IREDELL COUNTY HEALTH DEPARTMENT

STATESVILLE 704-878-5305 MOORESVILLE 704-664-5281

IMPROVEMENT PERMIT / AUTHORIZATION TO CONSTRUCT / OPERATION PERMIT / EXISTING SYSTEM INSPECTION

PERMIT# 86044 PIN# 4702 82 3357 DATE JAN 26 2000

OWNER OR CONTRACTOR Kings Forest Inc PHONE: Business 532-6527 Home

ADDRESS 5551 Monroe Rd Charlotte

LOCATION Old MTR d 5th (R) E Lewis Ferry (L) Eufola (R) Barbary Lot on Left Toward end

SUBDIVISION Lansdowne BLOCK / SECTION M4 LOT 27 LOT AREA 1.09 SITE CLASS. PS DESIGN FLOW 360 L.T.A.R. .12

Septic Tank: 1000 Gallons; STB 1012 Date 04/24/02

Pump Tank: 1000 Gallons; PT 17 Date 04/26/02

Pump Make: Gould's Model WE0311M Serial No. F0263302

Nitrification Field: No Fields 1 Square Feet 3000 Linear Feet 600

No Lines 10 Trench Width 12" Max Trench Bottom Depth 12" Gravel Depth N/A

☑ New System ☐ Repair System Type: I, II, III, (IV), V, VI

System Description: LPP

Repair System Description: Same

Maintenance Agreement Required: ☑ Yes ☐ No

☐ House/Mod. Home No. Bedrooms 3

☑ Mobile Home No. Bathrooms 2

☐ Business No. Employees

☐ Other

☐ Slab ☑ Crawl Space ☐ Basement w/plumbing ☐ Basement wo/plumbing

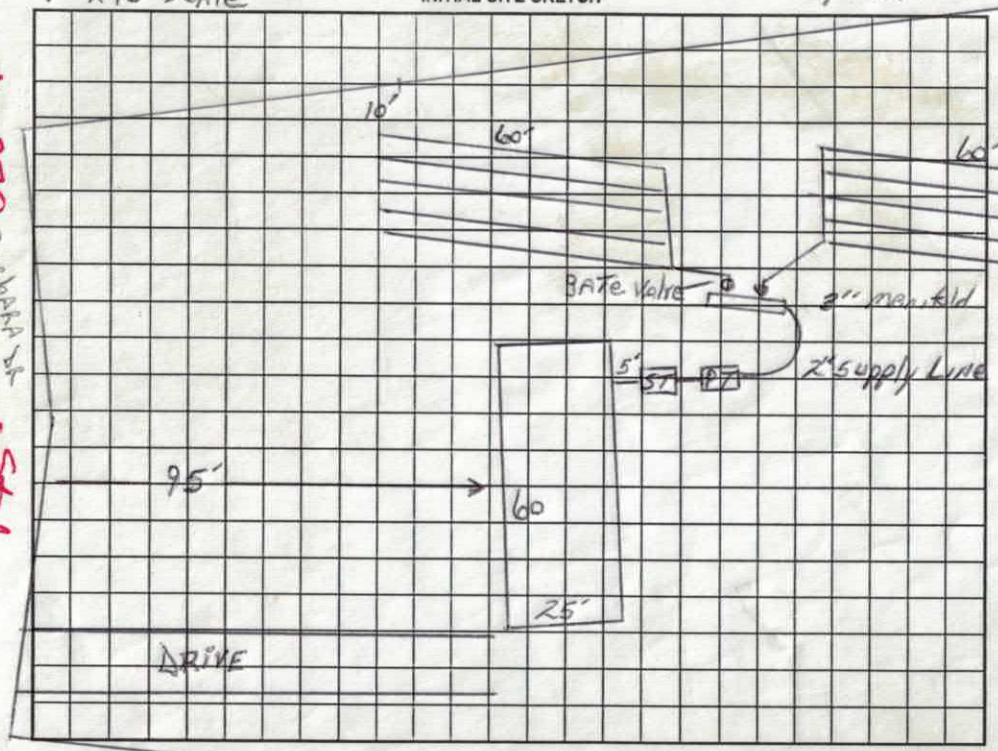
Water Supply: ☐ Individual ☑ Public ☐ Community

Comments:/Conditions: Trees in direct line of trench/lateral are to be removed. All other trees within drain field area are to be cut down & stumps ground up.
See Attached LPP plan for additional conditions & Pump information PL347

