

1/9/2008

duponbj

Groundwater and Wastewater Services File Imaging Project

May 2007

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CONDITIONS OF IMPROVEMENT PERMIT

Permit Number: **5811B** Tax Number: **199-371-03**

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

Basement: ☒ Yes ☐ No ☐ Partial Basement

Primary Wastewater System

Type: ☐ I ☐ II ☒ III ☐ IV ☐ V ☐ VI

☐ Conventional
☒ Prefabricated, permeable block panel system
☐ Shallow Placed Conventional

☒ Low Pressure Pipe
☐ Large Diameter Pipe
☐ Fill
☐ Other

☐ Innovative or Experimental:

0.25 Long-term acceptance rate (GPD/ft^2)	480 Max gallons/day wastewater flow	960 Absorption Area (ft^2)	8 Trench spacing (min. on centers) (ft)
Serviced by private well: ☐ Yes ☒ No	1500 Gallon septic tank	320 Total trench length (ft)	24 Maximum trench depth (in) (At least 12" of provisionally suitable soil must remain between trench bottom and unsuitable soil conditions.)
4 Bedrooms in residence	1500 Gallon pump tank	na Depth of stone (in)	

Any surface water present: **No** Type: Minimum separation distance (ft):

~~Additional~~ conditions: **Install according to plans on file submitted by Toney Jacobs and Associates. Lot #2**

Repair Area System

Type: ☐ I ☐ II ☒ III ☐ IV ☐ V ☐ VI

☐ Conventional
☒ Prefabricated, permeable block panel system
☐ Shallow Placed Conventional

☒ Low Pressure Pipe
☐ Large Diameter Pipe
☐ Fill
☐ Other

☐ Innovative or Experimental:

960 Absorption Area (ft^2) 320 Total trench length (ft)	na Depth of stone (in)	8 Trench spacing (min. on centers) (ft)	24 Maximum trench depth (in)

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

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

*** This Improvement permit is transferable.

DENR Authorized Agent — Date: 3/15/05

Owner/Agent Signature — Date: 3-15-05

MECKLENBURG COUNTY
HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION
c/o HAL MARSHALL CTR.
SUITE 211
700 N. TRYON ST.
CHARLOTTE, NC 28202
(704) 336-5103

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

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

ACS

Sheet: 1 of 2
Property ID: PO 199-161-11
Lot #: 2
File #: 5811B
Code: 2

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

Owner: Sanctuary at Lake Wylie
Applicant: Toney Jacobs
Address: 10933 Ballantyne Crossing Ave., Charlotte, N. C. 28277
Date Evaluated: 1/12/2005
Proposed Facility: Residence
Design Flow (.1949): 600gpd
Property Size: Approx .3a inv.
Location of Site: Wildlife Road
Property Recorded:
Water Supply: [x] Public [ ] Individual [ ] Well [ ] Spring [ ] Other
Evaluation Method: [ ] Auger Boring [x] Pit [ ] Cut
Type of Wastewater: [x] Sewage [ ] Industrial Process [ ] Mixed

PROFILE #	.1940 Landscape Position/ Slope%	Horizon Depth (IN.)	SOIL MORPHOLOGY .1941 .1941 Structure/ Texture	.1941 Consistence Mineralogy	OTHER PROFILE FACTORS .1942 Soil Wetness/ Color	.1943 Soil Depth (IN.)	.1956 Sapro Class	.1944 Restr Horiz	Profile Class & LTAR
1	LS, 10	0-17	GR/CL	FR/SEXP/SS/SP	>51" TO SOIL WETNESS	51	N/A	NONE	PS, IV
		17-51	ABK/C	FI/SEXP/S/P					.25GPD/FT^2
2	"	0-11	GR/CL	FR/SEXP/SS/SP	"	"	"	"	"
		11-51	ABK/C	FI/SEXP/S/P					
3	"	0-6	GR/CL	FR/SEXP/SS/SP	>48" TO SOIL WETNESS	48	"	"	"
		6-32	ABK/C	FI/SEXP/S/P					
		32-48	ABK/CL	FR/SEXP/SS/SP					

Description	Initial System	Repair System
Available Space (.1945)	PS	US
System Type(s)		
Site LTAR	.25GPD/FT^2	.25GPD/FT^2

