File No.: 2003.061644
Type 3a
7KKS-95-3-K3

BRUNSWICK COUNTY HEALTH DEPARTMENT
P.O. BOX 9 BOLIVIA, N.C. 28422 (910) 253-2250

IMPROVEMENT PERMIT

PERMIT IS SUBJECT TO REVOCATION IF SITE PLANS OR THE INTENDED USE CHANGE

An Authorization for Wastewater Construction must be attached to the Improvement Permit before any other permit can be issued and before a wastewater system can be installed.

Supporting documents such as the completed application form, site evaluation form, fill plan, etc., are considered a part of this Improvement Permit.

Owner/Authorized Agent : PNR PROPERTIES INC Tax Parcel : 199OA020

Lot: 20 Block: ______ Section: ______ Subdivision : SKIPPER RUN

Residential : XX Water Supply: XX Public ______ Private (well)

No. of units : 1 No. of bedrooms : 3 No. of occupants : 3

Commercial : N/A Number of employees : N/A Number of seats: N/A
Type of business: N/A

Size of septic tank : 900 g LTAR: 0.57 gpd/sq. ft. Drainfield sq. feet: 540 - w/25% reduction

No. of Lines: 3 Length ea.: 60' Trench width: 3 Bed : N/A Design Flow gpd: 360

Trench/ Bed bottom depth no deeper than: 18 inches Pump tank volume: ______
(if applicable)

If applicable, the following conditions must be met prior to issuance of an **Authorization for Wastewater Construction** and prior to wastewater system installation.

X Keep 100 feet from all water supplies (minimum of 50 feet must be maintained).
X Keep 10 feet from all water lines .
X Keep 10 feet from any property lines (no less than 5 feet for lots recorded prior to 7/1/77)
X Do not drive over, park, pave, or build any structure over the area for the septic tank system and the repair area if applicable.
X Do not install the septic system during wet conditions.
X Maintain Gravity Flow for septic system.
___ Drainage Maintenance Required.
X Suitable Fill material must be installed exactly per the Health Department approved fill plan. Fill check plan. *Fill check must be completed by the Health Dept. prior to issue of Authorization for Wastewater Construction.*
___ Approved for use of Alternative/Innovative Wastewater System (Specify)______
___ Submit Wastewater plans to the Health Department for review/approval
___ If Septic System Uses Rock Aggregate/Approved Filter Fabric Covering Required
X Septic Tank System must be installed per the Construction Authorization Permit.
___ ______

IMPROVEMENT PERMIT DATE: 9/3/03 **EXPIRATION DATE:** 9/3/08

Permit Not Valid Unless Signed by Authorized Agent: [signature]
Signature

ACTIONS OF BRUNSWICK COUNTY HEALTH DEPARTMENT REPRESENTATIVES ENGAGED IN THE EVALUATION AND DETERMINATION OF MEASURES REQUIRED TO EFFECT COMPLIANCE WITH THE APPLICABLE LAWS AND RULES SHALL IN NO WAY BE TAKEN AS A WARRANTY THAT SEWAGE TREATMENT AND DISPOSAL SYSTEMS APPROVED AND PERMITTED WILL FUNCTION IN A SATISFACTORY MANNER FOR ANY GIVEN PERIOD OF TIME. PERMIT IS SUBJECT TO REVOCATION IF THE SITE PLAN OR PLAT WHICHEVER IS APPLICABLE, OR THE INTENDED USE CHANGES.

The issuance of this permit does not preclude the Permittee from complying with any and all statutes, rules, regulations, or ordinances which may be imposed by other government agencies (local, state, and federal) which have jurisdiction.

SEPTIC TANKS SHALL HAVE AN APPROVED EFFLUENT FILTER & ACCESS DEVICES

IP0398
Updated 09/25/02

(910) 253-4381 / 763-1312 / 457-5281 File No. 03-L1644

BRUNSWICK COUNTY HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION
PO BOX 9, BOLIVIA, NC 28422

FILL PLAN FOR WASTEWATER SYSTEM

Fill

In some cases your property can be modified in order to install a conventional or modified conventional septic tank system. A commonly accepted Site Modification is the use of fill.