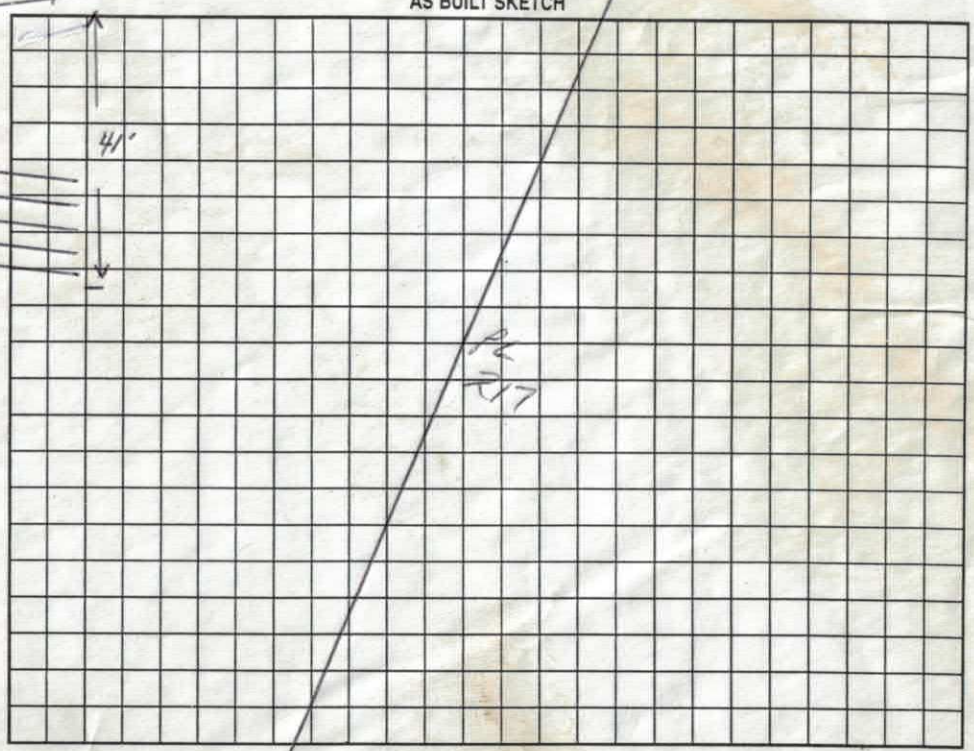
Comments:/Conditions: SEPTIC TANK INSTALLED USING TUFF TIGHT FILTER & SEPTIC MARKER

1" x 40 Scale

INITIAL SITE SKETCH



AS BUILT SKETCH



* 279 Barbara Dr - Stph.

Permit can be suspended or revoked if any false information is supplied toward securing the permit/any unauthorized changes are made to the site/any unauthorized changes are made in the installation of the system. Improvement Permit with plat valid without expiration. Improvement Permit with site plan valid for sixty months. Authorization to Construct is valid for a period equal to that of Improvement Permit – not to exceed sixty months.

Signed: James T. Bagley PL 264 date

Installed by: CRAIG THOMPSON SEPTIC & GRADING

Improvement Permit by: J C Hoke date JAN 14 2000

Operation Permit by: Patrick Mitchell date 10/01/02

Authorization to Construct by: J C Hoke date JAN 14, 2000

Existing System Inspection by: date

HEALTH DEPT. COPY: WHITE OWNER COPY (FINAL): YELLOW OWNER COPY (INITIAL): PINK

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

Sheet ___ of ___
PROPERTY ID #: ___
COUNTY: Iredell

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: ___ APPLICANT: Kings Forest
ADDRESS: 5551 Monroe Rd Charlotte APPLICATION DATE: 10 26 99 DATE EVALUATED: 11 4 99
PROPOSED FACILITY: 3Bdrm SN PROPOSED DESIGN FLOW (.1949): 360 PROPERTY SIZE: 1.09
LOCATION OF SITE: Lot 27 Lansdowne Enfield Rd (T) Barbary Rd Lot PROPERTY RECORDED: ___
on Left Toward End.
WATER SUPPLY: ☐ Private ☑ Public ☐ Well ☐ Spring ☐ Other ___
EVALUATION METHOD: ☑ Auger Boring ☐ Pit ☐ Cut
TYPE OF WASTEWATER: ☑ 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	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
1	L 5-8%	0-12	Plow G SCL	FR	Yellow Trans Gray 5Y 8/1				US
		12-36	SAB C	FR					
		36-48	SAB C	FR					
2	L 5-8%	0-15	Plow G SCL	FR	Brown Trans (Trace Red) Chroma 2 Trans/Reds				US
		15-38	SAB C	FR					
		38-48	SAB C	FR					
3	L 5-8%	0-28	SAB C	FR	Chroma 2 Red+Trans	Auger Sides Sl. Shed up due to SS SP			US
		28-40	SAB C	FR					
4									

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)		
System Type(s)		
Site LTAR		

OTHER FACTORS (.1946): ___
SITE CLASSIFICATION (.1948): ___
EVALUATED BY: ___
OTHER(S) PRESENT: ___

DIVISION OF ENVIRONMENTAL HEALTH
ON-SITE WASTEWATER SECTION

PROPERTY ID #:
COUNTY: Iredell

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: _____ APPLICANT: Kings Forest
ADDRESS: _____ APPLICATION DATE: _____ DATE EVALUATED: 1-12-99
PROPOSED FACILITY: 3 Bd Rm PROPOSED DESIGN FLOW (.1949): _____ PROPERTY SIZE: 1.09
LOCATION OF SITE: Lot 27 Lansdowne PROPERTY RECORDED: _____
WATER SUPPLY: ☐ Private ☐ Public ☐ Well ☐ Spring ☐ Other _____
EVALUATION METHOD: ☐ Auger Boring ☐ Pit ☐ Cut
TYPE OF WASTEWATER: ☐ Sewage ☐ Industrial Process ☐ Mixed

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941) .1941 STRUCTURE/ TEXTURE	SOIL MORPHOLOGY (.1941) .1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFIL CLASS & LTAR
1		0 22	SCL		5Y 8/1	20"			
		22-48	ABK C	F, -VF,					
2		0-10	SCL			20"			
		10 30	SABW C	Inclusion F,					
		30 50	C	F, VF,					
3		0-11	SCL			23"			
		11. 23	ABK C	F,					
		23-48	C						
4		0-11	SCL						
		11-29	SABW C	F,					
		29+	C		Chroma 2				

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)		
System Type(s)		
Site LTAR		

