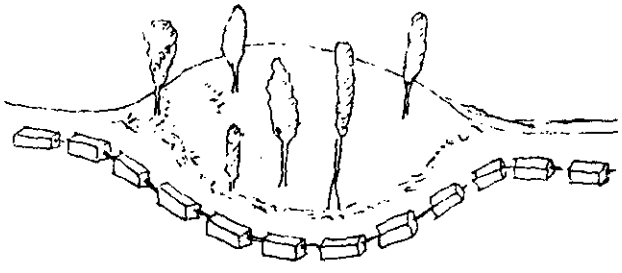


Above is an example of a multiple line installation. As you can see the installation should begin with the line marked 1 and proceed to 2, 3, then 4. This procedure will greatly ease material handling and backfilling. (Note sections of the drainlines should be left uncovered to allow for inspection of lines when area is confined and return access to lines is limited.)

On the following page are two examples of drain lines on sloping lots. The first drawing shows the drainline going through a slope making the center of the line deeper in the ground. This is not a desirable situation. The second drawing shows the drainline going around the slope keeping the trench depth and cover uniform for the entire length of the line. On slopes care should be given to avoid cutting away valuable top soil in an effort to make straight lines. Panel lines can be curved to almost any degree.



Wrong



Right

Digging The Trench

Start by shooting the grade and marking the contour. Then for a 16 inch panel add 28 inches to the shallowest or lowest grade that the trench must cross to obtain the trench bottom grade. Now dig the trench at the elevation derived, checking the grade frequently. The trench should be a minimum of two feet wide. With the trench open all sidewalls shall be raked to bring smeared areas back to their original structure before a light dusting of lime is applied. Now place a 6 inch layer of backfill sand in the trench and level to grade, then place a 1 x 4 or 6 inch board flat on it's side on top of the 6 inch layer of sand. Once more check the grade of the trench by shooting the top of the board. Once the grade boards have been set, the panels may be set into the ditch by hand or using the backhoe. Each panel weights about 155 pounds and placement by hand goes quickly. The panels should be placed about 6 inches apart in the trench to obtain equal spacing. Now place 10 to 12 pounds of clean particle sand (medium sand blasting sand) in the top chamber of each panel to form a bed of sand about one inch thick. Tar seal rope should be placed in the U outs to form seals as shown in earlier drawings. Once the tar rope is in place, a 24 inch section of two inch PR160 pipe is cut to span from the upper middle top chamber of the first panel to the upper middle chamber of the next panel. The tar seal rope that is used should be of tar or butyl that is soft and pliable to obtain a water tight seal. Now that the connection and sealing is complete a block cap is placed on each end of the panel covering all openings.(These will be delivered with the panels.) The cap block may well serve as an inspection port at some future date. The trench is ready to be backfilled to the top of the panel with the same backfill sand used in the trench bottom. With the sand to the top of the panel, trenches should be left for the sanitarian to inspect. Soil cover should be added after the final inspection.

Most Panel Systems are currently used due to space considerations and caution should be taken to preserve suitable soil structure and site conditions.

Materials Chart For 16 Inch Panels

Materials needed per panel:

- Three feet of half inch tar seal rope per panel.
- Two feet of two inch PR160 pipe per panel or same linear feet as line layout of pressure system of one and a quarter inch pipe. Add pipe for tie in of lines to tank and house.
- One hundred pounds of partical sand (sand blasting sand fine texture) per eight panels.
- Same linear feet of one by six boards as line length.
- Bag powder lime when in clay soils.

