ICHD - ENVIRONMENTAL HEALTH DIVISION

Statesville Office (704) 878-5305 Mooresville Office (704) 660-3625 PERMIT # AP-321642

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

PIN # 4636-25-8097

APPLICANT/OWNER: Trevor Hackney APPLICANT ADDRESS: 501 N.Salem St. Apex NC 27502

SITE ADDRESS: 766 Pine Mist Dr. Mooresville NC 28117 PHONE: 704-268-9160 ALT. PHONE 704-995-2797

SITE DIRECTIONS: Western Brawley School Rd, T/L pn Isle of Pines T/L Pine Mist Property on right SAP CONTROLLED: ☐ YES ■ NO

SUBDIVISION: Whispering Oaks SECTION: 16 LOT AREA: 1.3ac DESIGN FLOW: 360 L.T.A.R.: 0.25

Septic Tank	1000	(gal)	STB 760	Date	7/23/22	■ New System ☐ Repair ☐ Expansion System Type: I II III IV V VI	■ Residence	No. Bedrooms	3
Pump Tank	1000	(gal)	PT 363	Date	7/25/22	System Description: PM - Low Profile Chambers	☐ Business	No. Persons	6
Pump Make		Model		Serial #		Repair System Description: 25% Reduction	☐ Other	No. Employees	
# Nitrification Fields	1	# Lines	5	Linear Ft	484'	Maintenance Agreement Required: ☐ YES ■ NO	☐ Slab	■ Crawl Space	Water Supply: ■ Private ☐ Public ☐ Community
Trench Width	36"	Low-side Trench Bottom Depth	14"	Gravel Depth	N/A	☐ GRAVITY ■ PRESSURE	☐ Basement w/plumbing	☐ Basement w/o plumbing	

Comments / Conditions: Per plan By AWT, HOUSE SIZE AND LOCATION CHANGED SLIGHTLY, IF THIS AFFECTS TANK LOCATION SEE SOIL SCIENTIST FOR CHANGES 2-9-2022 BW

INITIAL SITE SKETCH

This permit is issued pursuant to Section 11.(c) of SL 2018-114 using the signed and sealed

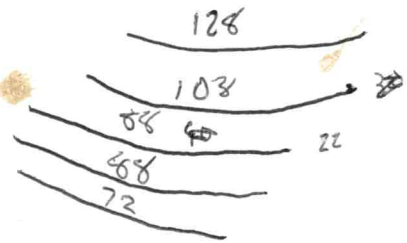
LSS Evaluation attached here.

See plan by: AWT

AS BUILT SKETCH

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

Tank + Lines checked 9/8/22 MW
- Supply Line + Plumbing cleanout still needs Ductile Iron.



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: 10/15/21

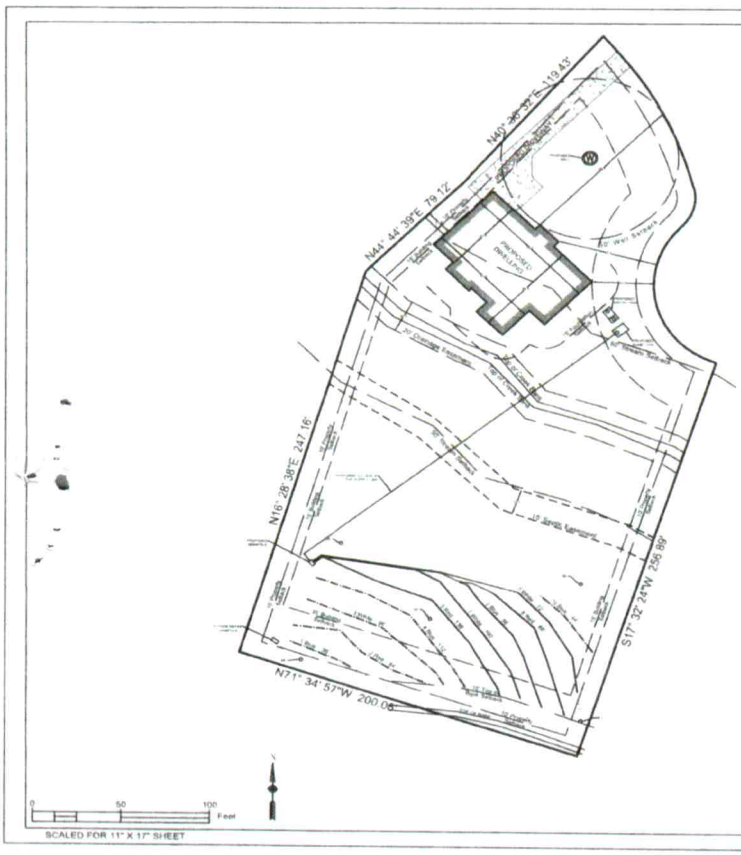
AUTHORIZATION TO CONSTRUCT by: Date: 2-9-2022

Installed by: M. Powell

OPERATION PERMIT by: D mieberg Date: 9/14/22

Existing System Inspected by: Date:

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



DRAINLINE LEGEND:

PROPOSED PRIMARY	———
FUTURE REPAIR	——·——·——
UNUSED	· · · · · ·

SYSTEM NOTES

3-BEDROOM SINGLE FAMILY RESIDENCE

LTAR: 0.31 GAL/FT/DAY

PRIMARY SYSTEM:
-484 TOTAL LINEAR FT (148 LINEAR FT REQUIRED)
-PUMP TO PRESSURE MANIFOLD w/ LOW PROFILE CHAMBER DRAINFIELD

REPAIR SYSTEM:
-372 TOTAL LINEAR FT (368 LINEAR FT REQUIRED)
-PUMP TO PRESSURE MANIFOLD w/ CHAMBER DRAINFIELD (25% REDUCTION TAKEN)

SCALED FOR 11" X 17" SHEET

AWT
Engineers and Soil Scientists
Apex Waste Technology, Inc.
501 N. Salem Street Suite 2F
Apex, North Carolina 27502
919.439.2981
www.apexwaste.com

Owner Information:
Wayne Dozier
146 Pine Mist Dr.
Mooresville, NC 28117

Property Information:
Whispering Oaks Lot 16
Pine Mist Dr.
Mooresville, NC 28117
Iredell County
PIN: 4636-25-8097.000

For Review Only

GENERAL NOTES

SHEET TITLE
Property Layout

PROJECT CONTACT:
T. Hackney 704-258-9160

DRAWN BY: G. Rhodes	CREATED ON: 7/28/2021
REVISED BY: L. Dash	REVISED ON: 5/19/2021
RELEASED BY:	RELEASED ON:

DRAWING NUMBER
WW-1

DRAWING IS A PRELIMINARY PLAT FOR VERIFICATION OF ZONING COMPLIANCE FOR HOME LOCATION AND SHALL NOT BE USED FOR THE SALE, CONVEYANCE OR CONSTRUCTION OF THE DEPICTED LOT.

PLOT PLAN DEPICTS THE CONCEPTUAL LOCATION OF THE PROPOSED HOME AND ALL INFORMATION SHOWN TAKEN FROM PRELIMINARY PLAT ON FILE WITH IREDELL COUNTY AND SHOWN IMPROVEMENTS HAVE NOT BEEN AS-BUILT BY R. JOE HARRIS & ASSOCIATES, INC.

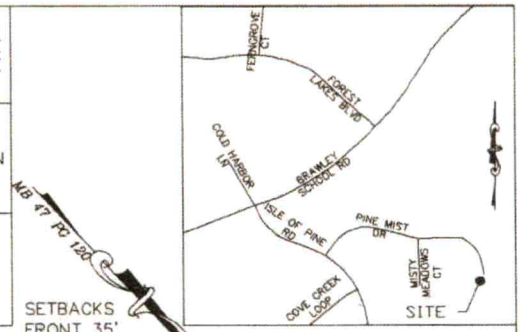
LOT IS SUBJECT TO ANY DEED RESTRICTIONS, EASEMENT CONVEYANCES, RIGHTS-OF-WAY, UTILITIES AND RESTRICTIVE COVENANTS ON FILE WITH THE IRDELL COUNTY, NCDOT, CITY OF MOORESVLLE, HOMEOWNERS ASSOCIATION AND/OR OTHER GOVERNMENTAL AGENCIES.

WHISPERING OAK-LOT #16
MODEL-HARDWICK
ELEV.-R-C3BH
FND-CRAWL
FACADE-FRONT BRICK (NOT SHOWN)
2-CAR GARAGE RIGHT FRONT

FINAL HOUSE PLACEMENT WILL BE ESTABLISHED BY TRUE HOMES AND MAY VARY BY FIELD CONDITIONS.

LOT IS NOT LOCATED WITHIN THE 100 YEAR FLOOD PER FEMA FLOOD INSURANCE RATE MAP (FIRM) #3710463600J DATED MARCH 18, 2008.

DRIVEWAY LOCATION APPROXIMATE ONLY. SUBJECT TO FIELD VERIFICATION AND LOCAL ORDINANCES.



VICINITY MAP
NOT TO SCALE

SETBACKS
FRONT 35'
SIDE 15'
REAR 35'

Line Table		
Line #	Length	Direction
L1	79.12	N44°44'39"E

9
BETTY K LINEBERRY
PID 4636246856.000
MB 25 PG 188
DB 1832 PG 716

20
DEBRA J OBERMOLLER
JERRY L OBERMOLLER SR
PID 4636256096.000
MB 44 PG 21
DB 1969 PG 1898

N71°34'57"W 200.06'

N16°28'38"E 247.16'

16
69,508 SQ. FT.
1.596 ACRES±

15' SEPTIC EASEMENT
TO SERVE LOT 19
PB 47 PG 120

20' DRAINAGE
EASEMENT
PB 47 PG 120

15.00'

20.00'

S17°32'47"W 256.89'

19
SANDRA C RATCLIFFE
FRANK O RATCLIFFE JR
PID 4636256169.000
MB 44 PG 21
DB 2294 PG 2233

14
MISCHELLE K TEIXEIRA
ALBERT B TEIXEIRA
PID 4636350091.000
MB 47 PG 120
DB 1762 PG 56

HARDWICK
2697
#166

VAC

L1

20.69'

18.91'

37.25'

C5 C4 C3 C2 C1

PINE MIST DR
(45' PUBLIC R/W)

97.41'

119.43'

N40°36'32"E

18
FELISA COPELAND
PID 4636257382.000
MB 47 PG 120
DB 1677 PG 1488

APPROXIMATE EDGE
OF PAVEMENT

IMPERVIOUS SURFACE AREA

DESCRIPTION	AREA
HOUSE	3,728 SF
DRIVE TO R/W	2,767 SF
DRIVE EP	150 SF
FRONT PORCH	156 SF
REAR PORCH	183 SF
LEADWALK	195 SF
HVAC	16 SF
TOTAL LOT AREA	69,508 SF
TOTAL PROPOSED	7,045 SF
SEED/STRAW	62,463 SF
IMPERVIOUS	10%

Curve Table					
Curve #	Length	Radius	Chord	Bearing	Delta
C1	108.84	207.50	107.60	S28°18'31"E	30°03'16"
C2	9.19	25.00	9.14	S2°44'57"E	21°03'57"
C3	16.69	25.00	16.38	S26°54'35"W	38°14'47"
C4	95.34	50.00	81.54	S8°35'16"E	109°15'14"
C5	8.07	50.00	8.07	S67°51'21"E	9°15'07"

0 30 60 120
1 inch = 60 ft.

Preliminary Plot Plan - Lot 16

For: True Homes
166 Pine Mist Dr @ Whispering oak
City of Mooresville, Iredell, North Carolina

Drawn: ZSL	Date: 12-15-2021	MB 47 PG 120
Surveyor: BPL		DB 1677 PG 1488
Project: 4856		PID 4636258097.000

R. Joe Harris & Associates, Inc.
Engineering • Land Surveying • Planning Management
1186 Stonecrest Blvd, Tega Cay, S.C. 29708 Phone: (803) 802-1799

PROPERTY ID #: _4636-25-8097__
COUNTY: Iredell Co.__

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

CLIENT: _____Wayne Dozier_____ _____ APPLICATION DATE_____
ADDRESS:____ _____Lot 16, Pine Mist Dr, Mooresville, NC. 28117 DATE EVALUATED: __9/1/21 _
PROPOSED FACILITY: _Single Family Residence___PROPOSED DESIGN FLOW (.1949): ___360 GPD____ PROPERTY SIZE: ___1.6 ac.____
LOCATION OF SITE: Lot 16, Pine Mist Dr, Mooresville, NC. 28117 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 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	
SB 1	12%	0-10"	SL; GR	SS; SP; Fr		31"	-	Saprolite	Low Profile Chamber
		10-24"	CL; SBK	SS; SP; Fi					
		24-31"	CL; WSBK	SS; SP; Fr					0.25 GPD/Ft²
		31+"	CL; MA	SS: SP; Fr					
SB 2	6%	0-12"	SL; GR	SS; SP; Fr		36+"	-	-	Provisionally Suitable
		12-30"	C; SBK	SS; SP; Fi					
		30-36+"	CL; WSBK	SS; SP; Fr					0.25GPD/Ft²
SB 3	10%	0-8"	SCL; Gr	SS; SP; Fr		30 "	-	Saprolite	Low Profile Chamber
		8-24"	C; SBK	SS; SP; Fi					
		24-30"	CL; WSBK	SS; SP; Fr					0.25GPD/Ft²
		30+"	CL; MA	SS; SP; Fr					
SB 4	12%	0-9"	SCL; Gr	SS; SP; Fr		36+"		-	Provisionally Suitable
		9-30"	C; SBK	SS; SP; Fi					
		30-36+"	CL; WSBK	SS; SP; Fr					0.25GPD/Ft²

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	Provisionally Suitable	Provisionally Suitable
System Type(s)	Low Profile Chamber	Innovative 25% Reduction
Site LTAR	0.25 GPD/Ft²	0.25 GPD/Ft²

OTHER FACTORS (.1946): _____
SITE CLASSIFICATION (.1948): _____

EVALUATED BY: ___Jeff Vaughan_____
OTHER(S) PRESENT: _____Trevor Hackney_____

COMMENTS
Updated February 2014

SOIL/SITE EVALUATION

(Continuation Sheet-Complete all field in full)

PROPERTY ID #: _4636-25-8097_
DATE OF EVALUATION: ___9/1/21__
COUNTY: _ Iredell Co.__

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	
SB 5	13%	0-18"	SCL; WSBK	SS; SP; Fr		34"	-	Saprolite	Provisionally Suitable 0.25GPD/Ft^2
		18-34"	C; SBK	SS; SP; Fi					
		34+"	CL; WSBK	SS; SP; Fr					

(B8)

ICHD - ENVIRONMENTAL HEALTH DIVISION

Statesville Office (704) 878-5305 Mooresville Office (704) 660-3625 PERMIT # **AP-321642**

SEPTIC: IMPROVEMENT PERMIT / AUTHORIZATION TO CONSTRUCT / OPERATION PERMIT / EXISTING SYSTEM PIN # 4636-25-8097

APPLICANT/OWNER: Trevor Hackney APPLICANT ADDRESS: 501 N.Salem St. Apex NC 27502

SITE ADDRESS: 166 Pine Mist Dr. Mooresville NC 28117 PHONE: 704-268-9160 ALT. PHONE 704-995-2797

SITE DIRECTIONS: Western Brawley School Rd, T/L pn Isle of Pines T/L Pine Mist Property on right SAP CONTROLLED: ☐ YES ■ NO

SUBDIVISION: Whispering Oaks SECTION: 16 LOT AREA: 1.3ac DESIGN FLOW: 360 L.T.A.R.: 0.25

Septic Tank	1000	(gal)	STB	Date	■ New System	☐ Repair	☐ Expansion	System Type: I II III IV V VI	■ Residence	No. Bedrooms	3	Water Supply
Pump Tank	1000	(gal)	PT	Date	System Description:	PM - Low Profile Chambers			☐ Business	No. Persons	6	■ Private
Pump Make		Model		Serial #	Repair System Description:	25% Reduction			☐ Other	No. Employees		☐ Public
# Nitrification Fields	1	# Lines	5	Linear Ft 484'	Maintenance Agreement Required:	☐ YES	■ NO		☐ Slab	■ Crawl Space		☐ Community
Trench Width	36"	Low-side Trench Bottom Depth	14"	Gravel Depth N/A		☐ GRAVITY	■ PRESSURE		☐ Basement w/ plumbing		☐ Basement w/o plumbing	

Comments / Conditions: Per plan By AWT, HOUSE SIZE AND LOCATION CHANGED SLIGHTLY, IF THIS AFFECTS TANK LOCATION SEE SOIL SCIENTIST FOR CHANGES 2-9-2022 BEW

INITIAL SITE SKETCH

This permit is issued pursuant to Section 11.(c) of SL 2018-114 using the signed and sealed LSS Evaluation attached here.

See plan by: AWT

AS BUILT SKETCH

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

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**

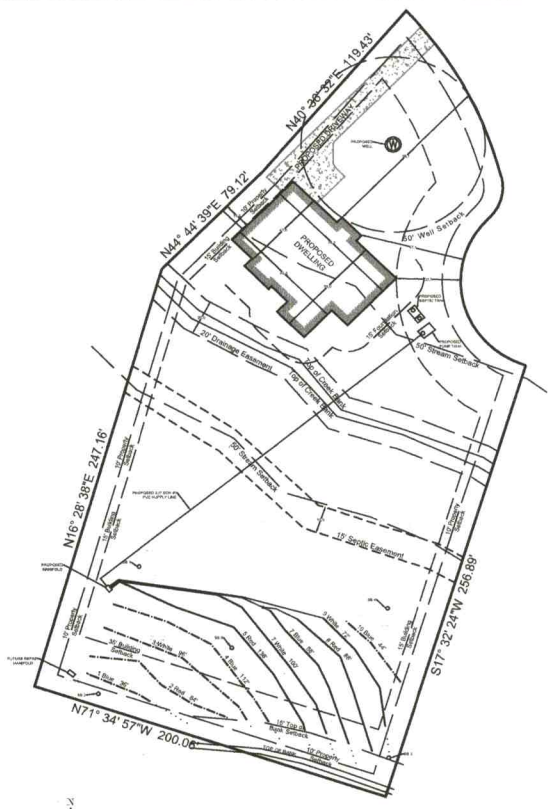
☐ **IMPROVEMENT PERMIT** *with plat valid without expiration.* ■ **IMPROVEMENT PERMIT** *with site plan valid for 60 mos.* ☐ **AUTHORIZATION TO CONSTRUCT** *valid for period equal to IMPROVEMENT PERMIT--not to exceed 60 mo.*

Owner / Applicant Signature: Wayne E. Cox Date: Installed by:

IMPROVEMENT PERMIT by: Date: 10/15/21 OPERATION PERMIT by: Date:

AUTHORIZATION TO CONSTRUCT by: Bryant C. White Date: 2-9-2022 Existing System Inspected by: Date:

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



DRAINLINE LEGEND:

PROPOSED PRIMARY:	———
FUTURE REPAIR:	—·—·—·—
UNUSED:	. . . . .

SYSTEM NOTES:

3-BEDROOM SINGLE-FAMILY RESIDENCE

LTAR: 0.25 GAL/FT²/DAY

PRIMARY SYSTEM:
-484 TOTAL LINEAR FT (480 LINEAR FT REQUIRED)
-PUMP TO PRESSURE MANIFOLD w/ LOW PROFILE CHAMBER DRAINFIELD

REPAIR SYSTEM:
-372 TOTAL LINEAR FT (360 LINEAR FT REQUIRED)
-PUMP TO PRESSURE MANIFOLD w/ CHAMBER DRAINFIELD (25% REDUCTION TAKEN)

SCALED FOR 11" X 17" SHEET

AWT
Engineers and Soil Scientists
Agri-Waste Technology, Inc.
501 N. Salem Street, Suite 203
Apex, North Carolina 27502
919-859-0669
www.agriwaste.com

Owner Information:
Wayne Dozier
146 Pine Mist Dr.
Mooresville, NC 28117

Property Information:
Whispering Oaks Lot 16
Pine Mist Dr.
Mooresville, NC 28117
Iredell County
PIN: 4636-25-8097.000

For Review Only

GENERAL NOTES

TOPOGRAPHY INFORMATION TAKEN FROM IREDELL COUNTY GIS DATA AND IREDELL COUNTY CONTOUR MAP. BOUNDARY SURVEY PERFORMED BY DON ALLEN & ASSOCIATES P.A.

LOCATION OF SEPTIC COMPONENTS PLOTTED AND PROPERTY TAKEN FROM DRAWING SURVEY.

THIS DRAWING DOES NOT REPRESENT A SURVEY PRODUCT.

SHEET TITLE
Property Layout

PROJECT CONTACT:	
T. Hackney	704-368-9160
DRAWN BY:	CREATED ON:
G. Rhodes	7/28/2021
REVISED BY:	REVISED ON:
T. Davis	9/16/2021
RELEASED BY:	RELEASED ON:

DRAWING NUMBER
WW-1

RECEIVED OCT 06 2021

APPLICATION MUST BE FILLED OUT COMPLETELY & BE LEGIBLE OR IT WILL NOT BE PROCESSED

Iredell County Health Department – Environmental Health Division

S.L.

PAGE 1: *APPLICATION FORM* AP-321642 $500.00

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

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 (X) Custom Site Plan, scaled no more than 1 inch = 60 feet

Applicant Information: (PRINT CLEARLY)

Applicant Name: Trevor Hackney Address: 501 N Salem St. Apex NC Zip: 27502
Applicant Email: thackney@agriwaste.com Phone: 704-268-9160 Alt. Phone:
Owner Name: Wayne Dozier Address: 146 Pine Mist Dr. Mooresville NC Zip: 28117
Owner Email: Wedozier@yahoo.com Phone: 704-995-2797 Alt. Phone:

Property Information:

Street Address: 169 Pine Mist Dr. (Lot 16) Mooresville NC 28117
Subdivision Name: Whispering Oaks Section/Phase: Lot Number: 16
Driving Directions: Drive Weston Brawley School Rd; Turn Left on 1st of Pines rd; Turn left on Pine mist Dr; Prop. on right side of cul-de-sac at end of Pine mist Dr.

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

(X) New Single Family Residence
( ) New Multi-Family Residence
( ) Accessory Building
( ) Bedroom(s) Addition
( ) Repair to failing septic system ___ Tank ___ Drain lines Describe Problem:
Maximum Number of Bedrooms: 3
Maximum Number of Occupants: 6
( ) Swimming Pool
( ) Other Addition/Structure:
Non-Residential Site Development: Type of Business:
Square Footage of Building: Max. Number of Employees: Max. Number of Seats/Beds/Other:

CHECK FOUNDATION TYPE
(X) 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:
(X) 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 (X) Innovative ( ) Modified Conventional ( ) Other:

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

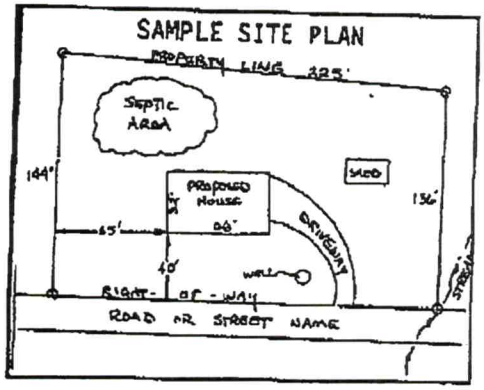
I have read this application and certify that the information provided herein is true, complete, and correct. Authorized county and state officials are granted right of entry to conduct necessary inspections to determine compliance with applicable laws and rules. I understand that I am solely responsible 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: _____ 9/20/21
Property owner or owner's legal representative signature (SIGNATURE REQUIRED) DATE

321642

IREDELL COUNTY HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION
PAGE 2: *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 PERMIT!!!



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

- (X) Property Line measurements are clearly identified
- (X) All proposed structures are indicated
- (X) Front and side setbacks from property line
- (X) Preferred driveway location and well location
- (X) Area you prefer your septic system to be placed
- (X) 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

Please see Attached Plans

From Agri-Waste Technology

Signature: _____ 9/20/21

Property owner or owner's legal representative signature (SIGNATURE REQUIRED) — DATE

321642

IREDELL COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH

DOCUMENTATION TO AUTHORIZE AN OWNER'S LEGAL REPRESENTATIVE

(Check and sign only ONE of the options below)

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

Applications for permits require the "signature of the owner or owner's legal representative" (15A NCAC 18A .1937). If the owner does not sign the application himself or herself, they can submit any one of the following documents to designate their legal representative: *Power of Attorney; Real Estate Contract; Estate executor; Bankruptcy trustee; Court ordered guardianship* In the absence of the above documentation, the property owner may provide the local health department with documentation that designates a legal representative. A property owner may:
Complete this form to document his or her legal representative, or provide his or her own form that contains the information in this form. If there are multiple property owners, then all property owners must sign the form that designates a legal representative.
By signing a form that designates a legal representative for purposes of 15A NCAC 18A .1937, the property owner authorizes that representative to act on their behalf in matters pertaining to the application and permitting process, including signing or receiving any application, document or permit. The owner retains full responsibility to meet all permit conditions specified by the local health department.

☒ **2.** I, Trevor Hackney, am the legal owner(s) of the property located at 169 Pine Mist Dr. Mooresville, NC, identified as PIN (Parcel Identification Number) 4636-25-8097, located in Iredell County, North Carolina.

I do hereby authorize (print **legal representative/company name**) Agriwaste Technology/ Trevor Hackney, 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.

Wayne E. Dagen — Signature of Owner(s)

9/20/21 — Date

Mooresville - Environmental Health
Fax: 704-662-3239
610 E. Center Avenue, Mooresville, NC 28115

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

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Engineers and Soil Scientists
Agri-Waste Technology, Inc.
501 N. Salem Street, Suite 203
Apex, North Carolina 27502
919-859-0669
www.agriwaste.com



Soil Suitability for Domestic Sewage Treatment and Disposal Systems
Lot 16, Pine Mist Drive, Mooresville NC. 28117
(PIN: 4636-25-8097; Iredell County)

PREPARED FOR: Wayne Dozier, Client

PREPARED BY: Jeff Vaughan, Ph. D., Licensed Soil Scientist
Trevor Hackney, Environmental Scientist

DATE: September 9, 2021

Soil suitability for domestic sewage treatment and disposal systems was evaluated on September 1, 2021 for the property located at Lot 16, Pine Mist Drive, Mooresville, NC. Jeff Vaughan and Trevor Hackney of Agri-Waste Technology, Inc. (AWT) conducted the soil evaluation. This evaluation was done to facilitate permitting for a septic system. This report and attached documents were prepared to meet the requirements for a Licensed Soil Scientist evaluation to meet SL 2018-114 (c).

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

The total property area is approximately 1.6 acres. The property is partially cleared and mostly wooded. A home is proposed near the front of the property and the septic system is proposed near the back of the property. There is a stream that runs through the center of the property. A septic system supply line easement for lot 19 also runs through the middle of this property. An alternative easement or waiver will have to be granted for the supply line for this property to cross the supply line easement for lot 19. The supply line for this property (lot 16) will also have to be properly sleaved when crossing the stream. A location has been proposed by AWT to cross the stream and the supply line easement. This location will be finalized during the approval for the Construction Authorization.

Soil Suitability for Domestic Sewage Treatment and Disposal Systems

The drawing in Attachment 1 details the property boundaries (as surveyed by Piedmont Design), soil boring locations, and layout of drain field trenches (Completed by AWT). Five soil borings were assessed on the property. Soil borings were examined to determine soil suitability for on-site sewage disposal systems in accordance with 15A18A .1900 Rules for Sewage Treatment and Disposal Systems. These borings were advanced with a hand auger.

A septic layout was performed to demonstrate available space (.1945). The layout in Attachment 1 indicates there is available space for a three-bedroom pump to pressure manifold initial system utilizing low profile chambers with a 25% reduction pump to pressure manifold repair system.

The proposed LTAR (Long Term Acceptance Rate) by AWT is 0.25 GPD/ft^2. The soils on this property are group IV soils within the distribution and treatment zone as used to define the LTAR. Since usable slope corrected soil depths meet or exceed 26" AWT is recommending the use of low-profile chambers for the primary system. With an LTAR of 0.25 GPD/ft^2, 480 linear feet of low-profile chambers is necessary to support a three-bedroom home initial system. The attached drawing proves that 484 linear feet of low-profile chambers can be installed with the home location on the property. The maximum trench bottom should not exceed 14 inches from the low side of the trench. The repair system will be a 25% reduction septic system with a LTAR of 0.25 GPD/ft^2. A minimum of 360 linear feet of innovative trench are necessary for the repair system and there is 372 linear feet available for use for the repair system. The maximum trench should not exceed 14 inches from the low side of the trench. At this trench bottom depth, a 6-inch soil cap is recommended for the repair system.

Any disturbances or grading done in the usable area or within the proposed setbacks will change the potential of using the area designated for a drain field. Prior to moving forward with building on the property, Iredell County Environmental Health Department should be contacted to complete the necessary review of this documentation to issue an IP (Improvement Permit) for the property.

Conclusions

An IP (Improvement Permit) for this property can be issued with the site plan that is in Attachment 1. The county issues an Operation Permit after the system has been installed to meet the specifications of the Authorization to Construct. Septic layouts and system design can be performed as needed. It will be critical to not disturb any of the proposed septic area or there is a risk that the IP will be voided. The LSS Evaluation is being submitted pursuant to and meets the requirements of the SL 2018-114 Section 11. (c)

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

Sincerely,

Jeff Vaughan

Trevor Hackney

Jeff Vaughan

Trevor Hackney

Attachment 1: Site Plan/Drawing

CONVENTIONAL SEPTIC SYSTEM DESIGN (Primary)

Designed by: TD
Revised: 9/15/2021

Site Information

Project: Dozier Property WWTS
Site Address: Pine Mist Drive
Mooresville, NC 28117
County: Iredell

Design Information

Estimated Daily Flow:	360	gal/day
L.T.A.R.:	0.25	gal/day/ft^2
L.T.A.R. + 5%:	0.263	gal/day/ft^2
Trench Width:	3	ft.
Line Length Required:	480	ft.

DRAINFIELD INFO. - **Primary**

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

Line No.	Flag Color	Line Length (ft.)		Flow (gpm)	Flow/Foot (gpm/ft)	Line L.T.A.R.
5	Red	136	3/4in SCH 40	12.5	0.092	0.237
6	White	100	3/4in SCH 80	10.1	0.101	0.260
7	Blue	88	SPLIT 1in SCH 80	8.42	0.096	0.247
8	Red	88	SPLIT 1in SCH 80	8.42	0.096	0.247
9	White	72	1/2in SCH 40	7.11	0.099	0.255
TOTAL		**484**		**46.55**		0.249

Total Run Time =	7.73	min.	
% of Dose Volume =	75.0%		(Req. Range 66% - 75%)
Dose Volume =	236.9	gal/dose	
Run Time/Dose =	**5.1**	**min**	(Range 5-7 min unless uphill, checked)
Volume/depth =	21.07	gal/in	(Dependent upon tank manufacturer, to be field verified)
Estimated Drawdown =	11.24	in.	

Manifold Box

Number of Taps =	4		
Manifold Length =	3.5	ft.	(approximate)

CONVENTIONAL SEPTIC SYSTEM DESIGN (Repair)

Designed by: TD
Revised: 9/15/2021

Site Information

Project: Dozier Property WWTS
Site Address: Pine Mist Drive
Mooresville, NC 28117
County: Iredell

Design Information

Estimated Daily Flow:	360	gal/day
L.T.A.R.:	0.25	gal/day/ft^2
L.T.A.R. + 5%:	0.263	gal/day/ft^2
Trench Width:	3	ft.
Line Length Required:	480	ft.
Line Length w/ 25% Reduction:	360	ft. (for Chambers or EZ Flow Product)
L.T.A.R. Reduced:	0.333	gal/day/ft^2
L.T.A.R. Reduced + 5%:	0.350	gal/day/ft^2

DRAINFIELD INFO. - **Repair**

Proposed Type of System/Distribution: ***Pump to Pressure Manifold using Chambers or EZ-flow Product***

Line No.	Flag Color	Line Length (ft.)		Flow (gpm)	Flow/Foot (gpm/ft)	Line L.T.A.R.
1	Blue	36	1/2in SCH 80	5.48	0.152	0.346
2	Red	84	3/4in SCH 40	12.5	0.149	0.338
3	White	96	3/4in SCH 40	12.5	0.130	0.296
4	Blue	112	1in SCH 80	16.8	0.150	0.341
10	Blue	44	1/2in SCH 80	5.48	0.125	0.283
TOTAL		**372**		**52.76**		0.321

Total Run Time =	6.82	min.	
% of Dose Volume =	75.0%		(Req. Range 66% - 75%)
Dose Volume =	182.2	gal/dose	
Run Time/Dose =	**3.5**	**min**	(Range 5-7 min unless uphill, checked)
Volume/depth =	21.07	gal/in	(Dependent upon tank manufacturer, to be field verified)
Estimated Drawdown =	8.65	in.	

Manifold Box

Number of Taps =	5		
Manifold Length =	4.0	ft.	(approximate)

PUMP DESIGN

Designed by: TD

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

Revised: 9/15/2021

Project: Dozier Property WWTS
Site Address: Pine Mist Drive
Mooresville, NC 28117
County: Iredell

Friction Losses

Suction Head =		0 ft.	*(submersible = 0)*
Elev. Difference (highest point from pump) =		12.50 ft.	
Design Pressure At Outlet =		2 ft.	
Supply Line - *2.0" Schedule 40 PVC* (accounts for 10' of pipe in pump tank)			
Pipe Diameter (ID) =	2.047 in.	Flow =	46.55 gpm
Pipe Length =	238 ft.	Velocity =	4.54 ft/sec
Pipe Length for Fittings =	23.8 ft.		
Est. Friction Loss per 100' =		3.70 ft/100 ft.	
Estimated Friction Loss =		9.67 ft.	
Pressure Filter Friction Loss =		1.62 ft.	*(from manufacturer)*
Friction Loss - Taps/Special Fittings =		3.5 ft.	
TOTAL =		**29.29 ft.**	

Flow for Vent Hole

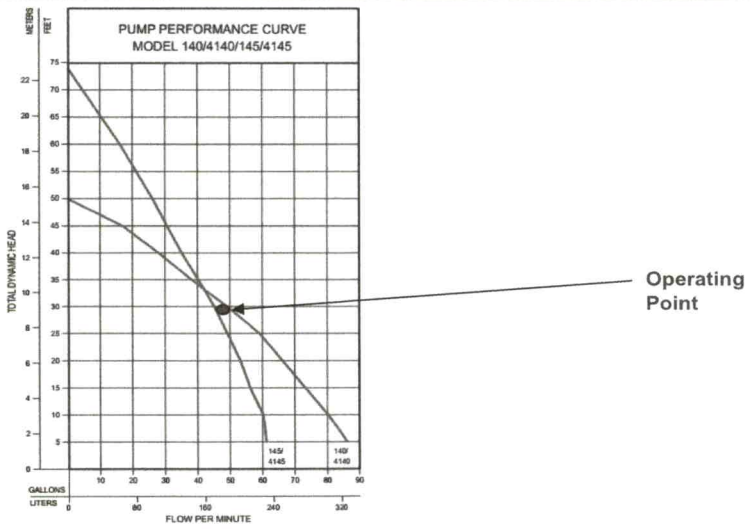
Hole Diameter = 1/8 in.
Hole Flowrate = 1.00 gpm

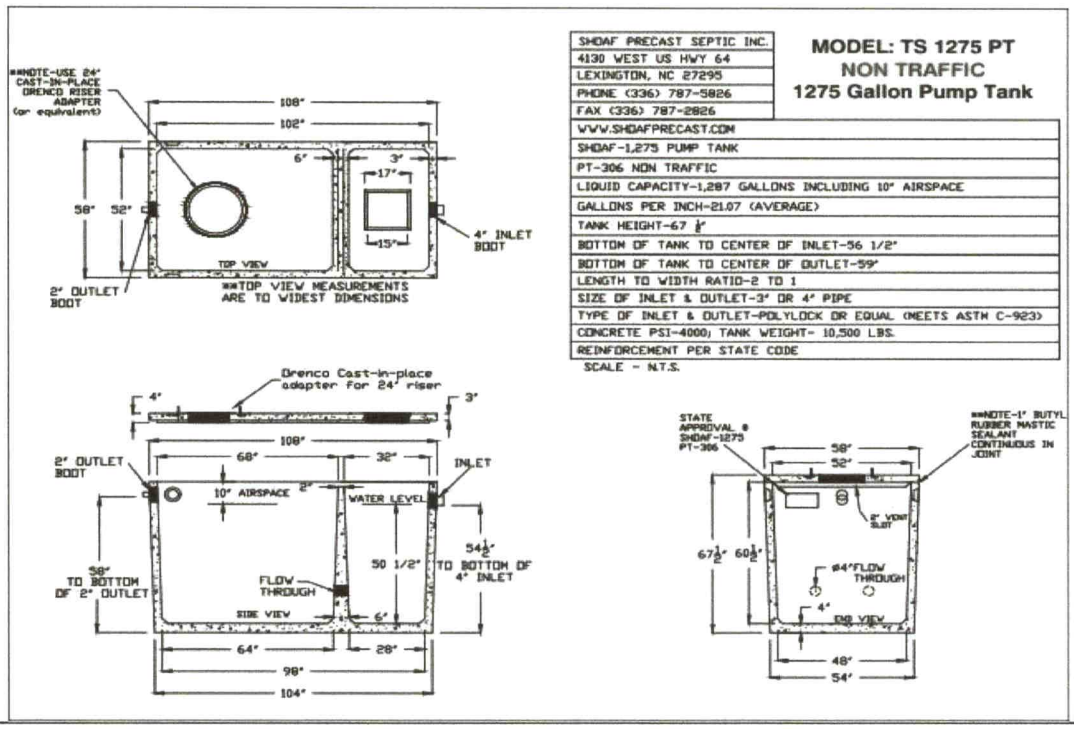
Pump Efficiency = 0.7 *(assumed, typical)*
Motor Efficiency = 0.9 *(assumed for electric pumps)*
Flow = 47.55 gpm

Required Horsepower = 0.56 hp
TDH = 29.29 ft.

Pump Selection

Manufacturer: **Zoeller**
Model: **N140**
Horsepower: **1**





Interior Height (in.)	**60.5**
Avg. Gals/Inch	**21.07**

Primary System

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

Top of pump (including 4" block)	16.1 in.	(Pump approx. 12.1" tall)
Pump Off	18.0 in.	(allows pump to remain submerged)
Pump On	29.24 in.	(set for dose volume)
Alarm on	35.24 in.	(6" above ON Float)

Emergency Storage Available	
Pump Tank	532.2 gal
Days of Storage	1.48 days

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

Attachment 2: Soil Boring Description Sheets

Attachment 3: Additional Documentation

Doc ID: 009571350004 Type: CRP
Recorded: 08/31/2005 at 04:08:19 PM
Fee Amt: $73.00 Page 1 of 4
Excise Tax: $50.00
Iredell County, NC
Brenda D. Bell Register of Deeds
BK 1677 PG 1488-1491

4

Sales Price: 25,000.00

Revenue Stamps: 50.00

Excise Tax $ | Recording Time, Book and Page

Tax Lot No. | Parcel Identifier No. 4636-25-8068 and a portion of 4636-24-9978

Verified by _____ County on the ___ day of _____, 20 by

Mail after recording to **Grantee**
This instrument was prepared by Clifton W. Homesley, Attorney at Law, **Homesley, Goodman & Wingo, PLLC, 330 South Main Street, Mooresville, NC 28115 www.lakenormanlaw.com**

Brief Description for the index | Lot 16 and a portion of Lot 15 Whispering Oaks

NORTH CAROLINA GENERAL WARRANTY DEED

THIS DEED made this 31 day of **August, 2005**, by and between

GRANTOR	GRANTEE
Ronnie L. Smith and wife, Lee A. Smith	**Felisa Copeland** Whose Address Is: PO BOX 2444 Cornelius, NC 28031

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 Mooresville, Iredell County, North Carolina and more particularly described as follows:

Please See Attached Exhibit "A"

The property hereinabove described was acquired by Grantor by instrument recorded in Book --, Page --.

A map showing the above described property is recorded in Plat **Book –, Page –.**

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:

1. **ANY AND ALL EASEMENTS, RIGHTS OF WAY AND RESTRICTIONS OF RECORD.**
2. **ANY AND ALL ZONING AND PLANNING ORDINANCES.**
3. **ANY DISCREPANCIES AS AN ACCURATE SURVEY OF THE PREMISES MIGHT REVEAL.**

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.

_____ (SEAL)
Ronnie L. Smith

Lee A. Smith (SEAL)
Lee A. Smith

NORTH CAROLINA, Iredell County.

I, a Notary Public of the County and State aforesaid, certify that Ronnie L. Smith and wife, Lee A. Smith, Grantors, personally appeared before me this day and acknowledged the execution of the foregoing instrument. Witness my hand and official stamp or seal, this 31 day of August 2005.

JENNIFER L. JONES NOTARY PUBLIC IREDELL COUNTY, N. C.

My commission expires: 06/11/08

_____, Notary

SEAL-STAMP

NORTH CAROLINA, _____ County.

I, a Notary Public of the County and State aforesaid, certify that _____, personally came before me this day and acknowledged that he/she is _____ Secretary of _____, a _____ corporation, and that by authority duly given and as the act of the corporation, the foregoing instrument was signed in its name by its _____ President, sealed with its corporate seal and attested by him/her as its _____ Secretary. Witness my hand and official stamp or seal, this ___ day of _____, 2002.

My commission expires: _____

_____, Notary

The foregoing Certificate(s) of Jennifer L. Jones

is/are certified to be correct. This instrument and this certificate are duly registered at the date and in the Book and Page shown on the first page hereof.

Brenda D. Bell REGISTER OF DEEDS FOR Iredell COUNTY

By Sheila D Campbell Deputy/~~Assistant~~-Register of Deeds.

EXHIBIT "A"

Lying in Davidson Township, Iredell County, North Carolina:

BEGINNING at a point in the western margin of the right of way of the beginning of the cul de sac of Pine Mist Drive, the easternmost common corner of Lot 16 and Lot 17 of Whispering Oaks Subdivision as such are depicted on plat recorded in plat book 44 at page 21 of the Iredell County Public Registry; thence with the common boundary line of Lot 16 and Lot 17 South 71-23-31 West 181.35 feet to a point, another common corner of Lot 16 and Lot 17; thence further with the common line of Lot 16 and Lot 17 North 41-15-19 West 19.76 feet to a point, the westernmost common corner of Lot 16 and Lot 17; thence with the western boundary line of Lot 16 South 16-28-38 West 174.30 feet to a point in the line of #9 Mallard Pines (see deed book 1055 at page 436), the southeasternmost common corner of Lot 16 and Lot 20; thence with #9 Mallard Pines South 71-34-57 East 100.06 feet to a point, the southernmost common corner of Lot 15 and Lot 16; thence with the southern boundary line of Lot 15 South 71-34-57 East 100.00 feet to a point, a new common corner with Ronnie L. Smith and wife, Lee A. Smith (see deed book 985 at page 1701); thence with a new line with the Smiths North 17-32-24 East 256.89 feet to a point in the cul de sac of Pine Mist Drive, a new common corner with the Smiths; thence with the cul de sac of Pine Mist Drive the following courses and distances: 1) on a curve heading in a generally westerly direction with said curve having a radius of 50.00 feet for an arc distance of 8.07 feet and having a chord bearing of North 67-50-06 West 8.06 feet to a point; 2) on a curve heading in a generally westerly direction with said curve having a radius of 50.00 feet for an arc distance of 95.34 feet and having a chord bearing of North 08-35-16 West 81.54 feet to a point and 3) on a curve heading in a generally northerly direction with said curve having a radius of 25.00 feet for an arc distance of 16.69 feet and a chord bearing of North 26-54-35 East 16.38 feet to the point and place of BEGINNING and containing 1.30 acres more or less according to a survey by William M. Allen, registered surveyor.

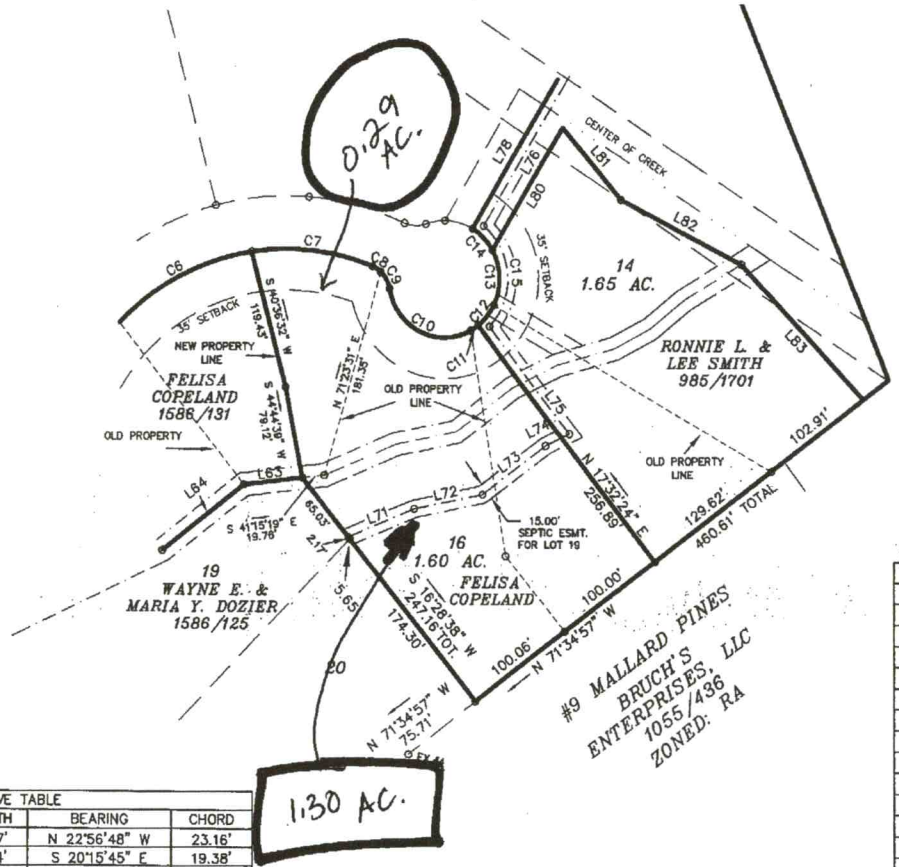
The above-described property is all of Lot 16 and a part of Lot 15 of Whispering Oaks subdivision as such is platted, planned and recorded in Plat Book 44 at Page 21 of the Iredell County Public Registry. See a portion of a map attached hereto for informational purposes. The above-described tract does not include the portion designated in hand writing as "0.29 acres".

Prior to this conveyance, the grantee herein, Felisa Copeland, was the owner of Lot 17 and 18 of Whispering Oaks subdivision as such is platted, planned and recorded in Plat Book 44 at Page 21 of the Iredell County Public Registry. Subsequent to this conveyance, Felisa Copeland and Ronnie L. Smith and wife, Lee A. Smith are recording a new plat that will combine part of Lot 17 with all of Lot 18 to create a newly described Lot 18. Said plat will combine part of Lot 17 (already owned by Copeland) with the property described hereinabove to create a new Lot 16. Upon the recordation of said plat, Lot 17 and Lot 15 will no longer exist as numbered lots, having been combined with each other pursuant to this conveyance and pursuant to the new plat.

Ronnie L. Smith and wife, Lee A. Smith reserve for themselves and their heirs, successors and assigns a perpetual fifteen foot wide non-exclusive easement for the installation and maintenance of a septic line extending from Lot 19 across the subject property. The centerline of said easement is described as follows: BEGINNING at the easternmost common corner of Lots 19 and 20; thence from said point of beginning the following courses and distances: 1) South 56-53-29 East 63.99 feet to a point; 2) South 45-54-56 East 62.71 feet to a point; 3) South 71-04-51 East 70.41 feet; and 4) South 60-46-58 East 23.26 feet to the termination point of the easement in the line of the property being retained by Ronnie L. Smith and wife, Lee A. Smith.

This conveyance is subject to the drainage easement depicted on plat book 43 at page 34 and plat book 44 at page 21. Plat book 44 at page 21 is a revision of plat book 43 at page 34.

This conveyance is subject to all restrictions and covenants for Whispering Oaks subdivision as well as all easements and rights of way of record.



THIS MAP IS NOT A CERTIFIED SURVEY AND HAS NOT BEEN REVIEWED BY A LOCAL GOVERNMENT AGENCY FOR COMPLIANCE WITH ANY APPLICABLE LAND DEVELOPMENT REGULATIONS.

CURVE TABLE				
CURVE	RADIUS	LENGTH	BEARING	CHORD
C1	50.00'	23.37'	N 22°56'48" W	23.16'
C2	35.00'	19.64'	S 20°15'45" E	19.38'
C3	30.00'	51.16'	S 44°39'46" W	45.18'
C4	728.80'	96.86'	N 89°42'25" E	96.79'
C5	207.50'	48.71'	N 87°22'34" W	48.59'
C6	207.50'	135.14'	N 61°59'37" W	132.76'
C7	207.50'	108.84'	N 28°18'31" W	107.60'
C8	25.00'	9.19'	N 02°44'57" W	9.14'
C9	25.00'	16.69'	N 26°54'35" E	16.38'
C10	50.00'	95.34'	S 08°35'16" E	81.54'
C11	50.00'	8.07'	S 67°50'06" E	8.06'
C12	50.00'	22.40'	S 85°17'33" E	22.21'
C13	50.00'	49.18'	N 53°41'50" E	47.22'
C14	50.00'	26.06'	N 10°35'22" E	25.77'
C15	57.50'	97.13'	N 51°39'20" E	85.99'

LINE	DIRECTION	DISTANCE
L63	N 41°15'19" W	51.70'
L64	N 72°33'33" W	92.18'
L65	N 60°02'15" W	159.65'
L66	S 04°11'19" E	25.39'
L67	N 85°53'58" E	101.59'
L70	S 04°11'19" E	136.51'
L71	N 56°53'29" W	63.99'
L72	S 45°54'56" E	62.71'
L73	S 71°04'51" E	70.41'
L74	S 60°46'58" E	23.26'
L75	S 17°32'24" W	116.33'
L76	N 86°33'57" E	148.02'
L77	N 01°42'50" W	63.17'
L78	N 86°33'57" E	147.86'
L79	N 01°42'50" W	52.02'
L80	N 86°33'57" E	121.44'
L81	N 15°08'44" E	79.87'
L82	S 07°38'20" E	120.63'
L83	S 12°08'25" W	158.72'



VICINITY MAP *** NO SCALE

LINE	DIRECTION	DISTANCE
L63	N 41°15'19" W	51.70'
L64	N 72°33'33" W	92.18'
L65	N 60°02'15" W	159.65'
L66	S 04°11'19" E	25.39'
L67	N 85°53'58" E	101.59'
L70	S 04°11'19" E	136.51'
L71	N 56°53'29" W	63.99'
L72	S 45°54'56" E	62.71'
L73	S 71°04'51" E	70.41'
L74	S 60°46'58" E	23.26'
L75	S 17°32'24" W	116.33'
L76	N 86°33'57" E	148.02'
L77	N 01°42'50" W	63.17'
L78	N 86°33'57" E	147.86'
L79	N 01°42'50" W	52.02'
L80	N 86°33'57" E	121.44'
L81	N 15°08'44" E	79.87'
L82	S 07°38'20" E	120.63'
L83	S 12°08'25" W	158.72'



CURVE TABLE				
CURVE	RADIUS	LENGTH	BEARING	CHORD
C1	30.00'	23.37'	N. 22°56'48" W	23.16'
C2	35.00'	18.84'	S. 20°15'45" E	19.38'
C3	30.00'	31.16'	S. 44°39'46" W	45.18'
C4	228.00'	96.86'	N. 89°42'28" E	96.79'
C5	207.50'	48.71'	N. 87°22'34" W	48.59'
C6	207.50'	130.14'	N. 61°39'37" W	132.76'
C7	207.50'	108.64'	N. 28°18'31" W	107.60'
C8	25.00'	9.18'	N. 02°44'57" W	9.14'
C9	25.00'	16.69'	N. 28°54'35" E	16.38'
C10	30.00'	85.34'	S. 08°20'16" E	81.54'
C11	30.00'	8.07'	S. 67°20'06" E	8.06'
C12	50.00'	22.40'	S. 85°13'33" E	22.21'
C13	30.00'	49.18'	N. 53°31'50" E	47.22'
C14	30.00'	26.06'	N. 10°35'22" E	25.77'
C15	57.50'	97.12'	N. 51°39'20" E	85.99'

1) This property may be subject to any easements and/or Rights-of-way of record.
2) NO GEODETIC MONUMENT LOCATED WITHIN 2000 FEET OF PROPERTY.
3) All lots are subject to a 10' Utility and Drainage Easement, 10 feet on each side of the property line, see lot 4 for typical
4) Total acreage to be subdivided: 6.12 Ac.
5) Total lots created: 4
6) Property zoned: RA, adjoining property zoned: RA,GB & PRD
7) "THIS SURVEY IS OF ANOTHER CATEGORY, SUCH AS THE RECOMBINATION OF EXISTING PARCELS, A COURT ORDERED SURVEY, OR OTHER EXCEPTION TO THE DEFINITION OF SUBDIVISION.

PROFESSIONAL LAND SURVEYOR

8) Minimum Building Setback: 35' From:
35' Rear See LOT 4 for typical
15' Side lot setbacks.
25' Corner
9) The smallest lot in the subdivision = 30,000 SQ. FT.
10) The property is located in DAVIDSON TWSP., Iredell Co., N.C.
11) Maximum roadway grades to be 10%
12) Turn out radius are 25' typical
13) Cul-de-sac radius are 50' typical
14) PSDE = PUBLIC STORM DRAINAGE EASEMENT
15) R/W = RIGHT-OF-WAY
16) Boundary performed by D.A.S. 2/16/2001
17) "HIS PROPERTY IS NOT LOCATED IN A SPECIAL FLOOD HAZARD AREA. (3703 I-0200-CDATED 6/22/98
18) TAX PARCEL #(PIN NUMBER) = 4636352170, 4636351021, 4636258068, 4636258297, 4636257312, 4636249987, 4636354428
19) DEED REF. = 985/1701, 1588/129, 1588/131, 1677/1488
20) ALL LOTS WITHIN WHISPERING OAKS SUBDIVISION "TO THE BEST OF MY KNOWLEDGE LIE WITHIN THE WS-IV, CRITICAL AREA OF THE LAKE NORMAN WATERSHED BASIN AS DESIGNATED BY THE NORTH CAROLINA DIVISION OF ENVIRONMENTAL MANAGEMENT AND AS APPEARS ON THE WATERSHED PROTECTION MAP OF IREDELL COUNTY.

8-31-05 DATE

SUBDIVISION ADMINISTRATOR

21) THE SOLE PURPOSE OF THIS PLAT IS TO REVISE THE BOUNDARY LINE BETWEEN THE FUTURE DEVELOPMENT AREA AND LOT 13. DIVIDE LOT 15 BETWEEN LOTS 14 & 16; DIVIDE LOT 17 BETWEEN LOTS 18 & 16; AND TO ADD A SEPTIC EASEMENT FROM LOT 19 TO LOT 13.
22) THIS PLAT SUPERSEDES PLAT PREVIOUSLY RECORDED IN PLAT BK. 43 PG. 34

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)

1 Inch = 100 ft.

DAS

DON ALLEN & ASSOCIATES P.A.

"Since 1977"

Commercial * Residential * Mortgage Surveys * Multi-Family Construction Staking * Subdivision Design * Topographical

111-B Raceway Drive * Mooresville , N.C. 28117

(704) 664-7029 (704) 664-9041 Fax

FILED Doc ID: 009871360001 Type: CRP
BOOK Recorded: 08/31/2005 at 04:06:19pm
Fee Amt: $21.00 Page 1 of 1
DATE Iredell County, NC
Brenda B. Bell Register of Deeds
REGIS BK 47 PG 120 PAGES
COUNTY
REGIS
BY: Debbie L Moore Deputy

OWNERS CERTIFICATE AND NOTARIZATION

I HEREBY CERTIFY THAT I AM THE OWNER OF THE PROPERTY SHOWN AND DESCRIBED HEREON, WHICH IS LOCATED IN THE SUBDIVISION JURISDICTION OF THE COUNTY OF IREDELL AND THAT I HEREBY ADOPT THIS PLAN OF SUBDIVISION WITH MY FREE CONSENT AND ESTABLISH MINIMUM BUILDING SETBACKS AS NOTED AND DEDICATE ALL ROADS, ALLEYS, WALKS, PARKS, AND OTHER SITES AND EASEMENTS TO PUBLIC OR PRIVATE USE AS NOTED.

I FURTHER CERTIFY THAT

a: THERE ARE NO DEED RESTRICTIONS WHICH WILL BE VIOLATED BY THE REQUESTED SUBDIVISION, AND

b: THERE ARE NO GOVERNMENTAL REGULATIONS OF ANY KIND, OTHER THAN THOSE FOR WHICH A VARIANCE HAS BEEN APPLIED FOR UNDER IREDELL COUNTY SUBDIVISION ORDINANCE REGULATIONS, WHICH WILL BE VIOLATED BY THE REQUESTED SUBDIVISION, AND

C: I UNDERSTAND THAT ENFORCEMENT OF DEED RESTRICTIONS AND ANY OTHER CONTRACTUAL AGREEMENTS IS NOT THE RESPONSIBILITY OF IREDELL COUNTY, WILL NOT BE UNDERTAKEN BY IREDELL COUNTY, AND IS THE SOLE RESPONSIBILITY OF THE PARTIES AFFECTED BY VIOLATIONS OF SUCH DEED RESTRICTIONS AND CONTRACTUAL AGREEMENTS.

DATE OWNER

8-31-05 DATE OWNER

NORTH CAROLINA
IREDELL COUNTY

I, A NOTARY PUBLIC FOR SAID COUNTY AND STATE DO HEREBY CERTIFY THAT [illegible] AND [illegible] OWNER(S) PERSONALLY APPEARED BEFORE ME THIS DAY, AND ACKNOWLEDGED THE EXECUTION OF THE FOREGOING INSTRUMENT. WITNESS MY HAND AND OFFICAL SEAL, THIS 31 DAY OF August 2005

NOTARY PUBLIC

MY COMMISSION EXPIRES: 6/17/07

SURVEYORS CERTIFICATION

I, WILLIAM M. ALLEN CERTIFY THAT THIS MAP WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION (DEED DESCRIPTION RECORDED IN BOOK ____ PAGE ____; THAT THE RATIO OF PRECISION AS CALCULATED BY LATITUDES AND DEPARTURES IS 1:10000; (THAT THE BOUNDARIES NOT SURVEYED ARE SHOWN AS BROKEN LINES PLOTTED FROM INFORMATION FOUND IN BOOK ____ PAGE ____; THAT THIS MAP WAS PREPARED IN ACCORDANCE WITH G.S. 47-30, AS AMENDED.

WITNESS MY HAND AND SEAL THIS 22 DAY OF August, A.D. 2005

PROFESSIONAL LAND SURVEYOR

OFFICIAL SEAL L-3459

REGISTRATION NUMBER

NORTH CAROLINA IREDELL COUNTY

I, A NOTARY PUBLIC OF THE COUNTY AND STATE AFORESAID, CERTIFY THAT WILLIAM M. ALLEN, A REGISTERED LAND SURVEYOR, PERSONALLY APPEARED BEFORE ME THIS DAY AND ACKNOWLEDGE THE EXECUTION OF THE FOREGOING INSTRUMENT. WITNESS MY HAND AND OFFICIAL SEAL, THIS 22 DAY OF August 2005

NOTARY PUBLIC

MY COMMISSION EXPIRES: 6/17/07

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

Subdivision Administrator 8-31-05 Date
Iredell County, North Carolina

STATE OF NORTH CAROLINA
COUNTY OF IREDELL

REVIEW OFFICER OF IREDELL COUNTY, CERTIFY THAT THE MAP OR PLAT TO WHICH THIS CERTIFICATION IS AFFIXED MEETS ALL STATUTORY REQUIREMENTS FOR RECORDING

8-31-05 DATE REVIEW OFFICER

As of the date or this recording,the lots represented on this plat have not been inspected or approved by the Iredell County Health Department. Until inspected there is no assurance that a building permit will be issued.

RECOMBINATION PLAT
OF
WHISPERING OAKS SUBDIVISION
LOTS 13 – 18
(PB 44 PG 21)

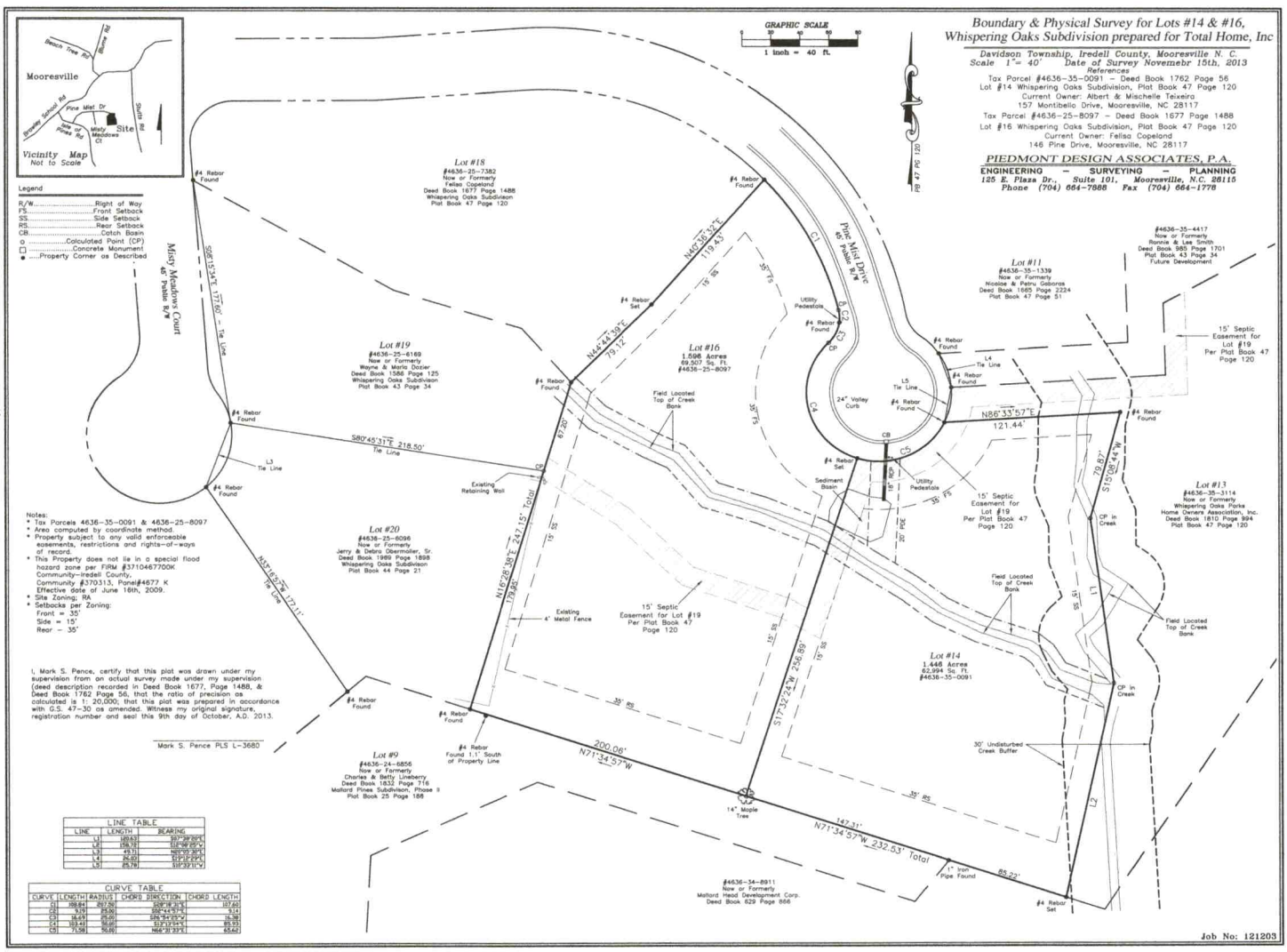
DAVIDSON TWSP., IREDELL CO., N.C.

SCALE: 1" = 100' DATE OF SURVEY: JUNE 23, 2005
DATE PLAT PREPARED: JULY 6, 2005

OWNER OF LOTS 13 & 14: RONNIE L. & LEE SMITH
128 FAST LANE
MOORESVILLE, NC. 28117

OWNER OF LOTS 16 & 18: FELISA COPELAND
P.O. BOX 2444
CORNELIUS, NC. 28031

FILE NAME: SB14REV3.DWG TAX MAP NO:


Boundary & Physical Survey for Lots #14 & #16,
Whispering Oaks Subdivision prepared for Total Home, Inc
Davidson Township, Iredell County, Mooresville N. C.
Scale 1" = 40' Date of Survey Novemebr 15th, 2013
References
Tax Parcel #4636-35-0091 - Deed Book 1762 Page 56
Lot #14 Whispering Oaks Subdivision, Plat Book 47 Page 120
Current Owner: Albert & Mischelle Teixeira
157 Montibello Drive, Mooresville, NC 28117
Tax Parcel #4636-25-8097 - Deed Book 1677 Page 1488
Lot #16 Whispering Oaks Subdivision, Plat Book 47 Page 120
Current Owner: Felisa Copeland
146 Pine Drive, Mooresville, NC 28117
PIEDMONT DESIGN ASSOCIATES, P.A.
ENGINEERING - SURVEYING - PLANNING
125 E. Plaza Dr., Suite 101, Mooresville, N.C. 28115
Phone (704) 664-7888 Fax (704) 664-1778
GRAPHIC SCALE
1 inch = 40 ft.
Vicinity Map
Not to Scale
Mooresville
Beaver Rd
Beaver Tree Rd
Shirley School Rd
Pine Mist Dr
Site
Misty Meadows Ct
South Rd
Legend
R/W.....Right of Way
FS.....Front Setback
SS.....Side Setback
RS.....Rear Setback
CB.....Catch Basin
O .....Calculated Point (CP)
□ .....Concrete Monument
● .....Property Corner as Described
Misty Meadows Court
45' Public R/W
Pine Mist Drive
45' Public R/W
Lot #18
#4636-25-7382
Now or Formerly
Felisa Copeland
Deed Book 1677 Page 1488
Whispering Oaks Subdivision
Plat Book 47 Page 120
Lot #19
#4636-25-6169
Now or Formerly
Wayne & Marla Dozier
Deed Book 1586 Page 125
Whispering Oaks Subdivision
Plat Book 43 Page 34
Lot #16
1.598 Acres
69,607 Sq. Ft.
#4636-25-8097
Lot #20
#4636-25-8096
Now or Formerly
Jerry & Debra Obermoller, Sr.
Deed Book 1989 Page 1898
Whispering Oaks Subdivision
Plat Book 44 Page 21
Lot #9
#4636-24-6856
Now or Formerly
Charles & Betty Lineberry
Deed Book 1832 Page 716
Mallard Pines Subdivision, Phase II
Plat Book 25 Page 186
Lot #11
#4636-35-1339
Now or Formerly
Nicolae & Petru Gaborea
Deed Book 1665 Page 2224
Plat Book 47 Page 51
#4636-35-4417
Now or Formerly
Ronnie & Lee Smith
Deed Book 985 Page 1701
Plat Book 43 Page 34
Future Development
Lot #13
#4636-35-3114
Now or Formerly
Whispering Oaks Parks
Home Owners Association, Inc.
Deed Book 1810 Page 994
Plat Book 47 Page 120
Lot #14
1.448 Acres
62,994 Sq. Ft.
#4636-35-0091
#4636-34-8911
Now or Formerly
Mallard Head Development Corp.
Deed Book 629 Page 866
#4 Rebar Found
#4 Rebar Set
CP
CB
Utility Pedestals
24" Valley Curb
Existing Retaining Wall
Sediment Basin
Existing 4' Metal Fence
CP in Creek
Field Located Top of Creek Bank
30' Undisturbed Creek Buffer
14" Maple Tree
1" Iron Pipe Found
15' Septic Easement for Lot #19 Per Plat Book 47 Page 120
S80°15'34"E 177.85' - Tie Line
S80°45'31"E 218.50' Tie Line
N53°16'07"W 177.11' Tie Line
N44°24'39"E 79.12'
N46°36'32"E 119.43'
N86°33'57"E 121.44'
S15°08'44"W 79.87'
N16°28'38"E 214.15' Total
S17°32'24"W 256.89'
N71°34'57"W 200.06'
N71°34'57"W 232.53' Total
147.31'
85.22'
Notes:
* Tax Parcels 4636-35-0091 & 4636-25-8097
* Area computed by coordinate method.
* Property subject to any valid enforceable easements, restrictions and rights-of-ways of record.
* This Property does not lie in a special flood hazard zone per FIRM #3710467700K Community-Iredell County, Community #370313, Panel#4677 K Effective date of June 16th, 2009.
* Site Zoning: RA
* Setbacks per Zoning:
Front = 35'
Side = 15'
Rear = 35'
I, Mark S. Pence, certify that this plat was drawn under my supervision from an actual survey made under my supervision (deed description recorded in Deed Book 1677, Page 1488, & Deed Book 1762 Page 56, that the ratio of precision as calculated is 1: 20,000; that this plat was prepared in accordance with G.S. 47-30 as amended. Witness my original signature, registration number and seal this 9th day of October, A.D. 2013.
Mark S. Pence PLS L-3680
LINE TABLE
LINE | LENGTH | BEARING
L1 | 189.63' | S07°29'39"E
L2 | 186.73' | S15°08'05"W
L3 | 49.17' | N89°02'29"E
L4 | 84.60' | S13°10'29"E
L5 | 85.78' | S18°32'11"W
CURVE TABLE
CURVE | LENGTH | RADIUS | CHORD DIRECTION | CHORD LENGTH
C1 | 188.84' | 267.50' | S09°18'31"E | 127.60'
C2 | 9.73' | 25.00' | S85°41'57"E | 9.14'
C3 | 16.69' | 25.00' | S26°54'25"W | 16.38'
C4 | 103.41' | 50.00' | S13°13'54"E | 85.35'
C5 | 71.58' | 50.00' | N66°31'33"E | 65.66'
Job No: 121203

Engineers and Soil Scientists

Agri-Waste Technology, Inc.
501 N. Salem Street, Suite 203
Apex, North Carolina 27502
919-859-0669
www.agriwaste.com

August 12, 2021

To: Applicant- Lot 16, Pine Mist Dr– Iredell County PIN 4636-25-8097.000, Mooresville, NC 28117

Re: Site/Soil Investigation for Lot 16, Pine Mist Dr– PIN 4636-25-8097.000 in Mooresville (Iredell County, NC)

I, Wayne Dozier (applicant name, print), acknowledge that "the LSS Evaluation attached to this application is to be used to produce design and construction features for permitting in accordance with SL 2018-114 Section 11.(c)."

Applicant Signature: Wayne E. Dozier

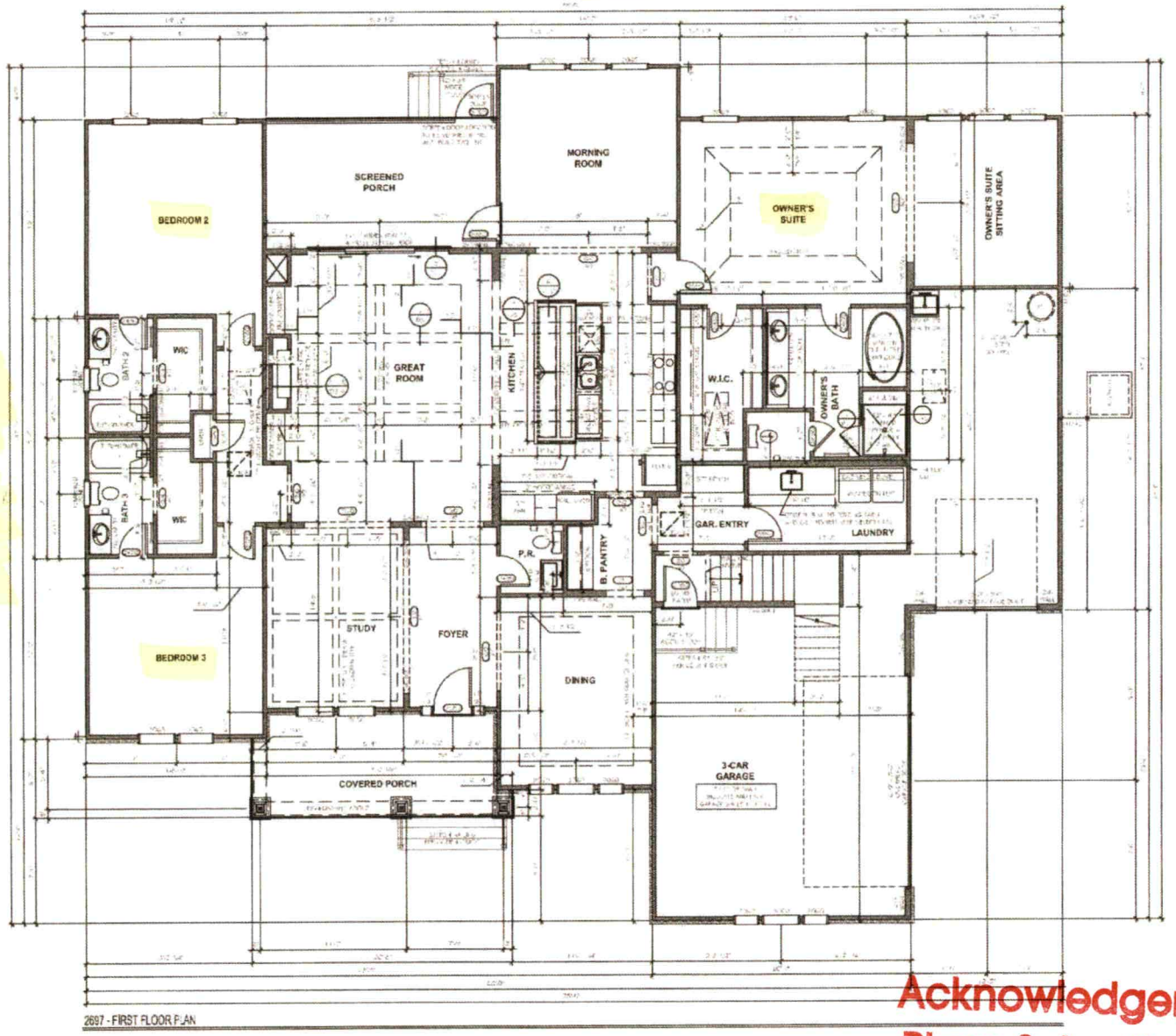
Date: 8/16/21

Sincerely,

Chris McGee, LSS
Soil Scientist
Agri-Waste Technology, Inc.

78'-5"

65'-4"



2697 - FIRST FLOOR PLAN

Acknowledgement Of Plans Submittal ONLY!

Date

Date

Bryant C. White 2-9-2022

TrueHomes
IT'S ALL ABOUT U
2649 Brekonridge Centre Dr.
Suite 104
Monroe, N.C. 28110
704-271-1191

OYL - REGION A - TRADITIONS

LOT # 1042

HARDWICK 2697

IREDELL

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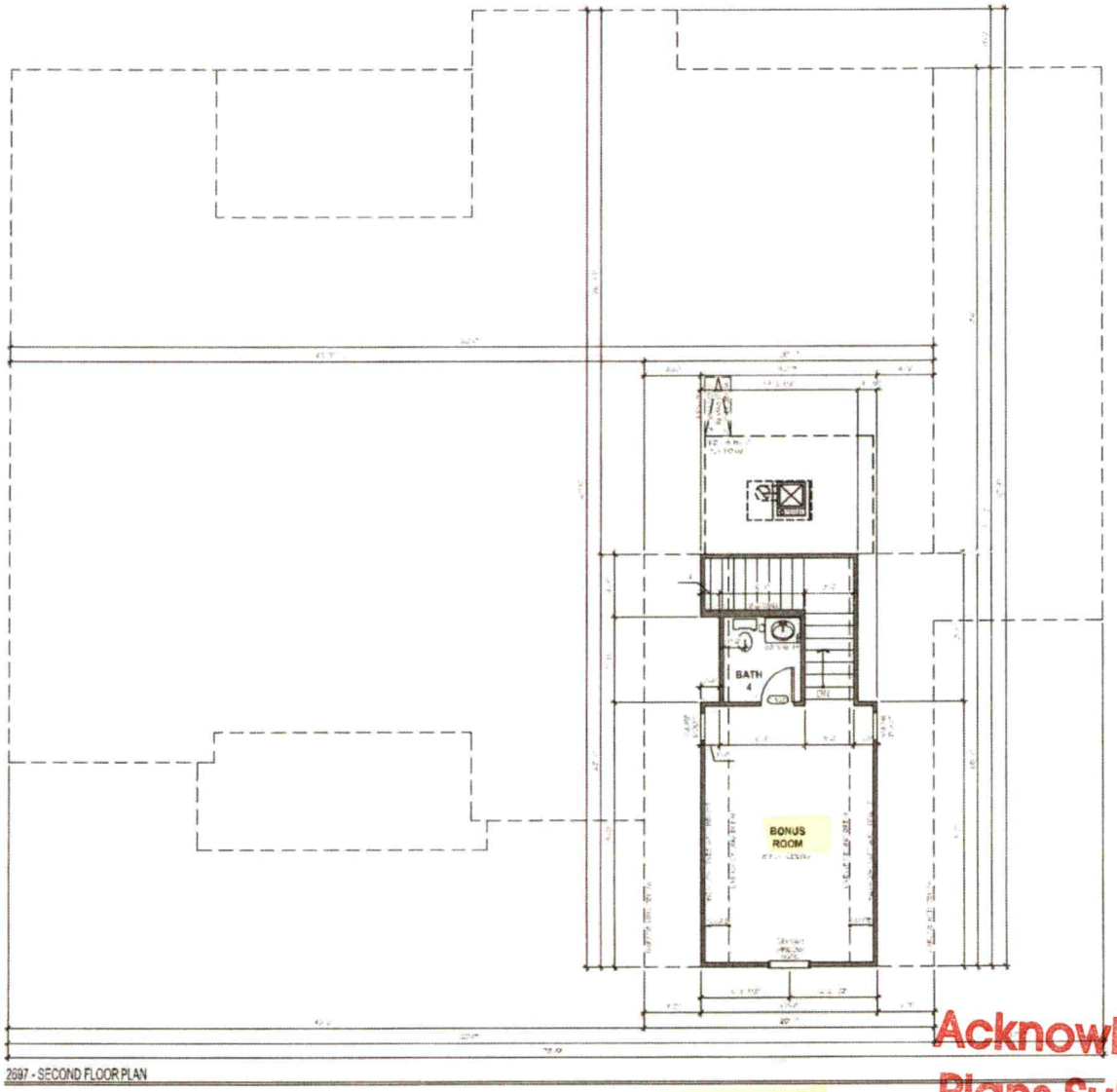
PREPARED BY: SETH

DATE: 12-16

SCALE: 1/8"=1'-0"

REVIEWED BY: NICK

SHEET: A2.1



2697 - SECOND FLOOR PLAN

78± ft

Acknowledgement Of
Plans Submittal ONLY!

X _____ Date _____

_____ Date _____

Bryant L. White 2-9-2022

TrueHomes
IT'S ALL ABOUT U
2649 Brekonridge Centre Dr.
Suite 104
Monroe, N.C. 28110
704-271-1191

OYL - REGION A - TRADITIONS

LOT # 1042

HARDWICK
2697

IREDELL

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PREPARED BY:
SETH

DATE
12.7.2

SCALE
1/8"=1'-0"

REVIEWED BY
NICK

SHEET:
A2.2

RECEIVED JAN 20 2022

BB

S.C

APPLICATION MUST BE FILLED OUT COMPLETELY & BE LEGIBLE OR IT WILL NOT BE PROCESSED

Iredell County Health Department – Environmental Health Division

PAGE 1: ***APPLICATION FORM*** AP-321642. $500.00

Application For: ( ) New Well Permit ( ) Well Repair Permit ( ) Well Abandonment
(✓) Septic Improvement Permit (X) 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

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: Maria & Wayne Dozier **Address:** 910 Camden Grandview Rd Apt E, Charlotte, NC **Zip:** 28202

Applicant Email: mycd1959@yahoo.com **Phone:** (704) 995-3693 **Alt. Phone:**

Owner Name: Maria & Wayne Dozier **Address:** 910 Camden Grandview Rd Apt E, Charlotte, NC **Zip:** 28202

Owner Email: wedozier@yahoo.com **Phone:** (704) 995-2787 **Alt. Phone:**

****

Property Information:

Street Address: 166 Pine Mist Drive Mooresville, NC 28117

Subdivision Name: Whispering Oaks **Section/Phase:** **Lot Number:** 16

Driving Directions: Western Brawley School Rd, T/L @ Isle of Pines, T/L @ Pine Mist, Property on right

****

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

CHECK FOUNDATION TYPE

(X) New Single Family Residence — Maximum Number of Bedrooms: 3 — (X) Crawl Space Foundation
( ) New Multi-Family Residence — Maximum Number of Occupants: 6 — ( ) Concrete Slab Foundation
( ) Accessory Building — ( ) Swimming Pool — ( ) Basement with Plumbing
( ) Bedroom(s) Addition — ( ) Other Addition/Structure: — ( ) Basement without Plumbing
( ) 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:

****

Water Supply: ( ) Replacement Well – Reason:
( ) Multi-connection Well Number of Houses: Number of Persons:

(X) 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 (3) Conventional (1) Innovative (2) Modified Conventional ( ) Other:

****

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.

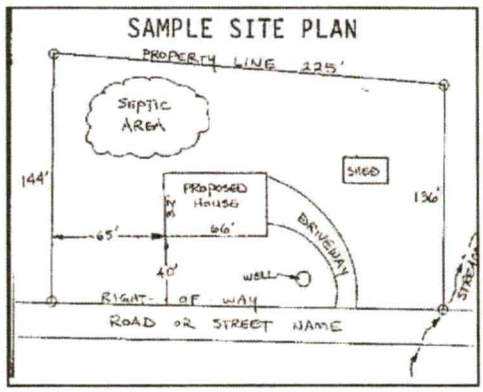
Signature: DocuSigned by: [signature] DocuSigned by: [signature]
Property owner or owner's legal representative signature: (SIGNATURE REQUIRED) 12/30/2021 DATE

IREDELL COUNTY HEALTH DEPARTMENT

ENVIRONMENTAL HEALTH DIVISION

PAGE 2: *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 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 and well location
- ( ) Area you prefer your septic system to be placed
- ( ) 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

Signature: DocuSigned by: [signature] 1B0B0F8DE8B204BC... DocuSigned by: [signature] 4F0104268F4A41... **Property owner or owner's legal representative signature (SIGNATURE REQUIRED)**

12/30/2021

DATE

IREDELL COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH

DOCUMENTATION TO AUTHORIZE AN OWNER'S LEGAL REPRESENTATIVE

(Check and sign only ONE of the options below)

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

Applications for permits require the "signature of the owner or owner's legal representative" (15A NCAC 18A .1937). If the owner does not sign the application himself or herself, they can submit any one of the following documents to designate their legal representative: *Power of Attorney; Real Estate Contract; Estate executor; Bankruptcy trustee; Court ordered guardianship*
In the absence of the above documentation, the property owner may provide the local health department with documentation that designates a legal representative. A property owner may:
Complete this form to document his or her legal representative, or provide his or her own form that contains the information in this form. If there are multiple property owners, then all property owners must sign the form that designates a legal representative.
By signing a form that designates a legal representative for purposes of 15A NCAC 18A .1937, the property owner authorizes that representative to act on their behalf in matters pertaining to the application and permitting process, including signing or receiving any application, document or permit. The owner retains full responsibility to meet all permit conditions specified by the local health department.

☒ **2.** I, _____, am the legal owner(s) of the property located at 166 Pine Mist Drive Mooresville, NC 28117, identified as PIN (Parcel Identification Number) 4636258097000, located in Iredell County, North Carolina.

I do hereby authorize (**print legal representative/company name**) SEPTIC ENVIRONMENTAL SOLUTIONS, INC Mr. Kenneth Avera, 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.

DocuSigned by: B060F8DE6B204BC... DocuSigned by: 4ED10F82581C441...

Signature of Owner(s)

12/30/2021
Date

Mooresville - Environmental Health
Fax: 704-662-3239
610 E. Center Avenue, Mooresville, NC 28115

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

(B8)

ICHD - ENVIRONMENTAL HEALTH DIVISION

Statesville Office (704) 878-5305 Mooresville Office (704) 660-3625 PERMIT # **AP-321642**

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

PIN # **4636-25-8097**

APPLICANT/OWNER: Trevor Hackney APPLICANT ADDRESS: 501 N.Salem St. Apex NC 27502

SITE ADDRESS: 160 ~~169~~ Pine Mist Dr. Mooresville NC 28117 PHONE: 704-268-9160 ALT. PHONE 704-995-2797

SITE DIRECTIONS: Western Brawley School Rd, T/L on Isle of Pines T/L Pine Mist Property on right SAP CONTROLLED: ☐ YES ■ NO

SUBDIVISION: Whispering Oaks SECTION: 16 LOT AREA: 1.3ac DESIGN FLOW: 360 L.T.A.R.: 0.25

Septic Tank 1000 (gal) STB Date

Pump Tank 1000 (gal) PT Date

Pump Make Model Serial #

Nitrification Fields 1 # Lines 5 Linear Ft 484'

Trench Width 36" Low-side Trench Bottom Depth 14" Gravel Depth N/A

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

System Description: PM - Low Profile Chambers

Repair System Description: 25% Reduction

Maintenance Agreement Required: ☐ YES ■ NO

☐ GRAVITY ■ PRESSURE

■ Residence No. Bedrooms 3

☐ Business No. Persons 6

☐ Other No. Employees

☐ Slab ■ Crawl Space

☐ Basement w/ plumbing ☐ Basement w/o plumbing

Water Supply: ■ Private ☐ Public ☐ Community

Comments / Conditions: Per plan By AWT

INITIAL SITE SKETCH

This permit is issued pursuant to Section 11.(c) of SL 2018-114 using the signed and sealed LSS Evaluation attached here.

See plan by: AWT

AS BUILT SKETCH

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

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: 10/15/21

AUTHORIZATION TO CONSTRUCT by: Date:

Installed by:

OPERATION PERMIT by: Date:

Existing System Inspected by: Date:

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

Engineers and Soil Scientists
Agri-Waste Technology, Inc.
501 N. Salem Street, Suite 203
Apex, North Carolina 27502
919-859-0669
www.agriwaste.com

Soil Suitability for Domestic Sewage Treatment and Disposal Systems
Lot 16, Pine Mist Drive, Mooresville NC. 28117
(PIN: 4636-25-8097; Iredell County)

PREPARED FOR: Wayne Dozier, Client

PREPARED BY: Jeff Vaughan, Ph. D., Licensed Soil Scientist
Trevor Hackney, Environmental Scientist

DATE: September 9, 2021

Soil suitability for domestic sewage treatment and disposal systems was evaluated on September 1, 2021 for the property located at Lot 16, Pine Mist Drive, Mooresville, NC. Jeff Vaughan and Trevor Hackney of Agri-Waste Technology, Inc. (AWT) conducted the soil evaluation. This evaluation was done to facilitate permitting for a septic system. This report and attached documents were prepared to meet the requirements for a Licensed Soil Scientist evaluation to meet SL 2018-114 (c).

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

The total property area is approximately 1.6 acres. The property is partially cleared and mostly wooded. A home is proposed near the front of the property and the septic system is proposed near the back of the property. There is a stream that runs through the center of the property. A septic system supply line easement for lot 19 also runs through the middle of this property. An alternative easement or waiver will have to be granted for the supply line for this property to cross the supply line easement for lot 19. The supply line for this property (lot 16) will also have to be properly sleaved when crossing the stream. A location has been proposed by AWT to cross the stream and the supply line easement. This location will be finalized during the approval for the Construction Authorization.

Soil Suitability for Domestic Sewage Treatment and Disposal Systems
The drawing in Attachment 1 details the property boundaries (as surveyed by Piedmont Design), soil boring locations, and layout of drain field trenches (Completed by AWT). Five soil borings were assessed on the property. Soil borings were examined to determine soil suitability for on-site sewage disposal systems in accordance with 15A18A .1900 Rules for Sewage Treatment and Disposal Systems. These borings were advanced with a hand auger.

A septic layout was performed to demonstrate available space (.1945). The layout in Attachment 1 indicates there is available space for a three-bedroom pump to pressure manifold initial system utilizing low profile chambers with a 25% reduction pump to pressure manifold repair system.

The proposed LTAR (Long Term Acceptance Rate) by AWT is 0.25 GPD/ft^2. The soils on this property are group IV soils within the distribution and treatment zone as used to define the LTAR. Since usable slope corrected soil depths meet or exceed 26" AWT is recommending the use of low-profile chambers for the primary system. With an LTAR of 0.25 GPD/ft^2, 480 linear feet of low-profile chambers is necessary to support a three-bedroom home initial system. The attached drawing proves that 484 linear feet of low-profile chambers can be installed with the home location on the property. The maximum trench bottom should not exceed 14 inches from the low side of the trench. The repair system will be a 25% reduction septic system with a LTAR of 0.25 GPD/ft^2. A minimum of 360 linear feet of innovative trench are necessary for the repair system and there is 372 linear feet available for use for the repair system. The maximum trench should not exceed 14 inches from the low side of the trench. At this trench bottom depth, a 6-inch soil cap is recommended for the repair system.

Any disturbances or grading done in the usable area or within the proposed setbacks will change the potential of using the area designated for a drain field. Prior to moving forward with building on the property, Iredell County Environmental Health Department should be contacted to complete the necessary review of this documentation to issue an IP (Improvement Permit) for the property.

Conclusions

An IP (Improvement Permit) for this property can be issued with the site plan that is in Attachment 1. The county issues an Operation Permit after the system has been installed to meet the specifications of the Authorization to Construct. Septic layouts and system design can be performed as needed. It will be critical to not disturb any of the proposed septic area or there is a risk that the IP will be voided. The LSS Evaluation is being submitted pursuant to and meets the requirements of the SL 2018-114 Section 11. (c)

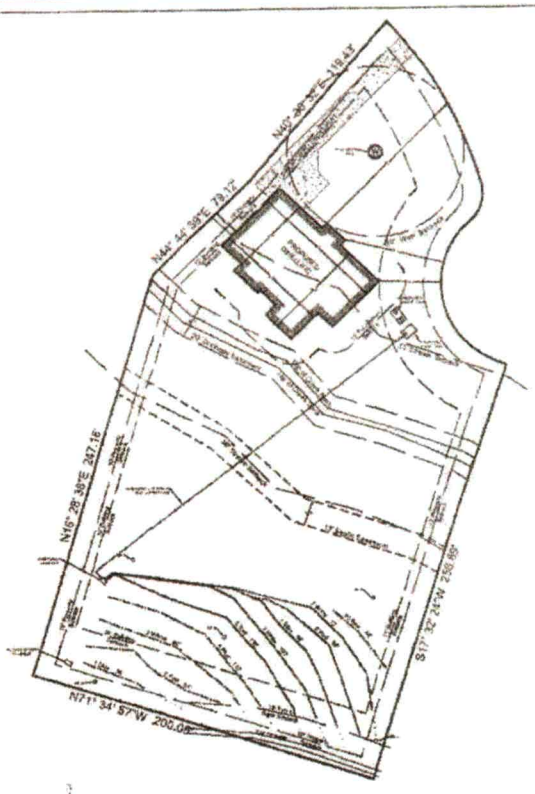
We appreciate the opportunity to assist you in this matter. Please contact us with any questions, concerns, or comments.

Sincerely,

Jeff Vaughan

Trevor Hackney

Attachment 1: Site Plan/Drawing



DRAWING LEGEND:

PROPOSED PRIMARY: ——————

FUTURE REPAIR: — — — —

UNUSED: . . . . . .

SYSTEM NOTES

3-BEDROOM SINGLE-FAMILY RESIDENCE

LTAR: 0.25 GAL/FT/DAY

PRIMARY SYSTEM:
450 TOTAL LINEAR FT (150 LINEAR FT REQUIRED)
ATTEMPT TO PRESSURE MANIFOLD w/ LOW PROFILE CHAMBER DRAINFIELD

REPAIR SYSTEM:
450 TOTAL LINEAR FT (150 LINEAR FT GUARANTEED)
PUMP TO PRESSURE MANIFOLD w/ CHAMBER DRAINFIELD (50% REDUCTION SIZING)

0 50 100 Feet

SCALED FOR 11" X 17" SHEET

AWT
Engineers and Soil Scientists

Owner Information:
Warren Taylor
146 Pine Mist Dr.
Mocksville, NC 28117

Property Information:
Whispering Oaks Lot 16
Pine Mist Dr.
Mocksville, NC 28117
Iredell County
PIN: 4636-25-8067.000

For Review Only

SHEET TITLE:
Property Layout

PROJECT DESIGNER:	
L. Hastings	704-798-9162
DRAWN BY:	DRAWER INI.
C. Rhodes	7/29/2021
REVISED BY:	REVISED INI.
S. Davis	8/24/2021
PLOTTED BY:	PLOTTED INI.

DRAWING NUMBER:
WW-1

CONVENTIONAL SEPTIC SYSTEM DESIGN (Primary)

Designed by: TD
Revised: 9/15/2021

Site Information

Project: Dozier Property WWTS
Site Address: Pine Mist Drive
Mooresville, NC 28117
County: Iredell

Design Information

Estimated Daily Flow:	360	gal/day
L.T.A.R.:	0.25	gal/day/ft^2
L.T.A.R. + 5%:	0.263	gal/day/ft^2
Trench Width:	3	ft.
Line Length Required:	480	ft.

DRAINFIELD INFO. - **Primary**

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

Line No.	Flag Color	Line Length (ft.)		Flow (gpm)	Flow/Foot (gpm/ft)	Line L.T.A.R.
5	Red	136	3/4in SCH 40	12.5	0.092	0.237
6	White	100	3/4in SCH 80	10.1	0.101	0.260
7	Blue	88	SPLIT 1in SCH 80	8.42	0.096	0.247
8	Red	88	SPLIT 1in SCH 80	8.42	0.096	0.247
9	White	72	1/2in SCH 40	7.11	0.099	0.255
TOTAL		**484**		**46.55**		0.249

Total Run Time =	7.73	min.	
% of Dose Volume =	75.0%		(Req. Range 66% - 75%)
Dose Volume =	236.9	gal/dose	
Run Time/Dose =	**5.1**	**min**	(Range 5-7 min unless uphill, checked)
Volume/depth =	21.07	gal/in	(Dependent upon tank manufacturer, to be field verified)
Estimated Drawdown =	11.24	in.	

Manifold Box

Number of Taps =	4		
Manifold Length =	3.5	ft.	(approximate)

CONVENTIONAL SEPTIC SYSTEM DESIGN (Repair)

Designed by: TD
Revised: 9/15/2021

Site Information

Project: Dozier Property WWTS
Site Address: Pine Mist Drive
Mooresville, NC 28117
County: Iredell

Design Information

Estimated Daily Flow:	360	gal/day
L.T.A.R.:	0.25	gal/day/ft^2
L.T.A.R. + 5%:	0.263	gal/day/ft^2
Trench Width:	3	ft.
Line Length Required:	480	ft.
Line Length w/ 25% Reduction:	360	ft. (for Chambers or EZ Flow Product)
L.T.A.R. Reduced:	0.333	gal/day/ft^2
L.T.A.R. Reduced + 5%:	0.350	gal/day/ft^2

DRAINFIELD INFO. - **Repair**

Proposed Type of System/Distribution: ***Pump to Pressure Manifold using Chambers or EZ-flow Product***

Line No.	Flag Color	Line Length (ft.)		Flow (gpm)	Flow/Foot (gpm/ft)	Line L.T.A.R.
1	Blue	36	1/2in SCH 80	5.48	0.152	0.346
2	Red	84	3/4in SCH 40	12.5	0.149	0.338
3	White	96	3/4in SCH 40	12.5	0.130	0.296
4	Blue	112	1in SCH 80	16.8	0.150	0.341
10	Blue	44	1/2in SCH 80	5.48	0.125	0.283
TOTAL		372		52.76		0.321

Total Run Time =	6.82	min.	
% of Dose Volume =	75.0%		(Req. Range 66% - 75%)
Dose Volume =	182.2	gal/dose	
Run Time/Dose =	**3.5**	**min**	(Range 5-7 min unless uphill, checked)
Volume/depth =	21.07	gal/in	(Dependent upon tank manufacturer, to be field verified)
Estimated Drawdown =	8.65	in.	

Manifold Box

Number of Taps =	5		
Manifold Length =	4.0	ft.	(approximate)

PUMP DESIGN

Designed by: TD
System (initial/repair): **Primary** *Revised:* 9/15/2021

Project: Dozier Property WWTS
Site Address: Pine Mist Drive
Mooresville, NC 28117
County: Iredell

Friction Losses

Suction Head =	0 ft.		*(submersible = 0)*
Elev. Difference (highest point from pump) =	12.50 ft.		
Design Pressure At Outlet =	2 ft.		
Supply Line - *2.0" Schedule 40 PVC* (accounts for 10' of pipe in pump tank)			
Pipe Diameter (ID) =	2.047 in.	Flow =	46.55 gpm
Pipe Length =	238 ft.	Velocity =	4.54 ft/sec
Pipe Length for Fittings =	23.8 ft.		
Est. Friction Loss per 100' =	3.70 ft/100 ft.		
Estimated Friction Loss =	9.67 ft.		
Pressure Filter Friction Loss =	1.62 ft.		*(from manufacturer)*
Friction Loss - Taps/Special Fittings =	3.5 ft.		
TOTAL =	**29.29 ft.**		

Flow for Vent Hole

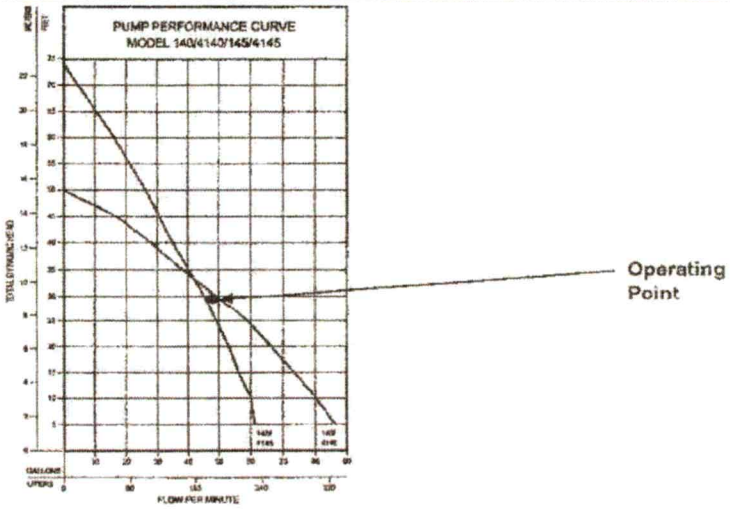
Hole Diameter = 1/8 in.
Hole Flowrate = 1.00 gpm

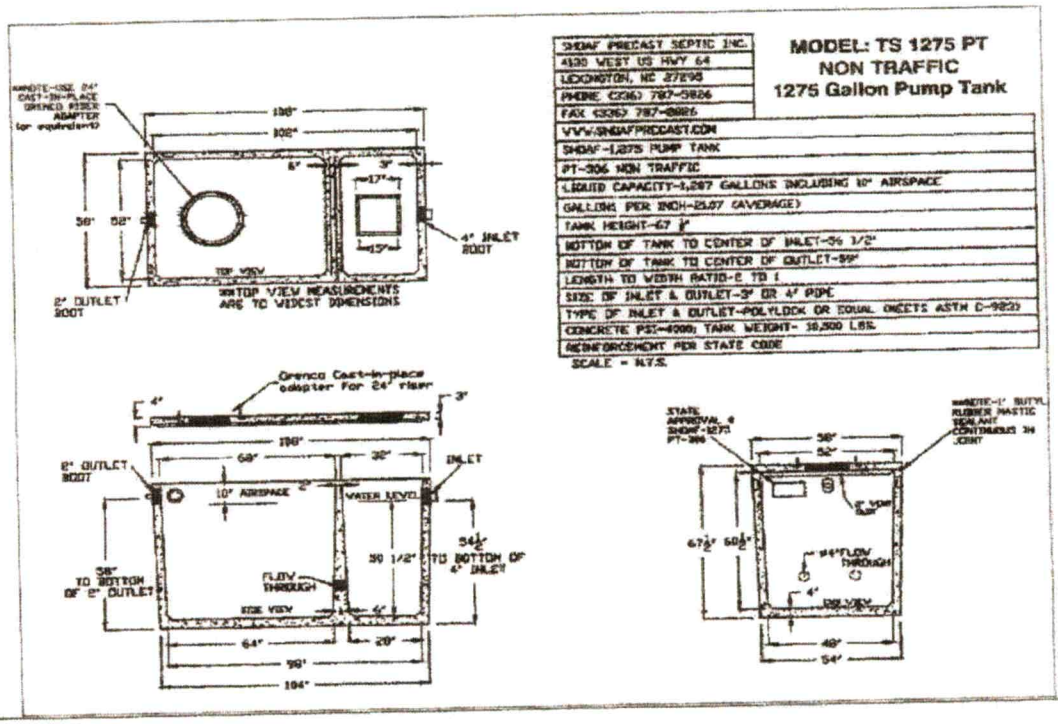
Pump Efficiency = 0.7 *(assumed, typical)*
Motor Efficiency = 0.9 *(assumed for electric pumps)*
Flow = 47.55 gpm

Required Horsepower = 0.56 hp
TDH = 29.29 ft.

Pump Selection

Manufacturer: **Zoeller**
Model: **N140**
Horsepower: **1**





Interior Height (in.)	**60.5**
Avg. Gals/Inch	**21.07**

Primary System

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

Top of pump (including 4" block)	16.1 in.	(Pump approx. 12.1" tall)
Pump Off	18.0 in.	(allows pump to remain submerged)
Pump On	29.24 in.	(set for dose volume)
Alarm on	35.24 in.	(6" above ON Float)

Emergency Storage Available	
Pump Tank	532.2 gal
Days of Storage	1.48 days

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

Attachment 2: Soil Boring Description Sheets

PROPERTY ID #: _4636-25-8097__
COUNTY: Iredell Co.__

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

CLIENT: _____Wayne Dozier_____ APPLICATION DATE_____
ADDRESS: _____Lot 16, Pine Mist Dr, Mooresville, NC. 28117 DATE EVALUATED: __9/1/21
PROPOSED FACILITY: _Single Family Residence___PROPOSED DESIGN FLOW (.1949): ___360 GPD____ PROPERTY SIZE: ___1.6 ac.____
LOCATION OF SITE: Lot 16, Pine Mist Dr, Mooresville, NC. 28117 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 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	
SB 1	12%	0-10"	SL; GR	SS; SP; Fr		31"	-	Saprolite	Low Profile Chamber
		10-24"	CL; SBK	SS; SP; Fi					
		24-31"	CL; WSBK	SS; SP; Fr					0.25 GPD/Ft²
		31+"	CL; MA	SS; SP; Fr					
SB 2	6%	0-12"	SL; GR	SS; SP; Fr		36+"	-	-	Provisionally Suitable
		12-30"	C; SBK	SS; SP; Fi					
		30-36+"	CL; WSBK	SS; SP; Fr					0.25GPD/Ft²
SB 3	10%	0-8"	SCL; Gr	SS; SP; Fr		30 "	-	Saprolite	Low Profile Chamber
		8-24"	C; SBK	SS; SP; Fi					
		24-30"	CL; WSBK	SS; SP; Fr					0.25GPD/Ft²
		30+"	CL; MA	SS; SP; Fr					
SB 4	12%	0-9"	SCL; Gr	SS; SP; Fr		36+"		-	Provisionally Suitable
		9-30"	C; SBK	SS; SP; Fi					
		30-36+"	CL; WSBK	SS; SP; Fr					0.25GPD/Ft²

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	Provisionally Suitable	Provisionally Suitable
System Type(s)	Low Profile Chamber	Innovative 25% Reduction
Site LTAR	0.25 GPD/Ft²	0.25 GPD/Ft²

OTHER FACTORS (.1946): _____
SITE CLASSIFICATION (.1948): _____

EVALUATED BY: ___Jeff Vaughan_____
OTHER(S) PRESENT: _____Trevor Hackney_____

COMMENTS
Updated February 2014

LEGEND

use the following standard abbreviations

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

MOIST	WET
VFR (Very Friable)	NS (Non-sticky)
FR (Friable)	SS (Slightly Sticky)
FI (Firm)	S (Sticky)
VFI (Very Firm v. Very Sticky)	VS (Very Sticky)
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.

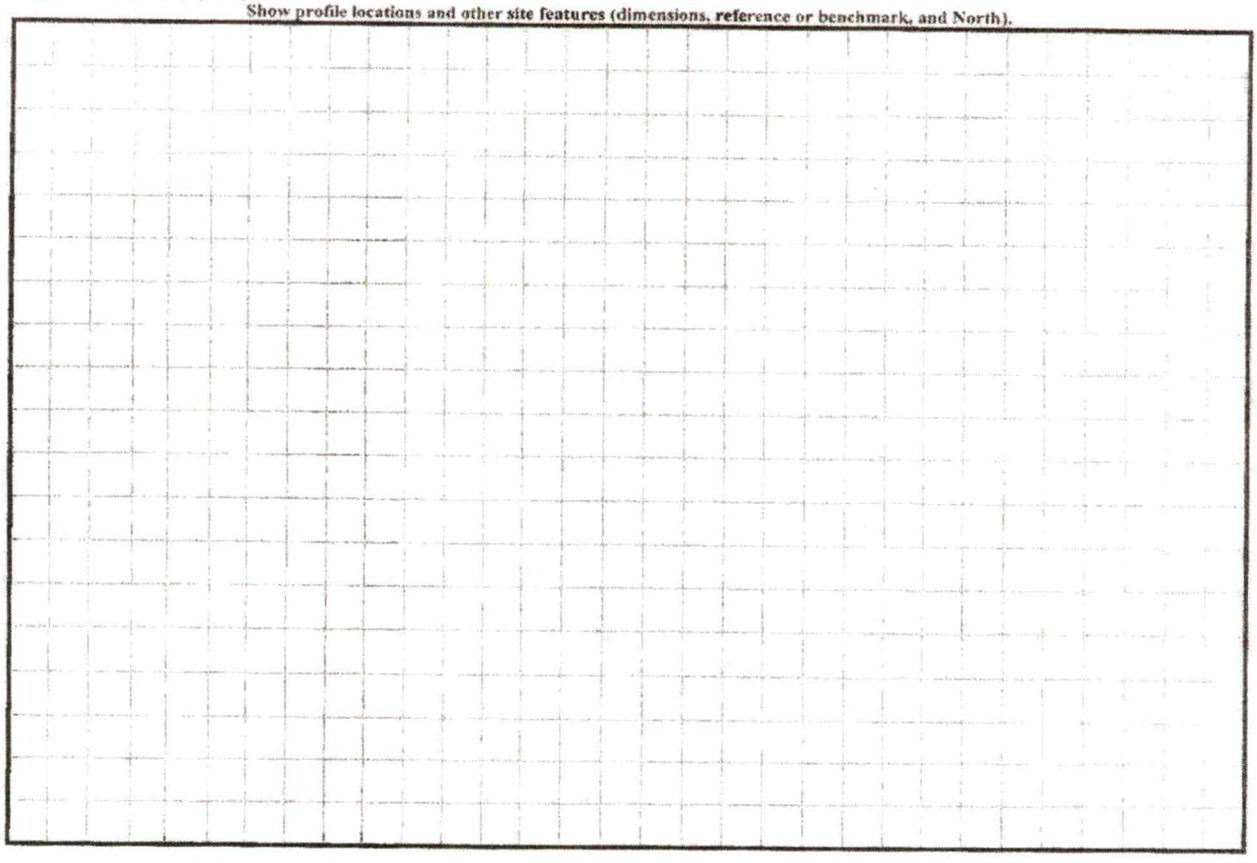
NOTES

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).



SOIL/SITE EVALUATION

(Continuation Sheet-Complete all field in full)

PROPERTY ID #: 4636-25-809
DATE OF EVALUATION: 9/1/21
COUNTY: Iredell Co.

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	
SB 5	13%	0-18"	SCL; WSBK	SS; SP; Fr		34"	-	Saprolite	Provisionally Suitable 0.25GPD/Ft²
		18-34"	C; SBK	SS; SP; Fi					
		34+"	CL; WSBK	SS; SP; Fr					