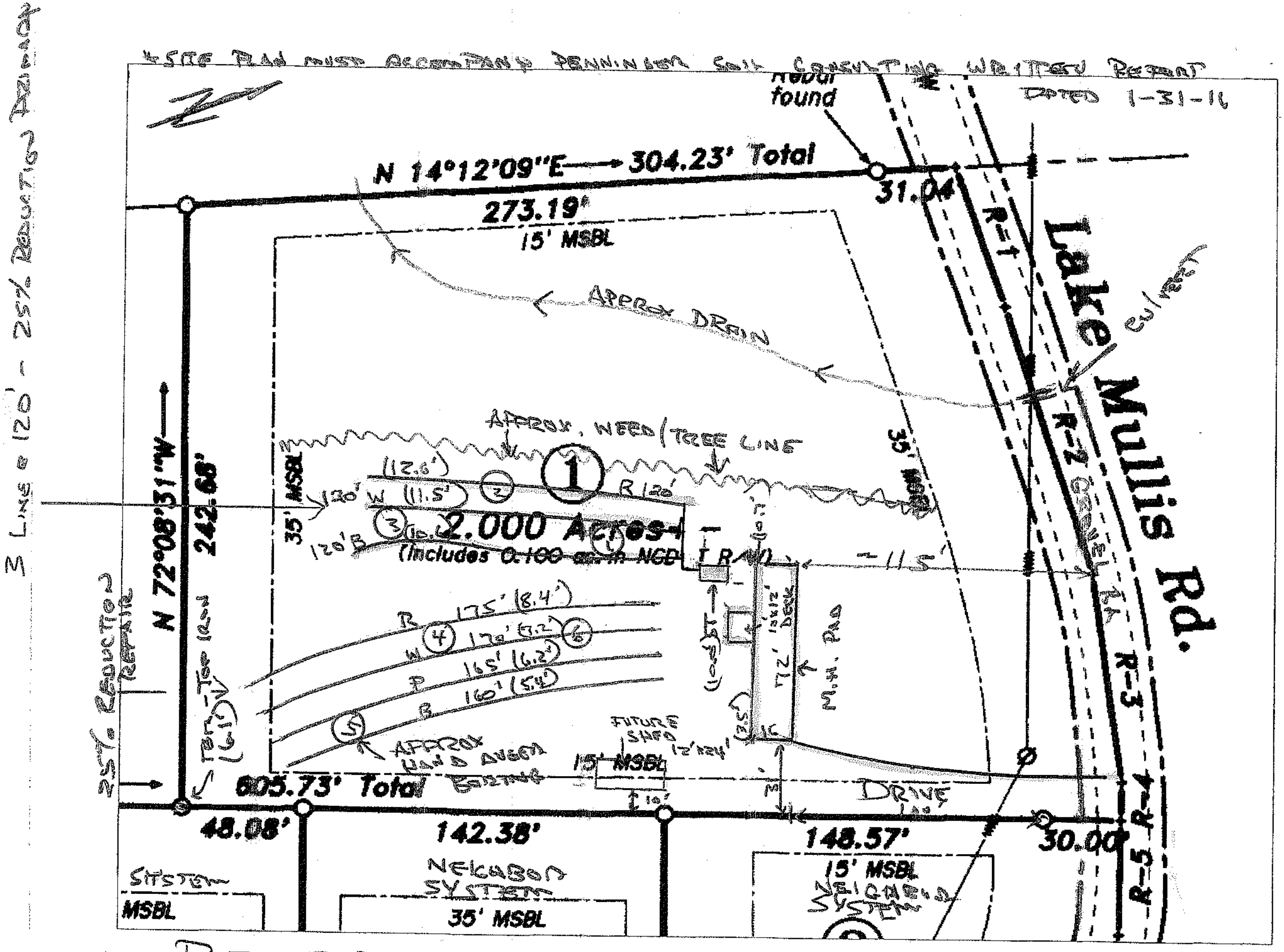


1-31-16 - ROBERT COONS - LAKE MULLIS RD SEPTIC SITE PLAN
1" = 50'

ICHD

Penninger Soil Consulting, PLLC
Ph: 704-996-6330 Email: pgpenninger@gmail.com

Call Pam P. for site visit. Give 2 days notice.

January 31, 2016

Mr. Robert Coons
159 Deer Valley Road
Cleveland, North Carolina 27013

Reference: **Technical Assistance with Septic Permitting**
Lot 1 Jericho Heights Subdivision
519 Lake Mullis Road
Iredell County, North Carolina
Project No. 16-109

Dear Mr. Coons:

Penninger Soil Consulting, PLLC has provided technical assistance to obtain a possible new, 3-bedroom septic system Improvement Permit on the above referenced lot from the Iredell County Health Department (ICHD). The technical assistance was performed in general accordance with our written proposal / letter of authorization dated January 28, 2016.

