BIDR-2024-56308

ICHD - ENVIRONMENTAL HEALTH DIVISION

Statesville Office (704) 878-5305 x3456 Mooresville Office (704) 660-3625

SEPTIC: IMPROVEMENT PERMIT / AUTHORIZATION TO CONSTRUCT / OPERATION PERMIT / EXISTING SYSTEM

PERMIT # OSWP 2024-57266

PIN # 4784 -- 37 -- 9623 ✓

APPLICANT/OWNER: Soil & Forestry Services LLC

APPLICANT ADDRESS: 126 3rd Creek Rd, Statesville, NC 28677

SITE ADDRESS: 282 Longview Rd, Statesville, NC 28625 ✓

PHONE: 980-223-2352

ALT. PHONE:

SITE DIRECTIONS: 64 E -> R Barry Oak -> R Longview -> lot on L

SAP CONTROLLED: ☐ YES ☑ NO

SUBDIVISION: JSKH Investments Inc ✓

SECTION: n/a

LOT # 1 ✓

LOT AREA: 1.91

DESIGN FLOW: 480 gpd

L.T.A.R.(Initial): 0.3

L.T.A.R (Repair): 0.3

Septic Tank 1000 (gal) STB 760 Date 11/17/24

Pump Tank 1000 (gal) PT 363 Date

Pump Make Zoeller Model 50 Series Serial #

Nitrification Fields 1 # Lines 3 Linear Ft: 402

Trench Width 36 *Max. Trench Depth(Initial) 30 *Max. Trench Depth(Repair) 30 Gravel Depth n/a

☐ GRAVITY ☑ PRESSURE

* Measured on the downhill side of the trench Effluent Standard: ☑ DSE ☐ HSE ☐ TS-I ☐ TS-II ☐ RCW ☐ NSF/ANSI 40

Usable Depth to LC (Initial): 50

☑ New System ☐ Repair ☐ Expansion System Type: I II III IV V VI

System Description: 25% Reduction PM - IIIb

Repair System Description: 25% Reduction PM - IIIb

Maintenance Agreement Required: ☐ YES ☑ NO

☑ Residence No. Bedrooms 4

☐ Business No. Persons 8

☐ Other No. Employees

☐ Slab ☑ Crawl Space

☐ Basement w/plumbing ☐ Basement w/o plumbing

Usable Depth to LC (Repair): 50 *Limiting Condition*

Water Supply

☐ Private

☑ Public

☐ Community

Comments / Conditions: Do not pave, grade, drive, park, or bury utilties in drainfield.

DO NOT EXCEED 36" MAXIMUM DEPTH OR REDUCTION WILL BE LOST

INITIAL SITE SKETCH

Improvement permit issued pursuant to: G.S. 130A-335(a2), (a3) & (a4) using signed & sealed LLS/LG Evaluation attached, from:

Ashley Rollans

LSS# 1231

Construction authorization issued pursuant to: G.S. 130A-335(a2) & (a5)

AOWE# 10027E

AS-BUILT SKETCH

FOR SEPTIC FINAL INSPECTION CALL: 704-664-3703 between 8am-9am

the day the inspection is needed. Be sure to speak with an inspector to confirm your time.

Liners

Tanks CW 1/3

PH MW

Floats 3/14

Alarm

Electrical

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. **CONTACT A LOCATOR SERVICE PRIOR TO ANY EXCAVATION**

☐ **IMPROVEMENT PERMIT** *with plat valid without expiration.* ☑ **IMPROVEMENT PERMIT** *with site plan valid for 60 mos.* ☑ **AUTHORIZATION TO CONSTRUCT** *valid for period equal to IMPROVEMENT PERMIT--not to exceed 60 mo.*

Owner / Applicant Signature: Online Signature Date:

IMPROVEMENT PERMIT by: D. Wieberg ✓ Date: 07/16/2024

AUTHORIZATION TO CONSTRUCT by: D. Wieberg ✓ Date: 07/16/2024

Installed by: Stutts Grading

OPERATION PERMIT by: Mark Wells ✓ Date: 3/14/25

Existing System Inspected by: Date:

N 06°30'22"W 200.00'
35' Setback
BUILDING /GRAVELPAD
77.96'
218.80'
1/2" EIR
159.52'
120.15'
Lot 1
Area
1.91 Acre
Including 0.14 acre in R/W
a portion of
D.B. 3031, Pg. 2101
B4
B5
HOUSE
80'
75'
322.04'
15' Setback
382.27'
15' Setback
N 87°31'48"W 412.27'
New Line
DRIVE
B3
B2
B1
6 O 3.3 174'
5 Y 3.1 174'
4 B 3.2 172' Install 134'
3 P 2.9 189' Install 134'
2 R 1.9 166' Install 134'
20' CPP
30.00'
30.27'
1/2" EIR
EP
EP
L3
L2
L1
SCALE
1" = 50
RELATIVE TO
NCGS GRID NAD83

Permit/File #: OSWP-2024-57266

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES

ROY COOPER • Governor
KODY H. KINSLEY • Secretary
MARK BENTON • Deputy Secretary for Health
SUSAN KANSAGRA • Assistant Secretary for Public Health
Division of Public Health

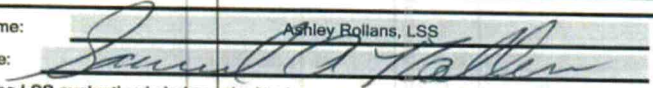
Submittal Includes; [X] (a2) Improvement Permit [X] (a2) Construction Authorization [ ] Fee $

IMPROVEMENT PERMIT FOR G.S. 130A-335(a2)

County: Iredell
PIN/Lot Identifier: 4784379623
Issued To: Herman A. Hale
Property Location: 282 Longview Rd, Statesville NC 28625
Subdivision (if applicable): N/A Lot#: 1 Block: Section:
LSS Report Provided: Yes [X] No [ ]
If yes, name and license number of LSS: Ashley Rollans #1231
New [X] Expansion [ ] System Relocation [ ] Change of Use [ ]
Facility Type: 4 bedroom house
Number of bedrooms: 4 Number of Occupants: 8 Other:
Design Wastewater Strength: [X] Domestic [ ] High Strength [ ] Industrial Process Wastewater
Proposed Design Daily Flow: 480 GPD Proposed LTAR (Initial): 0.3 Proposed LTAR (Repair): 0.3
Proposed Wastewater System Type*: IIIb (ACCEPTED) PMANIFOLD (Initial) Pump Required: [X] Yes [ ] No [ ] May be required
Proposed Wastewater System Type*: IIIb (ACCEPTED) PMANIFOLD (Repair) Pump Required: [X] Yes [ ] No [ ] May be required
Please include system classification for proposed wastewater system types in accordance with Rule .1301 Table XXXII
Effluent Standard: [X] DSE [ ] HSE [ ] NSF/ANSI 40 [ ] TS-I [ ] TS-II [ ] RCW
Saprolite System (Initial): [ ] Yes [X] No Saprolite System (Repair): [ ] Yes [X] No
Fill System (Initial): [ ] Yes [X] No If yes, specify: [ ] New [ ] Existing (when adding more than 6 inches of fill to system area provide a fill plan)
Fill System (Repair): [ ] Yes [X] No If yes, specify: [ ] New [ ] Existing (when adding more than 6 inches of fill to system area provide a fill plan)
Usable Depth to LC (Initial)*: 50 Usable Depth to LC (Repair)*: 50 * Limiting Condition
Max. Trench Depth (Initial)ǂ: 30 Max. Trench Depth (Repair)ǂ: 30 ǂ Measured on the downhill side of the trench
Artificial Drainage Required: [ ] Yes [X] No If yes, please specify details:
Type of Water Supply: [ ] Private well [ ] Public well [ ] Shared well [X] Municipal Supply [ ] Spring [ ] Other:
Drainfield location meets requirements of Rule .0508: Yes [X] No [ ] Drainfield location meets requirements of Rule .0601: Yes [X] No [ ]
Permit valid for: [X] Five years [site plan submitted pursuant to GS 130A-334(13a)] [ ] No expiration [plat submitted pursuant to GS 130A-334(7a)]

Permit conditions:

Proposed septic areas are to remain undisturbed (no grading, no utilities installation)
Proposed septic areas should be fenced/protected from disturbance (vehicle traffic, debris, etc...)
See Design for any additional details

Licensed Soil Scientist Print Name: Ashley Rollans, LSS
Licensed Soil Scientist Signature:  Date: 6/27/2024

The LSS evaluation is being submitted pursuant to and meets the requirements of G.S. 130A-335(a2).