Panel and C-33 Sand fill

50 LF - 11 panels
8¼ tons sand

60 LF - 14 panels
10 tons sand

70 LF - 16 panels
11½ tons sand

80 LF - 18 panels
13¼ tons sand

90 LF - 21 panels
15 tons sand

100 LF - 23 panels
16½ tons sand

110 LF - 25 panels
18¼ tons sand

120 LF - 27 panels
20 tons sand

130 LF - 30 panels
21½ tons sand

140 LF - 32 panels
23 tons sand

150 LF - 34 panels
25 tons sand

160 LF - 37 panels
26½ tons sand

170 LF - 39 panels
28 tons sand

180 LF - 41 panels
30 tons sand

190 LF - 43 panels
31½ tons sand

200 LF - 46 panels
33 tons sand

T & J Panel Material Worksheet

Homeowner _____ County _____

Address _____

_____

Description of System _____

_____

_____

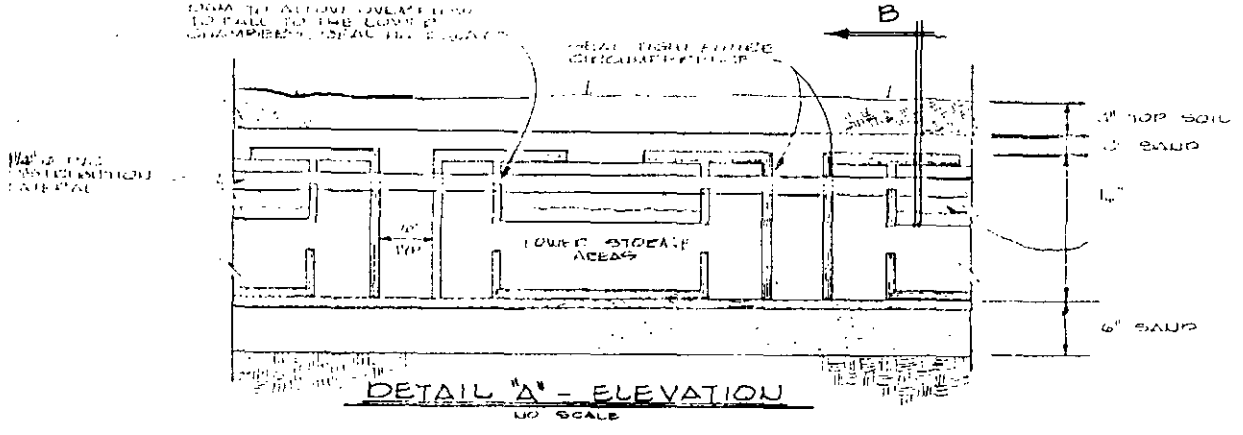
_____	T & J Panels _____ Inch (caps N/C)	_____
_____	2" Pipe	_____
_____	1 1/4" Pipe	_____
_____	Fittings for Pipe	_____
_____	Tar Seal Rope (3' per Panel)	_____
_____	Bag Partical Sand (100 lbs per 8 Panels)	_____
_____	Pallets (Returnable)	_____
_____	Screened Creek Sand (FM 2.3 to 3.0)	_____
_____	1x4 or 1x6 Boards	_____
_____	Power Lime	_____
_____	Sep Tank _____ Gallon	_____
_____	Tar Seal for Tank	_____
_____	4" PVC Pipe Schedule 40	_____
_____	Distrobution Box	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
	Sub-total	_____
	Delivery Charge	_____
	Tax	_____
	Total	_____

Panels With Pressure Distribution

The LP Panel uses Technology similar to that of Low Pressure Pipe (LPP) System. The tables and distribution design described in the LPP manual are applicable to the pressure Panel System. The system should be used with two to four feet of head. In many respects an LP Panel is similar to an LPP with the holes discharging into the panels.

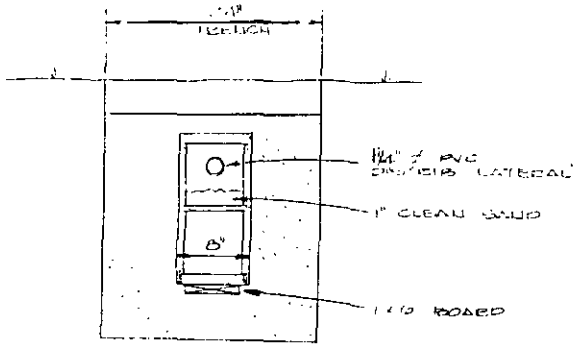
The dosing cycle for the Panel System is designed to pump enough effluent to fill the top chambers of all the panels in the system. The top chamber of a 16 inch panel holds 3.6 gallons. When the system has 34 panels and all the holes are the same size, then you would multiply 34 X 3.6 to get 122 gallon per dose cycle. The holes are drilled in the distribution pipe at the 10 and the 2 o'clock position. These are then placed so that the effluent is pumped into the top center chamber of the panel. If the hole sizing changes then the pump cycle is set by the hole that is discharging the fastest.

All valves and turn ups should be neatly capped, covered, and labled for future service. Pump tanks should be constructed as shown in drawing as to allow for service and or repairs.



DETAIL "A" - ELEVATION

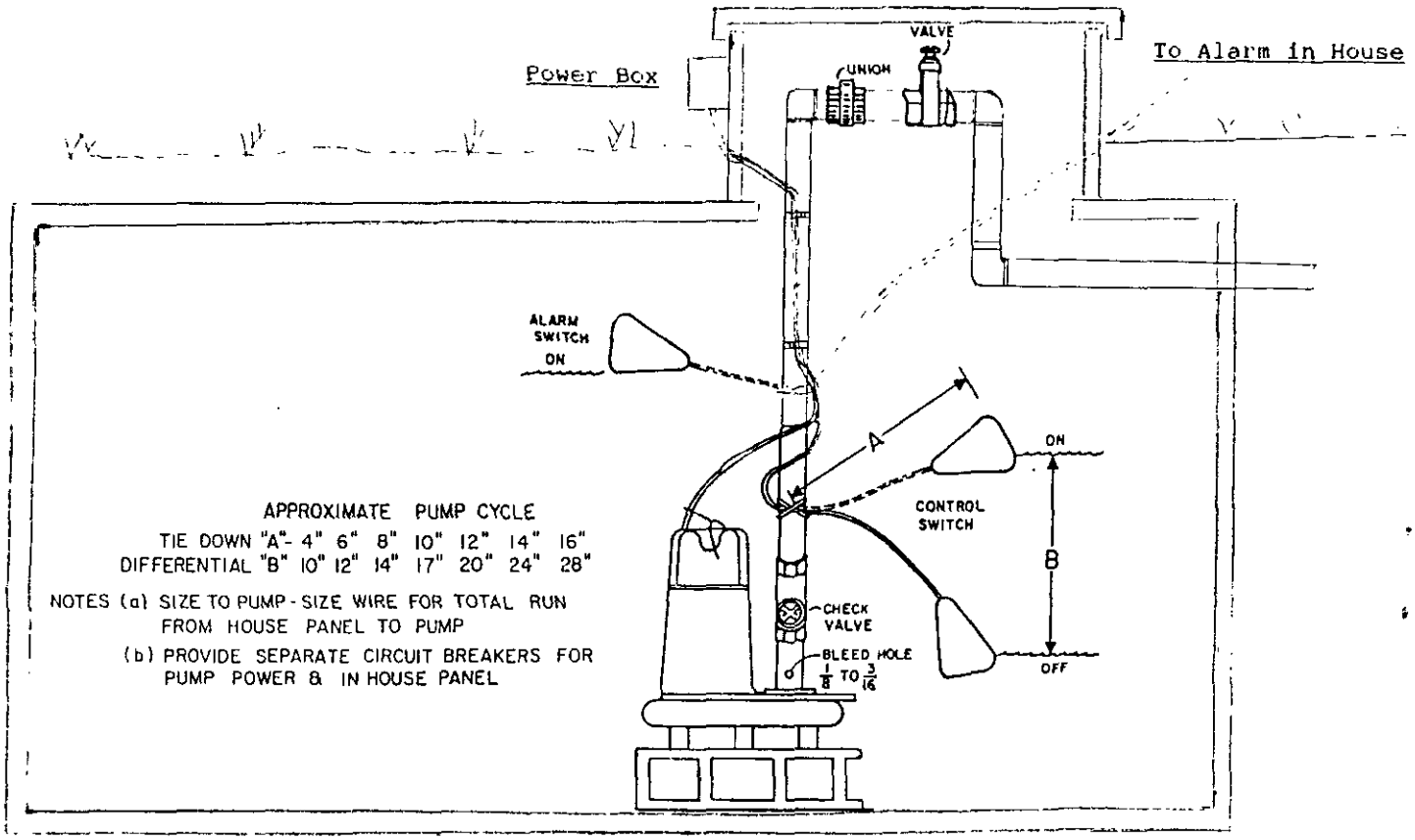
NO SCALE



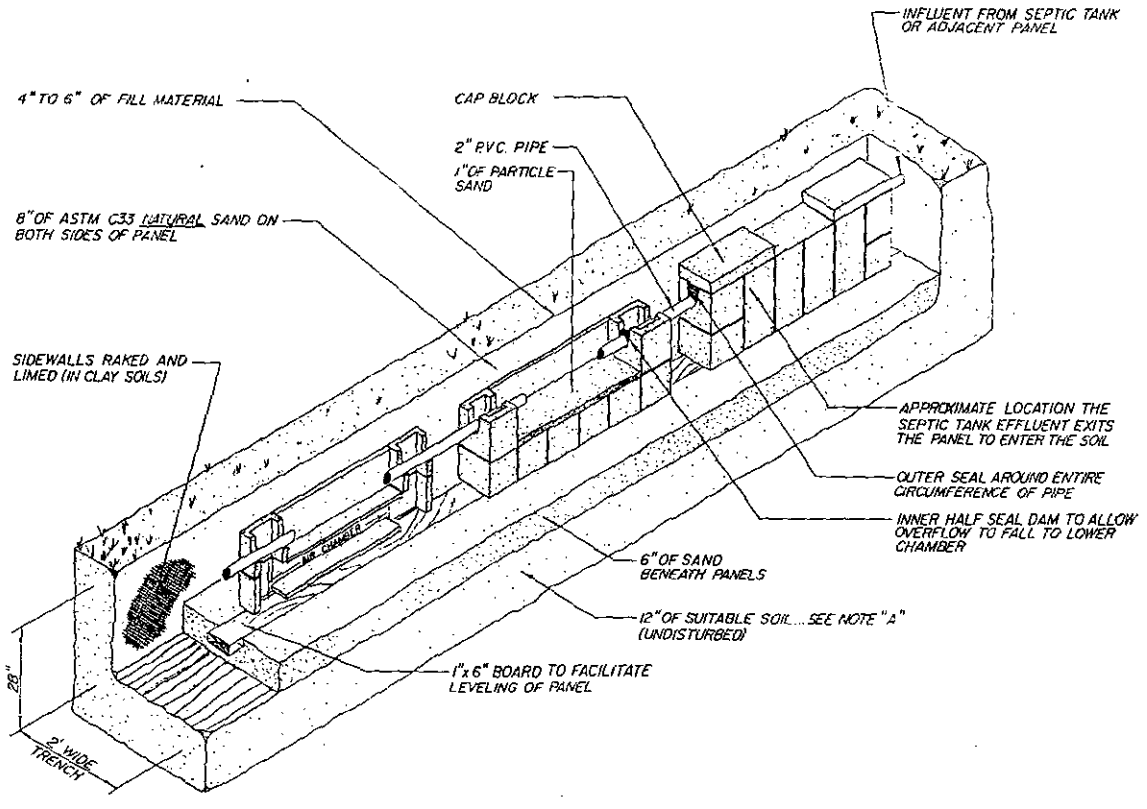
DETAIL "B" - SECTION