OTHER FACTORS (.1946): _____
SITE CLASSIFICATION (.1948): _____
EVALUATED BY: _____
OTHER(S) PRESENT: _____

DIVISION OF ENVIRONMENTAL HEALTH
ON-SITE WASTEWATER SECTION

PROPERTY ID #:
COUNTY: Iredell

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

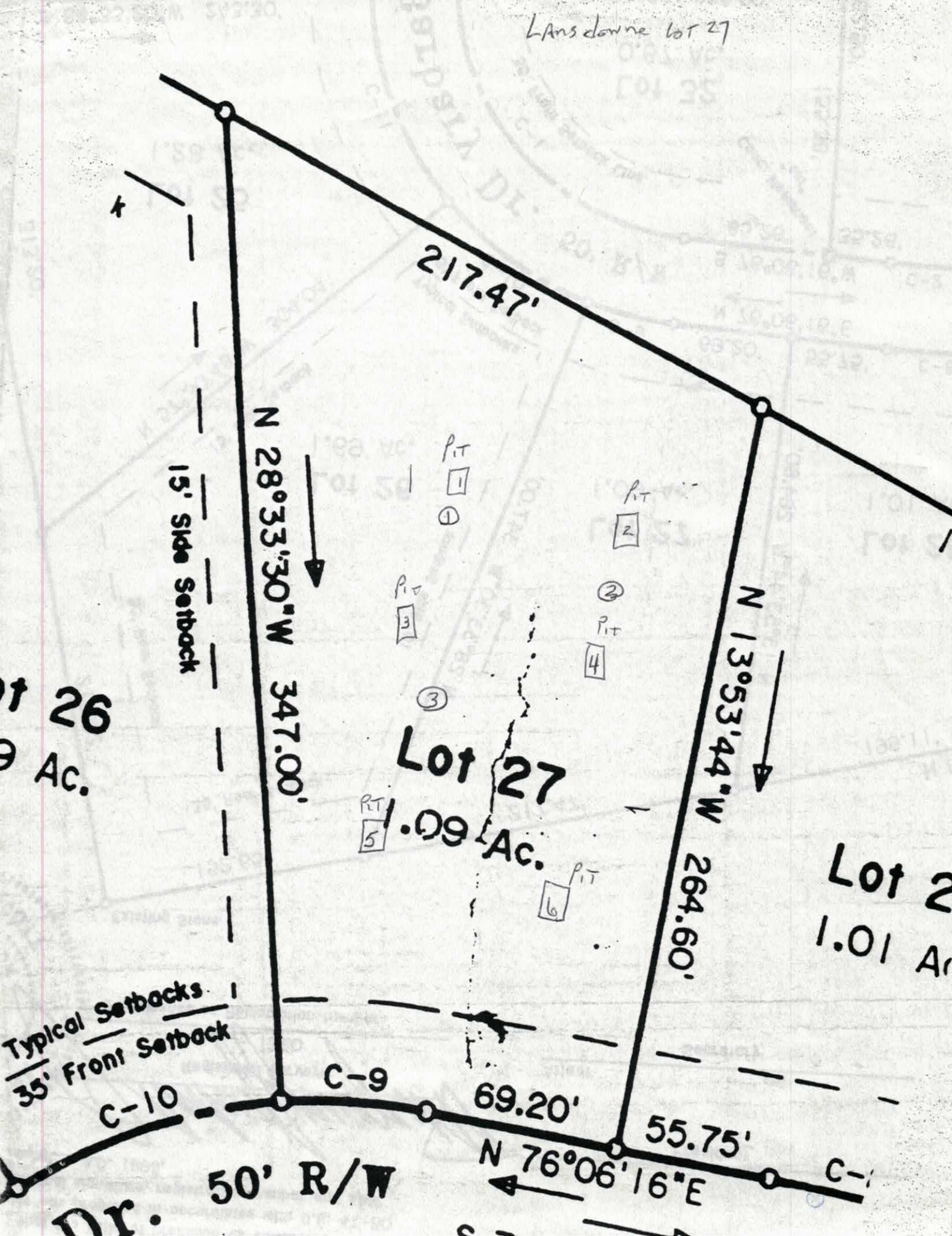
OWNER: _____ APPLICANT: Kings Forest
ADDRESS: _____ APPLICATION DATE: _____ DATE EVALUATED: 11 12 9
PROPOSED FACILITY: 3 Bd Hm PROPOSED DESIGN FLOW (.1949): _____ PROPERTY SIZE: 1.09
LOCATION OF SITE: Lot 27 Lansdowne PROPERTY RECORDED: _____
WATER SUPPLY: ☐ Private ☐ Public ☐ Well ☐ Spring ☐ Other _____
EVALUATION METHOD: ☐ Auger Boring ☐ Pit ☐ Cut
TYPE OF WASTEWATER: ☐ Sewage ☐ Industrial Process ☐ Mixed

PROFILE #	.1940 LAND-SCAPE POSITION/ SLOPE %	HORI-ZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941) .1941 STRUCTURE/ TEXTURE	.1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFIL CLASS & LTAR
1		0-9	SCL		Chroma 2 @	18"			
		9-39	ABK C	F,					
		39-52	C	F,					
2		0-7	SCL		Chroma 2	24" To	PLATY STRUCTURE		
		7-36	PLATY ABK C/SAP						
		36-52	C	VF,					
3									
4									

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)		
System Type(s)		
Site LTAR		

