BLDR-2024-59529

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 2024-57701 ✓

PIN # 4703 -- 29 -- 8554 ✓

APPLICANT/OWNER: AWT | APPLICANT ADDRESS: 501 N Salem St, Suite 203, Apex NC 27502

SITE ADDRESS: 219 Mock Mill Rd, Statesville, NC 28677 | PHONE: 919-859-0669 | ALT. PHONE:

SITE DIRECTIONS: Old Mountain Rd -> L Beulah -> onto Mock Mill -> lot on L | SAP CONTROLLED: ☐ YES ☑ NO

SUBDIVISION: Extreme Construction Svcs ✓ | SECTION: n/a | LOT # 2 ✓ | LOT AREA: 1.241 | 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
Pump Tank 1250 (gal) PT 306 Date
Pump Make Model Serial #
Nitrification Fields 1 # Lines 3 Linear Ft: 402
Trench Width 36 *Max. Trench Depth(Initial) 32 *Max. Trench Depth(Repair) 32 Gravel Depth n/a
* Measured on the downhill side of the trench
Effluent Standard: ☑ DSE ☐ HSE ☐ TS-I ☐ TS-II ☐ RCW ☐ NSF/ANSI 40

☑ New System ☐ Repair ☐ Expansion System Type: I II ☑ III IV V VI
System Description: 25% Reduction - PM - IIIb
Repair System Description: VPPBPS - IIIB
Maintenance Agreement Required: ☐ YES ☑ NO
☐ GRAVITY ☑ PRESSURE
Usable Depth to LC (Initial): 44

☑ 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): 44 *Limiting Condition*

Water Supply
☐ Private
☑ Public
☐ Community

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

INITIAL SITE SKETCH

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

Jeff Vaughn

LSS# 1227

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

AOWE# 10003E

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.

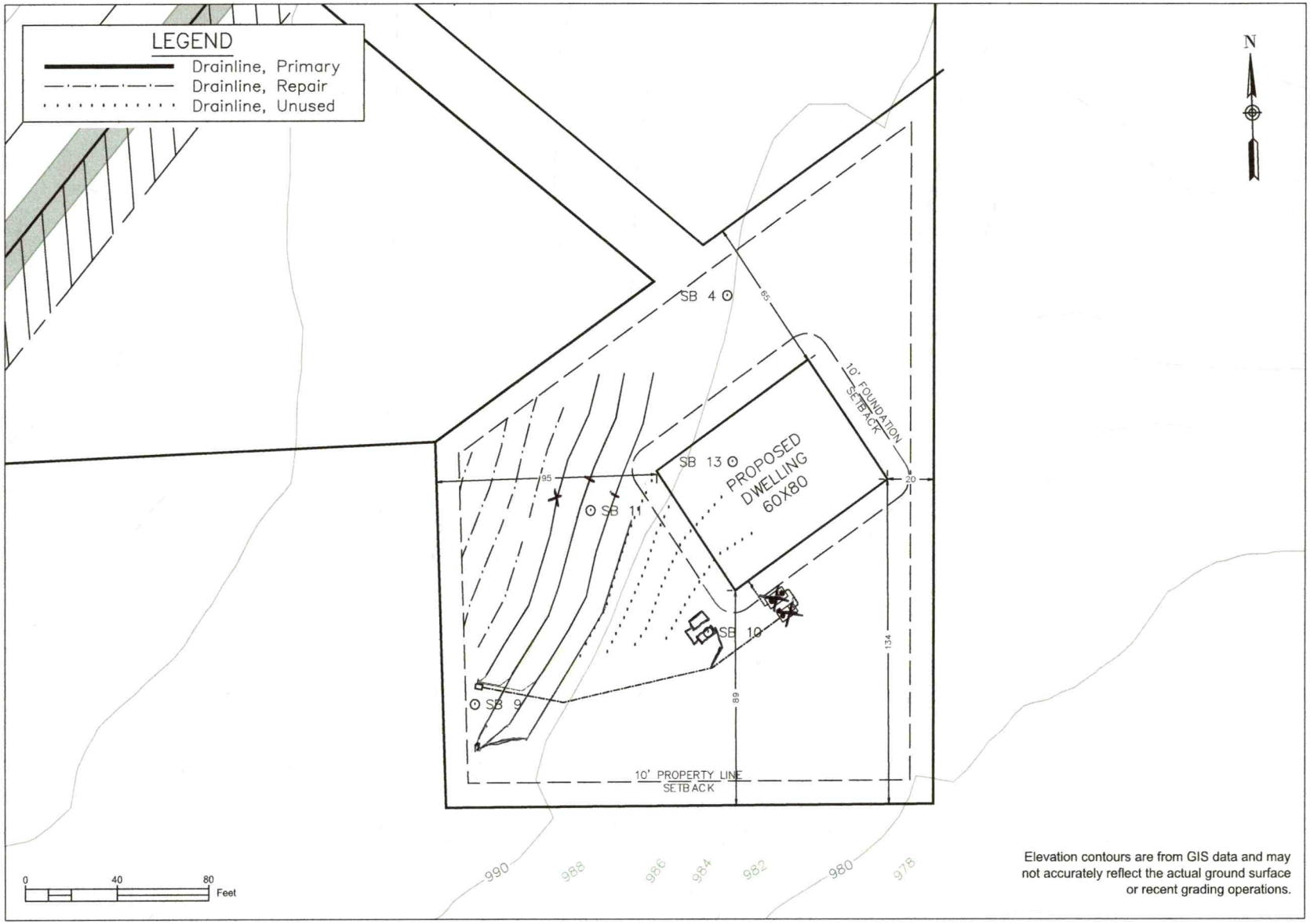
Yellow/Browns observed in sidewalls of ditch
10 gr 6/4 & 10yr 6/3

Lines CW
Tanks 1/15
Alarm
PH
PM
Floats
Electrical
} SH 11/21/25

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:
Installed by: Andrew Daysalt ✓
IMPROVEMENT PERMIT by: D. Wieberg ✓ | Date: 7/30/24
OPERATION PERMIT by: Sydney Hartsell ✓ | Date: 11/21/25
AUTHORIZATION TO CONSTRUCT by: D. Wieberg ✓ | Date: 7/30/24
Existing System Inspected by: | Date:



PROPERTY LAYOUT

SOURCE: AWT, Inc.

AWT
Engineers and Soil Scientists
Agri-Waste Technology, Inc.
501 N Salem Street, Suite 203, Apex, NC 27502
agriwaste.com | 919.859.9669

Extreme Construction Services LLC c/o Sky Powell
Extreme Const. Mock Mill Rd

Project Location:
219 Mock Mill Road
Statesville, NC
Iredell County
PIN: 4703299587.000

Project Owner:
Extreme Construction Services LLC c/o Sky Powell
191 Shepherds Bluff Drive
Mooresville, NC 28115
304-377-4358
sky@extreme-nc.com

For Review Only

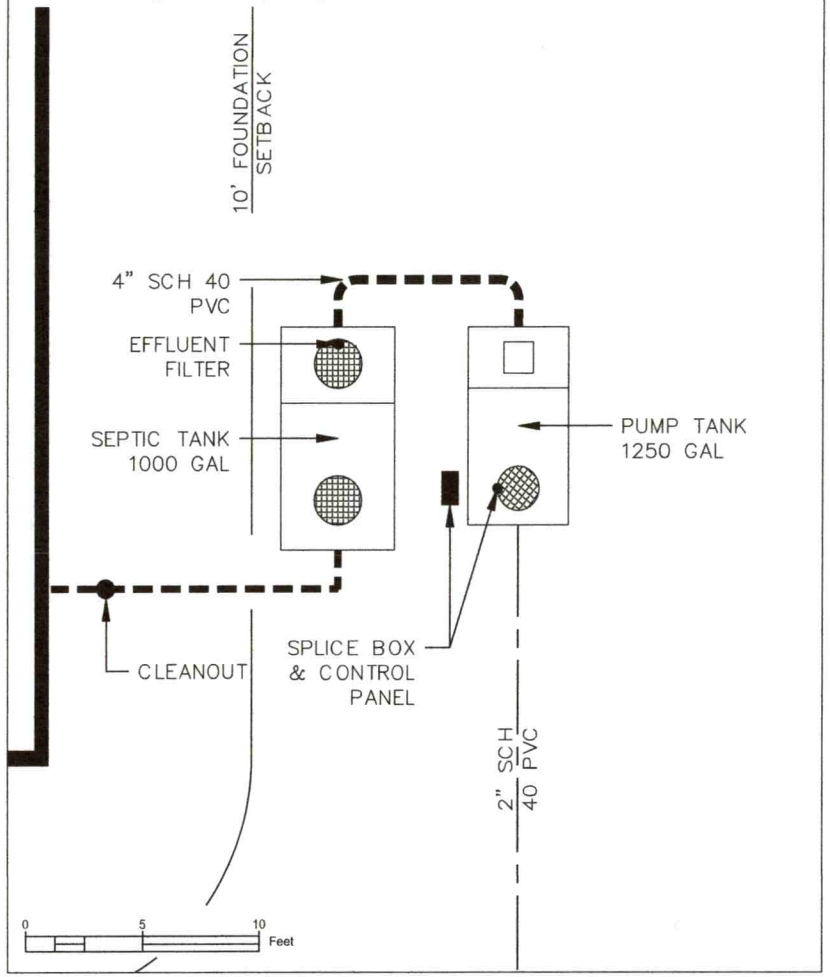
REV.	ISSUED DATE	DESCRIPTION

SHEET TITLE
Property Layout

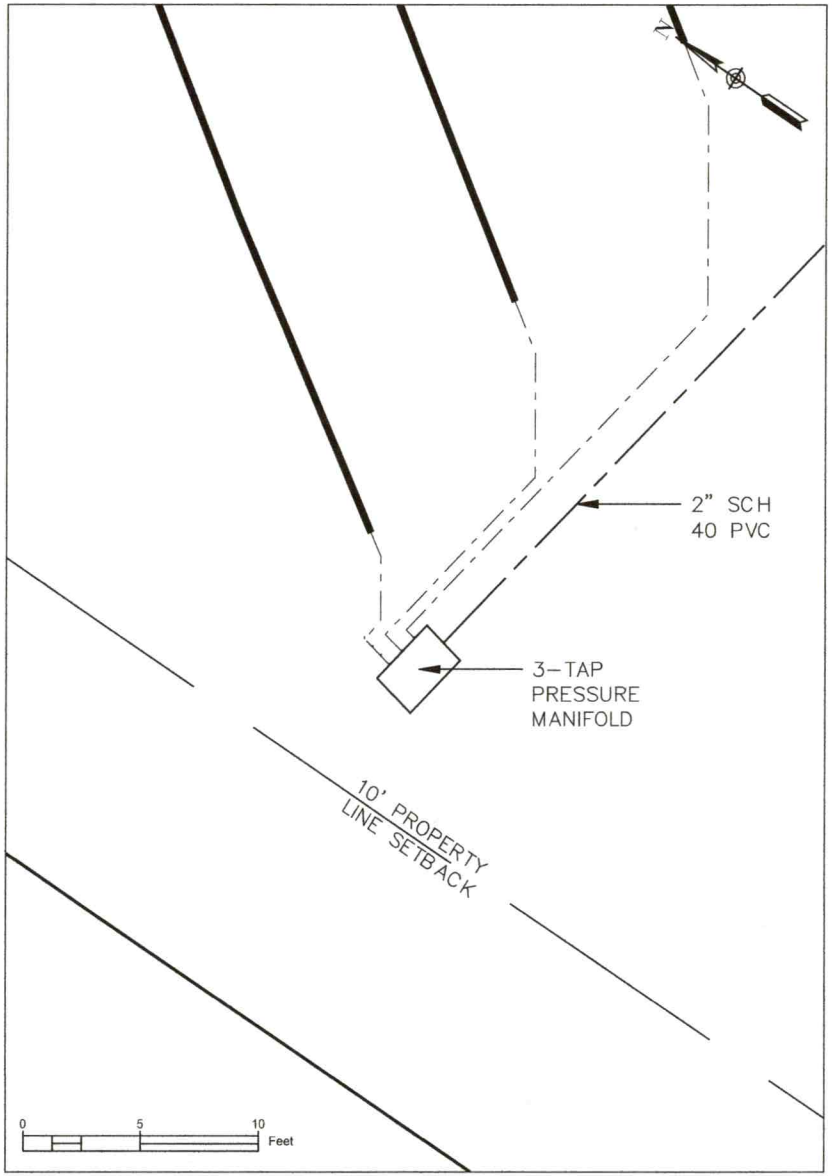
Drawn By:	Drawn On:
C. Barbee	6/10/2024
Revised By:	Revised On:
--	--
Released By:	Released On:
--	--

Drawing Number:
WW-2

NOTES – Contractor to adjust tank placements as necessary to maintain:
1. 15' downslope/10' sideslope/10' upslope setback from foundation drain
2. Min. 12" cover over Septic Tank (Not to exceed 36")
3. Min. 18" cover over pipes
4. Min. 2% grade on gravity pipe from house to Septic Tank



1 WW-3 COMPONENT LAYOUT: SEPTIC TANKS
SOURCE: AWT, Inc.



2 WW-3 COMPONENT LAYOUT: MANIFOLD
SOURCE: AWT, Inc.

AWT
Engineers and Soil Scientists
Agri-Waste Technology, Inc.
501 N Salem Street, Suite 203, Apex, NC 27502
agriwaste.com | 919.859.0669

Extreme Construction Services LLC c/o Sky Powell
Extreme Const. Mock Mill Rd

Project Location:
219 Mock Mill Road
Statesville, NC
Iredell County
PIN: 4703298587.000

Project Owner:
Extreme Construction Services LLC c/o Sky Powell
191 Shepherds Bluff Drive
Mooresville, NC 28115
304-377-4358
sky@extreme-nc.com

