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

PIN # 4726-84-2174 ✓

PPLICANT / OWNER: Larry Thompson | APPLICANT ADDRESS: PO Box 541, Midland, NC 28107

TE ADDRESS: 180 BOWMAN RD, STATESVILLE, NC 28625 ✓ | PHONE: | ALT. PHONE:

TE DIRECTIONS: | SAP CONTROLLED: YES ☐ NO ☑

UBDIVISION: Brookhollow Estates ✓ | SECTION: 1 | LOT #: 52 ✓ | LOT AREA: | DESIGN FLOW: 480 | L.T.A.R.: 0.25

eptic Tank: 1000 (gal)	STB: 2-4-24	Date: 760	☐ New System ☐ Repair ☐ Expansion	System Type: III	☑ Residence	No. Bedrooms: 4	Water Supply: Municipa Water
ump Tank: (gal)	PT:	Date:	System Description: PPBPS -50% reduction		☐ Business	No. Persons: 8	
ump Make:	Model:	Serial #:	Repair System Description: Anaerobic Drip		☐ Other	No. Employees:	
Nitrification Fields: 1	# Lines: 4	Linear Ft.: 268	Maintenance Agreement Required: ☐ YES ☑ NO		☑ Slab	☐ Crawl Space	
ench Width: 24	Trench Bottom Depth (Low side): 24		Gravel Depth:	☑ GRAVITY ☐ PRESSURE	☐ Basement w/ Plumbing	☐ Basement w/o Plumbing	

omments / Conditions: This permit is issued pursuant to G.S. 130A-335 (a2), (a3), (a4) using the signed and sealed LSS/LG evaluation attached

INITIAL SITE SKETCH

AS BUILT SKETCH

Lines } SH 3/20/24
Tanks }
Check Speed levelers & 6" cover
make sure porch found. isn't in the line.

DBox } SH 3/21/24
Cover }
Filter

Once porch is built, call back in to verify footers are >1' from line

-footer meets setbacks

rmit 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.

wner / Applicant Signature: | Date: | Installed By: B&D Grading

IPROVEMENT PERMIT by: Brijmohan Bedi | Date: 6/7/2023 | OPERATION PERMIT by: Brijmohan Bedi | Date: 4-19-2024.

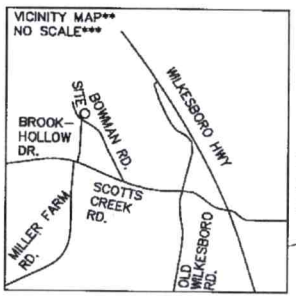
UTHORIZATION TO CONSTRUCT by: Brijmohan Bedi | Date: 6/7/2023. | Existing System Inspected By: | Date:

FOR SEPTIC FINAL INSPECTION CALL: 704-664-3703 BETWEEN 8am-9am the day the inspection is needed.

DAS DON ALLEN & ASSOCIATES, P.A.
"Since 1971"
Commercial * Residential * Mortgage Surveys * Multi-Family
Construction Staking * Subdivision Design * Topographical
127 Promenade Drive – Suite E * Mooresville * NC * 28117
(704) 664-7029 (704) 664-8041 Fax

I, certify that this map was drawn under my supervision from an actual survey made under my supervision recorded in deed book 2775, page 249, and/or plat book 21, page 46, that the ratio of precision is 1':10,000, that this map was prepared in accordance with the General Statutes of North Carolina Chapter 89C. my hand and seal on the 7TH, day of MARCH, A.D. 20 23.

WILLIAM M. ALLEN, PLS
NORTH CAROLINA PROFESSIONAL SEAL L-3499 LAND SURVEYOR WILLIAM M. ALLEN



Line Table		
Line #	Direction	Length
L1	S72°13'27"E	23.08'
L2	N37°01'02"W	34.89'
L3	N63°41'03"E	14.66'
L4	S87°40'51"E	70.01'
L5	S84°44'41"E	16.64'

LEGEND
E.I.P. = EXISTING IRON FOUND
I.P.S. = #4 REBAR SET
R/W = RIGHT-OF-WAY
CP = COMPUTED POINT

NOTES
1) THIS PROPERTY MAY BE SUBJECT TO ANY EASEMENTS AND/OR RIGHTS OF WAY OF RECORD.
2) ACREAGE COMPUTED BY THE COORDINATE METHOD.
3) UNDERGROUND POWER
4) NO GRID MONUMENT FOUND WITHIN 2000 FEET.
5) SETBACKS SHOWN PER PLAT (PB.77 PG.38)
FRONT: 35'
SIDE: 15'
REAR: 35'

0' 30' 60' 100'
SCALE IN FEET

BOUNDARY SURVEY

OF
180 BOWMAN ROAD
LOT 52 BROOKHOLLOW ESTATES PHASE 1 SHEET 2
CONCORD TWSP., IREDELL CO., N.C.

SCALE 1" = 60'
ACQUIRED BY: BYN LLC.