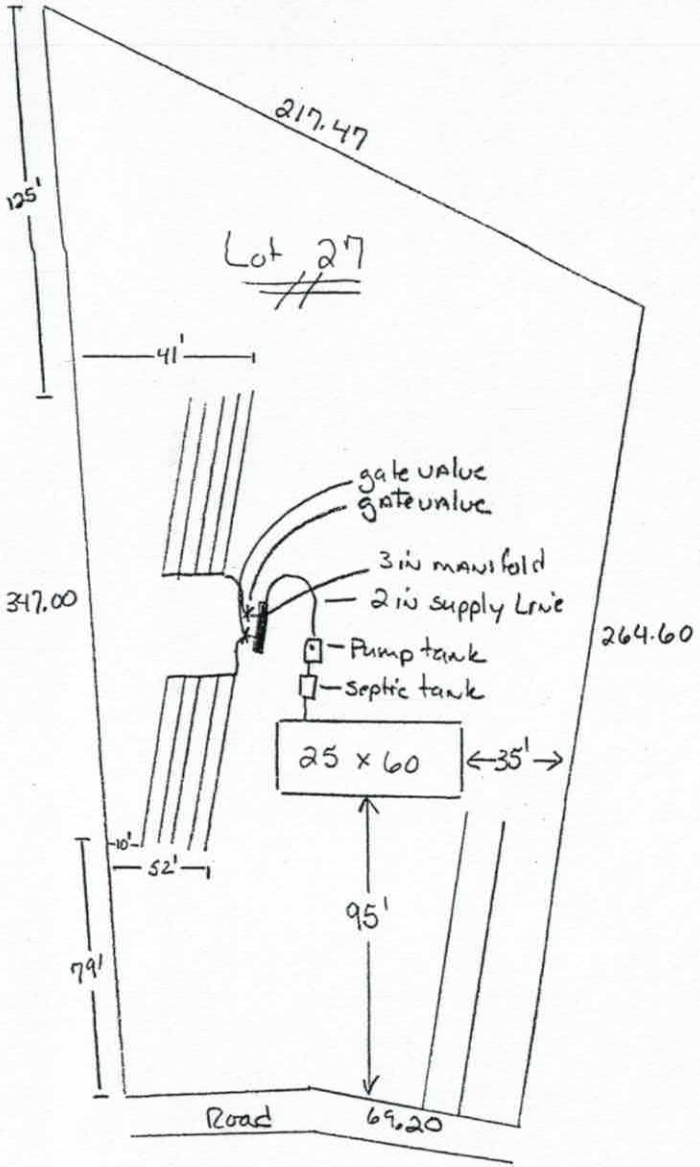
OTHER FACTORS (.1946): _____
SITE CLASSIFICATION (.1948): _____
EVALUATED BY: _____
OTHER(S) PRESENT: _____

Lansdowne Lot 27



Landsdown Lot 27
3 bedrooms
360 gpd ÷ .12 LTAR = 3000 sqft
3000 sqft ÷ 5 = 600 LRT

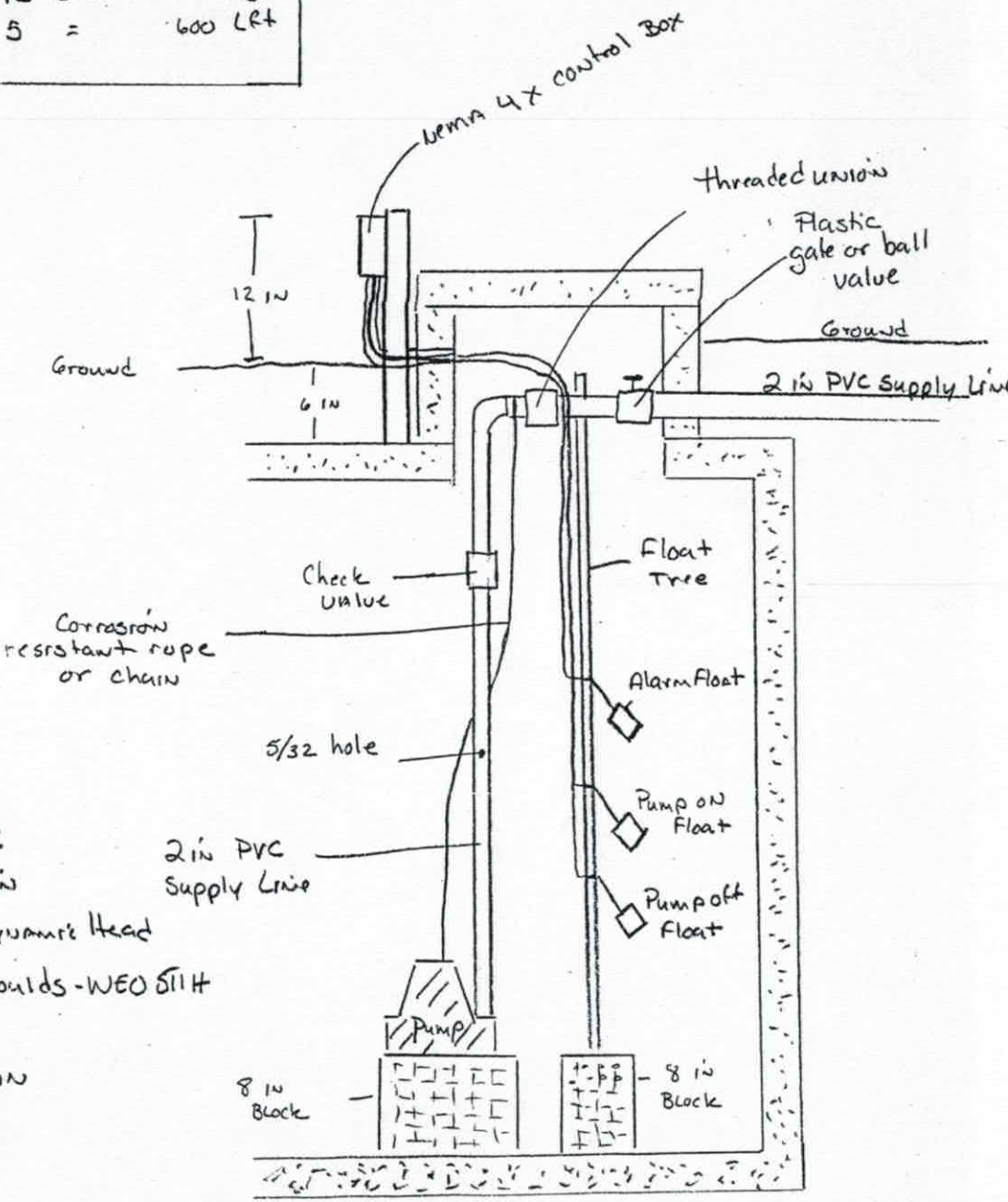
approximate scale
1" – 40'