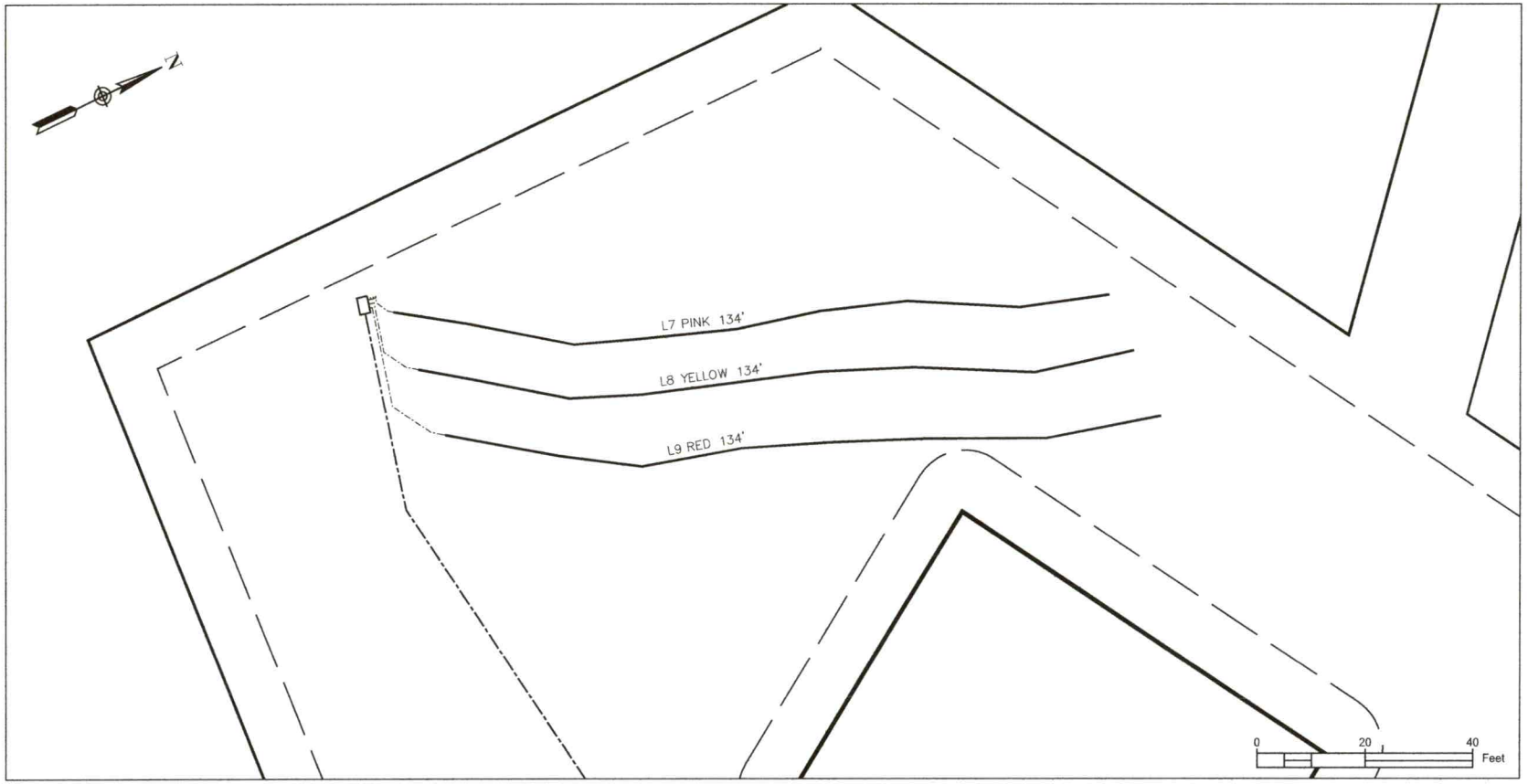
For Review Only

REV.	ISSUED DATE	DESCRIPTION

SHEET TITLE
Component Layout

Drawn By:	Drawn On:
C. Barbee	6/10/2024
Revised By:	Revised On:
--	--
Released By:	Released On:
--	--

Drawing Number:
WW-3



General Drainfield Notes:

1. Clear all trees less than 8" in diameter (measured at a height 3' from soil surface) from the drainfield.
2. Vegetation that will re-grow from a cut stump shall be stumped or pulled from the ground. Stumps shall not be pushed over.
3. Drainfield area shall be cleared of all leaves, pine straw, debris, etc. The accumulated material shall be removed from the drainfield.
4. In clayey soils, sides of trenches shall be raked and limed per manufacturer's instructions.
5. Supply lines shall be installed with a minimum of 18" cover.
6. The trenches shall be backfilled appropriately so that no low areas are present.
7. Apply lime over the drainfield area as needed. Seed fine fescue over the drainfield at the rate recommended by the seed manufacturer. Hand rake the seed into the soil surface. Straw the seeded area at the rate of 1.5-2 bales per 1000 sq. ft.

DRAINFIELD INFO. - **Primary**

Proposed Type of System/Distribution: ***Pump to Pressure Manifold using Chambers***

Line No.	Flag Color	Line Length (ft)	Tap	Flow (gpm)	Flow/Foot (gpm/ft)	Line L.T.A.R.
7	PINK	134	1/2in SCH 40	7.11	0.053	0.398
8	YELLOW	134	1/2in SCH 40	7.11	0.053	0.398
9	RED	134	1/2in SCH 40	7.11	0.053	0.398
	Total	**402**	**Total**	**21.33**	**Avg.**	**0.40**

1 WW-4 **Primary Drainfield**
SOURCE: AWT, Inc.

AWT
Engineers and Soil Scientists
Agri-Waste Technology, Inc.
501 N Salem Street, Suite 203, Apex, NC 27502
agriwaste.com | 919.859.9669

Extreme Construction Services LLC c/o Sky Powell
Extreme Const. Mock Mill Rd

Project Location:
219 Mock Mill Road
Statesville, NC
Iredell County
PIN: 4703295587.000

Project Owner:
Extreme Construction Services LLC c/o Sky Powell
191 Shepherds Bluff Drive
Mooresville, NC 28115
304-377-4358
sky@extreme-nc.com

For Review Only

REV.	ISSUED DATE	DESCRIPTION

SHEET TITLE
Primary Drainfield

Drawn By:	Drawn On:
C. Barbee	6/10/2024
Revised By:	Revised On:
--	--
Released By:	Released On:
--	--

Drawing Number:
WW-4

Permit/File #: OSWP-2024-57701

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES

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

Submittal Includes: ☒ (a2) Improvement Permit ☒ (a2) Construction Authorization ☐ Fee $_____

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

County: Iredell
PIN/Lot Identifier: 4703298587.000
Issued To: Extreme Construction Services, LLC
Property Location: 219 Mock Mill Rd, Statesville, NC 28677
Subdivision (if applicable) Extreme Construction Services, LLC Lot #: 2 Block: _____ Section: _____
LSS Report Provided: Yes ☒ No ☐
If yes, name and license number of LSS: Jeff Vaughan, 1227

New ☒ Expansion ☐ System Relocation ☐ Change of Use ☐
Facility Type: Single Family Residence
Number of bedrooms: 4 Number of Occupants: 8 Other: _____
Design Wastewater Strength: ☒ 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*: Type IIIb, Pump to Pressure Manifold (25% Reduction) (Initial) Pump Required: ☒ Yes ☐ No ☐ May be required
Proposed Wastewater System Type*: Type IIIb, Pump to Pressure Manifold (50% Reduction) (Repair) Pump Required: ☒ Yes ☐ No ☐ May be required
**Please include system classification for proposed wastewater system types in accordance with Rule .1301 Table XXXII*
Effluent Standard: ☒ DSE ☐ HSE ☐ NSF/ANSI 40 ☐ TS-I ☐ TS-II ☐ RCW
Saprolite System (Initial): ☐ Yes ☒ No Saprolite System (Repair): ☐ Yes ☒ No
Fill System (Initial): ☐ Yes ☒ 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 ☒ 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)[x]: 44" Usable Depth to LC (Repair)[x]: 44" ***[x] Limiting Condition***
Max. Trench Depth (Initial)[‡]: 32" Max. Trench Depth (Repair)[‡]: 32" ***[‡] Measured on the downhill side of the trench***
Artificial Drainage Required: ☐ Yes ☒ No If yes, please specify details: _____
Type of Water Supply: ☐ Private well ☐ Public well ☐ Shared well ☒ Municipal Supply ☐ Spring ☐ Other: _____
Drainfield location meets requirements of Rule .0508: Yes ☒ No ☐ Drainfield location meets requirements of Rule .0601: Yes ☒ No ☐
Permit valid for: ☒ Five years [site plan submitted pursuant to GS 130A-334(13a)] ☐ No expiration [plat submitted pursuant to GS 130A-334(7a)]

Permit conditions:

Licensed Soil Scientist Print Name: Jeff Vaughan
Licensed Soil Scientist Signature: Jeff Vaughan Date: 07/16/2024

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-2024-57701

This Section for Local Health Department Use Only

Initial submittal received: 7/30/24 *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: 7/30/24

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: 7/30/29

See attached site sketch

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES
Division of Public Health

Permit/File #: OSWP-2024-57701

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

County: Iredell **Pre-Construction Conference Required:** Yes ☐ No ■

PIN/Lot Identifier: 4703298587.000

Issued To: Extreme Construction Services, LLC

Property Location: 219 Mock Mill Rd, Statesville, NC

AOWE/PE Plans/Evaluations Provided: Yes ■ No ☐ If yes, name and license number of AOWE/PE: Jeff Vaughan, 10003E

Facility Type: Single Family Residence

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

■ New ☐ Expansion ☐ Repair ☐ System Relocation ☐ Change of Use

Basement? ☐ Yes ■ No Basement Fixtures? ☐ Yes ■ No

Crawl Space? ☐ Yes ■ No Slab Foundation? ■ Yes ☐ No

Type of Wastewater System* Type IIIb, Pump to Pressure Manifold (25% Reduction) (Initial) Type IIIb, Pump to Pressure Manifold (50% Reduction) (Repair)

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

Design Daily Flow: 480 GPD Wastewater Strength: ■ Domestic ☐ High Strength ☐ Industrial Process WW

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

Effluent Standard: ■ DSE ☐ HSE ☐ NSF/ANSI 40 ☐ TS-I ☐ TS-II ☐ RCW

Type of Water Supply: ☐ Private well ☐ Public well ☐ Shared well ■ Municipal Supply ☐ Spring ☐ Other: _____

Installation Requirements/Conditions

Septic Tank Size: 1,000 gallons Total Trench/Bed Length: 400 feet Trench/Bed Spacing: 9 feet on center

Trench/Bed Width: 36 inches LTAR: 0.3 gpd/ft² Usable Depth to LC (Initial)ˣ: 44 ˣ***Limiting condition***

Soil Cover: - inches Slope Corrected Maximum Trench/Bed Depth‡: 32 inches ‡ ***Measured on the downhill side of the trench***

Pump Tank Size (if applicable): 1,250 gallons Requires more than 1 pump? ☐ Yes ■ No

Pump Requirements: 18.00 ft. TDH vs. 23.09 GPM Grease Trap Size (if applicable): - gallons

Distribution Method: ☐ Serial ☐ D-Box or Parallel ■ Pressure Manifold(s) ☐ LPP ☐ Other: _____

Artificial Drainage Required: Yes ☐ No ■ 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 ■ No Declaration of Restrictive Covenants: ☐ Yes ■ No

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

Management Entity Required: ☐ Yes ■ No Minimum O&M Requirements: _____

Permit conditions:

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: Jeff Vaughan

AOWE/PE Signature: Jeff Vaughan Date: 07/16/2024

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

See attached site sketch

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES
Division of Public Health

Permit/File #: OSWP-2024-57701

This Section for Local Health Department Use Only

Initial submittal received: 7/30/24 (*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: 7/30/24

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: 7/30/29

See attached site sketch

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES

ROY COOPER • Governor
KODY H. KINSLEY • Secretary
MARK BENTON • Chief 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:
☑ (a2) Improvement Permit ☑ (a2) Construction Authorization ☐ (a2) Repair/Construction Authorization

If applying for a Construction Authorization, please indicate desired system type(s):
☐ Accepted ☐ Conventional ☐ Innovative ☑ Other Type IIIb, Pump to Pressure Manifold (25% Reduction) ☐ Any

☑ New Construction ☐ Expansion ☐ System Relocation ☐ Change of Use ☐ Repair
☑ 5-Year Expiration Requested (site plan provided) ☐ Non-Expiring Permit Requested (plat provided, defined in G.S.130A-334(7a)
Requesting DHHS review? (systems >3000 GPD or IPWW) ☐ Yes ☑ No

Applicant: Agriwaste Technology, Trevor Hackney
Mailing Address: 501 N. Salem Street
City: Apex
State: NC Zip: 27502
Phone #: (704)285-5944
Email: thackney@agriwaste.com

Owner: Extreme Construction Services, LLC
Mailing Address: 191 Shepherds Bluff Dr
City: Mooresville
State: NC Zip: 28115
Phone #: 304-377-4358
Email: sky@extreme-nc.com

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

☐ Yes	☒ No	Does the site contain any jurisdictional wetlands?
☐ Yes	☒ No	Is any wastewater going to be generated on the site other than domestic sewage?
☐ Yes	☒ No	Is the site subject to approval by any other public agency?
☐ Yes	☒ 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: Trevor Hackney Date: 06/24/2024

Owner's Signature: Date: 7/1/24

AGRITEC-01 CGARKALNS

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 1/12/2024

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME: Connie Garkalns	
Hartsfield & Nash Agency, Inc. 10405 Ligon Mill Rd., Ste H Wake Forest, NC 27587	PHONE (A/C, No, Ext): (919) 556-3698	FAX (A/C, No): (919) 556-8758
	E-MAIL ADDRESS: Connie@hartsfield-nash.com	

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : Selective Insurance Company of the Southeast	39926
INSURER B : ACCIDENT FUND INSURANCE COMPANY OF AMERICA	10166
INSURER C : Evanston Insurance Company	35378
INSURER D :	
INSURER E :	
INSURER F :	

INSURED

Agri-Waste Technology Inc
501 N. Salem St Ste 203
Apex, NC 27502

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY						EACH OCCURRENCE	$ 2,000,000
	[ ] CLAIMS-MADE [X] OCCUR			S 2253659	1/18/2024	1/18/2025	DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 300,000
							MED EXP (Any one person)	$ 10,000
							PERSONAL & ADV INJURY	$ 2,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	$ 4,000,000
	[ ] POLICY [X] PRO-JECT [ ] LOC						PRODUCTS - COMP/OP AGG	$ 4,000,000
	OTHER:							$
A	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	$ 1,000,000
	X ANY AUTO			S 2253659	1/18/2024	1/18/2025	BODILY INJURY (Per person)	$
	[ ] OWNED AUTOS ONLY [ ] SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	[ ] HIRED AUTOS ONLY [ ] NON-OWNED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	$
								$
A	[ ] UMBRELLA LIAB [X] OCCUR			S 2253659	1/18/2024	1/18/2025	EACH OCCURRENCE	$ 2,000,000
	[ ] EXCESS LIAB [ ] CLAIMS-MADE						AGGREGATE	$ 2,000,000
	[ ] DED [ ] RETENTION $							$
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y/N	N/A		100003072	1/18/2024	1/18/2025	X PER STATUTE [ ] OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? [N] (Mandatory in NH)						E.L. EACH ACCIDENT	$ 1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$ 1,000,000
							E.L. DISEASE - POLICY LIMIT	$ 1,000,000
C	Prof & Pollution			MKLV3ENV104078	8/22/2023	8/22/2024	Each Claim	5,000,000
A	Leased / Rented			S 2253659	1/18/2024	1/18/2025	Equipment	25,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER

***This is ONLY For Informational Purposes
Contact Agency for Specific Holder info to be added
****

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Connie Garkalns

© 1988-2015 ACORD CORPORATION. All rights reserved.
The ACORD name and logo are registered marks of ACORD

Engineers and Soil Scientists

Agri-Waste Technology, Inc.
501 N Salem Street, Suite 203, Apex, NC 27502
agriwaste.com | 919.859.0669

Soil Suitability for Domestic Sewage Treatment and Disposal Systems
219 Mock Mill Rd, Statesville, NC 28677
(Iredell County PIN: 4703298587.000)

PREPARED FOR: Extreme Construction Services, LLC
c/o Sky Powell – Client

PREPARED BY: Jeff Vaughan, Senior Agronomist & Soil Scientist
Trevor Hackney, Environmental Scientist

DATE: July 16, 2024

Soil suitability for domestic sewage treatment and disposal systems was evaluated on May 21, 2024, for the proposed property located at 219 Mock Mill Rd, Statesville, NC 28677. Trevor Hackney and Nathan Estevez of Agri-Waste Technology, Inc. (AWT) conducted the soil evaluation. This evaluation was done to facilitate permitting for a septic system. This report and attached documents were prepared to meet the requirements for G.S. 130A-335(a2).

A drawing of the site plan, septic layout, and boring locations is included in Attachment 1. Profile descriptions for each boring are included in Attachment 2. Additional documentation about the property is included in Attachment 3.

