IREDELL COUNTY HEALTH DEPARTMENT

Statesville office (704) 878-5305 | Mooresville Office (704) 660-3625

PERMIT # 246293

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

PIN # 3784302695.000

APPLICANT/OWNER: Don Dahlman / CS + SC | APPLICANT ADDRESS: 5723 Blackthorne Ave Lakewood, CA 90712

SITE ADDRESS: 239 old Lion Rd Statesville NC 28625 | PHONE: 562-316-7903 | ALT. PHONE 704-202-5791

SITE DIRECTIONS: I-40 to Sharon School Rd ⓛ Island Ford ⓡ old Lion Lot on Left | SAP CONTROLLED: ☐ YES ☒ NO

SUBDIVISION: Fern Valley Falls | SECTION: — | LOT # 1 | LOT AREA: 4.66 Acres | DESIGN FLOW: 360 | L.T.A.R.: -30

Septic Tank	1000 (gal)	STB	IM-1060	Date	Infiltrator	☒ New System ☐ Repair ☐ Expansion	System Type: I II ⓘ IV V VI	☒ Residence	No. Bedrooms 3	Water Supply
Pump Tank	— (gal)	PT	—	Date	—	System Description:	Gravity 25% Reduction.	☐ Business	No. Persons 6	☒ Private
Pump Make	—	Model	—	Serial #	—	Repair System Description:	PM - 25% Reduction.	☐ Other	No. Employees	☐ Public
# Nitrification Fields	1	# Lines	3	Linear Ft	300	Maintenance Agreement Required:	☐ YES ☒ NO	☒ Slab	☐ Crawl Space	☐ Community
Trench Width	36	Trench Bottom Depth(Low side)	25	Gravel Depth	—	☒ GRAVITY	☐ PRESSURE	☐ Basement w/plumbing	☐ Basement w/o plumbing	

Comments / Conditions: Patio Footprint does not encroach on Septic design.

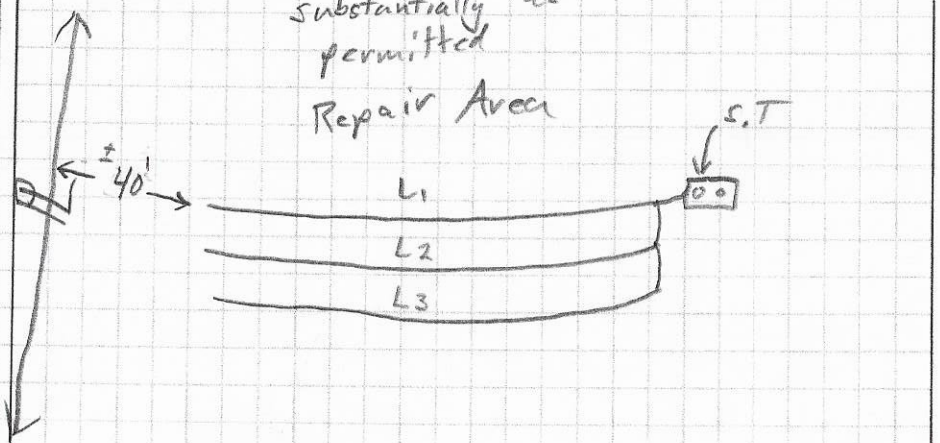
INITIAL SITE SKETCH

This permit is issued pursuant to SL 2018-114 Section 11.(c) using the signed + Sealed proposal attached by Carolina Soil + Septic Consulting, PLLC Adrian L. Pruett LSS # 1314