See attached site sketch

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES
Division of Public Health

Permit/File #: _OSWP-2024-57266

This Section for Local Health Department Use Only

Initial submittal received: 7/12/24 (*Date*) by DW (*Initials*)

G.S. 130A-335(a3) states the following:

When an applicant for an Improvement Permit submits to a local health department an Improvement Permit application, the permit fee charged by the local health department, the common form developed by the Department, and a soil evaluation pursuant to subsection (a2) of this section, the local health department shall, within five business days of receiving the application, conduct a completeness review of the submittal. A determination of completeness means that the Improvement Permit includes all of the required components. If the local health department determines that the Improvement Permit is incomplete, the local health department shall notify the applicant of the components needed to complete the Improvement Permit. The applicant may submit additional information to the local health department to cure the deficiencies in the Improvement Permit. The local health department shall make a final determination as to whether the Improvement Permit is complete within five business days after the local health department receives the additional information from the applicant. If the local health department fails to act within any period set out in this subsection, the applicant may treat the failure to act as a determination of completeness. The Department shall develop a common form for use as the Improvement Permit.

The review for completeness of this Improvement Permit was conducted in accordance with G.S. 130A-335(a3). This Improvement Permit is determined to be:

☐ Incomplete (If box is checked, information in this section is required.)

The following items are missing:

_____

_____

Copies of this were sent to the LSS and the Applicant on _____ (*Date*)

State Authorized Agent: _____ Date: _____

☒ Complete

State Authorized Agent: D. Wieberg Date: 7/16/24

This Improvement Permit is issued pursuant to G.S. 130A-335 (a2) and (a3) using the signed and sealed LSS/LG evaluation(s) attached here. The issuance of this permit in no way guarantees the issuance of other permits. The permit holder is responsible for checking with appropriate governing bodies in meeting their requirements. *This permit is subject to revocation if the site plan, plat, or the intended use changes.* The Improvement Permit shall not be affected by a change in ownership of the site. This permit is subject to compliance with the provisions of 15A NCAC 18E and to the conditions of this permit.

The Department, the Department's authorized agents, and the local health departments shall be discharged and released from any liabilities, duties, and responsibilities imposed by statute or in common law from any claim arising out of or attributed to evaluations, submittals, or actions from a licensed soil scientist or licensed geologist pursuant to GS 130A-335(a2).

Improvement Permit Expiration Date: 7/16/29

See attached site sketch

NCDHHS

Permit/File #: OSWP-2024-57266

CONSTRUCTION AUTHORIZATION FOR G.S. 130A-335(a2)

County: Iredell

Pre-Construction Conference Required: [ ] Yes [X] No

PIN/Lot Identifier: 4784379623

Issued To: Herman A. Hale

Property Location: 282 Longview Rd, Statesville NC 28682

AOWE/PE Plans/Evaluations Provided: Yes [X] No [ ] If yes, name and license number of AOWE/PE: Ashley Rollans #10027E

Facility Type: 4 bedroom house

Number of bedrooms: 4 Number of Occupants: 8 Other:

[X] New [ ] Expansion [ ] Repair [ ] System Relocation [ ] Change of Use

Basement? [ ] Yes [X] No Basement Fixtures? [ ] Yes [ ] No

Crawl Space? [X] Yes [ ] No Slab Foundation? [ ] Yes [X] No

Type of Wastewater System* IIb (ACCEPTED) PMANIFOLD (Initial) IIb (ACCEPTED) PMANIFOLD (Repair)

**Please include system classification for proposed wastewater system types in accordance with Rule .1301 Table XXXII*

Design Daily Flow: 480 GPD Wastewater Strength: [X] Domestic [ ] High Strength [ ] Industrial Process WW

Session Law 2014-120 Section 53, Engineering Design Utilizing Low-flow Fixtures and Low-flow Technologies? [ ] Yes [X] No
(if yes, please provide engineering documentation)

Effluent Standard: [X] DSE [ ] HSE [ ] NSF/ANSI 40 [ ] TS-I [ ] TS-II [ ] RCW

Type of Water Supply: [ ] Private well [ ] Public well [ ] Shared well [X] Municipal Supply [ ] Spring [ ] Other:

Installation Requirements/Conditions

Septic Tank Size: 1000 gallons Total Trench/Bed Length: 402 feet Trench/Bed Spacing: 9 feet on center

Trench/Bed Width: 36 inches LTAR: 0.3 gpd/ft² Usable Depth to LC (Initial)*: 50 *Limiting condition

Soil Cover: 18 inches Slope Adjusted Maximum Trench/Bed Depth‡: 30 inches *‡Measured on the downhill side of the trench*

Pump Tank Size (if applicable): 1000 gallons Requires more than 1 pump? [ ] Yes [X] No

Pump Requirements: 10.96 ft. TDH vs. 21.3 GPM Grease Trap Size (if applicable): gallons

Distribution Method: [ ] Serial [ ] D-Box or Parallel [X] Pressure manifold(s) [ ] LPP [ ] Other

Artificial Drainage Required: Yes [ ] No [X] If yes, please specify details:

Legal Agreements *(If the answer is "Yes" to any type of legal agreements, please attach a copy of the agreement.)*

Multi-party Agreement Required [.0204(g)]: [ ] Yes [X] No Declaration of Restrictive Covenants: [ ] Yes [X] No

Easement, Right-of-Way, or Encroachment Agreement Required [.0301(b)]: [ ] Yes [X] No

Management Entity Required: Yes [ ] No [X] Minimum O&M Requirements:

Permit conditions:

Proposed septic areas are to remain undisturbed (no grading, no utilities installation)

Proposed septic areas should be fenced/protected from disturbance (vehicle traffic, debris, etc..)

See Design for any additional details

The requirements of 15A NCAC 18E are incorporated by reference into this permit and shall be met. Systems shall be installed in accordance with the attached site sketch. *This Construction Authorization is subject to revocation if the site plan, plat, or the intended use changes.* The Construction Authorization shall not be affected by a change in ownership of the site. This Construction Authorization is subject to compliance with the provisions of 15A NCAC 18E, or 15A NCAC 18A .1900, as applicable, and to the conditions of this permit.

AOWE/PE Print name: Ashley Rollans, LSS Expiration Date: 6/27/2029

AOWE/PE Signature: Date: 6/27/2024

This AOWE/PE submittal is pursuant to and meets the requirements of G.S. 130A-335(a2) and (a5).