This property is a subdivision of a larger property on Mock Mill Road that will be identified as lot 2. The home is proposed near the middle of the property with the septic system proposed upslope of the home. The proposed septic system is a type IIIb, pump septic system utilizing pressure manifold distribution with a chamber dispersal 25% reduction drain-field product for the primary system and 50% reduction for the repair system.

Soil Suitability for Domestic Sewage Treatment and Disposal Systems
The drawing in Attachment 1 details the property boundaries (as proposed by Jordan Grant & Associates, PLLC), soil boring locations, and layout of drain field trenches (Completed by AWT). Soil borings were examined to determine soil suitability for on-site sewage disposal systems in accordance with 15A 18E Rules for Wastewater Treatment and Disposal Systems. These borings were advanced with a hand auger.

A septic layout was performed to demonstrate available space (.0508). The layout in Attachment 1 indicates there is available space for a four-bedroom type IIIb, pump septic system utilizing pressure manifold distribution with a 25% reduction drain-field product for the primary system. The repair system will be a 50% reduction system.

The proposed LTAR (Long Term Acceptance Rate) by AWT is 0.3 GPD/ft^2. The soils on this property are group IV soils within the distribution and treatment zone as used to define the LTAR. Since usable slope corrected soil depths meet or exceed 44" AWT is recommending the use of 25% reduction drain field product. The maximum low side trench bottom should not exceed 32". With an LTAR of 0.3 GPD/ft^2, 667 linear feet of trench are necessary to support a four-bedroom home initial and repair systems. The attached drawing proves that 402 linear feet of trench can be installed for the primary septic system. The attached drawing proves that 269 linear feet of trench can be installed for the repair septic system with the proposed home location on the property.

Any disturbances or grading done in the usable area or within the proposed setbacks will change the potential of using the area designated for a drain field.

We appreciate the opportunity to assist you in this matter. Please contact us with any questions, concerns, or comments.

Sincerely,

Jeff Vaughan, LSS/AOWE



EXTREME CONST. MOCK MILL RD

Project Location

219 Mock Mill Road
Statesville, NC
Iredell County
PIN: 4703298587.000

Project Owner

Extreme Construction Services LLC
c/o Sky Powell
191 Shepherds Bluff Drive
Mooresville, NC 28115
304-377-4358
sky@extreme-nc.com

Project Consultant

Jeff Vaughan, L.S.S

(919) 367-6313
Agri-Waste Technology, Inc.
501 N. Salem Street, Suite 203
Apex, NC 27502
(919) 859-0669
(919) 233-1970 Fax

System Overview

Single Family Residence
Four Bedroom, 480 gpd
Chambers Dispersal Primary
PPBPS Horizontal Dispersal Repair
Pressure Manifold Distribution Primary
Pressure Manifold Distribution Repair



VICINITY MAP

Sheet Index

Sheet 1	Cover Sheet
Sheet 2	Property Layout
Sheet 3	Component Layout
Sheet 4	Primary Drainfield
Sheet 5	Repair Drainfield
Sheet 6	Detail Sheet 1
Sheet 7	Detail Sheet 2
Sheet 8	Excavation Safety

North Carolina 811 www.nc811.org

AWT Engineers and Soil Scientists
Agri-Waste Technology, Inc.
501 N Salem Street, Suite 203, Apex, NC 27502
agriwaste.com | 919.859.0669

Extreme Construction Services LLC c/o Sky Powell
Extreme Const. Mock Mill Rd

Project Location:
219 Mock Mill Road
Statesville, NC
Iredell County
PIN: 4703298587.000

Project Owner:
Extreme Construction Services LLC c/o Sky Powell
191 Shepherds Bluff Drive
Mooresville, NC 28115
304-377-4358
sky@extreme-nc.com

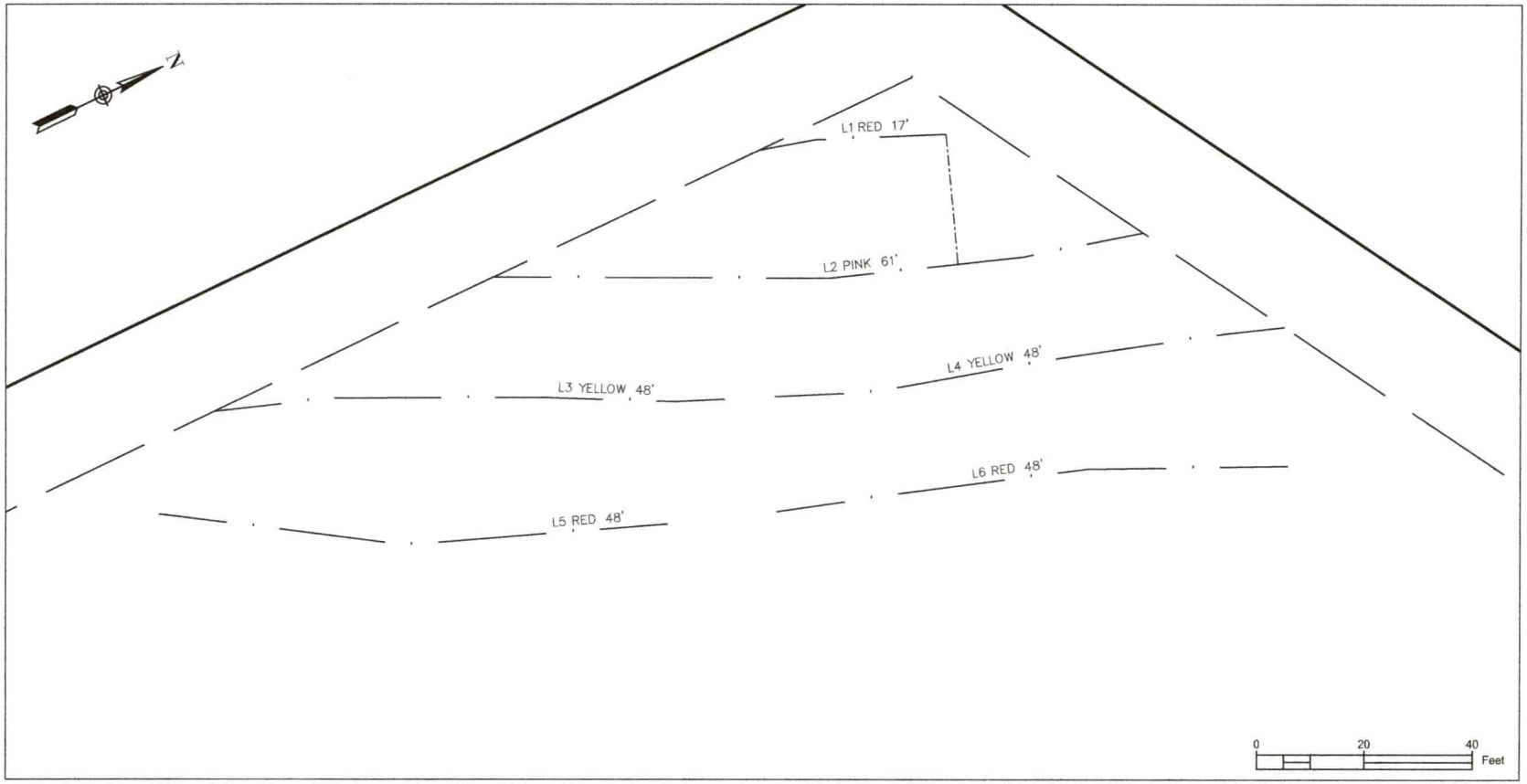
For Review Only

REV.	ISSUED DATE	DESCRIPTION

SHEET TITLE
Cover Sheet

Drawn By:	Drawn On:
C. Barbee	6/10/2024
Revised By:	Revised On:
--	--
Released By:	Released On:
--	--

Drawing Number:
WW-1



General Drainfield Notes:

1. Clear all trees less than 8" in diameter (measured at a height 3' from soil surface) from the drainfield.
2. Vegetation that will re-grow from a cut stump shall be stumped or pulled from the ground. Stumps shall not be pushed over.
3. Drainfield area shall be cleared of all leaves, pine straw, debris, etc. The accumulated material shall be removed from the drainfield.
4. In clayey soils, sides of trenches shall be raked and limed per manufacturer's instructions.
5. Supply lines shall be installed with a minimum of 18" cover.
6. The trenches shall be backfilled appropriately so that no low areas are present.
7. Apply lime over the drainfield area as needed. Seed fine fescue over the drainfield at the rate recommended by the seed manufacturer. Hand rake the seed into the soil surface. Straw the seeded area at the rate of 1.5-2 bales per 1000 sq. ft.

Line No.	Flag Color	Line Length (ft.)		Flow (gpm)	Flow/Foot (gpm/ft)	Line L.T.A.R.
1&2	RED&PINK	78	3/4in SCH 80	10.10	0.129	0.538
3	YELLOW	47.7	1/2in SCH 40	7.11	0.149	0.619
4	YELLOW	47.7	1/2in SCH 40	7.11	0.149	0.619
5	RED	47.7	1/2in SCH 40	7.11	0.149	0.619
6	RED	47.7	1/2in SCH 40	7.11	0.149	0.619
	Total	**269**	**Total**	**38.54**	**Avg.**	**0.60**

1 WW-5 **Repair Drainfield**
SOURCE: AWT, Inc.

AWT
Engineers and Soil Scientists
Agri-Waste Technology, Inc.
501 N Salem Street, Suite 203, Apex, NC 27502
agriwaste.com | 919.859.0909

Extreme Construction Services
LLC c/o Sky Powell
Extreme Const. Mock Mill Rd

Project Location
219 Mock Mill Road
Statesville, NC
Iredell County
PIN: 4703298587.000

Project Owner
Extreme Construction Services LLC c/o Sky Powell
191 Shepherds Bluff Drive
Mooresville, NC 28115
304-377-4358
sky@extreme-nc.com

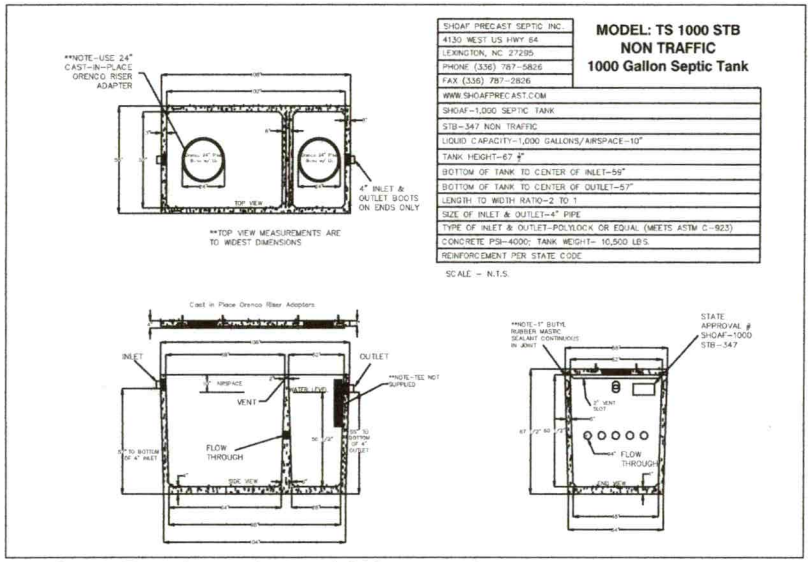
For Review Only

REV.	ISSUED DATE	DESCRIPTION

SHEET TITLE
Repair Drainfield

Drawn By:	Drawn On:
C. Barbee	6/10/2024
Revised By:	Revised On:
--	--
Released By:	Released On:
--	--

Drawing Number:
WW-5



SHOAF PRECAST SEPTIC INC.
4130 WEST US HWY 64
LEXINGTON, NC 27295
PHONE (336) 787-5826
FAX (336) 787-2826
WWW.SHOAFPRECAST.COM

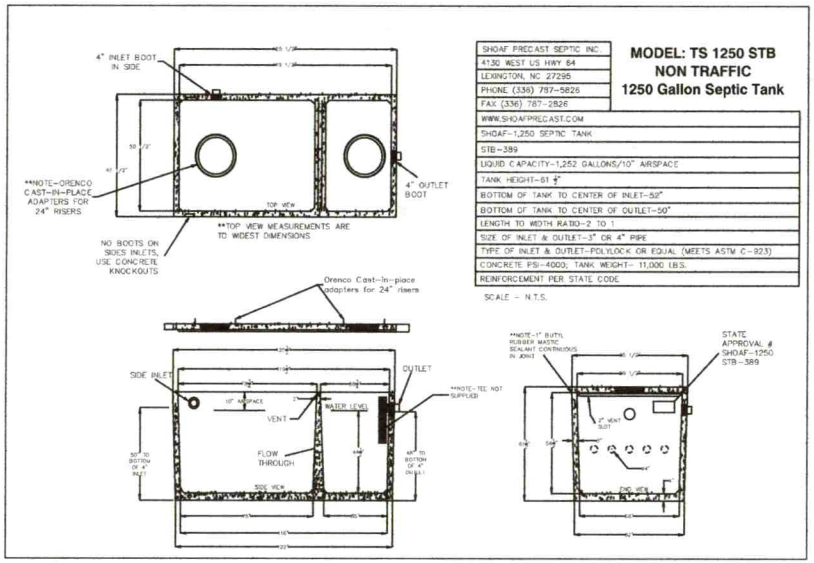
MODEL: TS 1000 STB
NON TRAFFIC
1000 Gallon Septic Tank

SHOAF-1,000 SEPTIC TANK
STB-347 NON TRAFFIC
LIQUID CAPACITY-1,000 GALLONS/AIRSPACE-10"
TANK HEIGHT-67 ½"
BOTTOM OF TANK TO CENTER OF INLET-59"
BOTTOM OF TANK TO CENTER OF OUTLET-57"
LENGTH TO WIDTH RATIO-2 TO 1
SIZE OF INLET & OUTLET-4" PIPE
TYPE OF INLET & OUTLET-POLYLOCK OR EQUAL (MEETS ASTM C-923)
CONCRETE PSI-4000; TANK WEIGHT- 16,500 LBS.
REINFORCEMENT PER STATE CODE

SCALE – N.T.S.

1 WW-6 Septic Tank (or equivalent 1,000-gal tank)

SOURCE: Shoaf Precast Septic, Inc.



SHOAF PRECAST SEPTIC INC.
4130 WEST US HWY 64
LEXINGTON, NC 27295
PHONE (336) 787-5826
FAX (336) 787-2826
WWW.SHOAFPRECAST.COM

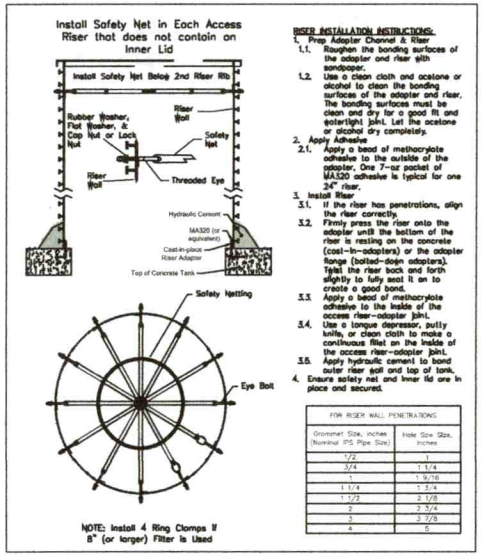
MODEL: TS 1250 STB
NON TRAFFIC
1250 Gallon Septic Tank

SHOAF-1,250 SEPTIC TANK
STB-389
LIQUID CAPACITY-1,252 GALLONS/10" AIRSPACE
TANK HEIGHT-61 ½"
BOTTOM OF TANK TO CENTER OF INLET-52"
BOTTOM OF TANK TO CENTER OF OUTLET-50"
LENGTH TO WIDTH RATIO-2 TO 1
SIZE OF INLET & OUTLET-3" OR 4" PIPE
TYPE OF INLET & OUTLET-POLYLOCK OR EQUAL (MEETS ASTM C-923)
CONCRETE PSI-4000; TANK WEIGHT- 11,000 LBS.
REINFORCEMENT PER STATE CODE

SCALE – N.T.S.