AS BUILT SKETCH

5/12/2020: Infiltrator IM-1060 Plastic tank w/a Polylok PL-68 effluent filter

	# Chambers		
L1	102	25	25" TB (low side) IQ4W installed on contour substantially as permitted
L2	102	25	
L3	98	24	



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**

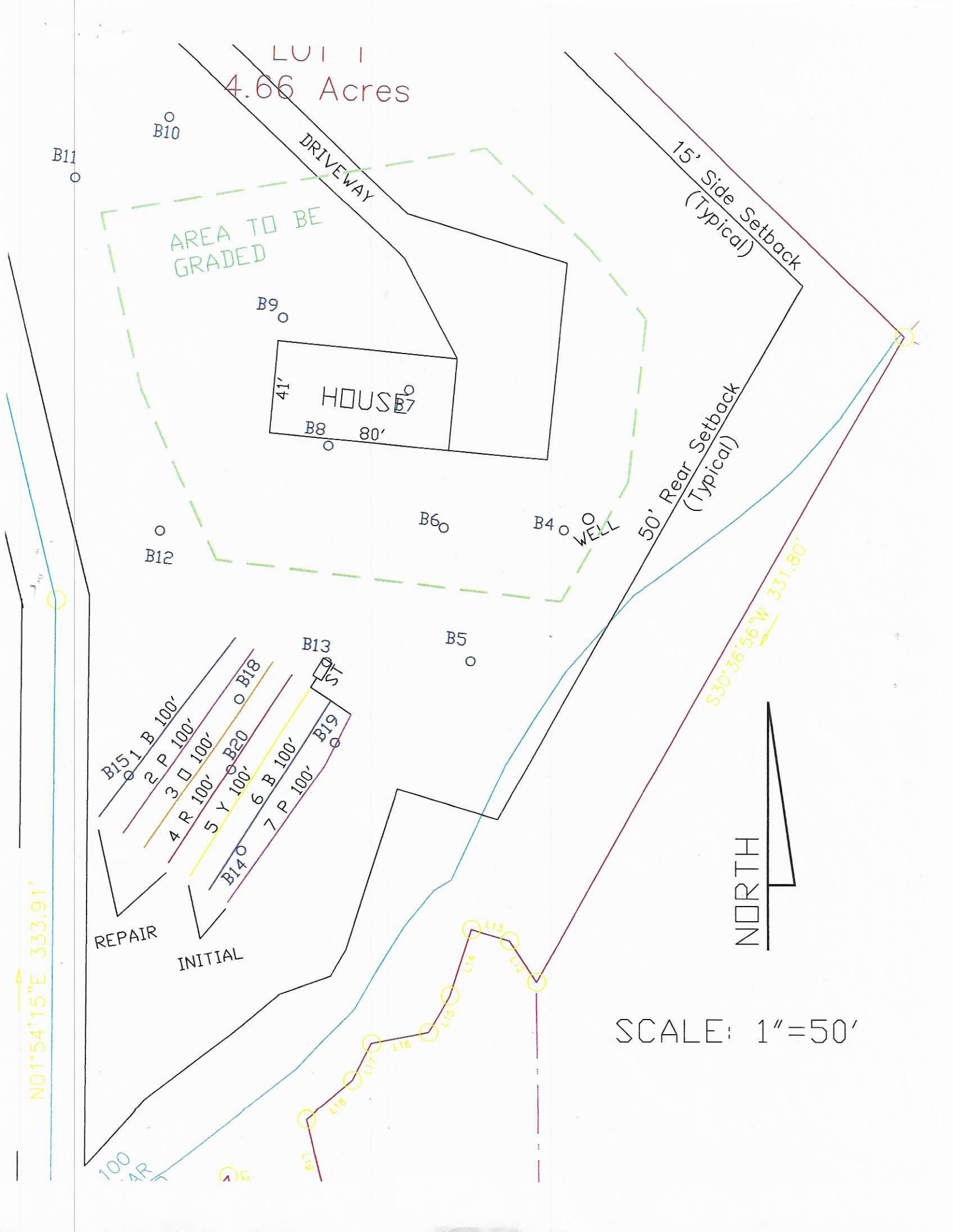
☐ IMPROVEMENT PERMIT *with plat valid without expiration.* ☒ IMPROVEMENT PERMIT *with site plan valid for 60 mos.* ☒ AUTHORIZATION TO CONSTRUCT *valid for period equal to IMPROVEMENT PERMIT--not to exceed 60 mo.*

Owner / Applicant Signature: _____ Date: 10-14-19 Installed by: Jared Lentz Lentz Wastewater

IMPROVEMENT PERMIT by: Benjamin A Bittle Date: 8/26/19 OPERATION PERMIT by: Tom Shuck Date: 5/12/2020

AUTHORIZATION TO CONSTRUCT by: Benjamin A Bittle Date: 8/26/19 Existing System Inspected by: _____ Date: _____

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


LOT 1
4.66 Acres
B10
B11
DRIVEWAY
15' Side Setback
(Typical)
AREA TO BE
GRADED
B9
41'
HOUSE
B7
B8
80'
50' Rear Setback
(Typical)
B6
B4
WELL
B12
B5
B13
ST
B18
B20
B19
B15 1 B 100'
2 P 100'
3 O 100'
4 R 100'
5 Y 100'
6 B 100'
7 P 100'
B14
REPAIR
INITIAL
S30°36'56"W 331.80'
N01°54'15"E 333.91'
NORTH
SCALE: 1"=50'

Carolina Soil & Septic Consulting, PLLC

P.O. Box 1703, Mooresville, NC 28115

Phone: (704) 202-5791 Email: adrianpruett@yahoo.com

NC Licensed Soil Scientist, SC Professional Soil Classifier,
Certified Septic System Operator, Licensed Septic Installer,
Certified Septic Inspector

The LSS Evaluation is being submitted pursuant to and meets the requirements of SL 2018-114 Section 11.(c)

Proposed Design for a 25% Reduction Septic System using Gravity distribution for a 3 bedroom single family residence on Lot 1 of Fern Valley Falls Subdivision, 239 Old Lion Rd. in Statesville , Iredell County, North Carolina.