See attached site sketch

NC ONSITE WASTEWATER Certification Number 10027E EVALUATOR

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES
Division of Public Health

Permit/File #: OSWP-2024-57266

This Section for Local Health Department Use Only

Initial submittal received: 7/12/24 (*Date*) by DW (*Initials*)

G.S. 130A-335(a5) states the following:

When an applicant for a Construction Authorization, or an Improvement Permit and Construction Authorization together, submits a Construction Authorization, or an Improvement Permit and Construction Authorization application together, the permit fee charged by the local health department, the common form developed by the Department, and any necessary signed and sealed plans or evaluations conducted by a person licensed pursuant to Chapter 89C of the General Statutes as a licensed engineer or a person certified pursuant to Article 5 of Chapter 90A of the General Statutes as an Authorized On-Site Wastewater Evaluator, the local health department shall, within five business days of receiving the application, conduct a completeness review of the submittal. A determination of completeness means that the Construction Authorization or Improvement Permit and Construction Authorization includes all of the required components. If the local health department determines that the Construction Authorization or Improvement Permit and Construction Authorization is incomplete, the local health department shall notify the applicant of the components needed to complete the Construction Authorization or Improvement Permit and Construction Authorization. The applicant may submit additional information to the local health department to cure the deficiencies in the Construction Authorization or Improvement Permit and Construction Authorization. The local health department shall make a final determination as to whether the Construction Authorization or Improvement Permit and Construction Authorization is complete within five business days after the local health department receives the additional information from the applicant. If the local health department fails to act within any period set out in this subsection, the applicant may treat the failure to act as a determination of completeness. The applicant may apply for the building permit for the project upon the decision of completeness of the Construction Authorization or Improvement Permit and Construction Authorization by the local health department or if the local health department fails to act within five business days. The Authorized On-Site Wastewater Evaluator or licensed engineer submitting the evaluation pursuant to this subsection may request that the local health department revoke or suspend the Construction Authorization or Improvement Permit and Construction Authorization for cause. Upon written request of the Authorized On-Site Wastewater Evaluator or licensed engineer, the local health department shall suspend or revoke the Construction Authorization or Improvement Permit and Construction Authorization pursuant to G.S. 130A-23. The Department shall develop a common form for use as the Construction Authorization.

The review for completeness of this Construction Authorization was conducted in accordance with G.S. 130A-335(a5). This Construction Authorization is determined to be:

☐ Incomplete (If box is checked, information in this section is required.)

The following items are missing: _____

_____

Copies of this were sent to the AOWE/PE and the Applicant on _____ (*Date*)

State Authorized Agent: _____ Date: _____

■ Complete

State Authorized Agent: D. Wieberg Date of Issuance: 7/16/29

This Construction Authorization is issued pursuant to G.S. 130A-335(a2) and (a5) using the signed and sealed plans or evaluations attached here. This Construction Authorization is subject to revocation if the site plan, plat, or the intended use changes. The Construction Authorization shall not be affected by a change in ownership of the site. This Construction Authorization is subject to compliance with the provisions of the Laws and Rules for Sewage Treatment and Disposal and to the conditions of this permit.

The Department, the Department's authorized agents, and the local health departments shall be discharged and released from any liabilities, duties, and responsibilities imposed by statute or in common law from any claim arising out of or attributed to plans, evaluations, preconstruction conference findings, submittals, or actions from a person licensed pursuant to Chapter 89C of the General Statutes as a licensed engineer or a person certified pursuant to Article 5 of Chapter 90A of the General Statutes as an Authorized On-Site Wastewater Evaluator in GS 130A-335(a2), (a5), and (a7). The Department, the Department's authorized agents, and the local health departments shall be responsible and bear liability for their actions and evaluations and other obligations under State law or rule, including the issuance of the operations permit pursuant to GS 130A-337.

Construction Authorization Expiration Date: 7/16/29

See attached site sketch

SOIL & FORESTRY SERVICES
OF THE CAROLINAS, PA

www.soilandforestryservices.com

Project#: 24-0022
June 27th, 2024

BLUEWAVE BUILDERS
Attn: Grant Winchester
Email: g.winchester12@gmail.com

RE: Soil & Site Evaluation for a 4 Bedroom Residence at 282 Longview Rd (LOT 1), Statesville, NC 28682, PIN # (4784379623), Iredell County.

Mr. Winchester:

At your request Soil & Forestry Services of the Carolinas (S&FS) has performed soil/site evaluations on parcel noted above. The Lot size is noted on the attached survey map & soil evaluation form. The purpose of our work was to identify soil areas with potential to support subsurface wastewater disposal systems and provide design details for Session Law submittal to Iredell County Health Department.

Site Conditions

At the time of our evaluation land cover on the property was mostly open field with some woods. Topography within the evaluated area was gently slope near the house site and proposed drainfield area. Property lines and corners were marked at the time of the evaluation by Benbow Surveying. The client provided an Autocad File of the subdivision plat as a basemap. The proposed septic layout was located via measuring tape/GPS and used to produce the attached *Site Plan*. The house envelope was located tape measure by the builder.

Methodology

We evaluated soil areas through the use of auger borings. Soil morphological conditions including color, texture, structure, etc. were reviewed in the field with five borings locations on the property flagged and located via GPS. Two of the five borings are located in the proposed septic layout. Soil suitability was determined by referencing 15A NCAC 18E "Wastewater Treatment & Dispersal Systems". *Soil & Site Evaluation Forms* were utilized to record the soil morphological data for each boring. The house envelope was located by the builder. An on-ground layout of system and repair was performed using a laser level. Pin flag locations of the layout were also located by tape measure and GPS. Detailed system & repair information is summarized in the following paragraph for this Lot.

282 Longview Rd, Statesville NC 28625 *(See Attached Design)*
The septic layout for this lot (9' centers) yielded a total of 961 linear feet of line. The primary system is proposed as 402 linear feet of Accepted (25% Reduction) drainfield with pressure manifold distribution. Trench depth (Low Side) is specified at 30 inches. The repair system is proposed as 400 linear feet of Accepted (25% Reduction) drainfield with pressure manifold distribution. Trench depth (Low Side) is specified at 30 inches. There is 559 linear feet of repair available.

Session Law Requirements

All information needed to issue the IP must be submitted with the application. The application shall include all information described in 15A NCAC 18E .0202 and be accompanied by a signed and dated statement from the applicant (owner or owner's legal representative) that reads as follows:

"The LSS/LG evaluation(s) attached to this application is to be used to issue an Improvement Permit in accordance with G.S. 130A-335(a2) and (a3)."

Owner

Date

Print Name Grant Winchester
Signature _____ 7/9/24

The LSS evaluation shall include a statement bearing the LSS seal and signature that reads as follows:

"The LSS evaluation is being submitted pursuant to and meets the requirements of G.S. 130A-335(a2)."

Disclaimer
This report reflects the findings of S&FS, PA. *This LSS evaluation is being submitted pursuant to and meets the requirements of G.S. 130A-335(a2)."* Any site modifications that impact the proposed septic areas at 282 Longview Rd, Stateville NC 28682 may nullify this design. System design requirements and site requirements shall be adhered to for installation and Operations Permits to be issued by the local Health Department. If you have questions regarding these requirements a Pre-Construction meeting should be scheduled to discuss. Please contact S&FS if you have any questions regarding this report or the attached information. S&FS also offers septic system inspection, wetland delineation and forestry services.

Sincerely,

LICENSED SOIL SCIENTIST
SAMUEL A. ROLLANS
1231
STATE OF NORTH CAROLINA

S. Ashley Rollans, LSS
Attachment: *Septic Design*

SOIL & FORESTRY SERVICES
OF THE CAROLINAS, PA

6/27/2024

Iredell County Environmental Health
Attn: Heath Snow
349 N Center Street
Statesville, NC 28677

Re: Improvement Permit & CA Submittal for 282 Longview Rd, Statesville NC (Lot #1)

Mr. Snow

Attached please find sealed soil notes as well as site plans and design related data for a 4 bedroom ACCEPTED system using PMANIFOLD distribution.

"The LSS evaluation attached to this application is to be used to issue an Improvement Permit in accordance with G.S. 130A-335(a2) and (a3)."

"The plans or evaluations attached to this application are to be used to issue a Construction Authorization in accordance with G.S. 130A-335(a2), (a5) and (a6)."

Owner/Applicant: Herman A. Hale

Signature: _____

Date: 7/9/24

"The LSS Evaluation is being submitted pursuant to and meets requirements of GS 130A-335(a2)." This Improvement Permit is issued pursuant to G.S. 130A-335(a2),(a3), and (a4) using the signed and sealed LSS evaluation attached here". "This AOWE submittal is pursuant to and meets the requirements of G.S. 130A-335(a2) and (a5)"

"This Construction Authorization is issued pursuant to G.S. 130A-335 (a2), and (a5) and (a6) using the signed and sealed plans or evaluations attached here."