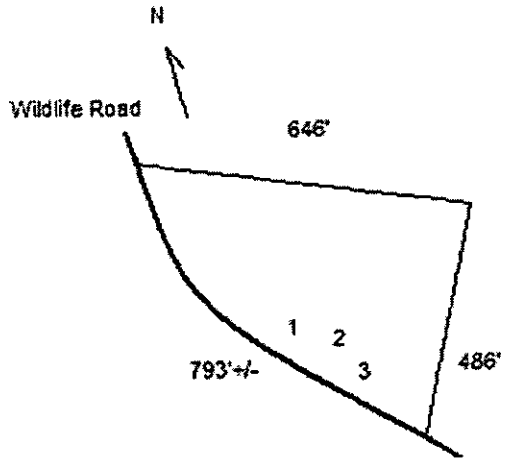
Other Factors (.1946):
Site Classification (.1948): UNSUITABLE
Evaluated By: W. R. Marlin, LSS, 1/14/2005, W. R. Marlin
Others Present: P. Penninger

COMMENTS:
100% repair

Landscape Position	Group	Texture	.1955 LTAR	Structure
R-Ridge	I	S-Sand	1.2 - 0.8	SG-Single Grain
SS-Shoulder Slope		LS-Loamy Sand		M-Massive
LS-Linear Slope				CR-Crumb
FS-Foot Slope	II	SL-Sandy Loam	0.8 - 0.6	GR-Granular
NS-Nose Slope		L-Loam		SBK-Subangular Blocky
HS-Head Slope				ABK-Angular Blocky
CC-Concave Slope	III	SI-Silt	0.6 - 0.3	PL-Platy
CV-Convex Slope		SICL-Silty Clay Loam		PR-Prismatic
T-Terrace		CL-Clay Loam		
FP-Flood Plain		SCL-Sandy Clay Loam		
	IV	SC-Sandy Clay	0.4 - 0.1	
		SIC-Silty Clay		
		C-Clay		

Consistence Moist	Consistence Wet	Mineralogy
VFR-Very Friable	NS-Non-Sticky	SEXP-Slightly Expansive
FR-Friable	SS-Slightly Sticky	EXP-Expansive
FI-Firm	S-Sticky	
VFI-Very Firm	VS-Very Sticky	
EFI-Extremely Firm	NP-Non-Plastic	
	SP-Slightly Plastic	
	P-Plastic	
	VP-Very Plastic	

Sketch of Soil Evaluation Locations



GWS – RES. APP 12/04

SEPTIC FEE: 700.00 ck/# 1868
DATE: 1/25/05
CRT [ ]

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

WELL FEE:
DATE:
CRT [ ]

FILE # 5811B

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

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

JOB LOCATION INFORMATION:
TAX/PARCEL #: 199-161-11P0
STREET ADDRESS: off Wildlife Rd
CITY:
STATE: NC ZIP:
SUBDIVISION OR MOBILE HOME PARK NAME: The Sanctuary
LOT #: 2
TOWNSHIP:
☐ 0-MECKLENBURG ☐ 4-PINEVILLE
☑ 1-CHARLOTTE ☐ 5-MATTHEWS
☐ 2-DAVIDSON ☐ 6-HUNTERSVILLE
☐ 3-CORNELIUS ☐ 7-MINT HILL

BUILDING INFORMATION:
TYPE OF BUILDING:
☐ SINGLE MOBILE HOME (S) ☐ MODULAR HOME (M)
☐ DOUBLE WIDE (D) ☐ MULTIPLE FAMILY (U)
☒ HOUSE (H) ☐ OTHER
HEATED SQUARE FOOTAGE:
NUMBER OF BEDROOMS: 5
NUMBER OF OCCUPANTS:

FOUNDATION FOR RESIDENCE:
☐ CONCRETE SLAB ☒ BASEMENT WITH PLUMBING
☐ CRAWLSPACE ☐ BASEMENT WITH NO PLUMBING

IF PLANNING TO EXPAND/ALTER THE EXISTING SYSTEM INDICATE THE FOLLOWING CHANGES:
NUMBER OF BEDROOMS TO BE ADDED: NUMBER OF ADDITIONAL OCCUPANTS IN THE RESIDENCE:
WILL THERE BE A HOME BUSINESS IN THE RESIDENCE? ☐ YES ☒ NO TYPE:

WATER SUPPLY:
☒ MUNICIPAL (M) ☒ PUBLIC (C) ☐ PRIVATE WELL (P) ☐ SHARED WELL (S) ☐ OTHER 'SPRINGS' (O)
PROPOSED USE OF WELL: ☐ N/A ☐ IRRIGATION ☐ POTABLE ☐ GEOTHERMAL ☐ OTHER

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

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

PROPERTY OWNER:
NAME: The Sanctuary at Lake Wylie
ADDRESS: 10933 Ballantyne Crossing Ave
CITY: Charlotte NC 28277
STATE: NC ZIP: 28277
HOME PHONE: WORK PHONE: 704-663-6905
MOBILE PHONE: FAX: 662-9945

LEGAL AGENT FOR PROPERTY OWNER, IF APPLICABLE:
NAME: Tony Jacobs
ADDRESS: 168 Bradwell Dr.
CITY: Mooresville, NC
STATE: NC ZIP: 28117
HOME PHONE: — WORK PHONE: 663-6905
MOBILE PHONE: FAX: 662-9945

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

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

1-25-05
Owner's/Agent's Signature Date

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

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

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

TONEY C. JACOBS & ASSOCIATES, INC.