FIELD BOOK:
FILE: BROOKHOLLOW ESTATES 52 P1
DC FILE:
TAX MAP NO: 4726842174

County: Iredell

This Section for Local Health Department Use Only

Initial submittal received: 4/27/2023 (Date) by ICHD (Initials)

Permit Number: OSWP-2023-23544

G.S. 130A-335(a4) states the following: *'If a local health department fails to act on an application for an improvement permit submitted pursuant to subsection (a3) of the section within 10 business days of receipt of a complete application, the local health department shall issue the improvement permit.'*

In accordance with G.S. 130A-335(a3) the improvement permit application is:

☐ 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 Owner on _____ (Date)

State Authorized Agent: _____ Date: _____

☐ Denied (See attached report.)

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

State Authorized Agent: _____ Date: _____

☑ Complete

State Authorized Agent: Bryan H Bass Date of Issuance: 6/7/2023.

This Improvement Permit is issued pursuant to G.S. 130A-335 (a2), (a3), and (a4) using the signed and sealed LSS/LG evaluation(s) attached here. The issuance of this permit by the Health Department 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 site is subject to revocation if the site plan, plat, or the intended use changes, or if information submitted in the application was falsified, inaccurate or misleading. 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 the Laws and Rules for Sewage Treatment and Disposal and to conditions of this permit. The location and identification of all property lines, easements, water lines, and other appropriate utilities shall be the responsibility of the owner.

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: 6/7/2028

See attached site sketch

County: Iredell

This Section for Local Health Department Use Only

Initial submittal received: 4/27/2023 (Date) by IcHD (Initials)

Permit Number: OSWP-2023-2354

G.S. 130A-335(a6) states the following: *'If a local health department fails to act on an application for a construction authorization submitted pursuant to subsection (a5) of the section within 10 business days of receipt of a complete application, the local health department shall issue the construction authorization.'*

In accordance with G.S. 130A-335(a5) the construction authorization application is:

☐ 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 Owner on _____ (Date)

State Authorized Agent: _____ Date: _____

☐ Denied (See attached report.)

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

State Authorized Agent: _____ Date: _____

☒ Complete

State Authorized Agent: Brian A Bell Date of Issuance: 6/7/2023.

This Construction Authorization is issued pursuant to G.S. 130A-335(a2), (a5), and (a6) 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, or if information submitted in the application was falsified, inaccurate or misleading. 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 location and identification of all property lines, easements, water lines, and other appropriate utilities shall be the responsibility of the owner. Final landscaping shall be constructed to divert water and establish vegetative cover.

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: 6/7/2028.

See attached site sketch

County: Iredell

CONSTRUCTION AUTHORIZATION FOR G.S. 130A-335(a2)/SL2022-11

PIN/Lot Identifier: 4726842174

Issued To: BYN LLC

Property Location: 180 Bowman Road, Statesville, NC 28625

AOWE/PE Plans/Evaluations Provided: Yes ☑ No ☐ If yes, name and license number of AOWE/PE: Larry Thompson, AOWE 10016E

Facility Type: Single Family Residence

☑ New ☐ Expansion ☐ Repair ☐ System Relocation

Basement? ☐ Yes ☑ No Basement Fixtures? ☐ Yes ☑ No

Type of Wastewater System** PPBPS (Initial) Anaerobic Drip Dispersal (Repair)

Design Daily Flow: 480 GPD Wastewater Strength: ☑ domestic ☐ high strength ☐ industrial process

Session Law 2014-120 Section 53, Engineering Design Utilizing Low-flow Fixtures and Low-flow Technologies? ☐ Yes ☑ No

Installation Requirements/Conditions

Septic Tank Size: 1,000 gallons Total Trench/Bed Length: 268 feet Trench/Bed Spacing: 8 feet on center

Drainfield square footage: 536 Trench/Bed Width: 24 inches LTAR: 0.3 gpd/ft²

Soil Cover: 8 inches Slope Adjusted Maximum Trench/Bed Depth: 24 inches

Aggregate Depth: N/A inches above pipe N/A inches below pipe 16 inches total

Pump Tank Size (if applicable): N/A gallons Requires more than 1 pump? ☐ Yes ☐ No

Pump Requirements: _____ ft. TDH vs. _____ 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 [.1937(h)]: ☐ Yes ☑ No

Easement, Right-of-Way, or Encroachment Agreement Required [.1938(j)]: ☐ Yes ☑ No

Declaration of Restrictive Covenants: ☐ Yes ☑ No

****If applicable:**

I understand the system type specified is different from the type specified on the application. I accept the specifications of this permit.

Owner/Legal Representative Print Name: _____

Owner/Legal Representative Signature: _____ Date: _____

Pre-Construction Conference Required: Yes ☑ No ☐

Conditions: _____

The construction and installation requirements of Rules .1950, .1952, .1954, .1955, .1956, .1957, .1958, and .1959 are incorporated by reference into this permit and shall be met. Systems shall be installed in accordance with the attached system layout.

AOWE/PE Print Name: Larry Thompson, LSS

AOWE/PE Signature: _____ Date: 4/27/23

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

See attached site sketch

County: Iredell

IMPROVEMENT PERMIT FOR G.S. 130A-335(a2)/SL2022-11

PIN/Lot Identifier: 4726842174

Issued To: BYN LLC

Property Location: 180 Bowman Road, Statesville, NC 28625

Subdivision: Brookhollow Estates Lot #: 52 Block: _____ Section: _____

LSS Report Provided: Yes ☑ No ☐

If yes, name and license number of LSS: Larry Thompson, NCLSS No. 1287

New ☑ Repair ☐ Expansion ☐ System Relocation ☐

Proposed Structure: Single Family Residence

Proposed Wastewater System Type: PPBPS (Initial) Anaerobic Drip Dispersal (Repair)

Fill System: ☐ Yes ☑ No If yes, specify: ☐ New ☐ Existing (when adding more than 6 inches of fill to system area please provide a fill plan)

Proposed Design Daily Flow: 480 GPD Proposed LTAR (Initial): 0.3 Proposed LTAR (Repair): 0.1

Design Wastewater Strength: ☑ domestic ☐ high strength ☐ industrial process

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

Pump Required: ☐ Yes ☑ No ☐ May be required based upon final location and elevations of facilities

Artificial Drainage Required: ☐ Yes ☑ No If yes, please specify details: _____

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

Drainfield location meets requirements of Rule .1945: Yes ☑ No ☐

Drainfield location meets requirements of Rule .1950: 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: Larry Thompson, LSS

Licensed Soil Scientist Signature: _____ Date: 4/27/23

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

See attached site sketch

Details

Vitaliy Meyko has contracted with Thompson Environmental Consulting, Inc. (TEC) to prepare a SL 2022-11 septic permit package for a new 4-bedroom single-family residence to be located at 180 Bowman Road, Statesville, NC (Iredell County Parcel Identification Number: 4726842174).

Based upon a previous soil evaluation performed by TEC, it was determined that a sufficient amount of "Provisionally Suitable" Group IV soils are available for the installation of an initial Vertical - Prefabricated Permeable Block Panel System (V-PPBPS) for a 480 gallon-per-day residence at a 0.30 GPD/sq/ft long-term acceptance rate (LTAR). The repair will be an Anaerobic Drip system with a 0.10 LTAR. The property will be served by public water.

The LSS/LG evaluation(s) attached to this application is to be used to issue an Improvement Permit and Construction Authorization in accordance with G.S. 130A-335(a2), (a5) and (a6). The property owner requests Iredell County Environmental Health issue the appropriate permits for a subsurface wastewater treatment and disposal system based upon the following SL 2022-11 proposal.

Location

From Statesville, take NC-15 North for 3.5 miles, then left on Scotts Creek Road for 0.5 mile, then right onto Bowman Road. 180 Bowman will be on right in 0.3 mile.

References

Laws and Rules for Sewage Treatment and Disposal Systems, 15A NCAC 18A, Section .1900, Department of Environment and Natural Resources, Division of Environmental Health, On-Site Wastewater Section, April 1, 2017.

Design, Installation and Maintenance of the T & J Panel Wastewater Treatment System; 2021, published by T & J Panel.

Primary Investigator's Credentials

NC Registered Sanitarian No. 1208
NC Licensed Soil Scientist No. 1287
NC Authorized Onsite Wastewater Evaluator No. 10016E
SC Certified Professional Soil Classifier No. 111
NC Subsurface Septic System Operator No. 22199
NC Grade IV Wastewater System Installer No. 1762
NC Certified Wastewater System Inspector No. 17621

Plans and Specifications

A. Septic Tank

1. The septic tank shall be State approved (Section .1953 of 15A NCAC 18A), watertight, structurally sound, and 1,000 gallons in capacity.
2. The septic tank shall be fitted with an approved effluent filter.
3. It is the responsibility of the septic contractor to thoroughly inspect the septic tank prior to accepting delivery to assure that the tanks have had time to properly cure and are free of cracks or other structural deficiencies.

B. Pipe, Fittings and Supply Line

1. All discharge piping, connectors, and supply lines should be made of SCH 40 PVC and fitted with pressure-rated couplings.
2. All joints must be properly "welded" utilizing the appropriate PVC cement for each application.
3. The supply line will be constructed of 2-inch SCH 40 PVC pipe with pressure fittings.
4. The supply line length is approximately 28 feet.

C. Distribution Method

1. The drainlines will be fed via a distribution box.
2. The distribtution box shall be water tested and level at the time of the final inspection.

D. Drainfield Installation

1. The drainfield has been previously laid out on-site utilizing metal stemmed flags. The property owner/builder should mark this area and isolate it as much as possible from construction traffic
2. Under no circumstances shall any construction take place within the drainfield area while the soil is in a wet condition.
3. The specified system is vertical - prefabricated permeable block panel system (V-PPBPS) manufactured by T&J Panel Wastewater Treatment System, Patent No. 4013559; telephone: 1-800-222-2577. The installer must follow the manufacturer's guidelines for installing the T&J Panel System and should request an installation manual from the manufacturer prior to beginning construction.
4. **The drainfield consists of four (4) lateral trenches 2-foot wide by 67-ft long. Total trench length is 268 feet**.
5. The maximum trench depth for this system shall be **24-inches**.
6. Drainlines shall be placed no closer than 8 foot on centers.
7. The laterals are to be installed on contour with the land, keeping the individual trench bottoms level from beginning to end.
8. The trenches should be left open for the final inspection by the reviewer of record.

Initial System - 180 Bowman Drive 4-BDR Single-Family Residence							
Field Line #	Color	Initial/Repair	Field Length	System Length	Setup #1	Setup #2	Relative Elevation
0	Orange	NOT USED	47	47	7.85		100.0
1	Green	Initial	72	67	9.75		98.1
2	White	Initial	95	67	12.25		95.6
3	Blue	Initial	95	67	14.20		93.7
4	Orange	Initial	67	67	16.70		91.2
				Line 1:	7.85		100

E. Final Landscaping

1. The final soil cover over the drainfield shall be a minimum of 6 inches deep.
2. The drainfield shall be shaped to shed rainwater and be free from low spots.
3. The drainfield area should be planted with grass as soon as possible to prevent erosion. The soil should be properly tilled, limed (if necessary) and fertilized prior to planting. After applying grass seed, the area should be heavily mulched with straw or other suitable material.

Maintenance

F. In General

1. The homeowner must maintain the drainfield area through periodic mowing. The drainfield must not be allowed to become overgrown.
2. The septic tank should be pumped every 4 years or when the solids within the septic tank reach an elevation equivalent to 25 percent of the tank's volume. In some situations, the tanks may need to be pumped more frequently. A garbage disposal is not recommended, however if using one, it is recommended that the homeowner has the septic and pump tanks cleaned out annually.
3. When cleaning the effluent filter, the filter should be removed, and the accumulated debris will be washed back into the septic tank – not onto the lawn.
4. Any damp areas, leakages, or malfunctions in the drainfield area should be addressed immediately.
5. Divert gutter downspouts and surface water runoff away from the septic and pump tanks.

Initial System Design Specifics

Daily Design Flow:	480 GPD – 4 bedroom house
Effluent Loading Rate:	0.300 GPD per sq. ft.
Drainfield Type:	V-PPBPS with 50% Reduction
Maximum Trench Depth:	24-Inches on low-side
Supply Line Length:	Approximately 28 feet
Number of Drainlines:	4

**Drain Lines:	2-ft Wide x 67-ft Long
**Drainline Spacing:	8 Feet on Centers
Total Trench Length:	268 Linear Feet
Total Number of Panels:	62
Distribution Method:	Distribution Box

** See drainfield layout for site locations and more details.

Repair System Option

Effluent Loading Rate:	0.10 GPD per sq. ft.
Drainfield Type:	Non-Treated Drip Dispersal
Maximum Trench Depth:	7 Inches
Linear Feet of Drainline:	2,400
Square Footage Required	4,800 sq-ft
Drainline Spacing:	2 Foot on Centers
Square Footage Available:	6,500+ sq-ft

Thompson Environmental Consulting, Inc.
PO Box 541
Midland, NC 28107

PROPERTY ID #: 4726842174
COUNTY: Iredell

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

OWNER: BYN LLC
ADDRESS: 808 Deercross Lane, Waxhaw, NC 28173
PROPOSED FACILITY: Res. PROPOSED DESIGN FLOW (.1949): 480 gpd
LOCATION OF SITE: 180 Bowman Road, Statesville, NC 28625

DATE EVALUATED: 3-7-23
PROPERTY SIZE: 0.99 acre
PROPERTY RECORDED:

WATER SUPPLY: ☐ Private ☑ Public ☐ Well ☐ Spring ☐ Other Lot 52 - Brookhollow Estates
EVALUATION METHOD: ☑ Auger Boring ☐ Pit ☐ Cut
TYPE OF WASTEWATER: ☑ Sewage ☐ Industrial Process ☐ Mixed

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941) .1941 STRUCTURE/ TEXTURE	SOIL MORPHOLOGY (.1941) .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
1	LS 4%	0-6	GR/SL	FR/SS/SP/SEXP	5YR 6/2	6"			US
2	LS 25%	0-16	WSBK/CL	FR/SS/SP/SEXP		41+"			PS 0.3
		16-41+	SBK/C	FI/S/P/SEXP					
3	LS 4%	0-4	GR/SL	FR/NS/NP/NEXP	5YR 6/2	8"			US
		4-8	SBK/SC	FI/S/P/SEXP					
4	LS 10%	0-5	WSBK/SCL	FR/SS/SP/SEXP	5YR 6/2	24"			PS 0.1
		5-26	SBK/SC	FI/S/P/SEXP					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	PS
System Type(s)	PPBPS	Drip Dispersal
Site LTAR	0.3	0.1

OTHER FACTORS (.1946):
SITE CLASSIFICATION (.1948): Provisionally Suitable
EVALUATED BY: Michael Wood, LSS
OTHER(S) PRESENT: Ethan Wood, L. Thompson, LSS

LICENSED SOIL SCIENTIST — MICHAEL A. THOMPSON JR. — 1287 — STATE OF NORTH CAROLINA

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

SOIL/SITE EVALUATION

(Continuation Sheet-Complete all field in full)

PROPERTY ID #: 4726842174
DATE OF EVALUATION: 3-7-23
COUNTY: Iredell

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941) .1941 STRUCTURE/ TEXTURE	SOIL MORPHOLOGY (.1941) .1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
5	LS 10%	0-8	WSBK/SCL	FR/SS/SP/SEXP	5YR 6/2	18"			PS 0.1
		8-18	SBK/C	FI/S/P/SEXP					
6	LS 28%	0-37	SBK/C	FI/S/P/SEXP		42+			PS 0.3
		37-42+	SBK/SC	FI/S/P/SEXP					
7	LS 6%	0-8	WSBK/SCL	FR/SS/SP/SEXP	5YR 6/2	8"			US
8	LS 29%	0-14	WSBK/SCL	FR/SS/SP/SEXP		43"			PS 0.3
		14-43	SBK/SC	FI/S/P/SEXP					
9	LS 29%	0-16	WSBK/SCL	FR/SS/SP/SEXP		23"			PS 0.1
		16-24	SBK/SC	FI/S/P/SEXP					

COMMENTS: _____

LEGEND

use the following standard abbreviations

LANDSCAPE POSITION	GROUP	SOIL TEXTURE	CONVENTIONAL .1955 LTAR*	LPP .1957 LTAR*	MINERALOGY/ CONSISTENCE	STRUCTURE
CC (Concave Slope)	I	S (Sand)	1.2 - 0.8	0.6 - 0.4	SEXP (Slightly Expansive)	G (Single Grain)
CV (Convex Slope)		LS (Loamy Sand)			EXP (Expansive)	M (Massive)
D (Drainage Way)						CR (Crumb)
DS (Debris Slump)	II	SL (Sandy Loam)	0.8 - 0.6	0.4 - 0.3		GR (Granular)
FP (Flood Plain)		L (Loam)				SBK (Subangular Blocky)
FS (Foot Slope)						ABK (Angular Blocky)
H (Head Slope)	III	Si (Silt)	0.6 - 0.3	0.3 - 0.15		PL (Platy)
L (Linear Slope)		SiCL (Silty Clay Loam)				PR (Prismatic)
N (Nose Slope)		CL (Clay Loam)				
R (Ridge)		SCL (Sandy Clay Loam)			**MOIST**	**WET**
S (Shoulder Slope)		SiL (Silt Loam)				
T (Terrace)					VFR (Very Friable)	NS (Non-sticky)
	IV	SC (Sandy Clay)	0.4 - 0.1	0.2 - 0.05	FR (Friable)	SS (Slightly Sticky)
		SiC (Silty Clay)			FI (Firm)	S (Sticky)
		C (Clay)			VFI (Very Firm v. Very Sticky)	VS (Very Sticky)
		O (Organic)	None	None	EFI (Extremely Firm)	NP (Non-plastic)
						SP (Slightly Plastic)
						P (Plastic)
						VP (Very Plastic)

*Adjust LTAR due to depth, consistence, structure, soil wetness, landscape, position, wastewater flow and quality.

NOTES

HORIZON DEPTH	In inches below natural soil surface
DEPTH OF FILL	In inches from land surface
RESTRICTIVE HORIZON	Thickness and depth from land surface
SAPROLITE	S(suitable) or U(unsuitable)
SOIL WETNESS	Inches from land surface to free water or inches from land surface to soil colors with chroma 2 or less - record Munsell color chip designation
CLASSIFICATION	S (Suitable), PS (Provisionally Suitable), or U (Unsuitable)

Evaluation of saprolite shall be by pits.

Long-term Acceptance Rate (LTAR): gal/day/ft^2

Show profile locations and other site features (dimensions, reference or benchmark, and North).

SEE ATTACHED FIGURE

Residential Subsurface Wastewater Treatment and Disposal System SL 2022-11 Proposal

for

Lot 52 – Brookhollow Estates
180 Bowman Road
Statesville, NC 28625

Iredell County PID: 4726842174
April 26, 2023

Prepared for:
Vitaliy Meyko
BYN LLC
808 Deercross Lane
Waxhaw, NC 28173
704-879-1647



Prepared by:

Larry Thompson, REHS, LSS
Thompson Environmental Consulting, Inc.
PO Box 541
Midland, NC 28107-0541
Phone: 704-301-4881
larry@thompsonenv.com



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, BYN LLC, am the legal owner(s) of the property located at 180 Bowman Road, Statesville, NC 28625, identified as PIN (Parcel Identification Number) 4726842174.000, located in Iredell County, North Carolina.

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

Larry Thompson, Thompson Environmental, 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.

Vitaliy Meyko
Vitaliy Meyko (Apr 25, 2023 19:03 EDT)

Signature of Owner(s)

Apr 25, 2023
Date

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

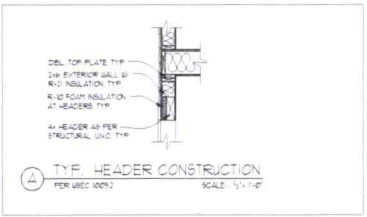
Mooresville - Environmental Health
barbara.nebel@co.iredell.nc.us
Fax: 704-662-3239
610 E. Center Avenue, Mooresville, NC 28115

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

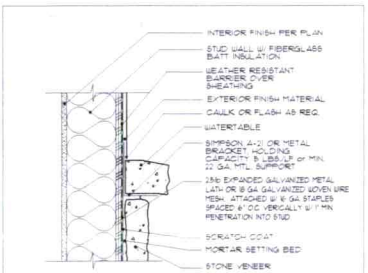
*** NO FIELD ALTERATIONS WILL BE AUTHORIZED UNLESS ACCOMPANIED BY REVISED DRAWINGS.**

NOTE:
REFER TO STRUCTURAL SHEETS FOR SHEAR WALL SCHEDULE AND ENGINEERING PLAN WHICH CONTAIN DETAIL REFERENCES AND/OR INSTRUCTIONS PERTAINING TO EACH SHEAR WALL INDICATED IN THIS PLAN.

NOTE:
CONTRACTOR TO VERIFY ALL DIMENSIONS AND CONDITIONS OF PROJECT AND REPORT ANY OMISSIONS/ DISCREPANCIES TO DESIGNER PRIOR TO COMMENCING WORK. DESIGNER SHALL NOT BE RESPONSIBLE FOR DISCREPANT CONDITIONS RESULTING FROM UNAUTHORIZED WORK PERFORMED BY THE CONTRACTOR.



(A) TYP. HEADER CONSTRUCTION
PER UBC 1809.2 SCALE: 1/4"=1'-0"



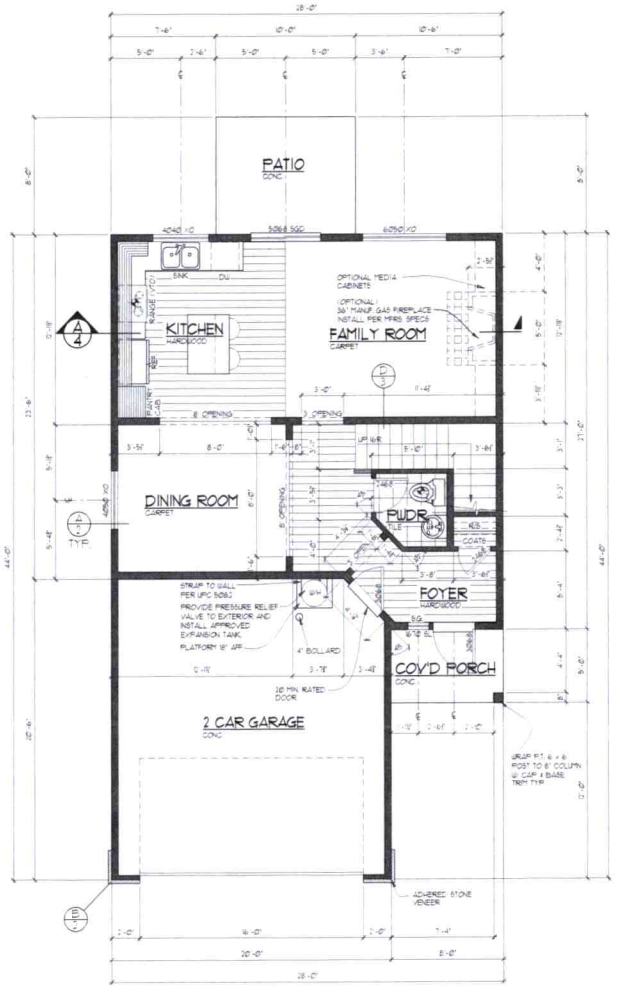
(E) ADHERED STONE VENEER
SCALE: N.T.S.

AREA SUMMARY		
MAIN FLOOR:	692	SF
UPPER FLOOR	1016	SF
TOTAL	1708	SF
GARAGE	404	SF
GLAZING SUMMARY		
WINDOWS	246	SF
DOORS W/ MORE THAN 50% GLAZING	48	SF
SKYLIGHTS	0	SF
TOTAL	294	SF
GLAZING PERCENT	14.0	% WDW SF / FLR SF (%)

SMOKE DETECTORS	
SD	INSTALL SMOKE DETECTORS WHERE INDICATED

CARBON MONOXIDE ALARMS	
CO/M	INSTALL CARBON MONOXIDE ALARM PER CODE

VENTILATION SCHEDULE		
VENTILATION REQUIREMENTS OF IRC TABLE R303.3		
SYMBOL		
1	KITCHENS	100 CFM INTERMITTENT OR 25 CFM CONTINUOUS
2	BATHROOMS-TOILET ROOMS	MECHANICAL EXHAUST CAPACITY OF 75 CFM MIN. INTERMITTENT OR 20 CFM CONTINUOUS



PROVIDE ONE LAYER 5/8" GWB TYPE 'X' AT CEILINGS COMMON WITH HABITABLE AREAS WHERE THE SEPERATION IS A FLOOR/CEILING ASSEMBLY. CLAD ALL SUPPORT COUPNG BEAMS AND WALLS WITH ONE LAYER 1/2" GWB. THE GARAGE SHALL BE SEPERATED FROM THE RESIDENCE AND ATTIC AREA WITH NO LESS THAN 1/2" GWB ON THE GARAGE SIDE.

LANDING AT EXTERIOR DOORWAY SHALL NOT BE MORE THAN 7¾" BELOW THE TOP OF THRESHOLD, PROVIDED THE DOOR, OTHER THAN EXTERIOR STORM OR SCREEN DOORS, DOES NOT SWING OVER THE LANDING. IRC R311.3

MAIN FLOOR PLAN

© 2022 Level Design, LLC. SCALE: 1/4" =1'-0"

- ALL DOOR/WINDOW HEADERS TO BE 4x10 DFK AT 2x6 BEARING WALLS U.N.O. 8'-0" MAX. SPAN
- ALL DOOR/WINDOW HEADERS TO BE 4x10 DFK AT 2x4 BEARING WALLS U.N.O. 6'-0" MAX. SPAN
- WINDOW HEADERS AT 8'-0" ABOVE SUB FLOOR, U.N.O.
- PROVIDE FIREBLOCKING AS REQUIRED (SEE NOTES ON SHEET 1)
- EXTERIOR WALLS TO BE 2X6 AT 16" (MAX.) O.C. U.N.O.
- INTERIOR PARTITIONS TO BE 2x4 AT 16" O.C. (2x6 @ PLUMBING WALLS U.N.O.
- DUCTS THROUGH WALL OR CEILING COMMON TO HOUSE MIN. 26 GAGE STEEL
- NO DUCT OPENINGS IN GARAGE
- PROVIDE SOLID FRAMING EQUAL TO THE WIDTH OF THE MEMBER BEING SUPPORTED (U.N.O.)

DUCTS SHALL BE LEAK TESTED IN ACCORDANCE WITH R5-33 PER UBEC 503.10.2 DUCTS, AIR HANDLERS, FILTER BOXES, AND BUILDING CAVITIES USED AS DUCTS SHALL BE SEALED AS PER UBEC 503.10.3

NOTE: BUILDING AIR LEAKAGE TEST REQUIRED AS PER UBEC 502.4.5

BLUE (8 AWG TRACER WIRE REQUIRED AT ALL NON-METAL WATER SERVICE PIPING PER UPC 604.8

These plans are copyrighted in accordance with federal statutes. Reproduction of these plans by Level Design, LLC prior to construction for each structure built from these plans. Reproduction by these means without written permission from Level Design, LLC is expressly prohibited. These drawings and all concepts therefrom remain the property of Level Design, LLC

PLAN 1708/2

Level design, llc.
612 N. Carr St. Tacoma, WA 98409
PHONE: 253.284.3170
FAX: 253.284.3183

REVISION DATE	INIT	PROJECT #

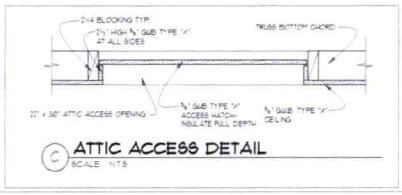
2 / 9

DATE: 7-24-2021
INIT: L. DESIGN
PROJECT #

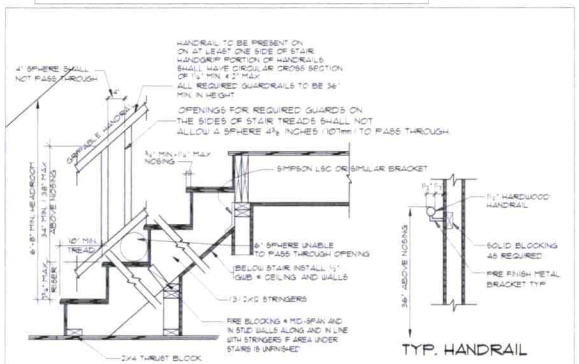
*** NO FIELD ALTERATIONS WILL BE AUTHORIZED UNLESS ACCOMPANIED BY REVISED DRAWINGS.**

NOTE:
REFER TO STRUCTURAL SHEETS FOR SHEAR WALL SCHEDULE AND ENGINEERING PLAN WHICH CONTAIN DETAIL REFERENCES AND/OR INSTRUCTIONS PERTAINING TO EACH SHEAR WALL INDICATED IN THIS PLAN.

NOTE:
CONTRACTOR TO VERIFY ALL DIMENSIONS AND CONDITIONS OF PROJECT AND REPORT ANY OMISSIONS/ DISCREPANCIES TO DESIGNER PRIOR TO COMMENCING WORK. DESIGNER SHALL NOT BE RESPONSIBLE FOR DISCREPANT CONDITIONS RESULTING FROM UNAUTHORIZED WORK PERFORMED BY THE CONTRACTOR.



C ATTIC ACCESS DETAIL
SCALE: N.T.S.



INTERIOR/GUARDRAIL STAIR NOTES:
- HANDRAILS MUST NOT PROJECT MORE THAN 4½" (114 MM) INTO THE STAIRWAY IRC SECTIONS R311.6.2
- THE SPACING BETWEEN INTERMEDIATE HANDRAIL MEMBERS MUST NOT ALLOW A 4" SPHERE TO PASS THROUGH ANY OPENING. IRC SECTION R312.3
- MINIMUM STAIRWAY WIDTH ABOVE HANDRAIL SHALL BE NO LESS THAN 36" INCHES IRC SECTION R311.7
- STAIR # STAIR LANDING MINIMUM WIDTH SHALL BE NO LESS THAN 36" (91½") CLEAR IF ONE HANDRAIL, # 27" CLEAR IF 2 HANDRAILS IRC SECTION R311.7
- THE TREADS LEADING EDGE CURVATURE CAN HAVE A MAX RADIUS OF 9/16". THE MAX. BEVELING OF THE NOSING SHALL BE NO MORE THAN ½" IRC SECTION R311.7.5.3
- RISER OR TREAD MAXIMUM DIFFERENTIAL SHALL BE NO MORE THAN ⅜" IRC SECTION R311.7.5.1
- NOSING IS NOT REQUIRED FOR STAIRS WITH TREADS GREATER THAN 11" IRC SECTION R311.7.5.3

EXTERIOR STAIR NOTES:
- EXTERIOR STAIR LIGHTING AT TOP LANDING WITH CONTROLS INSIDE THE DWELLING IRC SECTION R303.8
- A MAXIMUM SLOPE OF 1:48 (2% / 1/8 INCH PER FOOT) IS REQUIRED AT EXTERIOR LANDINGS AND TREADS FOR DRAINAGE IRC SECTION R311.3

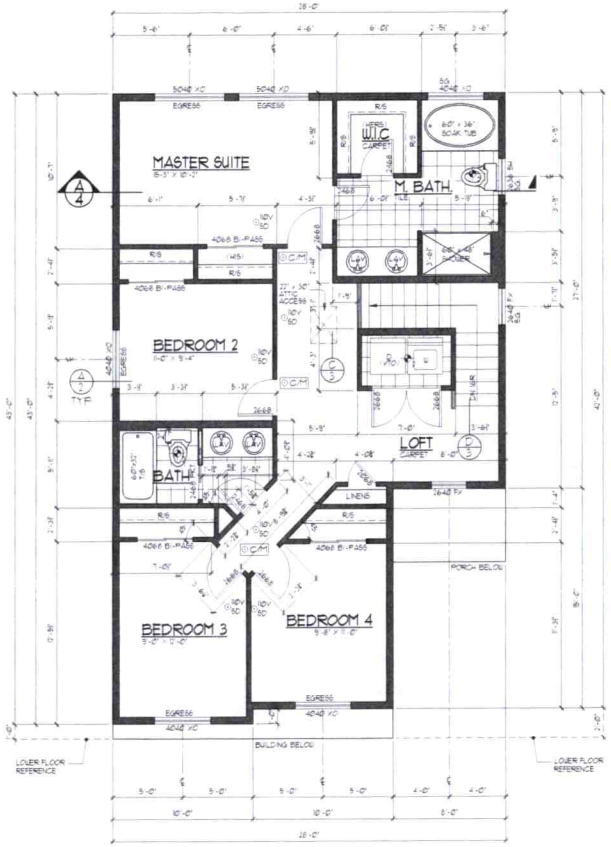
INTERIOR UNDER STAIR NOTES:
- UNDER TREADS ARE REQUIRED TO HAVE A MINIMUM OF 6" DEPTH AT INNER EDGE IRC SECTION R311.7.5.2
- UNDER TREAD DEPTH OF 10" WITH IN 12" OF THE INSIDE IRC SECTION R311.7.5.2.1

LANDING NOTES:
- LANDING WIDTH SHALL NOT BE LESS THAN THAT OF STAIR SERVED IRC R311.7.6
- LANDING SHALL NOT BE LESS THAN 36" INCHES IN DIRECTION OF TRAVEL IRC R311.7.6

A STAIR DETAIL
SCALE: N.T.S.

SMOKE DETECTORS	
SD	INSTALL SMOKE DETECTORS WHERE INDICATED
CARBON MONOXIDE ALARMS	
CO/M	INSTALL CARBON MONOXIDE ALARM PER CODE

VENTILATION SCHEDULE		
VENTILATION REQUIREMENTS OF IRC TABLE R303.3		
SYMBOL		
1	KITCHENS	100 CFM INTERMITTENT OR 25 CFM CONTINUOUS
2	BATHROOMS-TOILET ROOMS	MECHANICAL EXHAUST CAPACITY OF 50 CFM MIN. INTERMITTENT OR 20 CFM CONTINUOUS



UPPER FLOOR PLAN

© 2022 Level Design, LLC.

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

- PROVIDE FIREBLOCKING AS REQUIRED (SEE NOTES ON SHEET 1)
- WINDOW HEADERS AT 6'-8" ABOVE SUB FLOOR U.N.O.
- EXTERIOR WALLS TO BE 2X6 AT 16" O.C. U.N.O.
- INTERIOR PARTITIONS TO BE 2X4 AT 16" O.C. (2X6 @ PLUMBING WALLS) U.N.O.
- PROVIDE SUPPLEMENTAL JOISTS/BLOCKING BELOW SHEAR WALLS AS INDICATED ON FRAMING PLAN
- PROVIDE SOLID FRAMING EQUAL TO THE WIDTH OF THE MEMBER BEING SUPPORTED U.N.O.

DUCTS:
-DUCTS SHALL BE LEAK TESTED IN ACCORDANCE WITH R5-33 PER UBEC 503.10.2
-DUCTS, AIR HANDLERS, FILTER BOXES, AND BUILDING CAVITIES USED AS DUCTS SHALL BE SEALED AS PER UBEC 503.10.3

NOTE:
BUILDING AIR LEAKAGE TEST REQUIRED AS PER UBEC 502.4.3

BLUE 6 MIL TRACER LINE REQUIRED AT ALL NON-METAL WATER SERVICE PIPING PER UPC #604.8

PLAN 1708/2

These plans are copyrighted in accordance with Federal and International law. Ownership of all plans, Level Design, LLC prior to construction for each structure built from these plans. Reproduction by any means of all or part of, or variations thereof without written permission from Level Design, LLC is expressly prohibited. Title to these plans and rights therefrom remain the property of Level Design, LLC

Level design, llc.
612 N. Carr St. Tacoma, WA 98409
PHONE: 253.284.3170
FAX: 253.284.3183

REVISION DATE	INIT.	PROJECT #

3/9

DATE: 7-24-2021
INIT.: L. DESIGN
PROJECT #