2 WW-6 Pump Tank (or equiv. tank with 1-day storage)

SOURCE: Shoaf Precast Septic, Inc.



RISER INSTALLATION INSTRUCTIONS:

1. Prep Adapter Channel & Riser
   - 1.1. Roughen the bonding surfaces of the adapter and riser with sandpaper.
   - 1.2. Use a clean cloth and acetone or alcohol to clean the bonding surfaces of the adapter and riser. The bonding surfaces must be clean and dry for a good fit and watertight joint. Let the acetone or alcohol dry completely.
2. Apply Adhesive
   - 2.1. Apply a bead of methacrylate adhesive to the outside of the adapter. One 7-oz packet of MA320 adhesive is typical for one 24" riser.
3. Install Riser
   - 3.1. If the riser has penetrations, align the riser correctly.
   - 3.2. Firmly press the riser onto the adapter until the bottom of the riser is resting on the concrete (cast-in-adapters) or the adapter flange (bolted-down adapters). Twist the riser back and forth slightly to fully seat it on to create a good bond.
   - 3.3. Apply a bead of methacrylate adhesive to the inside of the access riser-adapter joint.
   - 3.4. Use a tongue depressor, putty knife, or clean cloth to make a continuous fillet on the inside of the access riser-adapter joint.
   - 3.5. Apply hydraulic cement to bond outer riser seal and top of tank.
4. Ensure safety net and inner lid are in place and secured.

FOR RISER WALL PENETRATIONS	
Grommet Size, inches (Nominal PS Pipe Size)	Hole Saw Size, Inches
1/2	1
3/4	1 1/4
1	1 9/16
1 1/4	1 3/4
1 1/2	2 1/8
2	2 5/8
3	3 7/8
4	5

3 WW-6 Riser Safety Nets

SOURCE: SIM-TECH, Inc.

NOTES

1. Installation to follow all NC DHHS and Iredell County applicable rules and regulations.
2. Iredell County to perform construction inspections and final system certification.
3. Septic Tank to have approved effluent filter.
4. Contractor to abide by all safety regulations during system installation.
5. Contractor shall backfill around all access areas such that storm water is shed away from potential entry points.
6. Invert elevations of all components to be verified in field by contractor to insure proper operation.
7. All system piping to be SCH40 PVC (except where noted).
8. All gravity elbows to be long radius or long sweeping type elbows.
9. Actual installation and placement of treatment system to be overseen by Contractor.
10. Tanks to be set on 6" minimum gravel base. Use #5 or #57 stone for base.
11. Contractor to seed and/or mulch disturbed areas to coincide with existing landscape. Area shall not be left with uncovered soil.
12. Mount Control Panel a minimum of 24" above grade.
13. Power to panel to be installed by licensed electrician per code. One 15-amp circuit and one 20-amp circuit with individual neutrals to be run from house to control panel.
14. All risers to have cast-in-place tank adapters and be single-piece riser. Risers to extend 6" above soil surface and be designed to prevent surface water inflow.
15. Backfill around tank(s) shall be gravel or tank hole shall be over-excavated a minimum of 2' in all directions to allow for mechanical tamping of backfill.
16. All penetrations to be sealed.
17. Spigot to be located on outside of building within 50' of tanks.
18. All pressure lines to maintain 18" min. cover.
19. Contractor to adjust tank placement to meet site constraints.

AWT
Engineers and Soil Scientists

Agri-Waste Technology, Inc.
501 N Salem Street, Suite 203, Apex, NC 27502
agriwaste.com | 919.859.0669

Extreme Construction Services LLC c/o Sky Powell
Extreme Const. Mock Mill Rd

Project Location:
219 Mock Mill Road
Statesville, NC
Iredell County
PIN: 4703298587.000

Project Owner:
Extreme Construction Services LLC c/o Sky Powell
191 Shepherds Bluff Drive
Mooresville, NC 28115
304-377-4358
sky@extreme-nc.com

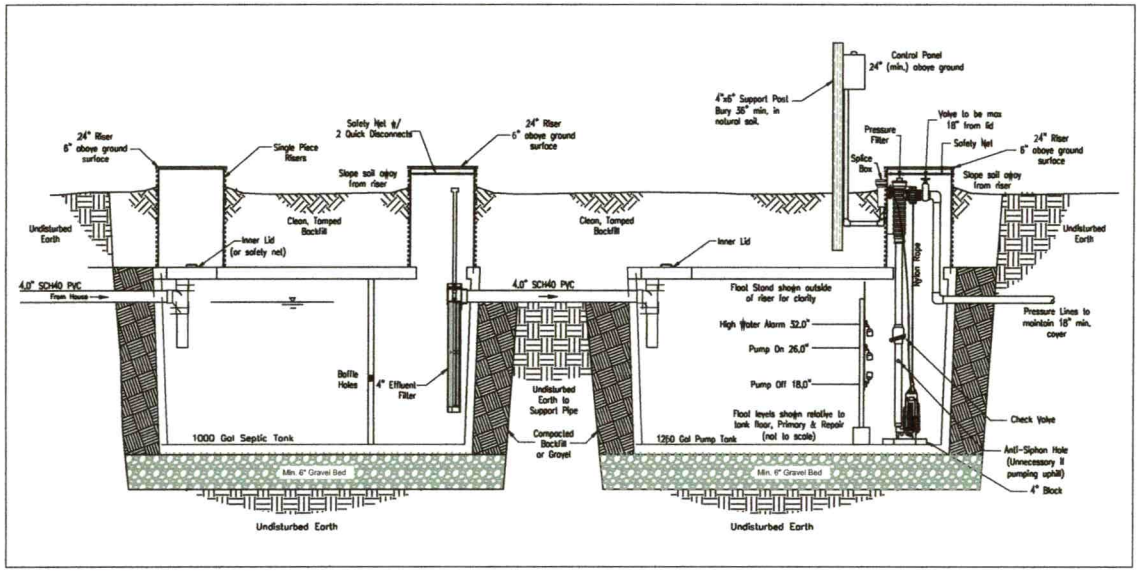
For Review Only

REV.	ISSUED DATE	DESCRIPTION

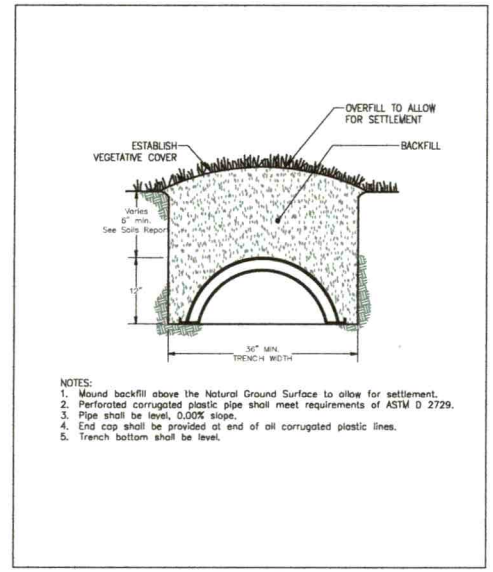
SHEET TITLE
Detail Sheet 1

DRAWN BY:	CREATED ON:
C. Barbee	6/10/2024
REVISED BY:	REVISED ON:
--	--
RELEASED BY:	RELEASED ON:
--	--

DRAWING NUMBER
WW-6

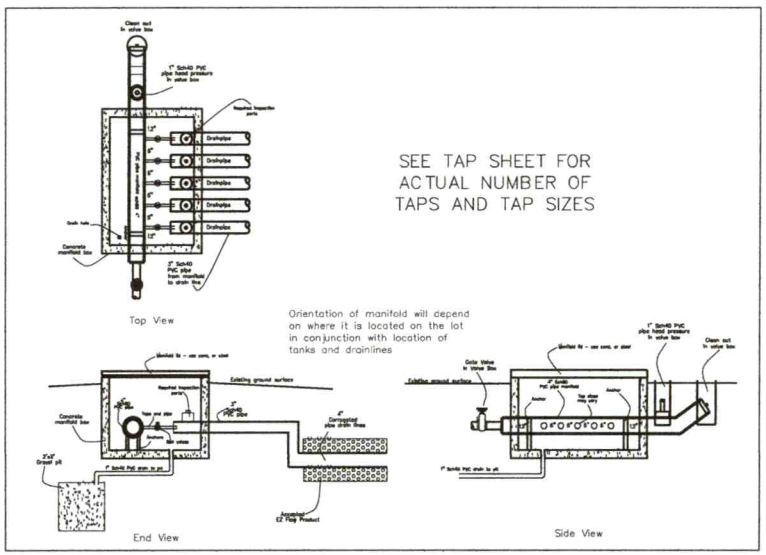


1 WW-7 **SYSTEM PROFILE VIEW**
N.T.S.

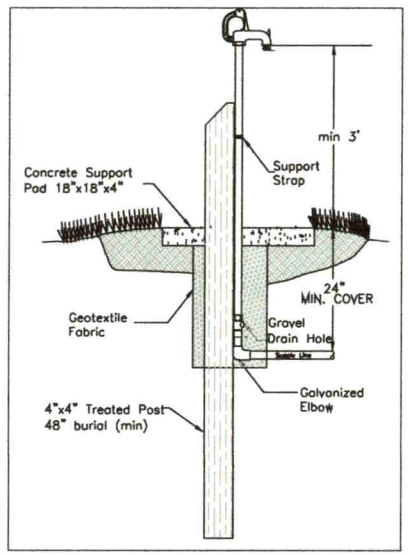


NOTES:
1. Mound backfill above the Natural Ground Surface to allow for settlement.
2. Perforated corrugated plastic pipe shall meet requirements of ASTM D 2729.
3. Pipe shall be level, 0.00% slope.
4. End cap shall be provided at end of all corrugated plastic lines.
5. Trench bottom shall be level.

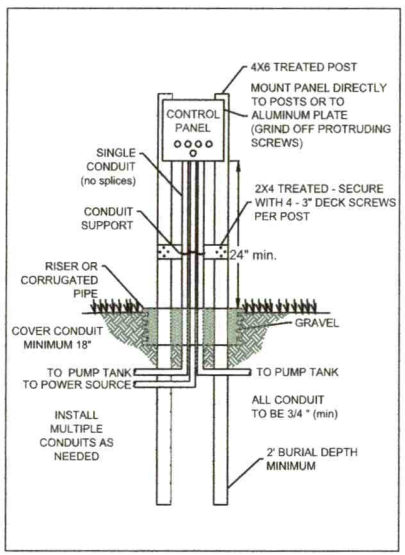
2 WW-7 **TRENCH X-SECTION (Typical)**
N.T.S. Source: AWT



4 WW-7 **PRESSURE MANIFOLD INSTALLATION (Typical) - For Illustration Only**
N.T.S. SOURCE: AWT



5 WW-7 **YARD HYDRANT (if required)**
N.T.S. SOURCE: AWT



6 WW-7 **CONTROL PANEL SUPPORT**
N.T.S. SOURCE: AWT

AWT
Engineers and Soil Scientists
Agri-Waste Technology, Inc.
501 N Salem Street, Suite 203, Apex, NC 27502
agriwaste.com | 919.859.0669

Extreme Construction Services LLC c/o Sky Powell
Extreme Const. Mock Mill Rd

Project Location:
219 Mock Mill Road
Statesville, NC
Iredell County
PIN: 4703298587.000

Project Owner:
Extreme Construction Services LLC c/o Sky Powell
191 Shepherds Bluff Drive
Mooresville, NC 28115
304-377-4358
sky@extreme-nc.com

For Review Only

REV.	ISSUED DATE	DESCRIPTION

SHEET TITLE
Detail Sheet 2

DRAWN BY:	CREATED ON:
C. Barbee	6/10/2024
REVISED BY:	REVISED ON:
--	--
RELEASED BY:	RELEASED ON:
--	--

DRAWING NUMBER
WW-7

Trenching and Excavation Safety

The employer must comply with the trenching and excavation requirements of 29 CFR 1926.651 and 1926.652 or comparable OSHA-approved state plan requirements.

Inspection of Excavations

OSHA standards require that a competent person inspect trenches daily and as conditions change before worker entry to ensure elimination of excavation hazards. A competent person is an individual who is capable of identifying existing and predictable hazards or working conditions that are hazardous, unsanitary, or dangerous to workers, soil types and protective systems required, and who is authorized to take prompt corrective measures to eliminate these hazards and conditions.

Access and Egress

OSHA standards require safe access and egress to all excavations, including ladders, steps, ramps, or other safe means of exit for employees working in trench excavations 4 feet (1.22 meters) or deeper. These devices must be located within 25 feet (7.6 meters) of all workers.

Recommendations

Heavy equipment and trucks should stay as far as possible from the edge of any trench.
Always use pads under stabilizers to minimize ground pressures that could lead to failures.

(b) Definitions

"Cemented soil" means a soil in which the particles are held together by a chemical agent, such as calcium carbonate, such that a hand-size sample cannot be crushed into powder or individual soil particles by finger pressure.
"Cohesive soil" means clay (fine grained soil), or soil with a high clay content, which has cohesive strength. Cohesive soil does not crumble, can be excavated with vertical sideslopes, and is plastic when moist. Cohesive soil is hard to break up when dry, and exhibits significant cohesion when submerged. Cohesive soils include clayey silt, sandy clay, silty clay, clay and organic clay.
"Dry soil" means soil that does not exhibit visible signs of moisture content.
"Fissured" means a soil material that has a tendency to break along definite planes of fracture with little resistance, or a material that exhibits open cracks, such as tension cracks, in an exposed surface.
"Granular soil" means gravel, sand, or silt (coarse grained soil) with little or no clay content. Granular soil has no cohesive strength. Some moist granular soils exhibit apparent cohesion. Granular soil cannot be molded when moist and crumbles easily when dry.
"Layered system" means two or more distinctly different soil or rock types arranged in layers. Micaceous seams or weakened planes in rock or shale are considered layered.
"Moist soil" means a condition in which a soil looks and feels damp. Moist cohesive soil can easily be shaped into a ball and rolled into small diameter threads before crumbling. Moist granular soil that contains some cohesive material will exhibit signs of cohesion between particles.
"Plastic" means a property of a soil which allows the soil to be deformed or molded without cracking, or appreciable volume change.
"Saturated soil" means a soil in which the voids are filled with water. Saturation does not require flow. Saturation, or near saturation, is necessary for the proper use of instruments such as a pocket penetrometer or sheer vane.

"Soil classification system" means, for the purpose of this subpart, a method of categorizing soil and rock deposits in a hierarchy of Stable Rock, Type A, Type B, and Type C, in decreasing order of stability. The categories are determined based on an analysis of the properties and performance characteristics of the deposits and the characteristics of the deposits and the environmental conditions of exposure.
"Stable rock" means natural solid mineral matter that can be excavated with vertical sides and remain intact while exposed.
"Submerged soil" means soil which is underwater or is free seeping.