Consulting Soil Scientists

Licensed by the North Carolina Board for Licensing of Soil Scientists
Certified by the American Registry of Certified Professionals in Agronomy, Crops and Soils

168 Broadbill Drive
Mooresville, NC 28117
Phone (704) 663-6905
Fax (704) 662-9845 E-mail jacobs@i-america.net

February 18, 2005

To: Mr. David Cornelius, R.S.
Mecklenburg County Env. Health Dept.

From : Toney C. Jacobs
Paul G. Penninger

RE: Request for an Improvement Permit for lot 2 at The Sanctuary:
MCHD file # 5811B

Crescent Resources is requesting an Improvement Permit for lot **2** at The Sanctuary Subdivision for a **4** bedroom, basement home. Mr. Bill Marlin of the MCHD evaluated the soils on 1-12-05 and determined the septic area is PS at an 0.25 gpd/ft^2 LTAR. Toney C. Jacobs and Associates, Inc. has flagged a LP PPBPS system and repair on the lot, as shown on the attached sketch.

We understand a building permit cannot be issued until your office issues an Authorization to Construct (ATC). The buyer of the lot will apply for the ATC. If the buyer's house pad does not fit in the "building envelope" shown on the Improvement Permit, we understand the proposed system may have to be modified prior to your office issuing the ATC. **No grading shall take place on lot prior to obtaining the ATC from the MCHD.**

Tri-County Wastewater (TCWW) is under contract to supply maintenance services for each septic system installed at The Sanctuary. TCWW will have a list of preferred septic contractors for the subdivision and will also have requirements for the installation of the septic systems that are greater that the state requirements. It will be the responsibility of TCWW to enforce any requirements above state requirements or the conditions on the Improvement Permit or ATC.

Please review the attached system sketch and design specifications for the Improvement Permit. Please call if you have and questions, comments, or corrections.

Design Specifications for Lot 2 at

The Sanctuary, MCHD File # 5811B

System Type:	primary: repair:	LP PPBPS LP PPBPS
Daily design flow:		480 gpd
Septic tank size:		1500 gal. (2 compartments)
Pumping tank size:		1500 gal.
Effluent loading rate:		0.25 gpd/ft^2 for primary and repair
Number and length of laterals:		4@ 80 ft., centerfed
Number of panels required:		18 per 80 ft. line for a total of 72 panels
Flow rate through the system:		36 gpm (use 3/16 in. holes with 3 ft. head pressure)
Pump requirements:		to be calculated by installer or owners agent when specific house and pump tank location are available
Dosing volume:		*approx. 260 gal. (3.6 gal. per panel) – 2.2 doses/day at design flow
Depth of water pumped per dose:		calculated to specific tank by measure or dealer engineering specifications (1 cubic ft. of water equals 7.48 gal.)
Check valve:		YES
Siphon break hole:		No