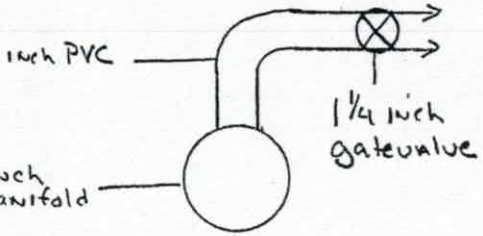
Effluent Pump
45 gallons / min
22 ft Total Dynamic Head
Recommend - Goulds - WE0 511H

Pump Draw Down
290 gallons
6.6 minutes

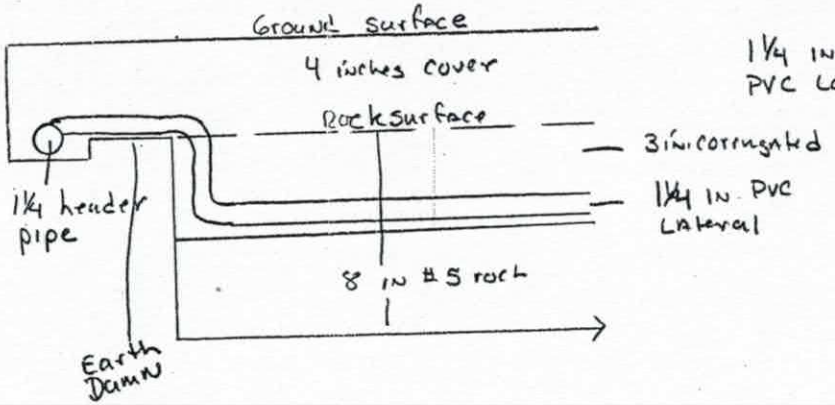
Pump Tank



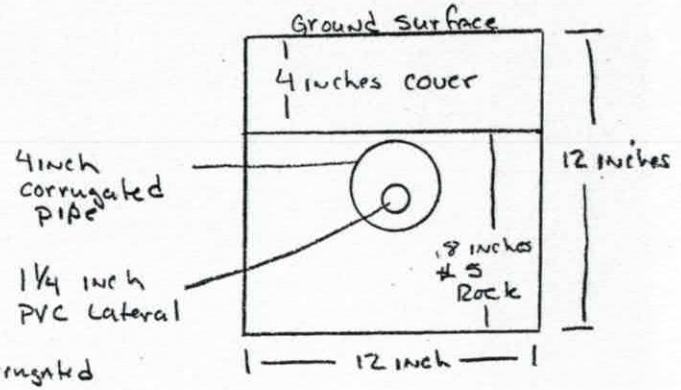
Manifold

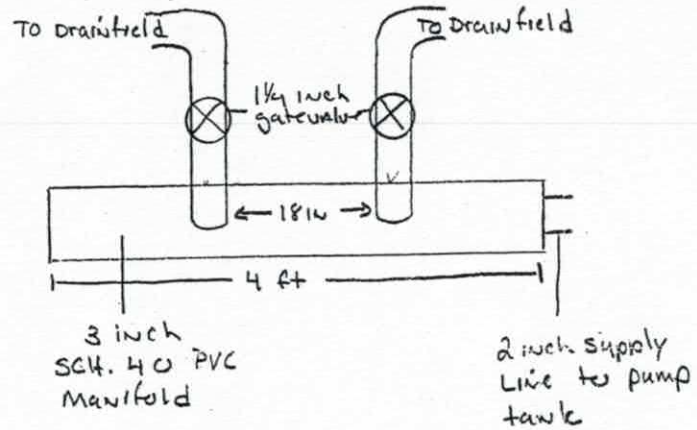


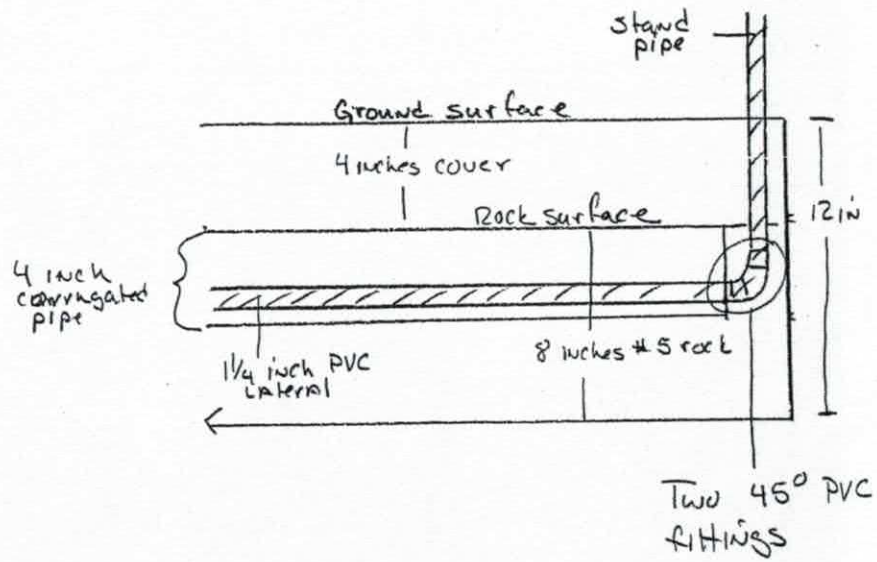
Header Trench/Lateral



Laterals / Trenches







Landsdown Lot 27

Low Pressure Pipe Distribution, Design Criteria

A. Septic Tank
   1000 gallons

B. Pump Tank
   1. 1000 gallons
   2. Pump tank shall have a riser extending 6 inches above finished grade.
   3. Effluent pump capable of delivering 45 gallons per minute and 22 feet total dynamic head.
   4. Controls to consist of a high water alarm and Dual on and off floats.
   5. Float for high water alarm shall be set no more than 6 inches above high water level of the pump cycle.
   6. All electrical connections shall be outside of the pump tank, and shall be installed in a NEMA 4X enclosure. Connections from the controls to the pump tank shall be in a watertight, gas tight conduit.
   7. Drill a 5/32 hole in supply line inside of the pump tank above the off control float.
   8. Install a check valve, plastic gate or ball valve and manual disconnect in the supply line inside of the pump tank.

C. Distribution System
   1. Trees in the direct line of a trench/lateral are to be removed. All other trees within the drainfield are to be cut down and the stumps ground up.
   2. Absolutely no construction of the system shall take place while the soil is in a wet condition.
   3. Heavy vehicular traffic is prohibited over the system before, during or after installation of the system.
   4. Supply line shall be 2 inch Sch. 40 PVC.
   5. Distribution manifold shall be 4 foot long and 3 inch Sch. 40 PVC.
   6. Distribution manifold to be installed level.
   7. Two, 1&1/4 inch lines off of distribution manifold. Each line is to have a 1&1/4 inch gate valve to control pressure in each subfield.
   8. Gate valves shall be protected in valve boxes.
   9. Laterals shall be arranged in 2 subfields with 5 laterals in each subfield.
   10. Laterals shall be 1&1/4 inch 160 psi PVC and 60 feet long.
   11. Laterals shall be installed level and on the contour of the slope with a minimum of 5 foot centers.
   12. Laterals shall be installed in trenches 12 inches wide and 12 inches deep with 8 inches of stone and four inches of cover.
   13. 1&1/4 inch laterals shall be encased in 3 inch corrugated pipe.
   14. Stabilize drainfield area with grass as soon as possible after completion of installation.

D. Lateral Design

1. Laterals are to be numbered with number 1 being the highest and 5 being the lowest in subfield A. In subfield B, number 6 is the highest and 10 the lowest.
2. Stand pipes shall be cut off at or below ground level after initial pressure is set. The stand pipes shall have threaded caps and protected in valve boxes.
3. Stand pipes are to be constructed with two 45 degree PVC fittings, **NOT A 90,** from the lateral.
4. 1 hole per lateral shall face down and the rest shall face up.

Lateral Number	Number of Holes/Line	Hole Spacing	First Hole	Hole Size	Stand Pipe Height
1	12	5.00ft	2.50ft	5/32	2.00ft
2	10	6.00ft	3.00ft	5/32	2.59ft
3	9	6.67ft	3.33ft	5/32	3.18ft
4	8	7.50ft	3.75ft	5/32	3.76ft
5	7	8.57ft	4.29ft	5/32	4.51ft
6	11	5.45ft	2.73ft	5/32	2.00ft
7	9	6.67ft	3.33ft	5/32	3.00ft
8	8	7.50ft	3.75ft	5/32	3.75ft
9	7	8.57ft	4.29ft	5/32	4.33ft
10	6	10.0ft	5.00ft	5/32	5.08ft

E. Pump Tank Draw Down

Internal Length Pump Tank X Interal Width Pump Tank X Internal Height Pump Tank = Cubic Feet in Pump Tank

Cubic X 7.48 gal/cubicft = Gallons in Tank

Gallons in Tank / Internal Height in Inches = Gallons per Inch 20"/Gallon

Draw Down is to be 290 gallons. 290 divided by Gallons per Inch = Inches Draw Down within the Pump Tank

PROJECT : Landsdown Lot 27
COUNTY : Iredell
REFERENCE NO. : 01
DATE : 12-13-1999

SUMMARY OF DESIGN
==========

DESIGN FLOW	:	360	GPD
APPLICATION RATE	:	0.12	GPD/SQFT
TOTAL AREA REQUIRED	:	3000	SQFT
TOTAL LATERAL LENGTH REQUIRED	:	600	LFT
TOTAL LATERAL LENGTH SPECIFIED	:	600	LFT
NUMBER OF FIELDS	:	1	
LATERAL LENGTH	:	60	FT
NUMBER OF LATERALS	:	10	
NUMBER OF LATERALS PER FIELD	:	10	
SLOPE	:	0	PERCENT