Fill is a specific amount of soil (sand to sandy loam) placed in an area designated for the septic system to overcome limitations of the soil and site due to shallow soils, shallow seasonal high water tables, restrictive soil horizons and other soil characteristics. Fill ca be placed on a site to raise the area for the nitrification drain lines so the suitable shallow soils can be utilized. The area and depth of the fill will vary due to the limiting soil condition.

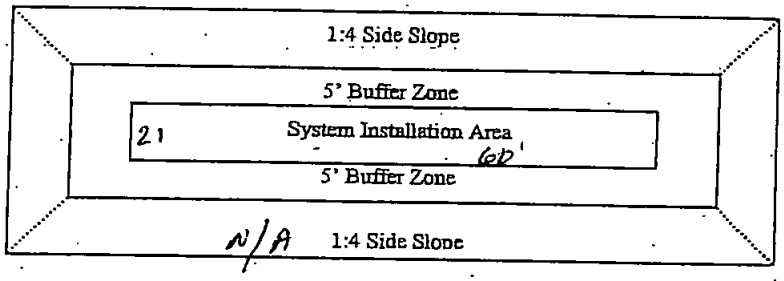
The following fill plan is for your proposed site and may be subjected to revision if the information changes on your Improvement Permit.

Fill Plan for Lot 20 Skipper Run

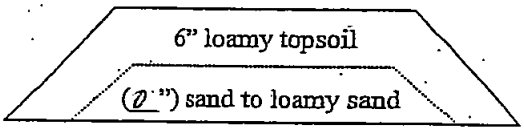
Fill Proposal by Ron Hunt Date 9/3/03

Design Flow/day 360 gpd
Application rate 0.52 gpd/ft²
Total depth of fill 1"
Total area of fill 31 x 70'
1. System and Buffer zone 31 x 70'
2. Length of Side slope N/A

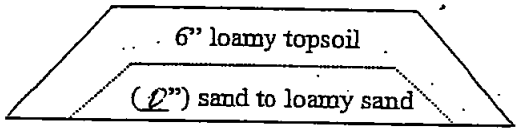
Top view (not to scale)



Cross sections (not to scale)



Total length 70'



Total width 31'

Fill Procedure:

1. Prior to installation of fill, remove vegetation and root mat and disk fill area
2. After the addition of 4" to 6" of sand or loamy sand fill, disk fill site again to provide a mix of fill and natural soil to a depth of 6" below the natural ground surface.
3. Add enough additional sand or loamy sand fill to achieve a depth of (") in system installation and buffer zone area. This area including side slopes shall be covered with an additional 6" of sandy loam to loamy topsoil to establish vegetative ground cover. Total depth of fill is (").
4. Construct a 1:4 side slope as shown from the top edge of the fill tapered down to the natural ground surface.
5. Achieve level grade along long axis of fill.
6. The fill system shall be shaped to shed surface water.
7. Call for re-inspection by Health Department.
8. After installation of the sewage system , the fill area shall be reshaped to shed surface water and seeded with grass to establish vegetative ground cover.

Notes: Home site may need to be modified to insure gravity flow to system. Any setbacks required are measured from the outer edge of the fill.

EHS Signature _____ Date _____

This signature affirms that the fill as described above has been checked and approved by the above Environmental Health Specialist.

***** SEE FILL PLAN SKETCH *****
FILL PAD MUST BE INSTALLED IN AREA DESIGNATED BY HEALTH DEPT

Brunswick County Health Department
Soil/Site Evaluation for On-Site Wasterwater System

File No. 03-61644
sheet 1 of 1

Owner: Phil Robinson, Jr Applicant: SAME
Application Date: _____ Date Evaluated: 9/2/03
Proposed Use: _____ Design Flow: 360 Property Size: see diagram
Site Location: Lot 20 Skipper Run Propery I.D. # 199DA020
Water Supply: Public X Private _____ Evaluation Method: Auger X Pit _____ Other _____