NO SCALE

Pump Tank Drawing



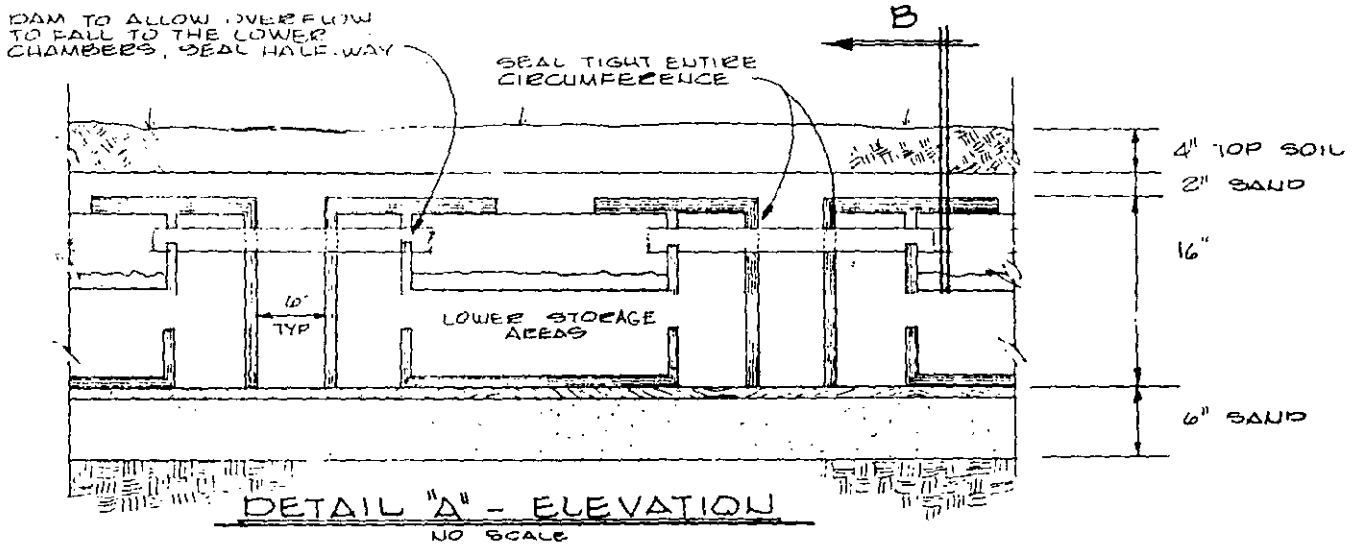
Isometric Drawing of a Segment of 16" T&J Panel Drainfield



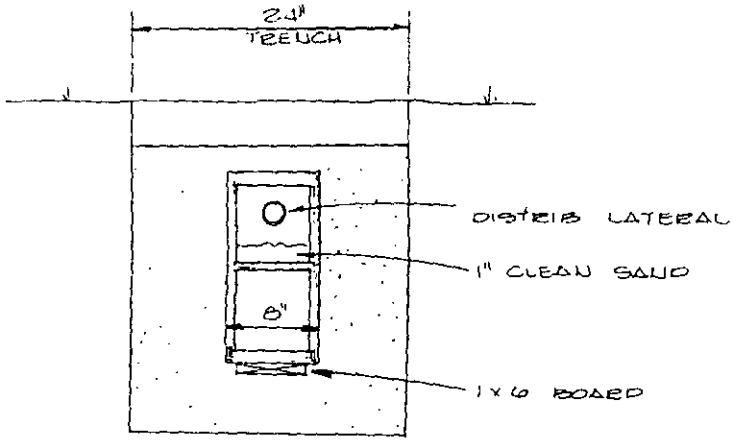
THE T. & J. PANEL
WASTE WATER TREATMENT SYSTEM

PATENT NUMBER 4013559

P.O. Box 288 • Statesville, North Carolina 28677
N.C. WATS 1-800-222-2577 • (704)872-9566



DETAIL "A" - ELEVATION
NO SCALE



DETAIL "B" - SECTION
NO SCALE

BK: 06526 PG: 0760/0760 #:0132 6.00

REGISTERED MAY/13/1991 12:55PM ANNE A. POWERS REGISTER OF DEEDS MECK. CO. N.C.

FILE NO. 7342A

STATE OF NORTH CAROLINA

COUNTY OF MECKLENBURG

COPY

ACKNOWLEDGEMENT OF REQUEST BY OWNER FOR RECLASSIFICATION OF SITE FROM "UNSUITABLE" TO "PROVISIONALLY SUITABLE" UNDER 10 NCAC 10A .1948(c)

The undersigned, JoAnn Houser Grant

owner of property located at 15900 Hubbard Rd.

(the site") and described in an instrument recorded in Book 3257 at Page 89, Mecklenburg Public Registry,

hereby acknowledges that he applied to the Mecklenburg County Department of Environmental Health ("the Department") for a permit t
install a septic tank sewage disposal system on the site; that the Department evaluated the site for suitability for such a system in acc
dance with the regulations promulgated by the North Carolina Commission for Health Services at 10 NCAC 10A .1934 et seq; that the
Department originally classified the site as "unsuitable" pursuant to the standards set forth in the regulations; that the undersigned requ
ested pursuant to 10 NCAC 10A .1948(c) that the Department reclassify the site as "provisionally suitable" in light of the particular septic tan
k system proposed by the undersigned; that the Department considered various studies, data and other information which indicate to the D
epartment that the septic tank system proposed by the undersigned can reasonably be expected to function satisfactorily and thus that the li
mitations specified in 10 NCAC 10A .1948(c)(1), (2), and (3) can be made; 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 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 Departmen
t, its officials, employees or agents assume any liability for any damages of any kind which are caused, or which may be caused, by a malfunc
tioning system.

The undersigned further agrees for himself, his heirs and assigns that he shall indemnify and hold harmless the Department, its empl
oyees and officials, as well as Mecklenburg County and its employees and officials, for any damages or other claims of any person or persons
whatsoever arising out of the installation, operation, or failure of said septic tank system.

The undersigned further agrees for his heirs and assigns that, in the event any septic tank system installed under authority of the af
oresaid permit fails to perform adequately in any respect, he will take whatever measures are required to correct same; or if such is impos
sible, will discontinue use of said system immediately.

Use of the singular masculine pronoun forms herein shall be deemed to also include the plural and feminine forms as the context may
require.

This document shall be placed on the public records of the Register of Deeds of Mecklenburg County and indexed therein under the
names index in the name or names of the undersigned, and the foregoing acknowledgements shall henceforth be binding on all persons
having any right, title, or interest in the site.

This 13 day of May, 1991.

X JoAnn Houser Grant (SEAL)

(SEAL)

STATE OF NORTH CAROLINA
COUNTY OF MECKLENBURG

I, DEBORAH T. MERRITT, a Notary Public for said County and State, do hereby certify that JoAnn Houser Grant personally appeared before me this date and acknowledged the execution of the foregoing instrument.

WITNESS my hand and notarial seal, this 13 day of May, 1991.

Deborah T. Merritt
Notary Public

Commission Expires 7-13-92

STATE OF NORTH CAROLINA
COUNTY OF _____

I, _____, a Notary Public for said County and State, do hereby certify that _____ personally came before me this day and acknowledged that he is _____, and that by authority duly given and as the act and deed of said corporation, the foregoing instrument was signed in its name by its _____, sealed with its corporate seal and attested by _____.

WITNESS my hand and notarial seal, this _____ day of _____, 19__.

_____
Notary Public

Commission Expires _____

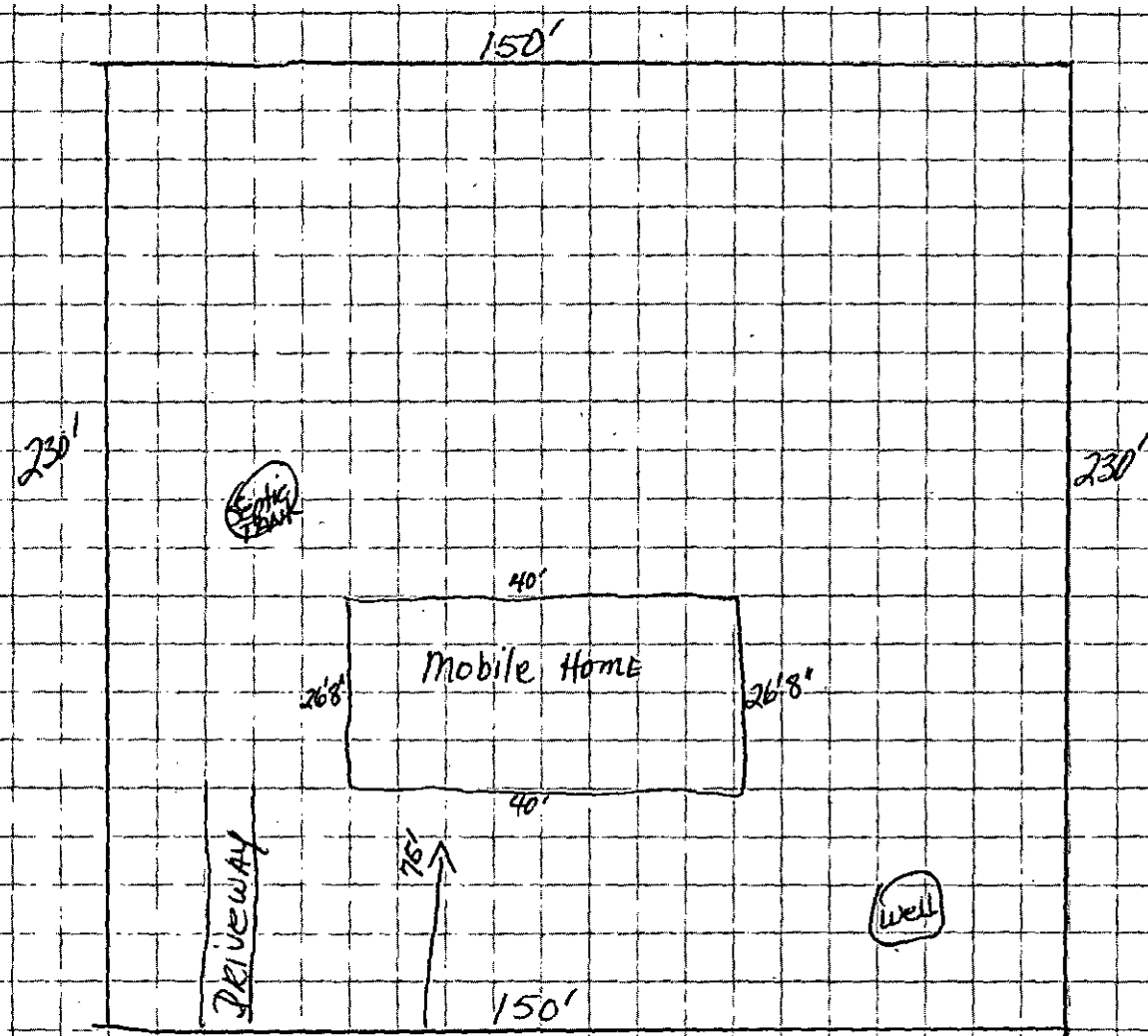
PROPOSED PLOT PLAN

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

FILE: 7342A

TC: _____

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.



APPROVAL DATE _____

White - Health Department's Copy Canary - Environmentalist's Copy Pink - Owner's Copy

Mecklenburg County
Health Department

May 8, 1991

Ms. JoAnn Houser Ghant
15900 Hubbard Road
Huntersville, N.C. 28078

Re: Property located at 15900 Hubbard Road
File: 7342A
Parcel: 013-131-22

Gentlemen:

Receipt of your plans for a modified waste disposal system for the property referenced above is acknowledged.

Your plans for the modified system for the above property as submitted are approved with the following comments:

- The Well should be located 100 feet or no less than 50 feet away from any part of the sewage disposal system and repair area.
- Water saving plumbing devices and low flush toilets should be installed when constructing the residence.
- Occupants to utilize maximum water conservation measures wherever possible.
- Effectively rake and lime all trench sidewalls
- Landscaping of repair area to be undisturbed. No grading, shaping, or altering in anyway.

Although the 100% repair area is not required, the maximum feasible remaining area, as determiend by this department, shall be allocated for system repair.

Upon execution and recording with the Register of Deeds Division Office, Mecklenburg County, of the enclosed "Septic Tank Agreement Form", an Improvements Permit may be issued by this office.

Sincerely,

Gene Vaughan, R.S., Supervisor
Individual Water and Wastewater Systems

G/lw

Enclosures - 3 Septic Tank Agreement Forms

Mecklenburg County
Health Department

April 4th, 1991

JoAnn Houser Ghant
619 Belton Street
Charlotte, NC 28209

RE: Property located at 15900 Hubbard Road
FILE: 7342A
PARCEL: 013-131-22

Dear Sir:

At your request, a field investigation was conducted on the property designated above for the purpose of determining site suitability for the installation of a ground absorption sewage disposal system. The results of this investigation showed the property to be classified UNSUITABLE for the installation of such a system. A copy of the Site Evaluation Report (Serial Number 17089) is enclosed.

State regulations provide that sites originally classified unsuitable may be utilized for the installation of alternate or modified sewage disposal systems provided the requirements of 10 NCAC 10A .1948 (c) are met. A reprint of this section is enclosed for your information.

Should you desire to file for permission to install an alternate or modified sewage treatment system on the property, please submit an Application For An Improvement Permit with an ACCURATELY dimensioned plot plan detailing the location of current and/or proposed buildings, wells and sewage disposal systems to this office. They will be reviewed, and if it is determined that the proposed system may reasonably be expected to function satisfactorily, an Improvement Permit will be issued by the Department upon completion by you, of a formal request for lot reclassification.

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

Very truly yours,

Gene Vaughan, R.S., Supervisor
Individual Water and Wastewater Systems

Enclosure (2)

Environmental Health Division
1200 Blythe Boulevard • Charlotte, North Carolina 28203 • (704) 376-4603

MECKLENBURG COUNTY HEALTH DEPARTMENT
SITE EVALUATION REPORT
SERIAL NUMBER 17089

File: Action 2

Parcel: 7342A
013-131-22

☐ PC

Location:

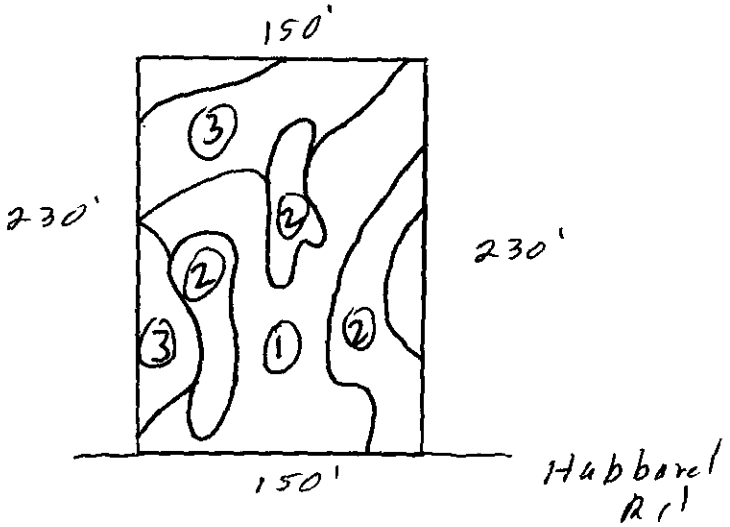
Subdivision: 15900 Hubbard Road

Lot: Block: Acres: .79

Owner:
Address: JoAnn Houser Ghant
619 Belton Street
Charlotte, NC 28209

Comments: MAY NEED 100% REPAIR
MAY NEED LIFT PUMP

Described by: Kelly Randall
Date: 4-2-91



***** EVALUATION KEY *****
S = Suitable U = Unsuitable
PS = Provisionally Suitable
The "Area Classification" *below* indicates the suitability of areas in the diagram.

FACTORS	AREA 1	AREA 2	AREA 3	AREA 4	AREA 5	AREA 6
Topography	(S) PS U 2-12%	S PS (U) GULLYS	S PS (U) DRAINAGEWAY DEPRESSION	S PS U	S PS U	S PS U
Texture	S (PS) U CLAY	S PS U —	S PS U	S PS U	S PS U	S PS U
Structure	S (PS) U SUB. ANG. BLKY.	S PS U —	S PS U	S PS U	S PS U	S PS U
Drainage	S (PS) U > 36"	S PS U —	S PS U	S PS U	S PS U	S PS U
Depth	S (PS) U > 43"	S PS U —	S PS U	S PS U	S PS U	S PS U
Restrictive Horizons	S PS U NONE	S PS U —	S PS U	S PS U	S PS U	S PS U
Available Space	S PS (U) RESTRICTED	S PS U —	S PS U	S PS U	S PS U	S PS U
Other (specify)	S PS U —	S PS U —	S PS U	S PS U	S PS U	S PS U
Soil Group/Series	CECIL LIKE	GULLYS	DRAINAGEWAY DEPRESSION			
Area Classification	S PS (U)	S PS (U)	S PS (U)	S PS U	S PS U	S PS U

APPLICATION FOR SOIL INVESTIGATION

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

(OFFICE USE ONLY)

FILE: 7342A

TC: 013-131-22

☑ PC ☐ REPT

JOB LOCATION

① ADDRESS: 15900 Hubbard Rd.

② SUBDIVISION: _____ ③ LOT: _____ ④ BLOCK: _____

⑤ PARCEL REFERENCE: BOOK NO.: _____ PAGE NO.: _____ PARCEL NO.: 013-131-22

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

OWNER

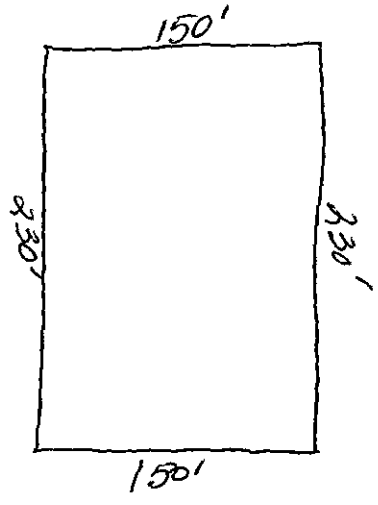
⑦ NAME: JO ANN (FIRST) HOUSER (MIDDLE) GRANT (LAST)

⑧ MAILING ADDRESS: 619 Belton St

⑨ CITY: Charlotte ⑩ STATE: NC ⑪ ZIP: 28209

⑫ PHONE: (WORK) 525-1714 (HOME) 5218423

⑬ Accurately diagram and dimension lot.



⑭ 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: Jo Ann Houser Grant

Date: 3-22-91

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

WHITE - HEALTH DEPARTMENT'S COPY • CANARY - ENVIRONMENTALIST'S COPY • PINK - OWNER'S COPY

MECKLENBURG COUNTY HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION

CHARGE SLIP

Date: 3-22-91

Name/Company: JoAnn Houser Engr

Sanitation _____

Vector Control _____

O.P.W.D. ✓

Service: App. Soil Test (Approx. 1 acre)
15900 Hubyard Rd
TP: 013-131-22
File: 7342A

MECKLENBURG COUNTY
HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION

Fee: $PAID 50.00 ck # 4961

MAR 22 1991

NOTICE:

A processing fee of $15.00 will be charged for all returned checks in accordance with N.C. General Statute 25-3-512.

Completed by

Collected by