FIELD NO. 1

LAT. NO.	LENGTH	ELEV-ATION	PRESS. HEAD	HOLE SIZE	HOLE SPAC.	NO.OF HOLES	FLOW PER HOLE	FLOW PER LATERAL
1	60	112.75	2.00	0.156	5.00	12	0.41	4.87
2	60	112.16	2.59	0.156	6.00	10	0.46	4.62
3	60	111.57	3.18	0.156	6.67	9	0.51	4.60
4	60	110.99	3.76	0.156	7.50	8	0.56	4.45
5	60	110.24	4.51	0.156	8.57	7	0.61	4.27
6	60	114.08	2.00	0.156	5.45	11	0.41	4.46
7	60	113.08	3.00	0.156	6.67	9	0.50	4.47
8	60	112.33	3.75	0.156	7.50	8	0.56	4.44
9	60	111.75	4.33	0.156	8.57	7	0.60	4.18
10	60	111.00	5.08	0.156	10.00	6	0.65	3.88

TOTAL 600 FEET

FLOW TO FIELD 44.25 GPM
FLOW VARIATION 20.3 %

LATERAL PIPE SIZE	:	1 1/4	INCHES (SDR 26)
MANIFOLD PIPE SIZE	:	3	INCHES (SDR 26)
SUPPLY LINE PIPE SIZE	:	2	INCHES (SCHEDULE 40)
SUPPLY LINE LENGTH	:	10	FEET
TOTAL DYNAMIC HEAD	:	21.13	FEET
DOSING VOLUME	:	290	GALLONS
~~PUMP TANK INSIDE LENGTH~~	:	~~8.00~~	~~FEET~~
~~PUMP TANK INSIDE WIDTH~~	:	~~4.00~~	~~FEET~~
~~PUMP TANK DRAWDOWN~~	:	~~1.21~~	~~FEET~~

To be determined in the field

MINIMUM DOSING VOLUME: 289.7 GALS (PUMP RUN TIME : 6.5 MIN.)
MAXIMUM DOSING VOLUME: 577.7 GALS (PUMP RUN TIME :13.1 MIN.)
SELECTED DOSING VOLUME: 290.0 GALS (PUMP RUN TIME : 6.6 MIN.)

IREDELL COUNTY HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION
Application For Improvement Permit

ALL items on this application form must be completed before Health Department can begin work. One application must be completed by the property owner or agent for each (proposed) site.

PERSONAL INFORMATION:

Applicant	Phone #	Mailing Address	City	State	Zip Code
KINGS FOREST	(704) 532-~~1504~~ 6625	5551 MONROE Rd	CHARLOTTE	NC	28212

Current Property Owner	Mailing Address	City	State	Zip Code
KINGS FOREST	5551 MONROE Rd	CHARLOTTE	NC	28212

PROPERTY INFORMATION:

(Proposed) Subdivision Name	(Proposed) Lot #	(Proposed) Block/Section #	State Road #
LANSDOWNE	27		

(Proposed) Water Supply: (Public) / Private Well	**Preliminary Plat Approval Date** (DEVELOPERS ONLY)	Tax Map #
PUBLIC		

Specific Directions to Property FROM OLD MOUNTAIN Rd, TL ONTO BUFFALO SHOALS Rd, TR ON EULOLA Rd, TURN L ONTO BARBARA

TYPE OF FACILITY: (use check (X) or number as appropriate)

House ____ Mobile Home X Commercial ____ No. Bedrooms 3 No. Baths 2

No. Persons or Employees (commercial only) ____ Basement N/A Basement with Plumbing N/A

Crawl Space X Concrete Slab N/A Garbage Disposal N/A Jaccuzi or spa N/A

COVENANT AND SIGNATURE:

I hereby make application to the Iredell County Health Department for a soils/site evaluation of the property described above. This evaluation is to be conducted for the sole purpose of obtaining a septic system Improvement Permit. I hereby authorize Iredell County Health Department representatives to go onto the above property for purposes of conducting this evaluation. I understand that, by state law, any Improvement Permit issued on the above property may be voided if substantial changes are made to the designated sewage system site. The issuance of an Improvement Permit by the Iredell County Health Department does not relieve me from compliance with all other relevant state/local laws or regulations. As owner or authorized agent, I covenant that the contents of this application are true and represent the maximum facilities intended to be placed on this property to my knowledge to date.

I understand that any Improvement Permit issued on the above property is valid for five (5) years from the issuance date and is subject to revocation if the above described site plans or intended use changes.