[Pick from dropdown] -,

Signature: _____

Date: 6/27/2024 Seal:

LICENSED SOIL SCIENTIST
SAMUEL A. ROLLANS
1231
STATE OF NORTH CAROLINA

ON-SITE WASTEWATER EVALUATOR

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES

ROY COOPER • Governor
KODY H. KINSLEY • Secretary
MARK BENTON • Deputy Secretary for Health
SUSAN KANSAGRA • Assistant Secretary for Public Health
Division of Public Health

Application for Services

This application, in conjunction with the common form established in G.S. 130A-335(a3) and (a5), is optional for local health departments to be used for applications submitted in accordance with G.S. 130A-335(a2), (a3), and (a5).
[hereinafter, G.S. 130A-335(a3) and (a5) permits referred to as (a2) Improvement Permit and (a2) Construction Authorization]

Applying for:

[X] (a2) Improvement Permit [X] (a2) Construction Authorization [ ] (a2) Repair/Construction Authorization

If applying for a Construction Authorization, please indicate desired system type(s):

[X] Accepted [ ] Conventional [ ] Innovative [ ] Other _____ [ ] Any

[X] New Construction [ ] Expansion [ ] System Relocation [ ] Change of Use [ ] Repair

[X] 5 Year Expiration Requested (site plan provided) [ ] Non-Expiring Permit Requested (plat provided, as defined in G.S. 130A-334(7a)

Requesting DHHS review? (systems >3000 GPD or IPWW) [ ] Yes [X] No

Applicant:	Ashley Rollans, LSS// Soil & Forestry Services, PA"
Mailing Address:	P.O. Box 5872
City:	Statesville
State:	North Caroline
Zip:	28687
Phone #:	980-223-8352
Email:	SFSStatesvilleNC@gmail.com

Owner:	Herman A. Hale
Mailing Address:	P.O. Box 556
City:	Terrell
State:	NC
Zip:	28682
Phone #:	704-252-4104
Email:	lhale4567@gmail.com

If the answer to any of the following questions is "yes", applicant must attach supporting documentation.

[ ] Yes	[X] No	Does the site contain any jurisdictional wetlands?
[ ] Yes	[X] No	Is any wastewater going to be generated on the site other than domestic sewage?
[ ] Yes	[X] No	Is the site subject to approval by any other public agency?
[ ] Yes	[X] No	Are there any easements or right of ways on this property?

I understand that the documentation and fees, as required in G.S. 130A-335(a2), (a3), (a5), and (a6), attached to this application are to be used to issue an Improvement Permit and/or Construction Authorization pursuant to G.S. 130A-335(a2),(a3), and (a5). I understand that authorized county and state officials are granted right of entry to the property indicated on this application to conduct necessary inspections to determine compliance with applicable laws and rules. *I understand that if the information in the application for an Improvements Permit and/or Construction Authorization is falsified, changed, or the site is altered, then the Improvement Permit and Construction Authorization shall become invalid.*

Applicant Signature: _____ Date: 6/27/2024

Owner's Signature: _____ Date: 7/9/24

SOIL & FORESTRY SERVICES
OF THE CAROLINAS, PA

SFSStatesvilleNC@gmail.com
980-223-8352
126A Third Creek Rd
Statesville, NC 28677
SoilAndForestryServices.com

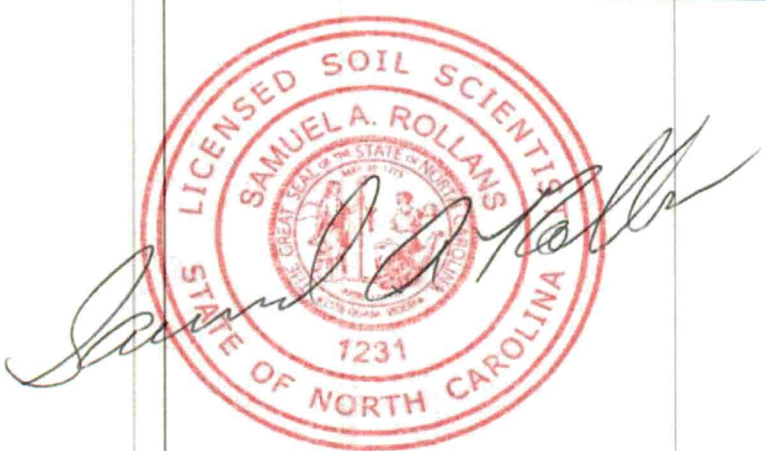
Project# 24-0022

Septic System Design for a 4 Bedroom House
ACCEPTED using PMANIFOLD distribution
Site location: 282 Longview Rd, Statesville NC , Lot # 1

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Layout Specifications	3
System Flow	4
Site Plan	5
Pump Specifications	6
Pressure Manifold Specifications	7
Calculations	8
Soil Descriptions	9
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Jun 2024
Design By: Ashley Rollans



INFORMATION FOR THE INSTALLER

Project #24-0022

ACCEPTED using PMANIFOLD distribution
Site location: 282 Longview Rd, Statesville NC , Lot # 1

* **CALL 811 BEFORE DIGGING**
* The permit should be read very carefully prior to bidding. The following are details that must be considered along with all other considerations.
* Tanks shall be approved by DHHS, and certification supplied by the that must be considered along with all other considerations.
* The installer shall be responsible to the owner for placement of the tanks and to insure that final grades are returned to the original natural grade, with exception of added structural features.
* The supply trench shall be compacted to eliminate cavities left during initial fill placement.
* Installation of the system shall be during dry conditions in order to protect the soil
* All fittings shall be pressure rated fittings.
* All joints shall be cleaned with PVC pipe cleaner and a heavy bodied glue applied to weld all joints.
* Where required by the county health department, post installation inspections by the designer must be scheduled 5 week days in advance.
* Trenches shall be carefully excavated so the bottom is within 2" from the highest to the lowest points of elevation within the trench. If the bottom elevation needs adjusting after it has been trenched, it will be done by removing high points rather than filling low points. It is extremely important to insure that trenches are not over excavated during initial trenching. All fine grading within the trench will be hand done with a shovel. No loose material will be left in the trench
* All pipe openings in the tanks shall be properly grouted. This also applies to the joints around the riser.
* All tanks shall be properly back filled and compacted to prevent slump at a later date.
* Earth dams, constructed of relatively impervious material, shall be installed at the beginning and end of each lateral.
* No heavy equipment shall be used on the field during or after installation. The use of a small loader (i.e. Bobcat) or a trencher (i.e. Ditch Witch 2300/2310) may be used.
* Elevations at pinflag locations should be checked by the installer prior to beginning
* Septic tank riser shall be a minimum of 6" above finished grade.

* **System specified as ACCEPTED type using PMANIFOLD distribution**
* **Repair specified as ACCEPTED type using PMANIFOLD distribution**
* **System trench depth specified at 30"**
* **System trenches installed on 9' minimum; 36" wide trenches**
* **Installation does not require a soil cap**

DESIGN SPECIFICATIONS **Project #24-0022**

ACCEPTED using PMANIFOLD distribution
Site location: 282 Longview Rd, Statesville NC , Lot # 1

Business (if applicable):	N/A
Contact:	Herman A. Hale
Phone:	704-252-4104
Email:	lhale4567@gmail.com
County:	Iredell
Location:	282 Longview Rd, Statesville NC
Source of Wastewater Flow:	4 bedroom home
Estimated Daily Wastewater Production:	480 gpd
Drain field Size:	402 lf
Loading Rate:	0.3 $gpd/ft.^2$
Trench Depth:	30 in
Trench Width:	36 in
Soil Cap:	0 in
Septic Tank Size:	1000 gal
Pump Tank Size:	1000 gal
System Flow:	21.33 gpm
Lateral Length Required:	400 lf
Total Area Trench Bottom:	1200 sf
Estimated Supply Line Length:	158 lf
Supply Line Diameter:	2" SCH 40 PVC
Supply Line Volume:	28 gal
Dosing Volume:	184 gal
Pump Draw Down:	8.8 in
Pressure Head:	2 ft
Friction Head:	1.5 ft
Elevation Head:	7.3 ft
Total Dynamic Head:	11.0 ft
Threaded Union:	In Tank
Gate Valves:	1 in Tank: 1 @ manifold
Check Valves:	In Tank
Anti-Siphon Hole:	n/a
Recommended Pump:	or County Approved Effluent Rated Pump Capable of Delivering 11 ft.of Head at 21 gpm Total Flow

Page 3	LAYOUT SPECIFICATIONS	Project #24-0022

ACCEPTED using PMANIFOLD distribution
Site location: 282 Longview Rd, Statesville NC , Lot # 1

Daily Flow (gpd) 480 6/17/2024

LINE #	FLAG COLOR	BS	HI	FS	ELEV	FLAGGED LENGTH	DESIGN LENGTH
TBM INSTR. 1	Left Front Corner	3.9	103.9		100.0		
			SYSTEM				
2	Red			1.9	102.0	166	134
3	Pink			2.9	101.0	189	134
4	Blue			3.2	100.7	172	134
			REPAIR				
1	Orange			1.6	102.3	86	86
5	Yellow			3.1	100.8	174	174
6	Orange			3.3	100.6	174	174

	LINE LENGTH	LTAR GPD/FT^2	SYSTEM TYPE	REDUCTION TYPE	DIST	TRENCH DEPTH	SOIL CAP
SYSTEM	402	0.300	ACCEPTED	25%	PMANIFOLD	30	0
REPAIR	559	0.300	ACCEPTED	25%	PMANIFOLD	30	0

Notes:
**TBM is assumed to be 100'
**All measures in feet
**Nitrification lines are demonstrated on contour via colored pin flags
**BS and FS indicate rod readings

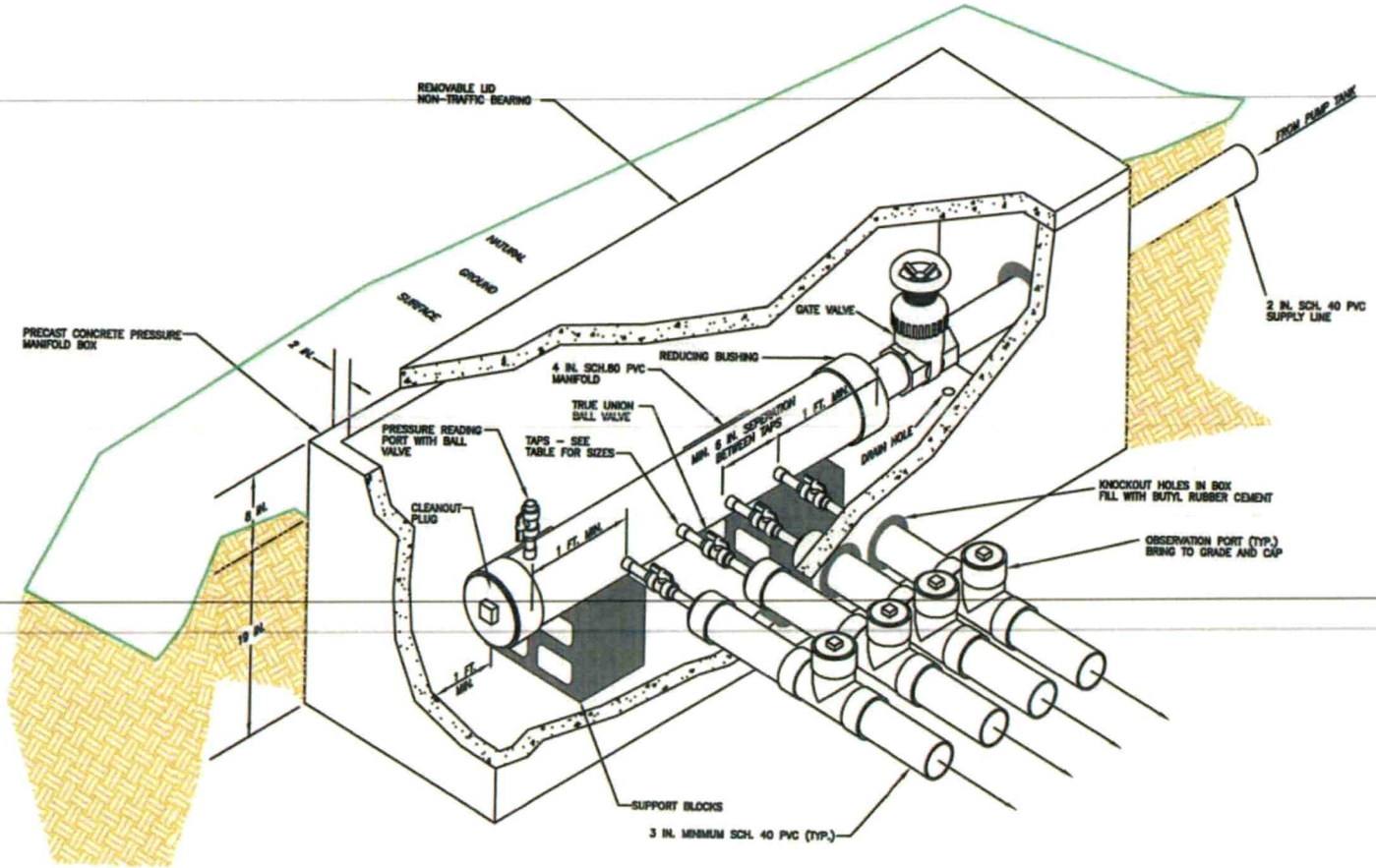
Page 4	SYSTEM FLOW	Project #24-0022

ACCEPTED using PMANIFOLD distribution
Site location: 282 Longview Rd, Statesville NC , Lot # 1

Line #	Color	Elev	Length	Hole Size	Flow/Tap	Line gpd	Line Trench Area	Flow/Line	Line LTAR
2	Red	1.9	134	SCH 40 1/2	7.11	160	402	0.053	0.40
3	Pink	2.9	134	SCH 40 1/2	7.11	160	402	0.053	0.40
4	Blue	3.2	134	SCH 40 1/2	7.11	160	402	0.053	0.40
	total	feet =	402	gal/min =	21.3				

Design Flow	480	gpd
Pump Run to Dose 480 gpd=	22.50	
Soil LTAR	0.300	
Accepted LTAR	0.40	

TYPICAL PRESSURE MANIFOLD DETAIL



CALCULATIONS	Project #24-0022
ACCEPTED using PMANIFOLD distribution Site location: 282 Longview Rd, Statesville NC , Lot # 1	