Contents: **Page**

Information for the Installer---------- 1

Design Information
Design Specifications---------- 2
Layout Specifications---------- 3

Site Plan/System Plan---------- 4-5

Dosing Calculations---------- 6

Soil Profile Descriptions---------- 7-8

Session Law/House Bill 374 Authorization Form---------- 9

August 20, 2019
Job Number: 19109
Design By: Adrian L. Pruett



INFORMATION FOR INSTALLER:

- The permit should be read very carefully prior to submitting bid. The following are details that must be considered along with all other considerations.
- Tanks shall be approved by NC DHHS, and certification supplied by the manufacturer.
- All tanks shall be properly back filled and compacted to prevent slump at a later date.
- The installer is responsible for final grades and returning that grade to original, with exception of added structural features.
- The supply trench shall be compacted to eliminate any cavities left during initial fill placement.
- Installation of the system shall be during dry conditions in order to protect the soil structure.
- All fittings shall be pressure rated fittings.
- All joints shall be cleaned with PVC pipe cleaner and a heavy bodied glue applied to weld all joints.
- Where required by the county health department, post installation inspections by the designer must be scheduled 5 week days in advance.
- Trenches shall be carefully excavated so the bottom has no more than 1/4"fall in 10 feet with no high or low areas within. If high or low areas do exist after trench excavation, high areas should be removed rather than filling in low areas. Do not over excavate trenches! Any fine grading should be completed by hand with a rake and shovel, leaving no loose material.
- All pipe openings in the tanks shall be properly grouted. This also applies to the joints around the riser.
- Earth dams, constructed of relatively impervious material, shall be installed at the beginning and end of each lateral to prevent unwanted lateral water movement.
- No heavy equipment shall be used on the field during or after installation. The use of a small loader (i.e. Bobcat) or a trencher (i.e. Ditch Witch 2300/2310) may be used for installation.
- Elevations at pin flag locations should be checked by the installer prior to beginning trenches to insure accuracy.
- If septic tank risers are used they should be a minimum of 6" above finished grade or within 6" of final grade if buried.
- Design precludes use of foundation drains on the residence.
- System is specified as an Accepted 25% Reduction Gravity installation.
- Repair is specified as Pressure Manifold 25% reduction installation.
- Trench width is specified as 36" wide, rake and lime all trench sidewalls
- **If grading for slab foundation is utilized do not grade/create greater than 2 ft of elevation difference within 15 ft of any component of the septic or repair. If back filling do not backfill over any initial or repair septic line.**

OWNER INFORMATION

Owner:	Donald Dalman
Address:	5723 Blackthorne Ave. Lakewood, CA 90712
Client:	Donald Dalman
Address:	5723 Blackthorne Ave. Lakewood, CA 90712
Contact:	Donald Dalman
Phone:	562-316-7903
County:	Iredell
Location:	FERN VALLEY FALLS LOT 1, 239 OLD LION RD.
Source of Wastewater Flow:	3 Bedroom Single Family Residence
Estimated Gallons Per Day Flow:	360
System Flow:	NA

25% GRAVITY DESIGN INFORMATION

Drainfield Design Flow (gpd):	360
Loading/Soil Application Rate (gpd/ft.^{2}):	0.300
Depth of Gravel in Trench:	NA (25% reduction)
Gravel Size:	NA (25% reduction)
Total Lateral Length From Layout:	300
Total Lateral Length Required:	300
Trench Depth:	25 in. Lowside
Trench Width:	36 in.
TOTAL AREA TRENCH BOTTOM:	900
Trench Spacing on Center:	9 ft.
Repair Trench Spacing:	9 ft.
Repair Trench Depth:	25 in.
Repair Trench Width:	36 in.
Septic Tank Size:	1000 gal.
Estimated Supply Line Length:	5
Supply Line Diameter:	3 in. SCH 40 PVC
Supply Line Volume:	1.80
Dosing Volume:	NA
Supply Manifold:	SERIAL DISTRIBUTION
Additional Comments:	Soil suitability was performed by Adrian L. Pruett LSS

FERN VALLEY FALLS LOT 1, 239 OLD LION RD.
FIELD LAYOUT SPECIFICATIONS

LAYOUT FOR 3 BEDROOM RESIDENCE — August 20, 2019

LINE #	FLAG COLOR	FS	ELEVATION	FLAGGED LINE LENGTH	DESIGN LINE LENGTH
TBM			NA		
HOUSE CRN		NA	NA		
P. TANK		NA	NA		
1	BLUE	NA	NA	108	100
2	PINK	NA	NA	105	100
3	ORANGE	NA	NA	109	100
4	RED	NA	NA	113	100
5	***YELLOW***	***NA***	***NA***	***117***	***100***
6	***BLUE***	***NA***	***NA***	***115***	***100***
7	***PINK***	***NA***	***NA***	***113***	***100***
			Total	**780**	**700**

	LINE LENGTH	SYSTEM TYPE	SOIL LTAR GPD/FT^2	TRENCH SYSTEM	DISTRIBUTION
System	***300***	***ACCEPT.***	***0.300***	***25% RED.***	***GRAVITY***
Repair	400	*ACCEPT.*	0.300	25% RED.	PRESSURE MANIFOLD

Notes: ** TBM Is Not Required.
**All measures in feet
**Nitrification lines are demonstrated on contour via colored pin flags

Comments:

DOSING CALCULATIONS

Location FERN VALLEY FALLS
Lot No: 1
Address: 239 OLD LION RD.

No. of Bedrooms	3	
Design Flow	360	$^{gal}/_{day}$
LTAR	0.300	$^{gal}/_{ft^2\ day}$
25% RED. Expansion? (YES OR NO)	YES	
Supply Line Length	5	ft.
Supply Line Volume	1.8	gal.
Required Feet of 25% RED. Line	300	ft.
Amount of Line from Layout	300	ft.
Gallons per Minute	NA	$^{gal}/_{min}$
Septic Tank Capacity	1000	gal.
Minimum Septic Tank Capacity	1000	gal.
Lateral Line Volume	195.9	gal.

The LSS Evaluation is being submitted pursuant to and meets the requirements of SL 2018-114 Section 11.(c)

PROP. ID #: 3784302695
COUNTY: IREDELL

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

OWNER: DON DAHLMAN
ADDRESS: 5723 Blackthorne Ave., Lakewood, CA 90712
PROPOSED FACILITY: SFR PROPOSED DESIGN FLOW (.1949): 360
LOCATION OF SITE: 239 OLD LION RD STATESVILLE NC

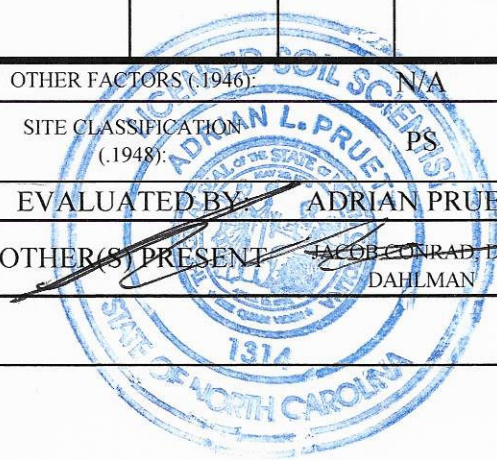
APPLICATION DATE:
DATE EVALUATED: 6/19/2019
PROPERTY SIZE: 4.66
PROPERTY RECORDED: YES

WATER SUPPLY: X PRIVATE PUBLIC WELL SPRING OTHER:
EVAL. METHOD: X A. BORING PIT CUT **WASTEWATER TYPE** X 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/C OLOR	.1943 SOIL DEPTH	.1956 SAPROLITE CLASS	.1944 RESTR HORIZON	
13	LSS 18%	0-2	B L WFSBK	FR SS SP SEXP	FEW/COM SAP 29-40, COM SAP 40-44, COM SAP 44-48"	48"	N/A	N/A	PS .3
		2-29	R C MFSBK	FI S P SEXP					
		29-40	R C MFSBK	FI S P SEXP					
		40-44	R CL WFSBK	FR SS SP SEXP					
		44-48	YR L WFSBK	FR SS SP SEXP					
14	LSS 15%	0-41	R C MFSBK	FI S P SEXP	FEW SAP 0-41", COM SAP 44-48"	48"	N/A	N/A	PS .3
		41-48	R C/CL WFSBK	FR SS SP SEXP					
15	LSS 18%	0-48	R C MFSBK	FI S P SEXP	N/A	48"	N/A	N/A	PS .3
18	LSS 18%	0-50	R C MFSBK/ABK	FI S P SEXP	FEW SAP	48"	N/A	N/A	PS .3

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
AVAILABLE SPACE (.1945)	PS	
SYSTEM TYPE(S)	GRAVITY 25% REDUCTION	PM 25% REDUCTION
SITE LTAR	0.3	0.3
COMMENTS		

OTHER FACTORS (.1946): N/A
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: ADRIAN PRUETT
OTHER(S) PRESENT: ~~JACOB CONRAD, DON~~ DAHLMAN



SOIL/SITE EVALUATION

(Continuation Sheet-Complete all field in full)

Sheet 2 OF 2

PROP. ID #: 3784302695

COUNTY: IREDELL

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/C OLOR	.1943 SOIL DEPTH	.1956 SAPROLITE CLASS	.1944 RESTR HORIZON	
19	LSS 15%	0-8	B CL WFSBK	FR SS SP SEXP	FEW SAP 16-37", COM SAP 37-49"	48"	N/A	N/A	PS.3
		8-16	YR C/CL WFSBK	FR SS SP SEXP					
		16-37	R C MFSBK/ABK	FI S P SEXP					
		37-49	R C/CL WFSBK	FR SS SP SEXP					
20	LSS 20%	0-24	R C MMSBK/ABK	FI S P SEXP	FEW MN 45-49"	49"	N/A	N/A	PS.3
		24-45	R C WFSBK	FI S P SEXP					
		45-49	R C WFSBK	FI S P SEXP					

SESSION LAW

IREDELL COUNTY DEPARTMENT of ENVIRONMENTAL HEALTH

APPLICATION FORM

246293

Application For: (X) New Well Permit ( ) Well Repair Permit ( ) Well Abandonment
(X) 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.

$500
$550

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: DON DAHLMAN/ CS&SC Address: 5723 BLACKTHORNE AVE. LAKEWOOD, CA Zip: 90712-1707

Applicant Email: ADRIANPRUETT@YAHOO.COM Phone: 562-316-7903 Alt. Phone: 704-202-5791

Owner Name: DON DAHLMAN Address: 5723 BLACKTHORNE AVE. LAKEWOOD, CA Zip: 90712-1707

Owner Email: DDAHLMAN@NIFTECH.NET Phone: 562-316-7903 Alt. Phone: _____

Property Information:

Street Address: 239 OLD LION RD STATESVILLE NC 28625

Subdivision Name: FERN VALLEY FALLS Section/Phase: _____ Lot Number: 1

Driving Directions: I 40 W, EXIT SHARON SCHOOL RD,TL ISLAND FORD RD, TR OLD LION RD LOT ON LEFT

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

CHECK FOUNDATION TYPE

(X) New Single Family Residence — Maximum Number of Bedrooms: 3 — ( ) Crawl Space Foundation
( ) New Multi-Family Residence — Maximum Number of Occupants: 6 — (X) 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: _____
(X) No Preference ( ) Alternative ( ) Conventional ( ) 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: _____ 8-21-19
Property owner or owner's legal representative signature (SIGNATURE REQUIRED) DATE

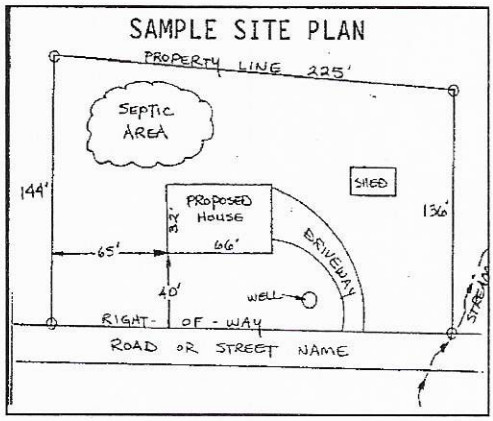
IREDELL COUNTY DEPARTMENT of ENVIRONMENTAL HEALTH

SITE PLAN WORKSHEET

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

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

- (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
- (X) Preferred well location
- (X) Preferred septic system location
- (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**