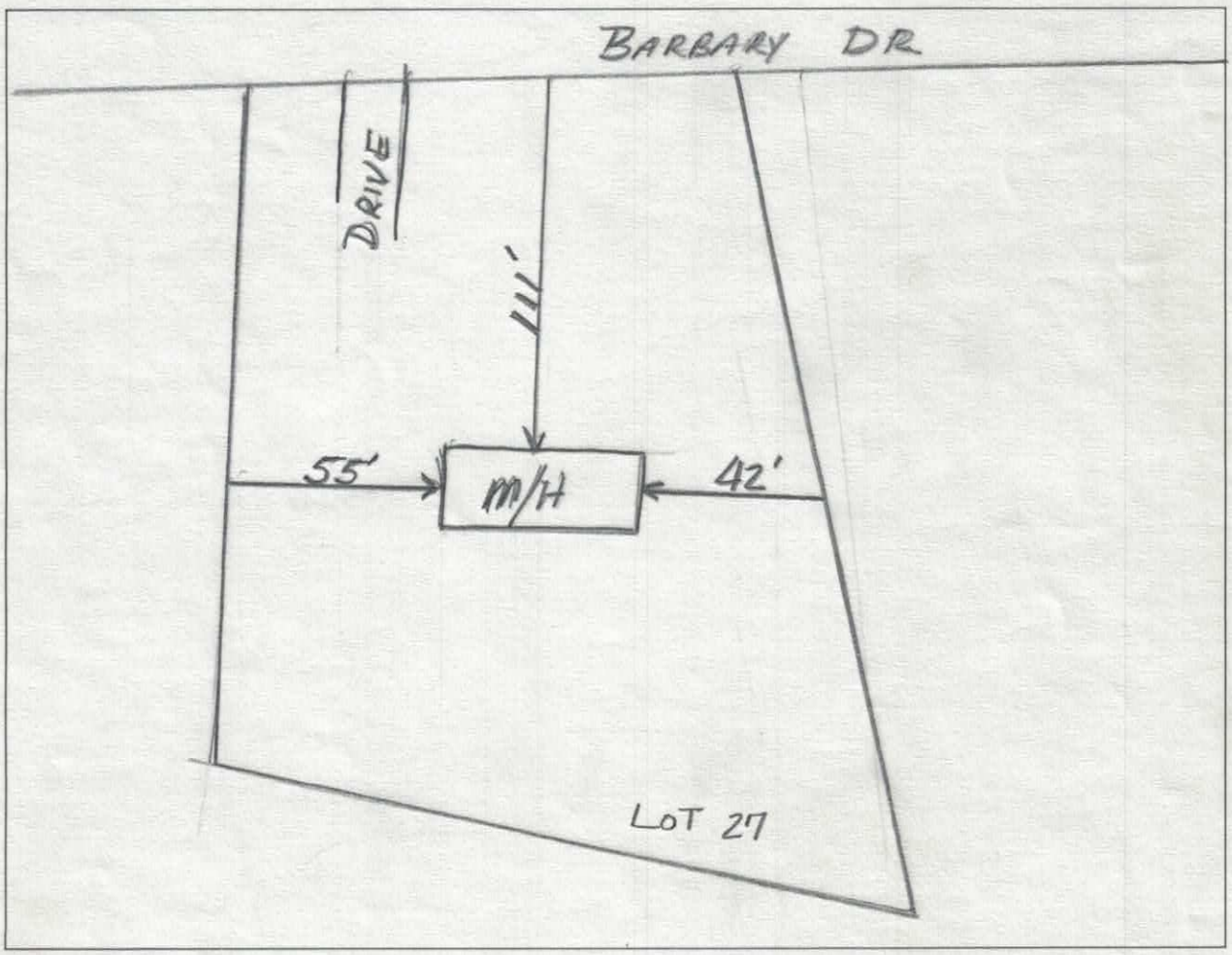
10/28/99 DATE [signature] SIGNATURE OF OWNER/AUTHORIZED AGENT

IREDELL COUNTY HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION
Application For Improvement Permit
Site Plan Form

INSTRUCTIONS TO APPLICANT: (Items in Parentheses are to be performed by DEVELOPERS ONLY)

All property corners must be staked and flagged with dimensions matching those shown on an approved final (preliminary) plat (**and** proposed house dimensions must be staked and flagged) before the Iredell County Health Department can begin review work on this proposed site. An application for an Improvement Permit is considered complete **only** when this site plan form is completed, signed, and attached to the application form.

As Close To Scale As Is Possible: 1. Draw in the proposed lot showing **all** proposed lot dimensions and orientation to proposed streets or roads. 2. Draw in the proposed structure showing dimensions and distances to property lines (include decks, walkways, etc.). E. Draw in the proposed driveway location. 4. Draw in all wells, both existing and proposed, including those on adjacent property (if known). 5. Draw in any other structure ie. sheds, outbuildings, pools, etc. which will occupy space on the proposed lot.



I hereby convenant that the above representation is correct to the best of my knowledge and ability.

10/28/99 Date Steve Belcher SIGNATURE OF OWNER/AUTHORIZED AGENT

IREDELL COUNTY
PROPERTY DESCRIPTION FORM
P.O. BOX 788 277 S. CENTER ST.
STATESVILLE, NC 28687
Call Sanitarian Between
8 a.m. and 9 a.m.
664-5281 / 878-5305

Permit No: 086044 Zoning Permit: X Improvements Permit: 1

Name: KINGS FOREST INC Address: 5551 MONROE RD

City: CHARLOTTE State: NC Zip: 282120000

Phone: 0005326527

Proposed Use: 03

PIN #: 4702-82-3357 Zoning: RA Township: 1400

Street Address: 279 BARBARY DR

Flood Zone: Plan Review Deposit: Date Received: / /

Subdivision/MHP: LANSDOWNE Lot #: 27 Lot Size: 1.09

Has Property been recorded? Y Community Water? Sewer?

Provider:

Watershed: WSIVPA Approximate Area to be Disturbed: 0

Total Built-upon Area: 0 Erosion Plan Required?

Setbacks: F=35 S=15 R=35

Minimum Lot Size: 31780 Minimum Lot Width: 100

Land Use Permitted in this Zoning District? Y

Comments: NEW D/W MH MUST HAVE 32 SQ FT DECK APPROVED STEPS UNDERPINNI

Hold Building Permits? Reason:

Location: OLD MT TL BUFFALO SHOALS TR EUFOLA TL BARBARY

Staff: JDK Date: 10/26/99

Fees: Zoning: $ 31.50 Health: $ 175.00

Signature of Applicant: Jeff Shane Baluk
Owner: Agent: