IREDELL COUNTY HEALTH DEPARTMENT - *ENVIRONMENTAL HEALTH* ☒ STATESVILLE OFFICE 704-878-5305 ☐ MOORESVILLE OFFICE 704-664-5281

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

PERMIT # 163286 PIN # 4719-49-2832 3766 DATE 10-25-10

OWNER Tracy Barnes APPLICANT: Same PHONE: Home/Cell # Business # 704-876-2378

SITE ADDRESS 133 Barnes Airship Rd. OWNER / APPLICANT ADDRESS 156 Barnes Airship Rd.

SITE DIRECTIONS 115 N, left at Damascus Church, (L) at Barnes Airship on (L)

SUBDIVISION Barnes BLOCK / SECTION LOT # 2 LOT AREA 4.966 DESIGN FLOW 360 L.T.A.R. .3

Septic Tank 1000 Gallons: STB 1012 Date 4-13-10
Pump Tank 1000 Gallons: P T 17 Date 10-19-10
Pump Make Model Serial #
No. Nitrification Fields: 1 No. Lines 4 Linear Feet 400
Trench Width 36 Max. Trench Bottom Depth 36

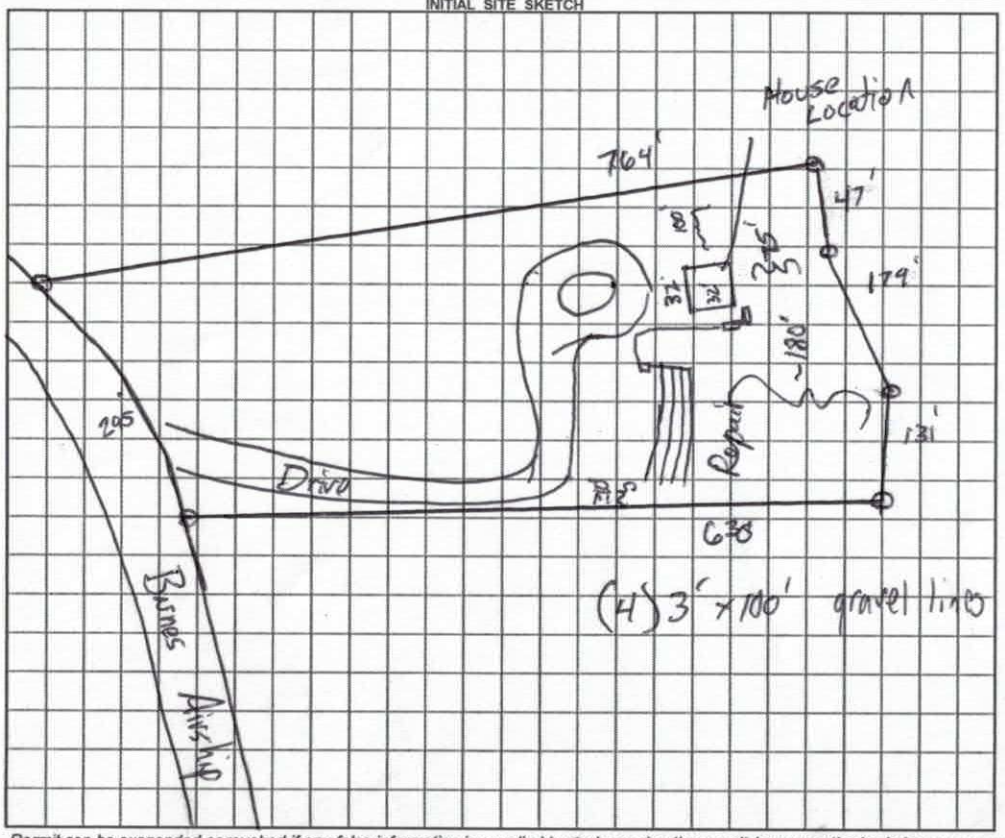
☒ New System ☐ Repair ☐ Expansion System Type I II (III) IV V VI
System Description: Conventional Pump
Repair System Description: Conventional Pump
Maintenance Agreement Required ☐ YES ☒ NO
Gravel Depth 12 ☐ GRAVITY ☒ PRESSURE

☒ Residence No. Bedrooms 3
☐ Business No. Persons
☐ Other No. Employees
☐ Slab ☒ Crawl Space
☐ Basement w/plumbing ☐ Basement w/o plumbing

Water Supply: ☒ Private ☐ Public ☐ Community

Comments / Conditions: An approved system map also be used

INITIAL SITE SKETCH



AS BUILT SKETCH

	Date	Initials
Drain Lines Checked	12-7	JS
Tanks Checked	12-6	TH
Pressure Manifold or Valve Box Checked	12-7	JS
Pressure Head Set		
Electrical Checked		
Floats Set		
Alarm Checked		
Maintenance Contract Y / N		

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.

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

Owner / Applicant Signature: Tracy Barnes Date 10-29-10 Installed by:

IMPROVEMENT PERMIT by: REHS Date 10-25-10 OPERATION PERMIT by: REHS Date

AUTHORIZATION TO CONSTRUCT by: EHS Date 29 Oct 10 Existing System Inspected by: REHS Date

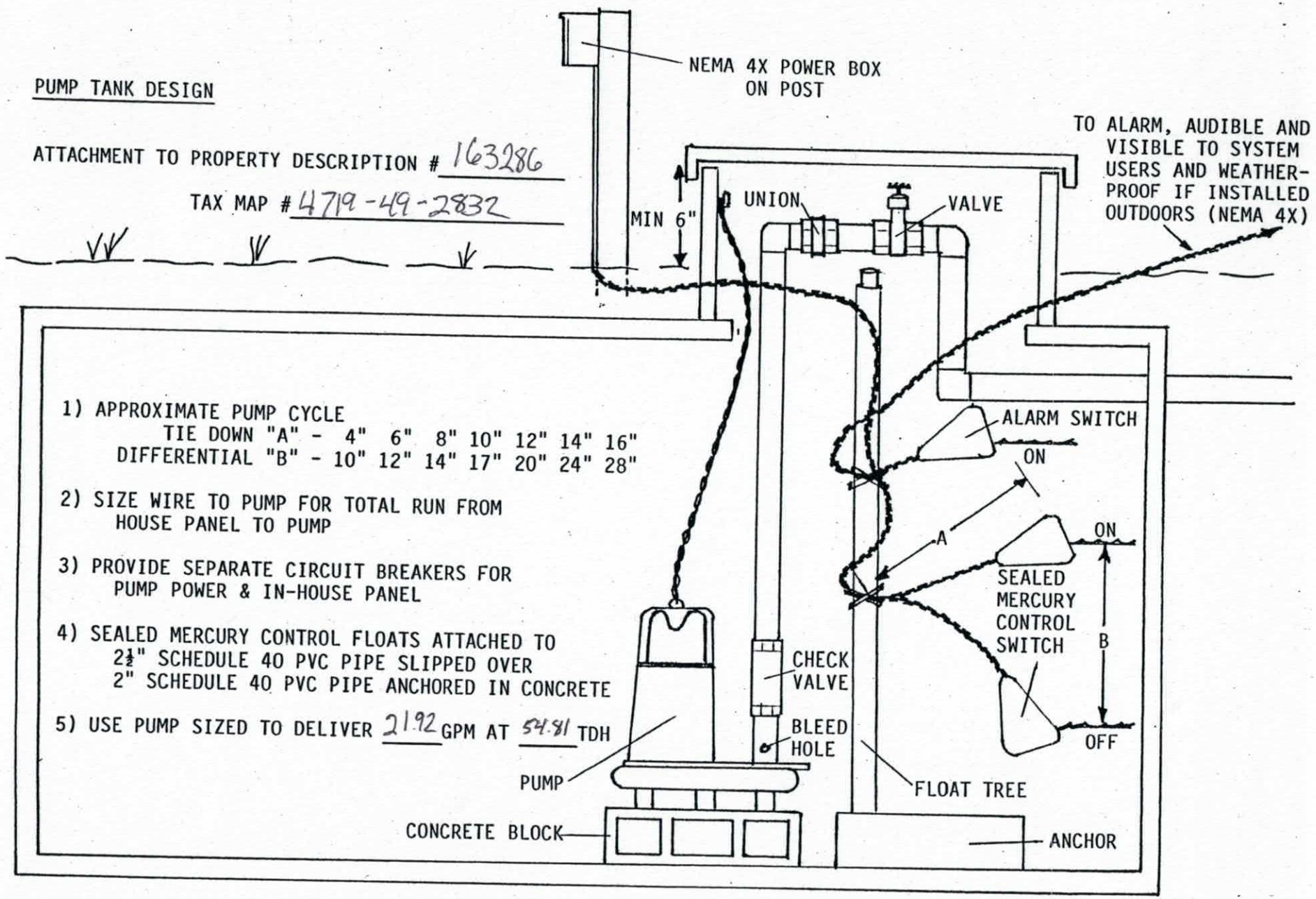
YOU SHOULD CONTACT A LOCATOR SERVICE PRIOR TO ANY EXCAVATION

White Copy – Environmental Health YELLOW COPY (Final) Owner / Applicant PINK COPY (Initial) Owner / Applicant

PUMP TANK DESIGN

ATTACHMENT TO PROPERTY DESCRIPTION # 163286

TAX MAP # 4719-49-2832



1) APPROXIMATE PUMP CYCLE
   TIE DOWN "A" - 4" 6" 8" 10" 12" 14" 16"
   DIFFERENTIAL "B" - 10" 12" 14" 17" 20" 24" 28"

2) SIZE WIRE TO PUMP FOR TOTAL RUN FROM HOUSE PANEL TO PUMP

3) PROVIDE SEPARATE CIRCUIT BREAKERS FOR PUMP POWER & IN-HOUSE PANEL

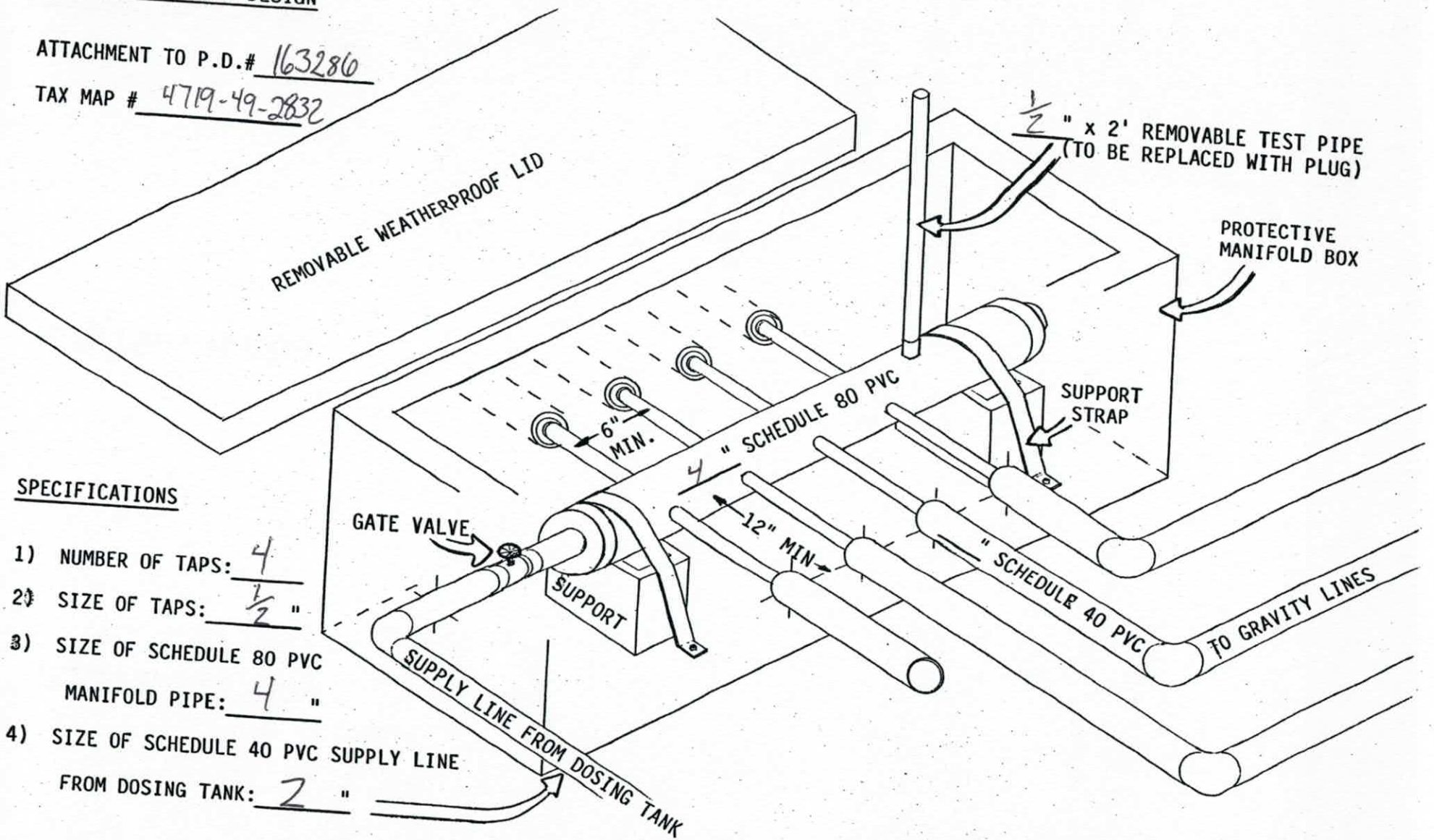
4) SEALED MERCURY CONTROL FLOATS ATTACHED TO 2½" SCHEDULE 40 PVC PIPE SLIPPED OVER 2" SCHEDULE 40 PVC PIPE ANCHORED IN CONCRETE

5) USE PUMP SIZED TO DELIVER 21.92 GPM AT 54.81 TDH

PRESSURE MANIFOLD DESIGN

ATTACHMENT TO P.D.# 163286

TAX MAP # 4719-49-2832



SPECIFICATIONS

1) NUMBER OF TAPS: 4

2) SIZE OF TAPS: ½ "

3) SIZE OF SCHEDULE 80 PVC MANIFOLD PIPE: 4 "

4) SIZE OF SCHEDULE 40 PVC SUPPLY LINE FROM DOSING TANK: 2 "

Pump Design Sheet **For:** **By:**

System Length (linear ft)	300		
# of Taps	4	Manifold Length (in)	30
Manifold Size (in)	4	Flow per Tap (gpm)	5.48
Tap Type (sch 40 or 80)	80	Total Flow (gpm)	21.92
Tap Size (in)	0.5	Friction Loss (ft)	2.81
Tap Length (in)	12	Total Dynamic Head (ft)	54.81
Supply Line Size (in)	2		
Supply Line Length (ft)	200		
Pressure Head (ft)	2		
Elevation Head (ft)	50		

When choosing a pump for this system, you will need a pump that can deliver:

21.92 GPM against **54.81** FT of Total Dynamic Head

Dose Volume (gal)	146.25
Pump Run Time (min)	6.67
Tank Drawdown (in)	6.96

DENR/DEH

ON-SITE WASTEWATER SECTION

Sheet 1 of 1
PROPERTY ID #: 4719492832
COUNTY: Iredell

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: Tracy Barnes
APPLICATION DATE 9-7-10
ADDRESS: 156 Barnes Airship Rd
DATE EVALUATED: 10-21
PROPOSED FACILITY: 3BR home
PROPOSED DESIGN FLOW (.1949): 360 gpd
PROPERTY SIZE: ~5 Ac.
LOCATION OF SITE: Barnes Airship Rd.
PROPERTY RECORDED: n/a
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) .1941 STRUCTURE/ TEXTURE	SOIL MORPHOLOGY (.1941) .1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	OTHER PROFILE FACTORS .1943 SOIL DEPTH	OTHER PROFILE FACTORS .1956 SAPRO CLASS	OTHER PROFILE FACTORS .1944 RESTR HORIZ	PROFILE CLASS & LTAR
1	20 LS	0-24	CL SBK	SS SP	n/a	31" soil 58" sap	L	n/a	.3 PS
		24-31	L SBK	SS SP					
		31-58	L/SAP						
2	20 LS	0-22	CL SBK	SS SP	n/a	27 soil 58 sap	L	n/a	.3 PS
		22-27	L SBK	SS SP					
		27-58	L/SAP						
3	20 LS	0-25	CL SBK	SS SP	n/a	41 soil 58 sap	L	n/a	.3 PS
		25-41	L SBK	SS SP					
		41-58	L/SAP.						
4	20 LS	0-31	CL SBK	SS SP	n/a	48 soil 58 sap	L	n/a	.3 PS
		31-48	L SBK	SS SP					
		48-58	L/SAP						

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	PS
System Type(s)	IIIb	IIIb
Site LTAR	.3	.3

OTHER FACTORS (.1946): none
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: John Stewart
OTHER(S) PRESENT: Tracy Barnes

COMMENTS:

IREDELL COUNTY HEALTH DEPARTMENT

Environmental Health Division

Application For Improvement Permit and/or Authorization To Construct, Existing System Inspection

(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)

1. APPLICATION FOR: ___ Improvement Permit ___ Authorization To Construct ✓ BOTH ___ Existing System Inspection

2. 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 check ( ) beside whichever is submitted if applicable ___ Custom Site Plan, Scaled no more than 1 Inch = 60 Feet

3. **Applicant Information:**

Applicant Name	Mailing Address	Home Phone #	Alternate Phone #
TRACY BARNES	156 BARNES AIRSHIP DR STATESVILLE NC 28625	704 876 2378	704 880 2761
SAME			
Owner Name	Mailing Address	Home Phone #	Alternate Phone #

4. **Property Information:**

Street Address	Subdivision Name	Section/Phase and Lot Number
133 ~~000~~ BARNES AIRSHIP DR	TRACY L BARNES SUBDIVISION	LOT # 2

Driving Directions: FROM I-40 10.5 MILES NORTH - - LEFT ON DEMASCUS CHURCH RD FOR .5 MILES -- LEFT ON BARNES AIRSHIP DR - - - .25 MILES ON LEFT TO SITE

****

5. **RESIDENTIAL Site Development Information:** *(Check or Complete ALL that apply)*

(✓) New, Single Family Residence
( ) New, Multi-Family Residence
( ) Expansion of Existing Septic System
( ) Repair To Failing Septic System
( ) Other ___

Maximum Number of Bedrooms ~~2~~ 3
Maximum Number of Occupants 3
If Expansion, Current Number of Bedrooms ___

(✓) Crawl Space Foundation?
( ) Concrete Slab Foundation?
( ) Basement w/Plumbing?
( ) Basement w/out Plumbing?

IF Non- Residential Site Development:
Type of Business ___
Square Footage of Building ___
Maximum Number of Employees ___
Maximum Number of Seats ___

****

6. **Proposed Water Supply:**

(✓) New Well ( ) Existing Well ( ) Community Well ( ) City Water ( ) Other Public Water

****

7. **Desired Septic System Type:** *(You may rank in order of preference, if any)*

( ) Alternative (X) Conventional ( ) Innovative ( ) Modified Conventional ( ) Other ___ ( ) No Preference

****

8. **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. industry) 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.

9. Signature: Tracy Barnes — 9-7-10

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

IREDELL COUNTY HEATLH DEPARTMENT

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...
  SHOW: proposed house or business footprint, wells, water lines, patios, pools and decks, and any other item that will occupy space on the site
- ✓ Front and side setbacks from property line...
- ✓ Preferred driveway location and configuration, preferred well location...
- ✓ Area you prefer your septic system to be placed...
- ___ North arrow, or other sufficient indicator of direction...

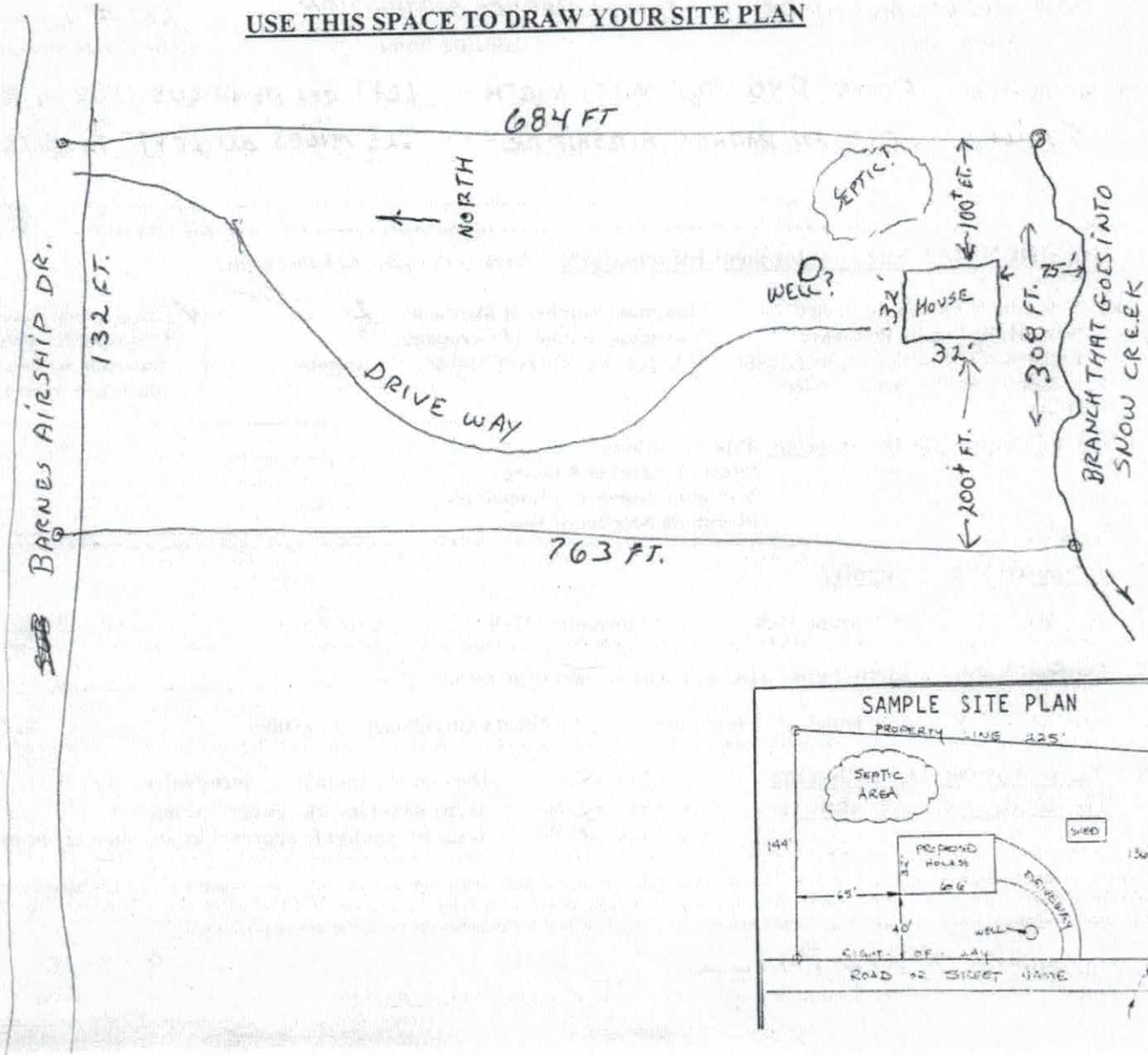
Circle N/A on the following if appropriate:

- ✓ 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

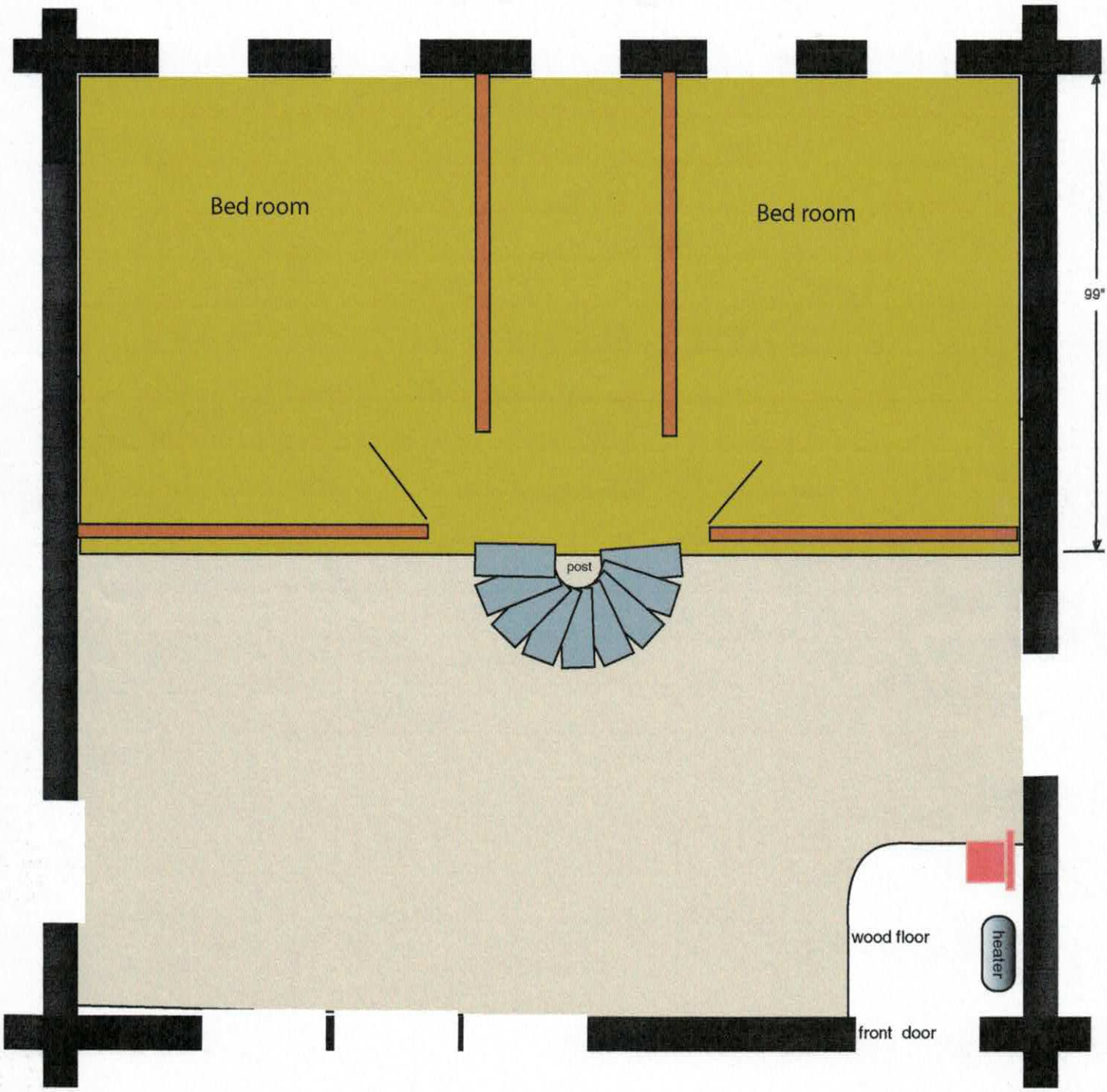
Signature: Tracy Barnes
Property owner or owner's legal representative signature (SIGNATURE REQUIRED)

9-7-10
DATE

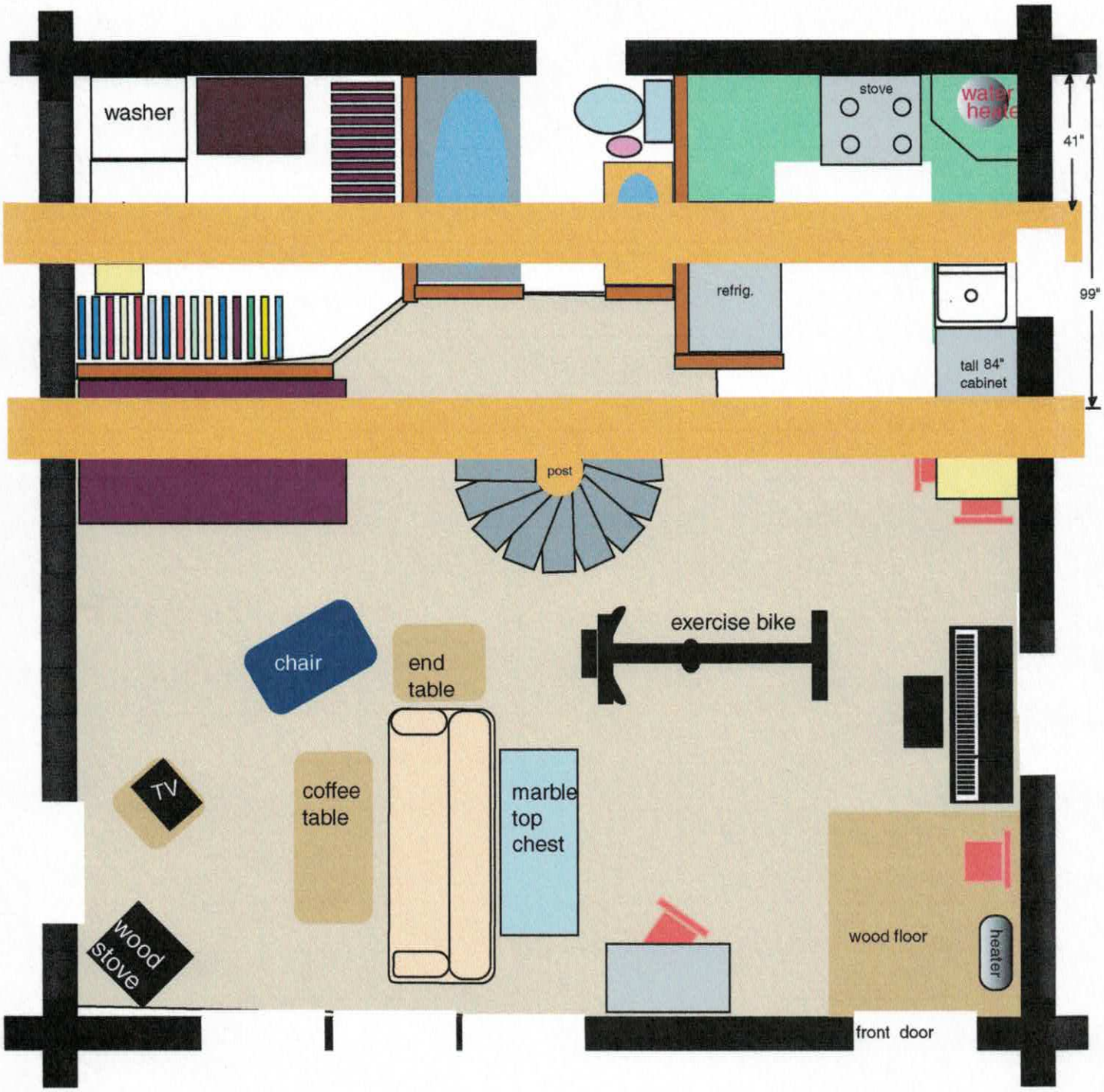
USE THIS SPACE TO DRAW YOUR SITE PLAN



LOFT---2 BED ROOMS

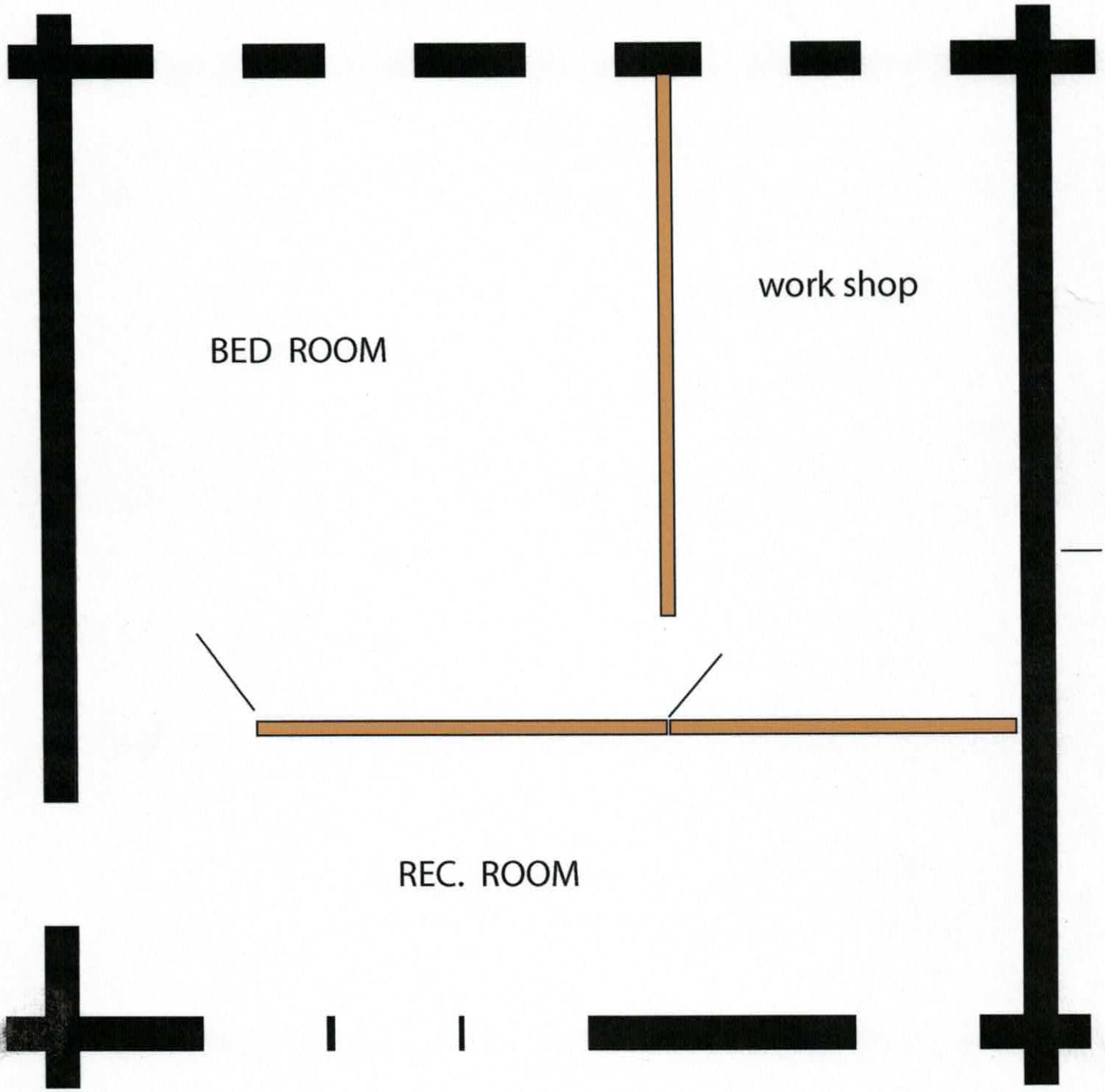


Acknowledgement Of
Plans Submittal ONLY!
Tracy Barnes Date 10-29-10
Date 29 Oct. 10



Acknowledgement Of
Plans Submittal ONLY!
Tracy Barnes Date 10-29-10
Date 29 Oct 10

Basement--- 1BED ROOM



Acknowledgement Of
Plans Submittal ONLY!

Tracy Barnes Date 10-29-10

Date 29 Oct. 10

Iredell County
Planning & Enforcement
349 N. Center St. PO Box 788
Statesville, NC 28687
704-878-3113

Printed: 9/7/2010

Zoning Permit

Permit Number: 163286ZO

Master #: 163286

Associated Permits:
163286ZO Zoning

Applicant

Name: Tracy Barnes
Address: 156 Barnes Airship Rd
Statesville, NC 28625

Phone: 704-876-2378

Parcel

Parcel Number: 4719492832.002
Address: 000 Barnes Airship Dr.
Statesville, NC 28625
Subdivision: Barnes

Zoning: R20
Township: 0900
Area: 4.966
Lot(s): 2

Directions to Parcel: 115N, make left at the Damascus Church (where Phills Redman Store is located before you make turn off to Love Valley exit), Barnes Airship

Owners

Name: Tracy Barnes
Address: 156 Barnes Airship Rd
Statesville, NC 28625

Contractors

Fees and Receipts:

Number	Description	Amount
FEE-216335-07	Zoning - Permit / Inspection	$75.00
FEE-216336-07	Technology and Administrative Fee	$2.25
FEE-216337-07	Environmental Health - Type I or II System	$485.00
	Total Fees:	**$562.25**
REC-118981-07		$562.25
	Total Receipts:	**$562.25**

Conditions