"Type A" means cohesive soils with an unconfined, compressive strength of 1.5 ton per square foot (tsf) (144 kPa) or greater. Examples of cohesive soils are: clay, silty clay, sandy clay, clay loam and, in some cases, silty clay loam and sandy clay loam. Cemented soils such as caliche and hardpan are also considered Type A.
However, no soil is Type A if:
(i) The soil is fissured; or
(ii) The soil is subject to vibration from heavy traffic, pile driving, or similar effects; or
(iii) The soil has been previously disturbed; or
(iv) The soil is part of a sloped, layered system where the layers dip into the excavation on a slope of four horizontal to one vertical (4H:1V) or greater; or
(v) The material is subject to other factors that would require it to be classified as a less stable material.

"Type B" means:
(i) Cohesive soil with an unconfined compressive strength greater than 0.5 tsf (48 kPa) but less than 1.5 tsf (144 kPa); or
(ii) Granular cohesionless soils including: angular gravel (similar to crushed rock), silt, silt loam, sandy loam and, in some cases, silty clay loam and sandy clay loam.
(iii) Previously disturbed soils except those which would otherwise be classed as Type C soil.
(iv) Soil that meets the unconfined compressive strength or cementation requirements for Type A, but is fissured or subject to vibration; or
(v) Dry rock that is not stable; or
(vi) Material that is part of a sloped, layered system where the layers dip into the excavation on a slope less steep than four horizontal to one vertical (4H:1V), but only if the material would otherwise be classified as Type B.

"Type C" means:
(i) Cohesive soil with an unconfined compressive strength of 0.5 tsf (48 kPa) or less; or
(ii) Granular soils including gravel, sand, and loamy sand; or
(iii) Submerged soil or soil from which water is freely seeping; or
(iv) Submerged rock that is not stable, or
(v) Material in a sloped, layered system where the layers dip into the excavation or a slope of four horizontal to one vertical (4H:1V) or steeper.

"Unconfined compressive strength" means the load per unit area at which a soil will fail in compression. It can be determined by laboratory testing, or estimated in the field using a pocket penetrometer, by thumb penetration tests, and other methods.
"Wet soil" means soil that contains significantly more moisture than moist soil, but in such a range of values that cohesive material will slump or begin to flow when vibrated. Granular material that would exhibit cohesive properties when moist will lose those cohesive properties when wet.

(c) Requirements

(1) Classification of soil and rock deposits. Each soil and rock deposit shall be classified by a competent person as Stable Rock, Type A, Type B, or Type C in accordance with the definitions set forth in paragraph (b) of this appendix.
(2) Basis of classification. The classification of the deposits shall be made based on the results of at least one visual and at least one manual analysis. Such analyses shall be conducted by a competent person using tests described in paragraph (d) below, or in other recognized methods of soil classification and testing such as those adopted by the American Society for Testing Materials, or the U.S. Department of Agriculture textural classification system.
(3) Visual and manual analyses. The visual and manual analyses, such as those noted as being acceptable in paragraph (d) of this appendix, shall be designed and conducted to provide sufficient quantitative and qualitative information as may be necessary to identify properly the properties, factors, and conditions affecting the classification of the deposits.
(4) Layered systems. In a layered system, the system shall be classified in accordance with its weakest layer. However, each layer may be classified individually where a more stable layer lies under a less stable layer.
(5) Reclassification. If, after classifying a deposit, the properties, factors, or conditions affecting its classification change in any way, the changes shall be evaluated by a competent person. The deposit shall be reclassified as necessary to reflect the changed circumstances.

(d) Acceptable visual and manual tests

(1) Visual tests. Visual analysis is conducted to determine qualitative information regarding the excavation site in general, the soil adjacent to the excavation, the soil forming the sides of the open excavation, and the soil taken as samples from excavated material.

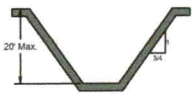
(i) Observe samples of soil that are excavated and soil in the sides of the excavation. Estimate the range of particle sizes and the relative amounts of the particle sizes. Soil that is primarily composed of fine-grained material material is cohesive material. Soil composed primarily of coarse-grained sand or gravel is granular material.
(ii) Observe soil as it is excavated. Soil that remains in clumps when excavated is cohesive. Soil that breaks up easily and does not stay in clumps is granular.
(iii) Observe the side of the opened excavation and the surface area adjacent to the excavation. Crack-like openings such as tension cracks could indicate fissured material. If chunks of soil spall off a vertical side, the soil could be fissured. Small spalls are evidence of moving ground and are indications of potentially hazardous situations.
(iv) Observe the area adjacent to the excavation and the excavation itself for evidence of existing utility and other underground structures, and to identify previously disturbed soil.
(v) Observe the opened side of the excavation to identify layered systems. Examine layered systems to identify if the layers slope toward the excavation. Estimate the degree of slope of the layers.
(vi) Observe the area adjacent to the excavation and the sides of the opened excavation for evidence of surface water, water seeping from the sides of the excavation, or the location of the level of the water table.
(vii) Observe the area adjacent to the excavation and the area within the excavation for sources of vibration that may affect the stability of the excavation face.

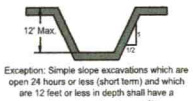
(2) Manual tests. Manual analysis of soil samples is conducted to determine quantitative as well as qualitative properties of soil and to provide more information in order to classify soil properly.

(i) Plasticity. Mold a moist or wet sample of soil into a ball and attempt to roll it into threads as thin as 1/8-inch in diameter. Cohesive material can be successfully rolled into threads without crumbling. For example, if at least a two inch (50 mm) length of 1/8-inch thread can be held on one end without tearing, the soil is cohesive.
(ii) Dry strength. If the soil is dry and crumbles on its own or with moderate pressure into individual grains or fine powder, it is granular (any combination of gravel, sand, or silt). If the soil is dry and falls into clumps which break up into smaller clumps, but the smaller clumps can only be broken up with difficulty, it may be clay in any combination with gravel, sand or silt. If the dry soil breaks into clumps which do not break up into small clumps and which can only be broken with difficulty, and there is no visual indication the soil is fissured, the soil may be considered unfissured.
(iii) Thumb penetration. The thumb penetration test can be used to estimate the unconfined compressive strength of cohesive soils. (This test is based on the thumb penetration test described in American Society for Testing and Materials (ASTM) Standard designation D2488 - "Standard Recommended Practice for Description of Soils (Visual - Manual Procedure).") Type A soils with an unconfined compressive strength of 1.5 tsf can be readily indented by the thumb; however, they can be penetrated by the thumb only with very great effort. Type C soils with an unconfined compressive strength of 0.5 tsf can be easily penetrated several inches by the thumb, and can be molded by light finger pressure. This test should be conducted on an undisturbed soil sample, such as a large clump of spoil, as soon as practicable after excavation to keep to a minimum the effects of exposure to drying influences.If the excavation is later exposed to wetting influences (rain, flooding), the classification of the soil must be changed accordingly.
(iv) Other strength tests. Estimates of unconfined compressive strength of soils can also be obtained by use of a pocket penetrometer or by using a hand-operated shearvane.
(v) Drying test. The basic purpose of the drying test is to differentiate between cohesive material with fissures, unfissured cohesive material, and granular material. The procedure for the drying test involves drying a sample of soil that is approximately one inch thick (2.54 cm) and six inches (15.24 cm) in diameter until it is thoroughly dry:
(A) If the sample develops cracks as it dries, significant fissures are indicated.
(B) Samples that dry without cracking are to be broken by hand. If considerable force is necessary to break a sample, the soil has significant cohesive material content. The soil can be classified as an unfissured cohesive material and the unconfined compressive strength should be determined.
(C) If a sample breaks easily by hand, it is either a fissured cohesive material or a granular material. To distinguish between the two, pulverize the dried clumps of the sample by hand or by stepping on them. If the clumps do not pulverize easily, the material is cohesive with fissures.If they pulverize easily into very small fragments, the material is granular.

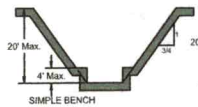
EXCAVATIONS IN TYPE A SOILS

All simple slope excavations 20 feet or less in depth shall have a maximum allowable slope of ¾:1.

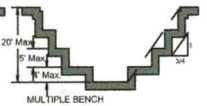




Exception: Simple slope excavations which are open 24 hours or less (short term) and which are 12 feet or less in depth shall have a maximum allowable slope of ½:1

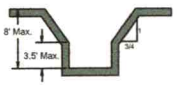


SIMPLE BENCH

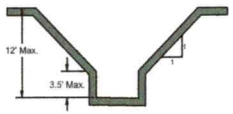


MULTIPLE BENCH

All benched excavations 20 feet or less in depth shall have a maximum allowable slope of ¾:1 and maxium bench dimensions as follows:

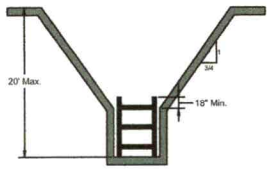


All excavations 8 feet or less in depth which have unsupported vertically sided lower portions shall have a maximum vertical side of ¾ feet.



All excavations more than 8 feet but not more than 12 feet in depth with unsupported vertically sided lower portions shall have a maximum allowable slope of 1:1 and a maximum vertical side of ¾ feet.

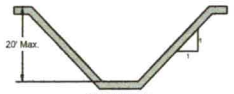
All excavations 20 feet or less in depth which have vertically sided lower portions that are supported or shielded shall have a maximum allowable slope of ½:1. The support or shield system must extend at least 18 inches above the top of the vertical side.



All other simple slope, compound slope, and vertically sided lower portion excavations shall be in accordance with the other options permitted under § 1926.652(b).

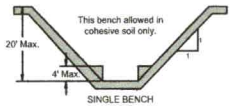
EXCAVATIONS IN TYPE B SOILS

All simple slope excavations 20 feet or less in depth shall have a maximum allowable slope of 1:1.

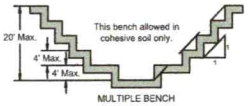


SIMPLE SLOPE

All benched excavations 20 feet or less in depth shall have a maximum allowable slope of 1:1 and maxium bench dimensions as follows:

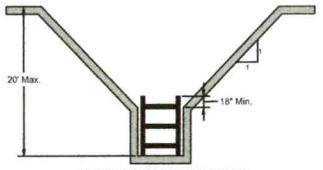


SINGLE BENCH



MULTIPLE BENCH

All excavations 20 feet or less in depth which have vertically sided lower portions that are supported or shielded shall have a maximum allowable slope of 1:1. The support or shield system must extend at least 18 inches above the top of the vertical side.

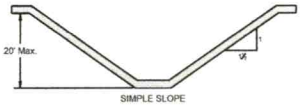


VERTICALLY SIDED LOWER PORTION

All other sloped excavations shall be in accordance with the other options permitted in § 1926.652(b).

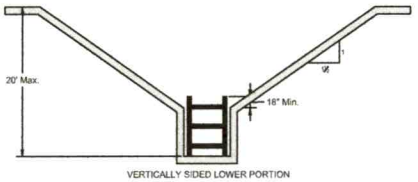
EXCAVATIONS IN TYPE C SOILS

All simple slope excavations 20 feet or less in depth shall have a maximum allowable slope of 1½:1.



SIMPLE SLOPE

All excavations 20 feet or less in depth which have vertically sided lower portions that are supported or shielded shall have a maximum allowable slope of 1½:1. The support or shield system must extend at least 18 inches above the top of the vertical side.

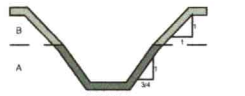


VERTICALLY SIDED LOWER PORTION

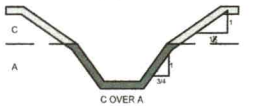
All other sloped excavations shall be in accordance with the other options permitted in § 1926.652(b).

EXCAVATIONS IN LAYERED SOILS

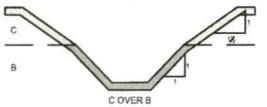
All excavations 20 feet or less in depth made in layered soils shall have a maximum allowable slope for each layer as set forth below.



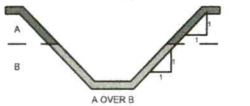
B OVER A



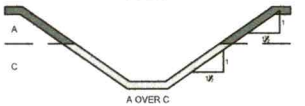
C OVER A



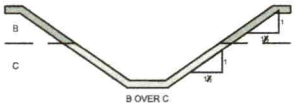
C OVER B



A OVER B



A OVER C



B OVER C

All other sloped excavations shall be in accordance with the other options permitted in § 1926.652(b).

AWT
Engineers and Soil Scientists
Agri-Waste Technology, Inc.
501 N Salem Street, Suite 203, Apex, NC 27502
agriwaste.com | 919.859.0669

Extreme Construction Services LLC c/o Sky Powell
Extreme Const. Mock Mill Rd

Project Location:
219 Mock Mill Road
Statesville, NC
Iredell County
PIN: 4703298587.000

Project Owner:
Extreme Construction Services LLC c/o Sky Powell
191 Shepherds Bluff Drive
Mooresville, NC 28115
304-377-4358
sky@extreme-nc.com

For Review Only

REV.	ISSUED DATE	DESCRIPTION

SHEET TITLE
Excavation Safety

Drawn By:	Drawn On:
C. Barbee	6/10/2024
Revised By:	Revised On:
--	--
Released By:	Released On:
--	--

Drawing Number:
WW-8

Septic System Design - Summary Page

Engineers and Soil Scientists
Agri-Waste Technology, Inc.

Project Manager:
Jeff Vaughan, PhD, LSS
jvaughan@agriwaste.com
919-859-0669

Project: Extreme Construction Lot 2 **Date:** 7/12/2024
Property: 219 Mock Mill Road
Statesville, NC **County:** Iredell
Subdiv.:
Lot #: **Permit #:**

Owner: Extreme Construction Services LLC c/o Sky Powell
Address: 191 Shepherds Bluff Drive **Type of System:** III b
Mooresville, NC 28115
Phone: 304-377-4358
Email: sky@extreme-nc.com **PIN:** 4703298587.000

EHS:

Soil Parameters

Soil Evaluation By:
-

Special Conditions/Notes:

LTAR: 0.30 gpd/ft^2

Design Parameters

Type of Establishment: Residence, 5 or fewer bedrooms
Unit: Bedroom
# of Units: 4

Septic Tank Specifications

Min. Tank Capacity: 1,000 gal
Actual Tank Volume: 1,000 gal
Tank Manufacturer: Shoaf
Tank Model: TS 1000 STB

	Exterior	Interior	
Length:	108.0	102.0	in.
Width:	58.0	52.0	in.
Depth:	67.5	60.5	in.

Primary Drainfield Specifications

Type of Distribution: Parallel Pressure Manifold
Trench Media: Chambers
Trench Width: 3 ft
Trench Depth: 32 in.
(or as specified on permit)

Trench Bottom Area: 1600 ft^2
Minimum Drain Line: 400 ft
Actual Drain Line: 402 ft
Number of Lines: 3
Minimum Line Spacing: 9 ft O.C.

Wastewater Treatment System Design Calculations

Project: Extreme Construction Lot 2
Location: 219 Mock Mill Road
Statesville, NC
County: Iredell

Septic Tank Sizing

Daily Flow Estimate:

Unit	# of Units	Flow/Unit	Flow/Day
Bedroom	4	120	480

Q= 480 gpd

Septic Tank Minimum Capacity: Per 15A NCAC 18E .0801

For individual residences with 4 bedrooms,

Minimum Liquid Capacity (V)= 1,000 gal

Septic Tank Specs:

Manufacturer: Shoaf
Model: TS 1000 STB
Volume: 1,000 gal
Weight: 10,500 lbs

	Exterior	Interior	
Length:	108.0	102.0	in.
Width:	58.0	52.0	in.
Depth:	67.5	60.5	in.

Shape of Risers: Circular
Diameter: 2.00 ft

Pump Tank Storage & Float Settings

Project: Extreme Construction Lot 2
Location: 219 Mock Mill Road
Statesville, NC
County: Iredell

Tank Manufacturer	Shoaf
Tank Model	MS 1250 PT*

Interior Height (in.)	**58.0** in.	
Avg. Storage	**21.80** gal/in.	

Primary System

Elevations, measured from bottom towards top (0 = Interior Bottom of Tank):

Top of pump (including 4" block)	16.1 in.	(Pump height = 12 1/8")
Pump Off	18.0 in.	
Pump On	26.0 in.	(set for dose volume)
Alarm On	32.0 in.	(6 in. above On Float)
Emergency Storage Available		
Pump Tank	567 gal	
Days of Storage	1.18 days	

(determined from "interior top of tank" - "High Water Alarm")

Repair System

Elevations, measured from bottom towards top (0 = Interior Bottom of Tank):

Top of pump (including 4" block)	16.1 in.	(Pump height = 12 1/8")
Pump Off	18.0 in.	
Pump On	29.5 in.	(set for dose volume)
Alarm On	35.5 in.	(6 in. above On Float)
Emergency Storage Available		
Pump Tank	491 gal	
Days of Storage	1.02 days	

(determined from "interior top of tank" - "High Water Alarm")

ELEVATIONS

Project: Extreme Construction Lot 2
Location: 219 Mock Mill Road
Statesville, NC
County: Iredell

Septic Tank	1,000 gal		
Ground Surface		986.70	ft
Depth of Soil Cover	12 in.	1.00	ft
Overall Ht of Tank	67.5 in.	5.63	ft
Elev, Base of Tank		980.08	ft
Ht to 4" Inlet Invert	57 in.	4.75	ft
Elev, 4" Inlet Invert		984.83	ft
Ht to 4" Outlet Invert	55 in.	4.58	ft
Elev, 4" Outlet Invert		984.66	ft
Gravel Base	6 in.	0.50	ft
Elev, Bot of Excavation		979.58	ft
Pump Tank	1250 gal		
Ground Surface		986.30	ft
Depth of Soil Cover	13 in.	1.08	ft
Overall Ht of Tank	66 in.	5.50	ft
Elev, Base of Tank		979.72	ft
Ht to 4" Inlet Invert	52 in.	4.33	ft
Elev, 4" Inlet Invert		984.05	ft
Ht to 2" Outlet Invert	58 in.	4.83	ft
Elev, 2" Outlet Invert		984.55	ft
Gravel Base	6 in.	0.50	ft
Elev, Bot of Excavation		979.22	ft
ST Inlet Pipe			
Grade @ Stub-out		987.5	ft
Depth of Stub-out, top		1.5	ft
Elev, Stub-out Invert		985.65	ft
Elev @ ST Inlet Invert		984.83	ft
Length		13	ft
Slope		6.3	%
Pipe, ST to PT			
ID	4 in.	0.33	ft
OD	4.5 in.	0.38	ft
Elev, ST Outlet Invert		984.66	ft
Elev, PT Inlet Invert		984.05	ft
Length		10	ft
Slope		6.1	%
Cover over inlet pipe		1.52	ft
Pump Reqmt.			
Floor Thickness	4 in.	0.33	ft
Elev, Pump Tank Floor		980.05	ft
Pump Block Ht.	4 in.	0.33	ft
Elev, Pump Intake		980.38	ft
Grade @ Primary Manifold		992.84	ft
Grade @ Repair Manifold		996.00	ft
Min. Cover	18 in.	1.50	ft
Max Elev, Primary		991.34	ft
Max Elev, Repair		994.50	ft
Elev Diff, Primary		10.96	ft
Elev Diff, Repair		14.12	ft

Drainfield Design

Project Extreme Construction Lot 2
Location 219 Mock Mill Road
Statesville, NC
County Iredell

Drainfield Sizing

Primary

LTAR	0.3 gpd/ft^2		
Daily Design Flow	480 gpd	**Type of Drainfield Media**	Chambers
Req. Drainfield Area	1,600 ft^2	**Required Drainline**	
Trench Width, Eff.	3 ft	**After 25% Reduction**	400 ft
Required Drainline	533 ft	**Minimum Line Spacing**	9 ft (O.C.)

Repair

LTAR	0.3 gpd/ft^2		
Daily Design Flow	480 gpd	**Type of Drainfield Media**	PPBPS, Horizontal
Req. Drainfield Area	1,600 ft^2	**Required Drainline**	
Trench Width, Eff.	3 ft	**After 50% Reduction**	267 ft
Required Drainline	533 ft	**Minimum Line Spacing**	8 ft (O.C.)

Drainfield Layout

Line	Use	Color	Elevation	Length	Primary	Repair
1	Layout Line	RED	995.8	21		17.3
2	Layout Line	PINK	995.0	60		60.7
3	Layout Line	YELLOW	994.3	100		47.7
4	Layout Line	YELLOW	994.3	100		47.7
5	Layout Line	RED	993.6	136		47.7
6	Layout Line	RED	993.6	136		47.7
7	Layout Line	PINK	992.9	139	134.0	
8	Layout Line	YELLOW	992.1	141	134.0	
9	Layout Line	RED	991.2	138	134.0	
10	Layout Line	PINK	990.5	120		
11	Layout Line	YELLOW	989.7	94		
12	Layout Line	RED	988.9	86		
13	Layout Line	PINK	988.1	57		
			Total	1328	402	269
			Count	13	3	6

Note: Line length totals are shown to the nearest foot.
For Chambers or Low-profile Chambers:
Effective trench lengths are shown. Add 1' for total installation length.

PRESSURE MANIFOLD DESIGN (Primary)

Site Information

Project: Extreme Construction Lot 2
Location: 219 Mock Mill Road
Statesville, NC
County: Iredell

Design Information

Estimated Daily Flow	480	gal/day
L.T.A.R. (from Iredell Co.)	0.3	gal/day/ft^2
L.T.A.R. + 5%	0.315	gal/day/ft^2
Trench Width	3	ft.
Line Length Required	533	ft.
Length after 25% Reduction	400	ft
L.T.A.R. Reduced	0.400	gal/day/ft^2
L.T.A.R. Reduced + 5%	0.420	gal/day/ft^2

DRAINFIELD INFO. - **Primary**

Proposed Type of System/Distribution: ***Pump to Pressure Manifold using Chambers***

Line No.	Flag Color	Line Length (ft)	Tap	Flow (gpm)	Flow/Foot (gpm/ft)	Line L.T.A.R.
7	PINK	134	1/2in SCH 40	7.11	0.053	0.398
8	YELLOW	134	1/2in SCH 40	7.11	0.053	0.398
9	RED	134	1/2in SCH 40	7.11	0.053	0.398
	Total	**402**	**Total**	**21.33**	**Avg.**	**0.40**

Note: Line lengths are calculated in 4'4" increments to reflect use of PPBPS product.

Total Run Time	22.50	min.	
Drainfield Capacity	262.5	gal	
% of Drainfield Cap	68.3%		(Req. Range 66-75%)
Dose Volume	179.2	gal/dose	
Run Time/Dose	**8.4**	**minutes**	
Volume/depth	21.80	gal/in.	(Per tank manufacturer's specifications)
Estimated Drawdown	8.22	in.	

Manifold Box

Number of Taps	3	with	0	Split(s)	
Manifold Length	3.0	ft.	(approximate)		

PRESSURE MANIFOLD SYSTEM DESIGN (Repair)

Site Information

Project: Extreme Construction Lot 2
Location: 219 Mock Mill Road
Statesville, NC
County: Iredell

Design Information

Estimated Daily Flow	480	gal/day
L.T.A.R. (from Iredell Co.)	0.3	gal/day/ft^2
L.T.A.R. + 5%	0.315	gal/day/ft^2
Trench Width	3	ft.
Line Length Required	533	ft.
Length after 50% Reduction	267	ft
L.T.A.R. Reduced	0.600	gal/day/ft^2
L.T.A.R. Reduced + 5%	0.630	gal/day/ft^2

DRAINFIELD INFO. - **Repair**

Proposed Type of System/Distribution: ***Pump to Pressure Manifold using PPBPS, Horizontal***

Line No.	Flag Color	Line Length (ft.)		Flow (gpm)	Flow/Foot (gpm/ft)	Line L.T.A.R.
1&2	RED&PINK	78	3/4in SCH 80	10.10	0.129	0.538
3	YELLOW	47.7	1/2in SCH 40	7.11	0.149	0.619
4	YELLOW	47.7	1/2in SCH 40	7.11	0.149	0.619
5	RED	47.7	1/2in SCH 40	7.11	0.149	0.619
6	RED	47.7	1/2in SCH 40	7.11	0.149	0.619
	Total	**269**	**Total**	**38.54**	**Avg.**	**0.60**

Note: Line lengths are calculated in 4'4" increments to reflect use of PPBPS product.

Total Run Time	12.45	min.	
Drainfield Capacity	334.8	gal	
% of Drainfield Cap	75.5%		(Max. 97.0% to not exceed 7.2 gal/panel)
Dose Volume	252.8	gal/dose	
Run Time/Dose	**6.6**	**minutes**	Time to deliver max. 3.6 gal/panel
Volume/depth	21.80	gal/in.	(Per tank manufacturer's specifications)
Estimated Drawdown	11.60	in.	

Manifold Box

Number of Taps	4	with	0	Split(s)	
Manifold Length	3.5	ft.	(approximate)		

PUMP DESIGN

System (initial/repair): **Primary**

Project: Extreme Construction Lot 2
Location: 219 Mock Mill Road
Statesville, NC
County: Iredell

Friction Losses

Suction Head	0 ft		*(submersible 0)*
Elev. Difference (highest point from pump)	10.96 ft		
Design Pressure At Outlet	2 ft		

Supply Line - 2" Schedule 40 PVC

Pipe Diameter, Nominal	2 in.		
Pipe Diameter (ID)	2.047 in.	Flow	21.33 gpm
Pipe Length	137.4 ft	Velocity	2.08 ft/sec
Pipe Length for Fittings	13.74 ft		Meets requirement that 2 ft/s < v < 5 ft/s.
Equivalent Length	151.14 ft		
Estimated Friction Loss in Supply Line	1.31 ft		

Pressure Filter Friction Loss	0.23 ft	*(from manufacturer)*
Friction Loss - Taps/Special Fittings	3.5 ft	
TOTAL	**18.00 ft.**	

Flow for Anti-Siphon Hole

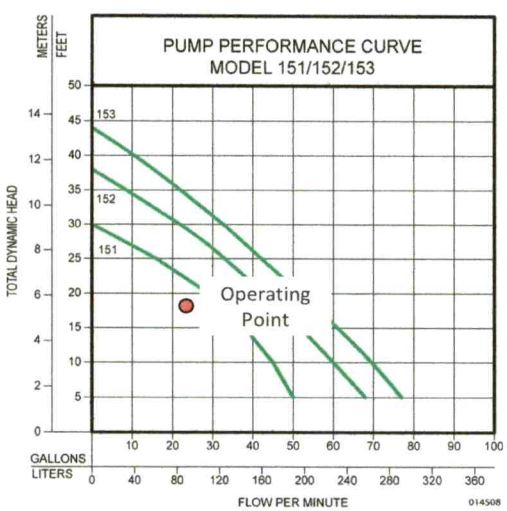
Hole Diameter	3/16 in.
Hole Flowrate	1.76 gpm

Pump Efficiency	0.7	*(assumed, typical)*
Motor Efficiency	0.9	*(assumed for electric pumps)*
Flow	**23.09 gpm**	

Required Horsepower	0.17 hp
TDH	**18.00 ft**

Pump Selection

Manufacturer:	Zoeller
Model:	N153
Horsepower:	**0.5**



PUMP DESIGN

System (initial/repair): **Repair**

Project: Extreme Construction Lot 2
Location: 219 Mock Mill Road
Statesville, NC
County: Iredell

Friction Losses

Suction Head	0 ft		*(submersible 0)*
Elev. Difference (highest point from pump)	14.12 ft		
Design Pressure At Outlet	2 ft		

Supply Line - 2" Schedule 40 PVC

Pipe Diameter, Nominal	2 in.		
Pipe Diameter (ID)	2.047 in.	Flow	38.54 gpm
Pipe Length	227 ft	Velocity	3.76 ft/s
Pipe Length for Fittings	22.7 ft		Meets requirement that 2 ft/s < v < 5 ft/s.
Equivalent Length	249.7 ft		
Estimated Friction Loss in Supply Line	6.48 ft		

Pressure Filter Friction Loss	0.23 ft	*(from manufacturer)*
Friction Loss - Taps/Special Fittings	3.5 ft	
TOTAL	**26.33 ft.**	

Flow for Anti-Siphon Hole

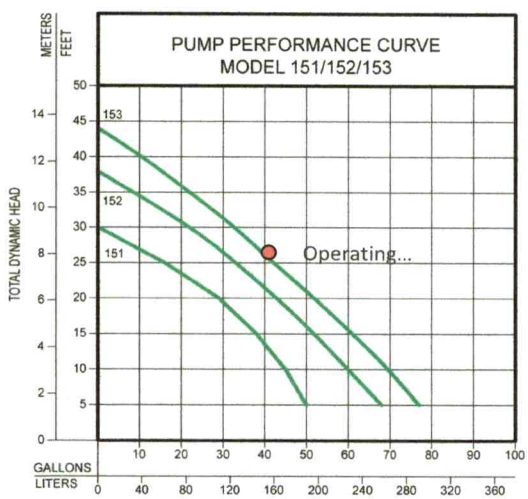
Hole Diameter	3/16	in.
Hole Flowrate	2.13	gpm

Pump Efficiency	0.7	*(assumed, typical)*
Motor Efficiency	0.9	*(assumed for electric pumps)*
Flow	**40.67 gpm**	

Required Horsepower	0.43 hp
TDH	**26.33 ft.**

Pump Selection

Manufacturer:	Zoeller
Model:	N153
Horsepower:	**0.5**



501 N Salem St, Suite 203
Apex, NC 27502

AWT
Engineers and Soil Scientists

919.859.0669
agriwaste.com

SOIL/SITE EVALUATION *for* ON-SITE WASTEWATER SYSTEM

OWNER: Sky Powell, Extreme Construction Services LLC APPLICATION DATE: _____
ADDRESS: 219 Mock Mill Rd, Statesville, NC EVALUATION DATE: 05/21/2024
PROPERTY ID: 4703-29-8587 COUNTY: Iredell
PROPOSED FACILITY: Single Family Residence PROPOSED DESIGN FLOW (.0400): 480 GPD PROPERTY SIZE: _____
LOCATION OF SITE: 219 Mock Mill Rd, Statesville, NC PROPERTY RECORDED: _____
WATER SUPPLY: ☒ Public ☐ Single Family Well ☐ Shared Well ☐ Spring ☐ Other _____ WATER SUPPLY SETBACK: _____
EVALUATION METHOD: ☒ Auger Boring ☐ Pit ☐ Cut TYPE OF WASTEWATER: ☒ Domestic ☐ High Strength ☐ IPWW

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY .1941 STRUCTURE/ TEXTURE	SOIL MORPHOLOGY .1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	OTHER PROFILE FACTORS .1943 SOIL DEPTH	OTHER PROFILE FACTORS .1956 SAPRO CLASS	OTHER PROFILE FACTORS .1944 RESTR HORIZ	PROFILE CLASS & LTAR*	.0502(d) SLOPE CORRECTION
1	5%	0-8"	Gr; SCL	FR; SS; SP	-	50"	-	-	0.3 GPD/Ft2	48"
		8-16"	ABK ; C	FI; S; P						
		16-50"	SBK ; C	FI; SS; SP						
2	5%	0-8"	Gr; SCL	FR; SS; SP	-	50"	-	-	0.3 GPD/Ft2	48"
		8-26"	ABK ; C	FI; S; P						
		26-50"	SBK ; C	FI; SS; SP						
3	5%	0-12"	Gr; SCL	FR; SS; SP	-	50"	-	-	0.275 GPD/Ft2	48"
		12-30"	SBK ; C	FI; S; SP						
		30-50"	SBK ; C	FI; SS; SP						
4	5%	0-12"	Gr; SCL	FR; SS; SP	-	50"	-	-	0.3 GPD/Ft2	48"
		12-20"	SBK ; C	FI; S; P						
		20-50"	SBK ; C	FI; SS; SP						

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.0508)	Provisionally Suitable	Provisionally Suitable
System Type(s)	Type, IIIb Pump to pressure manifold	Type IIIb, Pump to PPBPS Horizontal
Site LTAR	0.3 GPD/Ft2	0.3 GPD/Ft2
Maximum Trench Depth	32"	32"

SITE CLASSIFICATION (.0509): _____
EVALUATED BY: Trevor Hackney
OTHER(S) PRESENT: Nathan Estevez

Comments: _____

501 N Salem St, Suite 203
Apex, NC 27502

AWT
Engineers and Soil Scientists

919.859.0669
agriwaste.com

SOIL/SITE EVALUATION

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY		OTHER PROFILE FACTORS				PROFILE CLASS & LTAR*	.0503 SLOPE CORRECTION
			.1941 STRUCTURE/ TEXTURE	.1941 CONSISTENCE/ MINERALOGY	.1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ		
5	4%	0-6"	Gr; SCL	Fr; SS; SP	-	50"	-	-		
		6-36"	SBK ; C	FI; SS; SP					0.3 GPD/Ft2	50"
		36-50"	WSBK ; CL	Fr; SS; SP						
6	5%	0-4"	Gr; SCL	Fr; SS; SP	-	40"	-	SAP		
		4-40"	SBK; C	FI; SS;SP					0.3 GPD/Ft2	38"
		40+"	MA; SCL	Fr; SS; SP						
7	3%	0-6"	Gr; SCL	Fr; SS; SP	-	48"	-	SAP		
		6-32"	SBK; C	FI; SS; SP					0.3 GPD/Ft2	48"
		32-48'	WSBK; CL	Fr; SS; SP						
		48+"	MA; SCL	Fr; SS; SP						
8	3%	0-4"	Gr; SCL	Fr; SS; SP	-	50"	-	-		
		4-34"	SBK; C	FI; SS; SP					0.3 GPD/Ft2	50"
		34-50"	WSBK; CL	Fr; SS; SP						
9	5%	0-8"	Gr; SCL	Fr; SS; SP	-	48"	-	-		
		8-18"	ABK; C	FI; S; P					0.3 GPD/Ft2	46"
		18-48"	SBK; C	FI; SS; SP						

COMMENTS: _____

501 N Salem St, Suite 203
Apex, NC 27502

AWT
Engineers and Soil Scientists

919.859.0669
agriwaste.com

SOIL/SITE EVALUATION

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY		OTHER PROFILE FACTORS				PROFILE CLASS & LTAR*	.0503 SLOPE CORRECTION
			.1941 STRUCTURE/ TEXTURE	.1941 CONSISTENCE/ MINERALOGY	.1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ		
10	6%	0-10"	Gr; SCL	Fr; SS; SP	-	46"	-	SAP		
		10-34"	SBK; C	FI; SS; SP					0.3 GPD/Ft2	44"
		34-46"	WSBK; CL	Fr; SS; SP						
		46+"	MA; SCL	Fr; SS; SP						
11	6%	0-6"	WSBK; SCL	Fr; SS; SP	-	50"	-	-		
		6-15"	ABK; C	FI; S; P						
		15-40"	SBK; C	FI; SS; SP					0.3 GPD/Ft2	48"
		40-50"	WSBK; CL	Fr; SS; SP						
12	6%	0-6"	WSBK; SCL	Fr; SS; SP	-	50"	-	-		
		6-15"	ABK; C	FI; S; P						
		15-40"	SBK; C	FI; SS; SP					0.3 GPD/Ft2	48"
		40-50"	WSBK; CL	Fr; SS; SP						
13	8%	0-10"	WSBK; SCL	Fr; SS; SP	-	50"	-	-		
		10-50"	SBK; C	FI; SS; SP					0.3 GPD/Ft2	
										47"
14	5%	0-14"	Gr; SCL	Fr; SS; SP	C2 observed	28"	-	-	0.25 or 0.1 drip	
		14-28"	WSBK; C	FI; S; P						26"
		28+"	ABK; C	FI; S; P						

COMMENTS: _____

501 N Salem St, Suite 203
Apex, NC 27502

AWT
Engineers and Soil Scientists

919.859.0669
agriwaste.com

SOIL/SITE EVALUATION

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY		OTHER PROFILE FACTORS				PROFILE CLASS & LTAR*	.0503 SLOPE CORRECTION
			.1941 STRUCTURE/ TEXTURE	.1941 CONSISTENCE/ MINERALOGY	.1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ		
15	4%	0-12"	Gr; SCL	Fr; SS; SP	C2 observed	24"	-	-		
		12-24"	WSBK; C	FI; S; P					0.1 drip	24"
		24+"	ABK; C	FI; S; P						
16	6%	0-12"	Gr; SCL	Fr; SS; SP	C2 observed	22"	-	-		
		12-22"	WSBK; C	FI; S; P					0.1 drip	20"
		22+"	ABK; C	FI; S; P						

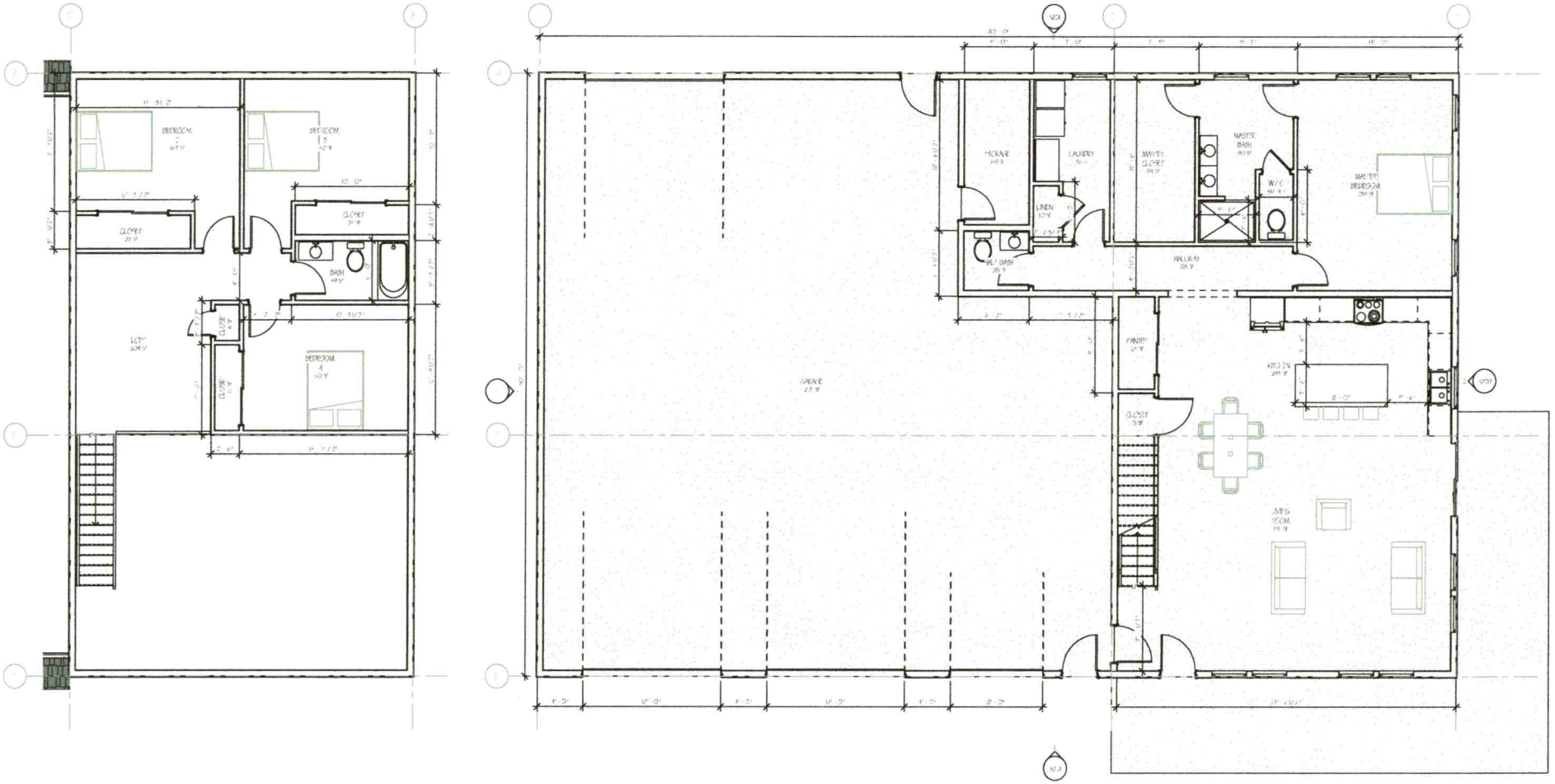
COMMENTS: _____

WINDOW SCHEDULE							
Tag	Description	Count	Width	Height	Manufacturer	Model	Comments
SW-OSC	SLIDING	2	5'-0"	4'-0"			
SW-S-1	SLIDING	1	2'-0"	3'-0"			

DOOR SCHEDULE							
Tag	Description	Count	Width	Height	Manufacturer	Model	Comments
D-068	WHITE SHAKER DOOR	1	36"	80"			
D-1-4	WHITE SHAKER DOOR	1	36"	80"			
D-360	WHITE SHAKER DOOR	1	36"	80"			
D-368	WHITE SHAKER DOOR	1	36"	80"			
D-2150	BALCONY PANEL DOOR	1	84"	80"			
D-360	OLD ASSET 2	1	36"	80"			
D-370	GLASS SLIDING DOOR	1	70"	84"			
D-2038	OLD ASSET 1	1	84"	80"			
D-369	BLOCK/DOOR 1 - 068	1	36"	80"			
D-364	BLOCK/DOOR	1	72"	80"			

GENERAL NOTES
1. GUTTERS AVAILABLE 26GA PAINT TO LIKE COLOR TRIM
2. 1/4" CDX OR GLAZING SHEET AVAILABLE ABOVE FLOOR
3. SEE KEY NEAR VICINITY DETAILS
4. GUTTER FLOOR DRAINS 4" OF ANY WALL FLOOR
5. GLAZING AS REQUIRED BY BUILDING CODE
6. AS DIRECTED
7. ALL CHECK SEALED OR DEEMED NECESSARY ACCORDING TO THE PLANS

SEE 2018 IRC SECTION 308 FOR FIRE CONDITIONS WITH GLAZING REQUIREMENTS. IF ANY DOOR IS LOCATED IN AN EGRESS LOCATED WALL, IT IS EITHER TEMPERED GLAZING.



2 UPPER FLOOR 1/4" = 1'-0"

1 GROUND FLOOR 1/4" = 1'-0"

0' 2' 4' 8' 16'

EXTREME POST FRAME

MOCK MILL RD

NOT FOR CONSTRUCTION

Project number	24-2
Date	08/29/24
Drawn by	SJF
Scale	1/4" = 1'-0"

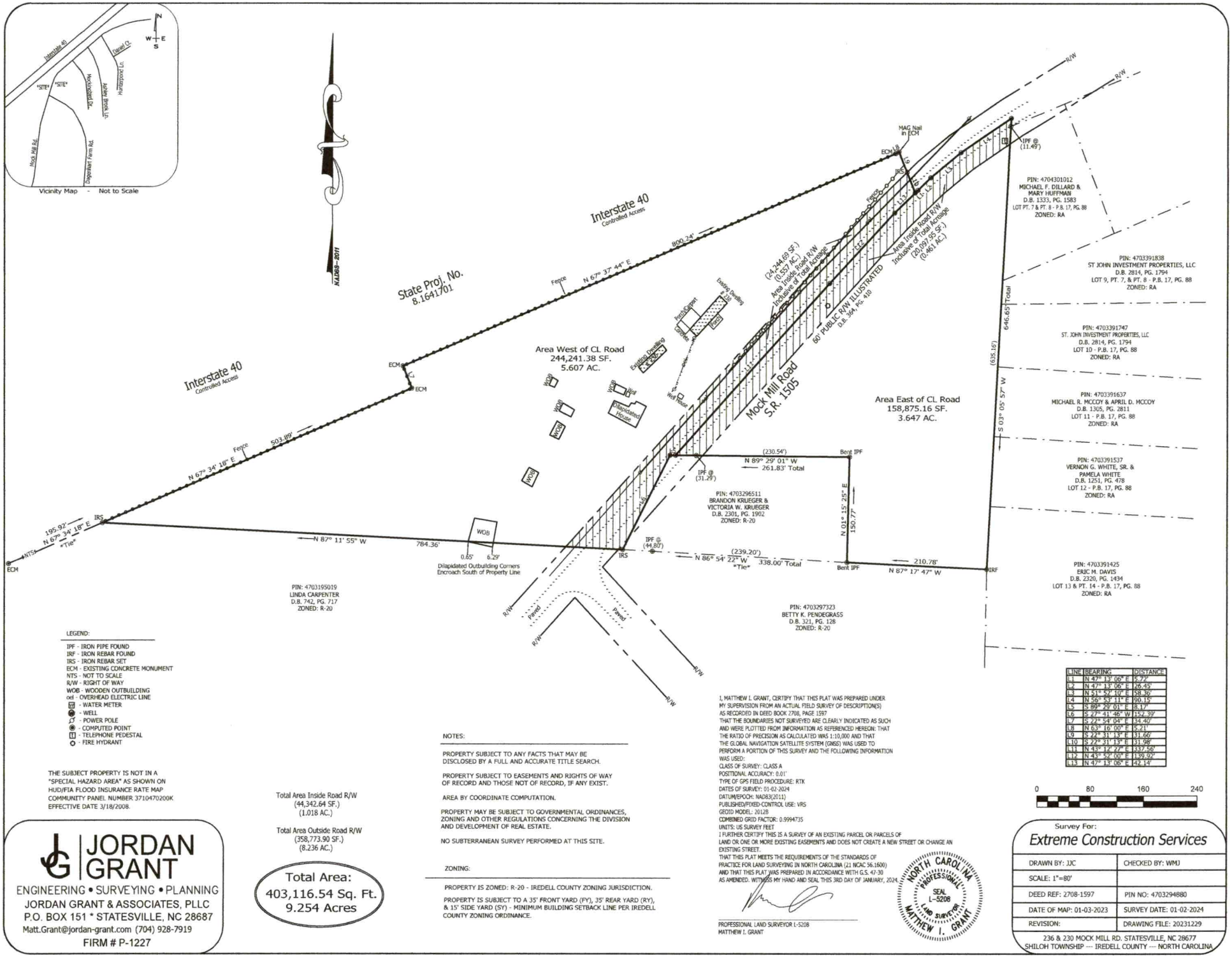
FLOOR PLAN

A101

ARCH 24"x36" | ELDER PAPER

No.	Revision	Date

NOT FOR CONSTRUCTION



LEGEND:

- IPF - IRON PIPE FOUND
- IRF - IRON REBAR FOUND
- IRS - IRON REBAR SET
- ECM - EXISTING CONCRETE MONUMENT
- NTS - NOT TO SCALE
- R/W - RIGHT OF WAY
- WOB - WOODEN OUTBUILDING
- oel - OVERHEAD ELECTRIC LINE
- WM - WATER METER
- WELL
- POWER POLE
- COMPUTED POINT
- TELEPHONE PEDESTAL
- FIRE HYDRANT

THE SUBJECT PROPERTY IS NOT IN A "SPECIAL HAZARD AREA" AS SHOWN ON HUD/FIA FLOOD INSURANCE RATE MAP COMMUNITY PANEL NUMBER 3710470200K EFFECTIVE DATE 3/18/2008.