We understand that you have the lot under contract and you have requested Penninger Soil Consulting, PLLC to assist with obtaining a Septic Improvement Permit for a proposed 3-bedroom mobile home.

You flagged the property corners and strung the lot lines in the grassed area, and staked the proposed house box. Penninger Soil Consulting described six hand auger borings in the proposed septic area and flagged the proposed septic drainfield lines. We are proposing a gravity, 25 Percent Reduction drainfield behind the proposed mobile home pad.

Once the septic area is permitted, it should be fenced off for protection during home installation. Access to the lot should only be by the existing drive. There shall not be cuts of 2 feet or greater within 15 feet of any part of the permitted septic system. Saprolite was observed in some of the hand auger borings and dictated a shallow trench depth. We recommend evaluating the site with backhoe pits prior to system installation to potentially allow the use of deeper trench bottom depths.

Penninger Soil Consulting, PLLC appreciates the opportunity to provide these services to you. The attached information is not an Improvement Permit or Authorization to Construct, and is only to assist you with the Expedited Review site evaluation. The ICHD may show any changes or modifications they deem necessary to the proposed system on the ICHD Permits or attached site plan. The ICHD must approve each lot and only the ICHD can issue these permits. The ICHD should verify all soil suitability and system specifications, required setbacks, and whether a professional engineer plan is required before permitting

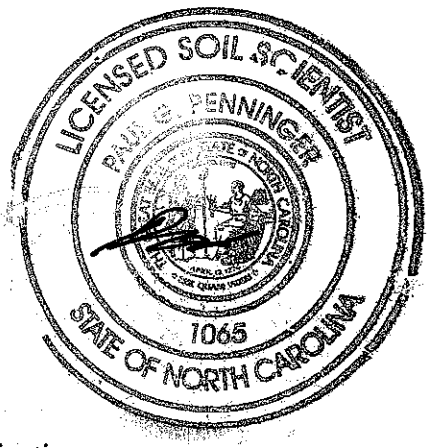
and/or septic system installation. Soil evaluations and system layouts are done based on interpretations of the rules governing wastewater treatment and disposal systems and are not guarantees for site approval or future septic system performance.

If you have any questions or require additional information please contact us at your convenience.

Sincerely,

Penninger Soil Consulting, PLLC

Paul G. Penninger, L.S.S.
Soil Scientist



Attachments:

1. ICHD Septic Improvement Permit Application
2. Proposed Site Plan and System Information

Copy: ICHD

C:\Users\Paul G. Penninger\Documents\2016 Projects\16-109 Robert Coons - Lake Mullis Road\Robert Coons - Expedited Review Summary Letter.doc

Jericho Heights Subdivision Lot 1 Expedited Review System Information (Pg 1 of 1)

Robert Coons - January 31, 2016

Number of Bedrooms	3
Basement or Crawl	**Crawl - Single Wide Mobile Home**
Design Flow (gpd)	360
LTAR (gpd/sqft)	0.25
Primary System Type	**Gravity 25 Percent Reduction**
No. Lines	3 lines @ 120 ft (See Site Plan)
Total Linear Feet	360
Trench Width	3' min.
Trench Spacing	9' min.
Trench Depth	~~24~~ 30 in. max.* Low side 2-4-16
Pump Required	No
Distribution Device	D-Box (Drop Boxes or other ICHD approved devices may be utilized)
Maintenance Agreement Required	No
Repair System	**25 Percent Reduction with 6 inch soil cover**
Total Linear Feet	670 ft shown (360 required)
Repair LTAR (gpd/sqft)	0.25
Repair Trench Depth	16 inch max.* Low side 2-4-16

Note: Installer and ICHD shall verify all line locations, tank locations, and elevations prior to installation.

- System is to be installed according to ICHD Permit requirements or policies.
- These specifications are to satisfy the ICHD Expedited Review checklist and are not intended to represent an Engineered System Design.
- *Saprolite may be evaluated with backhoe pits to potentially allow deeper trench depths.
- Expedited Review system information and site plan must accompany Penninger Soil Consulting written report dated January 31, 2016.

