88093

Supervisor/Administrative Professional Checklist

New Septic ☑ **New Well** ☐ **Use Existing** ☐ **Alteration** ☐ **Modified Plot Plan** ☐

New Septic Fees Paid:

IP ($250.00) Lwo 10/14/13 Initials/Date

CA ($200.00) MR 1-5-2023 Initials/Date

OP ($200.00) MR 1-5-2023 Initials/Date

(CA and OP fees need to be paid before a building permit can be issued)

New Well Fee Paid: $550.00 _____ Initials/Date

Use Existing Fee Paid: $100.00 _____ Initials/Date

Alteration Fee Paid: $300.00 (Total) $200 (If use existing was paid)_____ Initials/Date

Modified Plot Plan Fee Paid: $100.00 _____ Initials/Date

Floor plans need to be submitted and reviewed before CA can be issued. ☐ Reviewed ☐ ____

This site is served by septic and well. Verify each is complete before final hold is released. ☐

Septic file completed. ☒ 2/26/27 Well file completed. ☐ _____

Send permit for signature. ☐ Signature received. ☐ _____

This septic system requires a certified operator contract before final hold is released. ☐

Certified operator contract is on file. ☐ _____

SUPERVISOR/ADMINISTRATIVE PROFESSIONAL CHECKLIST

NEW SEPTIC ☑ NEW WELL ☐ USE EXISTING ☐ MODIFIED PLOT PLAN ☐

New Septic Fees Paid

IP ($250.00) 12/15/22 SM Initial/Date

IP ($450.00) SEPTIC Initial/Date 1/5/23

CA ($200.00) SEPTIC Initial/Date 1/5/23

OP ($200.00) _____ Initial/Date

(CA and OP fees need to be paid before a building permit can be issued)

New Well Fees Paid: $550.00 _____ Initial/Date

Use Existing Fees Paid: $100.00 _____Initial/Date

Alteration Fees Paid: $300 Total $200 _____Initial/Date (If use existing was part of payment)

Modified Plot Plan Fees Paid: $100.00 _____Initial/Date

Generate CA / Approve As Noted

Floor plans need to be submitted and reviewed before CA can be issued ☒ Review ☒ 1/9/23

This site is served by septic and well. Verify each is complete before final hold is released ☐

Septic file complete ☐_____ Well complete ☐ _____

Send permit for signature ☒ Signature received ☐ _____

This septic system requires a certified operation contract before final hold is released ☐

Certified operator contract is on file ☐ _____

8809B # 13536

MECKLENBURG COUNTY
HEALTH DEPARTMENT

APPLICATION FOR A RESIDENTIAL SITE IMPROVEMENT PERMIT/ CONSTRUCTION AUTHORIZATION FOR AN ON-SITE WASTEWATER SYSTEM, NEW WELL INSTALLATION, OR REPAIR OF EXISTING WELL

1. SEPTIC / TYPE APPLICATION: ○ N/A ◉ NEW SYSTEM ○ ALTERATION ○ REPAIR ○ MODIFIED PLOT PLAN

2. WELL / TYPE APPLICATION: ○ N/A ◉ NEW WELL ○ MAJOR REPAIR ○ ABANDONMENT

3. JOB LOCATION INFORMATION:
TAX PARCEL NUMBER: 21715146
STREET ADDRESS: 18217 Rockabill Ln
CITY: Charlotte
STATE: NC ZIP: 28278
SUBDIVISION NAME: _____
LOT #: _____ LOT SIZE (acres): _____
TOWNSHIP:
◉ MECKLENBURG ○ CORNELIUS ○ HUNTERSVILLE
○ DAVIDSON ○ CHARLOTTE ○ PINEVILLE
○ MATTHEWS ○ MINT HILL

4. BUILDING INFORMATION:
BUILDING TYPE:
○ SINGLE MOBILE HOME ○ MODULAR HOME
○ DOUBLE WIDE ○ MULTIPLE FAMILY
◉ HOUSE ○ OTHER _____
HEATED SQUARE FOOTAGE: 4,187
NUMBER OF BEDROOMS: 5
NUMBER OF OCCUPANTS: 4
FOUNDATION TYPE:
○ CONCRETE SLAB ◉ BASEMENT WITH PLUMBING
○ CRAWL SPACE ○ BASEMENT WITH NO PLUMBING

5. IF PLANNING TO EXPAND OR ALTER THE EXISTING SEPTIC SYSTEM PLEASE COMPLETE THE FOLLOWING SECTION: ☑ N/A

NUMBER OF BEDROOMS TO BE ADDED: _____ NUMBER OF ADDITIONAL OCCUPANTS IN THE RESIDENCE: _____

6. WATER SUPPLY: ○ MUNICIPAL ◉ PRIVATE WELL ○ PUBLIC WELL ○ SHARED WELL ○ OTHER _____

7. PROPOSED USE OF WELL: ○ N/A ○ IRRIGATION ◉ POTABLE (DRINKING WATER) ○ OTHER _____

8. PLEASE INDICATE AND RANK DESIRED SEPTIC SYSTEM TYPE(S) IN ORDER OF PREFERENCE *(1-MOST DESIRED 5-LEAST DESIRED)*:

☐ N/A ☐ ANY TYPE ☐ CONVENTIONAL ☐ ACCEPTED ☐ INNOVATIVE ☐ ALTERNATIVE ☐ OTHER _____

8A. RANK: ____ ____ ____ ____ ____

9. DO ANY OF THE FOLLOWING APPLY TO THE PROPERTY IN QUESTION? IF "YES" PLEASE ATTACH SUPPORTING DOCUMENTATION.

BURIED CABLES, LANDFILLS, STUMPHOLES	○ YES ○ NO	GRADING/SOIL REMOVAL PERFORMED	○ YES ○ NO
EXISTING WASTEWATER (SEPTIC) SYSTEMS	○ YES ○ NO	JURISDICTIONAL WETLANDS	○ YES ○ NO
WELLS, SPRINGS, OR WATER LINES	○ YES ○ NO	APPROVAL REQUIRED BY ANY OTHER PUBLIC AGENCY	○ YES ○ NO
EASEMENTS OR RIGHT-OF-WAYS	○ YES ○ NO	WASTEWATER OTHER THAN DOMESTIC SEWAGE	○ YES ○ NO
CHEMICAL/PETROLEUM STORAGE TANKS	○ YES ○ NO	KNOWN UNDERGROUND CONTAMINATION	○ YES ○ NO
WASTE STORAGE	○ YES ○ NO	GROUNDWATER USE RESTRICTIONS/VARIANCES	○ YES ○ NO

10. WHAT DATE WAS THE PROPERTY ORIGINALLY DEEDED AND RECORDED? 4/27/20 ☐ UNKNOWN

11. WHAT IS THE ANTICIPATED CLOSING DATE FOR THIS PROPERTY? _____ ☑ N/A

12. PROPERTY OWNER:
NAME: Gregory Thomas Beaton / Maureen Anne Beaton
ADDRESS: 3304 Sunset Key Cir, Unit C
CITY: Punta Gorda
STATE: FL ZIP: 33955
WORK PHONE: _____
MOBILE PHONE: (704) 604-9594
FAX: _____
E-MAIL: gbeaton@carolina.rr.com

13. OWNER'S LEGAL REPRESENTATIVE, IF APPLICABLE:
**Owner's Authorization form is required if legal representative is submitting application*
NAME: _____
ADDRESS: _____
CITY: _____
STATE: _____ ZIP: _____
WORK PHONE: _____
MOBILE PHONE: _____
FAX: _____
E-MAIL: _____

MECKLENBURG COUNTY – GROUNDWATER & WASTEWATER SERVICES
3205 Freedom Dr. Suite 8000, Charlotte, NC 28208 OFFICE: (980) 314-1680, FAX: 704-336-6894

Revised on: 03/27/19

14. SEPTIC SYSTEM PERMIT APPLICATION:

If the information in this application is falsified, changed, or the site is altered, then the Improvement Permit and Authorization to Construct shall become invalid. I have read this application and certify that the information provided herein is true, complete and correct. Authorized county and state officials are granted right of entry to conduct necessary inspections to determine compliance with applicable laws and rules. I understand that I am solely responsible for the proper identification and labeling of all property lines and corners and making the site accessible so that a complete site evaluation can be performed. The permit is valid for either sixty (60) months or is non-expiring depending upon the documentation submitted: complete site plan = 60 months, complete plat = non-expiring. GTB MAB (Initial here for septic system applications)

15. WELL PERMIT APPLICATION:

If the information in this application is falsified, changed, or the site is altered, then the Well Permit shall become invalid. I have read this application and certify that the information provided herein is true, complete and correct. Authorized county and state officials are granted right of entry to conduct necessary inspections to determine compliance with applicable laws and rules. I understand that I am solely responsible for the proper identification and labeling of all property lines and corners and making the site accessible so that a complete site evaluation can be performed. The permit is valid for a period of twelve (12) months from the date of issuance. GTB MAB (Initial here for well applications)

16. APPLICATION SIGNATURE SECTION:

ONLY COMPLETE APPLICATIONS WILL BE PROCESSED. A proper signature is required in order to process your application. Please review the application carefully and sign in the space provided below. A PROPOSED PLOT PLAN is required to be submitted with each application.

Property Owner's or Owner's Legal Representative Signature — Date: 11-29-2022 / 11/29/2022

OFFICE USE ONLY

○ SURVEY PLAT TO SCALE SUBMITTED ○ SCALED SITE PLAN SUBMITTED ○ UN-SCALED SITE PLAN SUBMITTED

SEPTIC APPLICATION FEE RECEIVED: $ _____ DATE FEE RECEIVED: _____

WELL APPLICATION FEE RECEIVED: $ _____ DATE FEE RECEIVED: _____

APPLICATION PROCESSED BY: _____

GWS FILE NUMBER ASSIGNED: _____

APPLICATION ID NUMBER ASSIGNED: _____

COMMENTS:

MECKLENBURG COUNTY – GROUNDWATER & WASTEWATER SERVICES
3205 Freedom Dr. Suite 8000, Charlotte, NC 28208 OFFICE: (980) 314-1680, FAX: 704-336-6894

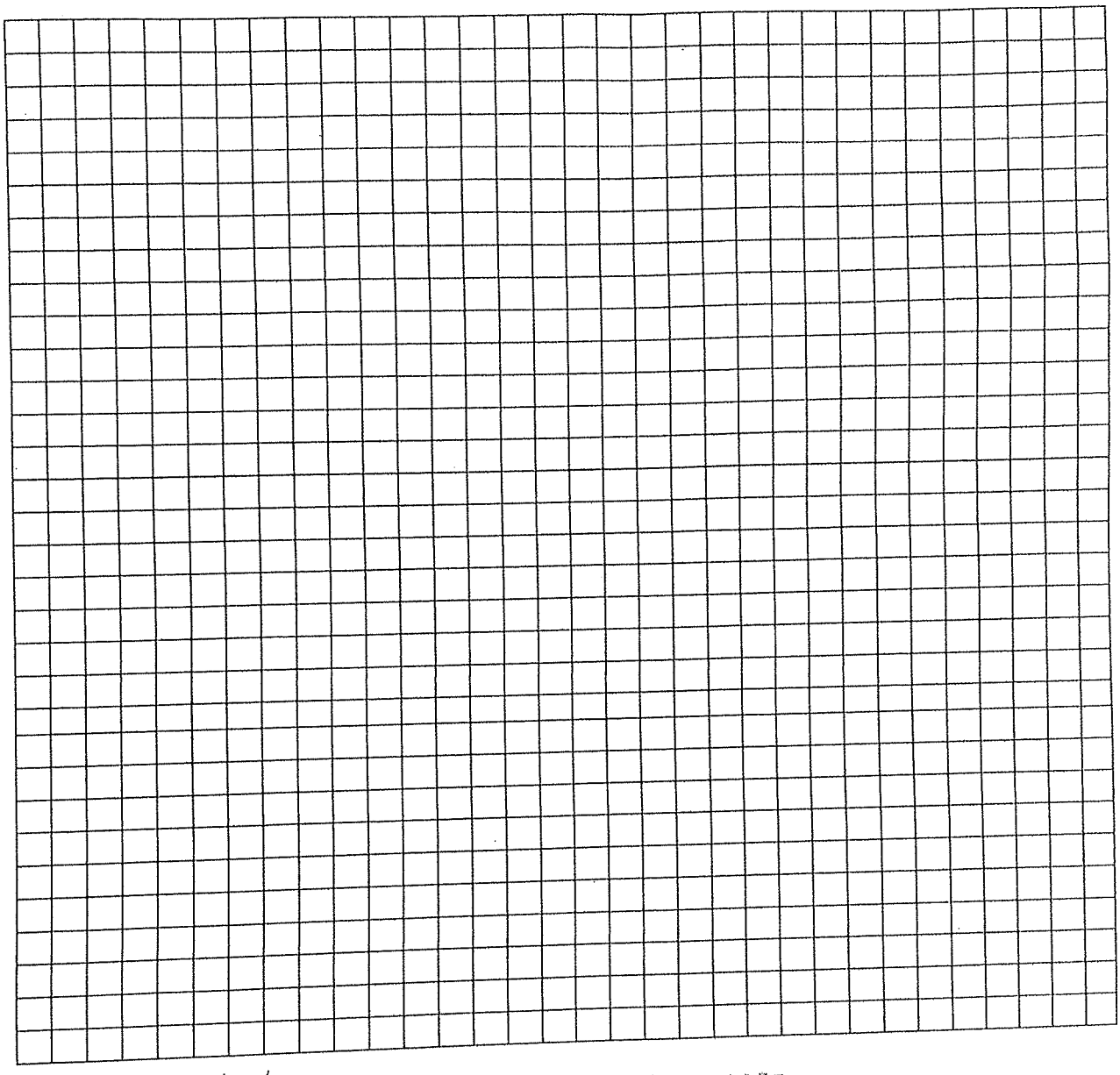
File #: _____

PROPOSED PLOT PLAN

A drawing showing the locations of the following items is required: existing and proposed property lines with dimensions, easements or right-of-ways, proposed building pad(s) or existing building footprint(s), all appurtenances (garage, driveway, deck, pool, etc.), location of existing or proposed well(s), location of existing or proposed sewer lines and sewage disposal systems, surface water bodies, and any aboveground or underground storage tanks. Provide names for all roads that adjoin the property.

Street Address: _____ Tax Parcel #: _____

Subdivision Name: _____ Lot #: _____



Property Owner's or Owner's Legal Representative Signature

11-29-2022
Date

11/29/2022

MECKLENBURG COUNTY – GROUNDWATER & WASTEWATER SERVICES
3205 Freedom Dr. Suite 8000, Charlotte, NC 28208, OFFICE: (980) 314-1680, FAX: 704-336-6894

Revised on: 03/27/19

Department of Environment, Health, and Natural Resources
Division of Environmental Health
On-site Wastewater Section

Sheet: 1 of 2
Property ID: 217-151-46 + easement
Lot #: 1 SFE #2
File #: 8809B
AppID: 13536

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

Owner: Gregory Thomas & Maureen Anne Beaton
Address: 3304 Sunset Key Cir, Unit C, Punta Gorda, FL 33955
Proposed Facility: 5 Bedroom House — Design Flow (.1949): 600 GPD
Location of Site: 18217 Rockabilll Ln, Charlotte, NC 28278
Water Supply: [ ] Public [X] Individual [X] Well
Evaluation Method: [X] Auger Boring [X] Pit
Type of Wastewater: [X] Sewage [ ] Industrial Process

Applicant: owner
Date Evaluated: 12/29/2022
Property Size: NA
Property Recorded: 4/27/2020
[ ] Spring [ ] Municipal
[ ] Cut
[ ] Mixed

PROFILE #	.1940 Landscape Position/ Slope%	Horizon Depth (IN.)	SOIL MORPHOLOGY .1941 .1941 Structure/ Texture	.1941 Consistence Mineralogy	b PROFILE FACTORS .1942 Soil Wetness/ Color	.1943 Soil Depth (IN.)	.1956 Sapro Class	.1944 Restr Horiz	General Comments	Profile Class & LTAR	Maximum Trench Bottom Depth for 3' Wide Trench Low Side
Pit E	LS 17%	0 - 4	gr SL	SS SP FR SEXP	>50"	50	NA	NA		PS IV 0.3	32"
		4 - 34	sbk C	S P FI SEXP							
		34 - 50	sbk CL	SS SP FR SEXP							
Boring F	LS 20%	0 - 3	gr L	SS SP FR SEXP	>50"	50	NA	NA		PS IV 0.3	32"
		3 - 27	sbk C	S P FI SEXP							
		27 - 51	sbk CL	SS SP FR SEXP							
Boring G	LS 17%	0 - 4	gr SL	SS SP FR SEXP	>48"	48	NA	NA		PS IV 0.3	30"
		4 - 32	sbk C	S P FI SEXP							
		32 - 48	abk CL	SS SP FR SEXP							
Boring H	LS 18%	0 - 3	sbk SCL	SS SP FR SEXP	>48"	48	NA	NA		PS IV 0.3	30"
		3 - 30	sbk C	S P FI SEXP							
		30 - 48	sbk CL	SS SP FR SEXP							

Description	Initial System	Repair System
Available Space (.1945)	PS	PS
System Type(s)	IIIbg	IVa
Site LTAR (gpd/sq ft)	**0.3**	**0.3**

Other Factors (.1946):
Soil Evaluation By: Jacob Presley, LSS, REHS
Others Present:
Site Classification (.1948): Provisionally Suitable
Site Evaluation By: Jeremy Michelone, REHS
Others Present:

COMMENTS:

Landscape Position
R-Ridge
SS-Shoulder Slope
LS-Linear Slope
FS-Foot Slope
NS-Nose Slope
HS-Head Slope
CC-Concave Slope
CV-Convex Slope
T-Terrace
FP-Flood Plain
D-Drainage Way

Group	Texture	.1955 LTAR
I	S-Sand	1.2 - 0.8
	LS-Loamy Sand	
II	SL-Sandy Loam	0.8 - 0.6
	L-Loam	
III	Si-Silt	0.6 - 0.3
	SiCL-Silty Clay Loam	
	CL-Clay Loam	
	SCL-Sandy Clay Loam	
	SiL-Silt Loam	
IV	SC-Sandy Clay	0.4 - 0.1
	SiC-Silty Clay	
	C-Clay	

Structure
sg-Single Grain
mass-Massive
cr-Crumb
gr-Granular
sbk-Subangular Blocky
abk-Angular Blocky
pl-Platy
pr-Prismatic

Structure Prefixes
w-weak
m-moderate
s-strong
f-fine
m-medium
c-coarse

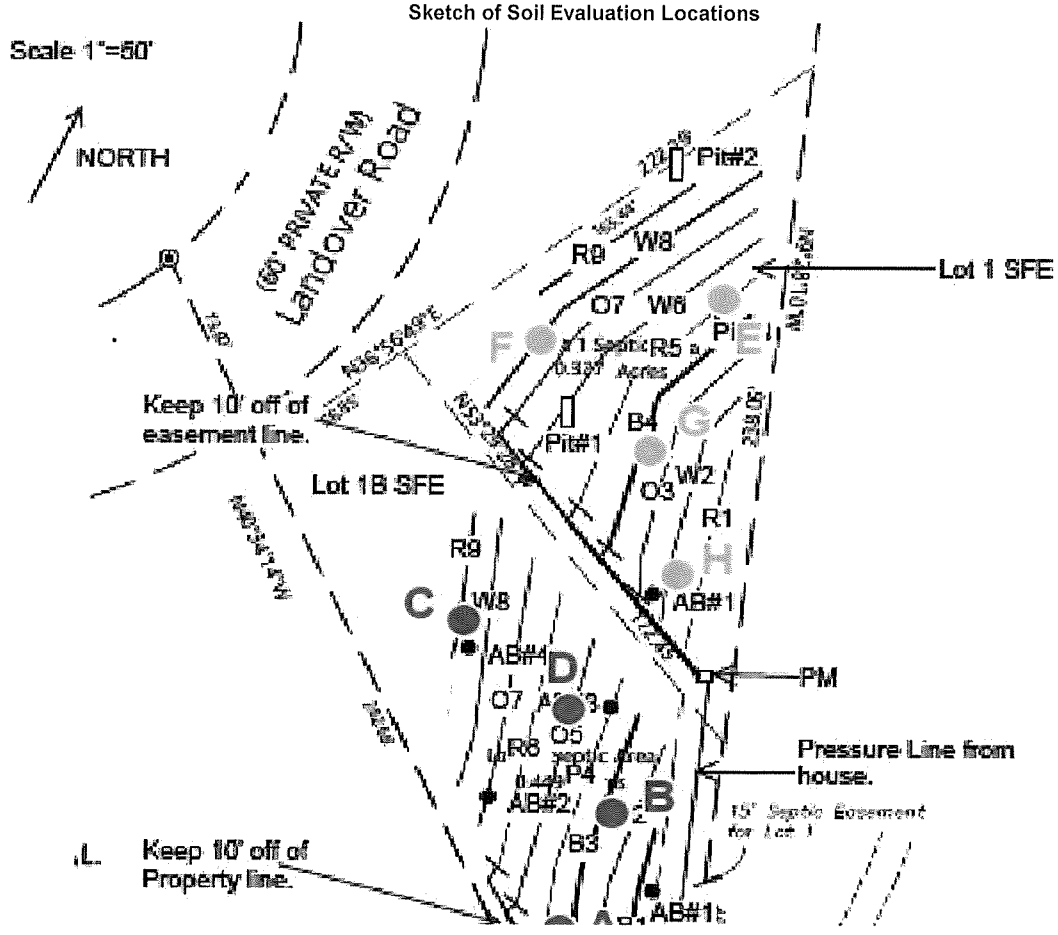
Consistence
Moist
VFR-Very Friable
FR-Friable
FI-Firm
VFI-Very Firm
EFI-Extremely Firm

Consistence
Wet
SS-Slightly Sticky
S-Sticky
VS-Very Sticky
NP-Non-Plastic
SP-Slightly Plastic
P-Plastic
VP-Very Plastic

Mineralogy
SEXP-Slightly Expansive
EXP-Expansive

Classification
US-Unsuitable
PS-Provisionally Suitable
S-Suitable
NA-Not Applicable

Sketch of Soil Evaluation Locations



Mecklenburg County Groundwater & Wastewater Services
3205 Freedom Dr., Suite 8000 Charlotte, NC 28208
Phone: (980) 314-1650 Fax: (704) 336-6894

NC DHHS
Division of Environmental Health
On-Site Wastewater Section

IMPROVEMENT PERMIT for a RESIDENTIAL
ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

Permit #: 30013536 GWS File #: 8809B Tax Parcel #: 217-151-46

- This IMPROVEMENT PERMIT is subject to revocation if site plans or the intended use change. There is to be NO grading, filling, or disturbance of the soil in the area of the septic tank system or repair area.
- CONSTRUCTION AUTHORIZATION must be obtained prior to receiving a Building Permit. Do not clear, grade, fill or disturb soil prior to obtaining a Construction Authorization.
- Domestic-type wastewater only. No industrial process wastewater may be discharged into the system.

I. This Improvement Permit Shall: Expire in Five (5) Years **Expiration Date (If Applicable):** 1/9/2028

Type of Installation: Residential - New System Lot Number: 0

Structure Type: HOUSE Size (ft^2): 4187 # Bedrooms: 5 Max. Occup.: 10

Building Foundation: Basement With Plumbing Water Supply: Private Well

II. Initial System Type: Pump to Accepted **System Classification:** IIIb

Initial System Specifications:

Design Flow (gpd): 600 LTAR (gpd/ft^2): 0.3 Septic Tank Size (gal): 1500 Pump Tank Size (gal): 1500

Trench Width (ft): 3 Trench Spacing (ft): 9 Absorption Area (ft^2): 1500 Total Trench Length (ft): 500

Maximum Trench Depth (in): 30 Depth of Media (in): 12 Distribution Device: Pressure Manifold

III. Repair System Type: PPBPS (pressurized) **System Classification:** IVa

Repair System Specifications:

Design Flow (gpd): 600 LTAR (gpd/ft^2): 0.3 Septic Tank Size (gal): 1500 Pump Tank Size (gal): 1500

Trench Width (ft): 2 Trench Spacing (ft): 9 Absorption Area (ft^2): 1000 Total Trench Length (ft): 500

Maximum Trench Depth (in): 30 Depth of Media (in): N/A Distribution Device: Manifold (LPP Distri

IV. Permit Conditions/Comments:

(Please See the Following Page for Permit Conditions.)

The undersigned, an authorized agent of the STATE OF NORTH CAROLINA, certifies that the Department is issuing an IMPROVEMENT PERMIT for the above referenced property. This permit is being issued in accordance with the *Laws and Rules For Sewage Treatment, and Disposal Systems* and is subject to the following provisions:

- No work shall be conducted on the septic system until a Pre-Construction meeting has been completed by the Department.
- The septic system installer shall be a licensed septic contractor with the North Carolina Wastewater Contractor Inspector Certification Board.
- The permitted system shall be installed in accordance with the included PLOT PLAN.
- This IMPROVEMENT PERMIT is transferable.

Authorized Agent: Jeremy Michelone

Signature:

Date Issued: 1/9/2023

Owner/Legal Agent: Michael Morgan
Print Name

Signature:

Mecklenburg County Groundwater & Wastewater Services
3205 Freedom Dr., Suite 8000 Charlotte, NC 28208
Phone: (980) 314-1680 Fax: (704) 336-6894

NC DHHS
Division of Environmental Health
On-Site Wastewater Section

IMPROVEMENT PERMIT for a RESIDENTIAL
ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

Permit #: 30013536 GWS File #: 8809B

IV. Permit Conditions/Comments:

- Easement agreement forms shall be on file and the property shall be deeded and recorded prior to issuance of Construction Authorization.
- This type of septic system requires an inspection once every 5 years by our office. The system owner is responsible for any fees, as determined by the Mecklenburg County Board of Commissioners, associated with this inspection.
- This type of repair system requires the property owner to obtain a contract with a Certified Operator to perform routine inspections and maintenance on the system.
- All components of the septic system must be installed in accordance with the required setbacks listed on the corresponding plot plan.
- All components of the septic system must be located at least 100 ft. (50 ft. minimum) from all private wells.
- All waterlines must be located a minimum of 10 ft. from any part of the septic system.
- All components of the septic system must be located a minimum distance from the normal pool elevation or mean high water mark for the nearby body of water. See plot plan for minimum setback requirements.
- Upon completion of the project the system designer shall provide Groundwater & Wastewater Services with a letter certifying that the system was installed in accordance with the approved design.
- The system must be water tested during the final inspection to verify proper operation and set system pressure.
- The supply pipe shall be installed with a minimum of 30" of compacted cover over the pipe or properly sleeved under areas that are subject to vehicular traffic.
- This permit is issued pursuant to GS 130a-336(a2)/SL2022-11

The undersigned, an authorized agent of the STATE OF NORTH CAROLINA, certifies that the Department is issuing an IMPROVEMENT PERMIT for the above referenced property. This permit is being issued in accordance with the *Laws and Rules For Sewage Treatment and Disposal Systems* and is subject to the following provisions:

- No work shall be conducted on the septic system until a Pre-Construction meeting has been completed by the Department.
- The septic system installer shall be a licensed septic contractor with the North Carolina Wastewater Contractor Inspector Certification Board.
- The permitted system shall be installed in accordance with the included PLOT PLAN.
- This IMPROVEMENT PERMIT is transferable.

Authorized Agent: Jeremy Michelone

Signature:

Date Issued: 1/9/2023

Owner/Legal Agent: Michael Mee
Print Name

Signature:

Mecklenburg County Groundwater & Wastewater Services
3205 Freedom Dr. Suite 8000 Charlotte, NC 28208
Phone: (980) 314-1680 Fax: (704) 336-6894

Septic System Pre-Construction Meeting Checklist

File # 8809B App# 13536 Tax Parcel# 217-151-46

Property Owner: Gregory + Maureen Beaton

Job Location Address: 18217 Rockabill Ln

City: Charlotte State: NC Zip Code: 28278

1. Does System design match facility, flow & wastewater characteristics?

   ☒YES ☐ NO

   Comments:_____

2. Is there sufficient available space for the septic systems initial and repair areas?

   ☐ YES ☐ NO

   Comments:_____

   _____

3. Can the septic system be installed per the permit conditions and drawing on file?

   ☒ YES ☐ NO

   Comments:_____

   _____

*If "NO" is checked for any of the above the existing permit may need to be revoked.

Permission is hereby given to ☒ install ☐ alter ☐ repair an on-site wastewater treatment & and disposal system, with subsurface soil absorption and effluent discharge meeting all of the construction requirements of 15A NCAC 18A .1900 which are in effect on the date of granting this approval. **System shall not be installed while soils are in wet condition.**

April Baumgarner
Authorized Agent

2-8-24
Date

Steve Autry
Others Present

Mecklenburg County Groundwater & Wastewater Services
3205 Freedom Dr. Suite 8000, Charlotte, NC 28208
Phone: (980) 314-1680 Fax: (704) 336-6894

NC DHHS
Division of Environmental Health
On-Site Wastewater Section

OPERATION PERMIT for an ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

File #: 8809B Permit #: 13536 Tax Parcel #: 217-151-46

Property Owner: Gregory & Maureen Beaton

Job Location Address: 18217 Rockabill Ln

City: Charlotte State: NC Zip Code: 28278

Operation Permit Issuance Date: 4-9-25 Contractor Name: Autry Septic

Permitted Design Flow: 600 GPD Liquid Capacity of Dosing Tank: 1500 gallons

Liquid Capacity of Septic Tank: 1500 gallons Tank Manufacture J+S Effluent Pump Model: Myers Mel5C

Drainfield Installation ☐ N/A

Trench Depth: 36 inches

Trench Width: 3 feet

Line Spacing: 9 feet (O.C.)

Total line length: 500 feet

# of Lines: 5 @ 100 feet

Depth of Media: 12 inches (Type) CHM36

Depth of Cover: 24" inches

Distribution Device: P. Manifold

Bed Installation *(For Repair Installations ONLY.)* ☒ N/A

Bed Depth: _____ inches

Bed Width: _____ feet

Total line length: _____ feet

# of Lines: _____ @ _____ feet

Depth of Media: _____ inches (Type) _____

Depth of Cover: _____ inches

Distribution Device: _____

Water Supply Source

☐ Municipal ☒ Private Well ☐ Community Well

☐ Other _____

System Installation Setbacks

Distance from Building Foundation: 10' feet

Distance from Property Line: 10' feet

Distance from Water Supply Source: 50' feet

Inspection Dates

Tank(s) Inspected: 2-8-24

Excavation Inspected: 4-1-24

Pump & Controls Inspected: 4-9-25

SKETCH OF SYSTEM INSTALLATION
(As-Built Drawing)

Installed per consultant design.

The undersigned has inspected the Septic Tank System described above, and certifies it has been ☒ installed ☐ altered ☐ repaired ☐ as detailed in the plot above ☒ in accordance with the permit issued and meets the provisions of 15A NCAC 18A. 1900, "Laws and Rules for Sewage Treatment and Disposal Systems" in effect on the date of issuance of the permit. The issuance of this Operation Permit does not in any way guarantee that the system will operate properly or relieve any person now or hereafter owning, controlling, or using such system from any liability resulting from the failure of the system to operate properly. This document is issued subject to those restrictions and conditions shown on the permit(s) and the provisions of 15A NCAC 18A. 1900 in addition to those listed below under "Comments." This document shall be null and void if any information contained in the application is untrue or if any additions are made to the property which would increase the requirements for said system.

Notice: Disturbance of the designated repair area may result in the Suspension or Revocation of this permit.

Comments: System Classification & Type: III B|P|CHM 36|O|NA

DENR Authorized Agent: April Bumgarner Signature: April Bumgarner

Mecklenburg County Groundwater & Wastewater Services
3205 Freedom Dr. Suite 8000, Charlotte, NC 28208
Phone: (980) 314-1680 Fax: (704) 336-6894

NC DHHS
Division of Environmental Health
On-Site Wastewater Section

OPERATION PERMIT for an ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

File #: 8809B Permit #: 13536 Tax Parcel #: 217-151-46

Property Owner: Gregory + Maureen Beaton

Job Location Address: 1827 Rockabill

City: Charlotte State: NC Zip Code: 28278

OPERATION PERMIT CONDITIONS:

I. Performance: System shall perform in accordance with 15A NCAC 18A .1961.

II. Monitoring: System shall be monitored as required by 15A NCAC 18A .1961.

III. Maintenance: Ground absorption sewage treatment and disposal systems shall be checked, and the contents of the septic tank removed, periodically from all compartments, to ensure proper operation of the system. The contents shall be pumped whenever the solids level is found to be more than 1/3 of the liquid depth in any compartment.

IV. Operation: System shall be operated in accordance with 15A NCAC 18A .1961.

System Classification: IIIB

*Operation Permits for Type V and VI systems expire five (5) years from the date of issuance (in accordance with Table V(a)). The system owner must contact GWS six (6) months prior to expiration for permit renewal.

Subsurface system operator required: Yes ☐ No ☒

☐ This type of system requires the system owner to maintain a contract with a certified operator to perform system inspection, maintenance, and reporting as required in 15A NCAC 18A .1961. and Table V(a). The system owner is responsible for all fees associated with these services.

☐ System does not require inspection by GWS on a routine frequency.

☒ System requires inspection by GWS once every five (5) years. The system owner is responsible for all fees associated with the inspection.

☐ System requires inspection by GWS once every three (3) years. The system owner is responsible for all fees associated with the inspection.

☐ System requires inspection by GWS once every twelve (12) months. The system owner is responsible for all fees associated with the inspection.

☐ System requires inspection by GWS once every six (6) months. The system owner is responsible for all fees associated with the inspection.

V. Other:

DENR Authorized Agent: April Bumgarner Date: 4-9-25

Signature: April Bumgarner

8809B

MECKLENBURG COUNTY
HEALTH DEPARTMENT

Copy #6480

APPLICATION FOR A RESIDENTIAL SITE IMPROVEMENT PERMIT/ CONSTRUCTION AUTHORIZATION FOR AN ON-SITE WASTEWATER SYSTEM, NEW WELL INSTALLATION, OR REPAIR OF EXISTING WELL

1. **SEPTIC / TYPE APPLICATION:** ○ N/A ◉ NEW SYSTEM ○ ALTERATION ○ REPAIR ○ MODIFIED PLOT PLAN

2. **WELL / TYPE APPLICATION:** ◉ N/A ○ NEW WELL ○ MAJOR REPAIR ○ ABANDONMENT

3. **JOB LOCATION INFORMATION:**

TAX PARCEL NUMBER: 217-151-46
STREET ADDRESS: Rockabil Lane (no address assigned)
CITY: Charlotte
STATE: NC **ZIP:** 28278
SUBDIVISION NAME: n/a
LOT #: 1 **LOT SIZE (acres):** 0.43
TOWNSHIP:

◉ MECKLENBURG ○ CORNELIUS ○ HUNTERSVILLE
○ DAVIDSON ○ CHARLOTTE ○ PINEVILLE
○ MATTHEWS ○ MINT HILL

4. **BUILDING INFORMATION:**

BUILDING TYPE:

○ SINGLE MOBILE HOME ○ MODULAR HOME
○ DOUBLE WIDE ○ MULTIPLE FAMILY
◉ HOUSE ○ OTHER _____

HEATED SQUARE FOOTAGE: 4,000
NUMBER OF BEDROOMS: 3
NUMBER OF OCCUPANTS: 6
FOUNDATION TYPE:

○ CONCRETE SLAB ◉ BASEMENT WITH PLUMBING
○ CRAWL SPACE ○ BASEMENT WITH NO PLUMBING

5. **IF PLANNING TO EXPAND OR ALTER THE EXISTING SEPTIC SYSTEM PLEASE COMPLETE THE FOLLOWING SECTION:** ☑ N/A

NUMBER OF BEDROOMS TO BE ADDED: _____ NUMBER OF ADDITIONAL OCCUPANTS IN THE RESIDENCE: _____

6. **WATER SUPPLY:** ○ MUNICIPAL ○ PRIVATE WELL ○ PUBLIC WELL ◉ SHARED WELL ○ OTHER to be proposal at a later time

7. **PROPOSED USE OF WELL:** ○ N/A ○ IRRIGATION ◉ POTABLE (DRINKING WATER) ○ OTHER _____

8. **PLEASE INDICATE AND RANK DESIRED SEPTIC SYSTEM TYPE(S) IN ORDER OF PREFERENCE** *(1-MOST DESIRED 5-LEAST DESIRED):*

☐ N/A ☐ ANY TYPE ☐ CONVENTIONAL ☐ ACCEPTED ☐ INNOVATIVE ☐ ALTERNATIVE ☑ OTHER see attached MSI proposal

8A. **RANK:** ____ ____ ____ ____ ____

9. **DO ANY OF THE FOLLOWING APPLY TO THE PROPERTY IN QUESTION? IF "YES" PLEASE ATTACH SUPPORTING DOCUMENTATION.**

BURIED CABLES, LANDFILLS, STUMPHOLES	○ YES ◉ NO	GRADING/SOIL REMOVAL PERFORMED	○ YES ◉ NO
EXISTING WASTEWATER (SEPTIC) SYSTEMS	○ YES ◉ NO	JURISDICTIONAL WETLANDS	○ YES ◉ NO
WELLS, SPRINGS, OR WATER LINES	○ YES ◉ NO	APPROVAL REQUIRED BY ANY OTHER PUBLIC AGENCY	○ YES ◉ NO
EASEMENTS OR RIGHT-OF-WAYS	○ YES ◉ NO	WASTEWATER OTHER THAN DOMESTIC SEWAGE	○ YES ◉ NO
CHEMICAL/PETROLEUM STORAGE TANKS	○ YES ◉ NO	KNOWN UNDERGROUND CONTAMINATION	○ YES ○ NO
WASTE STORAGE	○ YES ◉ NO	GROUNDWATER USE RESTRICTIONS/VARIANCES	○ YES ◉ NO

10. **WHAT DATE WAS THE PROPERTY ORIGINALLY DEEDED AND RECORDED?** 1/22/13 ☐ UNKNOWN

11. **WHAT IS THE ANTICIPATED CLOSING DATE FOR THIS PROPERTY?** 10/28/03 ☐ N/A

12. **PROPERTY OWNER:**

NAME: Wylie Investments, LLC
ADDRESS: 5520 Sharon View Rd
CITY: Charlotte
STATE: NC ZIP: 28226
WORK PHONE: _____
MOBILE PHONE: _____
FAX: _____
E-MAIL: _____

13. **OWNER'S LEGAL REPRESENTATIVE, IF APPLICABLE:**

NAME: Mountain Soils, Inc. (Steve Melin contact)
ADDRESS: 15 Lone Coyote Ridge
CITY: Fletcher
STATE: NC ZIP: 28732
WORK PHONE: (828) 551-9903
MOBILE PHONE: (828) 551-9903
FAX: _____
E-MAIL: sjmelin@earthlink.net

14. SEPTIC SYSTEM PERMIT APPLICATION:

If the information in this application is falsified, changed, or the site is altered, then the Improvement Permit and Authorization to Construct shall become invalid. I have read this application and certify that the information provided herein is true, complete and correct. Authorized county and state officials are granted right of entry to conduct necessary inspections to determine compliance with applicable laws and rules. I understand that I am solely responsible for the proper identification and labeling of all property lines and corners and making the site accessible so that a complete site evaluation can be performed. The permit is valid for either sixty (60) months or is non-expiring depending upon the documentation submitted: complete site plan = 60 months, complete plat = non-expiring.

sjm (Initial here for septic system applications)

15. WELL PERMIT APPLICATION:

If the information in this application is falsified, changed, or the site is altered, then the Well Permit shall become invalid. I have read this application and certify that the information provided herein is true, complete and correct. Authorized county and state officials are granted right of entry to conduct necessary inspections to determine compliance with applicable laws and rules. I understand that I am solely responsible for the proper identification and labeling of all property lines and corners and making the site accessible so that a complete site evaluation can be performed. The permit is valid for a period of twelve (12) months from the date of issuance.

_____ (Initial here for well applications)

16. APPLICATION SIGNATURE SECTION:

ONLY COMPLETE APPLICATIONS WILL BE PROCESSED. A proper signature is required in order to process your application. Please review the application carefully and sign in the space provided below. A PROPOSED PLOT PLAN is required to be submitted with each application.

Property Owner's or Owner's Legal Representative Signature (Mountain Soils, Inc.) — Date: 10/13/13

OFFICE USE ONLY

○ SURVEY PLAT TO SCALE SUBMITTED ○ SCALED SITE PLAN SUBMITTED ○ UN-SCALED SITE PLAN SUBMITTED

SEPTIC APPLICATION FEE RECEIVED: $ 250 DATE FEE RECEIVED: 10/14/13

WELL APPLICATION FEE RECEIVED: $ _____ DATE FEE RECEIVED: _____

APPLICATION PROCESSED BY: RWZ

GWS FILE NUMBER ASSIGNED: 8809B

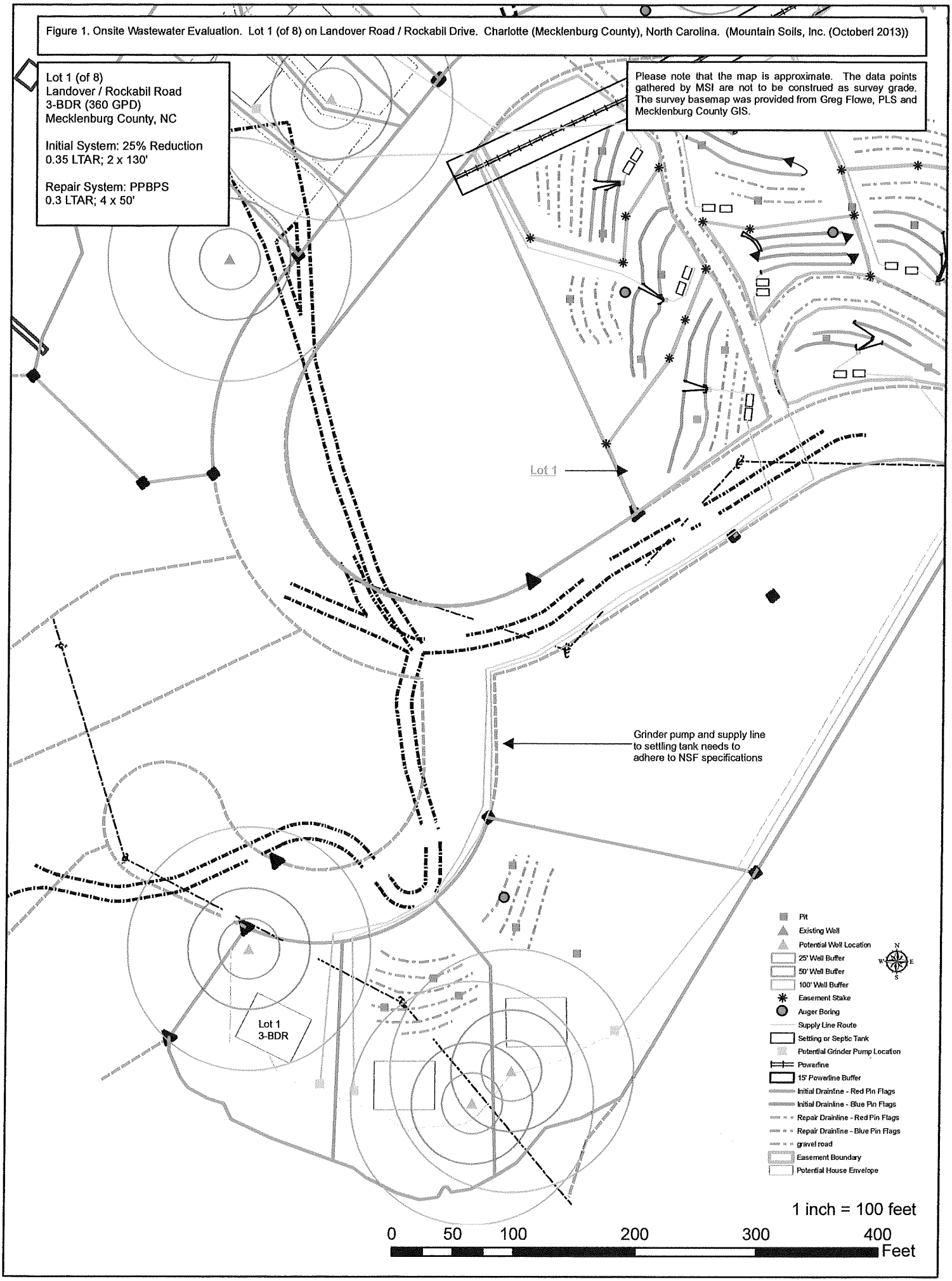
APPLICATION ID NUMBER ASSIGNED: 6480

COMMENTS:

MECKLENBURG COUNTY – GROUNDWATER & WASTEWATER SERVICES
700 N. TRYON ST. SUITE 211 CHARLOTTE, NC 28202, OFFICE: 704-336-5103, FAX: 704-336-6894

Revised on: 12/15/10

Figure 1. Onsite Wastewater Evaluation. Lot 1 (of 8) on Landover Road / Rockabil Drive. Charlotte (Mecklenburg County), North Carolina. (Mountain Soils, Inc. (October 2013))



Department of Environment, Health, and Natural Resources
Division of Environmental Health
On-site Wastewater Section

Sheet: 1 of 2
Property ID: 217-151-46 (offsite easement)
Lot #: 1
File #: 8809B
AppID: 6480

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

Owner: Wylie Investments, LLC
Address: 5520 Sharon View Rd, Charlotte, NC 28226
Proposed Facility: 3BR House
Design Flow (.1949): 360 GPD
Location of Site: Rockabil Ln, Charlotte, NC 28278
Water Supply: [X] Public [ ] Individual [X] Well [ ] Spring [ ] Other
Evaluation Method: [ ] Auger Boring [X] Pit [ ] Cut
Type of Wastewater: [X] Sewage [ ] Industrial Process [ ] Mixed

Applicant: Mountain Soils Inc. (Steve Melin)
Date Evaluated: 10/22/2013
Property Size: 0.43 ac + easement
Property Recorded: 1/22/2013

PROFILE #	.1940 Landscape Position/ Slope%	Horizon Depth (IN.)	SOIL MORPHOLOGY .1941 .1941 Structure/ Texture	.1941 Consistence Mineralogy	b PROFILE FACTORS .1942 Soil Wetness/ Color	.1943 Soil Depth (IN.)	.1956 Sapro Class	.1944 Restr Horiz	General Comments	Profile Class & LTAR	Maximum Trench Bottom Depth for 3' Wide Conventional Trench
Pit #1	LS 23%	0 - 3	gr SL	FR SEXP	>64"	28	PS	NA		PS IV 0.3	30"
		3 - 13	wmsbk C	FR SEXP							
		13 - 28	wfsbk SCL	FR SEXP							
		28 - 64	mass SL Sap	FR SS SP SEXP							
Pit #2	LS 18%	0 - 6	gr SL	FR SEXP	>66"	28	PS	NA		PS IV 0.3	31"
		6 - 19	wmsbk C	FR SEXP							
		19 - 28	wfsbk SCL	FR SEXP							
		28 - 64	mass SL Sap	FR SS SP SEXP							
Pit #3	LS 23%	0 - 3	gr SL	VFR SEXP	>60"	33	PS	NA		PS IV 0.3	28"
		3 - 15	mmsbk C	FR SEXP							
		19 - 33	wfsbk SCL	FR SEXP							
		33 - 60	mass SL Sap	FR SS SP SEXP							
Pit #4	LS 22%	0 - 3	gr SL	VFR SEXP	>55"	55	NA	NA		PS IV 0.3	35"
		3 - 19	mmsbk C	FI SEXP							
		19 - 33	mmsbk CL	FI SEXP							
		33 - 55	wfsbk SCL	FR SEXP							

Description	Initial System	Repair System
Available Space (.1945)		
System Type(s)		
Site LTAR (gpd/sq ft)	0.3	0.3

Other Factors (.1946):
Soil Evaluation By: Jacob Presley, LSS
Others Present: Steve Melin, LSS
Site Classification (.1948):
Site Evaluation By:
Others Present:

COMMENTS:

Landscape Position
R-Ridge
SS-Shoulder Slope
LS-Linear Slope
FS-Foot Slope
NS-Nose Slope
HS-Head Slope
CC-Concave Slope
CV-Convex Slope
T-Terrace
FP-Flood Plain
D-Drainage Way

Group	Texture	.1955 LTAR
I	S-Sand LS-Loamy Sand	1.2 - 0.8
II	SL-Sandy Loam L-Loam	0.8 - 0.6
III	Si-Silt SiCL-Silty Clay Loam CL-Clay Loam SCL-Sandy Clay Loam SiL-Silt Loam	0.6 - 0.3
IV	SC-Sandy Clay SiC-Silty Clay C-Clay	0.4 - 0.1

Structure
sg-Single Grain
mass-Massive
cr-Crumb
gr-Granular
sbk-Subangular Blocky
abk-Angular Blocky
pl-Platy
pr-Prismatic
Sap-Saprolite

Structure Prefixes
w-weak
m-moderate
s-strong
f-fine
m-medium
c-coarse

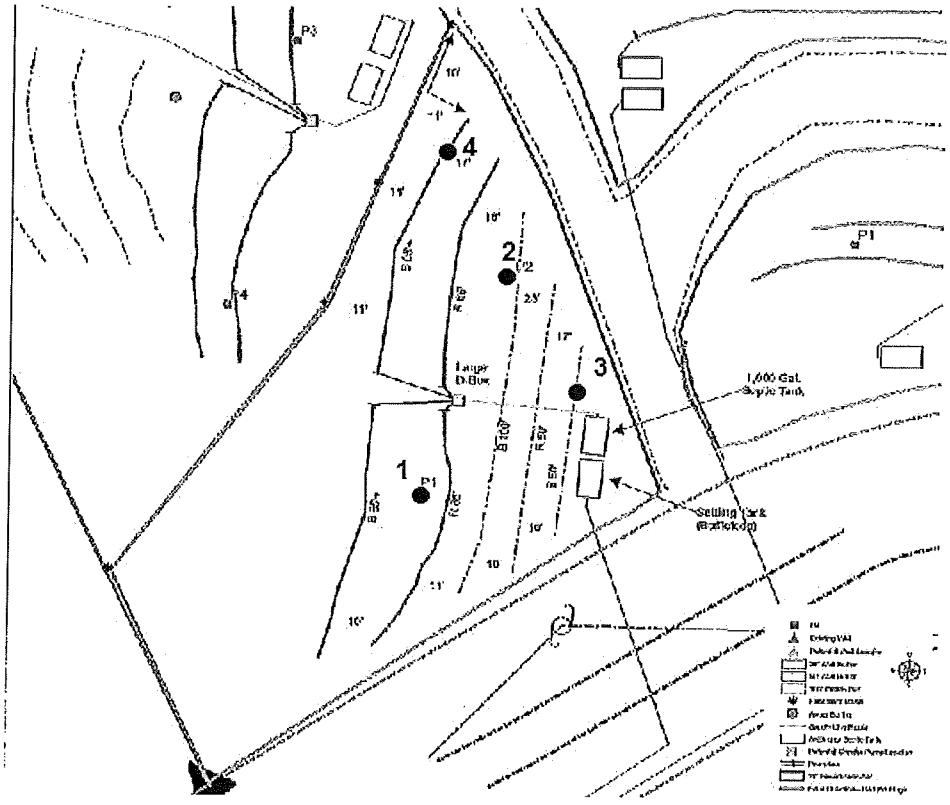
Consistence
Moist
VFR-Very Friable
FR-Friable
FI-Firm
VFI-Very Firm
EFI-Extremely Firm

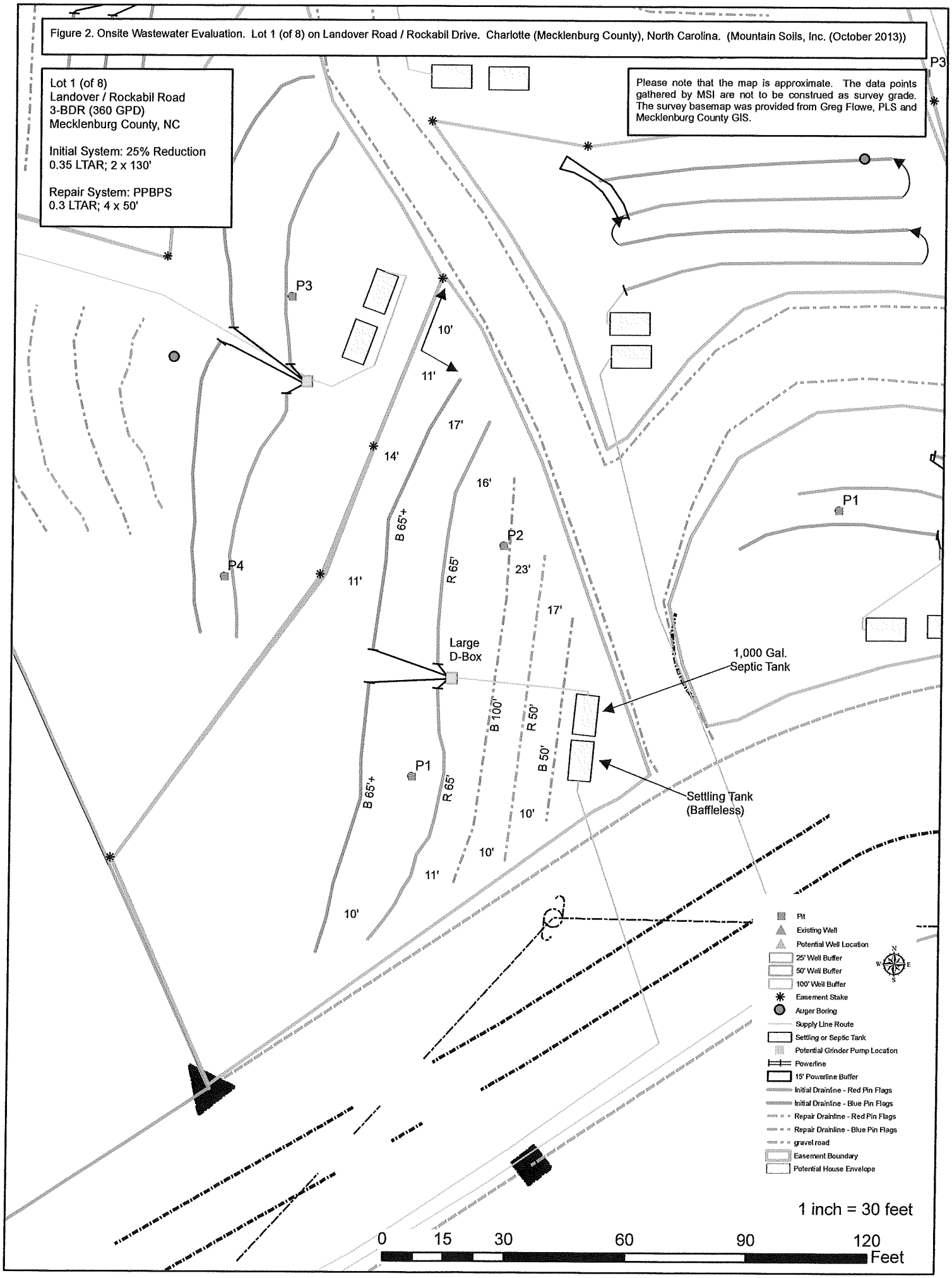
Consistence
Wet
SS-Slightly Sticky
S-Sticky
VS-Very Sticky
NP-Non-Plastic
SP-Slightly Plastic
P-Plastic
VP-Very Plastic

Mineralogy
SEXP-Slightly Expansive
EXP-Expansive

Classification
US-Unsuitable
PS-Provisionally Suitable
S-Suitable
NA-Not Applicable

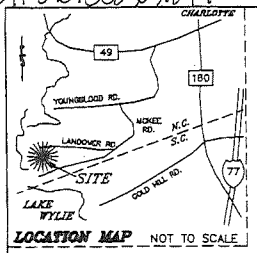
Sketch of Soil Evaluation Locations




Figure 2. Onsite Wastewater Evaluation. Lot 1 (of 8) on Landover Road / Rockabil Drive. Charlotte (Mecklenburg County), North Carolina. (Mountain Soils, Inc. (October 2013))
Lot 1 (of 8)
Landover / Rockabil Road
3-BDR (360 GPD)
Mecklenburg County, NC
Initial System: 25% Reduction
0.35 LTAR; 2 x 130'
Repair System: PPBPS
0.3 LTAR; 4 x 50'
Please note that the map is approximate. The data points gathered by MSI are not to be construed as survey grade. The survey basemap was provided from Greg Flowe, PLS and Mecklenburg County GIS.
P3
P3
10'
11'
17'
14'
16'
B 65'+
P2
P1
P4
R 65'
23'
11'
17'
Large
D-Box
1,000 Gal.
Septic Tank
B 100'
R 50'
B 50'
P1
B 65'+
R 65'
10'
10'
11'
10'
Settling Tank
(Baffleless)
Pit
Existing Well
Potential Well Location
25' Well Buffer
50' Well Buffer
100' Well Buffer
Easement Stake
Auger Boring
Supply Line Route
Settling or Septic Tank
Potential Grinder Pump Location
Powerline
15' Powerline Buffer
Initial Drainline - Red Pin Flags
Initial Drainline - Blue Pin Flags
Repair Drainline - Red Pin Flags
Repair Drainline - Blue Pin Flags
gravel road
Easement Boundary
Potential House Envelope
N
W
E
S
1 inch = 30 feet
0
15
30
60
90
120
Feet

#20130221127

MAP BOOK 54 PAGE 784



LOCATION MAP NOT TO SCALE

Map Prepared By:

Ben M. Flowe and Son

Land Surveying and Mapping Services

Ben M. Flowe, P.L.S.
Gregory S. Flowe, P.L.S.
11336 Brief Road
Charlotte, N.C.28227
Phone:(704)545-3060

Owner:

WYLIE INVESTMENTS, LLC
5520 SHARON VIEW RD
CHARLOTTE, NC 28226

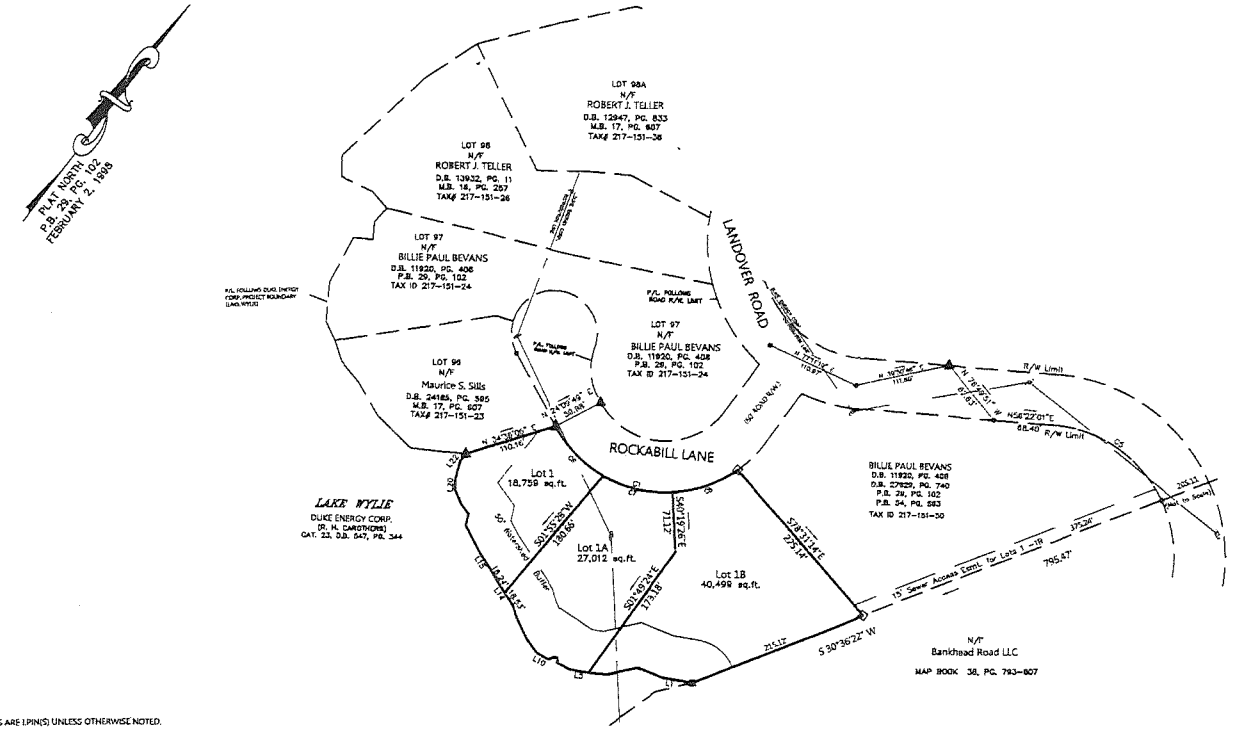
STATE OF NORTH CAROLINA
MECKLENBURG COUNTY

I, GREGORY S. FLOWE, certify that this plat was drawn under my supervision from an actual survey made under my supervision (deed description recorded in Book AS, page SHOWN, etc.) (other); that the boundaries not surveyed are clearly indicated as drawn from information found in Book AS, page SHOWN; that the ratio of precision as calculated is 1: 10,000+; that this plat was prepared in accordance with G.S. 47-30 as amended. Witness my original signature, registration number and seal this 15TH day of JANUARY, A.D., 2013.

Professional Land Surveyor L-3600

NORTH CAROLINA PROFESSIONAL SEAL L-3600 LAND SURVEYOR GREGORY S. FLOWE

FILED FOR REGISTRATION
FEB 13 2013
AT 9:59 AM
REGISTER OF DEEDS OFFICE MECKLENBURG COUNTY, N.C.



LINE TABLE		
LINE	LENGTH	BEARING
L1	37.35	N62°10'07"E
L2	29.75	N74°53'58"E
L3	37.09	N39°09'47"E
L4	21.30	N58°25'46"E
L5	22.41	N61°08'11"E
L6	16.20	N80°36'14"E
L7	5.46	S35°54'24"E
L8	3.19	N85°15'56"E
L9	9.35	N81°41'08"E
L10	15.14	N81°27'32"E
L11	20.09	S73°35'25"E
L12	28.14	S63°26'18"E
L13	12.48	S53°54'23"E
L14	36.77	S70°19'54"E
L15	35.27	S69°58'50"E
L16	37.21	S64°46'23"E
L17	14.16	S24°40'05"E
L18	14.89	S73°21'29"E
L19	18.36	S59°57'45"E
L20	10.79	S36°57'21"E
L21	23.28	S23°05'23"E
L22	10.90	S00°15'42"W
L23	15.86	S60°49'02"E
L24	50.60	N64°10'33"E
L25	51.50	N69°45'10"E
L26	38.83	N84°59'14"E
L27	32.42	N30°22'29"E
L28	40.85	N25°55'28"E
L29	11.44	N04°06'21"E
L30	12.97	N37°02'22"E
L31	16.97	N58°29'48"E
L32	36.08	N12°48'49"E
L33	27.77	N02°59'09"W
L34	29.61	N28°43'41"E
L35	7.11	N64°34'08"E
L36	6.74	N05°10'35"W
L37	15.62	N33°44'29"E
L38	28.39	N17°37'47"E
L39	30.83	N52°02'04"E

CURVE TABLE				
CURVE	LENGTH	RADIUS	BEARING	CHORD
C1	247.33	145.57	N 65°31'41" E	218.64'
C2	164.57	201.09	S 61°23'16" W	160.02'
C3	91.34	127.31	N 11°28'41" E	89.39'
C4	60.19	358.25	S 47°42'02" W	60.12'
C5	162.25	154.58	N 86°37'47" E	154.90'
C6	80.98	145.57	N 81°41'28" E	79.95'
C7	84.69	145.57	N 65°41'39" E	83.54'
C8	81.69	145.57	N 32°51'21" E	80.64'

NOTE:
ALL CORNERS ARE 1-PIN(S) UNLESS OTHERWISE NOTED.

NOTE:
ALL DISTANCES ARE HORIZONTAL DISTANCES UNLESS OTHERWISE NOTED.

NOTE:
AREA BY COORDINATE COMPUTATION.

NOTE:
PROPERTY SUBJECT TO ANY VALID & ENFORCEABLE EASEMENTS, RESTRICTIONS & RIGHTS OF WAY OF RECORD.

SUBJECT PROPERTY _____ LOCATED IN A SPECIAL FLOOD HAZARD AREA AS DETERMINED BY FLOOD INSURANCE RATE MAP.

NOTE: ALL CORNERS NOT IDENTIFIED ARE POINTS ALONG DUKE ENERGY CORP. PROJECT BOUNDARY (LAKE WYLIE)

NOTE:
THIS PLAT IS OF A SURVEY THAT IS OF ANOTHER CATEGORY, SUCH AS THE RECOMBINATION OF EXISTING PARCELS, A COURT-ORDERED SURVEY, OR OTHER EXCEPTION TO THE DEFINITION OF SUBDIVISION.

LEGEND

LINES SURVEYED
LINES NOT SURVEYED
INTERIOR LINES
TIE LINES
OHWD DISTRIBUTION LINE (OVERHEAD)
#4 REBAR(S)
#4 REBAR(F)
#5 REBAR(S)
#5 REBAR(F)
1" L PIPE(F)
#3 REBAR (F)
CON. MON.(F)
CON. MON.(S)
RETAIL POWER POLE

Zoning R-5

- 20% Maximum built upon area(Impervious Area)
- This property is located in the Lower Lake Wylie Critical Area Watershed

Qualifies as an exempt subdivision under Charlotte-Mecklenburg Subdivision Ordinance Exemption (4). "The division of a tract in single ownership whose entire area is no greater than two acres into not more than three lots, where no street right-of-way dedication is involved and where the resultant lots are equal to or exceed the standards of the appropriate zoning classification."

NOTE:
THIS PLAT IS NOT SUBJECT TO THE PROVISIONS OF THE CITY OF CHARLOTTE OR MECKLENBURG COUNTY SUBDIVISION ORDINANCES AND DOES NOT REQUIRE THE APPROVAL OF THE CHARLOTTE-MECKLENBURG PLANNING COMMISSION. HOWEVER, ANY FURTHER SUBDIVISION OF THIS PROPERTY MAY BE SUBJECT TO THESE PROVISIONS.

CHARLOTTE MECKLENBURG PLANNING COMMISSION
PLANNING COMMISSION STAFF

1/23/2013
DATE

State of North Carolina
County of MECKLENBURG

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

1/22/2013
Date

Review Officer

TAX PARCELS: 217-151-46
SOURCE OF TITLE: D.B. 18927, PG. 661
MAP BOOK 40, PG. 343
MAP BOOK 54 PG. 593

PROPERTY OWNED BY

WYLIE INVESTMENTS, LLC

STEELE CREEK TOWNSHIP
MECKLENBURG COUNTY, N.C.

SCALE: 1" = 100'
DRAWING NO. 169-03 REVISED

NOVEMBER 15, 2012
REVISED: JANUARY 15, 2013

100 50 0 100 200 300
SCALE IN FEET

MOUNTAIN SOILS, INCORPORATED

71 LEDFORD DRIVE FRANKLIN, NC 28734
EMAIL: MOUNTAINSOILS@FRONTIER.COM WEBSITE: WWW.MOUNTAINSOILS.COM
OFFICE/FAX: (828) 524-5962 CELL: (828) 421-3149

Landover Road "Subdivision" - Lot #1 (of 8) **10/12/2013**
Mecklenburg County, NC

Onsite Wastewater Septic System Overview:

The following report has been prepared by Mountain Soils, Inc. (MSI) for Lot #1 (of 8) (3-BDR) in the Landover Road "Subdivision" in Mecklenburg County, North Carolina. Please note that the following report is MSI's septic opinion and is not to be construed as the actual septic permit.

Application Type:	IP (3-BDR)					
Number of Bedrooms:	Proposed Septic System	**GPD**	**Soil Group**	**Soil Texture**	**LTAR**	**Linear Feet Required Calculation (in Square and Linear Feet)**
Initial Septic System:	25% Reduction	360	IV	Clay Loam / Sandy Clay	0.35	360 gpd / 0.35 gpd/ft^2 = 1,029 ft^2 1,029 ft^2 / 4 ft trench eq. = 257 ft (See calculations below)
Repair Septic System:	Prefabricated Permeable Block Panel System (PPBPS)	360	IV	Sandy Clay	0.30	360 gpd / 0.30 gpd/ft^2 = 1,200 ft^2 1,200 ft^2 / 6 ft trench eq. = 200 ft (See calculations below)
Easement Required:	YES					

Onsite Wastewater Septic System Configuration and Recommendations:

The following recommendations are proposed by MSI for Lot 1 (of 8) in the Landover Road "Subdivision" in Mecklenburg County, North Carolina. The proposed system

MOUNTAIN SOILS, INCORPORATED
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design/layout is for three bedrooms. The septic area has been evaluated and determined to contain Group IV soils (the most restrictive texture being sandy clay). A long-term acceptance rate (LTAR) of 0.35 has been assigned to these soils (0.30 for the repair PPBPS drainfield) *(See attached soil descriptions).*

MSI recommends utilizing a 25% Reduction type system for the septic drainfield. The (initial) septic system will require 257 linear feet of material to accommodate the 3-bedroom septic system. The recommended trench depth is 24 inches (low side of trench). It is anticipated that a grinder pump tank setup will be required to supply effluent to the settling tank (then septic tank). The square and linear footage required for installation of this system is illustrated below.

3 bedrooms x 120 gallon per bedroom per day = 360 gallons per day (gpd)
Group IV, Sandy Clay, 0.35 gallons per square foot per day (LTAR)
Square Footage required: 360 gpd / 0.35 LTAR = 1,029 square feet
1,029 ft^2/4' trench equivalency= 257 Linear Feet

MSI recommends utilizing a Prefabricated Permeable Block Panel System (PPBPS) for the repair septic drainfield. The repair system will require 200 linear feet of material to accommodate the 3-bedroom septic system. The recommended trench depth is 28 inches. The square and linear footage required for installation of this system is illustrated below.

3 bedrooms x 120 gallon per bedroom per day = 360 gallons per day (gpd)
Group IV, Sandy Clay, 0.30 gallons per square foot per day (LTAR)
Square Footage required: 360 gpd / 0.30 LTAR = 1,200 square feet
1,200 ft^2/6' trench equivalency= 200 Linear Feet

The proposed septic system area has been delineated in the field. It is recommended to utilize 4 x 65' of 25% Reduction material for the septic drainfield. *(See attached site plan for detail.)* It is also recommended to delineate the system again prior to installation.

MOUNTAIN SOILS, INCORPORATED

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Before any construction begins, it is recommended to conduct a pre-construction conference. These conferences typically include the homeowner/representative, the certified installer, Mountain Soils, Inc., and an Environmental Health Specialist for the Mecklenburg County Health Department (Environmental Health Section).

Onsite Wastewater Septic System Setbacks (Buffers) and Site Recommendations:

The following items are recommended by MSI to preserve the integrity of the proposed site and surrounding area.

1. MSI recommends encasing all septic system supply lines where they cross roads, drives and/or power lines (*pursuant to Laws and Rules for Sewage Treatment, and Disposal Systems 15A NCAC 18A .1900*)

2. MSI recommends diverting stormwater runoff away from all proposed septic areas.

3. A grinder pump tank setup is recommended. The grinder pump is recommended to feed a 1,000 gallon baffleless settling tank and then a 1,000 gallon septic tank with commercial filter. The septic tank is proposed to feed a large distribution box which will each distribute effluent to four (4) - sixty-five foot (65') drainlines (see attached site plan).

4. The grinder pump tank and supply from the grinder basin to settling tank must meet standards adopted by the National Sanitation Foundation (NSF). It is advisable to have these components engineered (by a P.E.) prior to construction.

5. The proposed MSI septic system designs/layouts are based on dodging large trees or other obstacles that may hinder the installation or operation of the septic system.

6. The proposed onsite wastewater system is based off of theoretical calculations based on data obtained at the site. MSI does not guarantee actual system performance.

7. The proposed initial septic system and repair system must maintain a setback (Buffer), specified by North Carolina Department of Environment and Natural Resources (NCDENR), including: 5' horizontal from the house and all foundations, 50' horizontal from any surface water, 100' horizontal minimum from all wells, 10' horizontal from all property lines and water lines, 20' horizontal from any other septic system (except repair) and 15' horizontal from cut banks (unless filled and compacted, 5' horizontal setback)

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8. The proposed septic system area/types, house location, well location and other site specific information in this report are MSI's opinion. Actual final designs, layouts, and locations may be subject to change.

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Landover Road "Subdivision" - Lot 1 (of 8)

10/12/2013

3-BDR (Offsite - Easement Required)

Mecklenburg County, NC

Septic System Calculation Worksheet

Initial System: 25% Reduction

Recommended Trench Bottom Depth: 24" (low side of trench)

Gal / Day	Trench Width (Inches)	Trench Equivalency (Feet)	Soil Depth on 0% Slope
360	36	4	36

Slope	Pit#	Soil Depth (in.)	Total Suitable Pit Depth/ Sap. Depth (in.)	Soil Needed (slope adjusted) (in.)	[1] Total Depth of Saprolite Required (2:1 ratio) factoring Soil Depth (in.)	Fill Material Required (in.)	Morphological Based Field LTAR
23%	P1	28	60	44.3	56	0	0.4
18%	P2	34	55	42.5	54	0	0.35
21%	P3	38	52	43.6	50	0	0.35
24%	P4	39	66	44.6	51	0	0.35
						LTAR Utilized	0.35
						Linear Feet Required	257

Repair System: PPBPS

Recommended Trench Bottom Depth: 28" (low side of trench)

Gal / Day	Trench Width (Inches)	Trench Equivalency (Feet)	Soil Depth on 0% Slope
360	24	6	40

Slope	Pit#	Soil Depth (in.)	Total Suitable Pit Depth/ Sap. Depth (in.)	Soil Needed (slope adjusted) (in.)	[1] Total Depth of Saprolite Required (2:1 ratio) factoring Soil Depth (in.)	Fill Material Required (in.)	Morphological Based Field LTAR
23%	P1	28	60	45.5	58	0	0.4
18%	P2	34	55	44.3	54	0	0.35
21%	P3	38	52	45.0	52	0	0.35
24%	P4	39	66	45.8	53	0	0.35
						LTAR Utilized	0.30
						Linear Feet Required	200

[1] [(soil depth needed-soil depth) x 2] + Soil depth = sap. Depth needed.
Above equation only to be used if the difference in soil depth needed and actual soil depth present = 12" or less

DENR/DEH

ON-SITE WASTEWATER SECTION Area 2

Sheet ___ of ___
PROPERTY ID #: ___
COUNTY: Mecklenburg

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: Landover RS Lot 1, 7, 8 (Lot 2, 4, 5) APPLICATION DATE ___
ADDRESS: ___ DATE EVALUATED: 4-11-13
PROPOSED FACILITY: ___ PROPOSED DESIGN FLOW (.1949): ___ PROPERTY SIZE: ___
LOCATION OF SITE: ___ PROPERTY RECORDED: ___
WATER SUPPLY: • Private • Public • Well • Spring • Other ___
EVALUATION METHOD: • Auger Boring • Pit • Cut TYPE OF WASTEWATER: • Sewage • Industrial Process • Mixed

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON	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 0-3 B 3-8	Ap	0 - 3	1 f gr / sl	Fr	5YR 2/2	28" / >60"	sl	-	III 0.4
		Bt	3 - 13	1 m sbk / scl	Fr (SS SP)	5YR 5/6				
		Bt	13 - 28	1 f sbk / cl	Fr	5YR 5/6 f.m.c.s				
		C	28 - 60+	ø m gr / sl	Fr / v fr	m c s				
2	Ls 0-3 B 3-8	AB	0 - 6	1 m gr / sl	Fr	2.5YR 4/4	34" / >55"	sl	-	III 0.35
		Bt	6 - 22	2 m sbk / cl	Fr (SS SP)	2.5YR 5/6				
		Bt	22 - 34	1 f sbk / scl	Fr	2.5YR 6/6 f.m.c.s				
		C	34 - 55+	ø Ma / sl	Fr / v fr	m c s				
3	Ls 0-3 B 3-8	AB	0 - 4	2 m gr / l	Fr	2.5YR 3/3	38" / >52"	sl	-	III 0.35
		Bt	4 - 17	2 m sbk / cl	Fr (SP SP)	10R 5/6				
		Bt	17 - 38	1 m sbk / sl	Fr	10R 4/6 f.m.c.s				
		C	38 - 52+	ø Ma sl	Fr / fr	m c s				
4	C 15-25 B 3-8	A	0 - 5	1 m gr / sl	Fr	2.5YR 4/4	8 / 39" / >66"	sl	-	~~II~~ II 0.35
		Bt	5 - 14	2 m sbk / sc	Fr (SS SP)	2.5YR 4/4				
		Bt	14 - 28	2 m sbk / sc	Fr (SS SP)	2.5YR 5/6				
		Bt	28 - 39	1 f sbk / sl	Fr	2.5YR 5/6 f.m.c.s				
		C	39 - 66	ø Ma / sl	Fr / v fr	m c s				

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)		
System Type(s)		
Site LTAR		

OTHER FACTORS (.1946): ___
SITE CLASSIFICATION (.1948): ___
EVALUATED BY: SL JM
OTHER(S) PRESENT: ___

LICENSED SOIL SCIENTIST STEVEN J. MELIN 1254 STATE OF NORTH CAROLINA

COMMENTS: ___

2 1

3

DENR/DEH

ON-SITE WASTEWATER SECTION

AREA 2

Sheet ___ of ___

PROPERTY ID #:

COUNTY: Mck.

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: Landon RS Lots 1,7,8 (~~Lot 1,4,5~~) APPLICATION DATE

ADDRESS: DATE EVALUATED: 4-11-13

PROPOSED FACILITY: PROPOSED DESIGN FLOW (.1949): PROPERTY SIZE:

LOCATION OF SITE: PROPERTY RECORDED:

WATER SUPPLY: ° Private ° Public ° Well ° Spring ° Other

EVALUATION METHOD: ° Auger Boring (Pit) ° Cut TYPE OF WASTEWATER: (° Sewage) ° Industrial Process ° Mixed

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941) STRUCTURE/ TEXTURE	SOIL MORPHOLOGY (.1941) CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
5	Crest 2%	Ap	0-5	2mg / sl	Fri	10R 3/2	35" / >55"	sl	—	~~III~~ ~~IV~~ 0.3
		BA	5-15	1to2msbk / cl	FR (ss ps)	10R 4/6				
		Bt2	15-29	2msbk / c	FR (ss ps)	10R 5/6				
		Bc	29-35	1fsbk / sl	FR	2.5Y 5/4 5/6				
		C	35-55+	0Ma / sl	FR	N 6/				
6	Linear 2%	Ap	0-5	1mgr / sl	FR	10R 3/3	33" / >55"	sl	—	~~III~~ 0.3
		BA	5-19	2msbk / c	FR (ss ps)	10R 4/6 10R 5/6				
		Bt	19-26	1fsbk / sl	FR	10R 5/6				
		C	26-33	0Ma / sl	VFR	N 6/				
7	Linear 2%	Ap	0-6	1mgr / sl	FR	10R 3/2	38" / >52"	sl	—	~~III~~ 0.3
		BA	6-26	2msbk / c	FR (ss ps)	10R 4/6 +5/6				
		Bt	26-38	1fsbk / sl	FR	10R 5/6 5/8				
		C	38-52+	0Ma / sl	FR/VFR	N 6/				
4										

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)		
System Type(s)		
Site LTAR		

OTHER FACTORS (.1946):

SITE CLASSIFICATION (.1948):

EVALUATED BY: Steven J. Melin

OTHER(S) PRESENT:

COMMENTS:

LICENSED SOIL SCIENTIST STEVEN J. MELIN 1254 STATE OF NORTH CAROLINA

MECKLENBURG COUNTY
Health Department

E. Winters Mabry, MD
Director

(704) 432-3199

Addendum to Application for
New Well or Septic System Installation
Abandonment or Repair of Existing Well or Septic System

Your signature below confirms the following:

1. The information on the application is true, complete and accurate.
2. Authorized county and state officials are granted right of entry to conduct necessary inspections to determine compliances with applicable laws and rules.
3. I acknowledge that Mountain Soils, Inc. is acting as my legal representative (agent) in the submittal of the application for a water supply well or septic permit located at

Landover Road / Lockabil Ln. → 8 Lots Lake Wylie
Number Street Town
(Or Parcel Number)

First Equities Financial, LLC
Property Owner (print name)

Philip M. Hays, Manager
Property Owner (signature)

10/14/2013
Date

MECKLENBURG COUNTY
LAND USE AND ENVIRONMENTAL SERVICES
Payment Receipt

Receipt Information

Date:	10/14/13	**Amount:**	2,000.00
Receipt #:	85703	**Tendered:**	2,000.00
Check / Auth #:	CHECK 1296	**Returned:**	0.00
Received By:	SADERLW		

Account Information

Account #: 200000
Contractor: SOUTHEAST RESORT INVESTMENT
Attn:
Address: 9218 COVEY HOLLOW CT
Address:
City/State/Zip: CHARLOTTE, NC 28210-7998

Item	Description	Permit#	Quantity	Unit Price	Total Price
0701	Improvment Permit App-Residen EIGHT LOTS, LAKE WILEY AREA		1	2,000.00	2,000.00

8809B
8810B
8811B
8812B
8813B
8814B
8815B
8816B

----------Outstanding Balances----------

Month-To-Date	Prior Month	30 Days	60 Days	90 Days	Balance

MA&A
SOIL & ENVIRONMENTAL CONSULTANTS

MICHAEL ATHANAS & ASSOCIATES
LICENSED SOIL SCIENTIST
556 Walden Trail
Weddington, NC 28173
(704) 576-3887

Reference: Data Sheet for 18217 Rockabill Lane; Lot 1; SFE#2 on Landover Road
PIN# 21715146
Mecklenburg County, NC

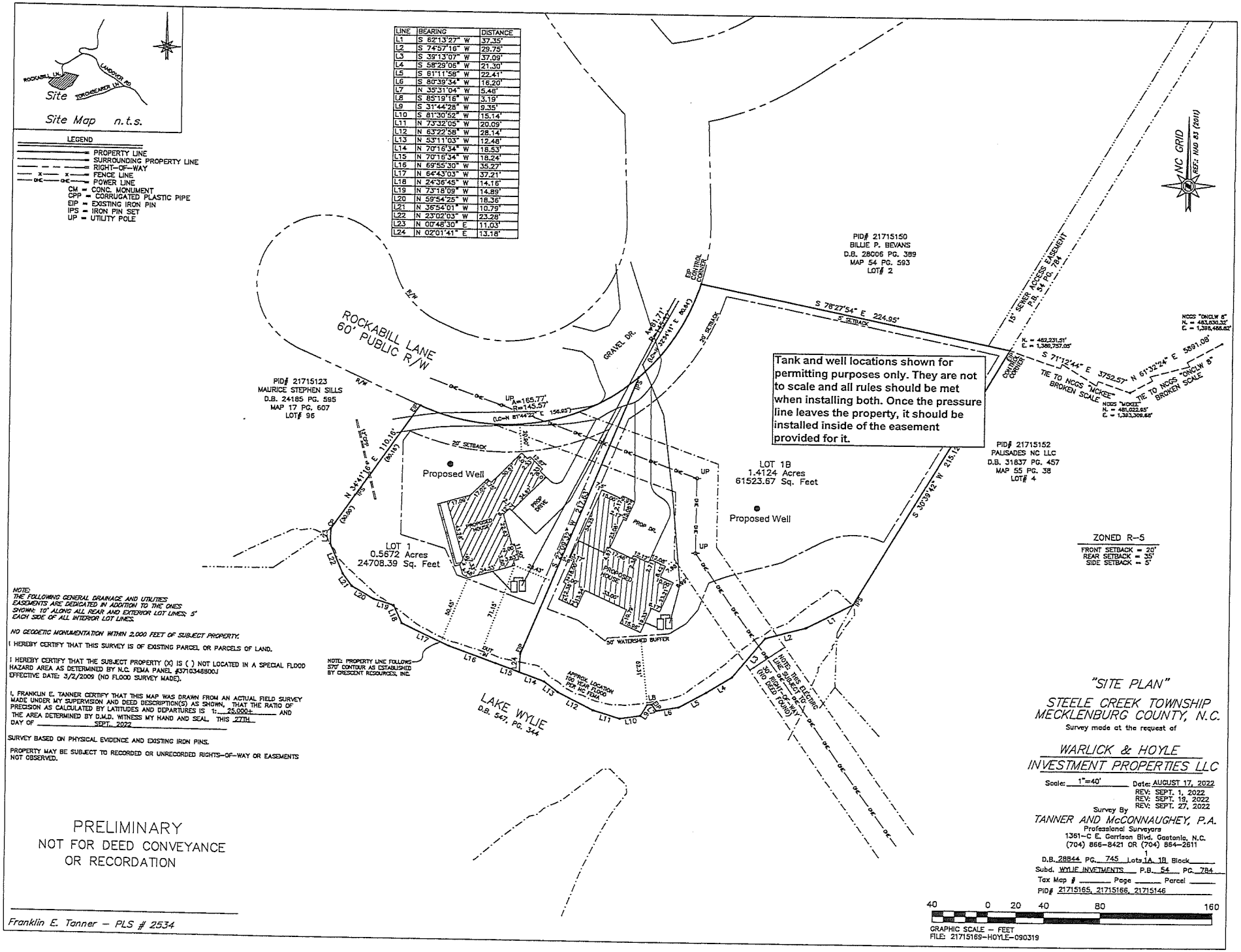
House Footprint: 65' x 60'
Building Setback: 20' Front; 50' Rear; 5' Side
Water Source: Private Well
Number of Bedrooms/GPD: 5/600GPD
Proposed LTAR: 0.3 gpd/ft2
Suggested Initial System Type: 25% Reduction
Repair System LTAR: 0.3 gpd/ft2
Repair System Type: PPBPS IVA Horizontal or Vertical
Distribution: Pressure Manifold
Flow per Tap: 5 @ ½" SCH 40 at 7.11 gpm
Tap Size and Material: ½" SCH 40
System Flow: 35.55 gpm
Dosing Volume: 218.76 gallons per dose
Pump Run Time: 6.15 minutes
Elevation Head: TBD by Engineer
Friction Head: TBD by Engineer
Pressure Head: 2'
Total Dynamic Head: TBD by Engineer
Supply Line Length: TBD by Engineer
Septic/Pump tank size: 1500 gallon septic tank; 1500 gallon pump tank
Trench Bottom: 36"

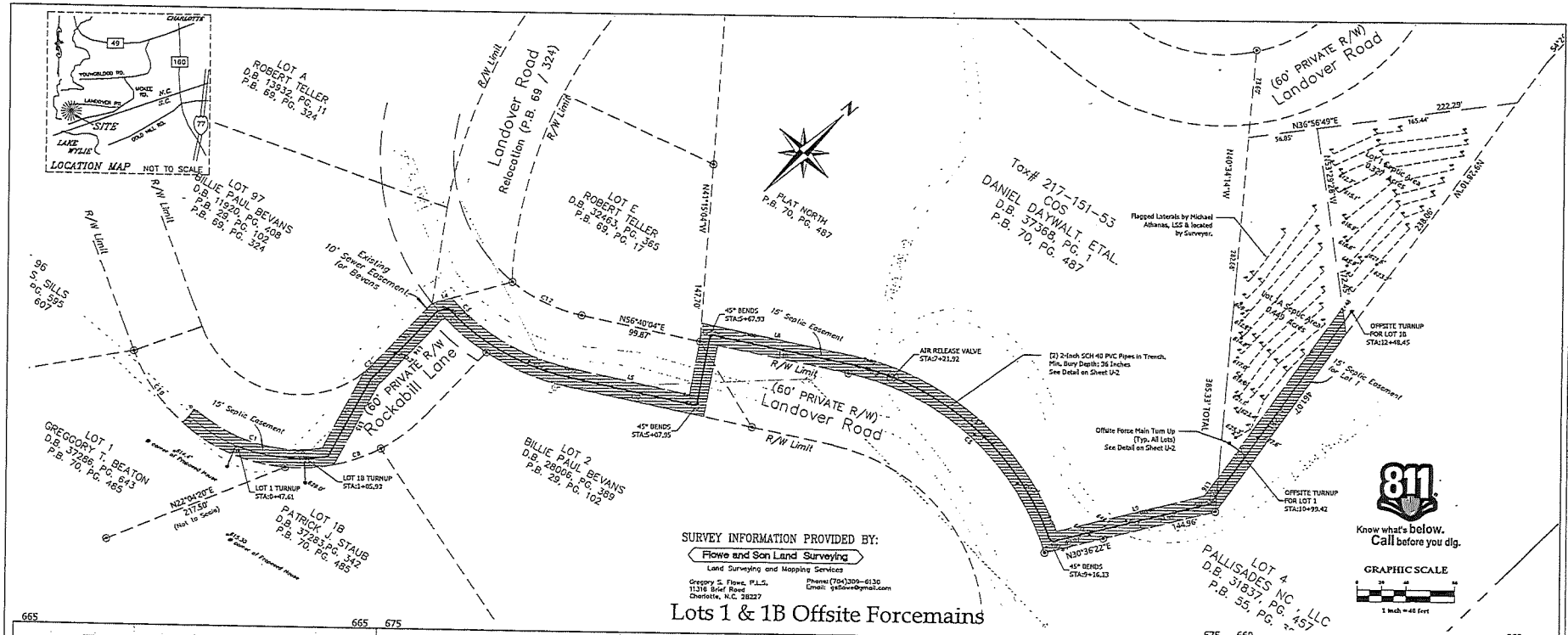
Line	Design Length	Actual Length	Elevation
Red 1		80'	TBD
White 2		90'	TBD
Orange 3	**100'**	**100'**	**TBD**
Blue 4	**100'**	**100'**	**TBD**
Red 5	**100'**	**102'**	**TBD**
White 6	**100'**	**102'**	**TBD**
Orange 7	**100'**	**104'**	**TBD**
White 8		120'	TBD
Red 9		60'	TBD

Initial System: 500' 25% Reduction
Pump Tank: TBD
Repair System: 350'PPBPS
House Corner: TBD
Bench Mark: TBD

Comments: The purpose of the evaluation is to permit this site for a 5 bedroom residence.

- The residence is located on Rockabill Lane. The SFE is located on Landover Road (PID#21715153). All easements have been recorded with Mecklenburg County. The SFE for this lot is labeled SFE#2. SFE#1 will serve Lot 1B also on Rockabill Lane (PID# 21715165).
- David DeCaron with Piedmont Designs will be designing the pump specifications.
- **The proposed septic area should be fenced off prior to any construction activities taking place. No vehicular traffic on the proposed septic area. Failure to do so will result in the permit being voided.**
- All septic lines have been located by the surveyor.
- MA&A recommends that both systems be installed at the same time to prevent any disturbance to either system. Both pressure line should be installed at the same time at a minimum.


Site Map n.t.s.
ROCKABILL LN.
LANDOVER RD.
TORCHBEARER LN.
Site
LEGEND
PROPERTY LINE
SURROUNDING PROPERTY LINE
RIGHT-OF-WAY
FENCE LINE
POWER LINE
CM = CONC. MONUMENT
CPP = CORRUGATED PLASTIC PIPE
EIP = EXISTING IRON PIN
IPS = IRON PIN SET
UP = UTILITY POLE
LINE | BEARING | DISTANCE
L1 | S 62°13'27" W | 37.35'
L2 | S 74°57'16" W | 29.75'
L3 | S 39°13'07" W | 37.09'
L4 | S 58°29'06" W | 21.30'
L5 | S 81°11'58" W | 22.41'
L6 | S 80°39'34" W | 16.20'
L7 | N 35°31'04" W | 5.46'
L8 | S 85°19'16" W | 3.19'
L9 | S 31°44'28" W | 9.35'
L10 | S 81°30'52" W | 15.14'
L11 | N 73°32'05" W | 20.09'
L12 | N 63°22'58" W | 28.14'
L13 | N 53°11'03" W | 12.48'
L14 | N 70°16'34" W | 18.53'
L15 | N 70°16'34" W | 18.24'
L16 | N 69°55'30" W | 35.27'
L17 | N 64°43'03" W | 37.21'
L18 | N 24°36'45" W | 14.16'
L19 | N 73°18'09" W | 14.89'
L20 | N 59°54'25" W | 18.36'
L21 | N 36°54'01" W | 10.79'
L22 | N 23°02'03" W | 23.28'
L23 | N 00°48'30" E | 11.03'
L24 | N 02°01'41" E | 13.18'
ROCKABILL LANE
60' PUBLIC R/W
GRAVEL DR.
PID# 21715123
MAURICE STEPHEN SILLS
D.B. 24185 PG. 595
MAP 17 PG. 607
LOT# 96
PID# 21715150
BILLIE P. BEVANS
D.B. 28006 PG. 389
MAP 54 PG. 593
LOT# 2
PID# 21715152
PALISADES NC LLC
D.B. 31837 PG. 457
MAP 55 PG. 38
LOT# 4
Tank and well locations shown for permitting purposes only. They are not to scale and all rules should be met when installing both. Once the pressure line leaves the property, it should be installed inside of the easement provided for it.
Proposed Well
Proposed Well
LOT 1
0.5672 Acres
24708.39 Sq. Feet
LOT 1B
1.4124 Acres
61523.67 Sq. Feet
PROP. DR.
PROP. DRIVE
PROPOSED HOUSE
PROPOSED HOUSE
50' WATERSHED BUFFER
S 78°27'54" E 224.95'
S 71°12'44" E 3752.57'
N 61°32'24" E 5891.08'
S 30°39'42" W 215.12'
N 34°41'16" E 110.15'
S 24°09'32" W 210.03'
15' SEWER ACCESS EASEMENT
P.B. 54 PG. 784
TIE TO NCGS "MCKEE"
BROKEN SCALE
TIE TO NCGS "ONCLW 8"
BROKEN SCALE
NCGS "ONCLW 8"
N = 483,430.34'
E = 1,388,468.62'
NCGS "MCKEE"
N = 481,022.65'
E = 1,393,309.66'
NC GRID
(NAD83 - NAD 83 (2011))
ZONED R-5
FRONT SETBACK = 20'
REAR SETBACK = 35'
SIDE SETBACK = 5'
NOTE: PROPERTY LINE FOLLOWS 570' CONTOUR AS ESTABLISHED BY CRESCENT RESOURCES, INC.
APPROX. LOCATION OF 100 YEAR FLOOD PER FEMA
LAKE WYLIE
D.B. 547, PG. 344
NOTE: THIS SURVEY IS SUBJECT TO ANY AND ALL RIGHTS-OF-WAY (IF ANY) NOT FOUND
NOTE:
THE FOLLOWING GENERAL DRAINAGE AND UTILITIES EASEMENTS ARE DEDICATED IN ADDITION TO THE ONES SHOWN: 10' ALONG ALL REAR AND EXTERIOR LOT LINES; 5' EACH SIDE OF ALL INTERIOR LOT LINES.
NO GEODETIC MONUMENTATION WITHIN 2,000 FEET OF SUBJECT PROPERTY.
I HEREBY CERTIFY THAT THIS SURVEY IS OF EXISTING PARCEL OR PARCELS OF LAND.
I HEREBY CERTIFY THAT THE SUBJECT PROPERTY (X) IS ( ) NOT LOCATED IN A SPECIAL FLOOD HAZARD AREA AS DETERMINED BY N.C. FEMA PANEL #3710348800J EFFECTIVE DATE: 3/2/2009 (NO FLOOD SURVEY MADE).
I, FRANKLIN E. TANNER CERTIFY THAT THIS MAP WAS DRAWN FROM AN ACTUAL FIELD SURVEY MADE UNDER MY SUPERVISION AND DEED DESCRIPTION(S) AS SHOWN, THAT THE RATIO OF PRECISION AS CALCULATED BY LATITUDES AND DEPARTURES IS 1: 25,000+ AND THE AREA DETERMINED BY D.M.D. WITNESS MY HAND AND SEAL, THIS 27TH DAY OF SEPT., 2022
SURVEY BASED ON PHYSICAL EVIDENCE AND EXISTING IRON PINS.
PROPERTY MAY BE SUBJECT TO RECORDED OR UNRECORDED RIGHTS-OF-WAY OR EASEMENTS NOT OBSERVED.
PRELIMINARY
NOT FOR DEED CONVEYANCE
OR RECORDATION
Franklin E. Tanner – PLS # 2534
"SITE PLAN"
STEELE CREEK TOWNSHIP
MECKLENBURG COUNTY, N.C.
Survey made at the request of
WARLICK & HOYLE
INVESTMENT PROPERTIES LLC
Scale: 1"=40' Date: AUGUST 17, 2022
REV: SEPT. 1, 2022
REV: SEPT. 19, 2022
REV: SEPT. 27, 2022
Survey By
TANNER AND McCONNAUGHEY, P.A.
Professional Surveyors
1361-C E. Garrison Blvd. Gastonia, N.C.
(704) 866-8421 OR (704) 864-2611
D.B. 28844 PG. 745 Lots 1A 1B Block
Subd. WYLIE INVETMENTS P.B. 54 PG. 784
Tax Map # Page Parcel
PID# 21715165, 21715166, 21715146
40 0 20 40 80 160
GRAPHIC SCALE – FEET
FILE: 21715169-HOYLE-090319



PUBLICATION OR REUSE OF THESE DRAWINGS OR ANY DETAILS WITHIN MUST BE WITH THE WRITTEN CONSENT OF PIEDMONT DESIGN ASSOCIATES, P.A.

Location: Owner: Approved: Date of Issue:

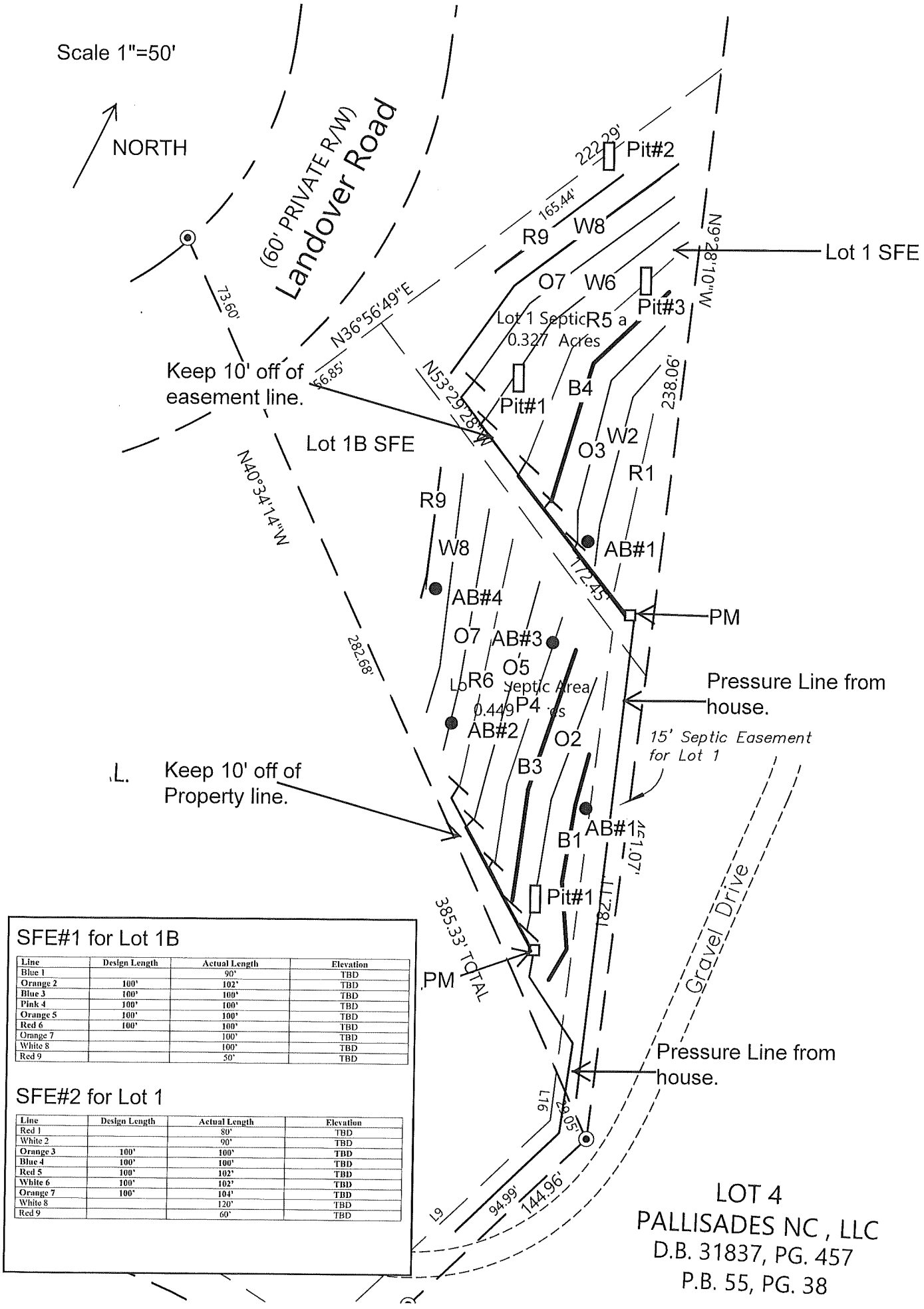
PIEDMONT DESIGN
Associates, P.A.
Suite 101 Westfield Center, 135 East Main Drive
Mooresville, NC 28115 Phone (704) 662-2188
NCBELS Licensed # C-1609

PREPARED FOR:
MIKE MORGAN
13022 AVILA COURT
CHARLOTTE, NC 28278
704-578-8727

OFFSITE FORCEMAIN PLAN/PROFILE
LOT 1 AND LOT 1B ROCKABILL LANE
LANDOVER ROAD - ROCKABILL LANE
CHARLOTTE, MECKLENBURG COUNTY, NORTH CAROLINA

REVISIONS	BY

Date: 12/13/22
Scale: 1" = 40' Ft. / 1" CONTOURS
Drawn: DMD
Checked: DLM
Project: 2022-12-03
Jobs: 2022-12-03
Sheet: U-1
of 2 Sheets



SFE#1 for Lot 1B

Line	Design Length	Actual Length	Elevation
Blue 1		90'	TBD
Orange 2	100'	102'	TBD
Blue 3	100'	100'	TBD
Pink 4	100'	100'	TBD
Orange 5	100'	100'	TBD
Red 6	100'	100'	TBD
Orange 7		100'	TBD
White 8		100'	TBD
Red 9		50'	TBD

SFE#2 for Lot 1

Line	Design Length	Actual Length	Elevation
Red 1		80'	TBD
White 2		90'	TBD
Orange 3	100'	100'	TBD
Blue 4	100'	100'	TBD
Red 5	100'	102'	TBD
White 6	100'	102'	TBD
Orange 7	100'	104'	TBD
White 8		120'	TBD
Red 9		60'	TBD

SPECIFICATIONS

FOR A

NETWORK OF OFFSITE EFFLUENT FORCEMAINS

FOR LOTS 1 and 1B

LANDOVER ROAD & ROCKABILL LANE

Charlotte, Mecklenburg County, North Carolina

December 12, 2022

GWS Septic System Design Review

GWS File#: 8804B

	Approved	Disapproved
Design Review:	☑	☐
Field Review:	☑	☐

*Projects are not considered "APPROVED" until both sections above are completed and indicate an APPROVED status.

Prepared for:
Mike Morgan
13022 Avila Court
Charlotte, NC 28278
Phone: 704-578-8727

Prepared by:
PIEDMONT DESIGN ASSOCIATES, P.A.
125 East Plaza Drive, Suite 101
Mooresville, NC 28115
Phone: 704-664-7888
Fax: 704-664-1778
NCBELS No.: C-1007



Offsite Force Main Network System
Landover Road and Rockabill Lane
Charlotte, Mecklenburg County, NC

SECTION I - INTRODUCTION AND DESIGN CONSIDERATIONS

Due to subject lots not having adequate space or suitable soils for septic systems, Lots 1 and 1B has been designed with the lots to have primary and repair located a tract of land not abutting the one for the primary residence.

Daily design flow has been set at 120 gallons per day per bedroom for the each of the individual systems.

Each residence is to be served by a private well located more than 50 feet from any septic system component.

Michael Athanas, LSS & Scott Kennedy evaluated the soil and flagged layouts for all individual onsite and offsite septic systems located off Landover Road and Rockabill Lane. Permitting of the individual septic system types, tank locations and sizes and exact distribution type will be completed under a separate review.

Before any site construction, the area of the nitrification fields and reserve area shall be barricaded with orange barricade fence to prevent any access by vehicles, grading equipment and there shall be no earth disturbance of this area unless under the direction of the Soil Scientist. This work shall only be done under the direct supervision of the Soil Scientist.

The following publications shall be a part of these specifications. Any deviation between them and these specifications shall be brought to the attention of the engineer for clarification.

(1) LAWS AND RULES FOR GROUND ABSORPTION SEWAGE TREATMENT & DISPOSAL SYSTEMS. N. C. Department of Environment, Health, and Natural Resources; Division of Environmental Health, On-Site Wastewater Section; Administrative Code Section 15A N.C.A.C. 18A.1900, amended effective date July 1, 1995.
(2) PRESSURE MANIFOLD DESIGN FOR GROUND ABSORPTION SEWAGE SYSTEM. Steven J. Berkowitz; February 1986.
(3) GUIDANCE MATERIAL, Onsite Wastewater Management, March 1996, NC DENR Onsite Waste Water Section.

Directions to the Property:
From I-485, take Exit 4 (Steele Creek Road) toward south. Turn right on Shopton Road West. Cross over South Tryon(Highway 49) and road name changes to Youngblood Road. Turn left on McKee Rd. McKee Road turns into Bankhead Road. Turn right on Landover Road to Rockabill Lane.

SECTION II - COMPONENTS OF SYSTEM

Proposed collection system installed according to Title 15A Subchapter 18A of the North Carolina Administrative Code, IWWS 2016-01 (Approved 09/02/2016), the NC Plumbing Code, local plumbing, and ASTM D2321 latest revision.

- Offsite Force mains and associated appurtenances

B. COLLECTION SYSTEM

Material and Installation Specifications for Force main Piping: Unless superseded or modified by a Special Provision, all materials, apparatus, supplies, methods of manufacture, or construction shall conform to the specifications for same contained in this Section. National material standards (ASTM, ANSI, etc.) referred to herein shall be the latest revisions only.

The Engineer may waive certain requirements of these Material and Installation specifications, provided that the Contractor requests such waiver in writing and provided that the function of the material is not impaired. The Contractor may request to substitute for a material that has been specified. The Engineer, in writing only, may accept or reject such request.

PVC PRESSURE SEWER: All piping from individual pump tanks to offsite drain field distribution devices shall be 2" diameter SCH 40 (or greater) PVC pipe with a minimum pressure rating of 200 PSI. Pipe shall be labeled NSF-PW with solvent welded joints. All force main piping shall be buried with 36 inches of minimum cover with marking

tape and locator wire as specified herein at a depth halfway between the crown of the pipe and finish ground surface. PVC Pipe shall be made from materials whose Cell Classifications are either Class 1245A or 1245B and shall be furnished in lengths of 20 feet. Lesser lengths will be accepted to allow the proper placement of fittings, valves, etc. All PVC Pipe will be shipped, stored, and strung at the project in such a manner as to be protected from total accumulated exposure to sunlight and possible ultraviolet radiation of no more than four (4) weeks.

Pipes shall either be color coded for corresponding lots or marked permanently on the crown of the pipe with unique lot number and/or letter and shall be visible at time of construction. The printed number shall be a minimum of 1-inch in height.

MARKING TAPE: The force main shall be clearly identified with green plastic locator tape made specifically for that purpose. The tape shall be marked with black lettering clearly identifying the pipeline as sanitary sewer. The tape shall be Type III detectable Marking Tape as manufactured by Seton or approved equal. Tape shall be installed at a depth to provide 18 inches of cover between top of pipe and tape. Tape shall be green metallic to allow for locating service to acquire a horizontal location of force main. As an alternate, wire may me attached to pipe with tape or zip ties at minimal separation distance of 5 to 10 feet.

FITTINGS: PVC fittings for pressure sewer mains shall be solvent weld Schedule 40 fittings furnished in accordance with ASTM D-2467 with solvent weld joints installed according to ASTM D-2855.

PIPING: All pressure lines to be pressure rated SCH 40 PVC. All pressure lines (less than 2" in diameter) to be cut with hand ratcheting style cutter or wheel style cutter. PVC saws shall not be used to cut pressure pipe.

This section is a minimum guideline for furnishing and the installation of Polyvinyl Chloride (PVC) pipe and fittings for lines with hydraulic pressure.

Pipe shall be furnished complete with all fittings, specials, and other appurtenances.

FITTINGS: All fittings within this piping system shall be glue type capable of sustaining the working pressure and imposed loads. The fittings shall be compatible with the pipe used.

THRUST BLOCKING: At all sharp bends in the force main, the contractor shall install thrust blocking. Thrust blocking shall be installed per detail on plan sheet U-2.

AIR VACUUM RELEASE VALVE: If required and at location as shown on the plans, contractor shall install an air vacuum release valve for all force mains manifolded together to allow for air/gases to escape the line. Air release valves required when the elevation change is greater than 10 feet. Air release valves shall be enclosed in a minimum 30-inch diameter riser with locking lid. Air release valves shall be Orenco Model ARV21 or Engineer approved equal.

DRAIN FIELD MONUMENTS: At all septic field easements, installer shall install a 4 x 4 pressure treated post to indicate easement corners. A minimum of (2) 3-inch UV rated labels shall be placed to indicate which corner the post corresponds with. Post shall be set in ground a minimum of 24 inches and backfilled with washed stone or premixed concrete. Post shall extend a minimum of 36 inches above ground surface. Any alternatives to the monument shall be pre-approved by the engineer of record.

SECTION IV – INSTALLATION & CONSTRUCTION SEQUENCE

The new force mains shall be installed complete, tested and accepted before receiving any waste.

1. Installation of the force mains shall be coordinated with the General Contractor, Local Health Department, Engineer, and Owner and scheduled as necessary to comply with overall operation.

2. Installation of the system shall be performed to the satisfaction of the Owner, Design Engineer, Licensed Soil Scientist and Local Health Department.

3. The Septic Contractor shall install all components of the system in strict accordance with the plans and specifications. Upon completion of the system construction, the Septic Contractor shall charge the system with water and go through a complete cycle. Any failure or discrepancy shall be corrected. The manufacturer of the component and the Septic Contractor shall warrant the component and system for one year from the date of acceptance by the Owner.

Force Main Installation

Lay out force mains to allow placement of within easements.

Each of the force mains going to each field shall be coded with a color using an exterior grade, UV resistant paint. These mains shall be labeled every 10 feet with a minimum of 10 feet continuous painting, marked with permanent pen to a height no less than 1-inch or with a UV resistant sticker adhered to the pipe no less than 1-inch in height at a minimum of every 10 feet along the pipe.

Continuous warning tape shall be buried above all plastic pipe. Warning tape shall be 3" wide, 4 mils thick green polyethylene. This warning tape shall be installed 18" below finished grade. The words "caution - sewer line buried below" shall be printed on the tape in 3" high letters at approximately 3' intervals on centers. Warning tape shall be placed printed side up, parallel to finished grade. The top of the pipe shall be installed 18" below the warning tape. A copper tracing wire shall be zip tied to the pipe for locating.

Spacing between pipes within the same trench shall be separated with a minimum of one pipe diameter. Contractor shall install spacer between pipes as detailed on plan sheet U-2.

Trenches shall not be opened for more than 300 feet in advance of the complete pipe nor more than 100 feet in the rear thereof.

Backfill material shall contain no organic material, rocks larger than 4-inches or construction materials. The material shall be dry and shall have no tendency to flow when compacted. No rocks shall be installed against pipe.

All force mains shall have 36 inches minimum cover.

Install all other piping, valves, headworks, and all other system components. Ensure good bedding and cover and uniform slope as specified. All valve boxes shall be flush with the ground and clear of debris.

FORCE MAIN INSTALLATION

Lay out supply force mains to corresponding offsite lot location. The pressure force main shall be SCH 40 PVC or stronger material. This pipe shall be buried with 3 feet minimum cover. A continuous warning tape shall be installed 18 inches above the crown of the pipe with a continuous locator wire from tank to the pressure manifold.

1. Preparation
   A. Trenching, backfilling, and compaction.
      1. Trenching shall be performed such that soil cover over the pipe is a minimum of 18 inches to warning tape.
      2. Pipe should be placed on native soil or soil that it well compacted using a tamping rod or a mechanical tamper.
      3. Fill should be placed over the pipe before required testing has been performed. Fill shall be well compacted over the pipe and approximately 2 to 4 inches of soil shall be mounded over the trench to allow for subsequent settling. Contractor shall leave an open pit to exposed pipe a minimum of every 100 feet along trench for Engineer/Inspector to verify correct bury depth, material, spacing, etc.
   B. Cutting the pipe.

1. Cut pipe smooth, straight and at right angles to the pipe axis with saws or pipe cutters designed specifically for the material.
2. Remove burrs and wipe off all dust from the jointing surfaces.
3. Do not disturb previously installed joints during cutting operations.

C. Field Joints.
1. Use push-on joints for buried pipe except where indicated otherwise on the plans.
   a. Dirt, oil, grit, and other foreign matter shall be removed from the inside of the bell, outside of the spigot, and where other pipe connections are to be made.
   b. All joints shall be cleaned with solvent PVC cleaner prior to joining.
   c. Joints shall be glued using acceptable PVC glue that will provide a water-tight joint at a pressure of 100 psi.

UTILITY CROSSING AND LOCATIONS: The Septic Contractor is responsible for locating all services before beginning work on the site. The plans are approximate and may not show all utilities.

WATER LINE VERTICAL SEPARATION: Clear separation distance when a water line crosses over a sewer must be at least 18-inches at the closest point. When conditions prevent an 18-inch clear separation from being maintained, or whenever it is necessary for the water line to cross under the sewer, both the water line and sewer shall be constructed of ferrous materials with mechanical joints equivalent to water main standards for a distance of at least 10 feet on each side of the point of crossing, with full sections of pipe centered at the point of crossing.

STORM DRAIN SEPARATION: Horizontal separation between sewer lines and storm drains shall be at least ten feet. Vertical separation between sewer lines and storm drains at crossings shall be at least 18-inches at the closest point unless the sewer is of cast iron pipe or encased in concrete for at least ten feet on either side of the crossing.

SECTION III - TESTING REQUIREMENTS:

Requirements for Leakage Testing-Pressure Force Mains

Required testing of pipelines and valves shall be done under the direct supervision of the Project Engineer. Field-testing shall not negate the requirements for material certifications as contained in the material specification section of this contract. Unless otherwise directed by the Engineer, all testing and disinfection will be completed prior to connection to any existing line.

Hydrostatic & Leakage Tests

On completion of the line or sections of the lines, connections and appearances, the line shall be filled and hydrostatically tested after backfilling. The water for testing purposes can be taken from the nearest available water main under the supervision of the Engineer's Inspector. All leaks and any defective material shall be repaired or replaced to the satisfaction of the Engineer and the tests repeated until the requirements of this specification are met. Any special equipment, pumps, etc., required to make the test shall be furnished and operated by the Contractor as directed by the Inspector.

The Septic Contractor shall use great care to be sure that all air is expelled from each section under test. If service connection or other openings are not available for the purposes of expelling air, the Septic Contractor shall provide air release of sufficient size (as determined by the Engineer).
Specific procedures for testing main are as follows:

A. The contractor shall perform hydrostatic testing of all effluent distribution systems, as set forth in the following, and shall conduct said tests in the presence of Design Engineer, with 48 hours advance notice provided.

B. Piping and appurtenances to be tested shall be within sections between turn-ups, unless alternate methods have received prior approval from the Design Engineer. Testing shall not proceed until all restraining devices have been installed. All piping shall be thoroughly cleaned and flushed prior to testing to clear the lines of all foreign matter. While the piping is being filled with clean water, care shall be exercised to permit the escape of air from extremities or the test section, with additional release cocks provided if required.

C. Hydrostatic testing shall be performed at 150 pounds per square inch pressure, unless otherwise approved by the Engineer, for a period of not less than two (2) hours. Testing shall be in accordance with

the applicable provisions as set forth in AWWA Standard C605-94, Section 7. The allowable rate of leakage shall be less than the number of gallons per hour determined by the following formula:

L= ND (P) ½ / 3700
L = allowable leakage in gallons per hour
N = number of joints in section tested
D = nominal diameter of the pipe in inches
P = average test pressure maintained during the leakage test in pounds per square inch gauge
OR

Q = (D1 X S1) + (D2 X S2) + (D3 X S3) X P X H / 133,200
Where,
D= Diameter of line tested (inches)
S = Length of line tested (feet)
P = Square root of average test pressure
Q = Allowable leakage (gallons)
H = Test duration (hours)

D. The testing procedures shall include the continued application of the specified pressure to the test system, for the two-hour period, by way of a pipe taking supply from a container suitable for measuring water loss. The amount of loss shall be determined by measuring the volume displaced from said container.

E. Should the test fail, necessary repairs shall be accomplished by the contractor and the test repeated until within the established limits. The contractor shall furnish the necessary labor, water, pumps, gauges, and all other items required to conduct the required water distribution system testing and perform necessary repairs.

If the leakage exceeds this amount, then the pipe shall be visually inspected, and any leaking joints shall be replaced. Once this is complete the pipe shall be re-tested.

The Contractor shall be required to provide as many tests and/or certifications as the Engineer may deem necessary for materials, such as concrete, piping, valves, steel reinforcement, all fasteners and anchorage systems, etc. Testing for materials shall be made by a separate independent test laboratory employed by the Contractor and approved by the Engineer.

During the installation of the system, construction inspection(s) may be conducted by the local health department. These inspections will help to ensure the system is installed to meet the intended design and to document the system components. At the completion of the installation a final inspection will be completed by the certifying Engineer. At this time, the system installer will also provide the certifying Engineer with documentation of the installation as well as an installer certification indicating the system was installed to meet the intent of the design.

Required testing of pipelines shall be done under the direct supervision of the Project Engineer. Field-testing shall not negate the requirements for material certifications as contained in the material specification section of this contract. Unless otherwise directed by the Engineer, all testing is required to be completed prior connection to pump tank or distribution device.

Prior to testing and certified in writing by the Engineer of Record, the Contractor shall backfill the trenches to a minimum of 95% standard proctor, seed, and mulch. At the ends of the offsite force main(s), the contractor shall install a 90-degree ell and extend up to an elevation of 36-inches above the ground surface and cap. It shall also be noted on the pipe within 12-inches of the cap the corresponding lot number. This will allow for installers to readily identify the pipe and tie into for extension to the future pump tank and drain field distribution device. Contractor shall leave an open pit to exposed pipe a minimum of every 100 feet along trench for Engineer/Inspector to verify correct bury depth, material, spacing, etc. To be backfilled after completion/approval of testing.

FINAL LANDSCAPING

SEEDBED PREPARATION

Complete grading according to the approved plan before seeding. Below are steps to take in order to prepare the seedbed for planting.

- Chisel compacted areas and spread topsoil 3 inches deep over adverse soil conditions, if available.

- Rip the entire area to 6 inches deep.
- Remove all loose rock, roots, and other obstructions leaving surface reasonably smooth and uniform.
- Apply agricultural lime, fertilizer, and superphosphate uniformly and mix with soil.
- Continue tillage until a well pulverized, firm reasonably uniform seedbed is prepared 4 to 6 inches deep.
- Seed on a freshly prepared seedbed.
- Mulch immediately after seeding and anchor mulch.

Apply lime and fertilizer evenly and incorporate into the top 4–6 inches of soil by disking or other suitable means. Operate machinery on the contour. When using a hydro seeder, apply lime and fertilizer to a rough, loose surface.

Roughen surfaces. Complete seedbed preparation by breaking up large clods and raking into a smooth, uniform surface. Fill in or level depressions that can collect water. Broadcast seed into a freshly loosened seedbed that has not been sealed by rainfall.

SEEDING

Seeding dates given in the seeding mixture specifications designated as "best" or possible." Seedings properly carried out within the "best" dates have a high probability of success. It is also possible to have satisfactory establishment when seeding outside these dates. However, as you deviate from them, the probability of failure increases rapidly. Seeding on the last date shown under "possible" may reduce chances of success by 30-50%. Always take this into account in scheduling land-disturbing activities.

Use certified seed for permanent seeding whenever possible. Certified seed is inspected by the North Carolina Crop Improvement Association. It meets published North Carolina Standards and should bear an official "Certified Seed" label.

Labeling of non-certified seed is also required by law. Labels contain essential information on seed purity, germination, and presence of weed seeds. Seed must meet State standards for content of noxious weeds. Do not accept seed containing "prohibited" noxious weed seed.

Apply seed uniformly with a cyclone seeder, drop-type spreader drill, cultipacker seeder, or hydro seeder on a firm, friable seedbed.

When using a drill or cultipacker seeder, plant small grains no more than 1 inch deep, grasses and legumes no more than ½ inch. Equipment should be calibrated in the field for the desired seeding rate.

When using broadcast-seeding methods, subdivide the area into workable sections and determine the amount of seed needed for each section. Apply one-half the seed while moving back and forth across the area, making a uniform pattern; then apply the second half in the same way, but moving at right angles to the first pass.

Cover broadcast seed by raking or chain dragging; then firm the surface with a roller or cultipacker to provide good seed contact.

MULCH

Mulch all plantings immediately after seeding. Select a material based on site and practice requirements, availability of material, labor, and equipment. Before mulching, complete the required grading, install sediment control practices, and prepare the seedbed. Apply seed before mulching except in the following cases:

- Seed is applied as part of a hydro seeder slurry containing wood fiber mulch.
- A hydro seeder slurry is applied over straw.

IRRIGATION

Moisture is essential for seed germination and seedling establishment. Supplemental irrigation can be extremely helpful in assuring adequate stands in dry seasons or to speed development of full cover. Assess the need for irrigation when the seeding is conducted.

Water application rates must be carefully controlled to prevent runoff. Inadequate or excessive amounts of water can be more harmful than no supplemental water. Once the system has been placed into use, cease all irrigation use on the drainfield areas to prevent the hydraulic overloading.

APPLICATION OF ORGANIC MULCH

Organic mulches are effective where they can be tacked securely to the surface.

Spread mulch uniformly by hand, or with a mulch blower. When spreading straw mulch by hand, divide the area to be mulched into sections of approximately 1,000 ft2, and place 70-90 lb. of straw (1 ½ to 2 bales) in each section to facilitate uniform distribution. After spreading mulch, no more than 25% of the ground surface should be visible. In hydroseeding operations, a green dye, added to the slurry, assures a uniform application.

ANCHORING ORGANIC MULCH

Straw mulch must be anchored immediately after spreading using vegetation. Rye (grain) may be used to anchor mulch in fall plantings, and German millet in spring. Broadcast at 15 lb./acre before applying mulch.

PERMANENT STABILIZATION

Permanent stabilization is needed in graded or cleared areas subject to erosion and where a permanent, long-lived vegetative cover is needed. Typically, disturbed portions of a site where construction activities have permanently ceased will be stabilized with permanent seeding no later than 14 days after the last construction activity. This method will not provide erosion control cover or prevent soil slippage on soils that are not stable due to soil texture or structure, water movement or excessively steep slopes. In some areas it may be necessary to install erosion or sediment control practices such as dikes, contour ripping, erosion stops, channel liners, sediment basins, diversions, subsurface drainage, or other practices.

Prior to seeding, 1,000 lbs./ac of a 12-12-12 or equivalent fertilizer and lime according to soil test or in lieu of soil test, 4,000 lbs./ac of ground agricultural limestone shall be worked into the soil to a depth of 3 inches. Seed should be applied uniformly at a depth of 1/4 to ½ inch with appropriate equipment. Except on very flat slopes and ideal seeding conditions, small grain straw should be applied at a rate of 3,000 to 4,000 lbs./ac using appropriate mulch anchoring techniques. Other mulch materials can be used except under adverse conditions or steep slopes, grain straw should be adequate.

AS BUILTS AND RECORD DRAWINGS

A set of as-built plans and specifications shall be prepared by a Professional Surveyor licensed to practice in the State of North Carolina. The Surveyor shall be hired by the Septic Contractor to perform the work. The Septic Contractor shall provide the "As-Built" data to the Engineer. The Engineer shall provide the signed and sealed "Record Drawings" to the local Health Department, Engineer and Owner which will show actual vertical and horizontal location and design of all system components and contain a complete list of all mechanical equipment installed whenever any deviations were made from the approved plans and specifications. The Septic Contractor shall forward to the Engineer two bound sets of all manufacturer's component data along with the "As Built" data.

Final Record drawings shall be on full-size 24" x 36" paper. Two (2) sets shall be provided. An additional full-size Record Drawing shall be given to the ORC.

OPERATING PERMIT

Installation of the remaining portions of the system shall be performed under the supervision of the Local Health Department or designer.

The force main(s) shall not be operated until the Project Engineer certifies in writing that the system has been installed in accordance with the approved plans and specifications, and the installation is approved by the local Health Department.

1. An Operation Permit may be issued by the Local Health Department after all conditions of the improvement permit have been met, the Design Engineer certifies in writing that the system has been installed in accordance with the approved plans and specifications.

2. The operation permit shall include description of facilities served and sewage system components, as-built plans and specifications, legal documents, operation and maintenance manual, monitoring and performance requirements, and other operating conditions deemed appropriate.

WARRANTY: The Septic Contractor shall agree to provide a minimum of one-year regular service to the Owner for maintenance and upkeep of the force mains at no additional cost to the Owner, and such one-year period shall begin from the date of final inspection and acceptance of the system construction by the Owner and the Engineer. Any concerns by the owners' personnel shall be addressed promptly.

If the installation Septic Contractor will not be willing to agree to the above described one-year maintenance period, then any other time period must be acceptable to the Owner and the Engineer.

The current system owner and subsequent owners shall establish an operation and maintenance program and procedure based on experience obtained from similar installations.

The current system owner and subsequent owners shall be responsible to comply with all above operating and maintenance procedures in addition to any so specified on the operation permit issued by the Local County Health Department or may be necessary in the future for the operation of the system to meet all public health laws, rules, and regulation regarding the wastewater system.

Failure to comply with these operating and maintenance procedures will necessitate immediate legal action by the Local County Health Department to suspend or revoke the operation permit.

TECHNICAL BROCHURE
BCP0 R6



FEATURES

Rugged NEMA 4X construction withstands even the most severe weather conditions and prevents corrosion.

Hinged door with lockable stainless steel latch for safe operation indoors and out.

High level alarm circuit with external, on/off, alarm horn silence switch.

Alarm test switch insures proper operation of the alarm circuit without the need to actuate the alarm float.

Inside mounted pump run light.

Top mounted high intensity red light provides 360° visibility.

Corrosion proof alarm horn.

Color coded wiring, screw type terminals, ensure ease of field servicing.

Field wiring diagram, panel schematic and installation instructions included.

Entire unit is UL and CUL listed

Non-modifiable

S10015 1Ø CONTROL PANELS

SIMPLEX / WEATHERPROOF CONTROLLER WITH ALARM

CentriPro
a xylem brand

APPLICATIONS

Simplex liquid level controller, automatically maintains pump operation, includes high level alarm warning for a variety of sump, effluent, sewage and water transfer applications.

SPECIFICATIONS

- Accepts single or dual power feed.
- Hand-off-automatic (H-O-A) pump selection switch.
- Magnetic contactor.
- Numbered terminal strip-screw type.
- NEMA 4X, 30 watt, red alarm light.
- NEMA 4X, fiberglass enclosure with gasketed, hinged door and stainless steel hardware.
- NEMA 4X, alarm horn - 95db.

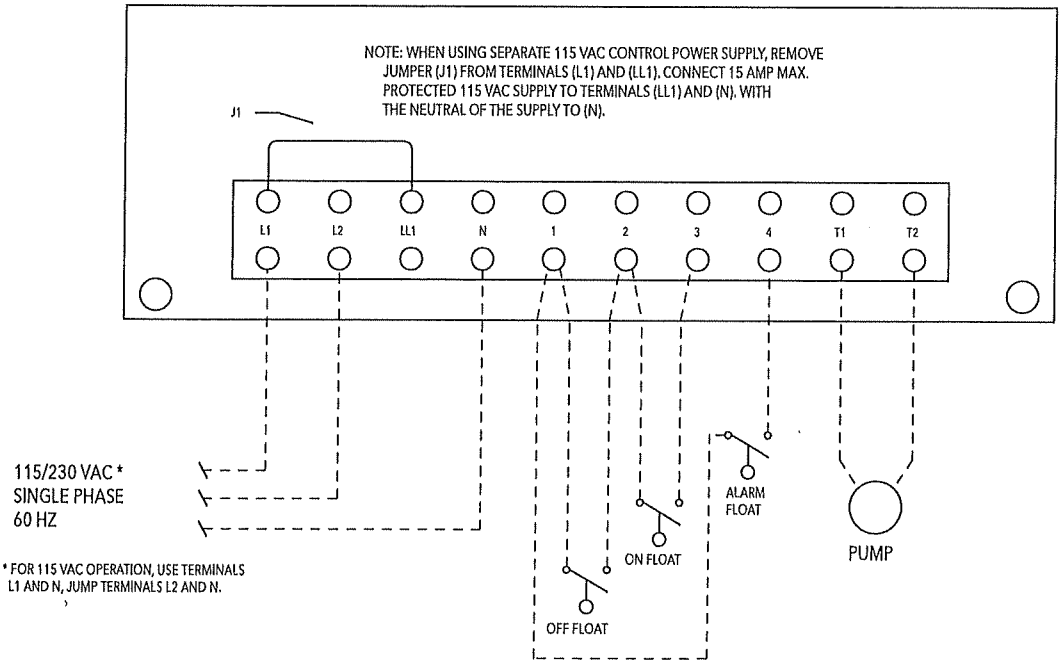
Single Phase

- 115 or 230 volt, 60 Hz.

Order No.	Maximum Running Amps	Float Switches
S10015	20	None, Order Separately (3 required)
S10015WF	20	① Inc. (3) N.O. Narrow Angle Mech. Control Switches

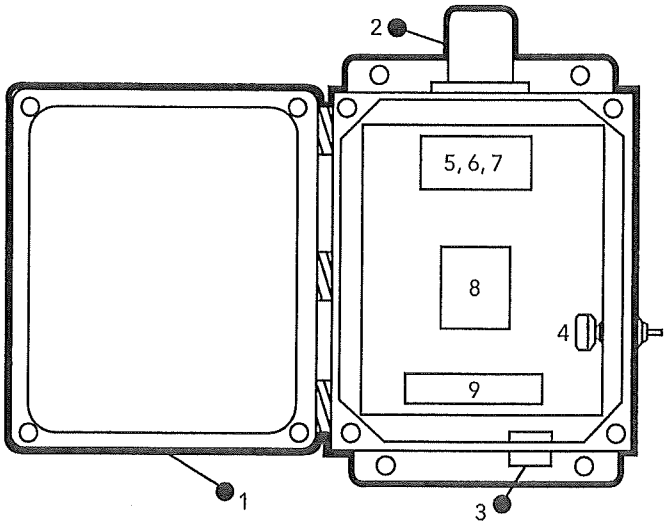
① Includes weights. Replacement switch is order No. A2N33.

TERMINAL STRIP WIRING



COMPONENTS

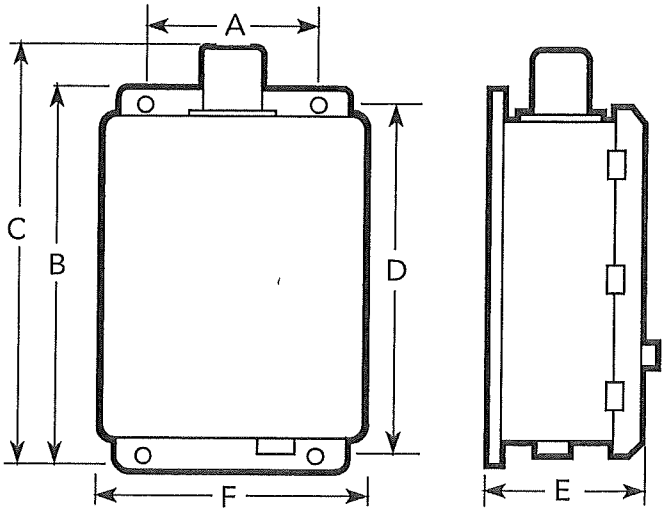
1. NEMA 4X FRP enclosure
2. Alarm light (RB63)
3. Alarm horn (RB50)
4. Horn on-off selector switch
5. H-O-A selector switch
6. Pump run light
7. Alarm test switch
8. Motor contactor
9. Wiring terminal strip



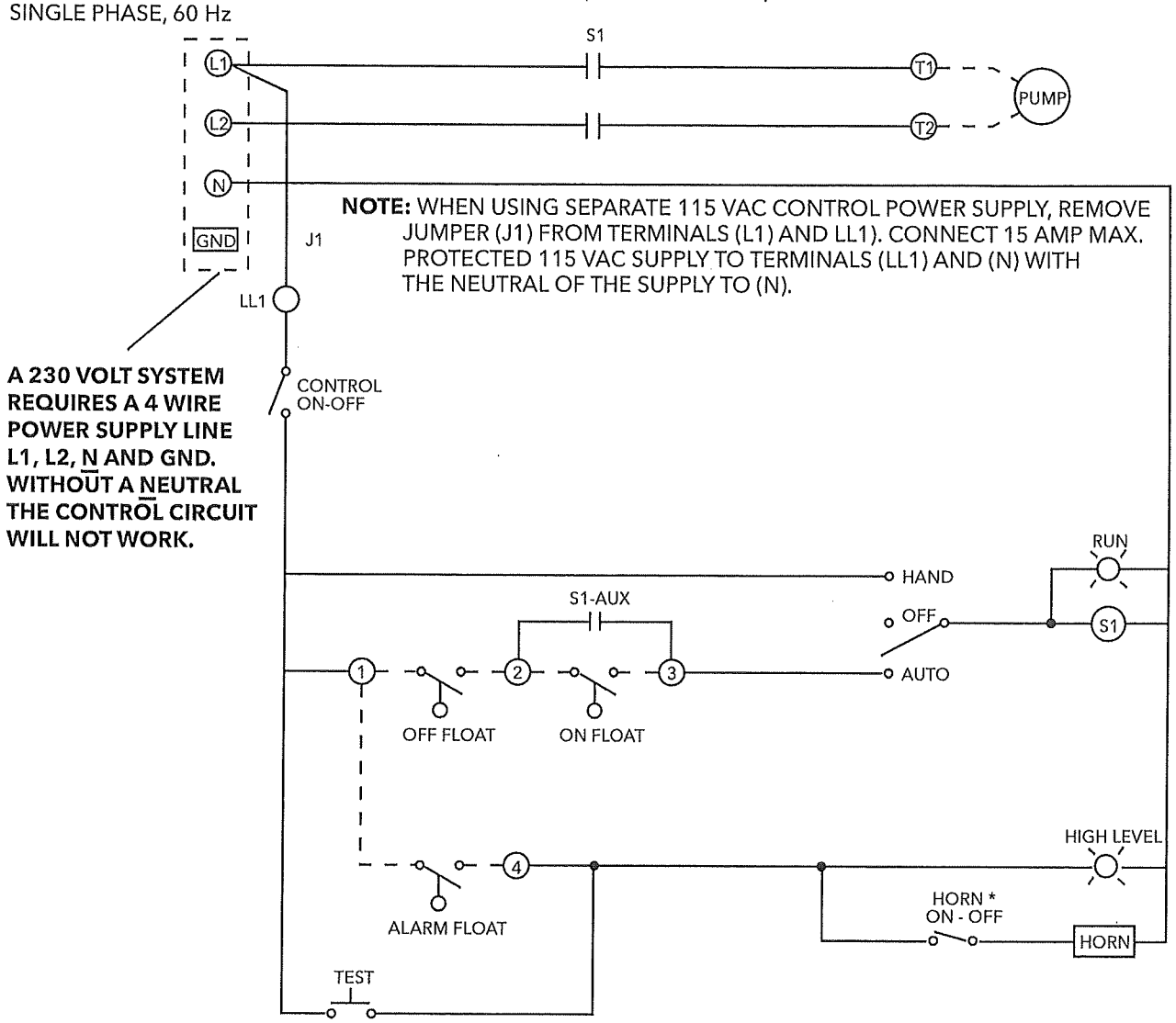
ENCLOSURE DIMENSIONS (in inches)

Single Phase

A	B	C	D	E	F
6	11.5	13.5	11.75	5.63	9.25



115/230 VAC (FOR 115 VAC, USE TERMINALS L1 AND N, JUMP L2 AND N).
SINGLE PHASE, 60 Hz



***NOTE:** THE HORN ON/OFF SELECTOR SWITCH MUST BE PLACED BACK INTO THE (ON) POSITION AFTER THE ALARM CONDITION HAS BEEN CORRECTED IN ORDER TO MAINTAIN THE AUDIO ALARM ANNUNCIATION

xylem
Let's Solve Water

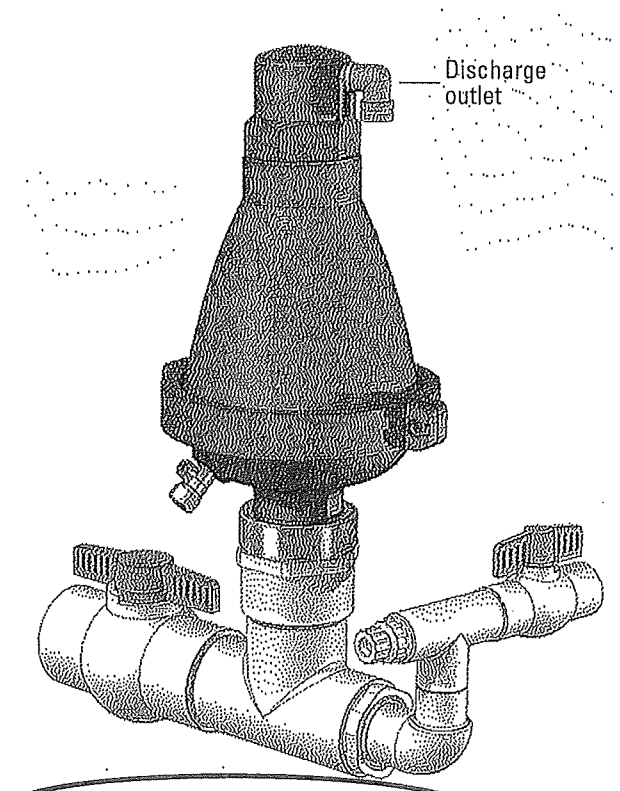
Xylem, Inc.
2881 East Bayard Street Ext., Suite A
Seneca Falls, NY 13148
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www.xyleminc.com/brands/centripro

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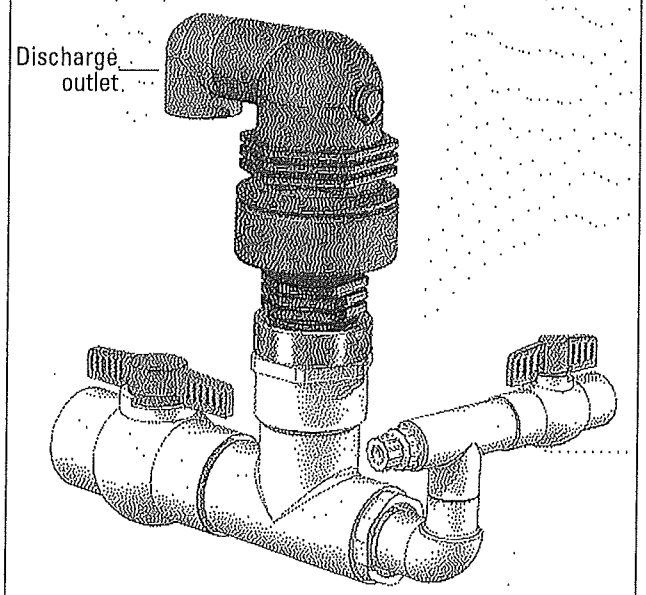
Technical Data Sheet

Air Release Assemblies and Valves

Orenco Systems® Incorporated
800-348-9843



ARA Air Release Assembly with ARV21 Valve



ARA Air Release Assembly with ARV40 Valve

Applications

The Orenco® ARA Air Release Assembly functions as a manual air, gas, and vacuum release at high points in all pressurized effluent collection or transport lines.

The ARV21 and ARV40 Valves are automatic combination air/vacuum release valves with large-orifice valve designs. Both are suitable for use on all pressure lines where the automatic release of air, gases, and vacuum is needed.

In addition, the ARV21 has an air gap at the top of the valve that prevents fluid contact with the sealing mechanism. This makes it ideal for use in applications with continuous high-volume flows, such as pressure sewer mainlines.

General

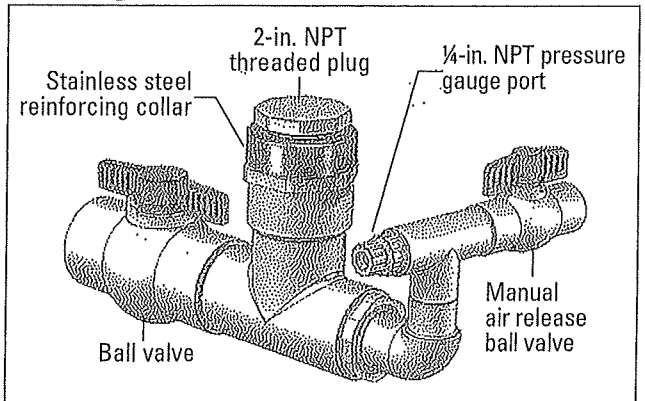
Orenco's ARA Air Release Assembly is designed to provide a high-reliability, low-maintenance manual air release valve assembly that can easily be converted to an automatic air/vacuum release assembly using an ARV21 or ARV40 Valve, without needing to replace piping. This allows greater system flexibility because systems can be designed to use ARA assemblies with manual valves, and more costly automatic valves can be installed later in locations where they are necessary.

To make upgrading to an ARV21 or ARV40 Valve easy, Orenco recommends a minimum diameter of 24 inches (610 mm) and a minimum height of 30 inches (760 mm) for ARA enclosures.

The ARV21 and ARV40 Valves are automatic combination air/vacuum release valves with large orifice valve designs that make pre-filters unnecessary. The large orifice valve design also enhances the reliability of the valves, which reduces the need for maintenance.

Standard Models

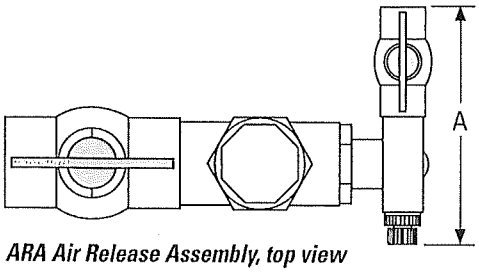
Assembly: ARA
Valves: (ARV21) ARV40,



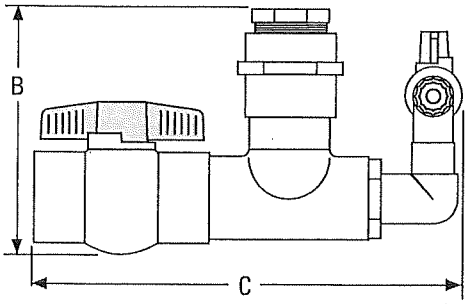
ARA Air Release Assembly with integral manual air release valve

© 2009 Orenco Systems® Inc.

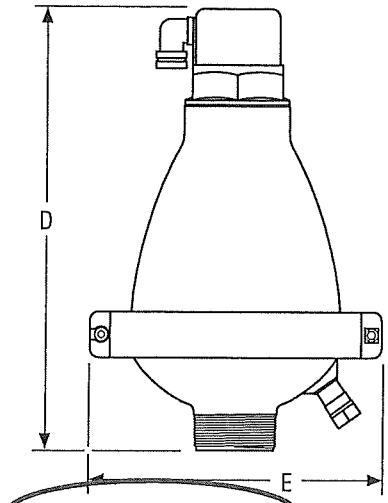
Air Release Assemblies (continued)



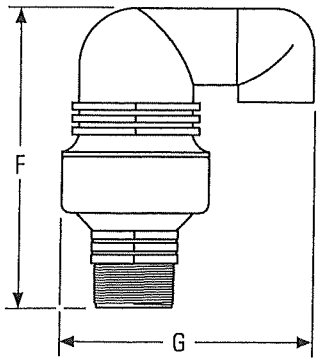
ARA Air Release Assembly, top view



ARA Air Release Assembly, side view



ARV21 Valve, side view



ARV40 Valve, side view

Specifications

ARA Air Release Assembly	
Working pressure	150 psi (10 bar)
Test Pressure	n/a
A	8 in. (200 mm)
B	8 in. (200 mm)
C	14 in. (360 mm)
ARV21 Valve	
Working pressure	3-150 psi (0.2-10 bar)
Test pressure	232 psi (16 bar)
D	12.5 in. (320 mm)
E	8.5 in. (220 mm)
ARV40 Valve	
Working pressure	3-150 psi (0.2-10 bar)
Test pressure	232 psi (16 bar)
F	8.25 in. (210 mm)
G	7 in. (180 mm)

Materials of Construction

ARA Air Release Assembly	
Piping	PVC
Ball valves	Schedule 40 PVC EPDM
Reinforcing collar	Stainless steel
ARV21 Valve	
Body and base	Reinforced nylon
Clamp and hardware	Reinforced nylon Stainless steel
Floats and stem	Foamed polypropylene stainless steel
Stopper	Acetal
O-rings	BUNA-N
Rolling seal	EPDM
Discharge outlet	Polypropylene
ARV40 Valve	
Body and base	Reinforced nylon
Float	Foamed polypropylene
O-ring	BUNA-N
Discharge outlet	Polypropylene
Seal plug assembly:	
Screws	Stainless steel
Plug cover	Reinforced nylon
Rolling seal	EPDM
Plug	Reinforced nylon

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DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH
ON-SITE WASTEWATER SECTION

Sheet __1__ *of* __1__
PROPERTY ID #: 18217 Rockabill Lane; Lot 1; PID#21715146; SFE#2
COUNTY: Mecklenburg

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: Gregory Beaton APPLICATION DATE: _____
ADDRESS: 3304 Sunset Key Circle Punta Gorda, FL 33955 DATE EVALUATED: 11/2022
PROPOSED FACILITY: 5 Bedroom Residence PROPOSED DESIGN FLOW (.1949): 600 GPD PROPERTY SIZE: 0.57 Acres
LOCATION OF SITE: 18217 Rockabill Lane Charlotte, NC 28278 PROPERTY RECORDED: 4/4/2022
WATER SUPPLY: ☐ Private ☐ Public ☒ Well ☐ Spring ☐ Other _____
EVALUATION METHOD: ☒ Auger Boring ☒ Pit ☐ Cut TYPE OF WASTEWATER: ☒ Sewage ☐ Industrial Process ☐ Mixed

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941)		OTHER PROFILE FACTORS				PROFILE CLASS & LTAR
			.1941 STRUCTURE/ TEXTURE	.1941 CONSISTENCE/ MINERALOGY	.1942 SOIL WETNESS / COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	
AB 1	L 19-20 %	0"-6"	Br CL WSBK	SS SP FR SEXP		48"	Few to common saprolite inclusions 25"-48"		0.3
		6"-25"	R C SBK	SS SP FR SEXP					
		25"-48"	R CL WSBK	SS SP FR SEXP					
Pit 1	L 19-20%	0"-33"	R C SBK	SS SP FR SEXP		50"	Few to common saprolite inclusions 33"-50"		0.3
		33"-50"	R CL WSBK	SS SP FR SEXP					
Pit 2	L 19-20%	0"-6"	Br CL WSBK	SS SP FR SEXP		43"	Few to common saprolite inclusions 27"-43"		0.3 Standing water at 43". Old pit.
		6"-27"	R C SBK	SS SP FR SEXP					
		27"-43"	R CL WSBK	SS SP FR SEXP					
Pit 3	L 19-20 %	0"-6"	Br CL WSBK	SS SP FR SEXP		48"	Few to common saprolite inclusions 31"-48"		0.3
		6"-31"	R C SBK	SS SP FR SEXP					
		31"-48"	R CL WSBK	SS SP FR SEXP					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	1500 FT2	1050ft2
System Type(s)	25% Reduction	PPBPS
Site LTAR	0.3	0.3

OTHER FACTORS (.1946): _____
SITE CLASSIFICATION (.1948): _____
EVALUATED BY: Michael Athanas and Associates
OTHER(S) PRESENT: _____

LEGEND

TECHNICAL BROCHURE
B3885



FEATURES

Impeller: Cast iron, semi-open, non-clog with pump-out vanes for mechanical seal protection. Balanced for smooth operation. Silicon bronze impeller available as an option.

Casing: Cast iron volute type for maximum efficiency. 2" NPT discharge.

Mechanical Seal: Silicon Carbide vs. Silicon Carbide sealing faces. Stainless steel metal parts, BUNA-N elastomers.

Shaft: Corrosion-resistant, stainless steel. Threaded design. Locknut on all models to guard against component damage on accidental reverse rotation.

Fasteners: 300 series stainless steel.

Capable of running dry without damage to components.

Designed for continuous operation when fully submerged.

EXTENDED WARRANTY AVAILABLE FOR RESIDENTIAL APPLICATIONS.

WE Series

Model 3885

SUBMERSIBLE EFFLUENT PUMPS

GOULDS WATER TECHNOLOGY

a xylem brand

APPLICATIONS

Specifically designed for the following uses:

- Homes, Farms, Trailer Courts, Motels, Schools, Hospitals, Industry, Effluent Systems

SPECIFICATIONS

Pump

- Solids handling capabilities: ¾" maximum.
- Discharge size: 2" NPT.
- Capacities: up to 140 GPM.
- Total heads: up to 128 feet TDH.
- Temperature: 104°F (40°C) continuous, 140°F (60°C) intermittent.
- See order numbers on reverse side for specific HP, voltage, phase and RPM's available.

MOTORS

- Fully submerged in high-grade turbine oil for lubrication and efficient heat transfer.
- Class B insulation on ⅓ - 1½ HP models.
- Class F insulation on 2 HP models.

Single phase (60 Hz):

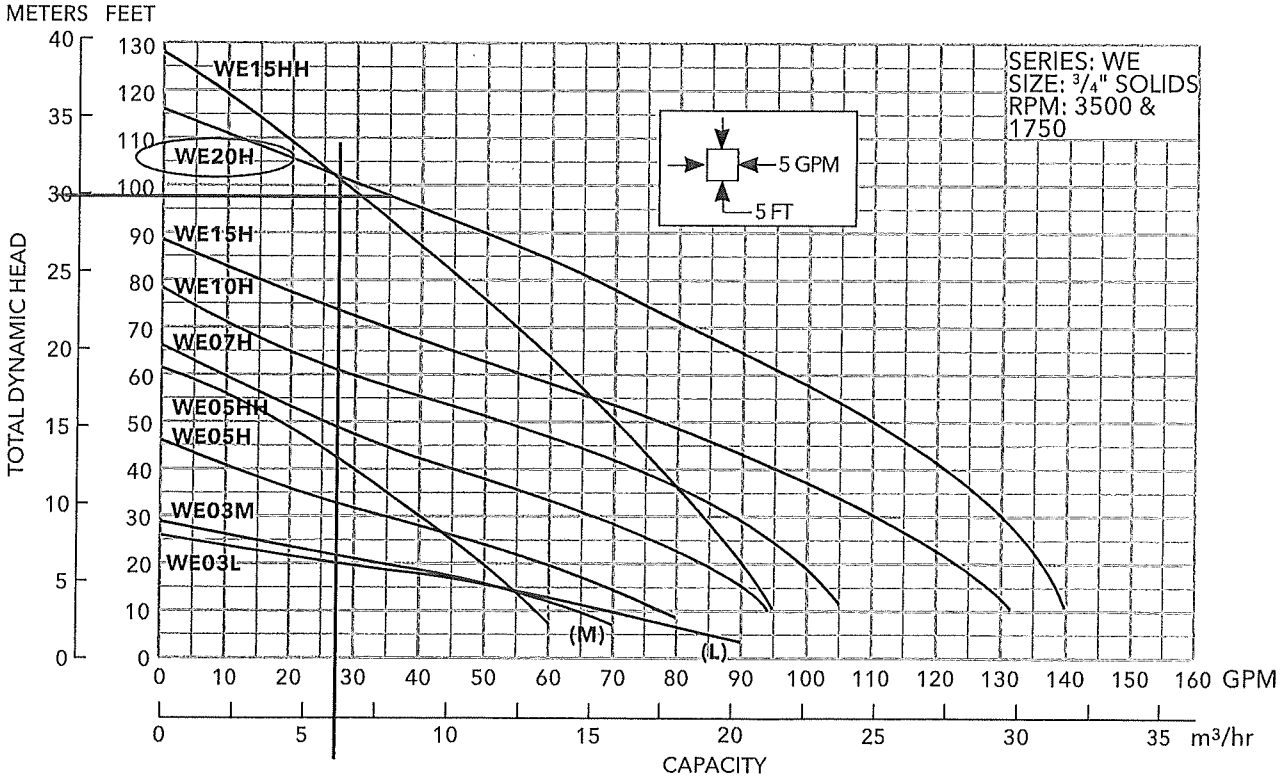
- Capacitor start motors for maximum starting torque.
- Built-in overload with automatic reset.
- SJTOW or STOW severe duty oil and water resistant power cords.
- ⅓ - 1 HP models have NEMA three prong grounding plugs.
- 1½ HP and larger units have bare lead cord ends.

Three phase (60 Hz):

- Class 10 overload protection must be provided in separately ordered starter unit.
- STOW power cords all have bare lead cord ends.
- Designed for Continuous Operation: Pump ratings are within the motor manufacturer's recommended working limits, can be operated continuously without damage when fully submerged.
- Bearings: Upper and lower heavy duty ball bearing construction.
- Power Cable: Severe duty rated, oil and water resistant. Epoxy seal on motor end provides secondary moisture barrier in case of outer jacket damage and to prevent oil wicking. Standard cord is 20'. Optional lengths are available.
- O-ring: Assures positive sealing against contaminants and oil leakage.

AGENCY LISTINGS

Tested to UL 778 and CSA 22.2 108 Standards
By Canadian Standards Association File #LR38549



MODELS

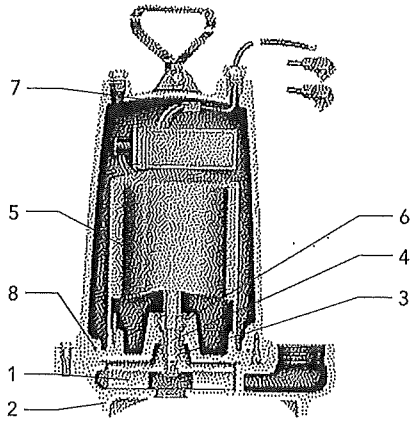
Order Number	HP	Phase	Volts	RPM	Impeller Diameter (in.)	Maximum Amps	Locked Rotor Amps	KVA Code	Full Load Efficiency %	Resistance		Power Cable Size	Weight (lbs.)
										Start	Line-Line		
WE0311L	0.33	1	115	1750	5.38	10.7	30.0	M	54	11.9	1.7	16/3	56
WE0318L			208			6.8	19.5	K	51	9.1	4.2		
WE0312L			230			4.9	14.1	L	53	14.5	8.0		
WE0311M			115			10.7	30.0	M	54	11.9	1.7		
WE0318M			208			6.8	19.5	K	51	9.1	4.2		
WE0312M			230			4.9	14.1	L	53	14.5	8.0		
WE0511H	0.5	1	115	1750	3.56	14.5	46.0	M	54	7.5	1.0	14/3	60
WE0518H			208			8.1	31.0	K	68	9.7	2.4	16/3	60
WE0512H			230			7.3	34.5	M	53	9.6	4.0		
WE0538H		3	200			4.9	22.6	R	68	NA	3.8	14/4	60
WE0532H			230			3.3	18.8	R	70	NA	5.8		
WE0534H			460			1.7	9.4	R	70	NA	23.2		
WE0537H			575			1.4	7.5	R	62	NA	35.3		
WE0511HH		1	115		3.88	14.5	46.0	M	54	7.5	1.0	14/3	60
WE0518HH			208			8.1	31.0	K	68	9.7	2.4	16/3	60
WE0512HH			230			7.3	34.5	M	53	9.6	4.0		
WE0538HH		3	200			4.9	22.6	R	68	NA	3.8	14/4	60
WE0532HH			230			3.6	18.8	R	70	NA	5.8		
WE0534HH			460			1.8	9.4	R	70	NA	23.2		
WE0537HH			575			1.5	7.5	R	62	NA	35.3		
WE0718H	0.75	1	208	3450	4.06	11.0	31.0	K	68	9.7	2.4	14/3	70
WE0712H			230			10.0	27.5	J	65	12.2	2.7		
WE0738H		3	200			6.2	20.6	L	64	NA	5.7	14/4	70
WE0732H			230			5.4	15.7	K	68	NA	8.6		
WE0734H			460			2.7	7.9	K	68	NA	34.2		
WE0737H			575			2.2	9.9	L	78	NA	26.5		
WE1018H	1	1	208		4.44	14.0	59.0	K	68	9.3	1.1	14/3	70
WE1012H			230			12.5	36.2	J	69	10.3	2.1		
WE1038H		3	200			8.1	37.6	M	77	NA	2.7	14/4	70
WE1032H			230			7.0	24.1	L	79	NA	4.1		
WE1034H			460			3.5	12.1	L	79	NA	16.2		
WE1037H			575			2.8	9.9	L	78	NA	26.5		
WE1518H	1.5	1	208		4.56	17.5	59.0	K	68	9.3	1.1	14/3	80
WE1512H			230			15.7	50.0	H	68	11.3	1.6		
WE1538H		3	200			10.6	40.6	K	79	NA	1.9	14/4	80
WE1532H			230			9.2	31.7	K	78	NA	2.9		
WE1534H			460			4.6	15.9	K	78	NA	11.4		
WE1537H			575			3.7	13.1	K	75	NA	16.9		
WE1518HH		1	208		5.50	17.5	59.0	K	68	9.3	1.1	14/3	80
WE1512HH			230			15.7	50.0	H	68	11.3	1.6		
WE1538HH		3	200			10.6	40.6	K	79	NA	1.9	14/4	80
WE1532HH			230			9.2	31.7	K	78	NA	2.9		
WE1534HH			460			4.6	15.9	K	78	NA	11.4		
WE1537HH			575			3.7	13.1	K	75	NA	16.9		
WE2012H	2	1	230			18.0	49.6	F	78	3.2	1.2	14/3	83
WE2038H		3	200			12.0	42.4	K	78	NA	1.7	14/4	83
WE2032H			230		5.38	11.6	42.4	K	78	NA	1.7		
WE2034H			460			5.8	21.2	K	78	NA	6.6		
WE2037H			575			4.7	16.3	L	78	NA	10.5		

PERFORMANCE RATINGS (gallons per minute)

Order No.		WE-03L	WE-03M	WE-05H	WE-07H	WE-10H	WE-15H	WE-05HH	WE-15HH	WE-20H
Total Head Feet of Water	HP	⅓	⅓	½	¾	1	1½	½	1½	2
	RPM	1750	1750	3500	3500	3500	3500	3500	3500	3500
	5	86	-	-	-	-	-	-	-	-
	10	70	63	78	94	-	-	58	95	-
	15	52	52	70	90	103	128	53	93	138
	20	27	35	60	83	98	123	49	90	136
	25	5	15	48	76	94	117	45	87	133
	30	-	-	35	67	88	110	40	83	130
	35	-	-	22	57	82	103	35	80	126
	40	-	-	-	45	74	95	30	77	121
	45	-	-	-	35	64	86	25	74	116
	50	-	-	-	25	53	77	-	70	110
	55	-	-	-	-	40	67	-	66	103
	60	-	-	-	-	30	56	-	63	96
	65	-	-	-	-	20	45	-	58	89
	70	-	-	-	-	-	35	-	55	81
	75	-	-	-	-	-	25	-	51	74
	80	-	-	-	-	-	-	-	47	66
	90	-	-	-	-	-	-	-	37	49
	100	-	-	-	-	-	-	-	28	30

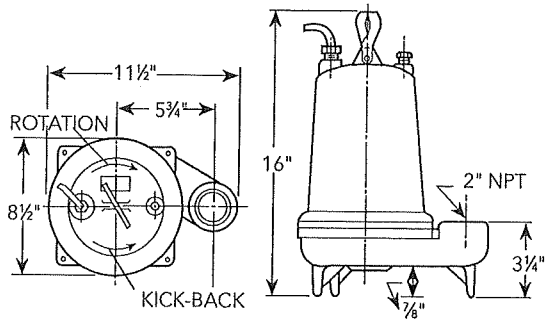
COMPONENTS

Item No.	Description
1	Impeller
2	Casing
3	Mechanical Seal
4	Motor Shaft
5	Motor
6	Ball Bearings
7	Power Cable
8	Casing O-Ring



DIMENSIONS

(All dimensions are in inches. Do not use for construction purposes.)



xylem
Let's Solve Water

Xylem, Inc.
2881 East Bayard Street Ext., Suite A
Seneca Falls, NY 13148
Phone: (866) 325-4210
Fax: (888) 322-5877
www.xyleminc.com/brands/gouldswatertechnology

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SETON
Signs, Labels & Solutions for a Safer Workplace

877.367.7732 seton.com
Fax 800.345.7819 Email submittals@seton.com
P.O. Box 458, Buffalo, NY 14240-0458

PRODUCT DATA SHEET

Detectable Underground Warning Tape

- Underground tapes are 1000 ft rolls or made to spec
- All Underground tapes made to APWA approved colors to meet or exceed industry standards



Description:	5-mil tape with aluminum backing makes it easy to find underground assets using a non-ferrous locator. Wider tapes help locatability at greater depths.
Use:	For non-metallic underground installations such as utility lines, PVC, and non-metal piping. The aluminum core allows detectability through a non-ferrous locator so the deeper the burial the wider the tape should be.
Adhesive Type:	Self-Adhesive
Substrate Type:	2 mil clear film laminated to ½ mil Aluminum Foil Center Core
Compliance:	Complies with APWA colors
Standard Legend Colors:	Black
Standard Background Colors:	Blue, yellow, green, red, orange
Thickness:	.005 inches

Standard Sizes/Dimensions:

Width	Recommended Depth
2"	up to 12" depth
3"	for 12" to 18" depth
6"	up to 24" depth

Date: ____/____/____ Job: _____

Contractor _____

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	NEXP (Non-expansive)	G (Single Grain)
CV (Convex Slope)		LS (Loamy Sand)			SEXP (Slightly Expansive)	M (Massive)
D (Drainage Way)					EXP (Expansive)	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.

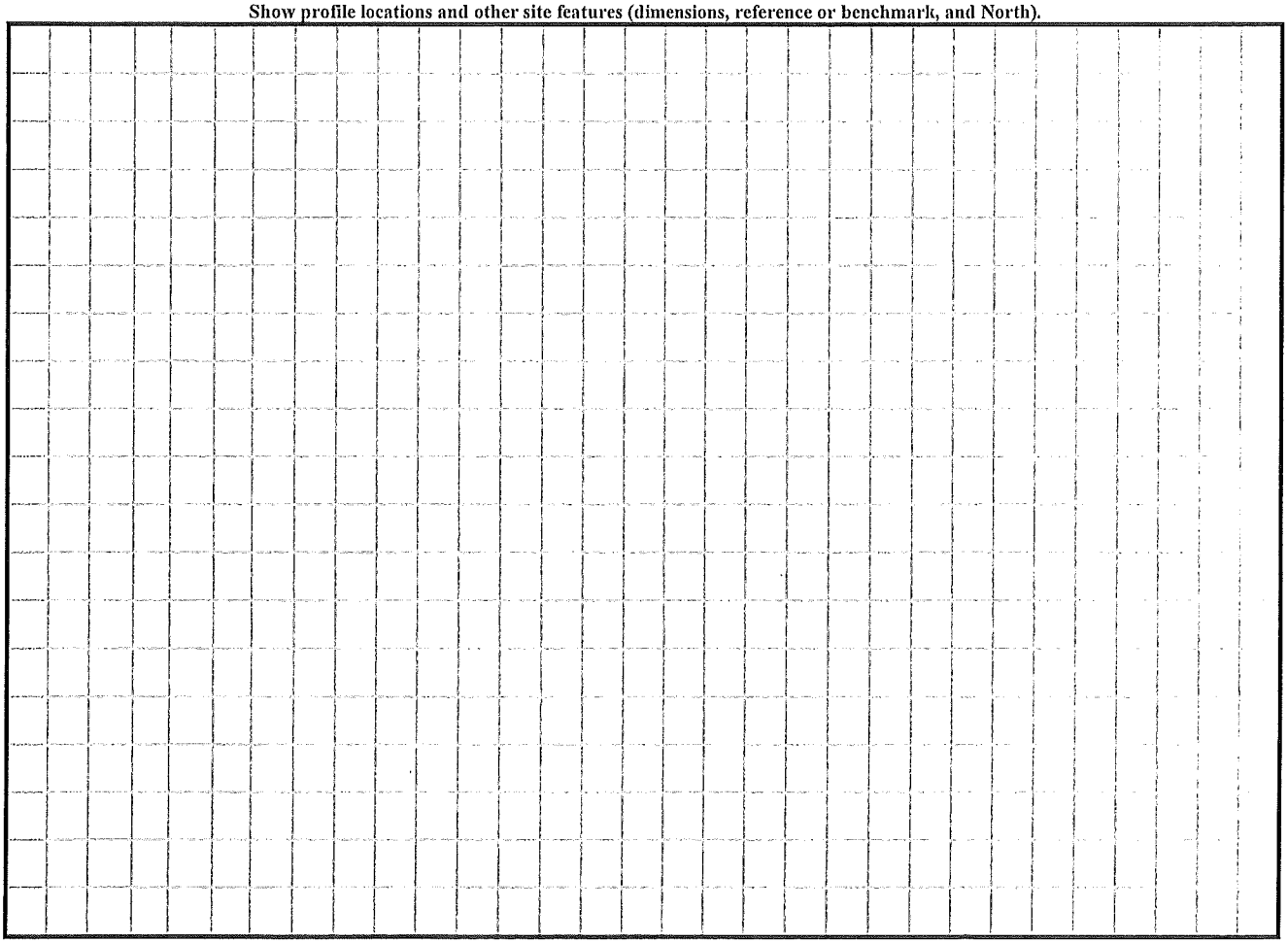
NOTES

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).



DENR (#######)

Review (#####)

FEE: 200.00

DATE: 2/14/2023

CONSTRUCTION AUTHORIZATION FOR AN ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

MECKLENBURG COUNTY
GROUNDWATER & WASTEWATER SERVICES

FILE NUMBER: 8809B

PERMIT NUMBER: 30013536

PARCEL NUMBER: 21715146

JOB LOCATION INFORMATION

ADDRESS: 18217 ROCKABILL LN

CITY: CHARLOTTE **STATE: NC** **ZIP:** 28278

ISSUED TO: GREGORY THOMAS BEATON

CONSTRUCTION AUTHORIZATION ISSUANCE DATE: 2/14/2023

CONSTRUCTION AUTHORIZATION CONDITIONS

1. WASTEWATER SYSTEM CONSTRUCTION AND INSTALLATION MUST MEET ALL CONDITIONS AND SPECIFICATIONS AS SET FORTH IN IMPROVEMENT PERMIT NUMBER 30013536, AND THE ATTACHED SITE PLAN WITH SYSTEM DETAILS. CONSTRUCTION AND INSTALLATION MUST ALSO MEET ALL REQUIREMENTS SET FORTH IN THE RULES GOVERNING SANITARY SEWAGE COLLECTION, TREATMENT, AND DISPOSAL AND ANY OTHER APPLICABLE RULES AND LAWS.

2. A PRE-CONSTRUCTION MEETING MUST BE SECURED PRIOR TO INSTALLATION OF THE SEPTIC TANK SYSTEM. THE INSTALLER OF THE SYSTEM SHALL BE A LICENSED SEPTIC TANK CONTRACTOR WITH THE NORTH CAROLINA ONSITE WASTEWATER CONTRACTOR INSPECTOR CERTIFICATION BOARD.

3. ANY ALTERATION IN SITE OR SOIL CONDITIONS (INCLUDING LOCATION OF STRUCTURES AND APPURTENANCES) OR MODIFICATION IN USE, DESIGN WASTEWATER FLOW, OR WASTEWATER CHARACTERISTICS AS SPECIFIED IN THE ASSOCIATED IMPROVEMENT PERMIT AND APPLICATION, MAY SUBJECT THIS CONSTRUCTION AUTHORIZATION AND ASSOCIATED PERMIT(S) TO REVOCATION.

4. THIS CONSTRUCTION AUTHORIZATION AS PROVIDED IN G.S. 130A-335(f) AND G.S. 130A-336(b) SHALL BE VALID FOR A PERIOD EQUAL TO THE VALIDITY OF THE IMPROVEMENT PERMIT, AND MAY BE ISSUED AT THE SAME TIME THE IMPROVEMENT PERMIT IS ISSUED.

Authorized Agent Signature April Burngame

For Registration
Fredrick Smith
Register of Deeds
Mecklenburg County, NC
Electronically Recorded
2022 Apr 26 11:23 AM RE Excise Tax: $ 550.00
Book: 37283 Page: 342 - 343 Fee: $ 26.00
Instrument Number: 2022063598

Fredrick Smith

Excise Tax $550.00	Recording Time, Book and Page

Tax Lot No. OUT OF 21715165 & 21715166 Parcel Identifier

Verified by Mecklenburg County on the day of , 20

by

Mail after recording to Grantee Mailing Address

This instrument was prepared by McMillan, Psaroudis & Markey, P.A. (wtw)

Brief description for the Index Lot 1B in PB 70/485

NORTH CAROLINA GENERAL WARRANTY DEED

THIS DEED made this 25th day of April, 2022 by and between

GRANTOR	GRANTEE
Warlick & Hoyle Investment Properties, LLC a North Carolina limited liability company	**Patrick J. Staub** and wife, **Beatriz C. Staub**
Forwarding Address: P.O. Box 708 Dallas, NC 28034	*Mailing Address:* 16946 Ashton Oaks Drive Charlotte, NC 28278

Enter in appropriate block for each party: name, address, and, if appropriate, character of entity, e.g., corporation or partnership.

The designation Grantor and Grantee as used herein shall include said parties, their heirs, successors, and assigns, and shall include singular, plural, masculine, feminine or neuter as required by context.

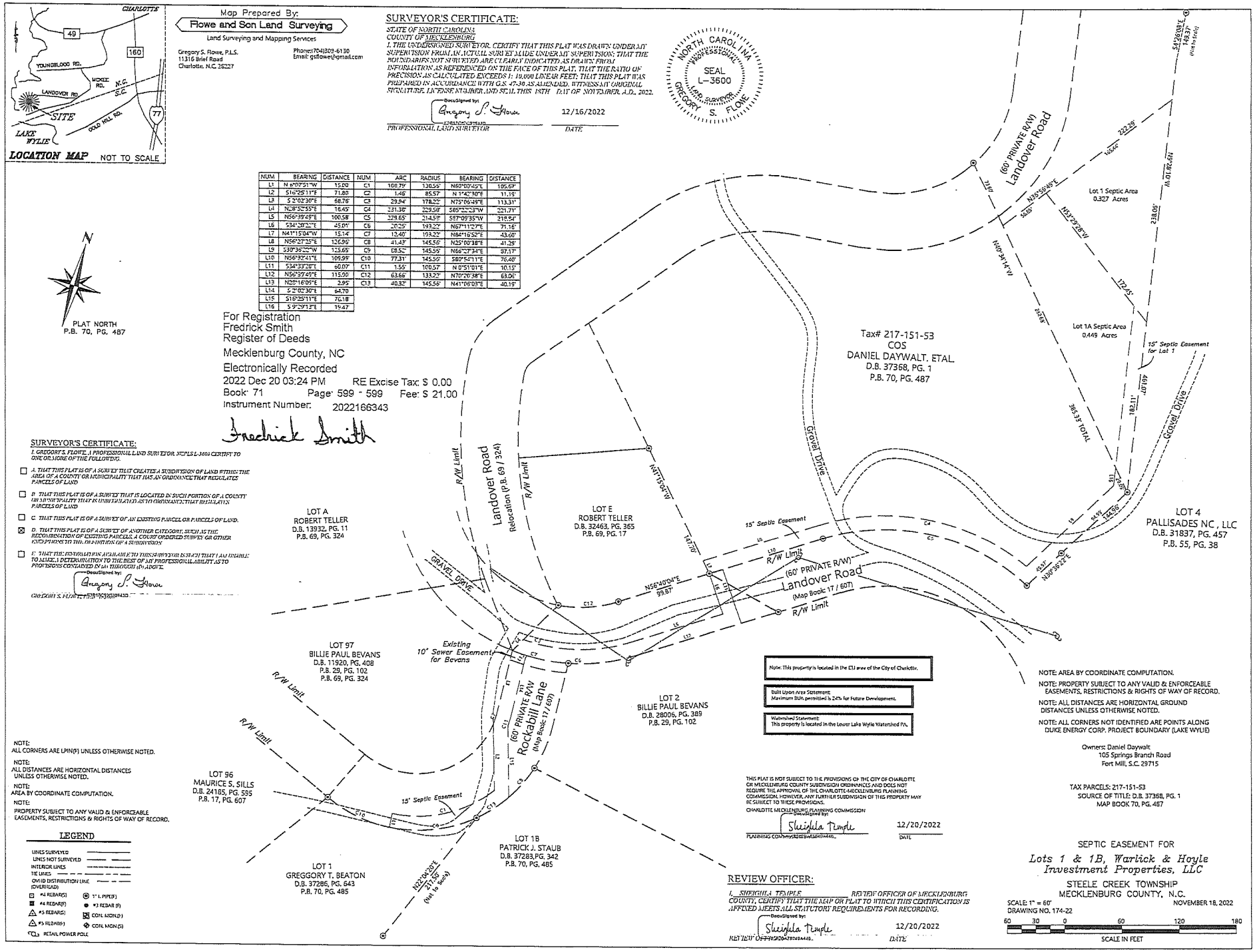
WITNESSETH, that the Grantor, for a valuable consideration paid by the Grantee, the receipt of which is hereby acknowledged, has and by these presents does grant, bargain, sell and convey unto the Grantee in fee simple, all that certain lot or parcel of land situated in the City of Charlotte, County of Mecklenburg, North Carolina and more particularly described as follows:

Being all of Lot 1B as shown on that plat entitled "Recombination Plat Lots 1, 1A & 1B" recorded in Plat Book 70 at Page 485 in the Office of the Register of Deeds for Mecklenburg County.

All or a portion of the property herein conveyed ___ includes or _X_ does not include the primary residence of the Grantor(s).

Submitted electronically by "McMillan Psaroudis & Markey, PA"
in compliance with North Carolina statutes governing recordable documents
and the terms of the submitter agreement with the Mecklenburg County Register of Deeds.

DocuSign Envelope ID: 6695258E-A192-4FCC-82BE-1A9CDD2B5DED



NUM	BEARING	DISTANCE	NUM	ARC	RADIUS	BEARING	DISTANCE
L1	N 6°07'51"W	15.00'	C1	108.79'	130.59'	N60°00'45"E	105.67'
L2	S16°25'11"E	71.80'	C2	1.46'	85.57'	N 1°42'30"E	11.19'
L3	S 2°02'30"E	68.76'	C3	29.94'	178.22'	N75°06'49"E	113.31'
L4	N28°52'55"E	16.45'	C4	231.36'	209.50'	S85°22'23"W	221.71'
L5	N56°39'49"E	100.58'	C5	328.65'	214.58'	S87°09'35"W	298.84'
L6	S34°20'22"E	45.01'	C6	26.26'	193.22'	N67°11'57"E	71.16'
L7	N41°15'04"W	15.14'	C7	13.40'	193.22'	N84°15'53"E	43.60'
L8	N56°27'35"E	126.90'	C8	41.43'	145.56'	N25°00'38"E	41.28'
L9	S30°36'22"W	125.65'	C9	68.52'	145.56'	N66°27'34"E	97.17'
L10	N56°32'41"E	109.95'	C10	77.31'	145.56'	S80°54'11"E	76.40'
L11	S34°33'20"E	60.07'	C11	1.55'	100.57'	N 0°51'01"E	10.15'
L12	N56°39'49"E	115.00'	C12	63.66'	133.23'	N70°20'38"E	63.06'
L13	N28°16'09"E	2.95'	C13	40.32'	145.56'	N41°06'03"E	40.19'
L14	S 2°02'30"E	64.70'					
L15	S16°25'11"E	70.18'					
L16	S 9°29'13"E	19.47'					

Submitted electronically by "Tony C Johnson, Attorney at Law" in compliance with North Carolina statutes governing recordable documents and the terms of the submitter agreement with the Mecklenburg County Register of Deeds.

The property hereinabove described was acquired by Grantor by instrument recorded in BOOK 28844, PAGE 745.

A map showing the above described property is recorded in Plat Book 70 at Page 487.

TO HAVE AND TO HOLD the aforesaid lot or parcel of land and all privileges and appurtenances thereto belonging to the Grantee in fee simple.

And the Grantor covenants with the Grantee, that Grantor is seized of the premises in fee simple, has the right to convey the same in fee simple, that title is marketable and free and clear of all encumbrances, and that Grantor will warrant and defend the title against the lawful claims of all persons whomsoever except for the exceptions hereinafter stated.
Title to the property hereinabove described is subject to the following exceptions:

All such valid and enforceable easements, restrictions and rights of way of record and the lien of ad valorem taxes for the current year which the grantee herein assumes and agrees to pay.

IN WITNESS WHEREOF, the Grantor has hereunto set his hand and seal, or if corporate, has caused this instrument to be signed in its corporate name by its duly authorized officers and its seal to be hereunto affixed by authority of its Board of Directors, the day and year first above written.

Warlick & Hoyle Investment Properties, LLC
a North Carolina limited liability company

David W. Hoyle, Jr., Manager

STATE OF NORTH CAROLINA

COUNTY OF MECKLENBURG

I, William T. Wallace, a Notary Public for the County and State aforesaid, do hereby certify that David W. Hoyle, Jr., either being personally known to me or proven by satisfactory evidence, who is the Manager of Warlick & Hoyle Investment Properties, LLC, a North Carolina limited liability company, personally appeared before me this day and acknowledged that he is Manager of Warlick & Hoyle Investment Properties, LLC and that as Manager being duly authorized to do so, voluntarily executed the foregoing instrument on behalf of said company for the purposes stated therein.

Witness my hand and official seal, this 25th day of April, 2022

Notary Public

My Commission Expires: 05/30/2022

William T. Wallace
Notary Public
Mecklenburg County
North Carolina
My Commission Expires 05/30/2022

The property hereinabove described was acquired by Grantor by instrument recorded in BOOK 28844, PAGE 745.

A map showing the above described property is recorded in Plat Book 70 at Page 485.

TO HAVE AND TO HOLD the aforesaid lot or parcel of land and all privileges and appurtenances thereto belonging to the Grantee in fee simple.

And the Grantor covenants with the Grantee, that Grantor is seized of the premises in fee simple, has the right to convey the same in fee simple, that title is marketable and free and clear of all encumbrances, and that Grantor will warrant and defend the title against the lawful claims of all persons whomsoever except for the exceptions hereinafter stated.
Title to the property hereinabove described is subject to the following exceptions:

All such valid and enforceable easements, restrictions and rights of way of record and the lien of ad valorem taxes for the current year which the grantee herein assumes and agrees to pay.

IN WITNESS WHEREOF, the Grantor has hereunto set his hand and seal, or if corporate, has caused this instrument to be signed in its corporate name by its duly authorized officers and its seal to be hereunto affixed by authority of its Board of Directors, the day and year first above written.

Warlick & Hoyle Investment Properties, LLC
a North Carolina limited liability company

David W. Hoyle, Jr., Manager

STATE OF NORTH CAROLINA

COUNTY OF MECKLENBURG

I, William T. Wallace, a Notary Public for the County and State aforesaid, do hereby certify that David W. Hoyle, Jr., either being personally known to me or proven by satisfactory evidence, who is the Manager of Warlick & Hoyle Investment Properties, LLC, a North Carolina limited liability company, personally appeared before me this day and acknowledged that he is Manager of Warlick & Hoyle Investment Properties, LLC and that as Manager being duly authorized to do so, voluntarily executed the foregoing instrument on behalf of said company for the purposes stated therein.

Witness my hand and official seal, this 25th day of April, 2022

Notary Public

William T. Wallace
Notary Public
Mecklenburg County
North Carolina
My Commission Expires 05/30/2022

My Commission Expires: 05/30/2022

the other Party's rights to use the easement area for the purposes granted herein.

These exclusive easements hereby reserved, and all agreements and terms set forth herein, shall run with the land and shall be binding upon all subsequent owners of the property over which the above-described easements extend. This easement may only be terminated by means of a signed, written document of record by and between all of the Parties herein, their successors and assigns, as the case may be.

SIGNATURE PAGES TO FOLLOW

GRANTEE:

_____ (Seal) Date: 11-30-22
Gregory Thomas Beaton

_____ (Seal) Date: 11/30/2022
Maureen Anne Beaton

STATE OF North Carolina

COUNTY OF Mecklenburg

I, William T. Wallace, a Notary Public for Mecklenburg County and the aforesaid State, do hereby certify that Gregory Thomas Beaton and Maureen Anne Beaton, either being personally known to me or proven by satisfactory evidence, personally appeared before me this day and acknowledged that he voluntarily executed the foregoing instrument for the purposes stated therein.

Witness my hand and official seal, this 30 day of November, 2022.

_____
Notary Public

My Commission Expires: 05/30/2027

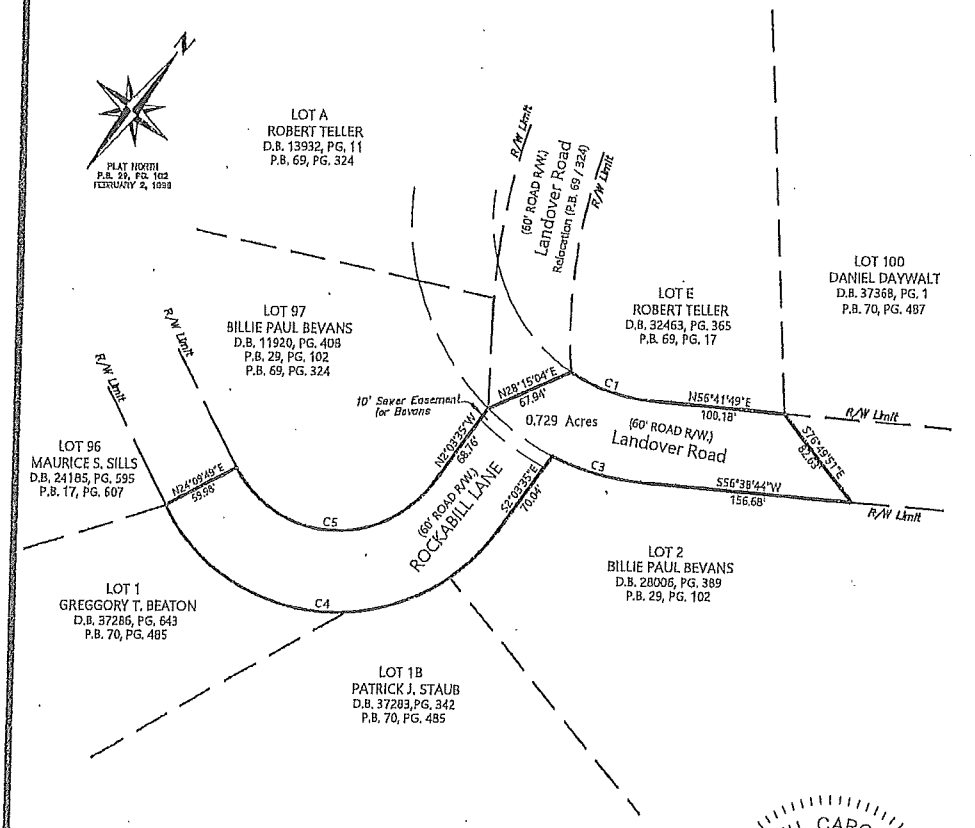
William T. Wallace
NOTARY PUBLIC
Union County
North Carolina
My Commission Expires 05/30/2027

EXHIBIT B TO EASEMENT

This map may not be a certified survey and has not been reviewed by a local government agency for compliance with any applicable land development regulations and has not been reviewed for compliance with recording requirements for plats.

Surveyed By: Flowe & Son Land Surveying;
11316 Brief Road
Charlotte, N.C.
28227
(704) 309-6130
Email: gsflowe@gmail.com

NUM	ARC	RADIUS	BEARING	DISTANCE
C1	64.28'	133.22'	N70°34'53"E	63.66'
C3	71.57'	193.22'	N67°10'22"E	71.16'
C4	295.36'	145.56'	N56°04'29"E	247.24'
C5	173.68'	85.57'	N56°05'11"E	145.37'
C6	108.96'	193.22'	S68°11'33"E	107.52'



NOTE:
ALL CORNERS ARE I.PIN(F) UNLESS OTHERWISE NOTED.

NOTE:
ALL DISTANCES ARE HORIZONTAL DISTANCES UNLESS OTHERWISE NOTED.

NOTE:
AREA BY COORDINATE COMPUTATION.

NOTE:
PROPERTY SUBJECT TO ANY VALID & ENFORCEABLE EASEMENTS, RESTRICTIONS & RIGHTS OF WAY OF RECORD.

SUBJECT PROPERTY IS NOT LOCATED IN A SPECIAL FLOOD HAZARD AREA AS DETERMINED BY FLOOD INSURANCE RATE MAP.

NOTE:
THIS PLAT IS OF A SHOWING OF AN EXISTING PARCEL or PARCELS OF LAND.

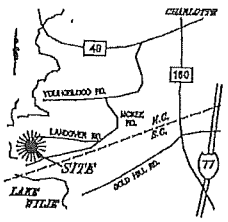
NORTH CAROLINA PROFESSIONAL SEAL L-3600 LAND SURVEYOR GREGORY S. FLOWE

10/31/22

Tax Parcel:

E.C. = 1' : 10,000' +
Map Book: 17 / 607

Location Map
(Not To Scale)



Plat of Right of Way
For

Legacy PB Company, LLC

Steele Creek Township
Mecklenburg County, N.C.

Drawing No. 174-22

Scale: 1" = 100'

October 31, 2022

TO HAVE AND TO HOLD the aforesaid lot or parcel of land and all privileges and appurtenances thereto belonging to the Grantee in fee simple.

The Grantor makes no warranty, express or implied, as to title to the property hereinabove described.

Title to the property hereinabove described is subject to the following exceptions:

All such valid and enforceable easements, restrictions and rights of way of record and the lien of ad valorem taxes for the current year which the grantee herein assumes and agrees to pay.

Grantee acknowledges that the Property conveyed by this deed lies within the right-of-way of Rockabill Lane and Landover Road as depicted on Plat recorded in Map Book 17, Page 468 in the Office of the Mecklenburg County Register of Deeds, and that this conveyance is made subject to those right-of-ways and to the rights of others in those right-of-ways.

All terms as set forth in this deed are hereby agreed and accepted by the Grantee.

IN WITNESS WHEREOF, the Grantee has hereunto set his hand and seal, or if corporate, has caused this instrument to be signed in its corporate name by its duly authorized officers and its seal to be hereunto affixed by authority of its Board of Directors, the day and year first above written.

Patrick J. Staub

Beatriz C. Staub

STATE OF NORTH CAROLINA

COUNTY OF MECKLENBURG

I, William T. Wallace, a Notary Public for the County of Union and State of North Carolina, certify that Patrick J. Staub and Beatriz C. Staub either personally known to me or by satisfactory evidence, personally appeared before me this day and acknowledged the execution of the foregoing instrument.

Witness my hand and official seal, this 8th day of November, 2022.

Notary Public

My Commission Expires: 05/30/2027

William T. Wallace
NOTARY PUBLIC
Union County
North Carolina
My Commission Expires 05/30/2027

EXHIBIT A

LEGAL DESCRIPTION OF THE PROPERTY

Being all that section of the Rockabill and Landover right-of-way as shown on that survey entitled "Plat of Right of Way for Legacy PB Company, LLC" performed by Gregory S. Flowe, NCPLS L-3600, dated October 31, 2022 and attached hereto as **Exhibit B**, and being more particularly described as:

Beginning at a point at the intersection of Landover Road & Rockabill Lane and being a common corner of Lot 97 as shown on Plat Book: 29 / 102 and as also shown on Plat Book: 69 / 324 showing the relocation of Landover Road, thence crossing the R/W of Landover Road with N 28-15-04 E - 67.94' to intersection of northern line of the beginning of the relocated Landover Road & the existing R/W of Landover Road; thence turning in a easterly direction with a curve to the left having a chord bearing of N 70-34-53 E and distance of 63.66' having a chord distance of 64.28' and a radius of 133.22' to a point in the line of Lot E as shown on Plat Book: 69 / 17 and then continuing with the line of Lot E N 56-41-49 E - 100.18' to the common corner of Lot E as mentioned and Lot 100 as shown on Plat Book: 70 / 487 and also being point on the northern edge of the 60' R/W of Landover Road; thence turning and crossing said R/W S 76-49-51 E - 82.63' to the southern edge of R/W of Landover Road in the common line of Billie Paul Bevans (D.B. 28006 / 102 & Plat Book: 29 / 102) thence with the R/W line of Landover Road S 56-38-44 W - 156.68' to a point; thence continuing with a curve to the right having a chord bearing of S 67-10-22 W and distance of 71.16' and having an arc length of 71.57' and a radius of 193.22' to the intersection of the R/W of Landover Road and Rockabill Lane as shown on Plat Book: 17 / 607; thence turning with R/W of Rockabill Lane S 02-03-35 E - 70.04' to a point; thence with a curve to the right having a chord bearing of S 56-04-29 W and a distance of 247.24' and having an arc length of 295.36' and a radius of 145.56' to the common corner of Lot 96 of Plat Book: 17 / 607; thence crossing the right of way of Rockabill Lane N 24-09-49 E – 59.98' to a point in the line of Billie Paul Bivens property (Lot 97 Plat Book: 17 / 607) & the R/W line of Rockabill Lane; thence with a curve to the left having a chord bearing of N 56-05-11 E and a distance of 145.37' and having an arc length of 173.68' and a radius of 85.57' to a point; thence N 02-03-35 W - 68.76' to the point and place of beginning. Containing 0.729 Acres and being a portion of the Right of Ways of Landover Road and Rockabill Lane as shown on Plat Book: 17 / 607 and owned by Legacy PB Company, LLC.

For Registration
Fredrick Smith
Register of Deeds
Mecklenburg County, NC
Electronically Recorded
2022 May 25 09:29 AM RE Excise Tax: $ 0.00
Book: 37367 Page: 409 - 410 Fee: $ 26.00
Instrument Number: 2022079225

Fredrick Smith

Excise Tax $0.00	Recording Time, Book and Page

Tax Lot No. OUT OF 21715167; 68 Parcel Identifier

Verified by Mecklenburg County on the day , 20

by

Mail after recording to Grantee Mailing Address

This instrument was prepared by McMillan, Psaroudis & Markey, P.A. (wtw) Title Ins: Morehead Title

Brief description for the Index Lots 101A, PB 70/487

NORTH CAROLINA GENERAL WARRANTY DEED

THIS DEED made this 25th day of April, 2022 by and between

GRANTOR	GRANTEE
Warlick & Hoyle Investment Properties, LLC a North Carolina limited liability company	**Michael Morgan**, a married man
Forwarding Address: P.O. Box 708 Dallas, NC 28034	*Mailing Address:* 4209 Stuart Andrew Blvd., Suite G Charlotte 28217

Enter in appropriate block for each party: name, address, and, if appropriate, character of entity, e.g., corporation or partnership.

The designation Grantor and Grantee as used herein shall include said parties, their heirs, successors, and assigns, and shall include singular, plural, masculine, feminine or neuter as required by context.

WITNESSETH, that the Grantor, for a valuable consideration paid by the Grantee, the receipt of which is hereby acknowledged, has and by these presents does grant, bargain, sell and convey unto the Grantee in fee simple, all that certain lot or parcel of land situated in the City of Charlotte, County of Mecklenburg, North Carolina and more particularly described as follows:

Being all of Lot 101A as shown on that plat entitled "Recombination Plat Lots 100A & 100B, 101A, 101B & 101C" recorded in Plat Book 70 at Page 487 in the Office of the Register of Deeds for Mecklenburg County.

All or a portion of the property herein conveyed ___ includes or _X__ does not include the primary residence of the Grantor(s).

Submitted electronically by "McMillan Psaroudis & Markey, PA"
in compliance with North Carolina statutes governing recordable documents
and the terms of the submitter agreement with the Mecklenburg County Register of Deeds.

For Registration
Fredrick Smith
Register of Deeds
Mecklenburg County, NC
Electronically Recorded
2022 May 25 11:05 AM RE Excise Tax: $ 0.00
Book: 37368 Page: 1 - 11 Fee: $ 26.00
Instrument Number: 2022079305

Fredrick Smith

Excise Tax $0.00	Recording Time, Book and Page

Tax Lot No. 217-151-53 Parcel Identifier

Verified by Mecklenburg County on the day , 20

by

Mail after recording to Grantee Mailing Address

This instrument was prepared by McMillan, Psaroudis & Markey, P.A. (wtw) Title Ins: Morehead Title

Brief description for the Index Common Open Space, Plat Book 70/487

NORTH CAROLINA GENERAL WARRANTY DEED

THIS DEED made this 12th day of May, 2022 by and between

GRANTOR	GRANTEE
Warlick & Hoyle Investment Properties, LLC a North Carolina limited liability company *Forwarding Address:* P.O. Box 708 Dallas, NC 28034	**Daniel Daywalt**, a married man and **Brian Thomas Feck** and wife, **Carolyn Dale Feck** and **Gerard Szatkowski** and wife. **Alice Szatkowski** **as tenants in common** *Mailing Address:* 105 Spring Branch Road Fort Mill, SC 29715

Enter in appropriate block for each party: name, address, and, if appropriate, character of entity, e.g., corporation or partnership.

The designation Grantor and Grantee as used herein shall include said parties, their heirs, successors, and assigns, and shall include singular, plural, masculine, feminine or neuter as required by context.

WITNESSETH, that the Grantor, for a valuable consideration paid by the Grantee, the receipt of which is hereby acknowledged, has and by these presents does grant, bargain, sell and convey unto the Grantee in fee simple, all that certain lot or parcel of land situated in the City of Charlotte, County of Mecklenburg, North Carolina and more particularly described as follows:

Being all of that tract shown as Common Open Space on that plat entitled "Recombination Plat Lots 100A & 100B, 101A, 101B & 101C" recorded in Plat Book 70 at Page 487 in the Office of the Register of Deeds for Mecklenburg County, said tract being 4.8672 acres, more or less ("Property").

This conveyance is delivered subject to the restrictions, terms and conditions as set forth in the Deed Restrictions ("Restrictions") attached hereto as Exhibit A. In the event of a breach of the terms of the Restrictions, this Property shall no longer be owned in fee simple by the Grantee, but shall automatically be encumbered by the ownership rights of those parties set forth in the Restrictions as Recipients, and in such event, the Grantee shall be prohibited from selling, transferring or mortgaging the Property without a recorded release of the Restrictions from all Recipients, or until the appropriate subdivided parcels, as defined in the Restrictions, are conveyed to the Recipients of the Restrictions.

The property hereinabove described was acquired by Grantor by instrument recorded in BOOK 28844, PAGE 745.

All or a portion of the property herein conveyed ___ includes or _X__ does not include the primary residence of the Grantor(s).

Submitted electronically by "McMillan Psaroudis & Markey, PA"
in compliance with North Carolina statutes governing recordable documents
and the terms of the submitter agreement with the Mecklenburg County Register of Deeds.

EXHIBIT A

DEED RESTRICTIONS FOR COMMON OPEN SPACE AT LANDOVER ROAD

All capitalized terms not defined herein shall have the same meaning as set forth in the Deed to which these Restrictions are attached.

At the time of this conveyance, it is the understanding and intention of the Grantor, Grantee, and the Recipients as later defined herein, that at a future date, the Property will be approved for subdivision by the applicable governing authority, and that upon the occurrence of such subdivision, the Grantee shall convey the subdivided lots of the Property to the applicable Recipients.

In the event the Grantee fails to convey the subdivided lots as required by these Restrictions, the Recipients shall be afforded the right to enforce these Restrictions, obligating the Grantee to the transfer of the subdivided lots to the applicable Recipients, and pursue any such action as available at law, including but not limited to a quiet title action. Any attorney fees incurred by the Recipients in pursuit of their enforcement of these Restrictions shall be the responsibility of the Grantee if in fact the Recipients are the prevailing party to any such legal action.

The Grantee acknowledges and agrees that the Recipients are entitled to receive the subdivided lots, by way of general warranty deed, in fee simple, marketable title, and that such shall be conveyed upon no later than five (5) business days after the completion of the subdivision, with completion of the subdivision to be the approval of and recording of a subdivision plat with the Mecklenburg County Public Registry. The Grantee promises, and in the event of a breach shall indemnify the Recipients, that Grantee shall commit no act to encumber the title to the subdivided lots, and that Grantee shall at no time mortgage, sell or transfer any such subdivided lot.

The Property shall be subdivided in accordance with the septic field easement lines set forth on that plat recorded in Map Book 70 at Page 487 ("Plat"). The Recipients are as follows: 1) Brian Thomas Feck and Carolyn Dale Feck ("Feck"); 2) Gerard Szatkowski and Alice Szatkowski ("Szatkowski"); 3) Michael Morgan ("Morgan"); and 4) Daniel Daywalt.

It is acknowledged that Gregory Thomas Beaton and Maureen Anne Beaton ("Beaton") and Patrick J. Staub and Beatriz C. Staub ("Staub") are owners of additional tracts within the same developed community as the properties described herein. Beaton and Staub join in the execution of these Restrictions to acknowledge and agree to the terms herein, including the future transfer and conveyance of the subdivided lots to Recipients.

The subdivided lots shall be conveyed from the Grantee to the Recipients, for no monetary consideration, as follows:

- Feck shall be conveyed 1.0239 acres, more or less, as is shown as SFE 101B on the Plat.
- Szatkowski shall be conveyed 1.2658 acres, more or less, as is shown as SFE 100 on the Plat.
- Morgan shall be conveyed 1.1246 acres, more or less, as is shown on SFE 101A on the Plat.
- Daywalt shall be conveyed the remaining acreage of the common open space on the Plat that is not made up of SFE 101B, SFE 100, or SFE 101A, this remaining acreage being 1.4529 acres, more or less.

The terms set forth herein shall run with the land and remain as a restriction on this Property until such time as all the aforementioned subdivided lots have been conveyed in accordance with the terms herein, at which time these Restrictions shall automatically terminate, or until each of the Recipients and the Grantee, their respective heirs and assigns, agree to terminate these restrictions by way of a signed and recorded termination.

I, _____, a Notary Public for the County and State aforesaid, do hereby certify that David W. Hoyle, Jr., either being personally known to me or proven by satisfactory evidence, who is the Manager of Warlick & Hoyle Investment Properties, LLC, a North Carolina limited liability company, personally appeared before me this day and acknowledged that he is Manager of Warlick & Hoyle Investment Properties, LLC and that as Manager being duly authorized to do so, voluntarily executed the foregoing instrument on behalf of said company for the purposes stated therein.

Witness my hand and official seal, this _____ day of May, 2022

_____

Notary Public

My Commission Expires: _____

GRANTEE:

_____

Daniel Daywalt

_____

Lindsey J. Daywalt

STATE OF ~~NORTH~~ South CAROLINA

COUNTY OF ~~MECKLENBURG~~ YORK

PAUL W CORRELL
Notary Public
State of South Carolina
My Commission Expires Nov. 3, 2031

I, Paul W. Correll, a Notary Public for the County and State aforesaid, do hereby certify that Daniel Daywalt and Lindsey J. Daywalt, either being personally known to me or proven by satisfactory evidence, personally appeared before me this day and acknowledged that he voluntarily executed the foregoing instrument on behalf for the purposes stated therein.

* Notary Block Continued on next page

RECIPIENTS:

Brian Thomas Feck

Carolyn Dale Feck

STATE OF North Carolina

COUNTY OF Mecklenburg

I, Katherine E. Lie, a Notary Public for Mecklenburg County and the aforesaid State, do hereby certify that Brian Thomas Feck and Carolyn Dale Feck, either being personally known to me or proven by satisfactory evidence, personally appeared before me this day and acknowledged that he voluntarily executed the foregoing instrument for the purposes stated therein.

Witness my hand and official seal, this 15th day of May, 2022.

Notary Public

My Commission Expires: 10/22/25

KATHERINE E LIE NOTARY PUBLIC MECKLENBURG COUNTY, NC

Michael Morgan

Chanda J. Morgan

STATE OF North Carolina

COUNTY OF Mecklenburg

I, William T. Wallace, a Notary Public for Mecklenburg County and the aforesaid State, do hereby certify that Michael Morgan and Chanda J. Morgan, either being personally known to me or proven by satisfactory evidence, personally appeared before me this day and acknowledged that he voluntarily executed the foregoing instrument for the purposes stated therein.

Witness my hand and official seal, this 20th day of May, 2022.

William T. Wallace
Notary Public

William T. Wallace
Notary Public
Mecklenburg County
North Carolina
My Commission Expires 05/30/2022

My Commission Expires: 05/30/2022

Patrick J. Staub

Beatriz C. Staub

STATE OF SC

COUNTY OF YORK

I, WALTER SIMPSON, a Notary Public for Mecklenburg County and the aforesaid State, do hereby certify that Patrick J. Staub and Beatriz C. Staub, either being personally known to me or proven by satisfactory evidence, personally appeared before me this day and acknowledged that he voluntarily executed the foregoing instrument for the purposes stated therein.

Witness my hand and official seal, this 19 day of MAY, 2022.

Notary Public

My Commission Expires: 3-18-31

WALTER SIMPSON NOTARY PUBLIC SOUTH CAROLINA

The property hereinabove described was acquired by Grantor by instrument recorded in BOOK 28844, PAGE 745.

A map showing the above described property is recorded in Plat Book 70 at Page 487.

TO HAVE AND TO HOLD the aforesaid lot or parcel of land and all privileges and appurtenances thereto belonging to the Grantee in fee simple.

And the Grantor covenants with the Grantee, that Grantor is seized of the premises in fee simple, has the right to convey the same in fee simple, that title is marketable and free and clear of all encumbrances, and that Grantor will warrant and defend the title against the lawful claims of all persons whomsoever except for the exceptions hereinafter stated.
Title to the property hereinabove described is subject to the following exceptions:

All such valid and enforceable easements, restrictions and rights of way of record and the lien of ad valorem taxes for the current year which the grantee herein assumes and agrees to pay.

IN WITNESS WHEREOF, the Grantor has hereunto set his hand and seal, or if corporate, has caused this instrument to be signed in its corporate name by its duly authorized officers and its seal to be hereunto affixed by authority of its Board of Directors, the day and year first above written.

Warlick & Hoyle Investment Properties, LLC
a North Carolina limited liability company

David W. Hoyle, Jr., Manager

STATE OF NORTH CAROLINA

COUNTY OF MECKLENBURG

I, William T. Wallace, a Notary Public for the County and State aforesaid, do hereby certify that David W. Hoyle, Jr., either being personally known to me or proven by satisfactory evidence, who is the Manager of Warlick & Hoyle Investment Properties, LLC, a North Carolina limited liability company, personally appeared before me this day and acknowledged that he is Manager of Warlick & Hoyle Investment Properties, LLC and that as Manager being duly authorized to do so, voluntarily executed the foregoing instrument on behalf of said company for the purposes stated therein.

Witness my hand and official seal, this 16th day of May, 2022

William T. Wallace
Notary Public

My Commission Expires: 05/30/2022

William T. Wallace
Notary Public
Mecklenburg County
North Carolina
My Commission Expires 05/30/2022

SFE 100, SFE 101A or SFE 101B, shall serve as the septic field for the following two described parcels of property, said parcels being particularly described by metes and bounds as follows: Beginning at a point, said point marking the southwestern corner of that property having 1) that property being all of Lot 1 as shown on that plat entitled "Recombination Plat Lots 1, 1A & 1B" recorded in Plat Book 70 at Page 485 in the Office of the Register of Deeds for Mecklenburg County ("Beaton Lot"), said property being owned by Beaton; and 2) that property being all of Lot 1B as shown on that plat entitled "Recombination Plat Lots 1, 1A & 1B" recorded in Plat Book 70 at Page 485 in the Office of the Register of Deeds for Mecklenburg County ("Staub Parcel"), said property being owned by Staub; and

WHEREAS, along the northern boundary of the Open Space there is a road identified on the Plat as Landover Road (herein "Road"), which Road has yet to be approved and accepted by the applicable governing body having jurisdiction and control over the maintenance and dedication over said Road; and

EASEMENT

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties, their successors and assigns, do grant unto each other an exclusive easement over, upon, under, through and across the aforementioned Open Space, for the following purposes and to the extent as set out herein:

1) The Parties do grant unto Szatkowski the right to install and maintain a septic system and/or septic lines in the area notated as SFE 100 on the Plat to service Lot 100, along with a right to use SFE 100 for the transmission and deposit of waste, and a general right of egress and ingress to travel upon the Open Space, including SFE 100, for the purpose of such installation and maintenance; and

2) The Parties do grant unto Morgan the right to install and maintain a septic system and/or septic lines in the area notated as SFE 101A on the Plat to service Lot 101A, along with a right to use SFE 101A for the transmission and deposit of waste, and a general right of egress and ingress to travel upon the Open Space, including SFE 101A, for the purpose of such installation and maintenance; and

3) The Parties do grant unto Beck the right to install and maintain a septic system and/or septic lines in the area notated as SFE 101B on the Plat to service Lot 101B, along with a right to use SFE 101B for the transmission and deposit of waste, and a general right of egress and ingress to travel upon the Open Space, including SFE 101B, for the purpose of such installation and maintenance; and

4) The Parties do grant unto Staub and Beaton the right to install and maintain a septic system and/or septic lines in all that area of the Open Space not notated as SFE 100, 101A or 101B on the Plat, to service Beaton's Lot and Staub's Parcel, along with a right to use said portion of the Open Space for the transmission and deposit of waste, and a general right of egress and ingress to travel upon the Open Space, including SFE 101B, for the purpose of such installation and maintenance; and

5) The Parties grant unto each other a right of egress and ingress with respect to the Road and utilizing the Road to connect to adjoining rights-of-way and/or thoroughfares. Until such time as the Road is accepted for dedication by the applicable governing authority, the maintenance of the Road, and any cost associated therewith, shall be equally shared among

PARTY TO AGREEMENT:

_____ (Seal) Date: 5-19-2022
Gregory Thomas Beaton

_____ (Seal) Date: 5-19-2022
Maureen Anne Beaton

STATE OF NC

COUNTY OF Mecklenburg

I, Ezio J Palomeque, a Notary Public for Mecklenburg County and the aforesaid State, do hereby certify that Gregory Thomas Beaton and Maureen Anne Beaton, either being personally known to me or proven by satisfactory evidence, personally appeared before me this day and acknowledged that he voluntarily executed the foregoing instrument for the purposes stated therein.

Witness my hand and official seal, this 19 day of May, 2022.

_____
Notary Public

Ezio J Palomeque
NOTARY PUBLIC
Union County, NC
My Commission Expires August 11, 2024

My Commission Expires: Aug 11, 2024

PARTY TO AGREEMENT:

_____ (Seal) Date: 5-15-22
Brian Thomas Feck

_____ (Seal) Date: 5-15-22
Carolyn Dale Feck

STATE OF North Carolina

COUNTY OF Mecklenburg

I, Katherine E. Lie, a Notary Public for Mecklenburg County and the aforesaid State, do hereby certify that Brian Thomas Feck and Carolyn Dale Feck, either being personally known to me or proven by satisfactory evidence, personally appeared before me this day and acknowledged that he voluntarily executed the foregoing instrument for the purposes stated therein.

Witness my hand and official seal, this 15th day of May, 2022.

_____
Notary Public

My Commission Expires: 10/28/25

KATHERINE E LIE NOTARY PUBLIC MECKLENBURG COUNTY, NC

SIGNATURE PAGES TO FOLLOW

IN WITNESS WHEREOF, the Parties have hereunto set their hands and seals as of the date set opposite their names.

PARTY TO AGREEMENT:

_____(Seal) Date: 5/19/22
Daniel Daywalt

PARTY TO AGREEMENT:

Michael Morgan (Seal) Date: 05/20/2022

Chanda J. Morgan (Seal) Date: 5/20/22

STATE OF North Carolina

COUNTY OF Mecklenburg

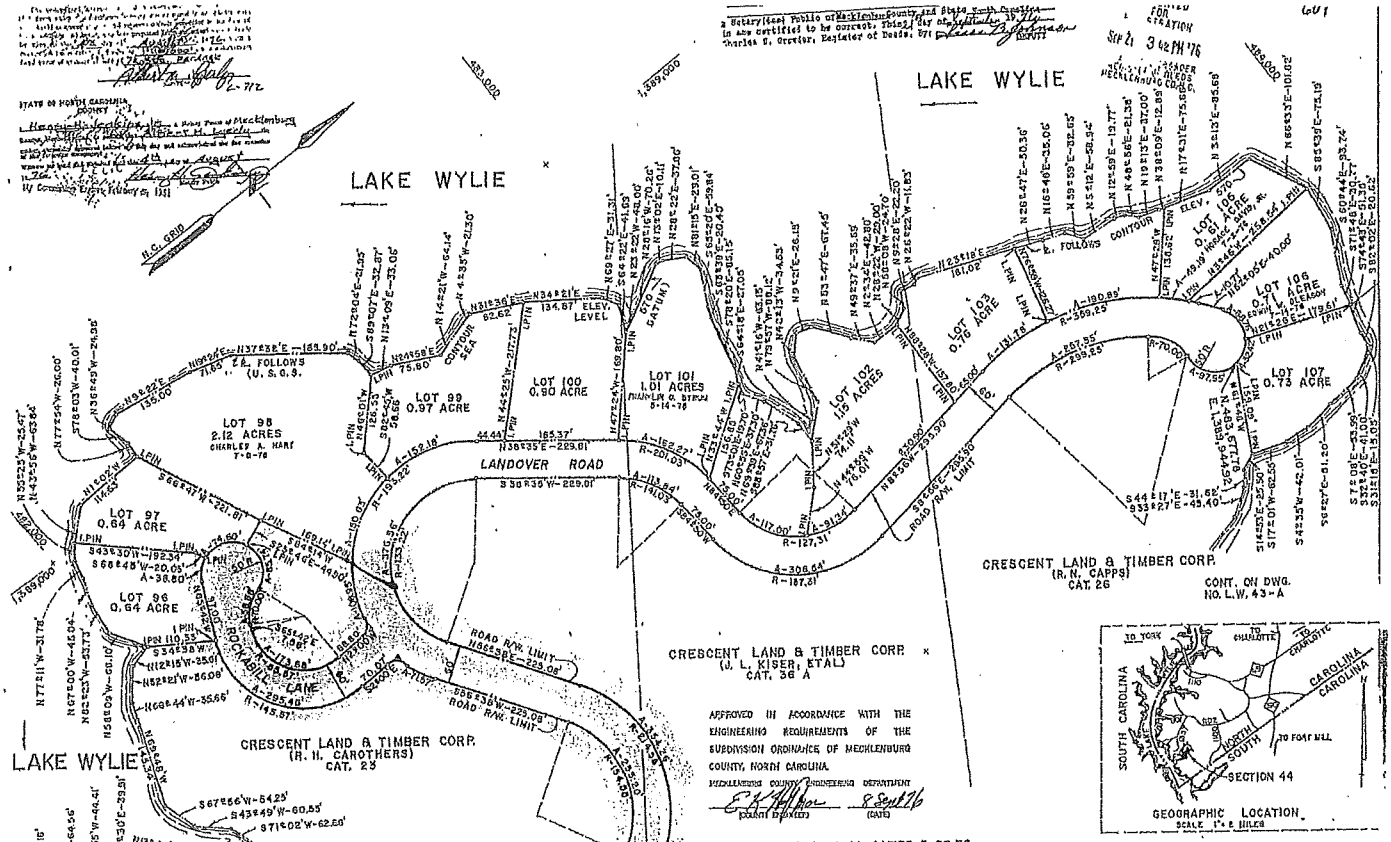
I, William T. Wallace, a Notary Public for Mecklenburg County and the aforesaid State, do hereby certify that Michael Morgan and Chanda J. Morgan, either being personally known to me or proven by satisfactory evidence, personally appeared before me this day and acknowledged that he voluntarily executed the foregoing instrument for the purposes stated therein.

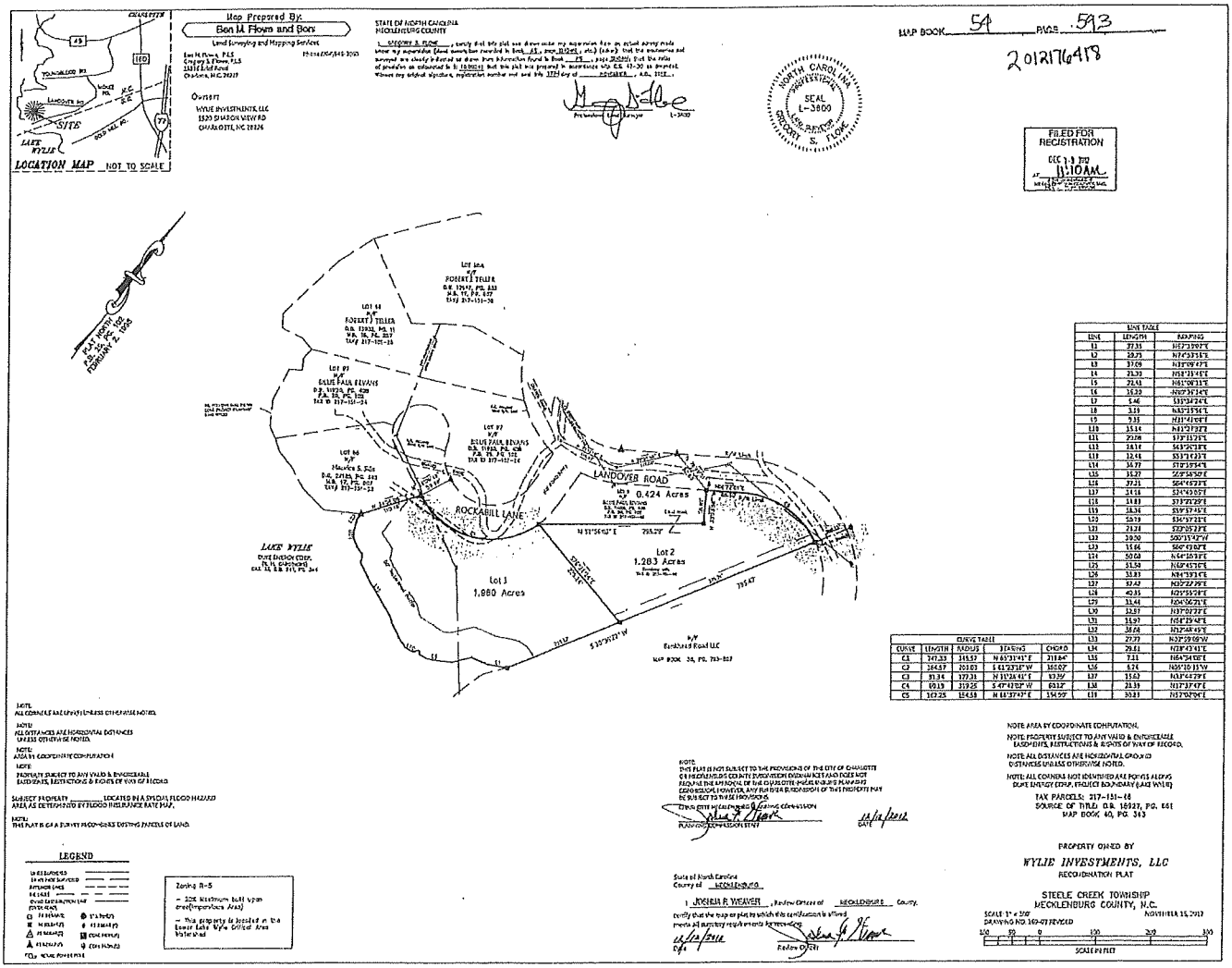
Witness my hand and official seal, this 20th day of May, 2022.

Notary Public

My Commission Expires: 05/30/2022

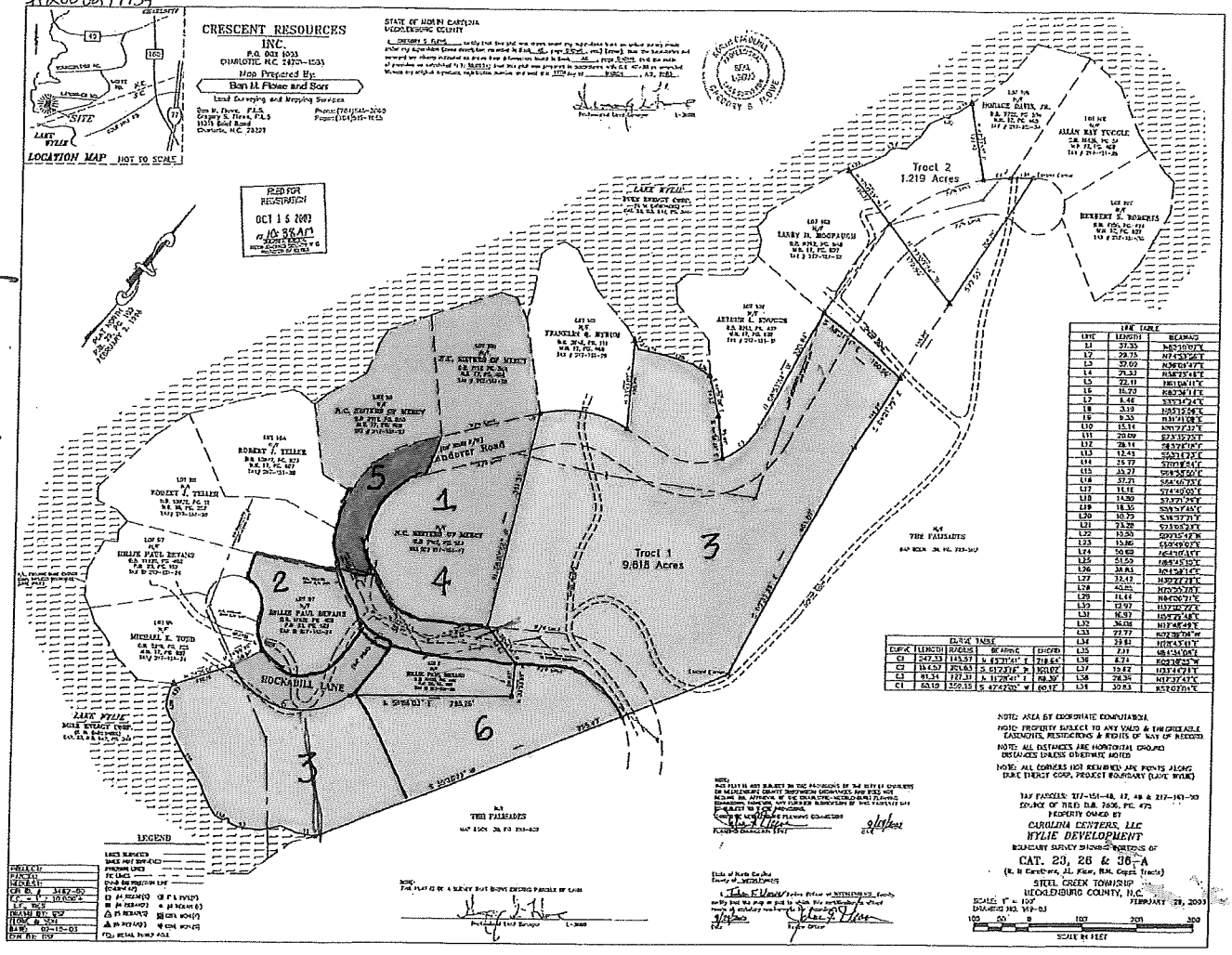
William T. Wallace
Notary Public
Mecklenburg County
North Carolina
My Commission Expires 05/30/2022


LAKE WYLIE
LAKE WYLIE
LAKE WYLIE
LOT 98
2.12 ACRES
CHARLES A. HART
7-8-76
LOT 97
0.64 ACRE
LOT 96
0.64 ACRE
LOT 99
0.97 ACRE
LOT 100
0.90 ACRE
LOT 101
1.01 ACRES
JULIAN L. & BYRON
5-14-76
LOT 102
1.15 ACRES
LOT 103
0.76 ACRE
LOT 104
0.67 ACRE
LOT 105
0.67 ACRE
LOT 106
0.71 ACRE
LOT 107
0.73 ACRE
LOT 94
0.97 ACRE
LANDOVER ROAD
TORCHBEARER LANE
CRESCENT LAND & TIMBER CORP.
(R. H. CAROTHERS)
CAT. 23
CRESCENT LAND & TIMBER CORP.
(D. L. KISER, ETAL)
CAT. 36 A
CRESCENT LAND & TIMBER CORP.
(R. N. CAPPS)
CAT. 26
CONT. ON DWG. NO. L.W. 43-A
CONT. ON DWG. NO. L.W. 44-B
CONT. ON DWG. NO. L.W. 44-F
N. 481,775.33
E. 1,389,659.73
APPROVED IN ACCORDANCE WITH THE ENGINEERING REQUIREMENTS OF THE SUBDIVISION ORDINANCE OF MECKLENBURG COUNTY, NORTH CAROLINA.
MECKLENBURG COUNTY ENGINEERING DEPARTMENT
(COUNTY ENGINEER)
(DATE)
APPROVED IN ACCORDANCE WITH THE PROVISIONS OF THE SUBDIVISION ORDINANCE OF MECKLENBURG COUNTY, NORTH CAROLINA.
CHAIRMAN, MECKLENBURG PLANNING COMMISSION
ORIGINAL DWG. DATED 5-28-76
RECORDED : PLAT BOOK 17,
PAGE 468, NOVEMBER 12, 1975
LOT 94 AND TORCHBEARER LANE REVISED 7-30-76
NOTE: DUKE POWER COMPANY TO CRESCENT LAND & TIMBER CORP, DEED BOOK 3146, PAGE 169. DATED MAY 1, 1969.
BUILDING SETBACK LINES ARE 30 FEET FROM ROAD RIGHT OF WAY LIMIT, 50 FEET FROM CONTOUR ELEV. 570 U.S.G.S. SEA LEVEL DATUM, AND 10 FEET FROM SIDE LOT LINE.
ALL STREET CORNER RADII ARE 20 FEET. PROPERTY LINE DISTANCES ARE COMPUTED TO POINT OF INTERSECTION AT STREET CORNERS.
CRESCENT LAND & TIMBER CORP.
LAKE WYLIE
MAP OF
RECREATION LOTS
SECTION 44
LOTS 94, 96-103, & 105-107
STEELE CREEK TOWNSHIP
MECKLENBURG COUNTY, N. C.
SCALE: 1" = 100'
MISC. BOOK NO. 873
MAY 28, 1975
DWG. NO. L.W. 44-F
0 100 200 300 400
SCALE IN FEET
TO YORK
TO CHARLOTTE
CAROLINA
SOUTH CAROLINA
NORTH CAROLINA
TO FORT MILL
SECTION 44
GEOGRAPHIC LOCATION
SCALE 1" = 5 MILES


CHARLOTTE
485
160
LANCASTER HWY
LAKE WYLIE
SITE
77
LOCATION MAP NOT TO SCALE
Map Prepared By:
Ben M. Flowe and Bon
Land Surveying and Mapping Services
Ben M. Flowe, PLS
Gregory S. Flowe, PLS
2611 Eastland Road
Charlotte, NC 28205
Phone (704) 536-3050
Owner:
WYLIE INVESTMENTS, LLC
1830 SHARON VIEW RD
CHARLOTTE, NC 28226
STATE OF NORTH CAROLINA
MECKLENBURG COUNTY
I, GREGORY S. FLOWE, hereby certify that this plat was drawn under my supervision from an actual survey made under my supervision (deed description recorded in Book 54, page 593, etc.) (other); that the boundaries not surveyed are clearly indicated as drawn from information found in Book 75, page 203/203; that the ratio of precision as calculated is 1:10,000+; that this plat was prepared in accordance with G.S. 47-30 as amended. Witness my original signature, registration number and seal this 12th day of DECEMBER, A.D., 2012.
SEAL L-3800
NORTH CAROLINA PROFESSIONAL
GREGORY S. FLOWE
L-3800
MAP BOOK 54 PAGE 593
2012176418
FILED FOR REGISTRATION
DEC 18 2012
11:10AM
Lot 1
1.880 Acres
Lot 2
1.283 Acres
Lot 3
0.424 Acres
ROCKABILL LANE
LANDOVER ROAD
LAKE WYLIE
Duke Energy Corp.
D.B. 11, PG. 501
D.B. 12, PG. 207
D.B. 14, PG. 311, PG. 364
N/F
Eastland Road LLC
MAP BOOK 38, PG. 783-787
ROBERT J. TELLER
D.B. 13932, PG. 11
M.B. 18, PG. 207
Tax# 217-131-16
BLUE PAUL EVANS
D.B. 11929, PG. 420
M.B. 30, PG. 102
Tax # 217-131-34
Maurice S. Sills
D.B. 27128, PG. 233
M.B. 12, PG. 207
Tax# 217-131-23
PLAT NORTH OF
D.B. 30, PG. 102
FEBRUARY 2, 1966
LINE TABLE
LINE | LENGTH | BEARING
L1 | 37.35 | N57°39'07"E
L2 | 28.75 | N74°53'15"E
L3 | 37.09 | N31°09'47"E
L4 | 25.39 | N55°31'14"E
L5 | 72.43 | N61°08'31"E
L6 | 15.32 | N50°31'14"E
L7 | 5.46 | S31°54'24"E
L8 | 3.39 | N53°15'54"E
L9 | 9.35 | N31°41'08"E
L10 | 35.14 | N41°27'37"E
L11 | 29.06 | S72°15'27"E
L12 | 28.14 | S63°26'18"E
L13 | 32.44 | S31°16'23"E
L14 | 36.77 | S78°35'54"E
L15 | 35.27 | S69°56'50"E
L16 | 37.21 | S64°45'21"E
L17 | 31.16 | S74°45'55"E
L18 | 34.81 | S77°29'29"E
L19 | 38.34 | S59°37'45"E
L20 | 58.79 | S36°57'21"E
L21 | 21.24 | S50°05'27"E
L22 | 39.50 | S00°35'47"W
L23 | 15.66 | S60°08'07"E
L24 | 50.02 | S64°05'53"E
L25 | 51.50 | N68°45'58"E
L26 | 33.83 | N84°33'31"E
L27 | 30.42 | N57°22'29"E
L28 | 40.35 | N25°55'29"E
L29 | 33.44 | N56°06'31"E
L30 | 32.57 | N37°09'29"E
L31 | 34.97 | N54°39'48"E
L32 | 38.66 | N72°48'45"E
L33 | 29.29 | N32°59'08"W
L34 | 29.61 | N78°43'41"E
L35 | 7.11 | N64°54'08"E
L36 | 6.76 | N55°10'15"W
L37 | 15.63 | N34°44'29"E
L38 | 28.39 | N17°37'47"E
L39 | 30.83 | N13°00'04"E
CURVE TABLE
CURVE | LENGTH | RADIUS | BEARING | CHORD
C1 | 347.35 | 345.57 | N 83°31'41" E | 333.84'
C2 | 184.57 | 201.03 | S 61°23'18" W | 160.02'
C3 | 91.34 | 177.31 | N 31°26'41" E | 93.29'
C4 | 99.19 | 219.25 | S 47°41'02" W | 98.32'
C5 | 103.25 | 154.58 | N 18°37'47" E | 134.59'
NOTE: ALL COURSES ARE GRID UNLESS OTHERWISE NOTED.
NOTE: ALL DISTANCES ARE HORIZONTAL DISTANCES UNLESS OTHERWISE NOTED.
NOTE: AREA BY COORDINATE COMPUTATION.
NOTE: PROPERTY SUBJECT TO ANY VALID & ENFORCEABLE EASEMENTS, RESTRICTIONS & RIGHTS OF WAY OF RECORD.
SUBJECT PROPERTY _____ LOCATED IN A SPECIAL FLOOD HAZARD AREA AS DETERMINED BY FLOOD INSURANCE RATE MAP.
NOTE: THIS PLAT IS FOR A SURVEY PRIOR TO EXISTING PARCELS OF LAND.
NOTE: AREA BY COORDINATE COMPUTATIONS.
NOTE: PROPERTY SUBJECT TO ANY VALID & ENFORCEABLE EASEMENTS, RESTRICTIONS & RIGHTS OF WAY OF RECORD.
NOTE: ALL DISTANCES ARE HORIZONTAL GROUND DISTANCES UNLESS OTHERWISE NOTED.
NOTE: ALL CORNERS NOT IDENTIFIED ARE POINTS ALONG DUKE ENERGY CORP. PROJECT BOUNDARY (LAKE WYLIE)
TAX PARCELS: 217-131-16
SOURCE OF TITLE: D.B. 18927, PG. 661
MAP BOOK 40, PG. 343
NOTE: THIS PLAT IS NOT SUBJECT TO THE PROVISIONS OF THE CITY OF CHARLOTTE OR MECKLENBURG COUNTY SUBDIVISION ORDINANCES AND IS EXEMPT FROM THE PROVISIONS OF THE CHARLOTTE-MECKLENBURG PLANNING COMMISSION. HOWEVER, ANY FUTURE SUBDIVISION OF THIS PROPERTY MAY BE SUBJECT TO THESE PROVISIONS.
CHARLOTTE-MECKLENBURG Planning Commission
12/12/2012
DATE
LEGEND
Zoning R-5
- 20K Minimum lot(s) size
- This property is located in the Lower Lake Wylie Critical Area Watershed
State of North Carolina
County of MECKLENBURG
I, JOSEPH R. WEAVER, Review Officer of MECKLENBURG County, certify that the map or plat to which this certification is affixed meets all statutory requirements for recording.
12/12/2012
Date
Review Officer
PROPERTY OWNED BY
WYLIE INVESTMENTS, LLC
RECOMBINATION PLAT
STEELE CREEK TOWNSHIP
MECKLENBURG COUNTY, N.C.
NOVEMBER 15, 2012
SCALE 1" = 100'
DRAWING NO. 102-01 REVISED
100 50 0 100 200 300
SCALE IN FEET

#200324171334

MAP 40 PAGE 343



Wallace Mapbook Pages.com

MECKLENBURG COUNTY
LAND USE AND ENVIRONMENTAL SERVICES
Payment Receipt

Receipt Information

Date:	12/14/22	**Amount:**	250.00
Receipt #:	138945	**Tendered:**	250.00
Check / Auth #:	MC 85251P	**Returned:**	0.00
Received By:	MOORES		

Account Information

Account #: 200000
Contractor: GREGORY THOMAS BEATON
Attn:
Address:
Address:
City/State/Zip: ,

Item	Description	Permit#	Quantity	Unit Price	Total Price
0701	Improvment Permit App-Residen 18217 ROCKABILL LN		1	250.00	250.00

----------Outstanding Balances----------

Month-To-Date	Prior Month	30 Days	60 Days	90 Days	Balance

MECKLENBURG COUNTY
LAND USE AND ENVIRONMENTAL SERVICES
Payment Receipt

Receipt Information

Date: 01/05/23
Receipt #: 139233
Check / Auth #: VISA 03307D
Received By: RAMSEMA

Amount: 200.00
Tendered: 200.00
Returned: 0.00

Account Information

Account #: 200000
Contractor: DAYWALT DANIEL
Attn:
Address:
Address:
City/State/Zip: ,

Item	Description	Permit#	Quantity	Unit Price	Total Price
0734	Septic Construction Authorizat 18217 ROCKABILL LN		1	200.00	200.00

----------Outstanding Balances----------

Month-To-Date	Prior Month	30 Days	60 Days	90 Days	Balance

MECKLENBURG COUNTY
LAND USE AND ENVIRONMENTAL SERVICES
Payment Receipt

Receipt Information

Date: 01/05/23
Receipt #: 139234
Check / Auth #: VISA 03307D
Received By: RAMSEMA

Amount: 200.00
Tendered: 200.00
Returned: 0.00

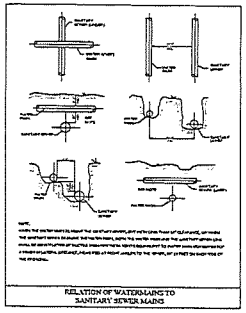
Account Information

Account #: 200000
Contractor: DAYWALT DANIEL
Attn:
Address:
Address:
City/State/Zip: ,

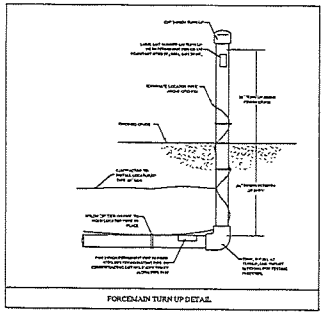
Item	Description	Permit#	Quantity	Unit Price	Total Price
0703	Septic Operational Permit 18217 ROCKABILL LN		1	200.00	200.00

----------Outstanding Balances----------

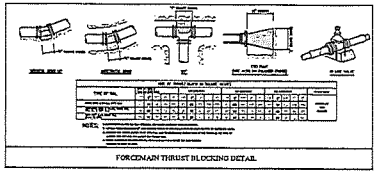
Month-To-Date	Prior Month	30 Days	60 Days	90 Days	Balance



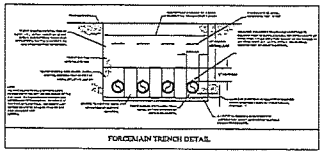
RELATION OF WATERMAINS TO SANITARY SEWER MAINS



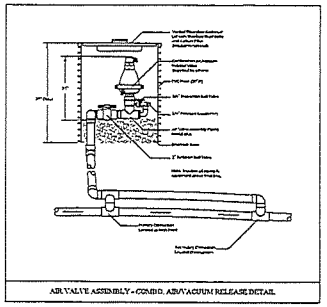
FORCEMAIN TURN UP DETAIL



FORCEMAIN THRUST BLOCKING DETAIL



FORCEMAIN TRENCH DETAIL



AIR VALVE ASSEMBLY - COMBO. AIR/VACUUM RELEASE DETAIL

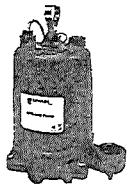
Lot Number	Offsite Lot Number	Pipe Material	Pipe O.D. (in.)	Pipe I.D. (in.)	Pipe Length (LF)	System Flow (GPM)*	Velocities (Ft./Sec.)	Friction Head (Ft.)	Low Point Elev. (Ft.)	High Point Elev. (Ft.)	Static Head (Ft.)	Oper. Head (Ft.)	Total Dynamic Head (Ft.)	Pump Req'd**
1	1-A	SCH 40 PVC	2-in.	2.067	1,090.00	27.40	2.62	19.67	590.00	664.00	74.00	2.00	95.67	Goulds 3885 Model WD0512H
1-B	1	SCH 40 PVC	2-in.	2.067	1,170.00	27.40	2.62	21.11	590.00	664.00	74.00	2.00	97.11	Goulds 3885 Model WD0512H

*Based on Soil Data Sheet Provided by Licensed Soil Scientist. Subject to changes based on system type at time of ATC

**Or Approved Equal

DESIGN LOW POINT ELEV. = 590.00 CONTRACTOR TO VERIFY ACTUAL LOW POINT ELEVATION PRIOR TO CONSTRUCTION AND CONSULT WITH DESIGN ENGINEER IF ACTURAL LOW POINT IS LOWER.

TECHNICAL BROCHURE
A3885



FEATURES

Impeller: Cast iron, semi-open, non-clog with pump-out vanes for mechanical seal protection. Balanced for smooth operation. Silicon bronze impeller available as an option.

Casing: Cast iron volute type for maximum efficiency 2" NPT discharge.

Mechanical Seal: Silicon Carbide vs. Silicon Carbide sealing faces. Stainless steel metal parts, BUNA-N elastomers.

Shaft: Corrosion-resistant, stainless steel. Tilmanited design. Lockout on all models to guard against component damage on accidental reverse rotation.

Fasteners: 300 series stainless steel.

Capable of running dry without damage to components.

Designed for continuous operation when fully submerged.

EXTENDED WARRANTY AVAILABLE FOR RESIDENTIAL APPLICATIONS.

WE Series

Model 3885

SUBMERSIBLE EFFLUENT PUMPS

GOULDS WATER TECHNOLOGY
a xylem brand

Goulds Water Technology

Wastewater

APPLICATIONS

Specifically designed for the treatment and transfer of domestic and light commercial sewage. Homes, Farms, Trailer Courts, Hotels, Schools, Hospitals, Industry, Effluent Systems.

SPECIFICATIONS

Pump
- Solids handling capabilities: ½" maximum.
- Discharge size: 2" NPT.
- Capacities: up to 140 GPM
- Total heads: up to 125 feet TDH
- Temperature: 104°F (40°C) continuous, 140°F (60°C) intermittent.
- See order numbers on inverse side for specific HP, voltage, phase and RPM's available.

MOTORS
- Fully submerged in hydrogen-cooled oil for maximum heat transfer. Heat-sensitive thermal protector.
- Class B insulation on ½ - 1½ HP models.
- Class F insulation on 2 HP models.

Single phase (60 Hz):
- Capacitor start motors for maximum starting torque
- Built-in overload with automatic reset

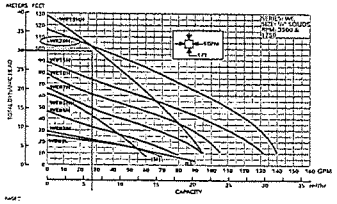
- 3/3W or 3TW severe duty oil and water resistant power cords.
- 1½ - 2 HP models have NEMA three prong grounding plugs.
- 1½ HP and larger units have heavy lead cord ends.

Three phase (60 Hz):
- Class 10 overload protection must be provided in separately ordered starter unit.
- 3TW power cords all have heavy lead cord ends.
- Hydrodynamic Performance: Hydraulics are within the motor manufacturer's recommended working limits, can be operated continuously without damage when fully submerged.
- Bearings: Upper and lower heavy duty ball bearing construction.
- Power Cable: Severe duty, oil and water resistant, Epoxy seal on motor end provides secondary moisture barrier in case of outer jacket damage and to prevent oil wicking. Standard cord is 20'. Optional lengths are available.
- Quality Assurance: Picture hook and rig removal constructed and oil leakage.

AGENCY LISTINGS

Submersible, File and Class 1, Div. 2 File Numbers for Canadian Standards Association for Hazardous Locations

METERS FEET



Goulds Water Technology

Wastewater

MODELS

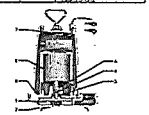
Model Number	HP	Phase	Volts	RPM	Impeller Diameter (In.)	Maximum Service Factor Amps	Maximum Service Factor Watts	Efficiency %	Full Load Amps	Approximate Locked Rotor Amps	Power Cable Size	Weight (lbs.)
WE0512L	0.33	1	115	1750	5.38	10.7	910	54	9.4	57.0	16/3	56
WE0512H			230			5.4	910	54	4.7	28.5		
WE0712L	0.5		115			13.5	1170	57	11.5	70.0		
WE0712H			230			6.9	1170	57	5.8	35.0		
WE1012L	0.75		115			16.8	1560	59	14.5	87.0		
WE1012H			230			8.4	1560	59	7.3	43.5		
WE1512L	1		115			20.2	1950	61	17.5	105.0	14/3	60
WE1512H			230			10.1	1950	61	8.8	52.5		
WE2012L	1.5		115			26.0	2600	63	22.5	135.0		
WE2012H			230			13.0	2600	63	11.3	67.5		
WE0503L	0.33	3	230		3.94	4.3	910	54	3.8	22.8	14/4	60
WE0503H			460			2.2	910	54	1.9	11.4		
WE0703L	0.5		230			5.4	1170	57	4.6	28.0		
WE0703H			460			2.7	1170	57	2.3	14.0		
WE1003L	0.75		230			6.7	1560	59	5.8	34.8		
WE1003H			460			3.4	1560	59	2.9	17.4		
WE1503L	1		230			8.1	1950	61	7.0	42.0	14/4	60
WE1503H			460			4.0	1950	61	3.5	21.0		
WE2003L	1.5		230			10.4	2600	63	9.0	54.0		
WE2003H			460			5.2	2600	63	4.5	27.0		
WE0505L	0.33	3	230		4.06	4.3	910	54	3.8	22.8	14/4	60
WE0505H			460			2.2	910	54	1.9	11.4		
WE0705L	0.5		230			5.4	1170	57	4.6	28.0		
WE0705H			460			2.7	1170	57	2.3	14.0		
WE1005L	0.75		230			6.7	1560	59	5.8	34.8		
WE1005H			460			3.4	1560	59	2.9	17.4		
WE1505L	1		230			8.1	1950	61	7.0	42.0	14/4	60
WE1505H			460			4.0	1950	61	3.5	21.0		
WE2005L	1.5		230			10.4	2600	63	9.0	54.0		
WE2005H			460			5.2	2600	63	4.5	27.0		
WE0507L	0.33	3	230		4.44	4.3	910	54	3.8	22.8	14/4	60
WE0507H			460			2.2	910	54	1.9	11.4		
WE0707L	0.5		230			5.4	1170	57	4.6	28.0		
WE0707H			460			2.7	1170	57	2.3	14.0		
WE1007L	0.75		230			6.7	1560	59	5.8	34.8		
WE1007H			460			3.4	1560	59	2.9	17.4		
WE1507L	1		230			8.1	1950	61	7.0	42.0	14/4	60
WE1507H			460			4.0	1950	61	3.5	21.0		
WE2007L	1.5		230			10.4	2600	63	9.0	54.0		
WE2007H			460			5.2	2600	63	4.5	27.0		
WE0510L	0.33	3	230		4.56	4.3	910	54	3.8	22.8	14/4	60
WE0510H			460			2.2	910	54	1.9	11.4		
WE0710L	0.5		230			5.4	1170	57	4.6	28.0		
WE0710H			460			2.7	1170	57	2.3	14.0		
WE1010L	0.75		230			6.7	1560	59	5.8	34.8		
WE1010H			460			3.4	1560	59	2.9	17.4		
WE1510L	1		230			8.1	1950	61	7.0	42.0	14/4	60
WE1510H			460			4.0	1950	61	3.5	21.0		
WE2010L	1.5		230			10.4	2600	63	9.0	54.0		
WE2010H			460			5.2	2600	63	4.5	27.0		
WE0515L	0.33	3	230		5.38	4.3	910	54	3.8	22.8	14/4	60
WE0515H			460			2.2	910	54	1.9	11.4		
WE0715L	0.5		230			5.4	1170	57	4.6	28.0		
WE0715H			460			2.7	1170	57	2.3	14.0		
WE1015L	0.75		230			6.7	1560	59	5.8	34.8		
WE1015H			460			3.4	1560	59	2.9	17.4		
WE1515L	1		230			8.1	1950	61	7.0	42.0	14/4	60
WE1515H			460			4.0	1950	61	3.5	21.0		
WE2015L	1.5		230			10.4	2600	63	9.0	54.0		
WE2015H			460			5.2	2600	63	4.5	27.0		
WE1520L	1	3	230		5.38	4.3	910	54	3.8	22.8	14/4	60
WE1520H			460			2.2	910	54	1.9	11.4		
WE2020L	1.5		230			5.4	1170	57	4.6	28.0		
WE2020H			460			2.7	1170	57	2.3	14.0		

PERFORMANCE RATINGS (gallons per minute)

Outlet	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
Head (Feet)	3560	3550	3540	3530	3520	3510	3500	3490	3480	3470	3460	3450	3440	3430	3420	3410	3400	3390	3380	3370	3360	3350	3340	3330	3320	3310	3300
125	124	124	123	123	122	122	121	121	120	120	119	119	118	118	117	117	116	116	115	115	114	114	113	113	112	112	111
120	119	119	118	118	117	117	116	116	115	115	114	114	113	113	112	112	111	111	110	110	109	109	108	108	107	107	106
115	114	114	113	113	112	112	111	111	110	110	109	109	108	108	107	107	106	106	105	105	104	104	103	103	102	102	101
110	109	109	108	108	107	107	106	106	105	105	104	104	103	103	102	102	101	101	100	100	99	99	98	98	97	97	96
105	104	104	103	103	102	102	101	101	100	100	99	99	98	98	97	97	96	96	95	95	94	94	93	93	92	92	91
100	99	99	98	98	97	97	96	96	95	95	94	94	93	93	92	92	91	91	90	90	89	89	88	88	87	87	86
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55	54	54	53	53	52	52	51	51	50	50	49	49	48	48	47	47	46	46	45	45	44	44	43	43	42	42	41
50	49	49	48	48	47	47	46	46	45	45	44	44	43	43	42	42	41	41	40	40	39	39	38	38	37	37	36
45	44	44	43	43	42	42	41	41	40	40	39	39	38	38	37	37	36	36	35	35	34	34	33	33	32	32	31
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35	34	34	33	33	32	32	31	31	30	30	29	29	28	28	27	27	26	26	25	25	24	24	23	23	22	22	21
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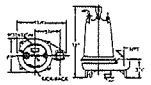
COMPONENTS

Item No.	Description
1	Impeller
2	Casing
3	Mechanical Seal
4	Motor Shaft
5	Motor
6	Fuel Chamber
7	Power Cable
8	Capacitor Box



DIMENSIONS

(All dimensions are in inches. Do not use for construction purposes.)



xylem
Let's Solve Water

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Seneca Falls, NY 13148
Phone: (866) 325-6210
Fax: (888) 322-5877
www.xylemwatersolutions.com/goulds/en-us/Pages/default.aspx

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NCBELS License # C-1607

PREPARED FOR:
MIKE MORGAN
13022 AVILA COURT
CHARLOTTE, NC 28278
704-578-8727

OFFSITE FORCEMAIN DETAILS
LOT 1 AND LOT 1B ROCKABILL LANE
LANDOVER ROAD - ROCKABILL LANE
CHARLOTTE, MECKLENBURG COUNTY, NORTH CAROLINA

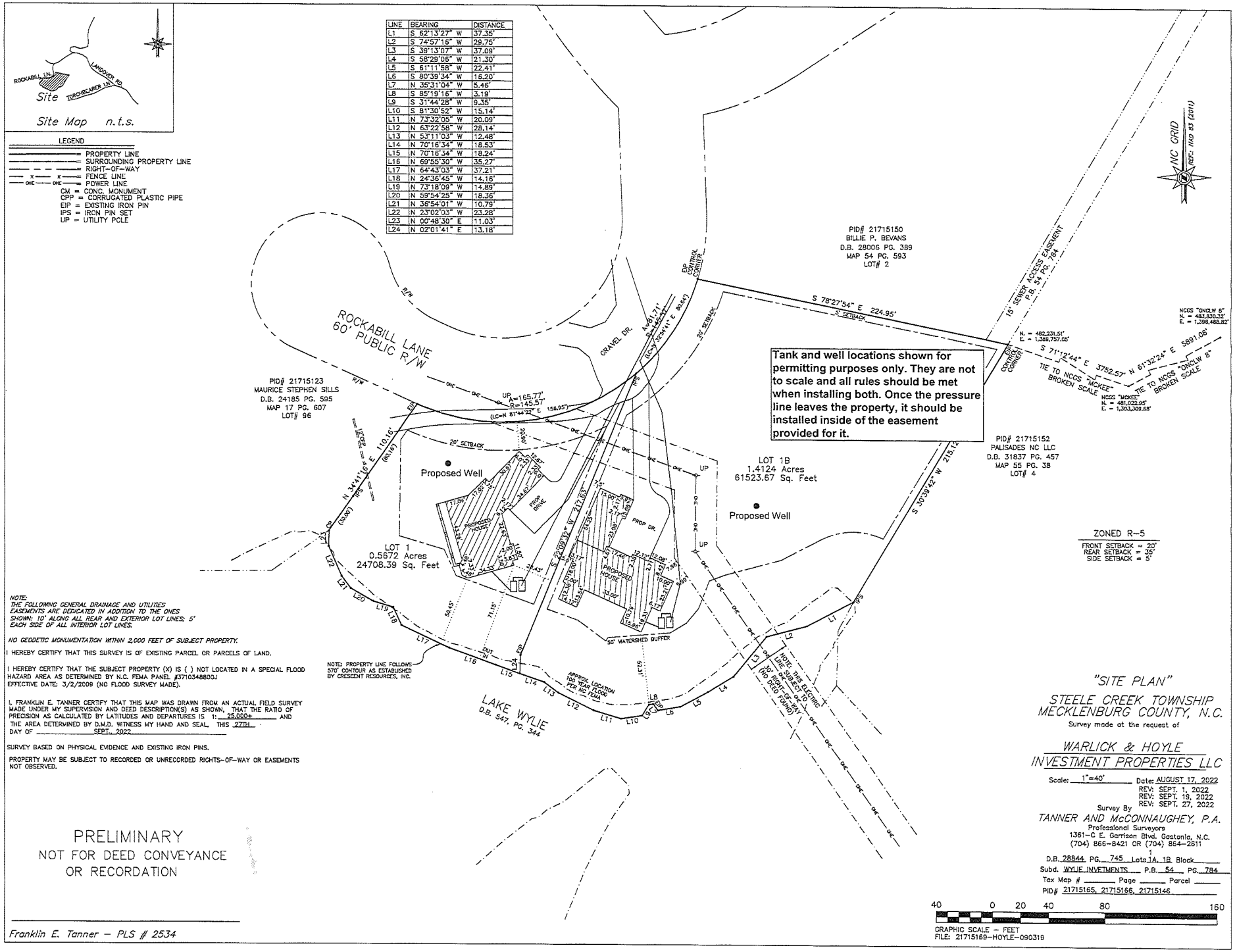
REVISIONS	BY

Date: 12/13/22
Scale: AS SHOWN
Drawn: DMD
Checked: DLM
Project: 2022-12-03
Job: 2022-12-03
Sheet: U-2
of 2 Sheets

PUBLICATION OR REUSE OF THESE DRAWINGS OR ANY DETAILS WITHIN MUST BE WITH THE WRITTEN CONSENT OF PIEDMONT DESIGN ASSOCIATES, P.A.

Location: Owner: Approved: Date of Issue:

I:\Projects\2022\2022-12-03 Rockabill Lane\U-2 Details.dwg, 12/13/2022 11:51:11 AM, DMD



NOTE:
THE FOLLOWING GENERAL DRAINAGE AND UTILITIES EASEMENTS ARE DEDICATED IN ADDITION TO THE ONES SHOWN: 10' ALONG ALL REAR AND EXTERIOR LOT LINES; 5' EACH SIDE OF ALL INTERIOR LOT LINES.

NO GEODETIC MONUMENTATION WITHIN 2,000 FEET OF SUBJECT PROPERTY.

I HEREBY CERTIFY THAT THIS SURVEY IS OF EXISTING PARCEL OR PARCELS OF LAND.

I HEREBY CERTIFY THAT THE SUBJECT PROPERTY (X) IS ( ) NOT LOCATED IN A SPECIAL FLOOD HAZARD AREA AS DETERMINED BY N.C. FEMA PANEL #3710348800J EFFECTIVE DATE: 3/2/2009 (NO FLOOD SURVEY MADE).

I, FRANKLIN E. TANNER CERTIFY THAT THIS MAP WAS DRAWN FROM AN ACTUAL FIELD SURVEY MADE UNDER MY SUPERVISION AND DEED DESCRIPTION(S) AS SHOWN, THAT THE RATIO OF PRECISION AS CALCULATED BY LATITUDES AND DEPARTURES IS 1: 25,000+ AND THE AREA DETERMINED BY D.M.D. WITNESS MY HAND AND SEAL, THIS 27TH DAY OF SEPT., 2022

SURVEY BASED ON PHYSICAL EVIDENCE AND EXISTING IRON PINS.

PROPERTY MAY BE SUBJECT TO RECORDED OR UNRECORDED RIGHTS-OF-WAY OR EASEMENTS NOT OBSERVED.

PRELIMINARY
NOT FOR DEED CONVEYANCE
OR RECORDATION

Franklin E. Tanner - PLS # 2534

"SITE PLAN"

STEELE CREEK TOWNSHIP
MECKLENBURG COUNTY, N.C.

Survey made at the request of

WARLICK & HOYLE
INVESTMENT PROPERTIES LLC

Scale: 1"=40' Date: AUGUST 17, 2022
REV: SEPT. 1, 2022
REV: SEPT. 19, 2022
REV: SEPT. 27, 2022

Survey By
TANNER AND McCONNAUGHEY, P.A.
Professional Surveyors
1361-C E. Garrison Blvd. Gastonia, N.C.
(704) 866-8421 OR (704) 864-2611

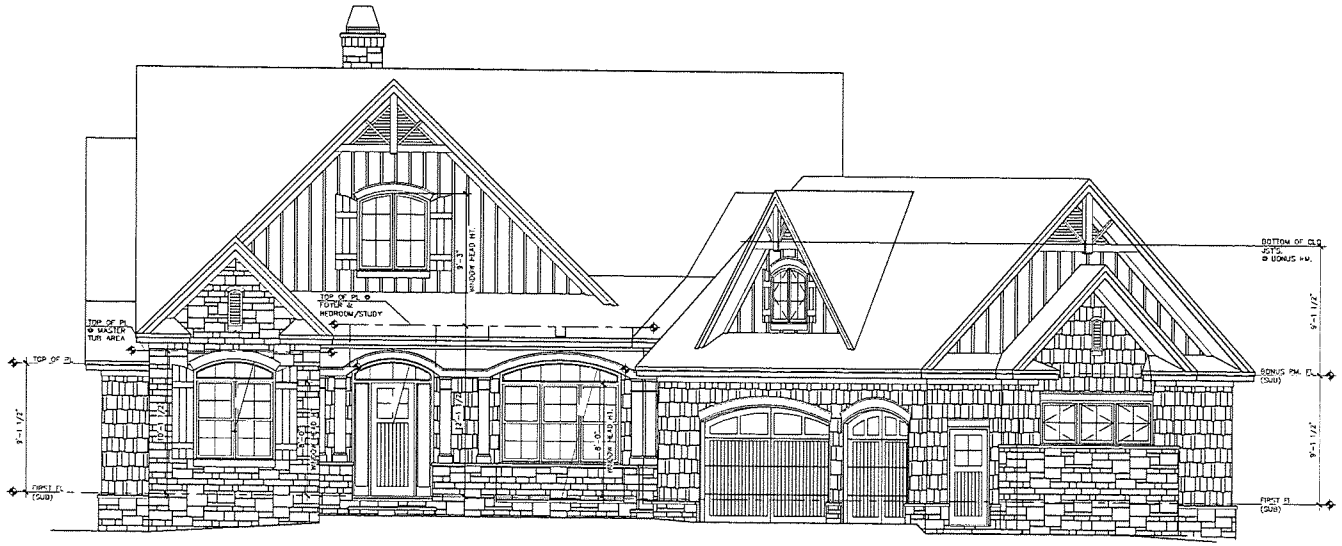
D.B. 28844 PG. 745 Lots 1A, 1B Block
Subd. WYLIE INVETMENTS P.B. 54 PG. 784
Tax Map # Page Parcel
PID# 21715165, 21715166, 21715146

FILE: 21715169-HOYLE-090319

BEATON HOME

AN AEM ENTERPRISE, LLC PROJECT

A REVISION TO A DONALD A. GARDNER 1320-D DESIGN



18222 ROCKABILL LN.
CHARLOTTE, NC 28278

SHEET LIST	
SHEET NUMBER	SHEET NAME
A0.00	COVER SHEET
A0.10	ROOF PLAN ⚠
A0.20	FOUNDATION PLAN ⚠
A0.30	BASEMENT PLAN ⚠
A1.00	FLOOR PLAN ⚠
A1.10	BONUS ROOM PLAN ⚠
A2.00	EXTERIOR ELEVATIONS
A2.01	EXTERIOR ELEVATIONS ⚠
A2.02	EXTERIOR ELEVATIONS
A3.00	SECTIONS
+12 PGS.	ORIGINAL DESIGN BY DONALD A. GARDNER

GENERAL NOTES: (PERTAINS TO ALL SHEETS)

1. CONTRACTOR SHALL VERIFY IN FIELD ALL DIMENSIONS, ELEVATIONS, AND DETAILS SHOWN WITHIN DRAWINGS, AGAINST AS-BUILT CONDITION(S). AS-BUILT CONDITIONS WHICH CONFLICT WITH THE DESIGN INTENT, SHALL BE BROUGHT TO G.C. ATTENTION FOR REVIEW PRIOR TO WORK PROCEEDING.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION AND CONSEQUENT REPAIR OR REPLACEMENT OF DAMAGES TO EXISTING SURFACES, AND OWNERS PERSONAL PROPERTY, THROUGHOUT THE DURATION OF THE PROJECT.
3. GENERAL CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS AND APPROVAL OF APPROPRIATE GOVERNING AUTHORITIES, PRIOR TO ANY WORK RELATED TO PROJECT.
4. ALL WORK SHALL COMPLY WITH LOCAL BUILDING CODES, AND THE GOVERNING STATE MUNICIPAL CODES.
5. CONTRACTOR SHALL COORDINATE ALL WORK WITH OWNER.
6. ALL EXTERIOR CONSTRUCTION ACTIVITY, INCLUDING MATERIALS AND TOOLS SHALL BE KEPT WITHIN A REASONABLE AREA, BY CONTRACTOR.
7. CONTRACTOR TO INSTALL TEMPORARY BARRICADES/FALL PROTECTION, AS REQUIRED OR REQUESTED.
8. CONTRACTOR SHALL MAINTAIN ALL WORK AREAS, FREE OF DEBRIS AT END OF TYP. WORK DAY.
9. DRAWINGS PROVIDED AS STAND-ALONE UNIT. ALL PROJECT RELATED SPECIFICS ARE DEFINED WITHIN. ADDITIONAL SPECIFICATION TO BE COORDINATED BY CONTRACTOR(S) WITH OWNER, AND INVOLVED PARTIES.
10. WHERE A CONDITION IS NOTED AS "TYPICAL" (TYP.) IT IS UNDERSTOOD THAT ALL SIMILAR CONDITIONS ARE TO BE CONSTRUCTED OF THE SAME MATERIAL AND/OR DIMENSIONAL PARAMETER.
11. WHERE A CONDITION EXISTS ON THE DRAWINGS THAT ARE CONFLICTING, THE CONTRACTOR SHALL NOTIFY GENERAL CONTRACTOR IMMEDIATELY, PRIOR TO COMMENCEMENT OF WORK. GENERAL CONTRACTOR TO PROVIDE REVISED DRAWING WITH CLARIFICATION. SHOULD THE GENERAL CONTRACTOR NOT BE NOTIFIED OF SAID CONFLICTS, THE GENERAL CONTRACTOR/DESIGNER WILL BE HELD HARMLESS OF ANY CLAIMS ARISING FROM SUCH CONFLICTS.

AREA MAP

PROJECT CONTACTS

CORNERSTONE DRAFT
706 WINDMILL ST.
JOSEPHINE, TX 75189
M: 972.955.6372
E: CORNERSTONEDRAFT@OUTLOOK.COM

AEM Enterprise, LLC
4209 Stuart Andrew Blvd.
Charlotte, NC 28217
M: 704.578.6727
E: aementerprises@outlook.com

ZONING ANALYSIS

RESIDENTIAL DISTRICT	R-1

APPLICABLE CODES

RESIDENTIAL CODE	INTERNATIONAL RESIDENTIAL CODE, AS AMENDED BY COUNTY

OCCUPANCY

OCCUPANCY	GROUP R-3 SINGLE FAMILY
CONTRUCTION TYPE	TYPE V-B
EXISTING RESIDENCE AREA	(G.C. TO VERIFY)

ABBREVIATIONS

AFF -	ABOVE FINISHED FLOOR	INT -	INTERIOR
AHJ -	AUTHORITY HAVING JURISDICTION	MAX -	MAXIMUM
ALUM -	ALUMINUM	MECH -	MECHANICAL
ANOD -	ANODIZED	MIN -	MINIMUM
BSMT -	BASEMENT	MTL -	METAL
BYND -	BEYOND	NIC -	NOT IN CONTRACT
BO -	BOTTOM OF	NO -	NUMBER
CIP -	CAST IN-PLACE	NOM -	NOMINAL
CHNL -	CHANNEL	OC -	ON CENTER
CJ -	CONTROL JOINT	OH -	OPPOSITE HAND
CLG -	CEILING	PLUMB -	PLUMBING
COL -	COLUMN	PLY -	PLYWOOD
CONC -	CONCRETE	PT -	PRESSURE TREATED
CONT -	CONTINUOUS	RCP -	REFLECTED CEILING PLAN
DBL -	DOUBLE	RFP -	REFLECTED FRAMING PLAN
DEMO -	DEMOLISH	REQD -	REQUIRED
DIA -	DIAMETER	SIM -	SIMILAR
DIM -	DIMENSION	SPEC -	SPECIFICATION
DR -	DOOR	SST -	STAINLESS STEEL
DWG -	DRAWING	STL -	STEEL
EA -	EACH	T&G -	TOUNGE AND GOOVE
EJ -	EXPANSION JOINT	TME -	TO MATCH EXISTING
ELEV -	ELEVATION	TO -	TOP OF
EQ -	EQUAL	TYP -	TYPICAL
EXIST -	EXISTING	UNO -	UNLESS NOTED OTHERWISE
EXT -	EXTERIOR	VIF -	VERIFY IN FIELD
FD -	FLOOR DRAIN	WD -	WOOD
FO -	FACE OF		
FND -	FOUNDATION		
GA -	GAUGE		
GALV -	GALVANIZED		
GWB -	GYPSUM WALL BOARD		
HR -	HOUR		
INSUL -	INSULATION		

Cornerstone Draft

Drafter: Cornerstone Draft
Address: 706 Windmill St., Josephine, TX 75189
Phone: 972.277.4726
Email: CornerstoneDraft@outlook.com

Contractor: AEM Enterprise, LLC
Address: 4209 Stuart Andrew Blvd., Charlotte, NC 28217
Phone: 704.578.6727
Email: aementerprises@outlook.com

BEATON HOME
GREG & MAUREEN BEATON
A REVISION TO DONALD A. GARDNER, INC. 1320-D DESIGN
LAKE WYLIE
18222 ROCKABILL LN.
CHARLOTTE, NC 28278

Revision

No.	Description	Date
⚠	OWNER - PERMIT SET	06/04/22

COVER SHEET

PROJECT #	0023
DATE:	07.15.22
DRAWN BY	TLH
CHECKED BY	GB

A0.00

GENERAL CONDITIONS AND STATEMENTS:

1. THESE NOTES SHALL APPLY UNLESS OTHERWISE INDICATED BY DRAWINGS OR SPECIFICATIONS

2. STRUCTURAL DRAWINGS INDICATE TYPICAL AND CERTAIN SPECIFIC CONDITIONS ONLY. SHOP DRAWINGS SHALL DETAIL ALL CONDITIONS IN ACCORDANCE WITH SPECIFIC STANDARDS AND THE SPECIFIC REQUIREMENTS OF THIS PROJECT AS INDICATED ON THE DRAWINGS.

3. THE STRUCTURE SHOWN ON THESE DRAWINGS IS STRUCTURALLY SOUND ONLY IN ITS COMPLETED FORM. THE CONTRACTOR SHALL TEMPORARILY BRACE ALL EARTH, FORMS, CONCRETE , STEEL, WOOD, TO RESIST GRAVITY, EARTH, WIND, AND CONSTRUCTION LOADS DURING CONSTRUCTION.

4. WHERE A DETAIL, TYPICAL DETAIL, SECTION, TYPICAL SECTION OR AS NOTED IS SHOWN FOR ONE CONDITION, IT SHALL APPLY FOR ALL LIKE OR SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.

FOUNDATIONS:

1. FOUNDATION DESIGN BASED ON AN ASSUMED SOIL BEARING PRESSURE OF 2,000 PSF. ALL FOOTINGS AND SLAB ON GRADE SHALL BEAR ON UNDISTURBED RESIDUAL SOIL OR STRUCTURAL COMPACTED FILL. ALL FOUNDATION EXCAVATIONS SHALL BE EVALUATED BY THE GEOTECHNICAL ENGINEER/TESTING AGENCY PRIOR TO PLACING CONCRETE FOR FOUNDATIONS.

2. NO UNBALANCED BACKFILLING SHALL BE DONE AGAINST BASEMENT WALLS UNLESS WALLS ARE BRACED BY TEMPORARY BRACING OR BY PERMANENT CONSTRUCTION.

3. COORDINATE FOUNDATION WORK WITH EXISTING UTILITIES. FOUNDATIONS SHALL BE LOWERED WHERE REQUIRED TO AVOID UTILITIES. NOTIFY PROJECT ARCHITECT AND STRUCTURAL ENGINEER TO PROVIDE REINFORCED CONCRETE PIER FOR COLUMN FOOTINGS

4. UNLESS NOTED OTHERWISE COLUMN CENTERLINES SHALL BE CENTERLINES OF COLUMN FOOTINGS.

CONCRETE:

1. CONCRETE SHALL BE PROPORTIONED TO MEET THE REQUIREMENTS OF THE FOLLOWING:

ELEMENT	28-DAY STRENGTH (PSI)	SLUMP RANGE (IN.)	UNIT WEIGHT (PCF)
COLUMN FOOTINGS	3000	3-5	150
WALL FOOTINGS	3000	3-5	150
SLAB ON GRADE	3000	3-4	150
EXTERIOR CONCRETE	4000	3-5	150

2. PORTLAND CEMENT SHALL BE ASTM C 150, TYPE I. FLY ASH SHALL BE ASTM C 618, CLASS F AND SHALL NOT EXCEED 25% OF CEMENT CONTENT BY WEIGHT. NORMAL WEIGHT AGGREGATE SHALL BE ASTM C 33.

3. CONCRETE AGGREGATE GRADATION SHALL BE IN ACCORDANCE WITH ASTM C33 SPECIFICATION. "SPECIFICATION FOR CONCRETE AGGREGATE". FINE AGGREGATE SHALL CONSIST OF NATURAL SAND OR A COMBINATION THEREOF, WITH A FINENESS MODULUS BETWEEN 2.3 AND 3.1. COURSE AGGREGATE CONTENT IS TO BE BETWEEN 35% AND 45% BY WEIGHT OR VOLUME OF THE TOTAL AGGREGATE CONTENT. LARGER COURSE AGGREGATE MIXES UP TO #67 ARE ACCEPTABLE FOR FLOOR SLAB CONCRETE TO MINIMIZE SHRINKAGE CRACKING.

4. FLY ASH SHALL NOT BE PERMITTED IN CONCRETE PLACED SUBJECT TO COLD WEATHER PLACEMENT PROCEDURES.

5. CONCRETE EXCEEDING THE SPECIFIED SLUMP RANGES SHALL BE RETURNED. DO NOT ADD WATER TO THE CONCRETE MIX AT THE JOB SITE WITHOUT THE WRITTEN PERMISSION FROM THE STRUCTURAL ENGINEER.

6. ALL REINFORCING STEEL SHALL BE ASTM A615 GRADE 60 UNLESS NOTED OTHERWISE. ALL WELDED WIRE FABRIC (W.W.F.) SHALL BE ASTM A82 AND A185 COLD DRAWN STEEL WIRE. W.W.F. SHALL BE DELIVERED TO THE JOB SITE IN FLAT SHEETS (NO ROLLS). PLACE SHEETS ON BOLSTERS AT 48" MAXIMUM TO LOCATE IN UPPER THIRD OF SLAB.

7. LAP CONTINUOUS REINFORCING BARS 36 BAR DIAMETERS UNLESS NOTED OTHERWISE. PROVIDE CORNER BARS IN ALL WALLS AND FOOTINGS.

8. BAR SUPPORTS, DESIGN, DETAILING, FABRICATION, AND PLACING OF REINFORCING BARS SHALL BE IN ACCORDANCE WITH THE ACI CODE AND DETAILING MANUAL AND CRSI'S "MANUAL OF STANDARD PRACTICE".

9. MINIMUM CONCRETE PROTECTION FOR REINFORCEMENT SHALL BE:

CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH.....3"
CONCRETE EXPOSED TO EARTH OR WEATHER:
 No. 6 THROUGH No. 18 BARS.....2"
 No. 5 AND SMALLER.....1 1/2"
CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:
SLABS, WALLS AND JOISTS:
 No. 14 AND No. 18 BARS.....1 1/2"
 No. 11 AND SMALLER.....3/4"
BEAMS AND COLUMNS:
 PRIMARY REINFORCEMENT, TIES, STIRRUPS AND SPIRALS.....1 1/2"

10. ANCHOR RODS FOR COLUMNS SHALL BE POSITIONED WITH A TEMPLATE PRIOR TO PLACING CONCRETE IN PIER OR FOOTING. NUTS SHALL BE TIGHTENED ON EACH SIDE OF THE TEMPLATE TO HOLD THE ANCHOR BOLTS IN PLACE.

11. CONCRETE DESIGN AND REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" (ACI 318-02) AND WITH "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT" (ACI 315-02). CONCRETE PLACED DURING HOT WEATHER AND COLD WEATHER SHALL MEET THE RECOMMENDATIONS OF ACI/PCA/TCA.

12. CONCRETE MIXES SHALL BE DESIGNED IN ACCORDANCE WITH ACI 301. WATER SHALL NOT BE ADDED TO THE CONCRETE MIX AT THE JOB SITE WITHOUT THE PRIOR WRITTEN PERMISSION OF THE STRUCTURAL ENGINEER.

13. UNLESS OTHERWISE SHOWN ON ARCHITECTURAL DRAWINGS, PROVIDE 3/4" CHAMFER AT ALL COLUMN, WALL SLAB AND BEAM EDGES THAT ARE EXPOSED TO VIEW IN THE FINAL STRUCTURE..

14. FIBER REINFORCEMENT - POLYPROPYLENE FIBRILLATED FIBERS USE AT 1 1/2 POUNDS PER CUBIC YARD WITH A MINIMUM AVERAGE RESIDUAL STRENGTH OF 45 PSI IN ACCORDANCE WITH ASTM 1399 TESTING - FIBERMESH 300 OR EQUIVALENT. FIBER REINFORCEMENT - AN ENGINEERED BLEND OF COLD DRAWN STEEL WIRE FIBER (23 lbs.) AND A GRADED MULTIFILAMENT POLYPROPYLENE FIBER (1 lb.) AT 1 BAG (24 lbs.) PER CUBIC YARD - ADVANTEK 850 OR EQUIVALENT.

SLAB ON GRADE:

1. CONTROL JOINTS FOR SLAB ON GRADE SHALL BE LOCATED AS SHOWN ON PLAN, WITH A MAXIMUM JOINT SPACING OF 2 1/2 TIMES THE SLAB THICKNESS IN FEET. JOINTS SHALL BE FORMED USING SAW CUTS 1/8" WIDE (MAXIMUM) BY 1/4 (1 1/4" MIN.) DEEP. SAW CUT AS SOON AS PRACTICAL AND WITHIN 12 HOURS AFTER PLACING CONCRETE. JOINTS SHALL BE FILLED WITH SIKA-RIGID EPOXY JOINT FILLER (CONSPEC POLIMEX JOINTFIL (OR EQUIVALENT). JOINTS IN AREAS SUBJECT TO FORKLIFT TRAFFIC SHALL BE FILLED WITH CONSPEC POLYUREA JOINT SAVER IT (OR EQUIVALENT).

2. SIDEWALKS AND OTHER EXTERIOR SLABS ARE NOT SHOWN ON THE STRUCTURAL DRAWINGS. SEE ARCHITECTURAL, SITE AND CIVIL DRAWINGS FOR LOCATIONS, DIMENSIONS AND ELEVATIONS.

3. SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF DEPRESSED SLAB AREAS AND DRAINS. SLOPE SLAB TO DRAINS WHERE INDICATED.

4. ALL INTERIOR AND EXTERIOR FLOOR SLABS ARE TO RECEIVE ONE (1) COAT OF EVAPORATION REDUCER (CONSPEC AQUAFILM (OR EQUIVALENT) APPLIED TO FRESHLY PLACED CONCRETE IMMEDIATELY AFTER SCREEDING AND/OR AFTER THE FIRST FLOATING OPERATION. EVAPORATION REDUCER IS NOT RECOMMENDED FOR USE DURING COLD WEATHER PLACEMENT.

5. FLOOR SLAB AREAS ARE TO RECEIVE 2 - COATS OF 25% MIN. SOLIDS ACRYLIC HARDENER AND SEAL (CONSPEC INTRASEAL, OR EQUIVALENT). APPLICATION IS TO CONFORM TO MANUFACTURER'S SPECIFICATIONS. FIRST COAT IS FOR CURING, SECOND COAT IS FOR SEALING AND DUST PROOFING AFTER BUILDING CONSTRUCTION COMPLETION.

6. FLOOR SLAB MAY RECEIVE DENSIFIER APPLICATION (NOX-CRETE DURNOX, CONSPEC INTRASEAL, OR ASHFORD FORMULA, OR EQUIVALENT) IN PLACE OF ACRYLIC FLOOR SEALER. DENSIFIERS DO NOT CONFORM WITH ASTM C309 AND MAY REQUIRE A CURING COMPOUND PRIOR TO APPLICATION OF DENSIFIER. CURING COMPOUND REQUIREMENT IS TO BE BASED ON CLIMATE CONDITIONS DURING TIME OF CONCRETE PLACEMENT. CONTRACTOR TO CONTACT ENGINEER FOR RECOMMENDATIONS.

7. DUE TO THE LACK OF SPECIFIC GEOTECHNICAL INFORMATION AND/OR SPECIFIC FLOOR LOADING REQUIREMENTS, THIS SLAB ON GRADE HAS BEEN DESIGNED USING A SUBGRADE MODULUS - K = 120 PCI AND DESIGN LOADING OF 100 PSF.

STRUCTURAL STEEL:

1. ALL W-SHAPE STRUCTURAL STEEL SHALL BE ASTM A992, ALL OTHER STRUCTURAL SHAPES SHALL BE ASTM A-36, SQUARE OR RECTANGULAR HSS SHAPES SHALL CONFORM TO ASTM A-500, GRADE B, ROUND HSS SHAPES SHALL CONFORM TO ASTM A-500, GRADE B, STRUCTURAL STEEL PIPE COLUMNS SHALL CONFORM TO ASTM A-501 OR ASTM A-53, TYPE E OR S, GRADE B. DESIGN, DETAILING, FABRICATION AND ERECTION SHALL BE IN ACCORDANCE WITH THE AISC CODE AND DETAILING MANUAL. NO STRUCTURAL MEMBERS SHALL BE SPLICED EXCEPT AS SHOWN ON APPROVED SHOP DRAWINGS.

2. FABRICATOR IS SOLELY RESPONSIBLE FOR THE DESIGN OF THE CONNECTIONS SHOWN ON THE STRUCTURAL DRAWINGS. REVIEW OF STRUCTURAL STEEL CONNECTIONS BY MSTRUCT, INC. IS FOR GENERAL DESIGN INTENT ONLY. FOR THE PURPOSE OF CONNECTION DESIGN, THE FABRICATOR SHALL RETAIN A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF THE PROJECT. THE ENGINEER SHALL SEAL AND SIGN EACH SHOP DRAWING CONTAINING ALL NON-STANDARD AND LATERAL RESISTING CONNECTION DESIGNS. A NOTE SHOULD ACCOMPANY THE SEAL STATING THAT THE SEAL IS FOR "CONNECTION DESIGN ONLY" AND DOES NOT INCLUDE RESPONSIBILITY FOR MEMBER OR BUILDING DESIGN, DIMENSIONS, FITUP, ERECTION AND ETC. GENERALLY CONNECTIONS SHOWN ON THE STRUCTURAL DRAWINGS ARE SCHEMATIC AND ARE INTENDED TO SHOW THE RELATIONSHIP OF THE MEMBERS. CONNECTIONS SHALL BE DESIGNED FOR REACTIONS SHOWN ON CONTRACT STRUCTURAL DRAWINGS. IF REACTIONS ARE NOT SHOWN ON CONTRACT STRUCTURAL DRAWINGS, DESIGN FOR ONE HALF (1/2) THE ALLOWABLE LOAD ON THE MEMBER, USING THE AISC "ALLOWABLE UNIFORM LOAD TABLES" WITH GIVEN BEAM SPAN, OR A MINIMUM OF 10 KIPS, WHICHEVER IS GREATEST. LOADINGS THAT INCLUDE WIND AND SEISMIC FORCES. NO FURTHER REDUCTIONS IN FORCES OR INCREASED IN ALLOWABLE STRESSES IS PERMITTED. CONNECTIONS MAY BE BOLTED OR WELDED UNLESS NOTED OTHERWISE.

3. FABRICATOR SHALL BE CATEGORY I CERTIFIED (CONVENTION STEEL STRUCTURES), OR A COMPANY SPECIALIZING IN PROJECTS OF THIS NATURE WITH A MINIMUM OF 5 YEARS OF EXPERIENCE.

4. ALL SHOP AND FIELD WELDING SHALL BE BY A CERTIFIED WELDER AND SHALL CONFORM TO AWS STANDARDS (LATEST EDITION).

5. WHERE CAMBER IS NOT PRESENT ERECT MILL CAMBER UP.

6. SEE ARCHITECTURAL DRAWINGS FOR MISCELLANEOUS STEEL NOT SHOWN ON STRUCTURAL DRAWINGS.

TIMBER:

1. WHEN CEILING JOIST ARE PARALLEL TO AN EXTERIOR WALL, TIE RAFTERS NEAR THE TOP PLATE TO CEILING JOISTS WITH A 2X6 STRONG BACK A MIN. OF 6'-0" LONG AT 4'-0" ON CENTER ACROSS THE TOP OF THE CEILING JOISTS. 2X4 RAFTERTAILS SHALL BE FASTENED TO THE SIDE OF THE RAFTER AND STRONG BACK

2. GABLE END FRAMING MUST BE BRACED PARALLEL TO THE RIDGES WITH A <DN. OF 2X6 DIAGONAL BRACES AT 6'-0" ON CENTERS AMONG THE GABLE WALL TO THE CEILING JOIST.
BRACES SHALL BE APPROXIMATELY 45 DEG.

3. MICROLAM TIMBER SHALL HAVE THE FOLLOWING MINIMUM ALLOWABLE DESIGN STRESSES: BENDING STRESS, Fb = 2,600 PSI, HORIZONTAL SHEAR STRESS, Fv = 285 PSI, AND MODULUS OF ELASTICITY, E = 1,900,000 PSI - CONNECT MULTIPLE MEMBERS TOGETHER AS PER MANUFACTURERS RECOMMENDATIONS.

4. ALL TIMBER CONNECTORS, ANCHORS, FASTENERS, TIES, STRAPS, BASES, CAPS, ETC. SHALL BE SIMPSON "STRONG-TIE" (OR EQUIVALENT). CONNECTORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS REQUIREMENTS. ALL CONNECTORS IN CONTACT WITH PRESSURE TREATED LUMBER SHALL MEET THE REQUIREMENTS OF ASTM A653 (CLASS G185) OR ASTM A153.

5. ALL LOAD BEARING TIMBER WALL STUDS SHALL BE SOUTHERN PINE NO. 2 OR SPRUCE-PINE-FURR (SURFACE AT 19% MOISTURE CONTENT). TYPICAL UNLESS NOTED OTHERWISE.

6. ALL SOUTHERN YELLOW PINE FRAMED LUMBER SHALL HAVE THE FOLLOWING MINIMUM ALLOWABLE STRESS STRESSES - UNLESS NOTED OTHERWISE (SURFACED AT 19% MOISTURE CONTENT):

ELEMENT	BENDING Fb-PSI	SHEAR Fv-PSI	COMPRESSION Fc-PSI	MODULUS OF ELASTICITY E-PSI
2"-4" THICK 2"-4" WIDE	1,100	175	1,450	1,400,000
2"-4" THICK 5"-6" WIDE	1,000	175	1,400	1,400,000
2"-4" THICK 8" WIDE	925	175	1,350	1,400,000
2"-4" THICK 10" WIDE	800	175	1,300	1,400,000
2"-4" THICK 12" WIDE	750	175	1,250	1,400,000

12. ALL TIMBER IN CONTACT WITH CONCRETE OR MASONRY OR EXPOSED TO WEATHER SHALL BE PRESSURE TREATED.

13. ALL TIMBER CONNECTIONS SHALL NOT BE LESS THAN THOSE SPECIFIED IN CHAPTER 23 OF THE CURRENT BUILDING UNLESS NOTED OTHERWISE.

14. GENERAL CONTRACTOR SHALL COORDINATE LOCATION OF TRUSSES WITH OTHER TRADES - SHIFT TRUSSES A MAXIMUM OF 3 1/2" AS REQUIRED.

16. ALL NON TONGUE AND GROOVE PLYWOOD/OSB PANELS SHALL HAVE 1/8" GAP AT ALL PANEL EDGES. PROVIDE SIMPSON PSCL (OR EQUIVALENT) PLYWOOD CLIPS @ 24" AT PANEL EDGES OF ALL ROOF PLYWOOD/OSB SHEATHING.

DESIGN CODES AND STANDARD SPECIFICATIONS

DESIGN CONFORMS TO THE 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE

CLIMATE ZONE 3

WINDOWS:
GLAZED FENESTRATION SHGC 0.30
FENESTRATION U-FACTOR 0.35

INSULATION:
CEILING R-VALUE 38
WOOD FRAMED WALL R-VALUE 15 OR 13+2
MASS R-VALUE 8/13
FLOOR R-VALUE 19
SLAB R-VALUE 0
CRAWL SPACE WALL R-VALUE 5/13

DESIGN CODES AND STANDARD SPECIFICATIONS

BUILDING CODE: STRUCTURAL DESIGN CONFORMS TO THE REQUIREMENTS OF THE NORTH CAROLINA RESIDENTIAL BUILDING CODE, 2018 EDITION AND ASCE 7-10..

DESIGN LIVE LOADS: ROOF LIVE LOAD 20 PSF
SNOW 10 PSF
FLOOR LIVE LOADS
SLEEPING AREAS 30 PSF
ALL OTHER 40 PSF

ULTIMATE WIND SPEED 115 MPH (3 SECOND GUST)
IMPORTANCE FACTOR 1
EXPOSURE C

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Cornerstone Draft
Cornerstone Quality

Drafter: Cornerstone Draft
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Phone: 972.237.3524
E-mail: Cornerstonedraft@yahoo.com

Contractor: AEM Enterprises, LLC
Address: 4209 Sweet Andrew Blvd., Charlotte, NC 28217
Phone: 704.574.8727
E-mail: aementerprise@outlook.com

BEATON HOME

GREG & MAUREEN BEATON
A REVISION TO DONALD A GARDNER, INC: 1320-D DESIGN
LAKE WYLIE
18222 ROCKABILL LN.
CHARLOTTE, NC 28278

THESE PLANS ARE THE PROPERTY OF CORNERSTONE DRAFT AND MAY NOT BE USED OR REPRODUCED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF CORNERSTONE DRAFT. THE PLANS ARE NOT TO BE ALTERED IN ANY WAY WITHOUT THE WRITTEN PERMISSION OF CORNERSTONE DRAFT. ANY ALTERATIONS MADE TO THESE PLANS WITHOUT THE WRITTEN PERMISSION OF CORNERSTONE DRAFT WILL RELEASE CORNERSTONE DRAFT FROM ALL LIABILITY AND THE PERSON OR COMPANY MAKING THE ALTERATIONS WILL BE RESPONSIBLE FOR ALL LIABILITY RELATED TO THE ALTERATIONS. ANY USE OF THESE PLANS WITHOUT THE WRITTEN PERMISSION OF CORNERSTONE DRAFT WILL BE AT THE USERS SOLE RISK AND WITHOUT LIABILITY TO CORNERSTONE DRAFT. THE USER AFFIRMS THAT THE AUTHORIZED REGISTERED PROFESSIONAL HAS DETERMINED THAT THE PLANS ARE SUITABLE FOR THE USERS PURPOSES AND THAT THE PLANS COMPLY WITH ALL APPLICABLE CODES AND REGULATIONS. THE USER AGREES TO INDEMNIFY AND HOLD HARMLESS CORNERSTONE DRAFT FROM ANY AND ALL CLAIMS, LOSSES, COSTS, DAMAGES, LIABILITIES AND EXPENSES ARISING OUT OF OR RESULTING FROM THE USE OF THESE PLANS.

ENGINEER'S SEAL (NOT EXAMINED)

NORTH CAROLINA PROFESSIONAL SEAL 28905 ENGINEER VINCENT V. GIAMMARINO
12.12.22
MStruct Engineering, PLLC No. P-0633
NORTH CAROLINA CERTIFICATE OF AUTHORIZATION

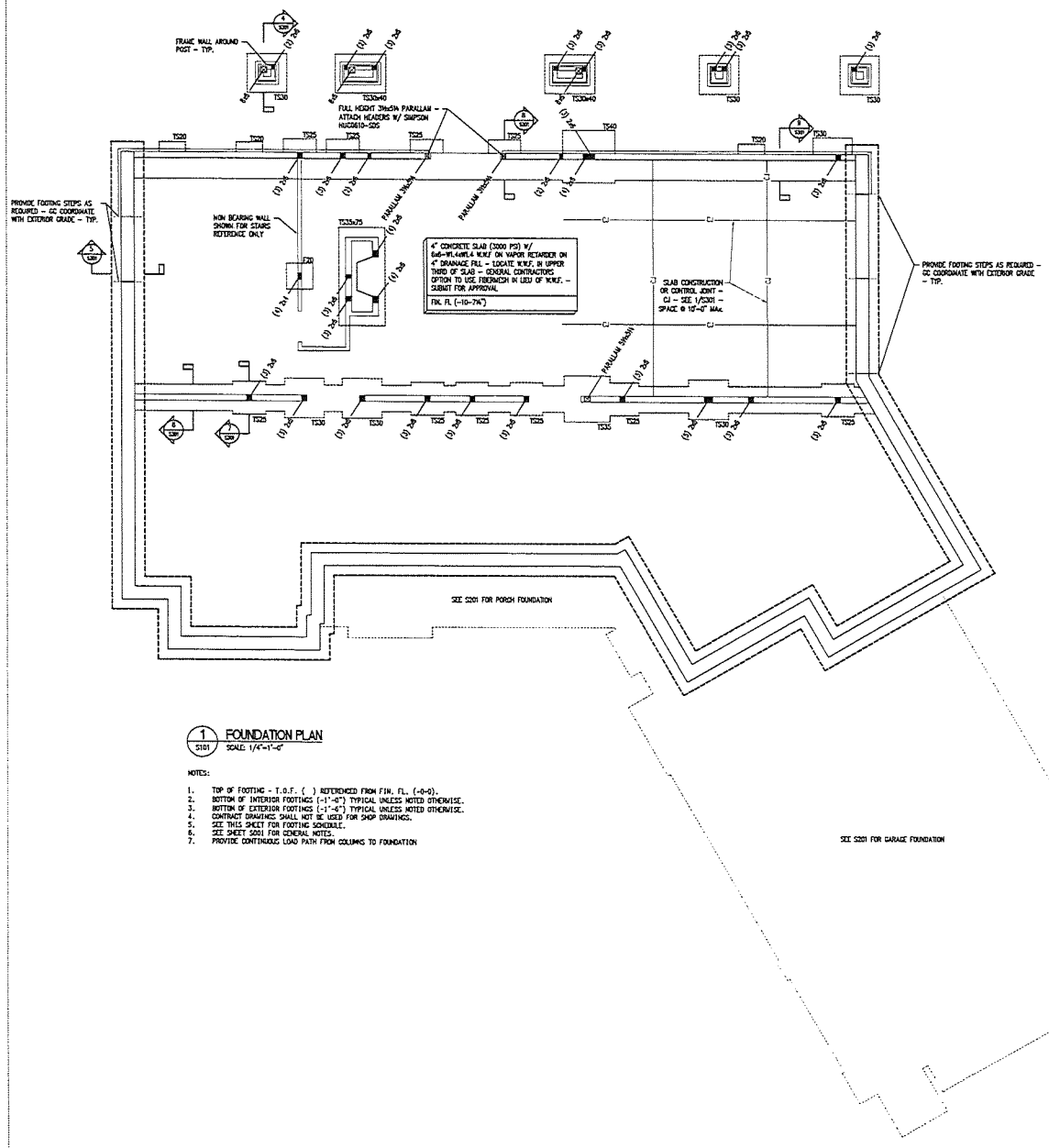
Revision

No.	Description	Date

NOTES

PROJECT #	0023
DATE	12.12.22
DRAWN BY	VVG
CHECKED BY	

S001



1 S101 **FOUNDATION PLAN**
SCALE: 1/4"=1'-0"

NOTES:

1. TOP OF FOOTING - T.O.F. ( ) REFERENCED FROM FIN. FL. (-0-0).
2. BOTTOM OF INTERIOR FOOTINGS (-1'-0") TYPICAL UNLESS NOTED OTHERWISE.
3. BOTTOM OF EXTERIOR FOOTINGS (-1'-6") TYPICAL UNLESS NOTED OTHERWISE.
4. CONTRACT DRAWINGS SHALL NOT BE USED FOR SHOP DRAWINGS.
5. SEE THIS SHEET FOR FOOTING SCHEDULE.
6. SEE SHEET S001 FOR GENERAL NOTES.
7. PROVIDE CONTINUOUS LOAD PATH FROM COLUMNS TO FOUNDATION

FOOTING SCHEDULE (ASSUMED 2000 PSF)

MARK	SIZE	THICK.	REINFORCING
T540	4'-0" x 4'-0"	12"	(6) #4 x 3'-6" EACH WAY
T535	3'-6" x 3'-6"	12"	(5) #4 x 3'-0" EACH WAY
T530	3'-0" x 3'-0"	12"	(4) #4 x 2'-6" EACH WAY
T525	2'-6" x 2'-6"	12"	(4) #4 x 2'-0" EACH WAY
T520	2'-0" x 2'-0"	12"	(3) #4 x 1'-8" EACH WAY
T515	1'-6" x 1'-6"	12"	(2) #4 x 1'-0" EACH WAY
T530x40	3'-0" x 4'-0"	12"	(6) #4 x 2'-6" SHORT WAY
		12"	(4) #4 x 3'-0" LONG WAY
T535x75	3'-6" x 7'-6"	12"	(10) #4 x 3'-0" SHORT WAY
		12"	(5) #4 x 7'-0" LONG WAY

SOILS LABORATORY SHALL VERIFY SOIL BEARING PRESSURE AT BOTTOM OF EACH FOOTING PRIOR TO PLACING CONCRETE. STRUCTURAL FILL SUPPORTING SLAB OR FOOTINGS SHALL BE PLACED IN MAXIMUM 8" LIFTS, WITH EACH 8" LIFT TESTED BY LABORATORY FOR COMPACTION LISTED IN GENERAL NOTES.

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Cornerstone Quality

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E-mail: Cornerstonedraft@softerra.com

Contractor: AEM Enterprise, LLC
Address: 4201 Shield Andrew Blvd., Charlotte, NC 28217
Phone: 704.574.9737
E-mail: aementerprise@outlook.com

BEATON HOME

GREG & MAUREEN BEATON
A REVISION TO DONALD A. GARDNER, INC. 1320-D DESIGN
LAKE WYLIE
18222 ROCKABILL LN.
CHARLOTTE, NC 28278

THESE PLANS ARE NOT TO BE USED FOR CONSTRUCTION UNLESS THEY ARE SIGNED AND SEALED BY A LICENSED NORTH CAROLINA ARCHITECT OR ENGINEER.

ENGINEER SEAL AND SIGNATURE REQUIRED:

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 28305 JOSEPH M. MAZZUCA

NORTH CAROLINA MStruct Engineering, PLLC No. P-0633 CERTIFICATE OF AUTHORIZATION

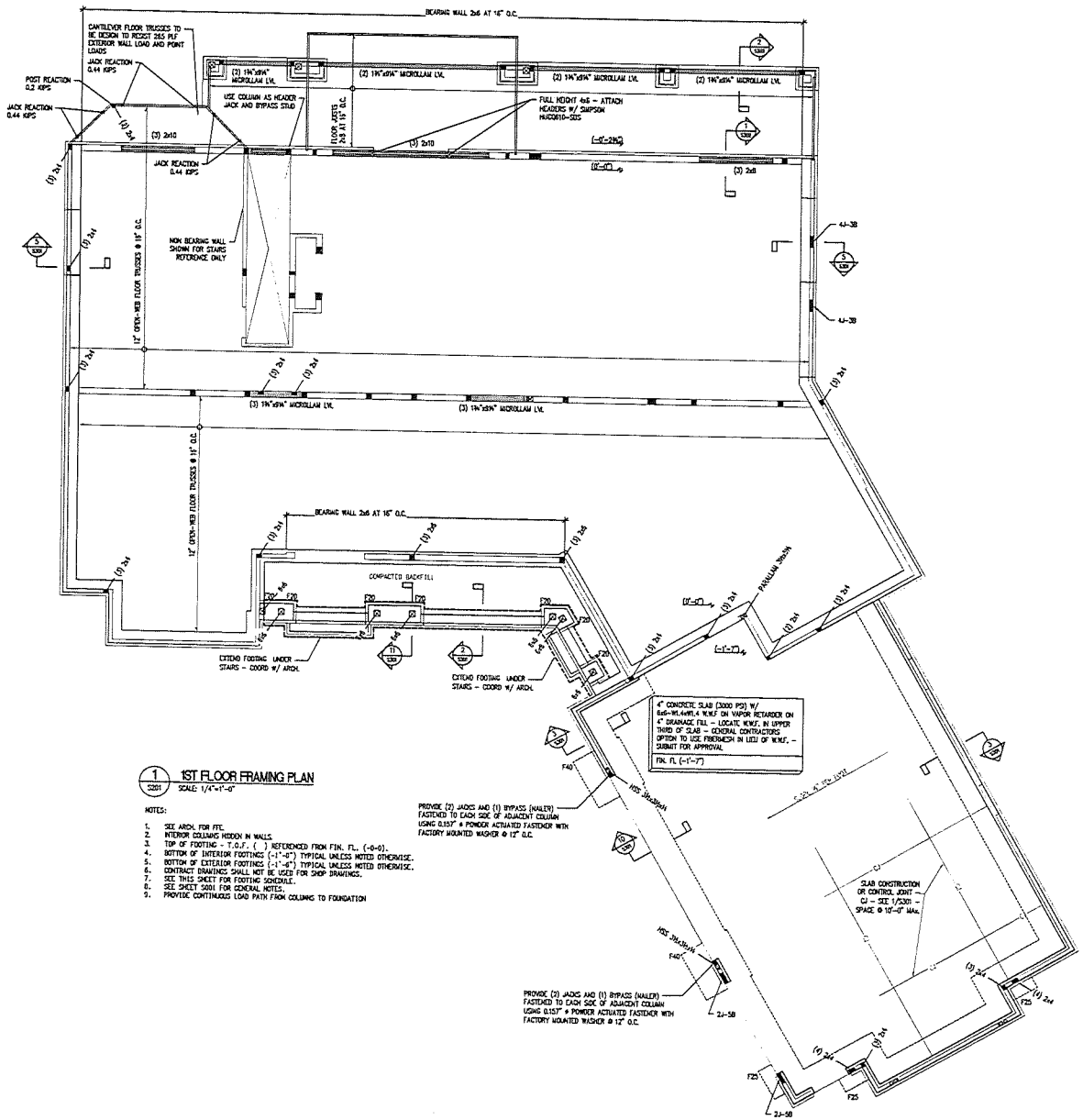
Revision

No.	Description	Date

FOUNDATION PLAN

PROJECT #:	0023
DATE:	12.12.22
DRAWN BY:	VVG
CHECKED BY:	

S101



1 S201 1ST FLOOR FRAMING PLAN

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

NOTES:

1. SEE ARCH. FOR FFE.
2. INTERIOR COLUMNS HIDDEN IN WALLS.
3. TOP OF FOOTING = T.O.F. ( ) REFERENCED FROM FIN. FL. (-0-0).
4. BOTTOM OF INTERIOR FOOTINGS (-1'-6") TYPICAL UNLESS NOTED OTHERWISE.
5. BOTTOM OF EXTERIOR FOOTINGS (-1'-0") TYPICAL UNLESS NOTED OTHERWISE.
6. CONTRACT DRAWINGS SHALL NOT BE USED FOR SHOP DRAWINGS.
7. SEE THIS SHEET FOR FOOTING SCHEDULE.
8. SEE SHEET S001 FOR GENERAL NOTES.
9. PROVIDE CONTINUOUS LOAD PATH FROM COLUMNS TO FOUNDATION

2x SAWN LUMBER HEADER:

PROVIDE (1) PIECES OF ½" PLYWOOD FILLER BETWEEN 2x HEADER MEMBERS TO ACHIEVE 3½" WALL THICKNESS – FASTEN 2x MEMBERS W/ (2) ROWS OF 10d NAILS @ 12" O.C. – SEE .../S302 FOR HEADER BEARING CONNECTION

MICROLAM HEADER NOTE:

GLUE AND FASTEN MEMBERS W/ (2) ROWS OF 10d NAILS @ 12" O.C. – SEE .../S302 FOR HEADER BEARING CONNECTION

GANG STUD NOTE:

FASTEN GANGED 2x WALL STUDS W/ (1) ROW OF 10d NAILS @ 12" O.C. – TYP.

FLOOR SHEATHING:
23/32" STRUCT I TONGUE AND GROOVE PLYWOOD/OSB SUBFLOOR WITH SPAN RATING OF 48/24 OR BETTER. ATTACH TO SUPPORTING MEMBERS USING 10GA. x 2" LONG SCREWS @ 6" O.C. EDGES AND @ 12" O.C. INTERMEDIATE – GLUE TO ALL SUPPORTING MEMBERS. LAYOUT STAGGERED AND PERPENDICULAR TO SUPPORTING MEMBERS.

EXTERIOR WALL SHEATHING (WALL BRACING):
7/16" (EXPOSURE I) PLYWOOD WALL SHEATHING – LAYOUT SHEETS STAGGERED AND PERPENDICULAR TO WALL STUDS ATTACH TO WALL STUDS W/ 10d NAILS AT 6" O.C. ALONG EDGES AND 12" O.C. INTERMEDIATE – PROVIDE SOLID BLOCKING BETWEEN STUDS AT 48" ALIGN W/ PLYWOOD EDGES – TYP. U.N.O. – SEE PLAN

FASTENING SCHEDULE

CONNECTION	FASTNER	NUMBER OR SPACING
TOP OR SOLE PLATE TO STUD, END NAIL	16d COMMON	2
STUD TO SOLE PLATE, TOE NAIL	8d COMMON	4
DOUBLE STUDS FACE NAIL	10d COMMON	16" O.C.
TRIPLE STUDS FACE NAIL	10d COMMON	12" O.C.
3-3 STUDS, NAIL EACH LAMINATION W/	16d COMMON	12" O.C.
BUILT UP CORNER STUDS	16d COMMON	24" O.C.
DOUBLE TOP PLATE, FACE NAIL	10d COMMON	12" O.C.
TOP PLATE, LAP & INTERSECTIONS FACE NAIL	10d COMMON	2
CONTINUOUS HEADER, TWO PIECES	16d COMMON	16" O.C. ALONG EDGE
CONTINUOUS HEADER TO STUD, TOE NAIL	8d COMMON	3
LEDGER STRIP	16d COMMON	3 AT EACH TRUSS
BUILT UP GIRDERS & BEAMS	16d COMMON	12" O.C. AT TOP AND BOTTOM STAGGERED 2 ENDS AND AT EACH SPLICE
COLLAR TIE TO RAFTER , FACE NAIL	10d COMMON	4
JACK RAFTER TO HIP	10d COMMON	3
ROOF RAFTER TO 2x RIDGE BEAM, TOENAIL	16d COMMON	2

BEARING WALL STUD SCHEDULE (U.N.O.)

FLOOR	LOCATION	SIZE	SPACING
BSMNT	INTERIOR	2x6	@ 16" O.C.
	EXTERIOR	2x6	@ 16" O.C.
1ST	INTERIOR	2x4	@ 16" O.C.
	EXTERIOR	2x4	@ 16" O.C.
BONUS	INTERIOR	2x4	@ 16" O.C.
	EXTERIOR	2x4	@ 16" O.C.

HANGER SCHEDULE FOR JOISTS AND BEAMS

MEMBER SIZE	HANGER
2x8	LUS28
2x10	LUS10
2x12	LUS10
(2) 2x8	HUS28-2
(2) 2x10	HUS10-2
(2) 2x12	HUS12-2
(3) 2x8	LUS28-3
(3) 2x8	LUS28-3
(3) 2x10	LUS210-3
(3) 2x12	HU212-3 WIN
(4) 2x12	HU210-4

HEADER, JAM STUD AND JACK POST:
PROVIDE (3) 2x6 HEADER AT ALL OPENINGS U.N.O. (1) JACK AND (1) BYPASS STUDS/ FULL HEIGHT STUDS BOTH SIDES AT ALL LOAD BEARING JAMS (SEE BELOW) – TYP. UNO. – PROVIDE (3) 2x6 UNDER ALL LVL BEAMS U.N.O.

BYPASS STUDS NUMBER:

OPENING SIZE (INCH)	2x4	2x6
<=3'	2	1
3'- 6"	3	1
4'- 6"	4	2
6'- 12"	5	3
8'-12"	–	4
13'-16"	–	5

FOOTING SCHEDULE (ASSUMED 2000 PSF)

MARK	SIZE	THICK.	REINFORCING
TS40	4'-0" x 4'-0"	12"	(6) #4 x 3'-6" EACH WAY
TS30	3'-0" x 3'-0"	12"	(4) #4 x 2'-6" EACH WAY
TS25	2'-6" x 2'-6"	12"	(4) #4 x 2'-0" EACH WAY
F20	2'-0" x 2'-0"	12"	(3) #4 x 1'-8" EACH WAY

SOILS LABORATORY SHALL VERIFY SOIL BEARING PRESSURE AT BOTTOM OF EACH FOOTING PRIOR TO PLACING CONCRETE. STRUCTURAL FILL SUPPORTING SLAB OR FOOTINGS SHALL BE PLACED IN MAXIMUM 8" LIFTS, WITH EACH 8" LIFT TESTED BY LABORATORY FOR COMPACTION LISTED IN GENERAL NOTES.

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E-mail: aementerprise@outlook.com

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THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK.

DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY.

ALL CONSTRUCTION SHALL COMPLY WITH THE 2018 NORTH CAROLINA RESIDENTIAL CODE AND ALL OTHER APPLICABLE CODES, ORDINANCES AND REGULATIONS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK.

NORTH CAROLINA PROFESSIONAL SEAL 28935 ENGINEER
12.12.22
MStruct Engineering, PLLC No. P-0633
CERTIFICATE OF AUTHORIZATION

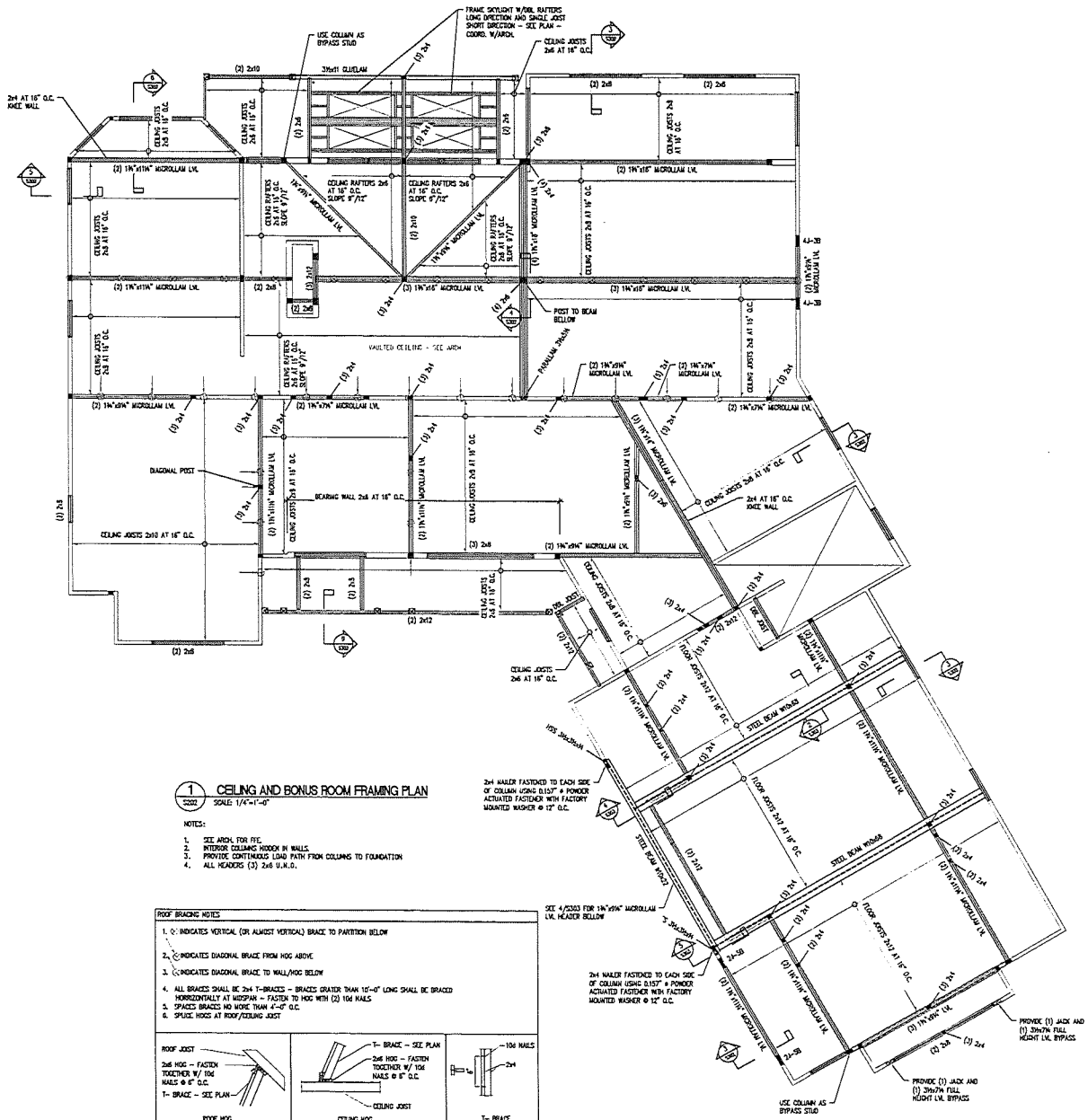
Revision

No.	Description	Date

1ST FLOOR FRAMING PLAN

PROJECT #	0023
DATE	12.12.22
DRAWN BY	VVG
CHECKED BY	

S201



1 CEILING AND BONUS ROOM FRAMING PLAN
S202 SCALE: 1/4"=1'-0"

NOTES:

1. SEE ARCH. FOR RFE.
2. INTERIOR COLUMNS HIDDEN IN WALLS.
3. PROVIDE CONTINUOUS LOAD PATH FROM COLUMNS TO FOUNDATION
4. ALL HEADERS (3) 2x6 U.N.O.

ROOF BRACING NOTES

1. ◇: INDICATES VERTICAL (OR ALMOST VERTICAL) BRACE TO PARTITION BELOW
2. ◇: INDICATES DIAGONAL BRACE FROM HOG ABOVE
3. ◇: INDICATES DIAGONAL BRACE TO WALL/HOG BELOW
4. ALL BRACES SHALL BE 2x4 T-BRACES – BRACES GREATER THAN 10'-0" LONG SHALL BE BRACED HORIZONTALLY AT MIDSPAN – FASTEN TO HOG WITH (2) 10d NAILS
5. SPACES BRACES NO MORE THAN 4'-0" O.C.
6. SPLICE HOGS AT ROOF/CEILING JOIST

2x SAWN LUMBER HEADER:

PROVIDE (1) PIECES OF ½" PLYWOOD FILLER BETWEEN 2x HEADER MEMBERS TO ACHIEVE 3½" WALL THICKNESS – FASTEN 2x MEMBERS W/ (2) ROWS OF 10d NAILS @ 12" O.C. – SEE .../S302 FOR HEADER BEARING CONNECTION

MICROLAM HEADER NOTE:

GLUE AND FASTEN MEMBERS W/ (2) ROWS OF 10d NAILS @ 12" O.C. – SEE .../S302 FOR HEADER BEARING CONNECTION

GANG STUD NOTE:

FASTEN GANGED 2x WALL STUDS W/ (1) ROW OF 10d NAILS @ 12" O.C. – TYP.

FLOOR SHEATHING:
23/32" STRUCT I TONGUE AND GROOVE PLYWOOD/OSB SUBFLOOR WITH SPAN RATING OF 48/24 OR BETTER. ATTACH TO SUPPORTING MEMBERS USING 10GA. x 2" LONG SCREWS @ 6" O.C. EDGES AND @ 12" O.C. INTERMEDIATE – GLUE TO ALL SUPPORTING MEMBERS. LAYOUT STAGGERED AND PERPENDICULAR TO SUPPORTING MEMBERS.

EXTERIOR WALL SHEATHING (WALL BRACING):
7/16" EXPOSURE I PLYWOOD WALL SHEATHING – LAYOUT SHEETS STAGGERED AND PERPENDICULAR TO WALL STUDS ATTACH TO WALL STUDS W/ 10d NAILS AT 6" O.C. ALONG EDGES AND 12" O.C. INTERMEDIATE – PROVIDE SOLID BLOCKING BETWEEN STUDS AT 48" ALIGN W/ PLYWOOD EDGES – TYP. U.N.O. – SEE PLAN

19/32" STRUCTURAL RATED PLYWOOD ROOF DECK – ATTACH TO ROOF MEMBERS W/ 10d NAILS @ 4" O.C. EDGES AND 6" O.C. INTERMEDIATE – LAYOUT STAGGERED AND PERPENDICULAR TO ROOF MEMBERS – TYP. U.N.O.

FASTENING SCHEDULE

CONNECTION	FASTNER	NUMBER OR SPACING
TOP OR SOLE PLATE TO STUD, END NAIL	16d COMMON	2
STUD TO SOLE PLATE, TOE NAIL	8d COMMON	4
DOUBLE STUDS FACE NAIL	10d COMMON	16" O.C.
TRIPLE STUDS FACE NAIL	10d COMMON	12" O.C.
3x STUDS, NAIL EACH LAMINATION W/	16d COMMON	12" O.C.
BUILT UP CORNER STUDS	16d COMMON	24" O.C.
DOUBLE TOP PLATE, FACE NAIL	10d COMMON	12" O.C.
TOP PLATE, LAP & INTERSECTIONS FACE NAIL	10d COMMON	3
CONTINUOUS HEADER, TWO PIECES	16d COMMON	16" O.C. ALONG EDGE
CONTINUOUS HEADER TO STUD, TOE NAIL	8d COMMON	3
LEDGER STRIP	16d COMMON	3 AT EACH TRUSS
BUILT UP GIRDERS & BEAMS	16d COMMON	12" O.C. AT TOP AND BOTTOM STAGGERED 2 ENDS AND AT EACH SPLICE
COLLAR TIE TO RAFTER , FACE NAIL	16d COMMON	4
JACK RAFTER TO HIP	10d COMMON	3
ROOF RAFTER TO 2X RIDGE BEAM, TOENAIL	16d COMMON	2

BEARING WALL STUD SCHEDULE (U.N.O.)

FLOOR	LOCATION	SIZE	SPACING
BSMNT	INTERIOR	2x6	@ 16" O.C.
	EXTERIOR	2x6	@ 16" O.C.
1ST	INTERIOR	2x4	@ 16" O.C.
	EXTERIOR	2x4	@ 16" O.C.
BONUS	INTERIOR	2x4	@ 16" O.C.
	EXTERIOR	2x4	@ 16" O.C.

HANGER SCHEDULE FOR JOISTS AND BEAMS

MEMBER SIZE	HANGER
2x6	LUS26
2x10	LUS10
2x12	LUS10
(2) 2x6	HUS26-2
(2) 2x10	HUS10-2
(2) 2x12	HUS12-2
(3) 2x8	LUS28-3
(3) 2x8	LUS28-3
(3) 2x10	LUS210-3
(3) 2x12	HUS12-3 MIN
(4) 2x12	HU210-4

HEADER JAM STUD AND JACK POST:
PROVIDE (3) 2x6 HEADER AT ALL OPENINGS U.N.O. (1) JACK AND (1) BYPASS STUDS/ FULL HEIGHT STUDS BOTH SIDES AT ALL LOAD BEARING JAMS (SEE BELOW) – TYP. UNO. – PROVIDE (3) 2x6 UNDER ALL LVL BEAMS U.N.O.

BYPASS STUDS NUMBER:

OPENING SIZE (INCH)	2x4	2x6
<2'-	2	1
2'- 4'	3	1
4'- 8'	4	2
8'- 8'	5	3
8'-13'	–	4
13'-16'	–	5

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BEATON HOME

GREG & MAUREEN BEATON
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LAKE WYLIE
18222 ROCKABILL LN.
CHARLOTTE, NC 28278

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 28905 JOSEPH M. MCCARTHY 12.12.22
MStruct Engineering, PLLC No. P-0633 CERTIFICATE OF AUTHORIZATION

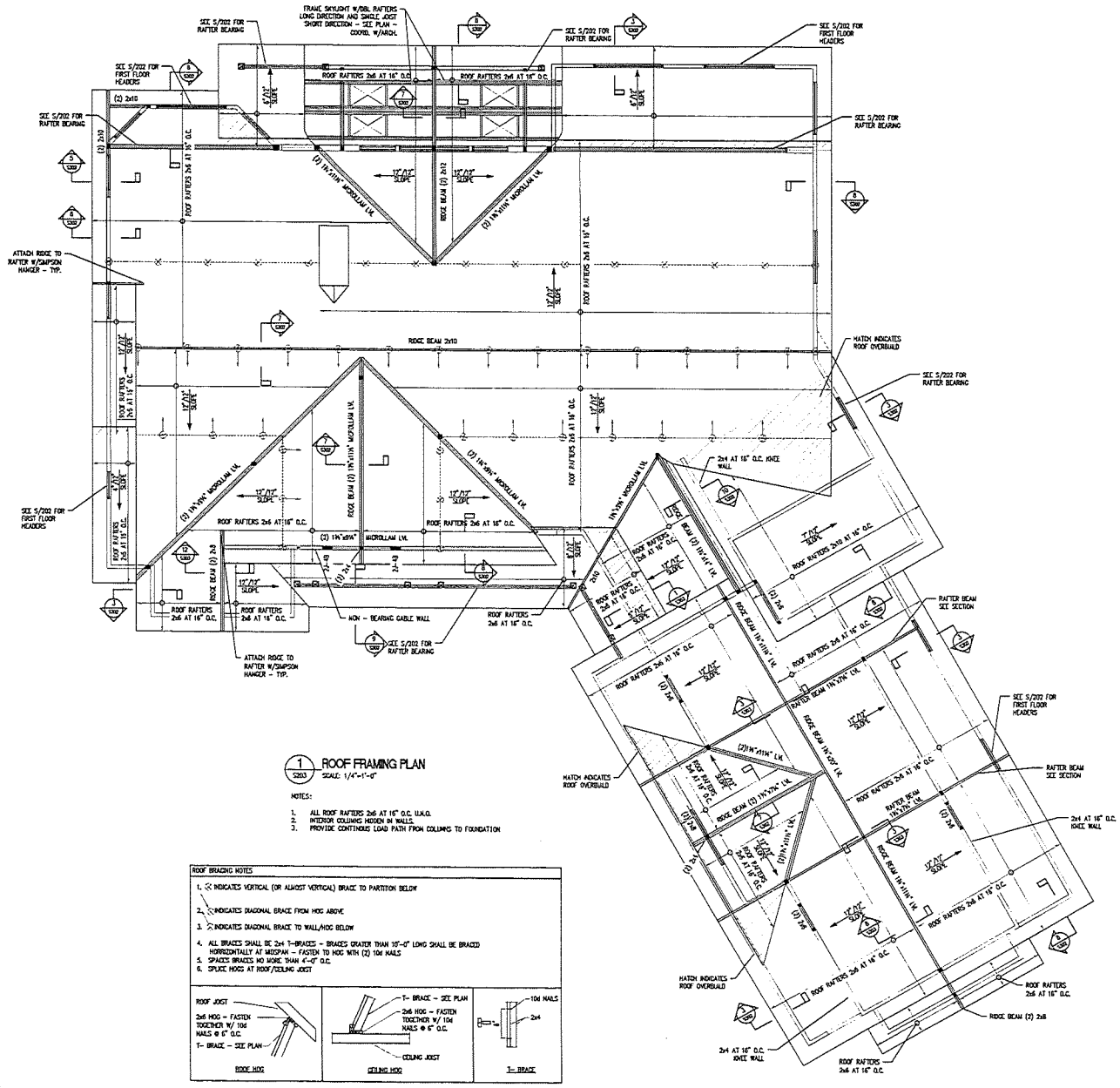
Revision

No.	Description	Date

CEILING FRAMING PLAN

PROJECT #: 0023
DATE: 12.12.22
DRAWN BY: VVG
CHECKED BY:

S202



1 S203 ROOF FRAMING PLAN

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

NOTES:

1. ALL ROOF RAFTERS 2x6 AT 16" O.C. U.N.O.
2. INTERIOR CEILINGS HIDDEN IN WALLS.
3. PROVIDE CONTINOUS LOAD PATH FROM COLUMNS TO FOUNDATION

ROOF BRACING NOTES

1. ⊠ INDICATES VERTICAL (OR ALMOST VERTICAL) BRACE TO PARTITION BELOW
2. ⊠ INDICATES DIAGONAL BRACE FROM HOG ABOVE
3. ⊠ INDICATES DIAGONAL BRACE TO WALL/HOG BELOW
4. ALL BRACES SHALL BE 2x4 T-BRACES - BRACES GRATER THAN 10'-0" LONG SHALL BE BRACED HORIZONTALLY AT MIDSPAN - FASTEN TO HOG WITH (2) 10d NAILS
5. SPACES BRACES NO MORE THAN 4'-0" O.C.
6. SPLICE HOGS AT ROOF/CEILING JOIST

2x SAWN LUMBER HEADER:

PROVIDE (1) PIECE OF ¾" PLYWOOD FILLER BETWEEN 2x HEADER MEMBERS TO ACHIEVE 3½" WALL THICKNESS - FASTEN 2x MEMBERS W/ (2) ROWS OF 10d NAILS @ 12" O.C. - SEE .../S302 FOR HEADER BEARING CONNECTION

MICROLAM HEADER NOTE:

GLUE AND FASTEN MEMBERS W/ (2) ROWS OF 10d NAILS @ 12" O.C. - SEE .../S302 FOR HEADER BEARING CONNECTION

GANG STUD NOTE:

FASTEN GANGED 2x WALL STUDS W/ (1) ROW OF 10d NAILS @ 12" O.C. - TYP.

19/32" STRUCTURAL RATED PLYWOOD ROOF DECK - ATTACH TO ROOF MEMBERS W/ 10d NAILS @ 4" O.C. EDGES AND 6" O.C. INTERMEDIATE - LAYOUT STAGGERED AND PERPENDICULAR TO ROOF MEMBERS - TYP. U.N.O.

FASTENING SCHEDULE

CONNECTION	FASTNER	NUMBER OR SPACING
TOP OR SOLE PLATE TO STUD, END NAIL	16d COMMON	2
STUD TO SOLE PLATE, TOE NAIL	8d COMMON	4
DOUBLE STUDS FACE NAIL	10d COMMON	16" O.C.
TRIPLE STUDS FACE NAIL	10d COMMON	12" O.C.
¾ STUDS, NAIL EACH LAMINATION W/	16d COMMON	12" O.C.
BUILT UP CORNER STUDS	16d COMMON	24" O.C.
DOUBLE TOP PLATE, FACE NAIL	10d COMMON	12" O.C.
TOP PLATE, LAP & INTERSECTIONS FACE NAIL	10d COMMON	2
CONTINUOUS HEADER, TWO PIECES	16d COMMON	16" O.C. ALONG EDGE
CONTINUOUS HEADER TO STUD, TOE NAIL	8d COMMON	3
LEDGER STRIP	16d COMMON	3 AT EACH TRUSS
BUILT UP GIRDERS & BEAMS	16d COMMON	12" O.C. AT TOP AND BOTTON STAGGERED 2 ENDS AND AT EACH SPLICE
COLLAR TIE TO RAFTER , FACE NAIL	16d COMMON	4
JACK RAFTER TO HIP	10d COMMON	3
ROOF RAFTER TO 2X RIDGE BEAM, TOENAIL	16d COMMON	2

HANGER SCHEDULE FOR JOISTS AND BEAMS

MEMBER SIZE	HANGER
2x8	LUS28
2x10	LUS10
2x12	LUS10
(2) 2x8	HUS28-2
(2) 2x10	HUS10-2
(2) 2x12	HUS12-2
(3) 2x8	LUS28-3
(3) 2x8	LUS28-3
(3) 2x10	LUS210-3
(3) 2x12	MIU212-3 MIN
(4) 2x12	MIU10-4

HEADER JAM STUD AND JACK POST:
PROVIDE (3) 2x6 HEADER AT ALL OPENINGS U.N.O, (1) JACK AND (1) BYPASS STUDS/ FULL HEIGHT STUDS BOTH SIDES AT ALL LOAD BEARING JAMS (SEE BELOW) - TYP. UNO. - PROVIDE (3) 2x6 UNDER ALL LVL BEAMS U.N.O.

BYPASS STUDS NUMBER:

OPENING SIZE (INCH)	2x4	2x6
<2'	2	1
2'- 4'	3	1
4'- 6'	4	2
6'- 8'	5	3
8'-13'	-	4
13'-16'	-	5

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ENGINEER'S SEAL IS AFFIXED

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 28905 CHARLES E. MCCALL JR. 12.12.22

MStruct Engineering, PLLC No. P-0633 CERTIFICATE OF AUTHORIZATION NORTH CAROLINA

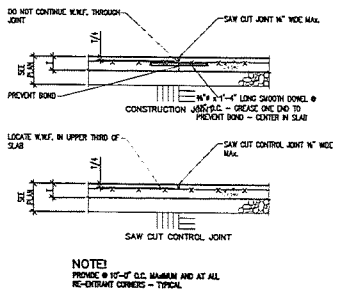
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No.	Description	Date

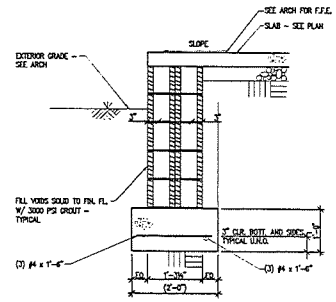
ROOF FRAMING PLAN

PROJECT #	0023
DATE	12.12.22
DRAWN BY	VVG
CHECKED BY	

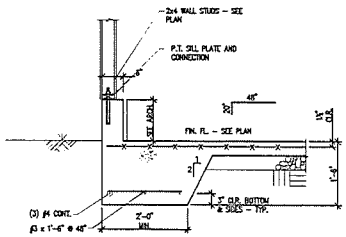
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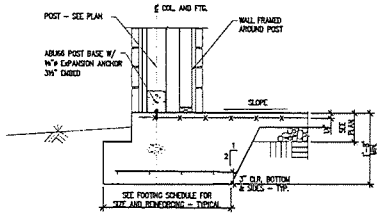
1 S301 CONTROL/CONSTRUCTION JOINT
SCALE: 3/4"=1'-0"



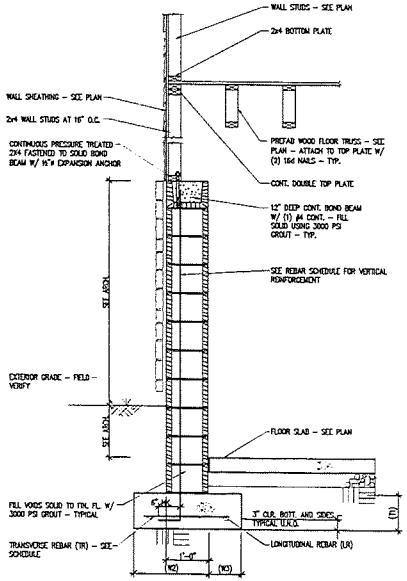
2 S301 SECTION AT FRONT PORCH
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3 S301 SECTION AT GARAGE WALL
SCALE: 3/4"=1'-0"

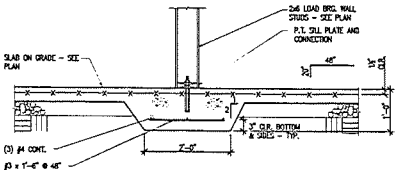


4 S301 SECTION AT EXTERIOR POST
NOT TO SCALE

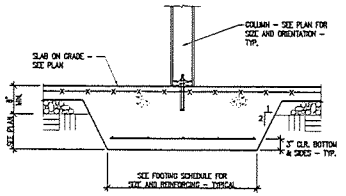


CANTILEVERED BASEMENT/RETAINING WALL SCHEDULE									
RETAINED HEIGHT (H1)	WALL REBAR	LOCATION	CMU SIZE (T)	FOOTING WIDTH (W)	HEEL (W2)	TOE (W2)	FOOTING THICKNESS (T1)	FOOTING REBAR (TR)	LONGITUDINAL REBAR (LR)
2'-0"	#5 @16" O.C.	EDGE	12"	4'-0"	2'-6"	1'-6"	1'-0"	#4 AT 16" O.C.	(2) #4 REBAR
6'-0"	#6 @16" O.C.	EDGE	12"	5'-6"	3'-6"	1'-6"	1'-0"	#4 AT 16" O.C.	(5) #4 REBAR
8'-0" OR LESS	#6 @16" O.C.	EDGE	12"	7'-6"	5'-6"	1'-6"	1'-0"	#4 AT 16" O.C.	(4) #4 REBAR

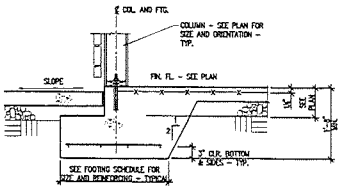
5 S301 SECTION AT RETAINING WALL
SCALE: 3/4"=1'-0"



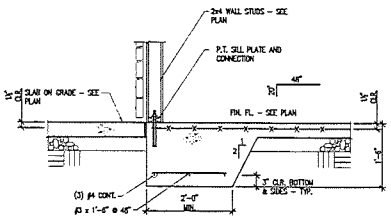
6 S301 MID WALL ON THICKENED SLAB
SCALE: 3/4"=1'-0"



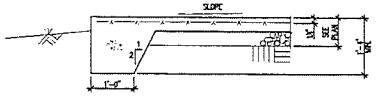
7 S301 SECTION AT INTERIOR COLUMN FOOTING
SCALE: 3/4"=1'-0"



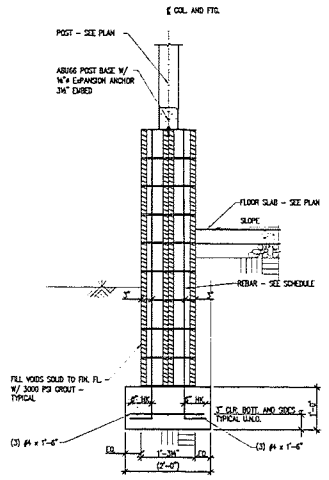
8 S301 SECTION AT EXTERIOR POST
NOT TO SCALE



9 S301 SECTION AT EXTERIOR WALL
SCALE: 3/4"=1'-0"



10 S301 SECTION AT EXTERIOR TURNDOWN
NOT TO SCALE



11 S301 SECTION AT FRONT POST
SCALE: 3/4"=1'-0"

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THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL NOTIFY THE DESIGNER OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK.



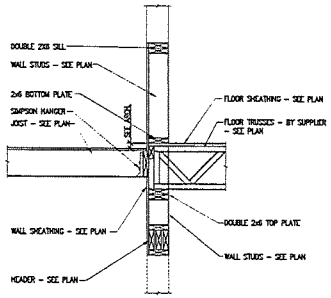
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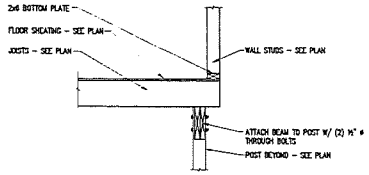
DETAILS

PROJECT #	0023
DATE	12.12.22
DRAWN BY:	VVG
CHECKED BY	

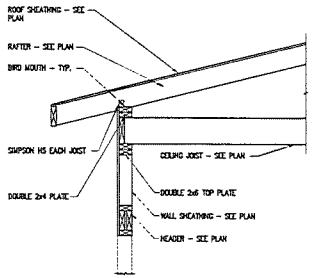
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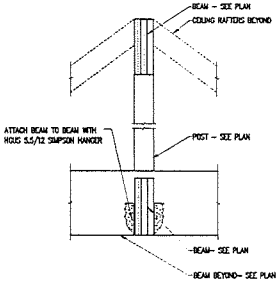
1 S302 SECTION AT EXTERIOR WALL
SCALE: 3/4"=1'-0"



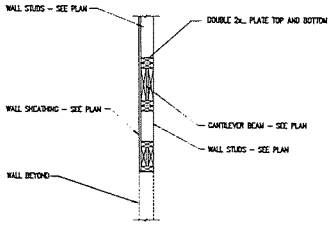
2 S302 SECTION AT EXTERIOR WALL
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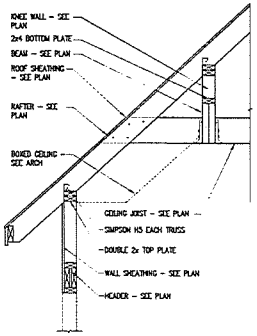
3 S302 SECTION AT RAFTER BEARING
SCALE: 3/4"=1'-0"



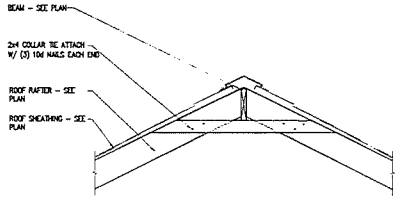
4 S302 SECTION AT BEAM
SCALE: 3/4"=1'-0"



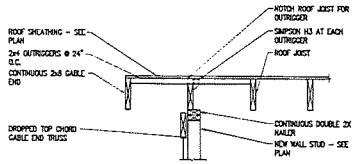
5 S302 SECTION AT CANTILEVER BEAM – SEE PLAN
SCALE: 3/4"=1'-0"



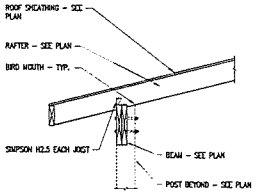
6 S302 SECTION AT RAFTER BEARING AND KNEE WALL
SCALE: 3/4"=1'-0"



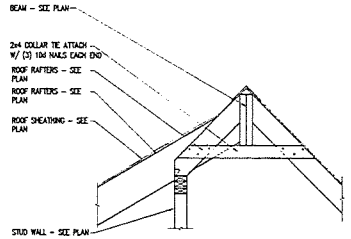
7 S302 SECTION AT RIDGE
NOT TO SCALE



8 S302 SECTION AT ROOF
SCALE: 3/4"=1'-0"



9 S302 SECTION RAFTER BEARING
SCALE: 3/4"=1'-0"



10 S302 SECTION AT RIDGE
NOT TO SCALE

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ENGINEER SEAL AND SIGNATURE

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 28905 JOSEPH M. MOSTELLER

12.12.22

NORTH CAROLINA MStruct Engineering, PLLC No. P-0833 CERTIFICATE OF AUTHORIZATION

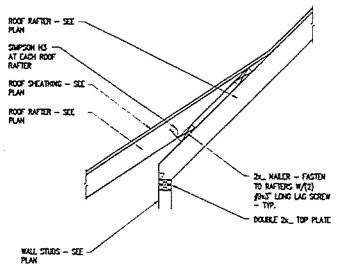
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No.	Description	Date

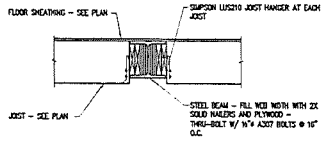
DETAILS

PROJECT #	0023
DATE	12.12.22
DRAWN BY	VVG
CHECKED BY	

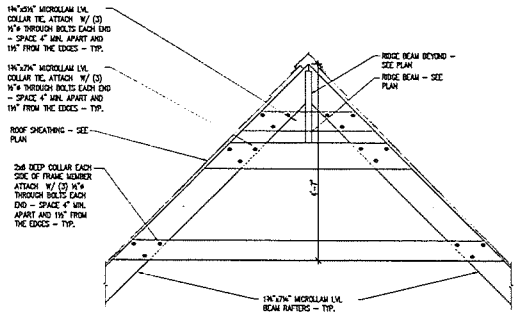
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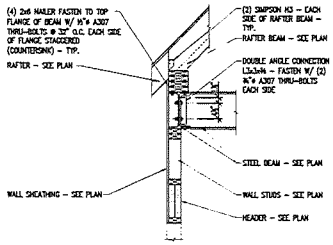
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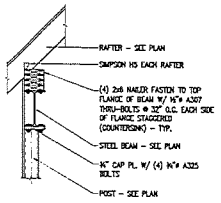
2 S303 SECTION AT BEAM
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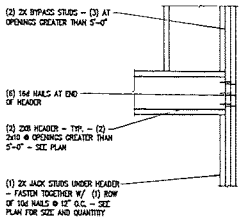
3 S303 SECTION AT RIDGE
SCALE: 3/4"=1'-0"



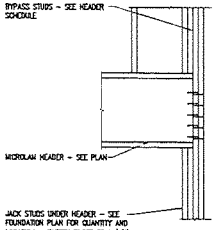
4 S303 SECTION AT BEAM
NOT TO SCALE



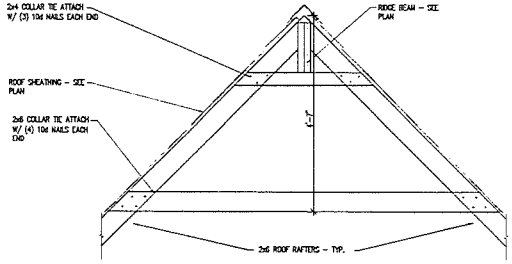
5 S303 SECTION AT BEAM BEARING
NOT TO SCALE



6 S303 2X BOXED HEADER BEARING
SCALE: 3/4"=1'-0"



7 S303 MICRO=LAM HEADER BEARING
SCALE: 3/4"=1'-0"



8 S303 SECTION AT RIDGE
SCALE: 3/4"=1'-0"

MStruct Engineering, PLLC
Structural Design+Inspection
1521 Nassau Blvd.
Charlotte, NC 28205
704. 307 .3099
www.mstruct.com
MStruct Job#: 166-22

Comerstone Draft
Cornerstone Quality

Drafter: Cornerstone Draft
Address: 756 Vineyard St., Jonesboro, TX 75189
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E-mail: Cornerstone@swiftnet.com

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BEATON HOME

GREG & MAUREEN BEATON
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LAKE WYLIE
18222 ROCKABILL LN.
CHARLOTTE, NC 28278

NORTH CAROLINA PROFESSIONAL SEAL 28905 ENGINEER
12.12.22
MStruct Engineering, PLLC No. C-3633
NORTH CAROLINA CERTIFICATE OF AUTHORIZATION

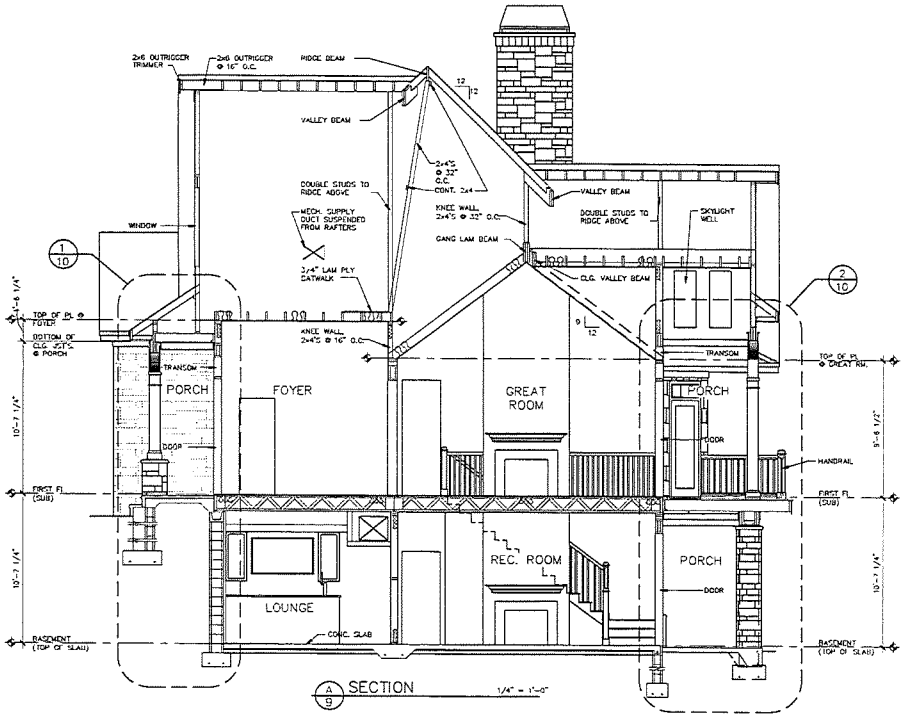
Revision

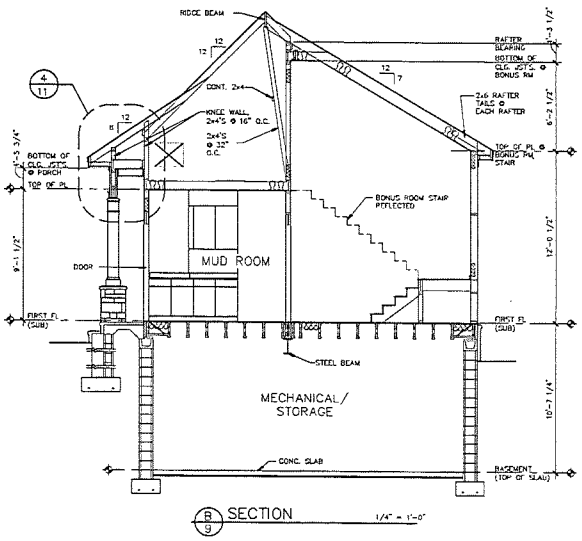
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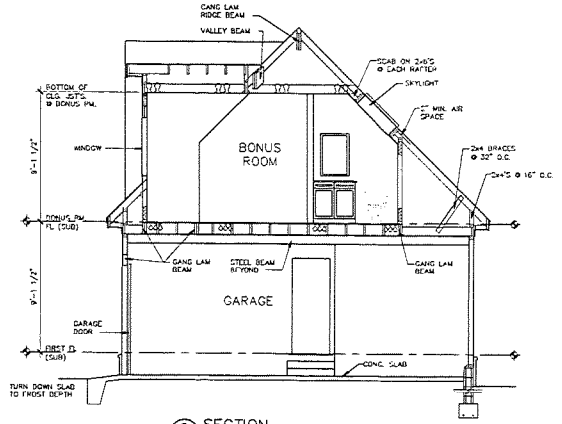
DETAILS

PROJECT #	0023
DATE:	12.12.22
DRAWN BY:	VVG
CHECKED BY	

S302







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Comerstone Quality

Drafter: Comerstone Draft
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E-mail: donhartington@outlook.com

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FIGURES TO BE VERIFIED

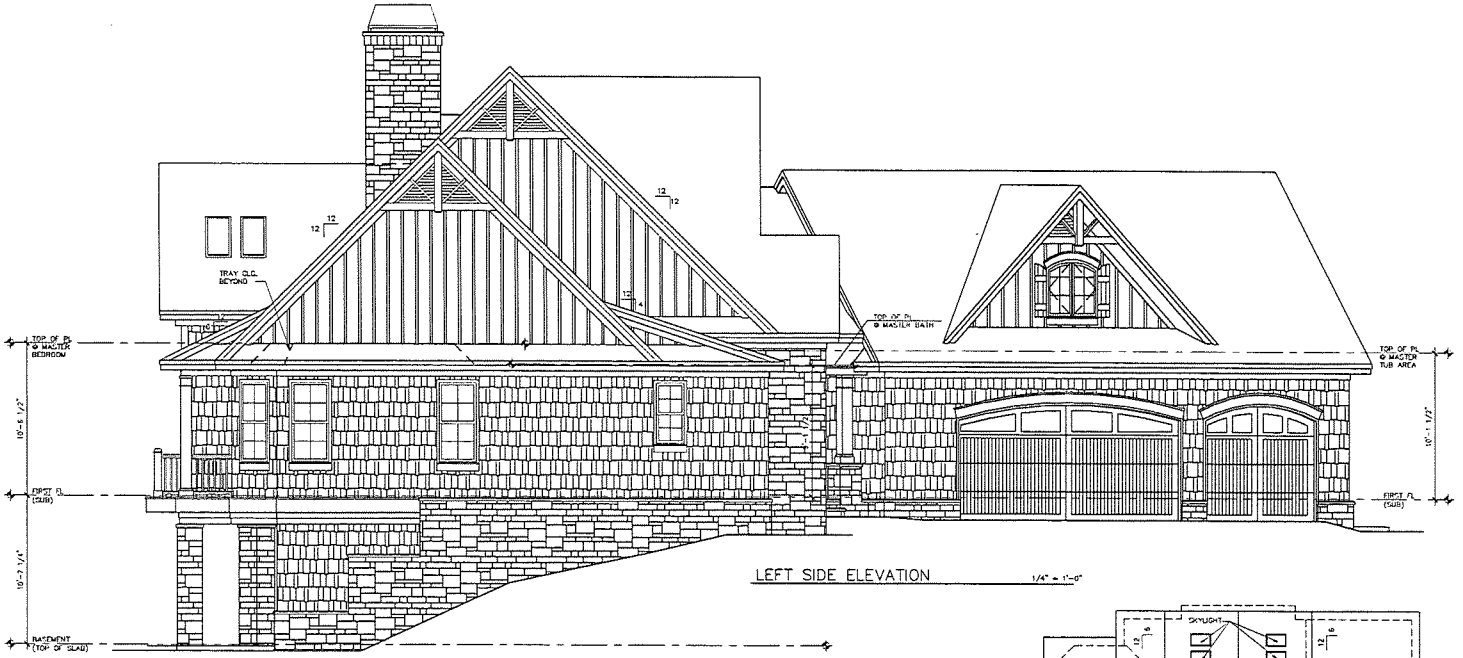
Revision

No.	Description	Date
△	OWNER - PERMIT SET	06/04/22

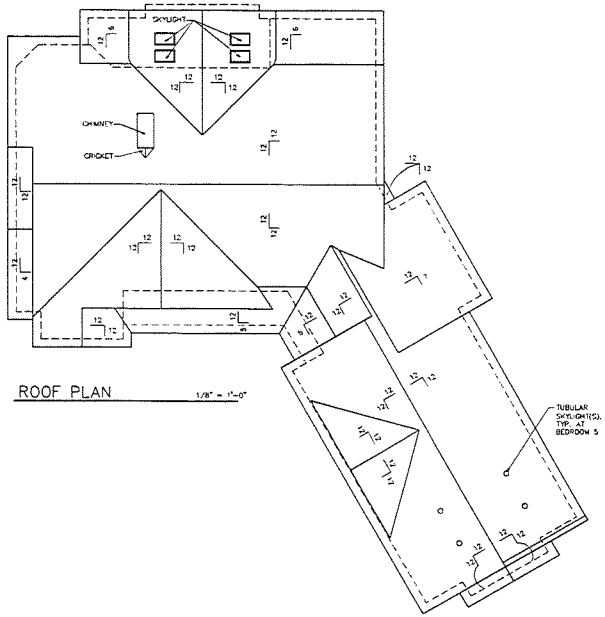
SECTIONS

PROJECT #	0023
DATE:	07.18.22
DRAWN BY:	TJH
CHECKED BY	GS

A3.00



LEFT SIDE ELEVATION 1/4" = 1'-0"



ROOF PLAN 1/8" = 1'-0"

Cornerstone Draft
Cornerstone Quality

Owner: Cornerstone Draft
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E-mail: aementerprise@outlook.com

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LAKE WYLIE
18222 ROCKABILL LN.
CHARLOTTE, NC 28278

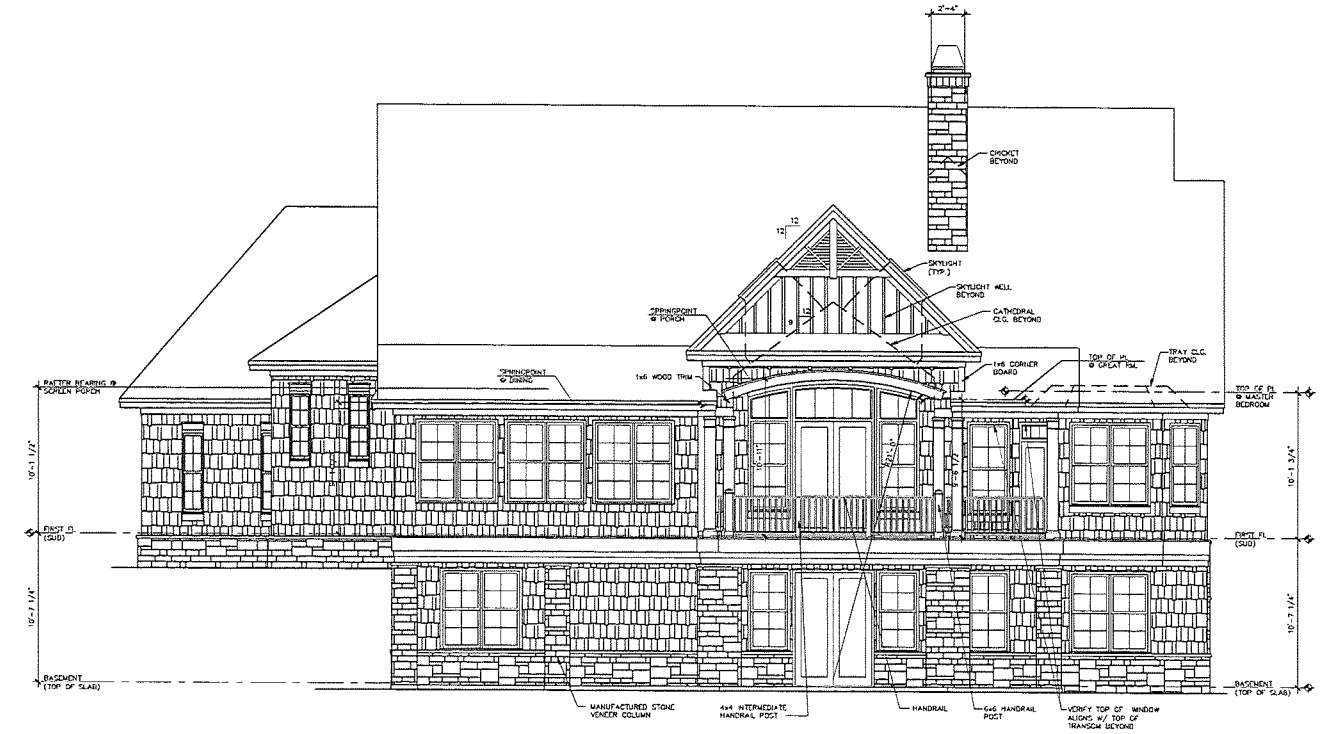
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No.	Description	Date
A	OWNER - PERMIT SET	09/04/22

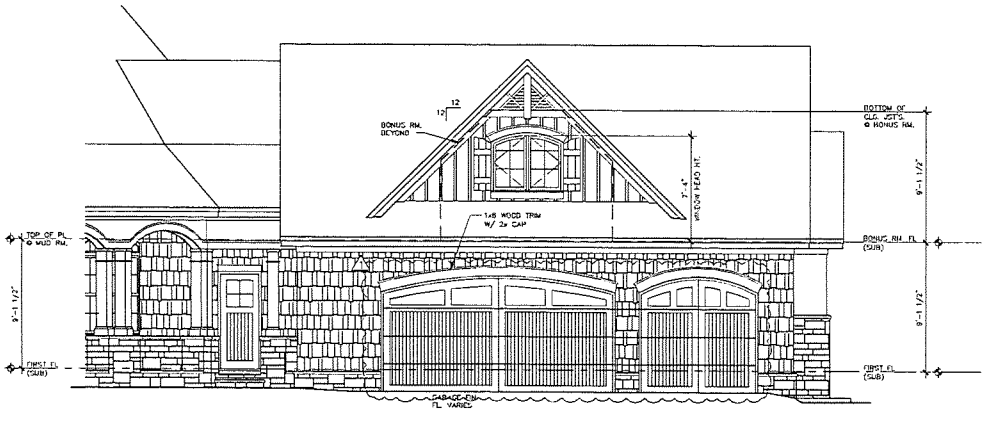
EXTERIOR ELEVATIONS

PROJECT #	0023
DATE:	07.18.22
DRAWN BY	TLH
CHECKED BY	GB

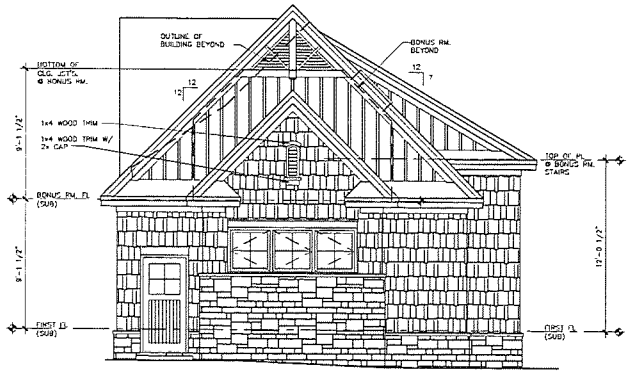
A2.02



REAR ELEVATION 1/4" = 1'-0"



GARAGE FRONT ELEVATION 1/4" = 1'-0"



GARAGE SIDE ELEVATION 1/4" = 1'-0"

Cornerstone Draft
Cornerstone Quality

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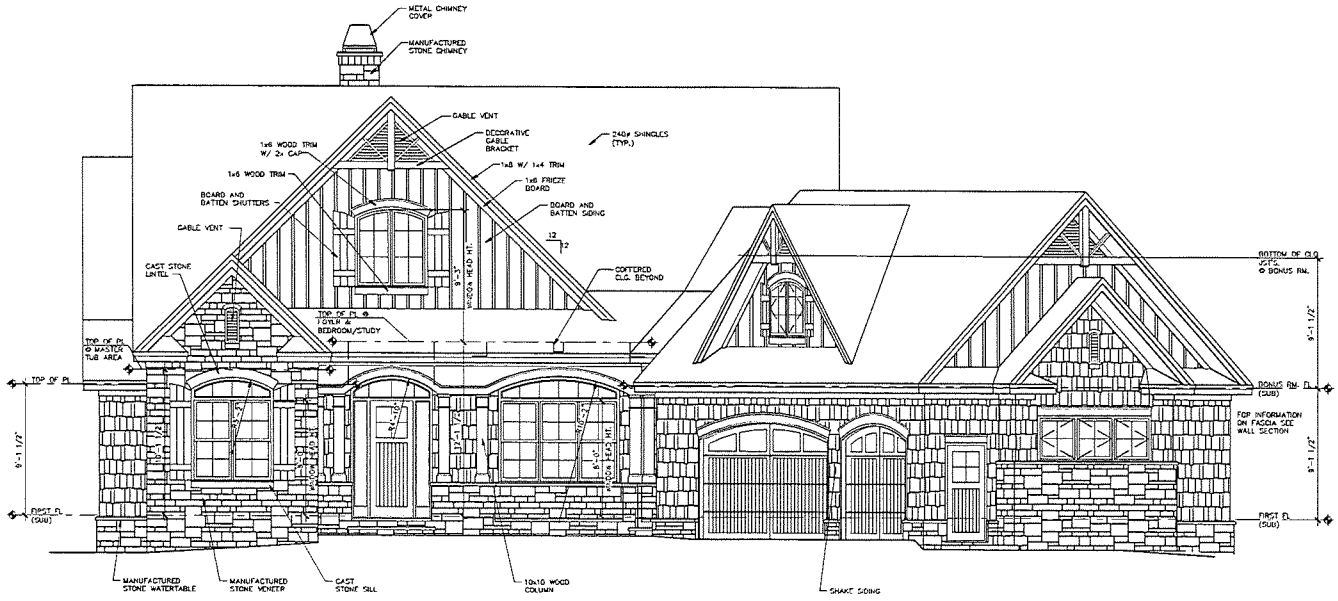
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No.	Description	Date
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2	OWNER - PERMIT SET	11/11/22

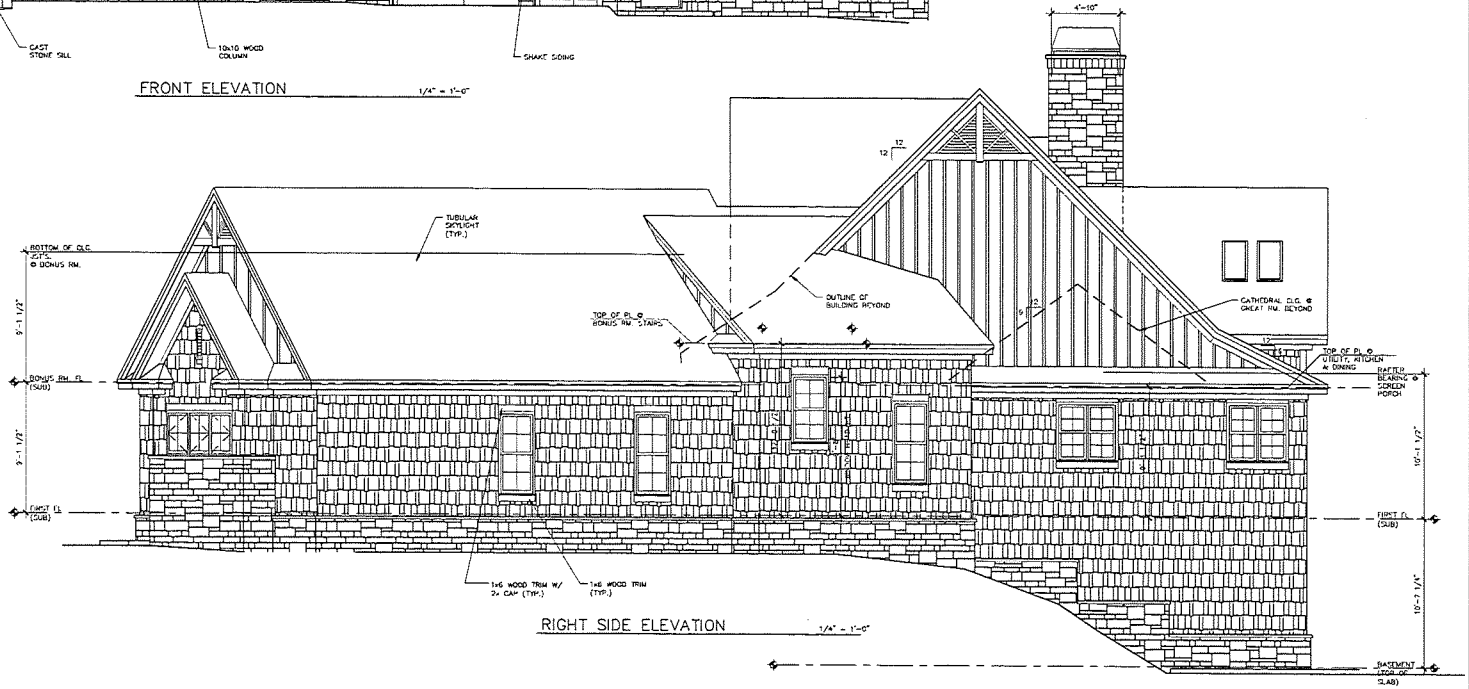
EXTERIOR ELEVATIONS

PROJECT #	0033
DATE:	07.18.22
DRAWN BY:	TJH
CHECKED BY	GB

A2.01



FRONT ELEVATION 1/4" = 1'-0"



RIGHT SIDE ELEVATION 1/4" = 1'-0"

Cornerstone Draft

Cornerstone Quality

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(VERIFIED FIELD MEASURED)

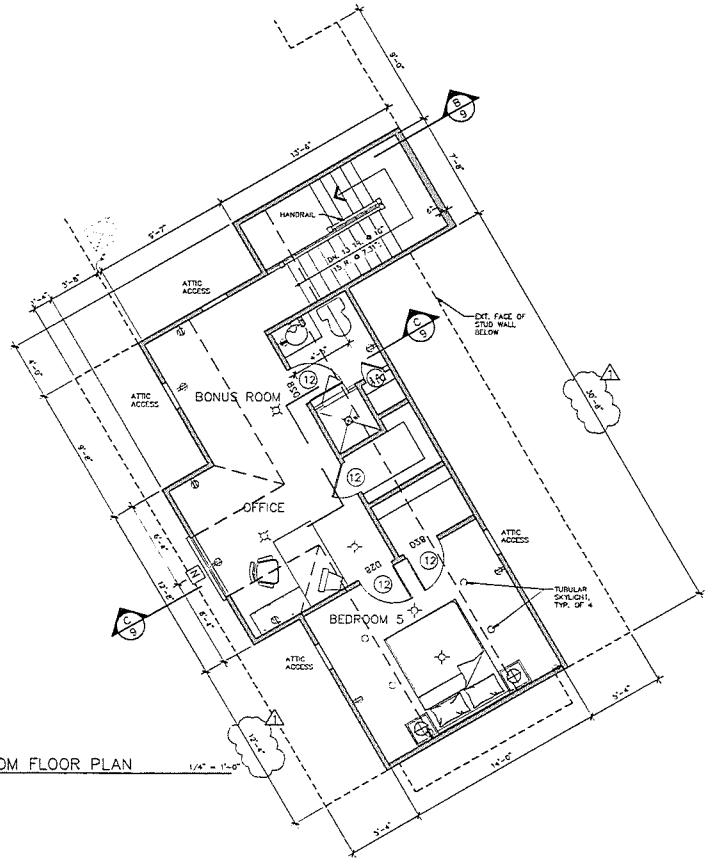
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No.	Description	Date
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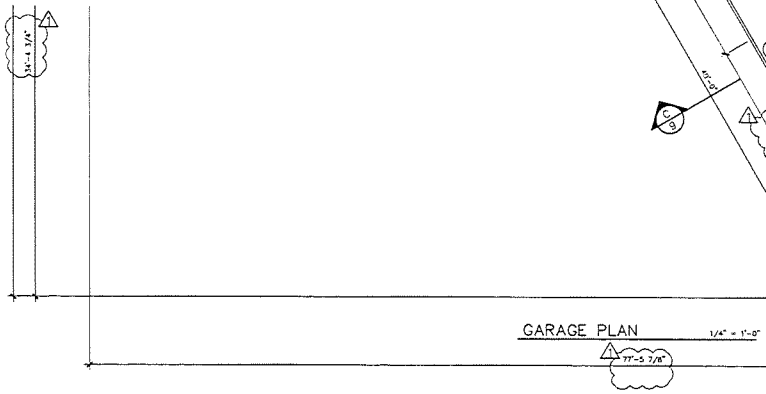
EXTERIOR ELEVATIONS

PROJECT #	0023
DATE:	07.18.22
DRAWN BY:	TJH
CHECKED BY	GB

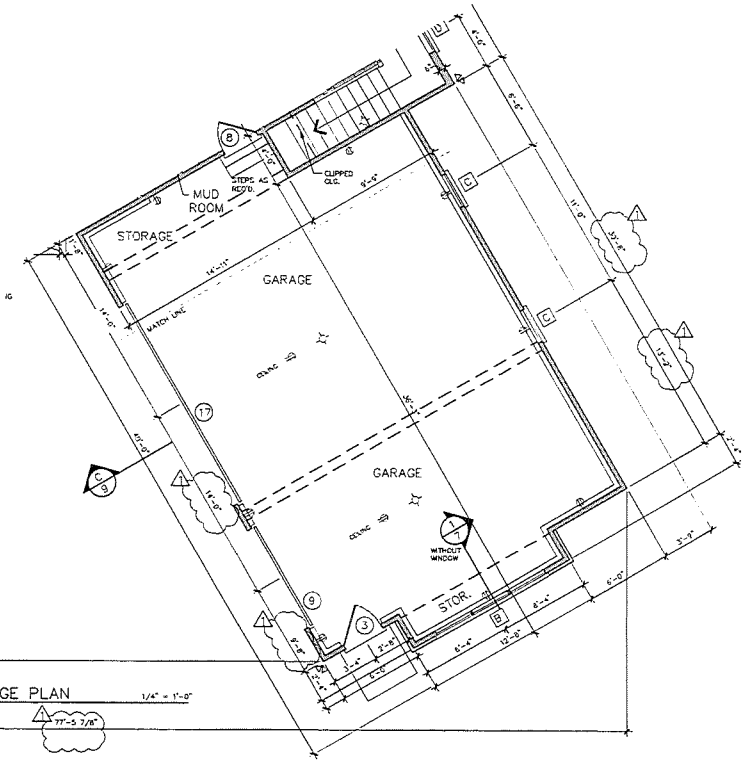
A2.00



BONUS ROOM FLOOR PLAN 1/4" = 1'-0"



GARAGE PLAN 1/4" = 1'-0"



Cornerstone Draft

Cornerstone Quality

Drafter: Cornerstone Draft
Address: 704 Windmill St., Houghton, TX 75189
Phone: 972.207.3526
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Contractor: AEM Enterprise, LLC
Address: 4204 Saint Andrew Blvd., Charlotte, NC 28217
Phone: 704.378.4737
E-mail: beatonbrothers@outlook.com

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CHARLOTTE, NC 28278

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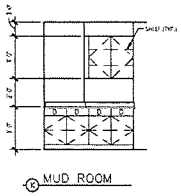
No.	Description	Date
1	OWNER - PERMIT SET	06/04/22
2	OWNER - PERMIT SET	07/11/22

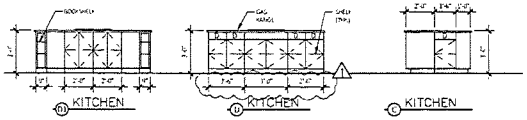
BONUS ROOM PLAN

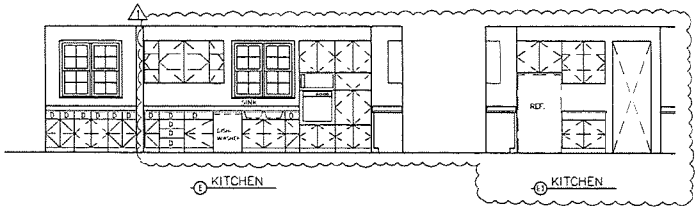
PROJECT #	0023
DATE:	07.18.22
DRAWN BY:	TJH
CHECKED BY:	GB

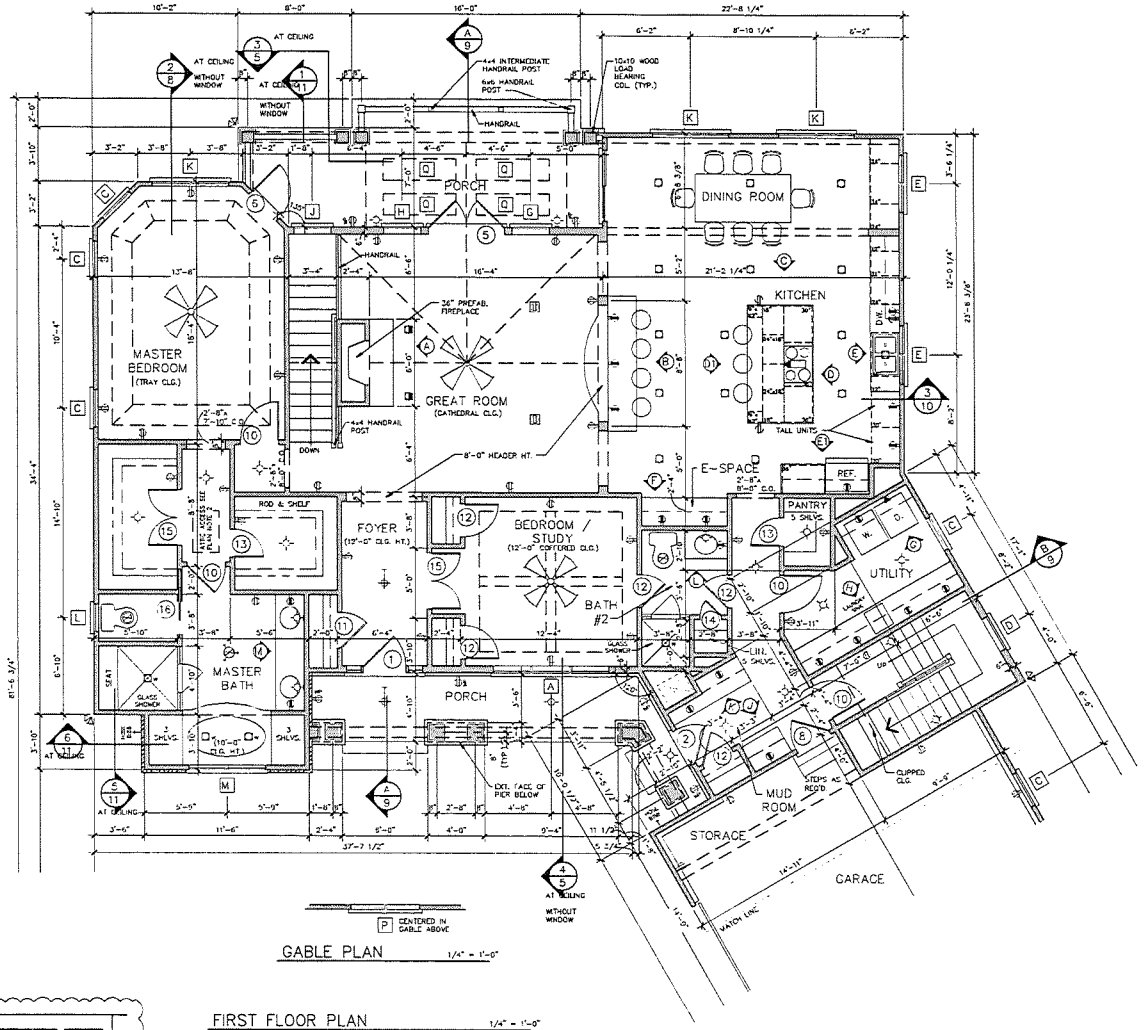
A1.01

ADDITIONAL WINDOW QUANTITY
(BEYOND ORIGINAL DESIGN, REF.
WINDOW SCHED. IN DONALD A. GARDNER
DRAWINGS)
2 - K UNITS
1 - E UNIT









GABLE PLAN 1/4" = 1'-0"

FIRST FLOOR PLAN 1/4" = 1'-0"

BASEMENT	1,417 sq. ft.
FIRST FLOOR	2,058 sq. ft.
TOTAL LIVING	4,187 sq. ft.
MECHANICAL/STORAGE	661 sq. ft.
GARAGE & STORAGE	920 sq. ft.
BONUS ROOM	682 sq. ft.
TOTAL	5,768 sq. ft.

Cornerstone Draft
Cornerstone Quality

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BEATON HOME

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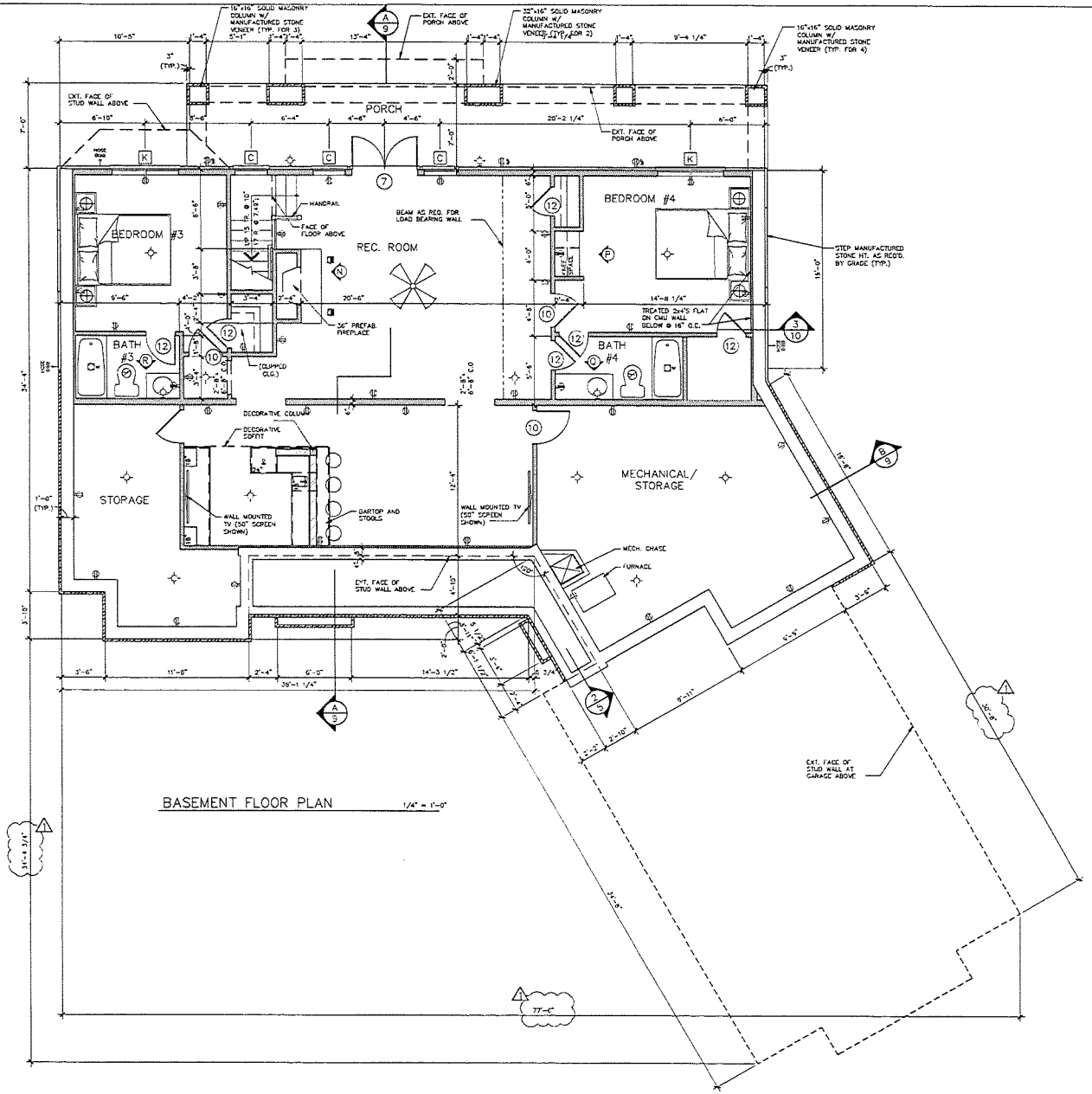
Revision

No.	Description	Date
1	OWNER - PERMIT SET	06/04/22
2	OWNER - PERMIT SET	07/11/22

FLOOR PLAN

PROJECT #	0023
DATE:	07.16.22
DRAWN BY:	TLH
CHECKED BY:	GB

A1.00



BASEMENT FLOOR PLAN 1/4" = 1'-0"

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LAKE WYLIE
18222 ROCKABILL LN.
CHARLOTTE, NC 28278

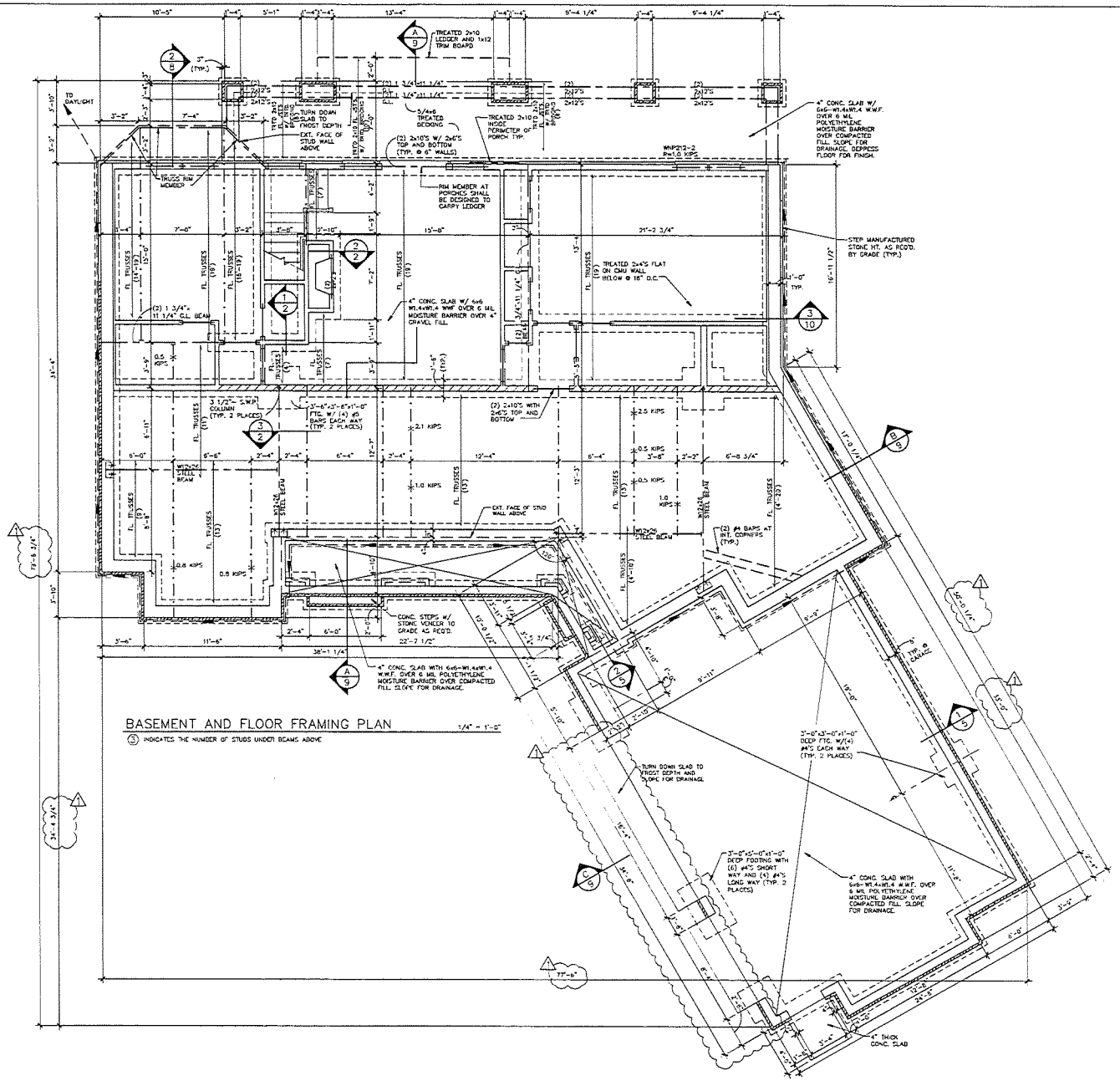
Revision

No.	Description	Date
1	OWNER - PERMIT SET	06/04/22
2	OWNER - PERMIT SET	07/11/22

BASEMENT PLAN

PROJECT #	0023
DATE	07.18.22
DRAWN BY:	TLH
CHECKED BY	GB

A0.30



BASEMENT AND FLOOR FRAMING PLAN 1/4" = 1'-0"

(3) INDICATES THE NUMBER OF STUDS UNDER BEAMS ABOVE

Cornerstone Draft

Cornerstone Quality

Drafter: Cornerstone Draft
Address: 704 Whitehall Dr., Josephine, TX 75189
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E-mail: Authorityfloor@outlook.com

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GREG & MAUREEN BEATON

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LAKE WYLIE

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CHARLOTTE, NC 28278

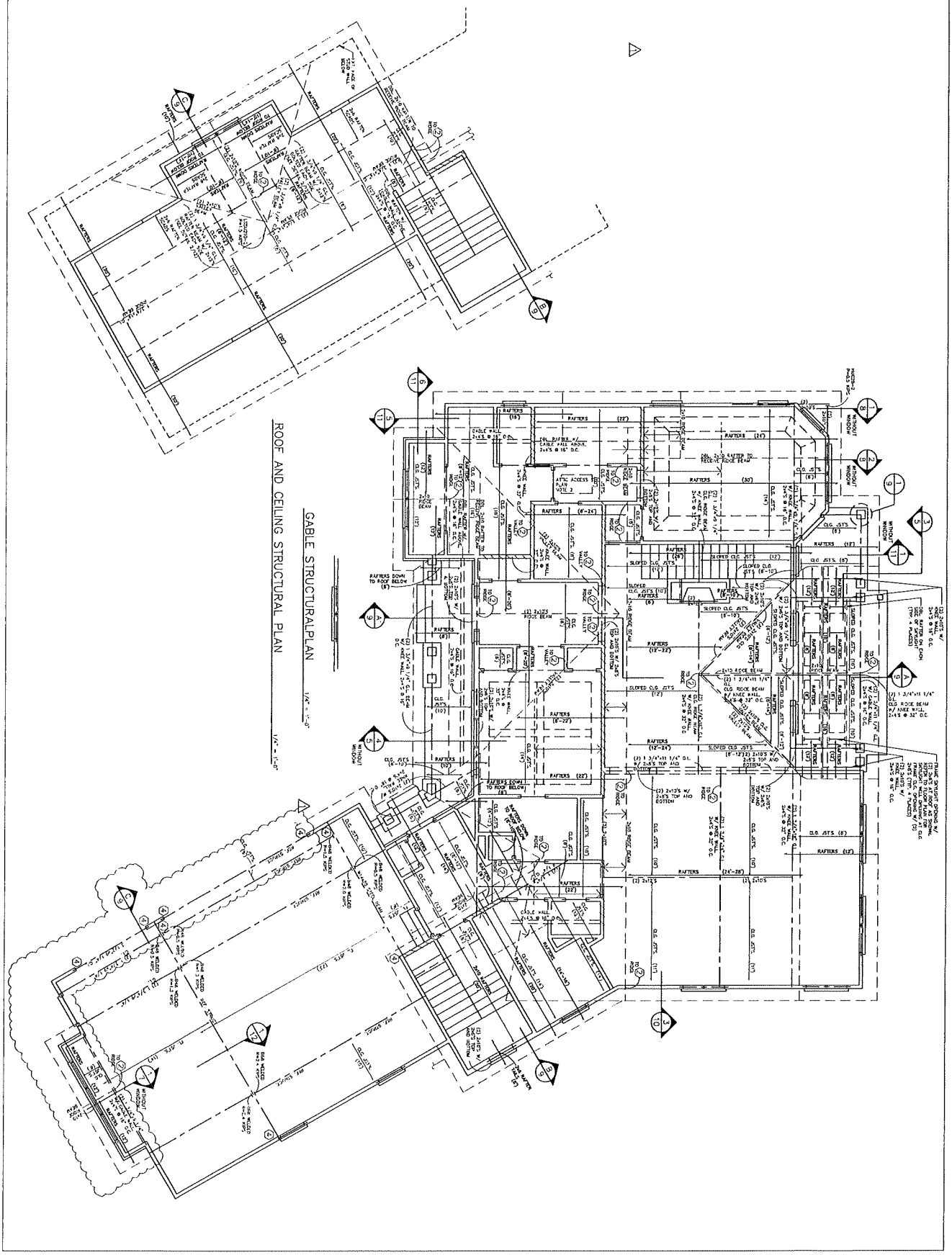
Revision

No.	Description	Date
1	OWNER - PERMIT SET	06/04/22
2	OWNER - PERMIT SET	07/11/22

FOUNDATION PLAN

PROJECT #	0023
DATE:	07.18.22
DRAWN BY:	TJH
CHECKED BY:	GB

A0.20



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LAKE WYLIE
18222 ROCKABILL LN.
CHARLOTTE, NC 28278

Revision		
No.	Description	Date
A	OWNER - PERMIT SET	09/04/22
	OWNER - PERMIT SET	07/15/22

ROOF PLAN

PROJECT # 0623
DATE 07.15.22
DRAWN BY TJH
CHECKED BY GS

A0.10

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