PROJECT INFO	Designer	Ashley Rollans
	Project #	24-0022
	Project MM YYYY	6/17/2024
	County	Iredell
	Project Location	282 Longview Rd, Statesville NC
	Lot # (if applicable)	1
	Subdivision (if applicable)	N/A
	Parcel #	4784379623
	Lot size (acres)	1.91
	Easement(s) on parcel?	No
	Business (if applicable)	N/A
	Name (Owner)	Herman A. Hale
	Mailing Address (Owner)	P.O. Box 556
	City (Owner)	Terrell
	State (Owner)	NC
	Zip (Owner)	28682
	Phone (Owner)	704-252-4104
	Email (Owner)	lhale4567@gmail.com
	Bedrooms	4
	Water Source	Municipal Supply
	Foundation Type	Crawl Space
	Daily Flow (gallons)	480
SYSTEM	System LTAR	0.3
	System Type	ACCEPTED
	System Distribution	PMANIFOLD
	System Trench Center Distance (feet)	9
	System Trench Width (inches)	36
	System Trench Depth (inches)	30
	Soil Cap (inches)	0
	Usable Soil Depth (inches)	50
	Media Height (inches)	12
	Tank Size (gallons)	1000
	Required Feet of Line (system)	400
	Designed Feet of Line (system)	402
	Saprolite system?	No
REPAIR	Repair LTAR	0.3
	Repair Type	ACCEPTED
	Repair Distribution	PMANIFOLD
	Repair Trench Center Distance (feet)	9
	Repair Trench Width (inches)	36
	Repair Trench Depth (inches)	30
	Soil Cap (inches)	0
	Usable Soil Depth (inches)	50
	Tank Size (gallons)	1000
	Required Feet of Line (repair)	400
	Designed Feet of Line (repair)	559
	Saprolite system?	No
SYSTEM PUMP VARIABLES	Amount of Line from Layout (feet)	402
	Gallons per Minute	21.3
	Required Septic Tank Capacity (gallons)	1000
	Minimum Standard Tank Size (gallons)	1000
	Lateral Line Volume (gallons)	263
	Dosing Volume (gallons)	184
	Tank Draw Down (inches)	8.8
	Pump Run Time (minutes)	8.6
	Elevation Head (feet)	7.3
	Pressure Head (feet)	2
	Supply Line Length (feet)	158
	Supply Line Volume (gallons)	28
	Supply Line Diameter	2" SCH 40 PVC
	Friction Factor (ft/100ft from the interpolater)	1.0
	Friction Head (feet)	1.5
	Friction Head +10% (feet)	1.7
	Total Dynamic Head (feet)	11.0
	Pump Recommendation	

Sheet 1 of 1

PROPERTY ID #: 4784379623

COUNTY: Iredell

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

OWNER: Herman & Linda Hale

ADDRESS: PO Box 556 Terrell NC 28682

PROPOSED FACILITY: 4 Bedroom Residence - 480 GPD

LOCATION OF SITE: 282 Longview Rd Statesville NC 28625

APPLICATION DATE:

DATE EVALUATED: 3/7/2024

PROPERTY SIZE: 1.91

PROPERTY RECORDED: Yes

WATER SUPPLY: ☐ Private ☐ Well ☐ Spring ☑ Other County Water

EVALUATION METHOD: ☑ Auger Boring ☐ Pit ☐ Cut

TYPE OF WASTEWATER: ☑ Sewage ☐ Industrial Process ☐ Mixed

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941)		OTHER PROFILE FACTORS				PROFILE CLASS & LTAR
			.1941 STRUCTURE/ TEXTURE	.1941 CONSISTENCE/ MINERALOGY	.1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPR CLASS	.1944 RESTR HORIZ	
1	L/5%	0-8 8-33 33-50	RBCL WFSBK BRC WMSBK RBCL WFSBK	FR SS SP FR SS P FR SS SP	flitho fsap flitho	50			0.3
2	L/5%	0-11 11-43 43-50	BCL WFSBK BRC WMSBK RBCL WFSBK	FR SS SP FR SS SP FR SS P	flitho fsap flitho	50			0.3
3	L/5%	0-10 10-46 46-50	RBCL WFSBK BRC WMSBK BRCL WFSBK	FR SS SP F SS P FR SS SP	fsap flitho fsap flitho	50			0.3
4	L/6%	0-10 10-38 38-50	RBCL WFSBK BRC WMSBK RBCL WFSBK	FR SS SP F SS P FR SS SP	fsap	50			0.3
5	L/5%	0-13 13-38 38-50	RBCL WFSBK BRC WMSBK RBCL WFSBK	FR SS SP F SS P FR SS SP	f-cwr fwr/sap	50			0.3
6									
7								N/A	
8								N/A	
9								N/A	
10								N/A	

LICENSED SOIL SCIENTIST SAMUEL A. ROLLANS III 1231 STATE OF NORTH CAROLINA

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	S	S
System Types(s)	ACCEPTED W/PM	ACCEPTED W/PM
Site LTAR	0.3	0.3

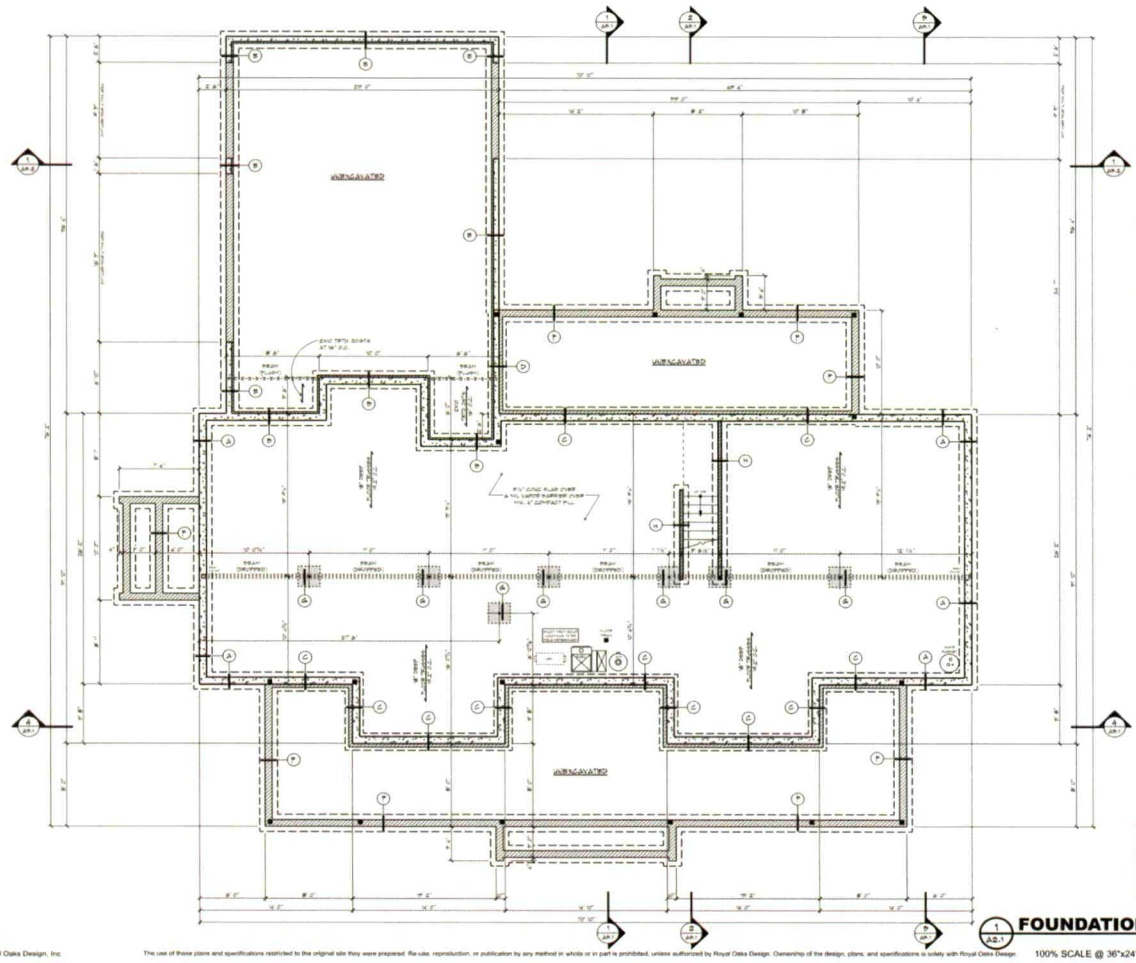
OTHER FACTORS (.1946):

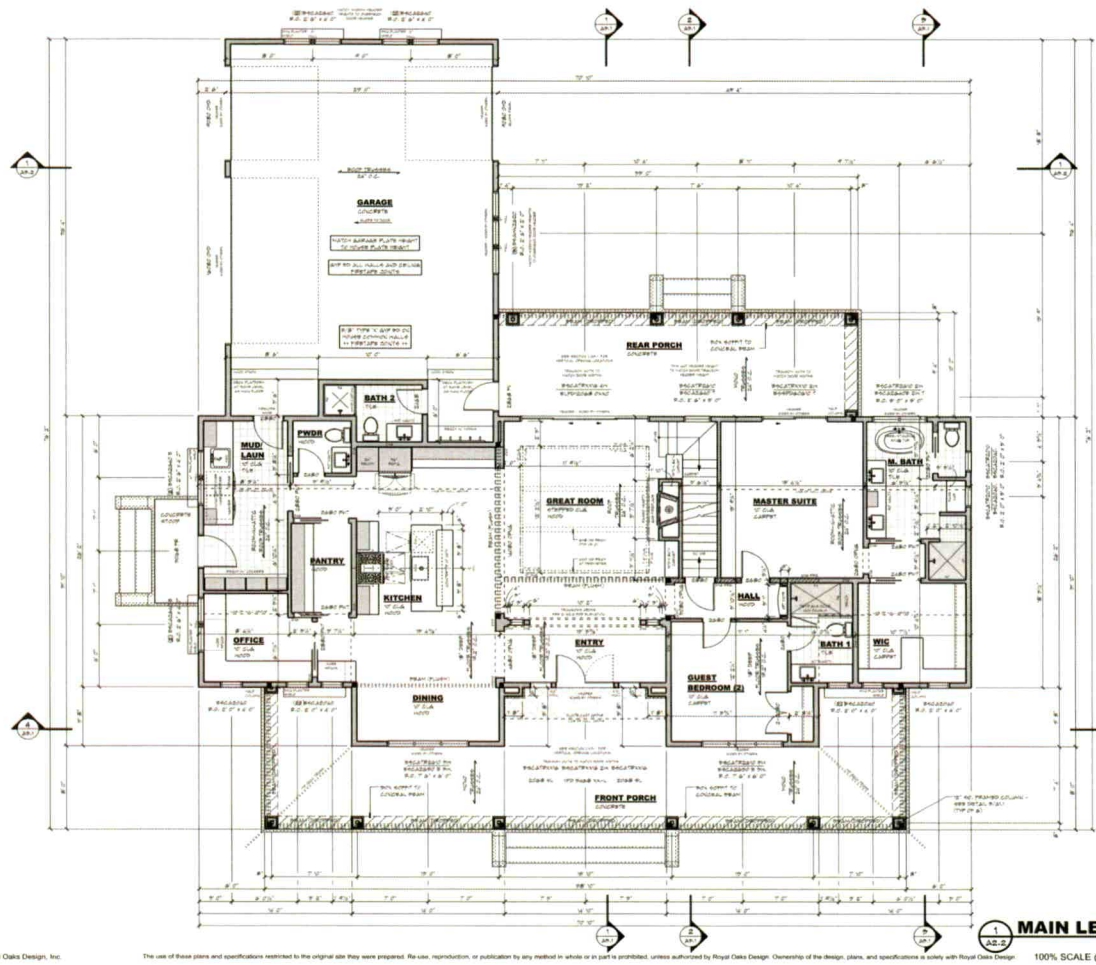
SITE CLASSIFICATION (.1948): S

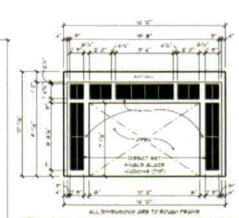
EVALUATED BY: Ashley Rollans

OTHER(S) PRESENT: Chad Wagner

COMMENTS:


UNEXCAVATED
UNEXCAVATED
UNEXCAVATED
BRG TO BEAM AT 96" O.C.
9'-1" LONG PLATE OVER 4" ALL WATER BARRIER OVER 1'-0" COMPACT FILL
BEAM (SKIRTED)
BEAM (SKIRTED)
BEAM (SKIRTED)





2 A2.2 ENTRY ELEVATION

SCALE: 1/4" = 1'-0"

GENERAL NOTES

- ALL WATER DRAINING AWAY FROM STRUCTURE OVER ROOFING OR DRAINAGE.
- DRAINAGE AWAY FROM EXTERIOR FACE OF EXTERIOR STUD WALLS AND CENTERLINE OF INTERIOR PARTITION.
- WHILE EVERY EFFORT HAS BEEN MADE TO ENSURE THESE PLANS ARE ACCURATE AND COMPLETE, THE OWNER/BUILDER MUST VERIFY ALL DIMENSIONS, CONSTRUCTION METHODS, SITE CONDITIONS AND SPECIFICATIONS AND BE RESPONSIBLE FOR SAME.
- ANY VARIATION OF SIZES OF STRUCTURAL MEMBERS SUCH AS FOOTINGS, FOUNDATION WALLS, POSTS, BEAMS, JOISTS, RAFTERS, TRUSSES ETC. THAT APPEAR ON THESE PLANS ARE FOR GENERAL REVIEW AND BIDDING PURPOSES ONLY. IT IS RECOMMENDED A PROFESSIONAL ENGINEER BE ENGAGED TO CALCULATE AND DETAIL ALL STRUCTURAL COMPONENTS INCLUDED IN THIS STRUCTURE.

WINDOWS

- ALL ESSENTIAL EGRESS WINDOWS:
- SILL AT 24" A.F.F. OR LOWER
- WINDOWS DESIGNATED WITH 'T' TO HAVE TEMPERED GLASS
- WINDOWS DESIGNATED WITH 'E' MEET EGRESS CODES
- WINDOW HEADER HEIGHTS ARE TO BE 7'-0" (U.N.O.)
- WINDOW HEADER HEIGHTS ARE TO BE 7'-6" (U.N.O.)
- BUILDER TO VERIFY WINDOW AND DOOR ROUGH OPENINGS AND HEADER HEIGHTS

FLOOR SYSTEM

- ENGINEERED WOOD FLOOR TRUSSES
  - DESIGNED TO WILL LIVE LOAD OF 40#
  - TRUSS MANUFACTURER TO PROVIDE DRAWING FOR ALL SUPPLY AND RETURN DUCTWORK
  - TRUSS MANUFACTURER TO VERIFY FRAMING AT DUCTWORK FOR FLOOR TRUSS JOISTS
  - TRUSS MANUFACTURER TO VERIFY LOCATION OF ANY CONCENTRATED LOADS, SUCH AS SPACITE COUNTERTOPS, AND PROVIDE PROPER FRAMING AS NEEDED

FRAMING

- 10'-0" PLATE HEIGHT (U.N.O.)
- SOLID BLOCK AT ALL POCKET DOORS
- DOUBLE STUDS AT WINDOW AND DOOR HEADERS
- PROVIDE SOLID BLOCKING AT ALL POINT LOADS
- INDICATES BEARING POINT LOAD
  - PROVIDE CONTINUOUS SOLID BLOCKING TO FOUNDATION BELOW - VERIFY LOADS W/ LOCAL STRUCTURAL ENGINEER

+++ STRUCTURAL NOTICE +++

ALL STRUCTURAL BEAM AND HEADER SIZES, FRAMING CONDITIONS AND FOUNDATION REQUIREMENTS MUST BE REVIEWED BY A STRUCTURAL ENGINEER BASED ON ACTUAL SITE CONDITIONS. OWNER/BUILDER TO ASSUME ALL RESPONSIBILITY FOR BUYER STRUCTURE.

1 A2.2 MAIN LEVEL FLOOR PLAN

SCALE: 1/4" = 1'-0"

100% SCALE @ 36"x24"

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THE SILVER BELL RANCH
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STD. 3 CAR SIDE

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Document Date: 11/22/2022

Document Phase:

Drawn by: BJD

MARK	DATE	REMARK
1	07.18.22	UPDATE WORK - SHT.
2	07.28.22	UPDATE WORK - SHT.
3	07.31.22	ADD NOTES - SHT.

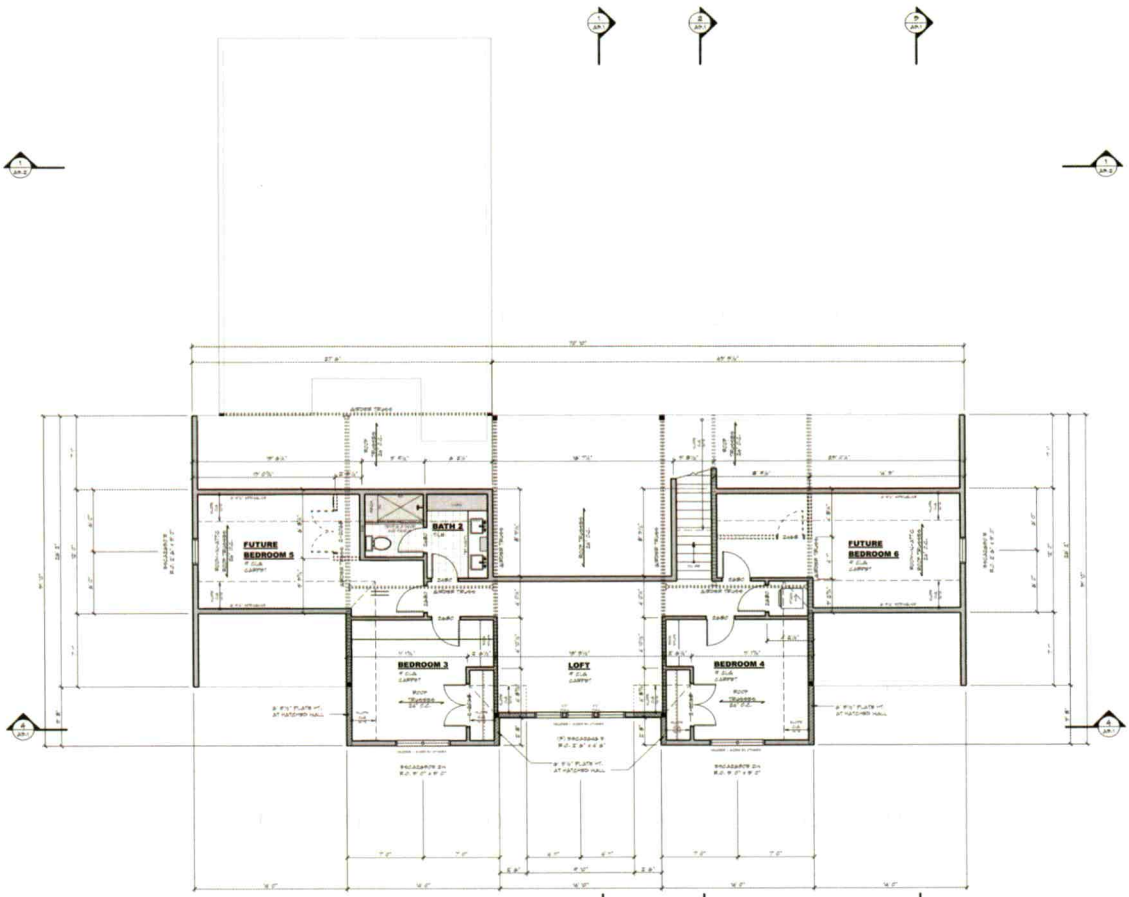
MAIN LEVEL FLOOR PLAN

4 **A2.2** 8

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AREA TABULATION

CRAWL SPACE	SQ.FT.
MAIN LEVEL	SQ.FT.
UPPER LEVEL	SQ.FT.
FINISHED	SQ.FT.
FUTURE	SQ.FT.
TOTAL FINISHED	SQ.FT.
TOTAL LIVABLE	SQ.FT.
GARAGE	SQ.FT.
FRONT PORCH	SQ.FT.
REAR PORCH	SQ.FT.

FLOOR AREAS ARE CALCULATED FROM THE OUTSIDE OF FOUNDATION WALLS AND/OR OUTSIDE FACE OF EXTERIOR STUD AT FRAMED WALLS.

STAIRS ARE INCLUDED IN CALCULATIONS AT ALL LEVELS.

GENERAL NOTES

- ALL WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALING OF DRAWINGS.
- DIMENSIONS ARE FROM EXTERIOR FACE OF EXTERIOR STUD WALLS AND CENTERLINE OF INTERIOR PARTITIONS.
- WHILE EVERY EFFORT HAS BEEN MADE TO ENSURE THESE PLANS ARE ACCURATE AND COMPLETE, THE OWNER/BUILDER MUST VERIFY ALL DIMENSIONS, CONSTRUCTION METHODS WITH LOCATIONS AND APPLICATIONS AND BE RESPONSIBLE FOR SAME.
- ALL LOCATIONS OF SIDES OF STRUCTURAL MEMBERS SUCH AS FOOTINGS, FOUNDATION WALLS, POINTS, BEAMS, JOISTS, RAFTERS, TRUSSES ETC., THAT APPEAR ON THESE PLANS ARE FOR OVERALL DESIGN AND PLANNING PURPOSES ONLY. IT IS RECOMMENDED A PROFESSIONAL ENGINEER BE ENGAGED TO CALCULATE AND DETAIL ALL STRUCTURAL COMPONENTS INCLUDED IN THIS STRUCTURE.

WINDOWS

- WINDOW SCHEDULE ORDER SHOWN
  - STYLE AND SIZE AS LISTED
  - WINDOWS SPECIFIED WITH "X" TO HAVE TEMPERED GLASS
  - WINDOWS SPECIFIED WITH "X" MEET EGRESS CODES
  - WINDOW HEADER HEIGHTS SET TO 7'-0" (U.N.O.)
  - BUILDER TO VERIFY WINDOW AND DOOR ROUGH OPENINGS AND HEADER HEIGHTS

FLOOR SYSTEM

- ENGINEERED WOOD FLOOR TRUSSES
  - DESIGNED TO MAX. L/480 DEFLECTION OR LESS
  - TRUSS MANUFACTURER TO PROVIDE DRAWING FOR ALL SUPPLY AND RETURN DUCTWORK
  - TRUSS MANUFACTURER TO VERIFY FRAMING AT CANTILEVERS FOR ROOF LOADS FROM ABOVE
  - TRUSS MANUFACTURER TO VERIFY LOCATIONS OF ANY CONCENTRATED LOADS, SUCH AS SPRINKLER CONNECTIONS, AND PROVIDE PROPER FRAMING AS DESIGNED

FRAMING

- 9'-1/8" PLATE HEIGHT (U.N.O.)
- 2X8 HEADER AT ALL PATIO DOORS
- DOUBLE STUDS AT WINDOW AND DOOR HEADERS
- PROVIDE BLOCKING AT ALL POINT LOADS
- ■ - INDICATES FRAMING POINT LOAD
  - PROVIDE CONTINUOUS SOLID BLOCKING TO FOUNDATION BELOW - VERIFY LOADS W/ LOCAL STRUCTURAL ENGINEER

+++ STRUCTURAL NOTICE +++

ALL STRUCTURAL BEAM AND HEADER SIZES, FRAMING CONDITIONS AND ANCHORING REQUIREMENTS MUST BE REVIEWED BY A STRUCTURAL ENGINEER RATED IN SNOW & WIND CONDITIONS. OWNER/BUILDER TO ASSUME ALL RESPONSIBILITY FOR SUCH STRUCTURE.

UPPER LEVEL FLOOR PLAN

1/4" = 1'-0"

100% SCALE @ 36"x24"

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CL-19-004
THE SILVER BELL RANCH
CRAWL SPACE
STD. 3 CAR SIDE

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Document Date: 11/22/2022

Document Phase:

Drawn by: BJC

MARK	DATE	REMARKS
5	01.18.23	UPDATE LOWER - SVL
6	01.24.23	MINOR ELEVATION + GRID
7	01.31.23	ADD LOWER - SVL

UPPER LEVEL FLOOR PLAN

5 **A2.3** 8

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