24" trench depth approved by letter 2-5-16 (Low side)

DEPARTMENT OF HEALTH AND HUMAN SERVICES
DIVISION OF PUBLIC HEALTH, ENVIRONMENTAL HEALTH SECTION
ON-SITE WATER PROTECTION BRANCH

Sheet 1 of 2
PROPERTY ID #:
COUNTY: Iredell

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM
(Complete all fields in full)

40'S ok JH

OWNER: Robert Coons
ADDRESS: Lake Mullis Road (519)
PROPOSED FACILITY: 3 bdr single wide MH
PROPOSED DESIGN FLOW (.1949): 360
APPLICATION DATE 1-31-16
DATE EVALUATED: 1-29-16
PROPERTY SIZE: 2 ac

LOCATION OF SITE: Lot 1 Jericho Heights - Lake Mullis Rd
PROPERTY RECORDED: 2009
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 AND NOTES .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
1	L approx. 10%	0-13	wsbk/scl	fr ss/sp	br				PS .3 to 45
		13-24	msbk/c	fi s/p	red; f sap incl, blk mica				
		24-45	wsbk/cl	fr ss/sp	yell red; c sap incl.				
		45-48	vwsbk-mass./ sl sap	fr ss/sp	mc.				
					n/a	45in.	PS- need pits for sap	n/a	
2	L approx. 10%	0-3	wsbk/scl	fr ss/sp	br				PS .3 to 38 46
		3-34	msbk/c	fr s/p	red;ff sap. incl				
		34-~~38~~	wsbk/cl	fr ss/sp	yell red; c sap incl.				
		~~38~~-48	vwsbk-mass./ sl-l sap	fr ss/sp	red yell; f cl incl.				
					n/a	38in.	PS-need pits for sap	n/a	
3	L approx. 10%	0-3	wsbk/scl	fr ss/sp	br				PS .3 to 46
		3-24	msbk/c	fr s/p	red;ff sap. incl				
		24-46	wsbk/cl	fr ss/sp	yell red; f-c sap incl.				
		46-48	vwsbk-mass./ sl-l sap	fr ss/sp	red yell; f cl incl.				
					n/a	46in.	PS-need pits for sap	n/a	
4	L approx. 10-12%	0-7	wsbk/scl	fr ss/sp	br				PS to 33 0.25
		7-25	sbk-abk/c	fi s/p	red				
		25-33	wsbk/cl	fr ss/sp	yell red; f-c sap incl.				
		33-48	vwsbk-mass./ sl-l sap	fr ss/sp	red yell; f cl/wr incl.				
					n/a	33in.	PS-need pits for sap	n/a	

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	PS
System Type(s)	25%	25% w/cover
Site LTAR	0.25	0.25

OTHER FACTORS (.1946):
SITE CLASSIFICATION(.1948): PS
EVALUATED BY: PGP - must be reviewed by ICHD
OTHER(S) PRESENT: Robert Coon

COMMENTS:

DEPARTMENT OF HEALTH AND HUMAN SERVICES
DIVISION OF PUBLIC HEALTH, ENVIRONMENTAL HEALTH SECTION
ON-SITE WATERPROTECTION BRANCH

PROPERTY ID #:
COUNTY: Iredell

JN

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM
(Complete all fields in full)

OWNER: Robert Coons
ADDRESS: Lake Mullis Road
PROPOSED FACILITY: 3 bdr single wide MH
PROPOSED DESIGN FLOW (.1949): 360

APPLICATION DATE 1-31-16
DATE EVALUATED: 1-29-16
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LOCATION OF SITE: Lot 1 Jericho Heights - Lake Mullis Rd
PROPERTY RECORDED: 2009

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 AND NOTES .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
5	L approx. 10%	0-3	wsbk/scl	fr ss/sp	br				PS .25 to 33
		13-29	abk-sbk/c	fi s/p	red; f sap incl, feldspar				
		29-33	vwsbk/cl	fr ss/sp	yell red; c sap incl.				
		33-48	mass./ sl sap	fr ss/sp	mc.- fwr incl				
					n/a	33in.	PS- need pits for sap	n/a	
6	L approx. 10%	0-10	wsbk/scl	fr ss/sp	br				PS .25-.3 to 48 6
		3-33	abk/c	fi s/p	red;f-c 7.5YR5/8 lithochromic				
		33-46	wsbk/cl	fr ss/sp	red; f-c sap incl.				
		46-48	vwsbk-mass./ sl-l CB/C horizon	fr ss/sp	red yell;				
					n/a	48in.	PS-need pits for sap	n/a	
7									
8									

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	PS
System Type(s)	25%	25% w/cover
Site LTAR	0.25	0.25

OTHER FACTORS (.1946):
SITE CLASSIFICATION(.1948): PS

EVALUATED BY: PGP - must be reviewed by ICHD
OTHER(S) PRESENT: Robert Coon

COMMENTS: