IREDELL COUNTY HEALTH DEPARTMENT

Statesville Office (704) 878-5305 Mooresville Office (704) 660-3625 PERMIT # 233451

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

PIN # 4627-21-4988

APPLICANT/OWNER: Jason + Amy Murphy APPLICANT ADDRESS: 8042 Garnkirk Rd. Huntersville, NC 28078

SITE ADDRESS: 109 Goathill Rd. Mooresville, NC 28117 PHONE: 704-258-4287 ALT. PHONE

SITE DIRECTIONS: BSR towards Lake Norman → R on McKendree → R on Lakeview Shores Loop → R on Goathill → house on left

SUBDIVISION: CL+T SECTION: 8 LOT # 315 LOT AREA: 0.93 acres SAP CONTROLLED: ☐ YES ☒ NO

DESIGN FLOW: 480 GPD L.T.A.R.: 0.30

Septic Tank 1000 (gal)	STB	Date	☒ New System ☐ Repair ☐ Expansion	System Type: I II III IV V VI	☒ Residence No. Bedrooms 4
Pump Tank 1000 (gal)	PT	Date	System Description: Existing + 25% Reduction (Pressure Manifold)		☐ Business No. Persons 8
Pump Make	Model	Serial #	Repair System Description:	TS II Drip Irrigation	☐ Other No. Employees
# Nitrification Fields 2	# Lines 2 + Existing	Linear Ft. 185 + Existing	Maintenance Agreement Required:	☐ YES ☒ NO	☒ Slab ☐ Crawl Space
Trench Width 36"	Trench Bottom Depth(Low side) 24"-28"	Gravel Depth		☐ GRAVITY ☒ PRESSURE	☐ Basement w/plumbing ☐ Basement w/o plumbing

Water Supply: ☒ Private ☐ Public ☐ Community

Comments / Conditions: Pump + crush existing septic tank. Remove retaining wall around front walkway. Reroute water supply line from well at least 10 feet away from septic field + tanks. Surface drain and conduit cut crossing Orange/Blue lines must be removed. Pool construction equipment must not cross active septic system components. Conveyance lines beneath driveway must meet minimal depth requirements (30") or be constructed of ductile iron. Recommend pumping septic tank every 3-5 years

INITIAL SITE SKETCH

See attached plans from Michael Athanas + Associates

Dated: 2/21/2018 Michael Athanas LS # 1252

★ Pre-construction meeting with installer at site is REQUIRED ★

3/12/18: Modified notes to clarify conduit detail and NOT remove fountain.

AS BUILT SKETCH

* supply line checked, solid piped lines checked - 8/28 CC

	Date	Initials
Drain Lines Checked	8/29/18	MD
Tanks Checked	8/28	CC
Pressure Manifold or Valve Box Checked	8/29/18	MD
Pressure Head Set	8/29/18	MD
Electrical Checked	2/4/2021	PJB
Floats Set	8/29/18	MD
Alarm Checked	1/25/2021	PJB
Maintenance Contract Y / N	N/A	

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

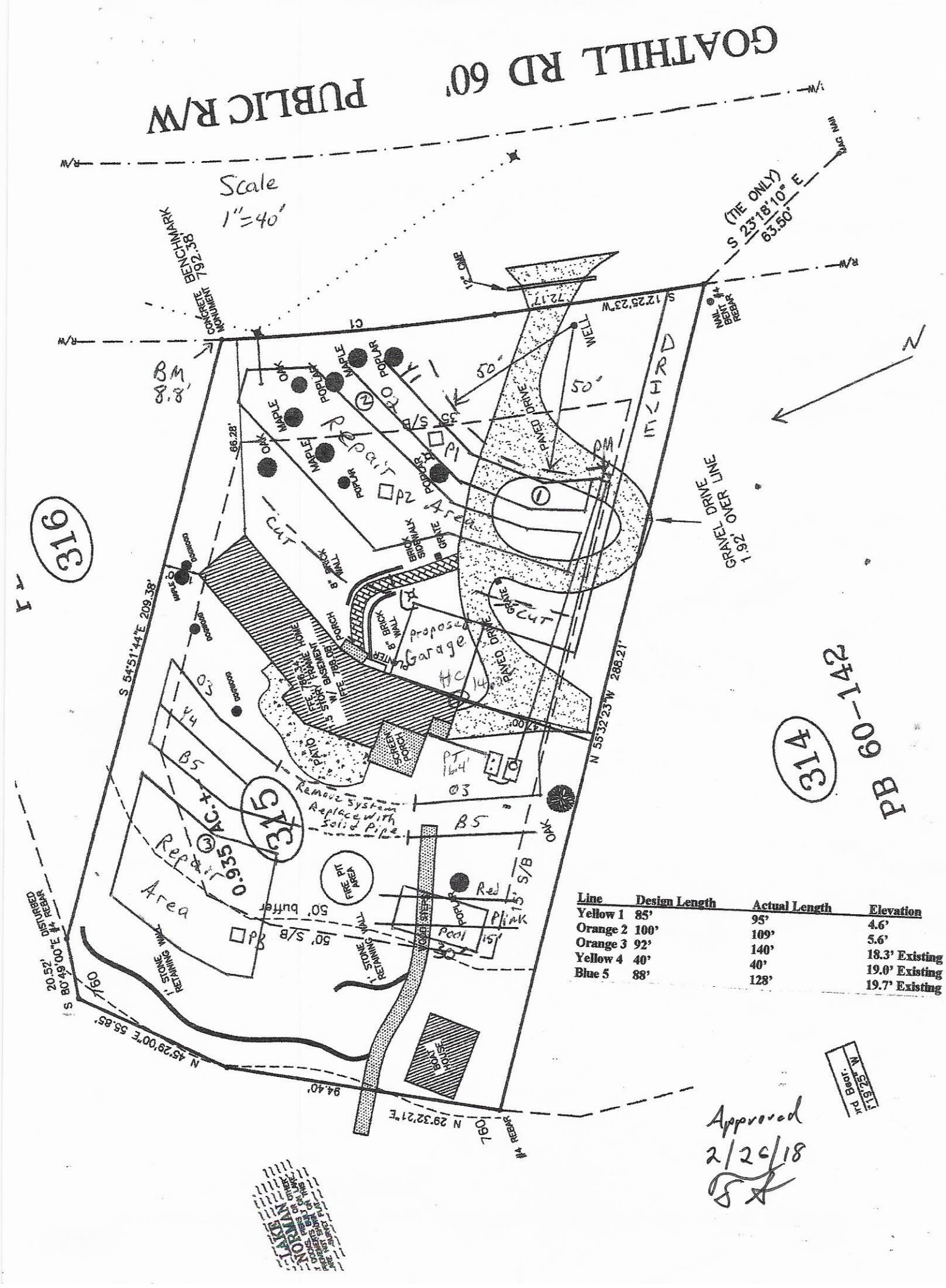
☐ IMPROVEMENT PERMIT *with plat valid without expiration.* ☒ IMPROVEMENT PERMIT *with site plan valid for 60 mos.* ☒ AUTHORIZATION TO CONSTRUCT *valid for period equal to IMPROVEMENT PERMIT--not to exceed 60 mo.*

Owner / Applicant Signature: Date: 3/2/18 Installed by: JW Ammons

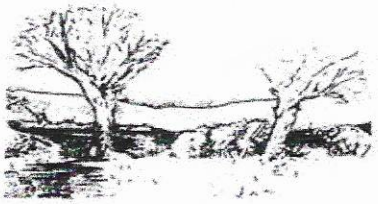
IMPROVEMENT PERMIT by: Tom Shuck Date: 2/26/2018 OPERATION PERMIT by: Patrick J Byrne III Date: 2/4/2021

AUTHORIZATION TO CONSTRUCT by: Tom Shuck Date: 2/26/2018 Existing System Inspected by: Date:

FOR SEPTIC FINAL INSPECTION: CALL 704-664-3703 between 8am-9am the day the inspection is needed. Be sure to speak with an inspector to confirm your inspection time.



Line	Design Length	Actual Length	Elevation
Yellow 1	85'	95'	4.6'
Orange 2	100'	109'	5.6'
Orange 3	92'	140'	18.3' Existing
Yellow 4	40'	40'	19.0' Existing
Blue 5	88'	128'	19.7' Existing



MICHAEL ATHANAS & ASSOCIATES
LICENSED SOIL SCIENTIST
561 Ennis Rd.
Weddington, NC 28173
(704) 576-3887

Reference: Data Sheet for 109 Goathill Rd, CL&T Sec 8, Lot 315
House Footprint: See attached
Building Setbacks: 35' front, 15' side, 50' lake
Water Source: Existing private well
Number of Bedrooms: 4/480 GPD
Proposed LTAR: 0.3 GPD/FT2
Proposed System Type: 25% Reduction
Proposed Repair System Type: TS II Drip irrigation
Distribution: Pressure manifold
Flow per Tap: 1 @ 10.1 GPM, 1 @ 12.5 GPM
Tap Size and Material: 1 @ ¾" SCH 80, 1 @ ¾" SCH 40
System Flow: 22.6 GPM
Dosing Volume: 176.8 gallons
Pump Run Time: 7.8 minutes
Elevation Head: 16.8'
Friction Head: 1.3'
Pressure Head: 2'
Total Dynamic Head: 20.1'
Supply Line Length: 100' of 2" PVC
Septic/Pump Tank Size: 1000/1000 gallons
Proposed Trench Bottom: 24" (initial), 18- 20" (repair)

Approved
2/26/18
SA

Line	Design Length	Actual Length	Elevation
Yellow 1	~~85'~~ 86	95'	4.6'
Orange 2	100' 102	109'	5.6'
Orange 3	92'	140'	18.3' Existing
Yellow 4	40'	40'	19.0' Existing
Blue 5	88'	128'	19.7' Existing

Initial System: 405'
Pump Tank: 16.4'
Repair System: 3880+FT2
House Corner: 14.2'
Benchmark: 8.8'

Comments:

The current septic must be modified for a pool addition and other improvements. In order to make room for current and future improvements, portions of the existing systems must be removed and abandoned. O3 will lose 48'. B5 will lose 40'. The portions of these lines must be removed because of the foundation drain of the wall of the fire pit. The sections that are removed must be replaced with solid pipe to connect the remaining lines. The existing red and pink flagged lines will be abandoned for the proposed pool (48' each). The 184' of line will be replaced and new septic and pump tanks installed. All supply lines must be 30" below the driveway. The current driveway will be removed. MA&A recommends a pre-installation with the county.

The ¾" SCH 80 tap will feed Y1 and O2.
The ¾" SCH 40 tap will feed O3, Y4, and B5.



Approved
2/26/18

PROPERTY ID #: 4627214988
COUNTY: Iredell

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: Jason Murphy
ADDRESS: 8042 Garnkirk Rd, Huntersville, NC 28078 APPLICATION DATE
PROPOSED FACILITY: 4 bdrm PROPOSED DESIGN FLOW (.1949): 480 GPD DATE EVALUATED:
LOCATION OF SITE: 109 Goathill Rd, CL&T Sec 8, Lot 315 PROPERTY SIZE: 0.93 AC
WATER SUPPLY: ☐ Private ☐ Public ☐ Well ☐ Spring ☐ Other PROPERTY RECORDED:
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	
PIT 1	LS 4%	0-10	Br SCL WSBK	FR SS SP SEXP	N/A	45"	F-C SAP PS	N/A	PS 0.3
		10-26	R C SBK	FR SS SP SEXP					
		26-45	R CL WSBK	FR SS SP SEXP					
		45-61	VER SL SAP M	FR SS SP SEXP					
PIT 2	LS 4%	0-12	FILL		N/A	40"	F-C SAP PS	N/A	PS 0.3
		12-30	R C SBK	FR SS SP SEXP					
		30-40	R CL WSBK	FR SS SP SEXP					
		40-60	VER L SAP M	FR SS SP SEXP					
PIT 3	LS 12%	0-9	FILL		N/A	43"	F-C SAP PS	N/A	PS 0.3
		9-14	Br SCL WSBK	FR SS SP SEXP					
		14-36	R C SBK	FR SS SP SEXP					
		36-43	R CL WSBK	FR SS SP SEXP					
		43-56	VER LS SAP M	VFR SS SP SEXP					
AB 1	LS 4%	0-3	Br SCL WSBK	FR SS SP SEXP	N/A	48"	F-C SAP	N/A	PS 0.3
		3-30	R C SBK	FR SS SP SEXP					
		30-48	R CL WSBK	FR SS SP SEXP					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	1215 FT2	3840+ FT2
System Type(s)	25% Reduction	DRIP
Site LTAR	0.3	0.125

OTHER FACTORS (.1946):
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: MA&A
OTHER(S) PRESENT: Tom Shuck (2/23/18)

COMMENTS:

SOIL/SITE EVALUATION

(Continuation Sheet)

PROPERTY ID #: 4627214988____
DATE OF EVALUATION: _____
COUNTY: __IREDELL____

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941) .1941 STRUCTURE/ TEXTURE	SOIL MORPHOLOGY (.1941) .1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	OTHER PROFILE FACTORS .1943 SOIL DEPTH	OTHER PROFILE FACTORS .1956 SAPRO CLASS	OTHER PROFILE FACTORS .1944 RESTR HORIZ	PROFILE CLASS & LTAR
AB 2	LS 4%	0-4	Br SCL WSBK	FR SS SP SEXP	N/A	40"	F-C SAP	N/A	PS 0.3
		4-18	R C SBK	FR SS SP SEXP					
		18-40	R CL WSBK	FR SS SP SEXP					
		40-48	VER SL SAP M	FR SS SP SEXP					
AB 3	LS 12%	0-4	Br SCL WSBK	FR SS SP SEXP	N/A	40"	F-C SAP	N/A	PS 0.3
		4-30	R C SBK	FR SS SP SEXP					
		30-40	R CL WSBK	FR SS SP SEXP					
		40-48	VER SL SAP M	FR SS SP SEXP					

RECEIVED FEB 2 1 2018

IREDELL COUNTY DEPARTMENT of ENVIRONMENTAL HEALTH

APPLICATION FORM

Paid $350.00 #233451

Application For:
( ) New Well Permit ( ) Well Repair Permit ( ) Well Abandonment
( ) Septic Improvement Permit (✓) Authorization to Construct ( ) Existing System Inspection ( ) Septic System Repair

THE ABOVE PERMIT DOCUMENTS WILL BECOME INVALID IF INFORMATION PROVIDED ON THIS APPLICATION IS FALSIFIED OR CHANGED, OR IF THE SITE IS ALTERED. THE IMPROVEMENT PERMIT IS VALID FOR EITHER 60 MONTHS OR WITHOUT EXPIRATION DEPENDING UPON DOCUMENTATION SUBMITTED. APPLICATION WITH SITE PLAN 60 MONTHS, APPLICATION WITH COMPLETE, SCALED PLAT WITHOUT EXPIRATION. SEE 15A NCAC 18A .1937(f) FOR DETAILS.

Page 2: *Site Plan Worksheet* form MUST accompany this application

Paid $500.00 3/2/18

The following optional attachments may also be submitted: (✓) Survey Plat, scaled no more than 1 inch = 60 feet
Place an (X) beside whichever is submitted if applicable ( ) Custom Site Plan, scaled no more than 1 inch = 60 feet

Applicant Information: (PRINT CLEARLY)

Applicant Name: Jason & Amy Murphy **Address:** 8042 Garnkirk Rd, Huntersville, NC **Zip:** 28078
Applicant Email: aimwelch22@gmail.com **Phone:** 704-258-4287 **Alt. Phone:**
Owner Name: Same **Address:** **Zip:**
Owner Email: **Phone:** **Alt. Phone:**

Property Information:

Street Address: 109 Goathill Rd
Subdivision Name: CL&T **Section/Phase:** 8 **Lot Number:** 315
Driving Directions:

Site Development Information: *(check or complete ALL that apply*

( ) New Single Family Residence
( ) New Multi-Family Residence
( ) Accessory Building
( ) Bedroom(s) Addition
( ) Repair to failing septic system ___ Tank ___ Drain lines Describe Problem:
Non-Residential Site Development: Type of Business:
Square Footage of Building: Max. Number of Employees: Max. Number of Seats/Beds/Other:

Maximum Number of Bedrooms: 4
Maximum Number of Occupants:
( ) Swimming Pool
(✓) Other Addition/Structure: Garage

CHECK FOUNDATION TYPE
( ) Crawl Space Foundation
(✓) Concrete Slab Foundation
( ) Basement with Plumbing
( ) Basement without Plumbing

Water Supply: ( ) Replacement Well – Reason:
( ) Multi-connection Well **Number of Houses:** **Number of Persons:**
( ) New Well (✓) Existing Well ( ) Community Well ( ) City Water ( ) Other Public Water

Desired Septic System Type: *(you may rank in order of preference)* **Year existing system installed:**
( ) No Preference ( ) Alternative ( ) Conventional ( ) Innovative ( ) Modified Conventional (✓) Other: Accepted

Please answer the following to the best of your ability:
( ) Yes (✓) No Does the site contain any jurisdictional wetlands?
( ) Yes (✓) No Is any non-domestic sewage (i.e. industrial) to be generated?
( ) Yes (✓) No Is the site subject to approval by any other public agency?

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.

Signature: _____ 2/21/2018
Property owner or owner's legal representative signature (SIGNATURE REQUIRED) DATE

Public Health
Prevent. Promote. Protect.
Iredell County Health Department

IREDELL COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH

DOCUMENTATION TO AUTHORIZE AN OWNER'S LEGAL REPRESENTATIVE

Applications for permits require the "signature of the owner or owner's legal representative" (15A NCAC 18A .1937). If the owner does not sign the application himself or herself, they can submit any one of the following documents to designate their legal representative:

Power of Attorney; Real Estate Contract; Estate executor; Bankruptcy trustee; Court ordered guardianship

In the absence of the above documentation, the property owner may provide the local health department with documentation that designates a legal representative. A property owner may:
Complete this form to document his or her legal representative, or provide his or her own form that contains the information in this form.
If there are multiple property owners, then all property owners must sign the form that designates a legal representative.

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

I, Amy R. Murphy and Jason E. Murphy, am the legal owner(s) of the property located at 109 Goathill Road, identified as PIN (Parcel Identification Number) 4627-21-4988.000, located in Iredell County, North Carolina.

I do hereby authorize (**print legal representative/company name**) Michael Athanas & Associates, to act as an agent on my behalf in applying for/signing/obtaining any of the documents described below.

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

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

Signature of Owner(s) — Date: 2/19/18

Signature of Witness — Date: 2/19/18

Please return this signed form to the appropriate office:

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

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

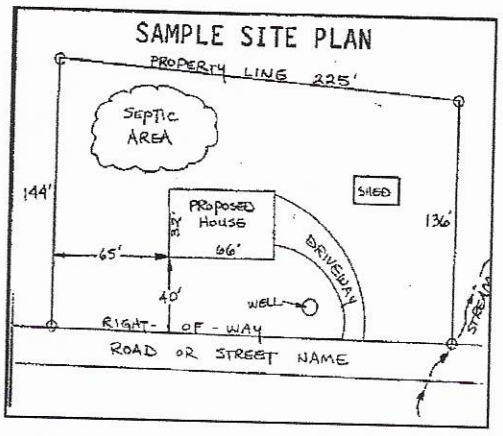
IREDELL COUNTY DEPARTMENT of ENVIRONMENTAL HEALTH

SITE PLAN WORKSHEET

SEE THE "SAMPLE SITE PLAN" BELOW. ***INCOMPLETE SITE PLANS WILL BE RETURNED TO YOU FOR COMPLETION AND MAY RESULT IN A DELAY IN THE ISSUANCE OF YOUR SEPTIC SYSTEM OR WELL PERMIT!!!***

Place an (X) beside each item as you complete the site plan:

( ) Property Line measurements are clearly identified
( ) All proposed structures are indicated
( ) Front and side setbacks from property line
( ) Preferred driveway location
( ) Preferred well location
( ) Preferred septic system location
( ) North arrow, or other sufficient indicator of direction



Circle N/A on the following if appropriate:

Location of septic systems and wells within 100' of your property	N/A
Location of easements and rights of ways on your property	N/A
Location of any designated wetlands on the property	N/A

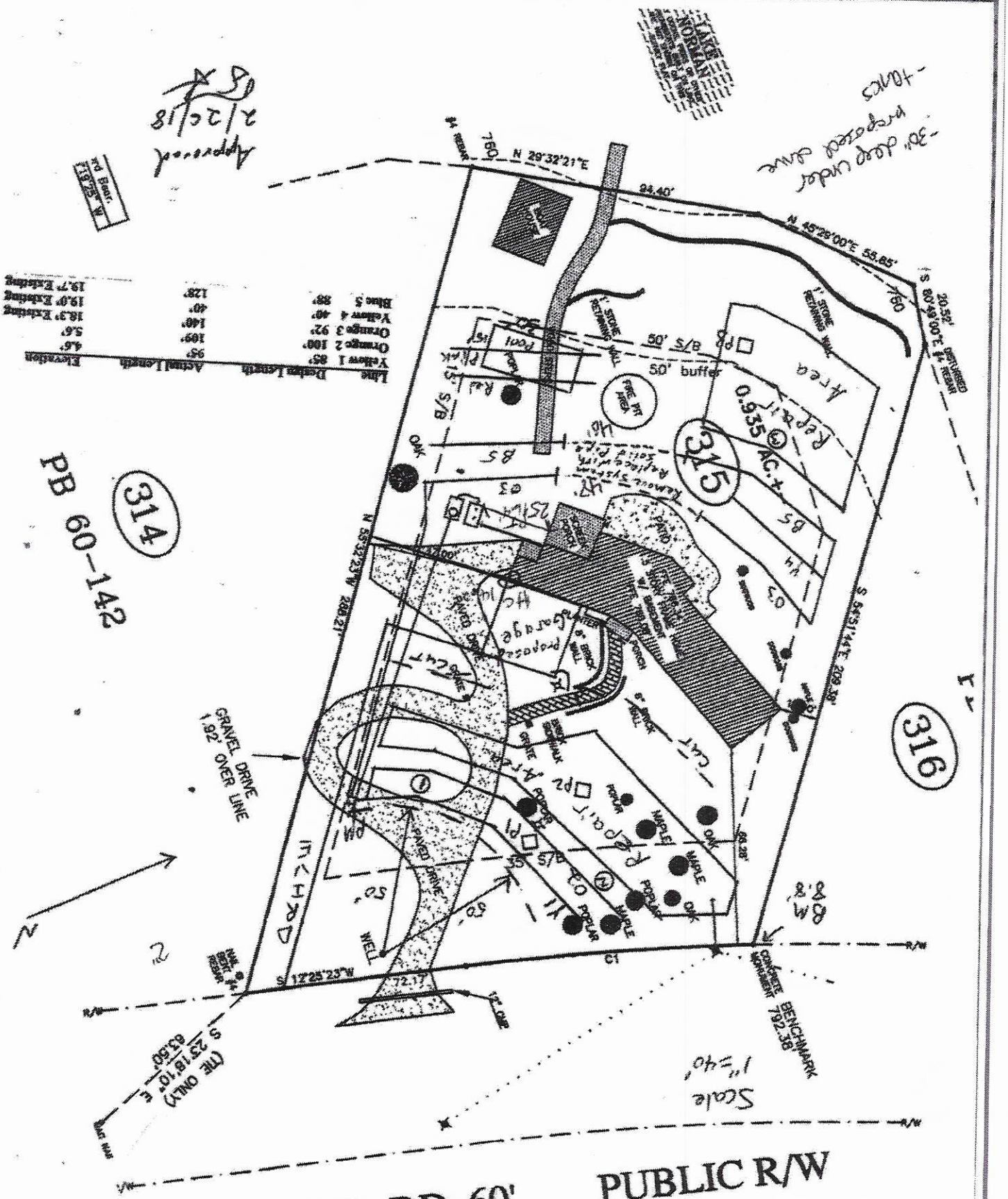
USE THIS SPACE TO DRAW YOUR SITE PLAN

Show: proposed house or business footprint, wells, water lines, patios, pools and decks, and any other item that will occupy space on the site

See attached plan

Signature: _____
Property owner or owner's legal representative signature (SIGNATURE REQUIRED)

2/21/2018
DATE


GOATHILL RD 60'
PUBLIC R/W
PB 60-142
314
315
316
0.935 AC.±
50' buffer
GRAVEL DRIVE
1.92' OVER LINE
PAVED DRIVE
PROPOSED GARAGE
EXISTING HOUSE
WELL
FIRE PIT AREA
STONE RETAINING WALL
N 29°32'21"E 780
N 45°29'00"E 58.85'
S 80°49'00"E 20.32'
S 54°51'45"E 208.38'
N 33°32'23"W 284.21'
S 12°25'23"W 72.17'
S 23°18'10"E 83.50' (TIE ONLY)
CONCRETE MONUMENT
BENCHMARK 792.38
Scale 1"=40'
Approved 2/12/18
-30' deep water preserve shore -Jones

IREDELL COUNTY HEALTH DEPARTMENT

Statesville Office (704) 878-5305 Mooresville Office (704) 660-3625 PERMIT # 17238

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

PIN # 4627214988

APPLICANT: RJ MELVILLE APPLICANT ADDRESS:

SITE ADDRESS: 109 GOAT HILL RD MOORESVILLE NC 28117 PHONE: ALT. PHONE:

SITE DIRECTIONS: BRAWLEY SCHOOL - TR MCKENDREE - TR LAKEVIEW SHORES - TR GOAT HILL - ON LT

SUBDIVISION: CL & T SECTION: 8 LOT # 315 LOT AREA: .93AC DESIGN FLOW: 480 L.T.A.R.: .3

Septic Tank EXISTING (gal) STB Date

Pump Tank (gal) PT Date

Pump Make Model Serial #

Nitrification Fields 1 # Lines 5 Linear Ft: 404

Trench Width 36" Max. Trench Bottom Depth 36" Gravel Depth N/A

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

System Description: GRAVITY 25% REDUCTION

Repair System Description: LP PRBPS

Maintenance Agreement Required: ☐ YES ☐ NO

☑ GRAVITY ☐ PRESSURE

☑ Residence No. Bedrooms 4

☐ Business No. Persons 8

☐ Other No. Employees

☐ Slab ☑ Crawl Space

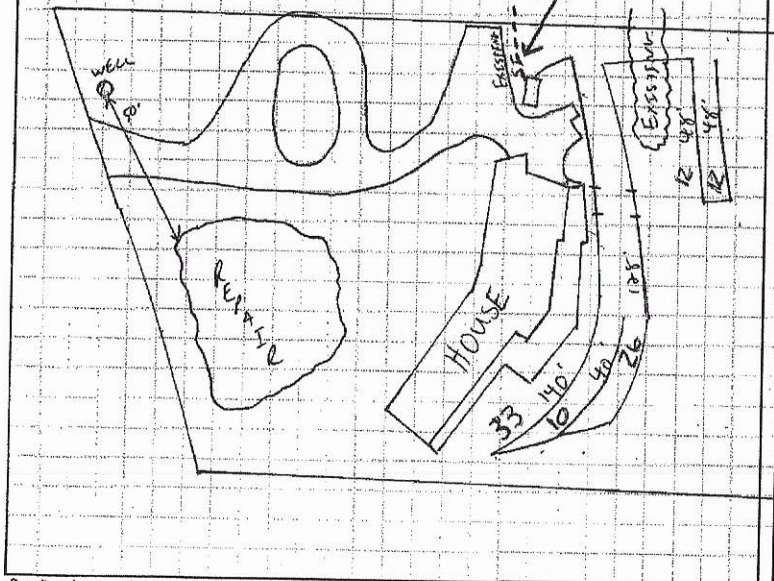
☐ Basement w/ plumbing ☐ Basement w/o plumbing

Water Supply: ☑ Private ☐ Public ☐ Community

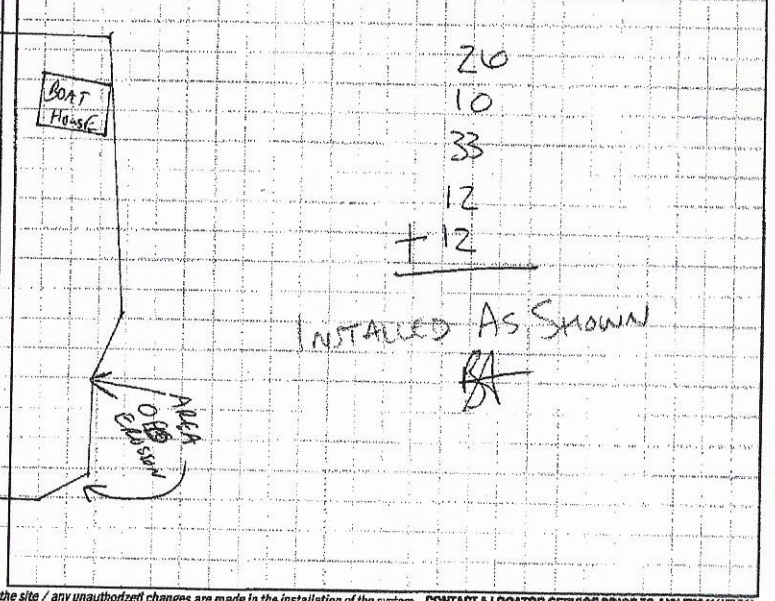
Comments / Conditions: RAIN ERODED BANK AFTER ORIGINAL PERMIT 7/10/13 WAS ISSUED. CHANGE OF SYSTEM LOCATION NEEDED.

LINE TO OLD BED SYSTEM UNHOOKED & PLUGGED WITH HYDROLIC CEMENT

INITIAL SITE SKETCH



AS BUILT SKETCH



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

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

Owner / Applicant Signature: Date:

IMPROVEMENT PERMIT by: Date: 10/3/13

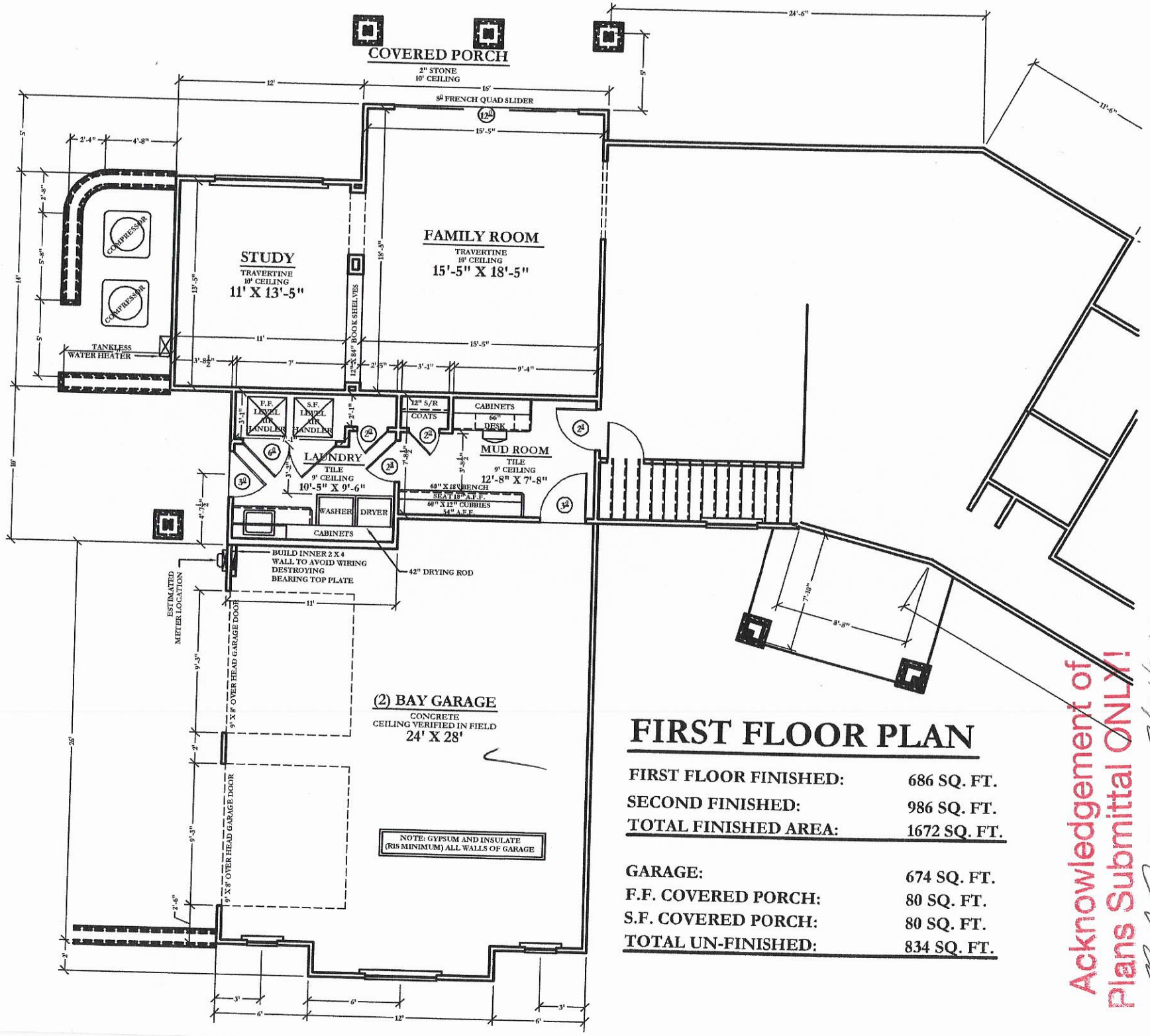
AUTHORIZATION TO CONSTRUCT by: Date: 10/3/13

Installed by: Orbison

OPERATION PERMIT by: Date: 10-11-13

Existing System Inspected by: Date:

Health Dept. Copy - WHITE Applicant (Final Approval) - YELLOW Applicant (Conditional Approval) - PINK



FIRST FLOOR PLAN

FIRST FLOOR FINISHED:	686 SQ. FT.
SECOND FINISHED:	986 SQ. FT.
TOTAL FINISHED AREA:	1672 SQ. FT.
GARAGE:	674 SQ. FT.
F.F. COVERED PORCH:	80 SQ. FT.
S.F. COVERED PORCH:	80 SQ. FT.
TOTAL UN-FINISHED:	834 SQ. FT.

Acknowledgement of Plans Submittal ONLY!

Date 2/11/2015

Date 2/25/15

SECOND FLOOR PLAN

SECOND FINISHED: 986 SQ. FT.

S.F. COVERED PORCH: 80 SQ. FT.

Acknowledgement of Plans Submittal ONLY!

Date 2/21/2018

Date 2/26/18