Total Area Inside Road R/W
(44,342.64 SF.)
(1.018 AC.)

Total Area Outside Road R/W
(358,773.90 SF.)
(8.236 AC.)

Total Area:
403,116.54 Sq. Ft.
9.254 Acres

NOTES:

PROPERTY SUBJECT TO ANY FACTS THAT MAY BE DISCLOSED BY A FULL AND ACCURATE TITLE SEARCH.

PROPERTY SUBJECT TO EASEMENTS AND RIGHTS OF WAY OF RECORD AND THOSE NOT OF RECORD, IF ANY EXIST.

AREA BY COORDINATE COMPUTATION.

PROPERTY MAY BE SUBJECT TO GOVERNMENTAL ORDINANCES, ZONING AND OTHER REGULATIONS CONCERNING THE DIVISION AND DEVELOPMENT OF REAL ESTATE.

NO SUBTERRANEAN SURVEY PERFORMED AT THIS SITE.

ZONING:

PROPERTY IS ZONED: R-20 - IREDELL COUNTY ZONING JURISDICTION.

PROPERTY IS SUBJECT TO A 35' FRONT YARD (FY), 35' REAR YARD (RY), & 15' SIDE YARD (SY) - MINIMUM BUILDING SETBACK LINE PER IREDELL COUNTY ZONING ORDINANCE.

LINE	BEARING	DISTANCE
L1	N 47° 13' 06" E	9.77'
L2	N 47° 13' 06" E	26.45'
L3	N 51° 52' 10" E	58.36'
L4	N 56° 53' 11" E	90.15'
L5	S 89° 29' 01" E	8.17'
L6	S 27° 41' 46" W	152.39'
L7	S 22° 54' 04" E	34.40'
L8	N 63° 16' 00" E	5.21'
L9	S 22° 31' 13" E	31.66'
L10	S 72° 31' 13" E	31.98'
L11	N 43° 12' 27" E	137.56'
L12	N 43° 52' 00" E	139.92'
L13	N 47° 13' 06" E	42.14'

0 80 160 240

I, MATTHEW I. GRANT, CERTIFY THAT THIS PLAT WAS PREPARED UNDER MY SUPERVISION FROM AN ACTUAL FIELD SURVEY OF DESCRIPTION(S) AS RECORDED IN DEED BOOK 2708, PAGE 1597
THAT THE BOUNDARIES NOT SURVEYED ARE CLEARLY INDICATED AS SUCH AND WERE PLOTTED FROM INFORMATION AS REFERENCED HEREON; THAT THE RATIO OF PRECISION AS CALCULATED WAS 1:10,000 AND THAT THE GLOBAL NAVIGATION SATELLITE SYSTEM (GNSS) WAS USED TO PERFORM A PORTION OF THIS SURVEY AND THE FOLLOWING INFORMATION WAS USED:
CLASS OF SURVEY: CLASS A
POSITIONAL ACCURACY: 0.01'
TYPE OF GPS FIELD PROCEDURE: RTK
DATES OF SURVEY: 01-02-2024
DATUM/EPOCH: NAD83(2011)
PUBLISHED/FIXED-CONTROL USE: VRS
GEOID MODEL: 2012B
COMBINED GRID FACTOR: 0.9994735
UNITS: US SURVEY FEET
I FURTHER CERTIFY THIS IS A SURVEY OF AN EXISTING PARCEL OR PARCELS OF LAND OR ONE OR MORE EXISTING EASEMENTS AND DOES NOT CREATE A NEW STREET OR CHANGE AN EXISTING STREET.
THAT THIS PLAT MEETS THE REQUIREMENTS OF THE STANDARDS OF PRACTICE FOR LAND SURVEYING IN NORTH CAROLINA (21 NCAC 56.1600) AND THAT THIS PLAT WAS PREPARED IN ACCORDANCE WITH G.S. 47-30 AS AMENDED. WITNESS MY HAND AND SEAL THIS 3RD DAY OF JANUARY, 2024.

PROFESSIONAL LAND SURVEYOR L-5208
MATTHEW I. GRANT

NORTH CAROLINA PROFESSIONAL SEAL L-5208 LAND SURVEYOR MATTHEW I. GRANT

JORDAN GRANT
ENGINEERING • SURVEYING • PLANNING
JORDAN GRANT & ASSOCIATES, PLLC
P.O. BOX 151 * STATESVILLE, NC 28687
Matt.Grant@jordan-grant.com (704) 928-7919
FIRM # P-1227

Survey For:
Extreme Construction Services

DRAWN BY: JJC	CHECKED BY: WMJ
SCALE: 1"=80'	
DEED REF: 2708-1597	PIN NO: 4703294880
DATE OF MAP: 01-03-2023	SURVEY DATE: 01-02-2024
REVISION:	DRAWING FILE: 20231229

236 & 230 MOCK MILL RD. STATESVILLE, NC 28677
SHILOH TOWNSHIP --- IREDELL COUNTY --- NORTH CAROLINA

Certificate of Ownership and Dedication

I hereby certify that I am the owner of the property shown and described hereon, which is located in the subdivision jurisdiction of the County of Iredell and that I hereby adopt this plan of subdivision with my free consent and establish minimum building setback as noted.

Owner

Date

North Carolina
County

I, _____, a Notary Public for said County and State, do hereby certify that _____, owner(s) personally appeared before me this day, and acknowledged the execution of the foregoing instrument. Witness my hand and official seal, this _____day of _____, 2024.

Notary Public

My Commission Expires:_____

State of North Carolina
County of Iredell

I, _____, Review Officer of Iredell County, certify that the map or plat to which this certification is affixed meets all statutory requirements for recording.

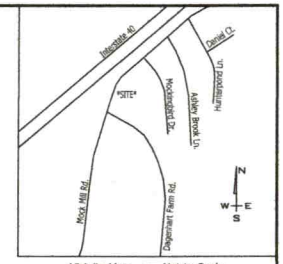
Review officer

Date

Certificate of Approval
I, hereby certify that this plat for recordation is an exception to the Subdivision Ordinance of Iredell County, North Carolina.

Subdivision Administrator - Iredell County
North Carolina

Date



Vicinity Map - Not to Scale

ZONING:

PROPERTY IS ZONED: R-20 - IREDELL COUNTY ZONING JURISDICTION.

PROPERTY IS SUBJECT TO A 35' FRONT YARD (FY), 35' REAR YARD (RY), & 15' SIDE YARD (SY) - MINIMUM BUILDING SETBACK LINE PER IREDELL COUNTY ZONING ORDINANCE.

STATE OF NORTH CAROLINA
IREDELL COUNTY
I, W. MATTHEW JORDAN, CERTIFY THAT THIS PLAT WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION; THAT THE RATIO OF PRECISION IS 1: 10,000; THAT THE BOUNDARIES NOT SURVEYED ARE SHOWN AS BROKEN LINES PLOTTED FROM INFORMATION FOUND IN BOOK 3039, PAGE 2076; THAT THIS PLAT WAS PREPARED IN ACCORDANCE WITH GS. 47-30 AS AMENDED. WITNESS MY SIGNATURE, REGISTRATION NUMBER, AND SEAL THIS 5th DAY OF MARCH, 2024.

I, W. MATTHEW JORDAN, HEREBY CERTIFY THAT THE SURVEY IS OF ANOTHER CATEGORY, SUCH AS THE RECOMBINATION OF EXISTING PARCELS, A COURT ORDERED SURVEY, OR OTHER EXCEPTIONS TO THE DEFINITION OF SUBDIVISION IN ACCORDANCE WITH G.S. 47-30 (f)(11)(d).

NORTH CAROLINA PROFESSIONAL SEAL L-4414 LAND SURVEYOR W. MATTHEW JORDAN

Preliminary - Not For Recording
07-09-24
SURVEYOR REG. NO.: L-4414

NOTES:

1. THE SURVEYED IMPROVEMENTS DO NOT LIE WITHIN A FLOOD HAZARD AREA AS DETERMINED BY FLOOD MAP 3710470269K, EFFECTIVE DATE 3/18/2008.
2. THIS PROPERTY IS SUBJECT TO ANY EASEMENTS OR RIGHT OF WAYS OF RECORD WHICH MAY EXIST ACROSS SAID PROPERTY.
3. IRON PINS ARE SET AT ALL PROPERTY CORNERS UNLESS OTHERWISE NOTED.
4. THE SURVEYED PROPERTY DOES NOT LIE WITHIN THE U.S. DEPARTMENTS OF INTERIOR'S NATIONAL REGISTER OF HISTORIC PLACES.
5. THE SURVEYED PROPERTY DOES NOT LIE WITHIN 2000 FEET OF A NORTH CAROLINA HORIZONTAL GRID MARKER.
6. BROKEN LINES REPRESENT PROPERTY LINES WHICH ARE NOT ACTUALLY SURVEYED. THESE DASHED LINES WERE TAKEN FROM DEEDS OR OTHER SOURCES.
7. THERE IS A TEN FOOT DRAINAGE AND UTILITIES EASEMENT ACROSS THE FRONT, REAR, AND EACH SIDELINE OF EACH LOT.
8. THE LOTS IN THIS SUBDIVISION WILL BE SERVED BY INDIVIDUAL WELLS AND SEPTIC SYSTEMS.
9. AS OF THE DATE OF THIS RECORDING, THE LOTS REPRESENTED ON THIS PLAT HAVE NOT BEEN INSPECTED OR APPROVED BY THE IREDELL COUNTY HEALTH DEPARTMENT. UNTIL INSPECTED, THERE IS NO ASSURANCE THAT A BUILDING PERMIT WILL BE ISSUED.
10. THE PURPOSE OF THIS PLAT IS TO REVISE THE PROPERTY LINES BETWEEN LOTS 1, 2 & 3.

LINE	BEARING	DISTANCE
L1	N 43° 12' 27" E	25.01'
L2	N 43° 12' 27" E	29.67'
L3	N 47° 13' 06" E	42.14'
L4	N 47° 13' 06" E	5.72'
L5	N 47° 13' 06" E	26.45'
L6	N 51° 52' 10" E	58.36'
L7	N 56° 53' 11" E	90.15'

LEGEND:

IPF - IRON PIPE FOUND
IRF - IRON REBAR FOUND
IRS - IRON REBAR SET
ECM - EXISTING CONCRETE MONUMENT
NTS - NOT TO SCALE
R/W - RIGHT OF WAY
WOB - WOODEN OUTBUILDING
oel - OVERHEAD ELECTRIC LINE
WM - WATER METER
WELL
POWER POLE
COMPUTED POINT
TELEPHONE PEDESTAL
FIRE HYDRANT

	Total Area	Area Inside Road R/W	Area Outside Road R/W
Lot 1	39,497.23 sq.ft. 0.907 acre	(8,083.25 sq.ft.) (0.186 acre)	(31,413.98 sq.ft.) (0.721 acre)
Lot 2	53,850.34 sq.ft. 1.236 acres	(749.86 sq.ft.) (0.017 acre)	(53,100.48 sq.ft.) (1.219 acres)
Lot 3	65,527.59 sq.ft. 1.504 acres	(11,264.43 sq.ft.) (0.259 acre)	(54,263.16 sq.ft.) (1.245 acres)

OWNER / DEVELOPER
EXTREME CONSTRUCTION SERVICES LLC
191 SHEPHERDS BLUFF DR
MOORESVILLE, N.C. 28115

0 50 100 150

JORDAN GRANT
ENGINEERING • SURVEYING • PLANNING
JORDAN GRANT & ASSOCIATES, PLLC
P.O. BOX 151 * STATESVILLE, NC 28687
matt.grant@jordan-grant.com (704) 928-7919
FIRM # P-1227

Revision of Lots 1 - 3 - of the Minor Subdivision For:
Extreme Construction Services, LLC
As Recorded in P.B. 82, Pg. 126

DRAWN BY: SMS	CHECKED BY: WMJ
SCALE: 1"=50'	
DEED REF: 3039-2076	PIN NO: ILLUSTRATED
DATE OF MAP: 06-12-24	SURVEY DATE: 01-02-24
REVISION:	DRAWING FILE: 20231229-MSUB-REV

MOCK MILL ROAD - STATESVILLE, N.C. 28677
SHILOH TOWNSHIP --- IREDELL COUNTY --- NORTH CAROLINA

IREDELL COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH

DOCUMENTATION TO AUTHORIZE AN OWNER'S LEGAL REPRESENTATIVE

(Check and sign only ONE of the options below)

☐ **1. * APPLICANT AND OWNER ARE THE SAME. *** (*Sign here*) _____

Applications for permits require the "signature of the owner or owner's legal representative" (15A NCAC 18A .1937). If the owner does not sign the application himself or herself, they can submit any one of the following documents to designate their legal representative: *Power of Attorney; Real Estate Contract; Estate executor; Bankruptcy trustee; Court ordered guardianship*

In the absence of the above documentation, the property owner may provide the local health department with documentation that designates a legal representative. A property owner may:

Complete this form to document his or her legal representative, or provide his or her own form that contains the information in this form. If there are multiple property owners, then all property owners must sign the form that designates a legal representative.

By signing a form that designates a legal representative for purposes of 15A NCAC 18A .1937, the property owner authorizes that representative to act on their behalf in matters pertaining to the application and permitting process, including signing or receiving any application, document or permit. The owner retains full responsibility to meet all permit conditions specified by the local health department.

☐ **2.** I, Extreme Construction Services, LLC, am the legal owner(s) of the property located at 219 Mock Mill Rd, Statesville, NC 28677, identified as PIN (Parcel Identification Number) 4703298587.000, located in Iredell County, North Carolina.

I do hereby authorize (**print legal representative/company name**)

Trevor Hackney, Agri-Waste Technology Inc., to act as an agent on my behalf in applying for/signing/obtaining any of the documents described below.

- Application for Improvement Permit (IP) / Authorization to Construct (AC)
- Improvement Permit (IP) / Authorization to Construct (AC)
- Application for soil-site evaluation (new/repair)
- Application/permit for private drinking water well/well abandonment
- Application for Compliance Inspection

I agree to abide by all decisions and/or conditions between the legal representative acting on my behalf and the Iredell County Department of Public Health, Environmental Health Division.

_____ 7/1/24

Signature of Owner(s) Date

Mooresville - Environmental Health
barbara.nebel@co.iredell.nc.us
Fax: 704-662-3239
610 E. Center Avenue, Mooresville, NC 28115

Statesville - Environmental Health
ronda.hart@co.iredell.nc.us
Fax: 704-871-3483
349 N. Center Street, Statesville, NC 28677