Profile Number	Horizon Depth (inches)	Soil Morphology texture	structure	mineralogy	Matrix color	Mottle color
(1)	0-6	S	g	sexp	10YR 4/2	
2%	6-12	LS	g	sexp	2.5Y 5/4	
Landscp pos./ slope	12-18	SCL	wsbk	fi-ss sp sexp	2.5Y 5/4	7.5YR 4/6
	18-24	SCL	wsbk	fi-ss sp sexp	2.5Y 5/4	7.5YR 4/6 2.5Y 4/2
	24-36	SCL	wsbk	fi ss p	2.5YR 5/2	7.5YR 4/6

.1942 wetness condition: III .1943 depth/.1953 saprolite: _____
.1944 restrictive horizon: _____ .1947 profile/classification: _____
LTAR: _____

Profile Number	Horizon Depth (inches)	Soil Morphology texture	structure	mineralogy	Matrix color
(2)	0-12	LS	g	sexp	10YR 4/2
sl/c slope	12-21	LS	g	sexp	2.5Y 5/2
Landscp pos./ slope	21-37	SCL	fr ss sp sbk sexp →		2.5Y 5/4
	37-48	SCL	sbk	fi-ss sp sexp	10YR 5/4

.1942 wetness condition: _____ .1943 depth/.1953 saprolite: _____
.1944 restrictive horizon: _____ .1947 profile/classification: _____
LTAR: _____

Profile Number	Horizon Depth (inches)	Soil Morphology texture	structure	mineralogy	Matrix color	Mottle color
(3)	0-6	LS	g	sexp	10YR 4/2	
12%	6-12	LS	g	sexp	10YR 5/2	
Landscp pos./ slope	12-18	SCL	sbk	fr-ss sp sexp	2.5Y 5/4	
	18-26	SCL	sbk	fi ss sp sexp	2.5Y 5/4	
	26-36	SCL	wsbk	fi ss sp sexp	2.5Y 5/4 10	7.5YR 4/6 10YR 4/2

.1942 wetness condition: _____ .1943 depth/.1953 saprolite: _____
.1944 restrictive horizon: _____ .1947 profile/classification: _____
LTAR: _____

Profile Number	Horizon Depth (inches)	Soil Morphology texture	structure	mineralogy	Matrix color
(4)					
	like 3				
Landscp pos./ slope					

.1942 wetness condition: _____ .1943 depth/.1953 saprolite: _____
.1944 restrictive horizon: _____ .1947 profile/classification: _____
LTAR: _____

GRP	TEXTURE		LTAR
I	S	sand	1.2 - 0.8
	LS	loamy sand	
II	SL	sandy loam	0.8 - 0.6
	L	loam	
III	SiL	silt loam	0.6 - 0.3
	Si	silt	
	SCL	sandy clay loam	
	SiCL	silty clay loam	
	CL	clay loam	
IV	SC	sandy clay	0.4 - 0.1
	SiC	silty clay	
	C	clay	

MINERALOGY
EXP: expansive
SEXP: slightly expansive

MOIST
vfr: very friable
fr: friable
fi: firm
vfi: very firm
xfi: extremely firm

WET
NS: non-sticky
SS: slightly sticky
S: sticky
VS: very sticky
NP: non-plastic
SP: slightly plastic
P: plastic
VP: very plastic

STRUCTURE
G: single grain
M: massive
CR: crumb
GR: granular
SBK: subangular blocky
ABK: angular blocky
PL: platy
PR: prismatic

Comments: _____

_____

Available space (.1945): _____ Other Factors (.1946): _____

LTAR: 0.52 System Type: 39

Evaluated By: Ron Monk

Others Present: Paul Robinson, Jr

This site was evaluated in accordance with applicable rules and regulations as specified in the North Carolina Laws and Rules for Treatment and Disposal Systems and this site has been classified as:

_____ Suitable

__X__ Provisionally Suitable

_____ Unsuitable due to _____

_____

However, certain modifications may be allowed.

( ) Drainage: A proposed drainage plan may be submitted for review showing elevation of the outlet, type of drainage and location of drainage system in relation to the site. If unsuitable soil texture, structure or restrictive horizons are present the drainage will need to be monitored during the wet season to determine its' effectiveness.

( ) Use of Fill: see attached fill plan.

( ) Site and soil limitations too severe to overcome except under the provisions listed on attached letter.

( ) Other alternatives _____

DIAGRAM

not to scale