BLDR-2024-58886

# 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 2024-57136

PIN # 4880 -- 71 -- 6370

APPLICANT/OWNER: Drew Baum

APPLICANT ADDRESS: 162 Four Andrews Drive, Harmony NC 28634

SITE ADDRESS: 779 E. Memorial Hwy, Harmony, NC 28634

PHONE: 570-337-3918

ALT. PHONE:

SITE DIRECTIONS: I40 E -> exit 162 -> N Hwy 64 -> L NC 901 -> lot on R after Dyson Rd

SAP CONTROLLED: ☐ YES ☑ NO

SUBDIVISION: Farmony Park

SECTION: n/a

LOT # 4

LOT AREA: 25.73

DESIGN FLOW: 360 gpd

L.T.A.R.(Initial): 0.25

L.T.A.R (Repair): 0.25

Septic Tank 1000 (gal) STB Infiltrator Date

Pump Tank (gal) PT Date

Pump Make Model Serial #

# Nitrification Fields 1 # Lines 4 Linear Ft: 360

Trench Width 36 *Max. Trench Depth(Initial) 28 *Max. Trench Depth(Repair) 28 Gravel Depth n/a

* Measured on the downhill side of the trench

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

System Description: 25% Reduction - IIb

Repair System Description: 25% Reduction - IIb

Maintenance Agreement Required: ☐ YES ☑ NO

☑ GRAVITY ☐ PRESSURE

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

Usable Depth to LC (Initial): 40

☑ Residence No. Bedrooms 3

☐ Business No. Persons 6

☐ Other No. Employees

☐ Slab ☑ Crawl Space

☐ Basement w/plumbing ☐ Basement w/o plumbing

Usable Depth to LC (Repair): 40 *Limiting Condition*

**Water Supply**

☑ Private

☐ Public

☐ Community

Comments / Conditions: 498' of line shown - install 360'

Do not pave, grade, drive, park, or bury utilties in drainfield.

If pump is required, a new permit will be required.

INITIAL SITE SKETCH

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

Alan Clapp

LSS# 1058

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

AOWE# 10017E

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.**

See attached for line lengths

*Permit can be suspended or revoked if any false information is supplied toward securing the permit / any unauthorized changes are made to the site / any unauthorized changes are made in the installation of the system.* **CONTACT A LOCATOR SERVICE PRIOR TO ANY EXCAVATION**

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

Owner / Applicant Signature: Online Signature Date:

IMPROVEMENT PERMIT by: D. Wieberg Date: 07/15/2024

AUTHORIZATION TO CONSTRUCT by: D. Wieberg Date: 07/15/2024

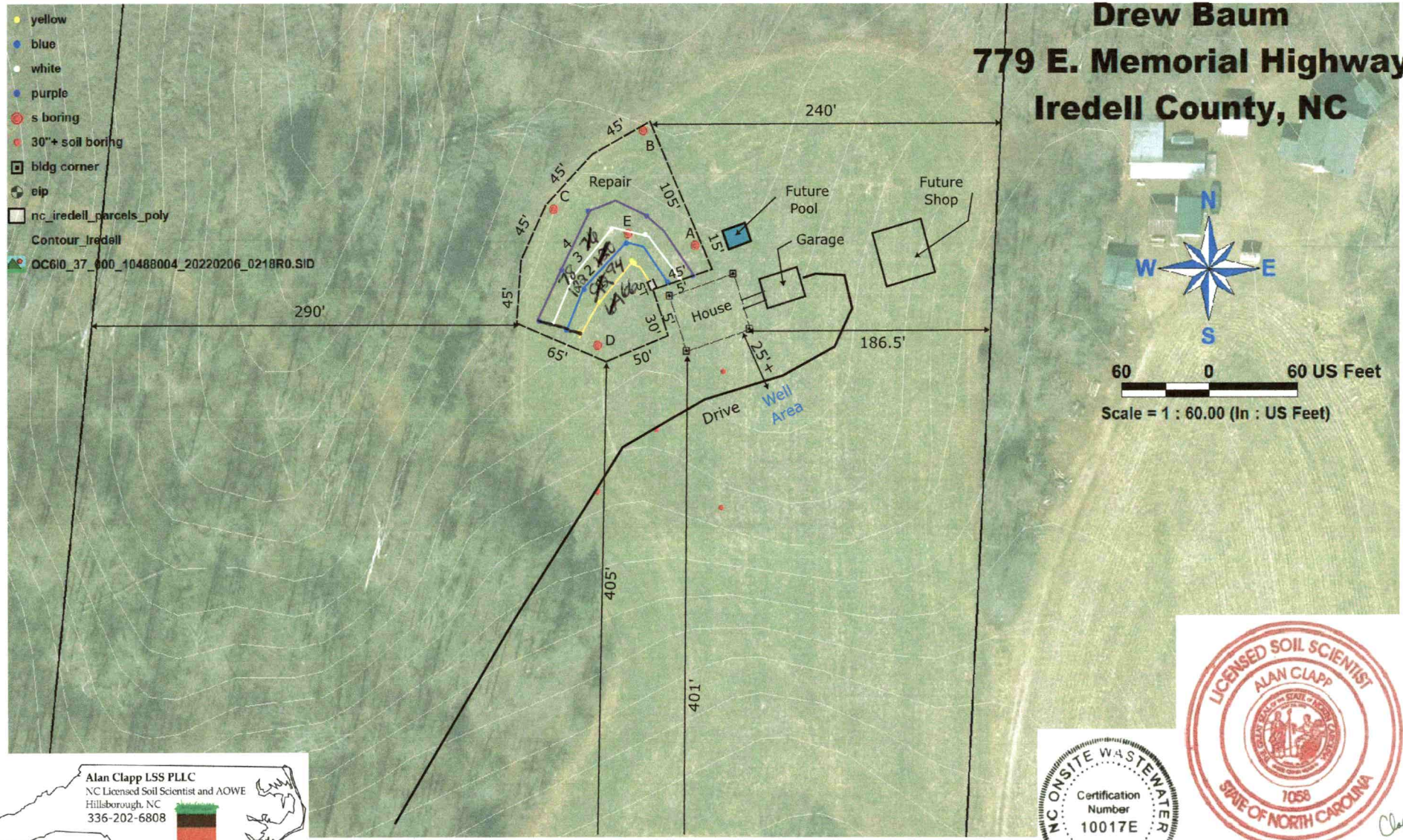
Installed by: Overdrive

OPERATION PERMIT by: Date: 1/30/25

Existing System Inspected by: Date:

# Septic Map for:

## Drew Baum
## 779 E. Memorial Highway
## Iredell County, NC





Alan Clapp LSS PLLC
NC Licensed Soil Scientist and AOWE
Hillsborough, NC
336-202-6808

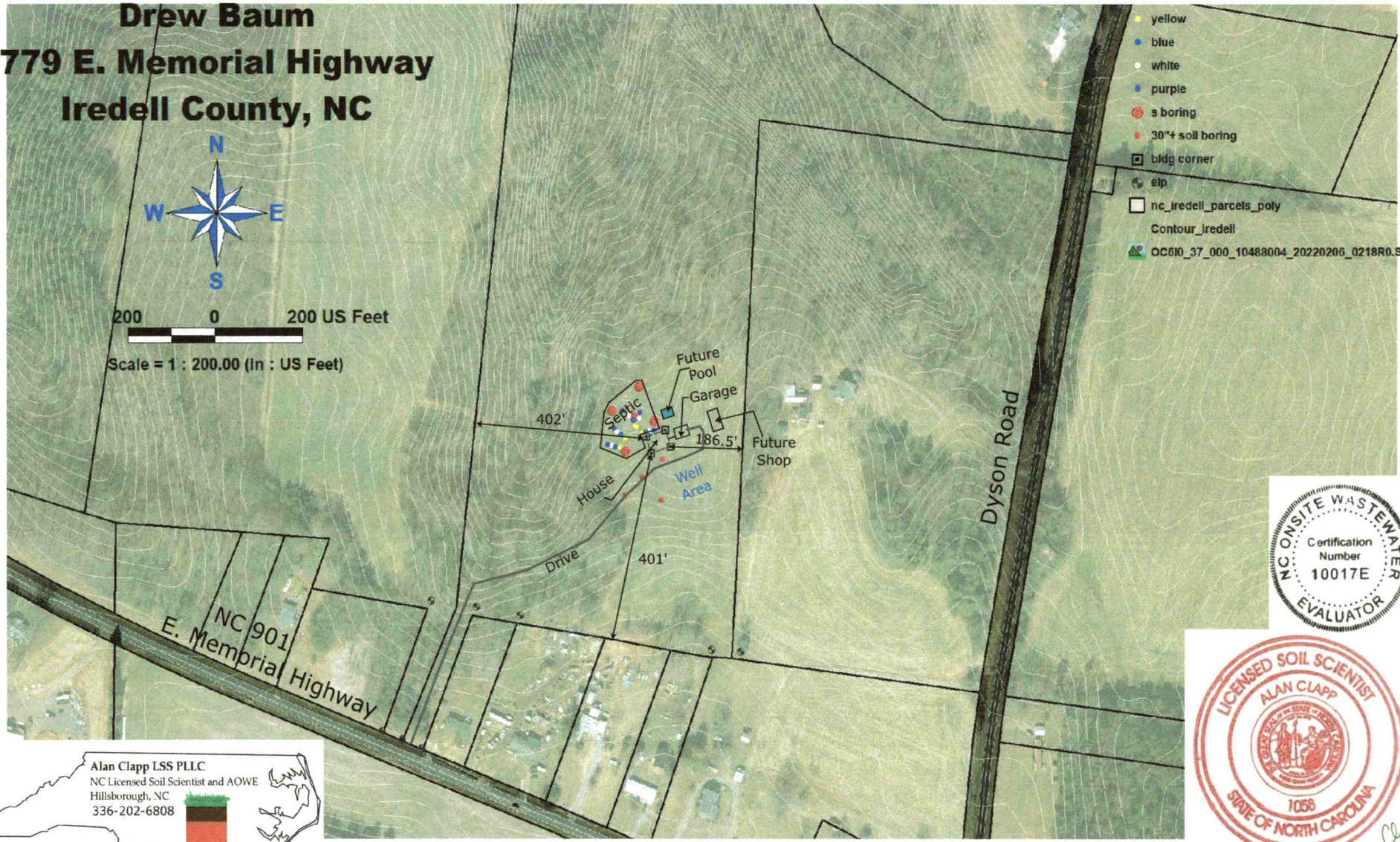

N.C. ONSITE WASTEWATER EVALUATOR
Certification Number
10017E

LICENSED SOIL SCIENTIST
ALAN CLAPP
7058
STATE OF NORTH CAROLINA

07-04-2024

# Site Map for:

## Drew Baum
## 779 E. Memorial Highway
## Iredell County, NC





Alan Clapp LSS PLLC
NC Licensed Soil Scientist and AOWE
Hillsborough, NC
336-202-6808


NC ONSITE WASTEWATER EVALUATOR
Certification Number
10017E

LICENSED SOIL SCIENTIST
ALAN CLAPP
1056
STATE OF NORTH CAROLINA

07-04-2024

Permit/File #: _OSWP-2(

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:** [X] (a2) Improvement Permit [X] (a2) Construction Authorization [ ] Fee $_____

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

County: Iredell

PIN/Lot Identifier: PIN: 4880716370 – 25.73 Acres

Issued To: Drew Baum

Property Location: 779 E. Memorial Highway (NC 901)

Subdivision (if applicable) PB: 78 PG: 101 Lot #: 4 Block: _____ Section: _____

LSS Report Provided: Yes [X] No [ ]

If yes, name and license number of LSS: Alan Clapp 1058

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

Facility Type: Residential Single Family Dwelling

Number of bedrooms: 3 Number of Occupants: 6 Other: _____

Design Wastewater Strength: [X] Domestic [ ] High Strength [ ] Industrial Process Wastewater

Proposed Design Daily Flow: 360 GPD Proposed LTAR (Initial): .25 Proposed LTAR (Repair): .25

Proposed Wastewater System Type*: IIb (Initial) Pump Required: [ ] Yes [X] No [X] May be requi

Proposed Wastewater System Type*: IIb (Repair) Pump Required: [ ] Yes [X] No [X] May be requi

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

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

Saprolite System (Initial): [ ] Yes [X] No Saprolite System (Repair): [ ] Yes [X] No

Fill System (Initial): [ ] Yes [X] No If yes, specify: [ ] New [ ] Existing (when adding more than 6 inches of fill to system area provide a fill

Fill System (Repair): [ ] Yes [X] No If yes, specify: [ ] New [ ] Existing (when adding more than 6 inches of fill to system area provide a fi

Usable Depth to LC (Initial)[x]: 40" Usable Depth to LC (Repair)[x]: 40" ***[x] Limiting Condition***

Max. Trench Depth (Initial)[‡]: 28" Max. Trench Depth (Repair)[‡]: 28" ***[‡] Measured on the downhill side of the tr***

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

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

Drainfield location meets requirements of Rule .0508: Yes [X] No [ ] Drainfield location meets requirements of Rule .0601: Yes [X] No

Permit valid for: [X] Five years [site plan submitted pursuant to GS 130A-334(13a)] [ ] No expiration [plat submitted pursuant to GS 130A-3

Permit conditions:

Licensed Soil Scientist Print Name: Alan Clapp

Licensed Soil Scientist Signature: Alan Clapp Date: 7/4/24

**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-20

## *This Section for Local Health Department Use Only*

Initial submittal received: 7/11/24 (*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 he department, the common form developed by the Department, and a soil evaluation pursuant to subsection (a2) of this section, the local health department sha within five business days of receiving the application, conduct a completeness review of the submittal. A determination of completeness means that the Improv Permit includes all of the required components. If the local health department determines that the Improvement Permit is incomplete, the local health departm 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 P is complete within five business days after the local health department receives the additional information from the applicant. If the local health department fa 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 Improven 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: 07/15/2024

**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 respons for checking with appropriate governing bodies in meeting their requirements. *This permit is subject to revocation if the site 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 fr any liabilities, duties, and responsibilities imposed by statute or in common law from any claim arising out of or attributed t evaluations, submittals, or actions from a licensed soil scientist or licensed geologist pursuant to GS 130A-335(a2).**

**Improvement Permit Expiration Date:** 7/15/29

***See attached site sketch***

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES
Division of Public Health

Permit/File #: OSWP-202

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

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

PIN/Lot Identifier: PIN: 4880716370 – 25.73 Acres

Issued To: Drew Baum

Property Location: 779 E. Memorial Highway (NC 901)

AOWE/PE Plans/Evaluations Provided: Yes ☒ No ☐ If yes, name and license number of AOWE/PE: Alan Clapp # 10017E

Facility Type: Residential Single Family Dwelling

Number of bedrooms: 3 Number of Occupants: 6 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* IIb (Initial) IIb (I

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

Design Daily Flow: 360 GPD Wastewater Strength: ☒ Domestic ☐ High Strength ☐ Industrial Process W

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: 1000 gallons Total Trench/Bed Length: 360 feet Trench/Bed Spacing: 9 feet on center

Trench/Bed Width: 36 inches LTAR: .25 gpd/ft² Usable Depth to LC (Initial)ˣ: 40" ˣ***Limiting condit***

Soil Cover: 6 inches Slope Corrected Maximum Trench/Bed Depth‡: 28" inches ‡ ***Measured on the downhill side of the tren***

Pump Tank Size (if applicable): 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 [.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: Divert all surface water around all parts of system including gutter and foundation drains.

**The requirements of 15A NCAC 18E are incorporated by reference into this permit and shall be met. Systems shall be installed in accordar with the attached site sketch. *This Construction Authorization is subject to revocation if the site plan, plat, or the intended use changes.* T Construction Authorization shall not be affected by a change in ownership of the site. This Construction Authorization is subject to compl 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: Alan Clapp

AOWE/PE Signature: Alan Clapp Date: 7/4/24

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

***See attached site sketch***

## *This Section for Local Health Department Use Only*

Initial submittal received: 7/11/24 *Date* by _____ *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, Improvement Permit and Construction Authorization application together, the permit fee charged by the local health department, the common form developed 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 lic 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 mea 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 t applicant of the components needed to complete the Construction Authorization or Improvement Permit and Construction Authorization. The applicant may su 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 Construc 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 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 Evalua 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 licens engineer, the local health department shall suspend or revoke the Construction Authorization or Improvement Permit and Construction Authorization pursuant 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: 07/15/2024

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

**The Department, the Department's authorized agents, and the local health departments shall be discharged and released fr any liabilities, duties, and responsibilities imposed by statute or in common law from any claim arising out of or attributed t plans, evaluations, preconstruction conference findings, submittals, or actions from a person licensed pursuant to Chapter 8 the General Statutes as a licensed engineer or a person certified pursuant to Article 5 of Chapter 90A of the General Statutes 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:** 7/15/29

***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 he 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 Authorizat*

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 _____ ☐ An

☑ 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-
Requesting DHHS review? (systems >3000 GPD or IPWW) ☐ Yes ☑ No

Applicant: _____
Mailing Address: _____
_____
City: _____
State: _____ Zip: _____
Phone #: _____
Email: _____

Owner: Drew Baum
Mailing Address: 162 Four Andrews Drive
_____
City: Harmony
State: NC Zip: 28634
Phone #: 570-337-3918
Email: drewbaum63@gmail.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? Power poles in front |

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

Applicant Signature: _____ Date: _____

Owner's Signature: _____ Date: 7/8/2024

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES
Division of Public Health

Permit/File #: _____

## ADDENDUM TO G.S. 130A-335(a2) SUBMITTAL

County: Iredell

PIN/Lot Identifier: PIN: 4880716370 – 25.73 Acres 779 E. Memorial Highway (NC 9C

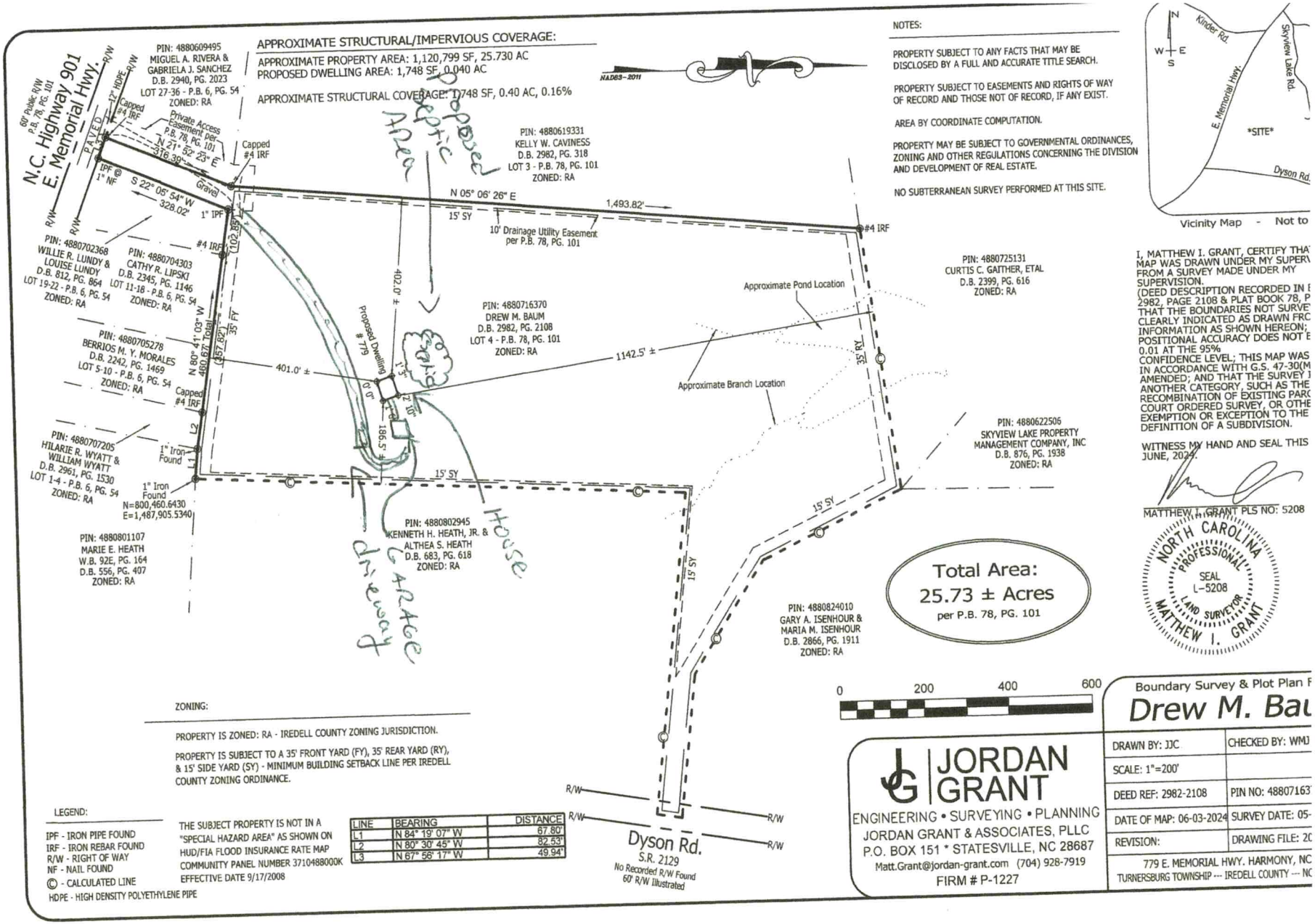
Issued To: Drew Baum

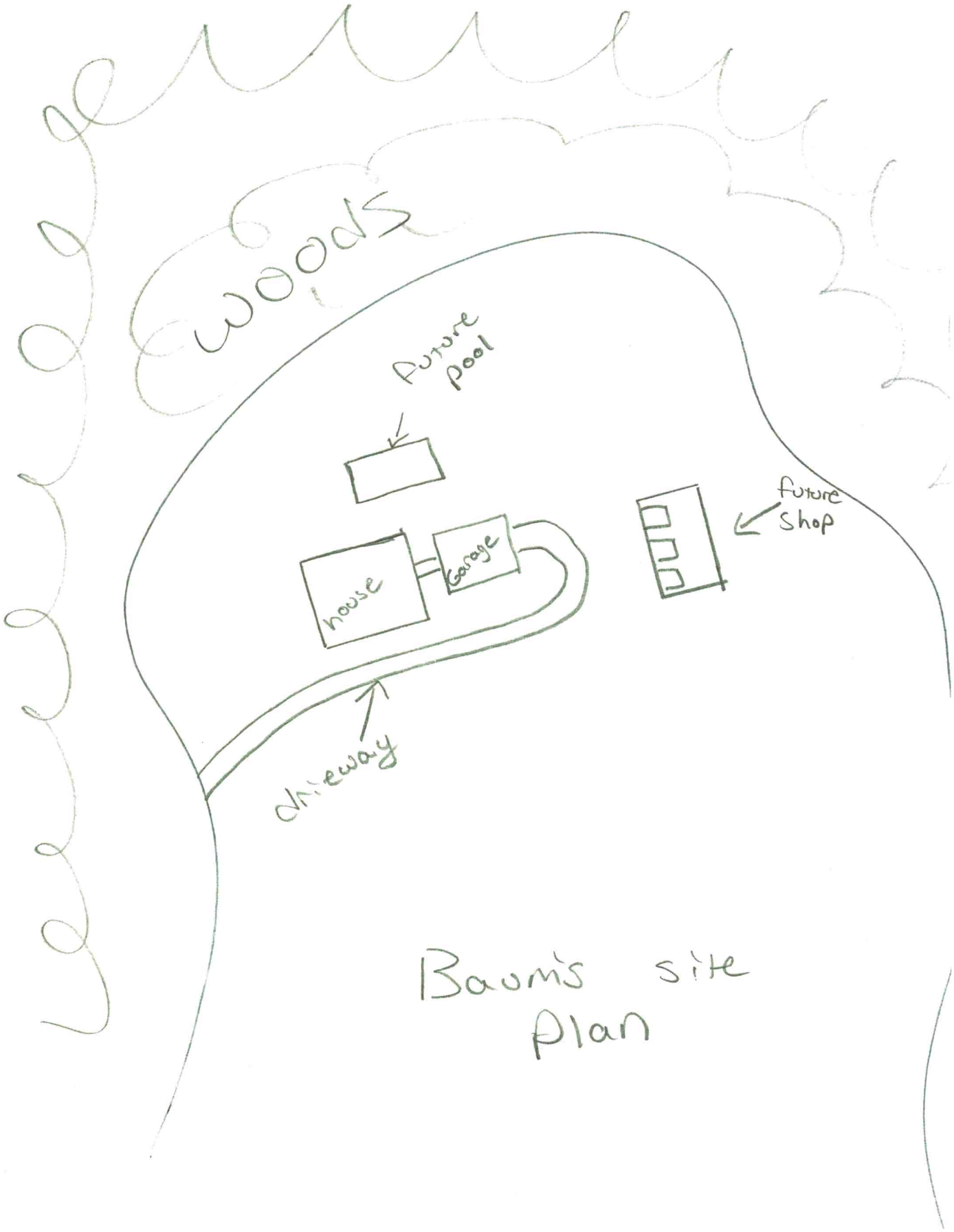
**Additional Improvement Permit Conditions:**

1. Well Permit required from Iredell County Health Department.
2. Construct protective fencing around the soil area and layout to protect from grading compaction, and construction traffic. Storage of materials, cuts and fill over septic area cou in revocation of the permit.
3. Maintain any septic layout until system is installed.
4. Install system per 15A NCAC 18E .0901 (g) and .0800.
5. Use septic and pump tanks as required per 15A NCAC 18E .0805.
6. Make sure property lines are marked prior to installation.
7. Bring in clean topsoil to fill voids when removing tree root balls in wooded areas.

**Additional Construction Authorization Conditions:**

8. Contact NC 811 prior to any digging.
9. Use # 5 gravel placed over the chamber louvers if a 25% accepted chamber trench sy used. Use a high flow splash plate at the first end plate of each trench if pumping to a 25% chamber system.
10. Divert all surface water around system and repair area including gutter and foundat Install upslope surface diversion swales.
11. Install system during dry conditions. Install system in area noted at the trench depth Final plumbing stub out elevation will determine if pump system needs to be added.
12. Straw and seed septic area after installation to establish a stable cover and prevent s erosion.
13. Submit the attached common form, report, and map with signature and an applicatio required) to the Health Department.


APPROXIMATE STRUCTURAL/IMPERVIOUS COVERAGE:
APPROXIMATE PROPERTY AREA: 1,120,799 SF, 25.730 AC
PROPOSED DWELLING AREA: 1,748 SF, 0.040 AC
APPROXIMATE STRUCTURAL COVERAGE: 1748 SF, 0.40 AC, 0.16%
NADB3-2011
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.
N.C. Highway 901
E. Memorial Hwy.
Kinder Rd.
Skyview Lake Rd.
E. Memorial Hwy.
*SITE*
Dyson Rd.
Vicinity Map - Not to
PIN: 4880609495
MIGUEL A. RIVERA & GABRIELA J. SANCHEZ
D.B. 2940, PG. 2023
LOT 27-36 - P.B. 6, PG. 54
ZONED: RA
PIN: 4880619331
KELLY W. CAVINESS
D.B. 2982, PG. 318
LOT 3 - P.B. 78, PG. 101
ZONED: RA
PIN: 4880702368
WILLIE R. LUNDY & LOUISE LUNDY
D.B. 812, PG. 864
LOT 19-22 - P.B. 6, PG. 54
ZONED: RA
PIN: 4880704303
CATHY R. LIPSKI
D.B. 2345, PG. 1146
LOT 11-18 - P.B. 6, PG. 54
ZONED: RA
PIN: 4880705278
BERRIOS M. Y. MORALES
D.B. 2242, PG. 1469
LOT 5-10 - P.B. 6, PG. 54
ZONED: RA
PIN: 4880716370
DREW M. BAUM
D.B. 2982, PG. 2108
LOT 4 - P.B. 78, PG. 101
ZONED: RA
PIN: 4880725131
CURTIS C. GAITHER, ETAL
D.B. 2399, PG. 616
ZONED: RA
PIN: 4880622506
SKYVIEW LAKE PROPERTY MANAGEMENT COMPANY, INC
D.B. 876, PG. 1938
ZONED: RA
PIN: 4880707205
HILARIE R. WYATT & WILLIAM WYATT
D.B. 2961, PG. 1530
LOT 1-4 - P.B. 6, PG. 54
ZONED: RA
PIN: 4880801107
MARIE E. HEATH
W.B. 92E, PG. 164
D.B. 556, PG. 407
ZONED: RA
PIN: 4880802945
KENNETH H. HEATH, JR. & ALTHEA S. HEATH
D.B. 683, PG. 618
ZONED: RA
PIN: 4880824010
GARY A. ISENHOUR & MARIA M. ISENHOUR
D.B. 2866, PG. 1911
ZONED: RA
Proposed Septic Area
Proposed Dwelling # 779
House
Garage
Driveway
Approximate Pond Location
Approximate Branch Location
Capped #4 IRF
1" IPF
#4 IRF
1" Iron Found
N=800,460.6430
E=1,487,905.5340
Gravel
PAVED
12" HDPE
60' Public R/W P.B. 78, PG. 101
Private Access Easement per P.B. 78, PG. 101
N 21° 52' 23" E 316.39'
S 22° 05' 54" W 328.02'
N 05° 06' 26" E 1,493.82'
15' SY
10' Drainage Utility Easement per P.B. 78, PG. 101
102.25'
402.0' ±
N 80° 41' 03" W 460.67' Total (457.62')
35' RY
401.0' ±
1142.5' ±
186.5' ±
0.0'
1.5'
2.10'
L1
L2
L3
Total Area:
25.73 ± Acres
per P.B. 78, PG. 101
0 200 400 600
ZONING:
PROPERTY IS ZONED: RA - 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.
LEGEND:
IPF - IRON PIPE FOUND
IRF - IRON REBAR FOUND
R/W - RIGHT OF WAY
NF - NAIL FOUND
© - CALCULATED LINE
HDPE - HIGH DENSITY POLYETHYLENE PIPE
THE SUBJECT PROPERTY IS NOT IN A "SPECIAL HAZARD AREA" AS SHOWN ON HUD/FIA FLOOD INSURANCE RATE MAP COMMUNITY PANEL NUMBER 3710488000K EFFECTIVE DATE 9/17/2008
LINE | BEARING | DISTANCE
L1 | N 84° 19' 07" W | 67.80'
L2 | N 80° 30' 45" W | 82.53'
L3 | N 67° 56' 17" W | 49.94'
Dyson Rd.
S.R. 2129
No Recorded R/W Found
60' R/W Illustrated
R/W
I, MATTHEW I. GRANT, CERTIFY THAT
MAP WAS DRAWN UNDER MY SUPERV
FROM A SURVEY MADE UNDER MY
SUPERVISION.
(DEED DESCRIPTION RECORDED IN E
2982, PAGE 2108 & PLAT BOOK 78, P
THAT THE BOUNDARIES NOT SURVE
CLEARLY INDICATED AS DRAWN FRO
INFORMATION AS SHOWN HEREON;
POSITIONAL ACCURACY DOES NOT E
0.01 AT THE 95%
CONFIDENCE LEVEL; THIS MAP WAS
IN ACCORDANCE WITH G.S. 47-30(M
AMENDED; AND THAT THE SURVEY I
ANOTHER CATEGORY, SUCH AS THE
RECOMBINATION OF EXISTING PARC
COURT ORDERED SURVEY, OR OTHE
EXEMPTION OR EXCEPTION TO THE
DEFINITION OF A SUBDIVISION.
WITNESS MY HAND AND SEAL THIS
JUNE, 2024.
MATTHEW I. GRANT PLS NO: 5208
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
Boundary Survey & Plot Plan F
Drew M. Bau
DRAWN BY: JJC
CHECKED BY: WMJ
SCALE: 1"=200'
DEED REF: 2982-2108
PIN NO: 48807163
DATE OF MAP: 06-03-2024
SURVEY DATE: 05-
REVISION:
DRAWING FILE: 20
779 E. MEMORIAL HWY. HARMONY, NC
TURNERSBURG TOWNSHIP --- IREDELL COUNTY --- NC




Baum's site plan

**Alan Clapp**
**Licensed Soil Scientist**
**405 N. Churton Street**
**Hillsborough, NC 27278**

Phone: 336-202-6808 alanclapp63@gmail.com
Soil/Site Evaluations-Septic Systems Layout and Design-Storm Water Assessment-Preliminary Evaluations

July 6, 2024

Drew Baum
162 Four Andrews Drive
Harmony, NC 28634

RE: Drew Baum Property
PIN: 4880716370 – 25.73 Acres
779 E. Memorial Highway (NC 901)
Iredell County, NC

Mr. Baum:

On July 4, 2024, the property referenced above in Iredell County was evaluated to facilitate Improvement Permit/Construction Authorization permitting for a septic system to serve a Single-Family Dwelling for a new proposed lot. This report and attached documents were prepared to meet the requirements for a Licensed Soil Scientist evaluation to meet **SL 2023-90.** Well water is to serve as water supply for the dwelling.

Soil borings were made and examined to determine soil suitability for on-site sewage disposal systems in accordance with **15A 18E Wastewater Treatment and Disposal Systems**. These borings were made by a soil auger. The property was traversed, and numerous bores were made in a transect-type sampling pattern to perform the soil/site evaluation. A septic layout is shown to demonstrate available space (.0508). The soil profile descriptions and locations along with the septic layout drawing will be located on a copy of the site plan. Under state regulations, sites for subsurface sewage disposal systems (septic tank systems) are evaluated for landscape position and topography, soil characteristics (structure, mineralogy, and texture), soil depth, soil wetness, restrictive horizons, and available space. This property is in the Piedmont physiographic region and the geologic region of the Cat Square Terrane.

## Typical Septic System used in Piedmont of NC:

The most common septic systems used in North Carolina are listed with the corresponding minimum usable soil depth required and any trench length reduction if allowed noted in parentheses: conventional (30"), shallow conventional systems (24" with soil cap), chamber systems (24" with soil cap and 25% drain field reduction), polystyrene systems (24" with soil cap and 25% drain field reduction), vertical panel block systems (requires at least 34" of usable soil and allows 50% drain field reduction), horizontal panel block systems (requires 26" of usable soil depth and allows 50% drain

field reduction), large diameter pipe (24"), low pressure pipe (24"), low profile chamber (20"), low pressure fill (18") and drip irrigation (18"). A pump can be used to deliver effluent to the usable soil area if gravity flow cannot be achieved. Also, a pump is required on any system with over 750' of drain field. The percent reduction means the amount of drain field trench length reduction for that product as compared to conventional trenches. Certain models of chamber systems and polystyrene bundle systems are considered accepted trench products. 25% Accepted trench products may be substituted in lieu of conventional gravel trenches per 15A NCAC 18E .1706 and .1707.

## SL 2023-90 Conditions, System Specifications and Site Features:

The information below is provided to facilitate the IP/CA issuance. One additional feature I would recommend is to **construct protective fencing around the soil area and septic layout**. No grading, filling, storage, compaction, or disturbance should be allowed over the soil/septic area. No soil removal from septic area during clearing.

| | | | |
|---|---|---|---|
| **Design Flow:** | **360** GPD | **Nitrification Field:** | **360** Lin. Ft. |
| **Septic Tank:** | **1000** GAL | **# of Lines:** | 6 |
| **Pump Tank:** | | **Min. Trench Depth:** | **18** inches |
| **Soil LTAR:** | **0.25** gpd/ft² | **Max. Trench Depth:** | **28** inches |
| **Usable Soil Depth:** | **40"** | **Min. Soil Cover:** | **6** inches |
| **Initial System Type:** | 25% Accepted Trench | **Max. Soil Cover:** | **16** inches |
| **Initial System Classification:** | **IIb** | **Trench Spacing:** | **9** Ft. on Center |
| **Repair System Type:** | 25% Accepted Trench | **Trench Width:** | **36** inches |
| **Repair System Classification:** | **IIb** | **Aggregate Depth:** | 25% Accepted Trench |
| **Saprolite System:** | No | **Distribution Type:** | Gravity |
| **Pump Requirements:** | | **Pre-treatment (Y/N):** | No |
| **Dosing Volume:** | | **Conditions:** | See attached |
| **Installer Level Required:** | **II** | **Water Supply:** | **Well water** |

**Location:** 779 E. Memorial Highway (NC 901)

## Design and Calculations:

**Bedrooms**: 3, not to exceed 6 people

**Design Flow**: 3-bedroom x 120 gpd/bedroom = 360 gpd, domestic strength wastewater

## Tankage: (15A NCAC .0801 (a)):

For a 3-bedroom dwelling, the minimum septic tank size is 1000-gallon septic tank (STB) capacity with effluent filter. Use a 1000-gallon septic tank. For a system that also requires a pump use a 1000-gallon pump tank (PT). (.0802 (a)).

## Soil/Site Conditions:

**Initial and Repair LTAR**: .25 gpd/ft²
**Trench Bottom Square Footage Required**: 360 gpd/.25 gpd/ft² = 1440 ft²
**Drainfield Requirement**: 1440 ft²/ 3 ft trench = 480 ft.
**System Requirement**:

| | |
|---|---|
| Conventional: | 480' |
| 25% Accepted Trench | 360' |
| 50% PPBPS Trench | 240' |

**Usable Soil/Saprolite Depth – Initial and Repair**: 40" (Based on bores A, B, C, D, E in the usable soil area and slope corrected)
**Maximum Trench Depth Initial and Repair**: 28"

**Initial System Type**: 25% Accepted Trench (IIb)
**Initial Trench Required**: **360' x 3'** of 25% Accepted 3'wide trench.

**Repair System Type**: 25% Accepted Trench (IIb)
**Repair Trench Required**: **360' x 3'** of 25% Accepted 3'wide trench.

## Septic Layout:

| Line | Color | Length |
|---|---|---|
| 1 | Yellow | 77' |
| 2 | Blue | 111' |
| 3 | White | 138' |
| 4 | Purple | 172' |
| **Total:** | | **498'** |

1. Initial system - 360' needed 25% Accepted Trench Lines 1-4
2. Repair system – 360' needed 25% Accepted Trench. Below 4
3. Line lengths measured with Bluebeam Revu Measuring tool.
4. Meets .0508 Available Space requirements.
5. Lines at laid out 9' on center at minimum.

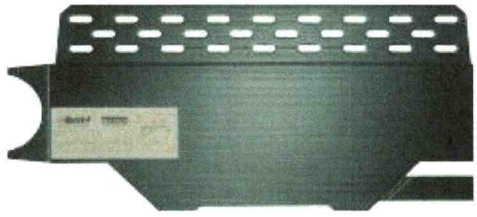
## System Distribution (.0901 (g) (9-12): Gravity, serial or parallel

**Gravel over Chamber Trench Louvers Detail**:



**High Flow Splash Plate:**





## Conclusions:

In North Carolina, three primary options for septic system permitting exist. 1. Traditional Health Department Permitting, 2. hybrid SL-2023 (a2) permitting, and 3. fully private permit options by either an engineer (EOP) or Authorized Evaluator (AOWE). With the hybrid permit option, SL2023-90 (a2), soil scientist that is also an AOWE will issue the Improvement Permit and Construction Authorization. The local Health Department will do the septic inspection and issue the Operation Permit. In the traditional permitting model, the county in the form of an Improvement Permit grants site approval. A Construction Authorization is issued once building floor plans are reviewed and the Improvement Permit is issued. The county issues an Operation Permit after the system has been installed to meet the specifications of the Construction Authorization. Septic layouts and system design can be performed as needed. The fully private permitting options are the Engineer Option Permit (EOP) and Authorized Onsite Wastewater Evaluator (AOWE) permit. A NC Licensed Engineer, a NC Licensed Soil Scientist, NC Authorized Evaluator, and a NC Registered Septic Installer can evaluate, design, and install a septic system without Health Department involvement other than record keeping.

The attached soil map and septic layout maps are based on soil boring, property iron and flag locations collected using an EOS Arrow Gold GPS and iCMTGIS Pro app. PCGIS X software was then used to prepare the maps and site plan. The house site was marked

with flags. A one inch to 60' version of the map will be provided. The map is scaled to print on 11" x 17" (Tabloid) paper in Landscape format. The GPS locations can be accurate to submeter, but county GIS shapefile layers should not be considered as accurate as survey located features, points, and property lines.

**Site Conditions for Improvement Permit and Construction Authorization:**

1. Well Permit required from Iredell County Health Department.
2. Construct protective fencing around the soil area and layout to protect from grading, compaction, and construction traffic. Storage of materials, cuts and fill over septic area could result in revocation of the permit.
3. Maintain any septic layout until system is installed.
4. Install system per 15A NCAC 18E .0901 (g) and .0800.
5. Use septic and pump tanks as required per 15A NCAC 18E .0805.
6. Make sure property lines are marked prior to installation.
7. Bring in clean topsoil to fill voids when removing tree root balls in wooded areas.
8. Contact NC 811 prior to any digging.
9. Use # 5 gravel placed over the chamber louvers if a 25% accepted chamber trench system is used. Use a high flow splash plate at the first end plate of each trench if pumping to a 25% accepted chamber system.
10. Divert all surface water around system and repair area including gutter and foundation drains. Install upslope surface diversion swales.
11. Install system during dry conditions. Install system in area noted at the trench depth specified. Final plumbing stub out elevation will determine if pump system needs to be added.
12. Straw and seed septic area after installation to establish a stable cover and prevent soil erosion.
13. Submit the attached common form, report, and map with signature and an application(if required) to the Health Department.

## NC Licensed Soil Scientist statement:

**This LSS Evaluation is being submitted pursuant to and meets the requirements of GS. 130A-335 (a2).**

## NC Onsite Wastewater Evaluator statement (AOWE):

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

Please feel free to contact me if you have any further questions.

Alan Clapp

Alan Clapp

NC Licensed Soil Scientist #1058
NC Registered Environmental Health Specialist #1118
NC Subsurface Wastewater Operator #1009092
NC Authorized Onsite Wastewater Evaluator #10017E







Project #: 123005

## Septic System Setbacks - *15A NCAC 18E .0601 Location of Sanitary Sewage Systems*:

**TABLE IX.** Minimum setbacks from all wastewater systems to site features

| Site Features | Setback in feet |
|---|---|
| Any transient or non-transient non-community water supply well, community well, shared water supply well, well that complies with 15A NCAC 18A .1700, or water supply spring | 100 |
| A private drinking water well or upslope spring serving a single family dwelling unit | 50 |
| Any other well or source not listed in this table, excluding monitoring wells | 50 |
| Surface waters classified WS-I, from ordinary high-water mark | 100 |
| Waters classified SA, from mean high-water mark | 100 |
| Any Class I or Class II reservoir, from normal water level | 100 |
| Lake or pond, from normal water level | 50 |
| Any other stream, non-water supply spring, or other surface waters, from the ordinary high-water mark | 50 |
| Tidal influenced waters, such as marshes and coastal waters, from mean high-water mark | 50 |
| Permanent stormwater retention basin, from normal water level | 50 |
| Any water line, unless the requirements of Paragraph (i) have been met | 10 |
| Closed loop geothermal wells | 15 |
| Building foundation and deck supports | 5 |
| Patio, porch, stoop, lighting fixtures, or signage, including supporting structures such as posts or pilings | 1 |
| Any basement, cellar, or in-ground swimming pool | 15 |
| Buried storage tank or basin, except stormwater | 10 |
| Above ground swimming pool and appurtenances that require a building permit | 5 |
| Top of slope of embankment or cuts of two feet or more vertical height with a slope greater than 50 percent | 15 |
| Top of slope of embankment or cuts of two feet or more vertical height with a slope greater than 33 percent and less than or equal to 50 percent | 15<br>If the site has suitable soil depth that extends for a minimum horizontal distance of 15 feet from the edge of the dispersal field, no minimum setback is required. |
| Top of slope of embankment or cuts of two feet or more vertical height with a slope less than 33 percent | 0 |
| Groundwater lowering system, as measured on the ground surface from the edge of the feature | 25 |
| Downslope interceptor drains and surface water diversions with a vertical cut of more than two feet, as measured on the ground surface from the edge of the feature | 15 |

| | |
|---|---|
| Upslope and sideslope interceptor drains and surface water diversions with a vertical cut of more than two feet, as measured on the ground surface from the edge of the feature | 10 |
| A stormwater collection system as defined in 15A NCAC 02H .1002(48), excluding gutter drains that connect to a stormwater collection system, with a vertical cut of more than two feet as measured from the center of the collection system | 10 |
| Bio-retention area, injection well, infiltration system, or dry pond | 25 |
| Any other dispersal field, except designated dispersal field repair area for project site | 20 |
| Any property line | 10 |
| Burial plot or graveyard boundary | 10 |
| Above ground storage tank from dripline or foundation pad, whichever is more limiting | 5 |
| Utility transmission and distribution line poles and towers, including guy wires, unless a greater setback is required by the utility company | 5 |
| Utility transformer, ground-surface mounted | 5 |
| Underground utilities | 5 |

## GENERAL DRAINFIELD REQUIREMENTS AND BEST CONSTRUCTION PRACTICES

1. Any clearing or preparation of the nitrification field shall be done without removal, disturbance, or compaction of soil. The contractor shall establish and stake the contour lines of the drainfield area before the installation and before the preconstruction conference, when required. **Tree or sediment protective fencing shall be installed around septic area to eliminate construction traffic and soil compaction on septic area.**

2. Drainfield trenches shall be installed level and shall follow the ground contours. An engineer's level or laser shall be used in staking and constructing the lines. Trench depth shall not exceed the maximum specified by the Construction Authorization, unless otherwise specified, (i.e., ultra-shallow systems). Trench installation specifications from product manufacturers shall be followed.

3. No construction or backfilling shall be done when soil conditions are wet enough to cause a smearing or compaction of the soil in the drainfield or repair area.

4. The pipe between the septic tank and drainfield, or between the septic tank and pump tank shall be a minimum of 3" schedule 40 PVC or equivalent, with a minimum fall of 1/8" per foot. All joints from the septic tank to the drainfield shall be watertight. The pipe shall be on a firm, stable surface and secured. There shall be a 2' dam of undisturbed earth before a gravel trench begins. All other trench types per manufacturer. The pipe shall then be inserted at least 2' into the corrugated pipe. A cleanout to the ground surface shall be located at the end of the gravity pipe (the beginning of the drainfield) when the drainfield is over 50' from the tank.

5. The trench bottoms shall be smoothed and level with loose soil removed.

6. When necessary to change to a new contour, a step-down shall be constructed of a 2' **undisturbed** earth dam, which is raised to an elevation equal to the upstream gravel surface. However, precautions shall be taken to prevent raising the level of the effluent in the tank. Schedule 40 pipe (3" minimum) shall be used in crossing dams. Fittings will be needed to make the turns. The rigid pipe shall extend at least 2 feet into the level portion of the corrugated pipe. Area taken up by dams and step-downs shall not count as part of the footage required. *For accepted trench products and Panel Block products, use manufacturer's specifications.*

7. The soil cover over the drainfield shall be to a depth of at least 6". Boulders should be removed from the backfill material to prevent damage to the pipe. The finished grade shall be smoothed to prevent ponding of surface water over the drainfield. Surface water from upslope, including foundation and gutter drains, shall be effectively diverted away.

8. A vegetative cover of grass over the drainfield shall be established after final grading to prevent soil erosion. Divert all surface water and gutter drainage around system.

**Installation and Testing Recommendations and Best Practices:**

1. A pre-construction conference is recommended to be attended by the installer and health department prior to beginning construction of the system.
2. For Accepted trench products use manufacturer's specifications for installation. The Installer should be certified in writing by the manufacturer.
3. The septic tank, dosing tank, risers and pipe penetrations shall be demonstrated to be watertight by a 24-hour leak test (no measurable leakage in 24 hours). The test shall be run with riser's inlet/outlet pipes installed.
4. Care shall be taken during installation to prevent extraneous debris from entering tanks, supply lines or distribution network. Supply lines and manifold shall be flushed prior to system start-up.
5. For pump dosed systems, a pump delivery rate shall be measured, and the floats adjusted according to the measured delivery rate to achieve the design flow at design head. All other mechanical components, pump(s), pump cycling, filters, etc., as applicable must be demonstrated to be fully operable in accordance with their design.
6. Install water line, electrical lines and other buried utilities around septic and repair areas.
7. Keep repair areas free of parking and any future construction. Maintain grass cover over drainfield and repair areas.
8. Any proposed Septic Tank, Pump Tank and Pressure Manifold locations are at the discretion of the Health Department at the time of the preconstruction conference.
9. Call NC 811 to mark any utilities prior to digging.
10. Estimated Septic Tank pumping frequency:

| Table I. Septic Tank Pumping Frequency in Years | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Septic Tank Size Gallons / Liters | Household size - Number of Occupants | | | | | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | Septic Tank Pumping Frequency in Years | | | | | | | | | |
| 500 gallons * / 1890 liters | 5.8 | 2.6 | 1.5 | 1.0 | 0.7 | 0.4 | 0.3 | 0.2 | 0.1 | -- |
| 750 * / 2840 | 9.1 | 4.2 | 2.6 | 1.8 | 1.3 | 1.0 | 0.7 | 0.6 | 0.4 | 0.3 |
| 900 / 3400 | 11.0 | 5.2 | 3.3 | 2.3 | 1.7 | 1.3 | 1.0 | 0.8 | 0.7 | 0.5 |
| 1000 / 3800 | 12.4 | 5.9 | 3.7 | 2.6 | 2.0 | 1.5 | 1.2 | 1.0 | 0.8 | 0.7 |
| 1250 / 5000 | 15.6 | 7.5 | 4.8 | 3.4 | 2.6 | 2.0 | 1.7 | 1.4 | 1.2 | 1.0 |
| 1500 / 5500 | 18.9 | 9.1 | 5.9 | 4.2 | 3.3 | 2.6 | 2.1 | 1.8 | 1.5 | 1.3 |

NC DHHS Division of Public Health Onsite Water Protection:
Understanding and Protecting Septic Systems

Septic System Resources form NC State Agricultural Extension:
https://content.ces.ncsu.edu/septic-systems-and-their-maintenance
https://content.ces.ncsu.edu/septic-system-owners-guide

Accepted Trench Products: https://ehs.ncpublichealth.com/oswp/approvedproducts.htm

T and J Panel Resources: http://www.tjpanel.com/installation-manual.html

Sheet __
PROPERTY ID #: __
COUNTY: II

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

OWNER: DREW BAUM
ADDRESS: 162 FOUR ANDREWS DRIVE MARION NC 28634
PROPOSED FACILITY: SFD
LOCATION OF SITE: 779 E. MEMORIAL HWY
PROPOSED DESIGN FLOW (0400): 360 gpd
APPLICATION DATE __
DATE EVALUATED: -
PROPERTY SIZE: 25.73
PROPERTY RECORDED: __
WATER SUPPLY: Private ✓Public Well Spring Other __
EVALUATION METHOD: ✓Auger Boring Pit Cut
TYPE OF WASTEWATER: ✓Sewage Industrial Process H S

| Boring/Pit/Cut # | A | B | C | D | E | F | G |
|---|---|---|---|---|---|---|---|
| Landscape position (.0502) | L | S | L | R | R | | |
| Slope % (.0502) | 8 | 6 | 5 | 5 | 5 | | |
| H1 depth (.0505) | 0-8 | 0-7 | 0-8 | 0-9 | 0-9 | | |
| H1 texture (.0503) | scl | scl | scl | scl | scl | | |
| H1 consistence (.0503) | fr | fr | fr | fr | fr | | |
| H1 structure (.0503) | gr | gr | gr | gr | gr | | |
| H1 mineralogy (.0503) | sc | sc | sc | sc | sc | | |
| H2 depth (.0505) | 8-38 | 7-25 | 8-40 | 9-38 | 9-31 | | |
| H2 texture (.0503) | c | c | c | c | c | | |
| H2 consistence (.0503) | fi | fi | fi | fi | fi | | |
| H2 structure (.0503) | msbk | msbk | msbk | msbk | msbk | | |
| H2 mineralogy (.0503) | se | se | se | se | se | | |
| H3 depth (.0503) | 38-48 | 25-42 | 40-46 | 38-48 | 31-48 | | |
| H3 texture (.0503) | scl | sc | c | c | c | | |
| H3 consistence (.0503) | fi | fi | fi | fi | fi | | |
| H3 structure (.0503) | wsbk | wsbk | wsbk | wsbk | wsbk | | |
| H3 mineralogy (.0503) | se | se | se | se | se | | |
| H4 depth (.0503) | | 42 | | | | | |
| H4 texture (.0503) | | SAP | | | | | |
| H4 consistence (.0503) | | | | | | | |
| H4 structure (.0503) | | | | | | | |
| H4 mineralogy (.0503) | | | | | | | |
| Soil wetness (.0504) | | | | | | | |
| Saprolite (.0506) | | | | | | | |
| Notes: | x-3 | x-2 | x-2 | x-2 | x-2 | | |
| Usable soil depth (.0503) | 45" | 48" | 46" | 46" | 46" | | |
| Profile Class (.0509) | S | S | S | S | S | | |
| LTAR (.0509) | .25 | .25 | .25 | .25 | .25 | | |
| Evaluation Date | 7-4-24 | 7-4-24 | 7-4-24 | 7-4-24 | 7-4-24 | | |

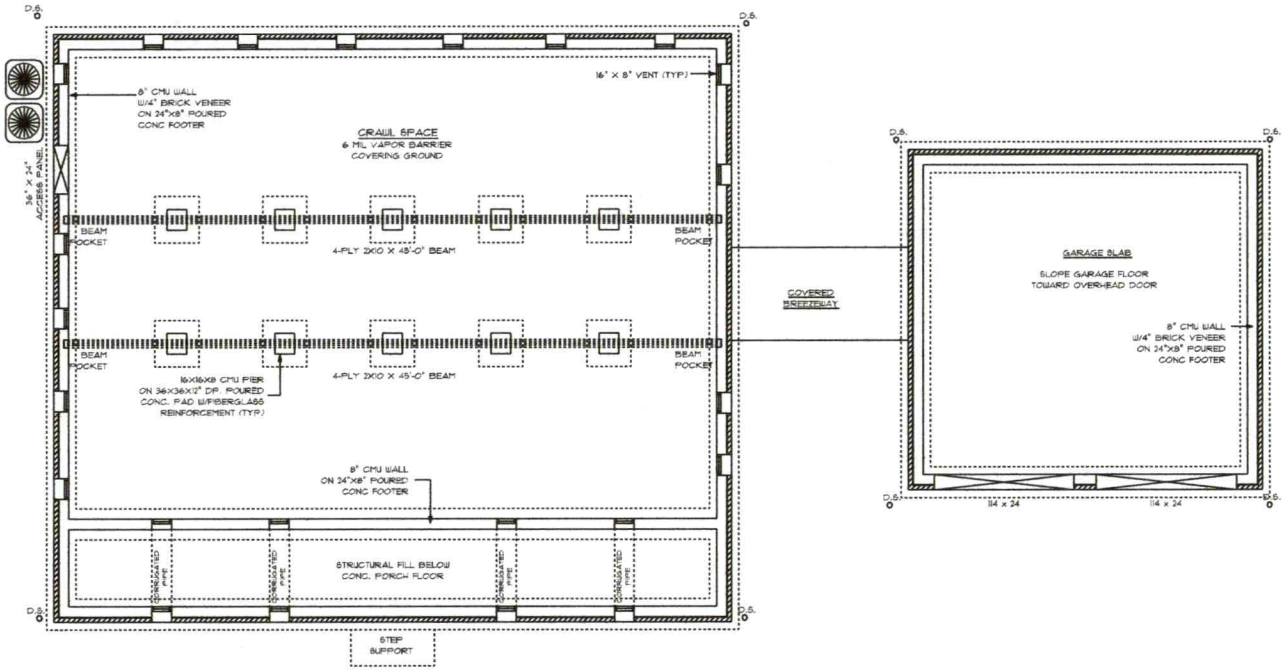
| DESCRIPTION | INITIAL SYSTEM | REPAIR SYSTEM |
|---|---|---|
| Available Space (.0508) | S | S |
| System Type(s) (.1301) | II b | II b |
| Site LTAR (.0509) | .25 | .25 |

OTHER FACTORS
SITE CLASSIFICATION (.0509) S
EVALUATED BY: Alan Clapp, LSS, AOWE, REHS
OTHER(S) PRESENT: KIP LEDBETTER

COMMENTS: __

x = slope correction per .0502(d)

reclassified using .0901-.0910




FOUNDATION NOTES:

1. BRICK VENEER ALL EXPOSED FOUNDATION
2. BOTTOM OF PIER PADS ELEVATION SHALL BE 2' BELOW BOTTOM OF CONT. FOOTER ELEVATION.
3. CONCRETE & MASONRY FOUNDATION WALLS SHALL EXTEND ABOVE FINISHED GRADE ADJACENT TO THE FOUNDATION A MIN. OF 4" WHERE MASONRY VENEER IS USED AND 6" MIN. ELSEWHERE.
4. ALL SILLS, PLATES, OR BAND JOISTS THAT REST ON OR IN CONTACT WITH CONCRETE OR MASONRY EXTERIOR WALLS SHALL REQUIRE THE USE OF PRESSURE PRESERVATIVE TREATMENT.

PIERS:

1. THE UNSUPPORTED HEIGHT OF MASONRY PIERS SHALL NOT EXCEED 10 TIMES THEIR LEAST DIMENSION. WHEN HOLLOW CONCRETE MASONRY UNITS ARE USED FOR ISOLATED PIERS TO SUPPORT BEAMS AND GIRDERS, THE CELLULAR SPACES SHALL BE FILLED SOLIDLY WITH CONCRETE.

CRAWL SPACE VENT CALCULATIONS:

TOTAL VENTED AREA: 1472
8"x16" VENT = 128 SQ IN = 0.89 SQFT
ASSUMED NET FREE AREA = 0.53 SQFT
TOTAL SQFT VENTILATION NEEDED 1472 /150 = 9.81
9.81 /0.53 = 19 TOTAL VENTS

GENERAL ELECTRICAL NOTES:

- GFI'S REQUIRED IN CRAWL SPACE & ACCESS PANEL AND @ AIR HANDLER/FURNACE
- LIGHTS TO BE WITHIN 6' OF ACCESS PANEL AND @ AIR HANDLER/FURNACE
- WIRE AIR HANDLER/FURNACE
- ELECTRICAL PANEL TO BE GROUNDED TO THE OUTSIDE

MEADOWVIEW MODERN FARMHOUSE / CUSTOM
FOUNDATION PLAN

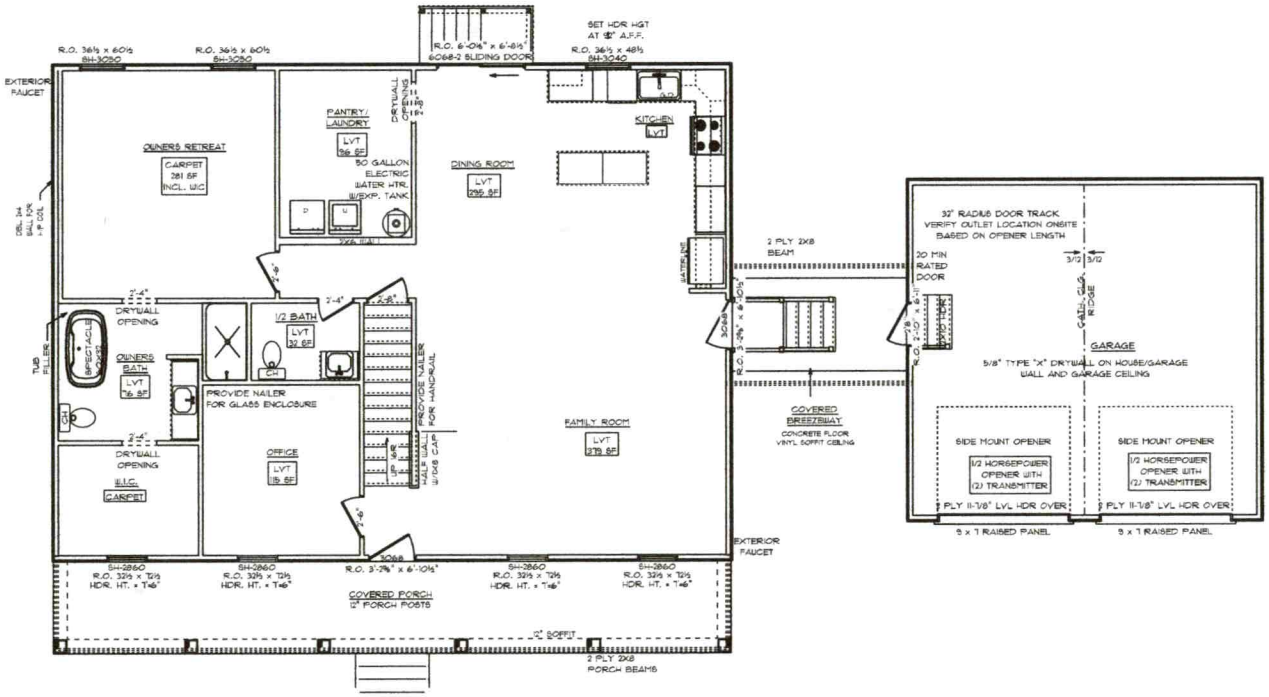
DRAWN BY: DK
DATE: 6/26/2024
SCALE: 1/8" = 1'-0"
PAGE: 3

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SQUARE FOOTAGES:
CRAWL 1472
FIRST FLOOR: 1472
SECOND FLOOR: 804
OPEN AREA: 34
GARAGE: 539
PORCH: 216

CUSTOM BUILT FOR:
JOB #:
LOCATION:
DREW M. BAUM
DK
1178 EAST MEMORIAL HWY
HARMONY, NC
IREDELL COUNTY
3Y 4 BA 423

Charlotte, NC
341 Alcove Road
Mooresville, NC 28117
(877) 267-3482
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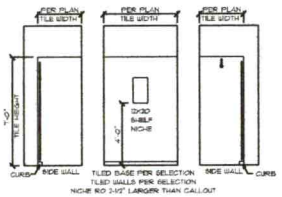



GENERAL FRAMING NOTES:
- DRYWALLED OPENINGS TO BE 8'-0" HEIGHT UNLESS OTHERWISE NOTED
- HEADERS TO BE 2-PLY 2X10 W/ (1) KING & (2) JACK STUDS UNLESS OTHERWISE NOTED
- ALL LVL, CARRIER TRUSSES AND BEAMS TO HAVE A MIN OF (2) KING & (2) JACK STUDS, UNLESS NOTED OTHERWISE

PLAN NOTES:
- SMOOTH CEILINGS THROUGHOUT HOME
- PAINTED TRIM
- 5-1/4" BASEBOARDS
- 3-1/4" CASING ON INTERIOR DOORS AND WINDOWS HAVE DRYWALLED RETURNS
- INTERIOR DOORS PER SELECTION

FLOORING NOTES:
- ALL FLOORING BREAKS OCCUR @ CENTER LINE OF DOOR OPENINGS UNLESS OTHERWISE NOTED
- FLOORING SQUARE FOOTAGES INCLUDE CLOSETS RELATIVE TO THE AREA UNLESS OTHERWISE NOTED
- SOME FLOORING SQUARE FOOTAGES MAY INCLUDE HALLS OR AREAS THAT CONNECT WITHOUT WALL SEPARATION IF THE SAME FINISH IS CONTINUED

6-6-23




TILED SHOWER DETAIL
MEMBRANE WATERPROOFING ON FLOORS AND WALLS

# MEADOWVIEW MODERN FARMHOUSE / CUSTOM

FIRST FLOOR PLAN
9' CEILING HEIGHT

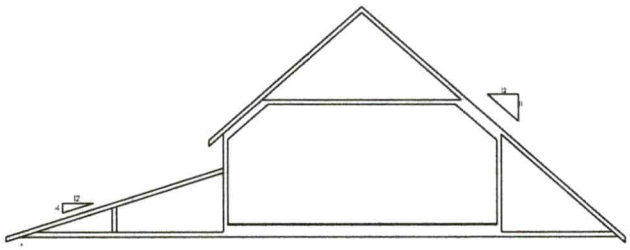
SQUARE FOOTAGES:
CRAWL: 1472
FIRST FLOOR: 1,472
SECOND FLOOR: 804
OPEN AREA: 34
GARAGE: 456
PORCH: 216

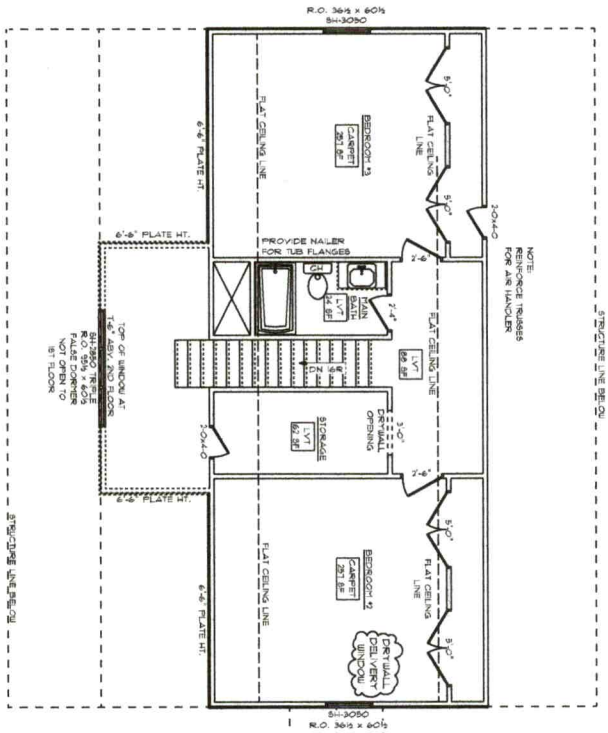
CUSTOM BUILT FOR: DREW M. BAUM
JOB #: CH-1
LOT: 433
LOCATION: 779 EAST MEMORIAL HWY
HARMONY, NC
IREDELL COUNTY

DRAWN BY: DJK
DATE: 6/26/2024
SCALE: 1/8" = 1'-0"
SHEET: 6

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Charlotte, NC
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Mooresville, NC 28117
(877) 267-3482
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SCHUMACHER HOMES




MEADOWVIEW MODERN FARMHOUSE / CUSTOM
SECOND FLOOR PLAN
9' CEILING HEIGHT

GENERAL FRAMING NOTES:
- INSTALLED OPENINGS TO BE 6'-0" HEIGHT UNLESS OTHERWISE NOTED
- HEADERS TO BE 2-PLY 2X10 W/ (1) KING + (2) JACK STUDS UNLESS OTHERWISE NOTED
- ALL LOAD BEARING WALLS TO HAVE A MIN. OF (2) KING + (2) JACK STUDS UNLESS NOTED OTHERWISE

PLAN NOTES:
- 9' CEILING HEIGHTS THROUGHOUT HOME
- PAINTED TRIM
- 5-1/4 BASEBOARDS
- 3-1/4 CASING ON INTERIOR DOORS AND WINDOWS HAVE DRYWALLED RETURNS
- INTERIOR DOORS PER SELECTION

FLOORING NOTES:
- ALL FLOORING BREAKS OCCUR @ CENTER LINE OF DOOR OPENINGS UNLESS OTHERWISE NOTED
- FLOOR COVERAGE FOOTAGES INCLUDE CLOSETS RELATIVE TO THE AREA UNLESS OTHERWISE NOTED
- SOME FLOORING SQUARE FOOTAGES MAY INCLUDE WALLS IN AREA TO CORRECT WITHOUT WALL REPLACEMENT IF THE SAME FINISH IS CONTINUED

6-6-23

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CUSTOM BUILT FOR:
DREW M. BAUM

JOB #:
DN #:
VN # BA 423

LOCATION:
778 EAST MEMORIAL HWY
HARMONY, NC
IREDELL COUNTY

SQUARE FOOTAGES:
CRAWL: 1472
FIRST FLOOR: 1472
SECOND FLOOR: 804
OPEN AREA: 34
GARAGE: 528
PORCH: 216

DRAWN BY: DJK
DATE: 6/26/2024
SCALE: 1/8" = 1'-0"
DWG: 9

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