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

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

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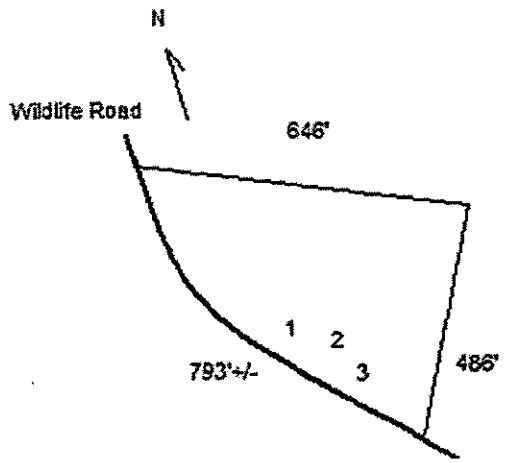
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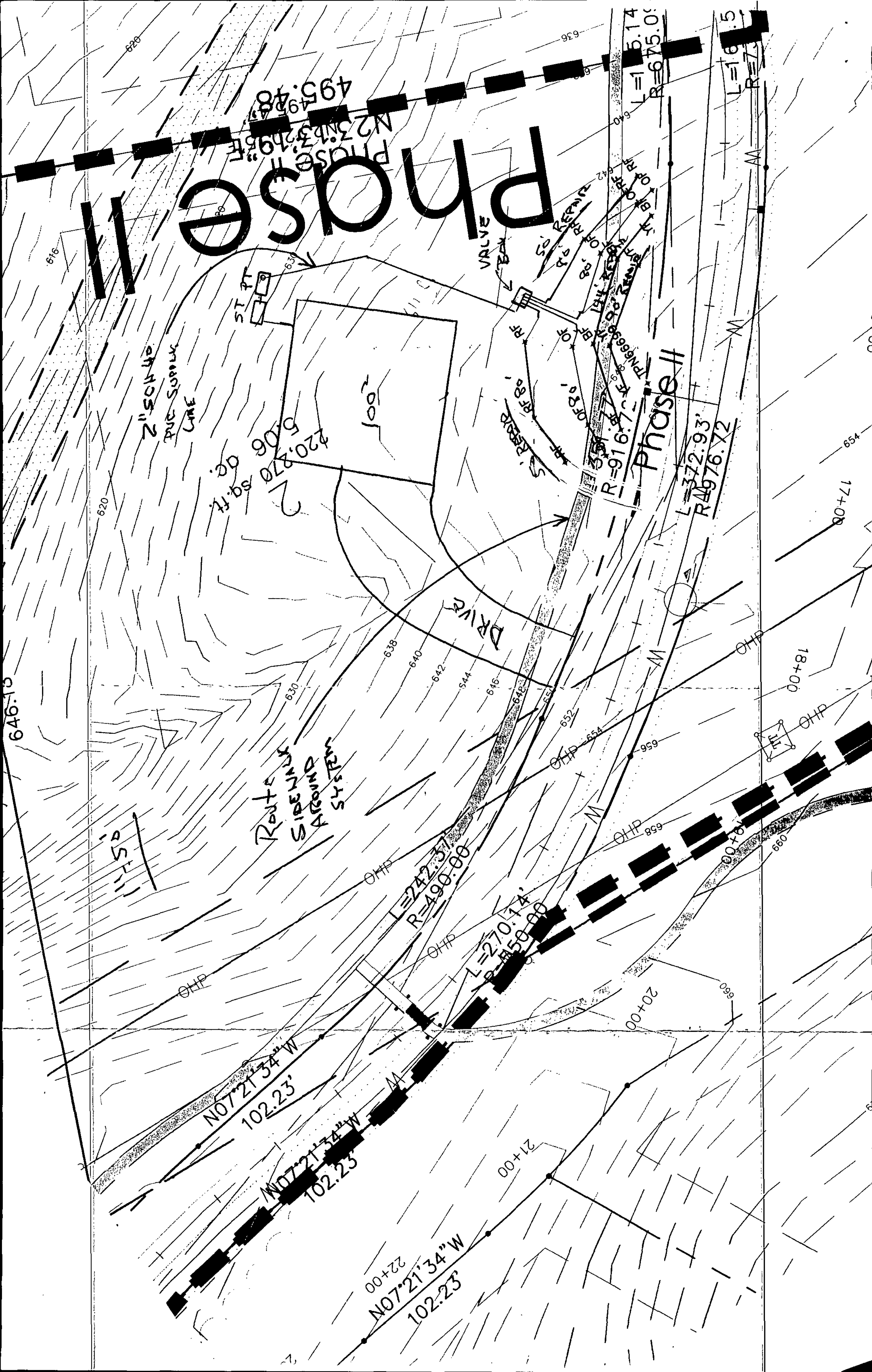
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	SP-Slightly Plastic	
	P-Plastic	
	VP-Very Plastic	

Sketch of Soil Evaluation Locations




Phase II
Phase II
495.48'
L=242.37'
R=490.00'
L=270.14'
N07°21'34"W
102.23'
N07°21'34"W
102.23'
N07°21'34"W
102.23'
L=372.93'
R=976.72'
R=916.72'
DRIVE
Route Sidewalk Around System
2" SCH 40 PVC Supply Line
ST PT
VALVE BOX
220,870 sq.ft.
5.06 ac.
646.15
OHP
17+00
18+00
20+00
21+00
22+00
654
656
658
660

Wildlife Road SR #1335
L=230.62'
R=609.93'
N07°21'34"W
102.23'
24+00
23+00
22+00
21+00
20+00
L=270.14'
R=550.00'
L=247.37'
R=499.99'
18+00
17+00
16+00
15+00
14+00
13+00
Phase II
L=372.93'
R=916.72'
2
220,270 sq.ft.
5.06 ac.
MINIMUM FFE = 572'
N68°07'30"E
646.18'
Phase II
N23°20'15"E
495.47'
L=165.53'
R=735.26'
5.06
Phase I
N71°19'38"E
277.15'
298.
6
680
670
660
658
656
654
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