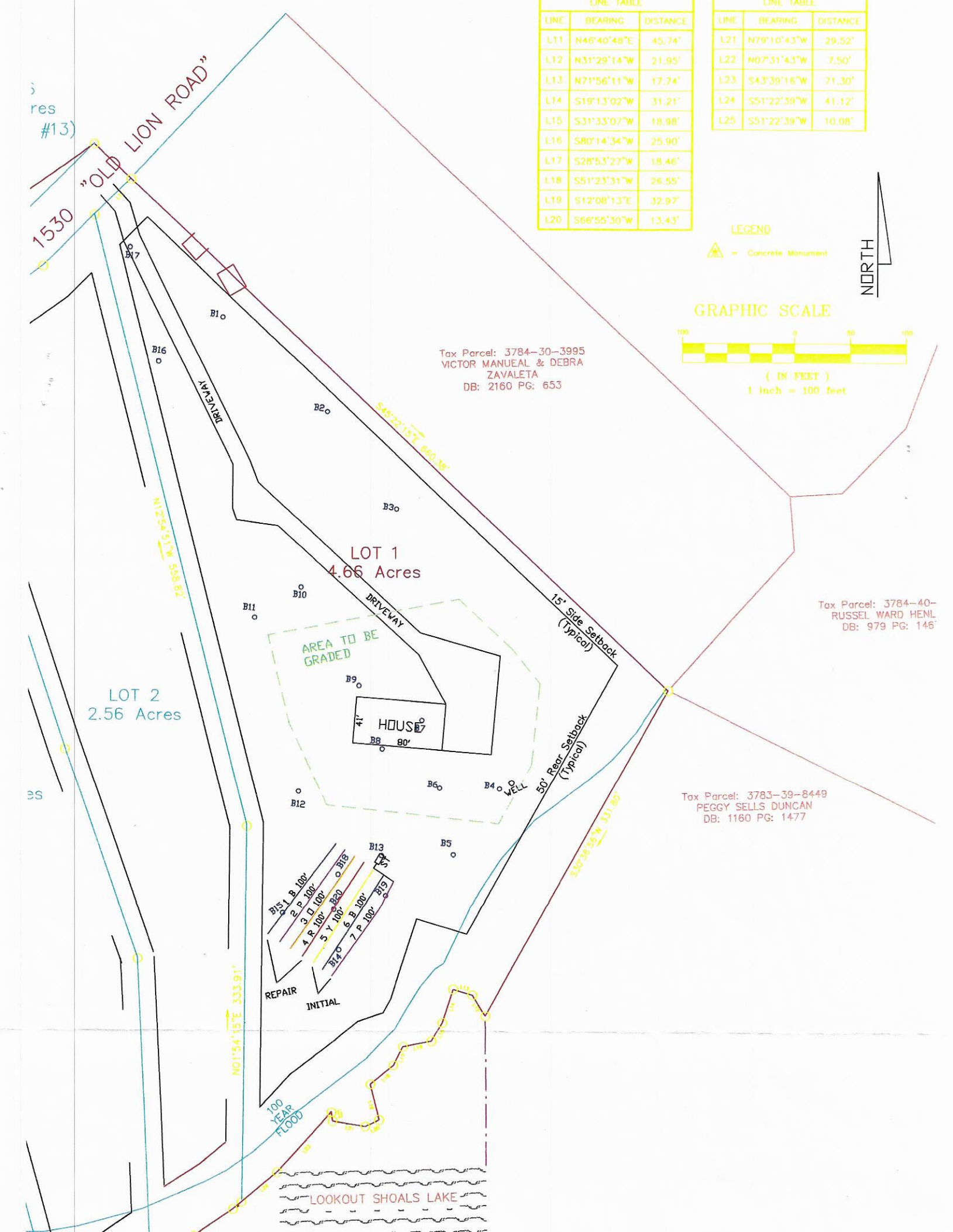
USE THIS SPACE TO DRAW YOUR SITE PLAN

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

SEE SITE PLAN FROM CS&SC

Signature: _____ 8-21-19

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


LINE TABLE
LINE | BEARING | DISTANCE
L11 | N46°40'48"E | 45.74'
L12 | N31°29'14"W | 21.95'
L13 | N71°56'11"W | 17.74'
L14 | S19°13'02"W | 31.21'
L15 | S31°33'07"W | 18.98'
L16 | S80°14'34"W | 25.90'
L17 | S28°53'27"W | 18.46'
L18 | S51°23'31"W | 26.55'
L19 | S12°08'13"E | 32.97'
L20 | S66°55'30"W | 13.43'
LINE TABLE
LINE | BEARING | DISTANCE
L21 | N79°10'43"W | 29.52'
L22 | N07°31'43"W | 7.50'
L23 | S43°39'16"W | 71.30'
L24 | S51°22'39"W | 41.12'
L25 | S51°22'39"W | 10.08'
LEGEND
= Concrete Monument
NORTH
GRAPHIC SCALE
100 0 50 100
(IN FEET)
1 inch = 100 feet
1530 "OLD LION ROAD"
res
#13)
es
DRIVEWAY
N12°54'51"W 556.62'
S45°22'15"E 660.39'
Tax Parcel: 3784-30-3995
VICTOR MANUEAL & DEBRA
ZAVALETA
DB: 2160 PG: 653
LOT 1
4.66 Acres
LOT 2
2.56 Acres
AREA TO BE
GRADED
HOUSE
41'
80'
DRIVEWAY
15' Side Setback
(Typical)
50' Rear Setback
(Typical)
WELL
B1
B2
B3
B4
B5
B6
B7
B8
B9
B10
B11
B12
B13
B14
B15
B16
B17
B18
B19
B20
1 B 100'
2 P 100'
3 D 100'
4 R 100'
5 Y 100'
6 B 100'
7 P 100'
REPAIR
INITIAL
Tax Parcel: 3784-40-
RUSSEL WARD HENL
DB: 979 PG: 146
Tax Parcel: 3783-39-8449
PEGGY SELLS DUNCAN
DB: 1160 PG: 1477
S39°36'56"W 331.86'
N01°54'15"E 333.91'
100
YEAR
FLOOD
LOOKOUT SHOALS LAKE

CAROLINA SOIL & SEPTIC CONSULTING, PLLC

P.O. BOX 1703, Mooresville, NC 28115
(704) 202-5791 adrianpruett@yahoo.com
NC Licensed Soil Scientist, SC Professional Soil Classifier,
Certified Septic System Operator, Licensed Septic Installer,
Certified Septic Inspector

July 31, 2019
Project Name: 19109

SESSION LAW 2018-114, SECTION 11.(c)/HOUSE BILL 374, SECTION 11.(c) AUTHORIZATION FORM

Carolina Soil & Septic Consulting has been contracted to evaluate soil, design and submit a septic system proposal to Iredell (county) on behalf of Don Dahlman (owner/applicant) for the property located at 239 Old Lion Rd, Statesville, NC 28625; PIN: 3784302695 (address/PIN).

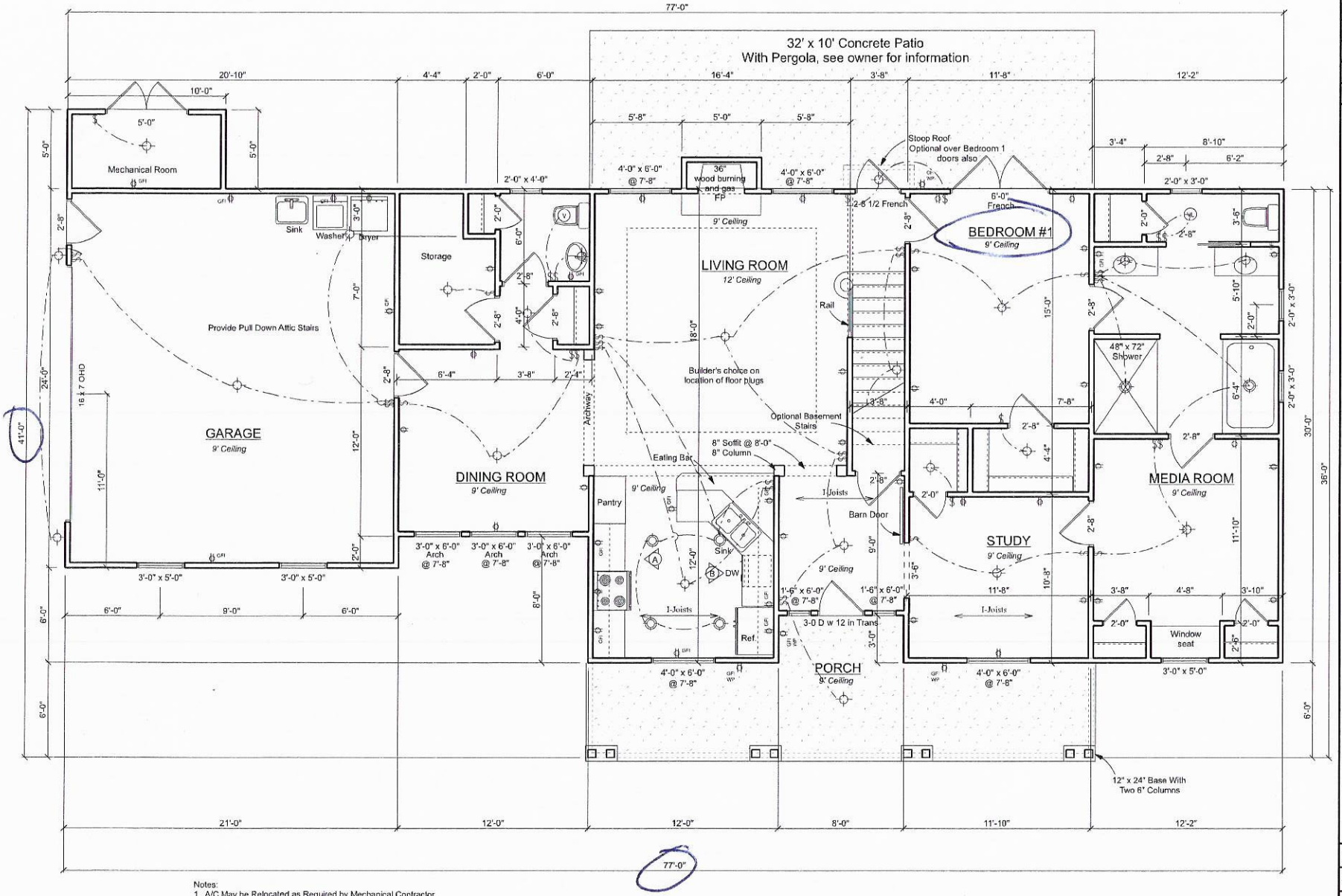
The Licensed Soil Scientist (LSS) Evaluation attached to this application is to be used to produce design and construction features for permitting in accordance with SL 2018-114 Section 11.(c).

By completing this form, signing and dating it you agree that the permit issued by Iredell (county) will fall under the above referenced law.

Owner/Owners Legal Representative: DONALD P DAHLMAN JR
Mailing Address: 5723 BLACKTHORNE AV LAKEWOOD CA - 90712
Telephone Number: 562 366 2903
Email Address: ASTEROF@YAHOO.COM

Signature of Owner/Owners Legal Rep.

07/31/2019
Date



Notes:
1. A/C May be Relocated as Required by Mechanical Contractor.
2. Builders Choice on 6" Plumb Wall Locations.
3. Co-ordinate Floor Truss Chase with Mechanical Contractor.
4. Provide Safety Glass where Required by Local Code.

1st Floor Plan

2560 Sq Ft H/C
406 Sq Ft H/C
1966 Sq Ft Total H/C

Acknowledgement of Plans Submittal ONLY!

Date 8-22-19

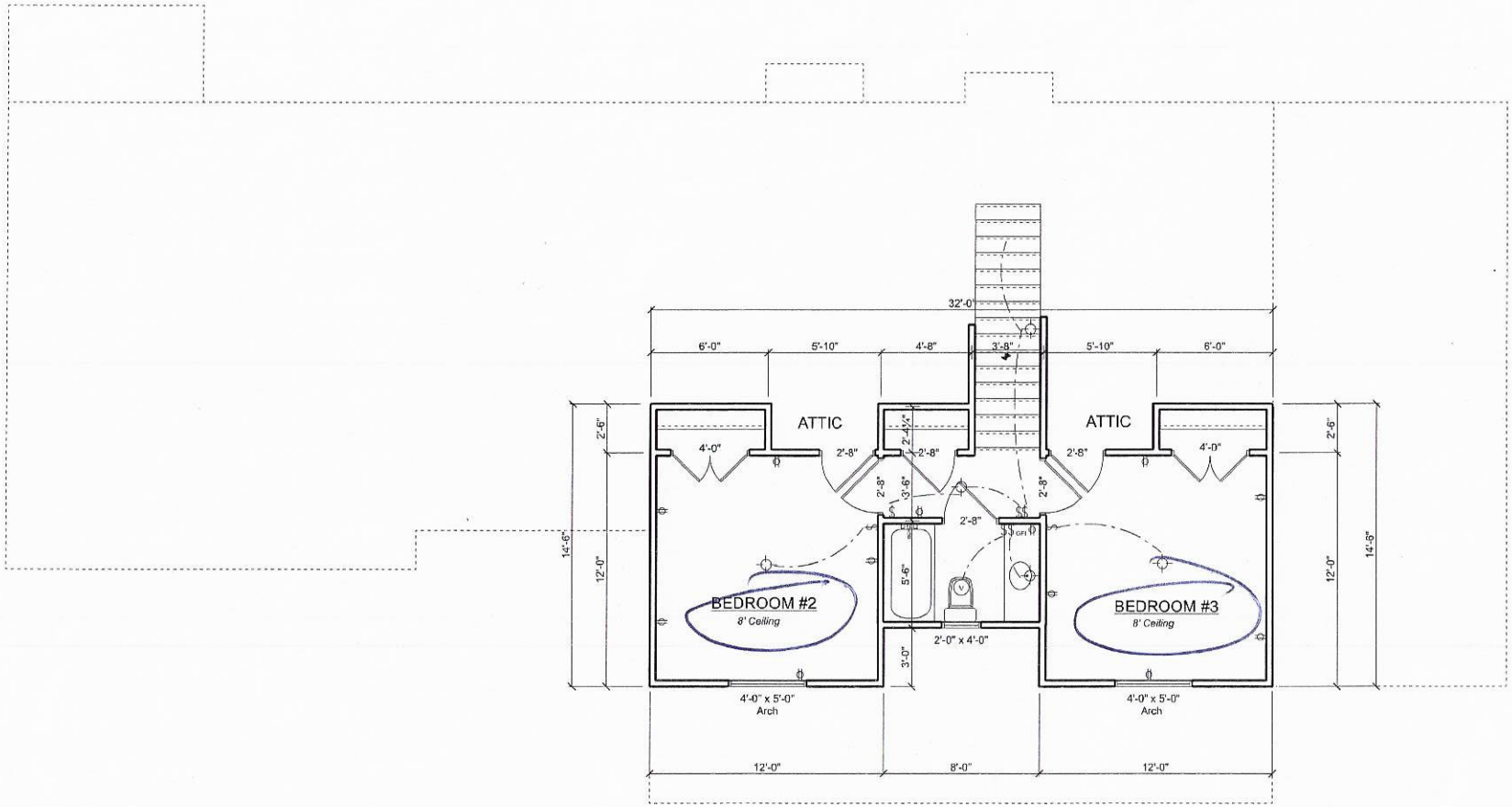
Date 8/26/19

REVISIONS	BY

W.L. Martin Home Designs
for Contact Information
www.wlmartinhomes.com

#24059 - CHATHAM
Modified For Dahlman

Date
Scale 1/4" = 1'-0"
Drawn
Job
Sheet 3
Of 8 Sheets



2nd Floor Plan

Acknowledgement of Plans Submittal ONLY!

Date 8-22-19

Date 8/28/19

REVISIONS	BY

#24059 - CHATHAM
Modified For Dahlman

W.L. Martin Home Designs
for Contact Information
www.wlmartinhomes.com

Date

Scale 1/4" = 1'-0"

Drawn

Job

Sheet 4

Of 8 Sheets