IREDELL COUNTY HEALTH DEPARTMENT

STATESVILLE 704-878-5305 MOORESVILLE 704-664-5281

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

PERMIT # 1164304 PIN # 4615 89 3880 DATE November 24, 2010

OWNER or APPLICANT Joel Sugarman PHONE: Business 573-268-7905 Home:

OWNER or APPLICANT ADDRESS 439 Barber Loop Mooresville NC 28117

LOCATION / DIRECTIONS Brawley School Rd. TR Chuckwood TL 2nd Barber Ln. House on right septic offsite on left

SUBDIVISION CL+T BLOCK / SECTION 7 LOT # 98 LOT AREA .67Ac DESIGN FLOW 720 gpd L.T.A.R. .275 gpd/ft²

Septic Tank 1500 Gallons: STB 444 Date 3-4-12

Pump Tank 1500 Gallons: PT 477 Date 6-25-11

Pump Make Liberty Model FL100 1HP Serial #

Nitrification Field No Fields 1 No Lines 4 Linear Feet 650

Trench Width 36" Max. Trench Bottom Depth 36" Gravel Depth NA ☐ GRAVITY ☒ PRESSURE

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

System Description: 25% Reduction PM

Repair System Description: LP PPBPS

Maintenance Agreement Required ☐ YES ☒ NO

☒ Residence No. Bedrooms 6 ☐ Business No. Persons 12 ☐ Other No. Employees ☐ Slab ☐ Crawl Space ☒ Basement w/plumbing ☐ Basement w/o plumbing

Water Supply: ☒ Private ☐ Public ☐ Community

Comments / Conditions: offsite septic on Watertree Lot 46

Before AC must have DOT approval for road crossing sealed by PE

Comments / Conditions

INITIAL SITE SKETCH

See Plan from Michael Athanas & Associates Approved by FCHD

See Specifications for varying tap sizes

AS BUILT SKETCH

CHECKED DRAIN FIELD
CHECKED TANKS 4-26-12

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

Owner / Applicant Signature: Sugarman, MD Date 11.29.30

Improvement Permit by: Melville Date 11-24-10

Authorzation to Construct by: REHS Date 1-20-12

Installed by: ABERNATHY

Operation Permit by: Date: 4/29/2020

Existing System Inspected by: 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



MICHAEL ATHANAS & ASSOCIATES
NORTH CAROLINA LISCENSED SOIL SCIENTEST
1999 CANDLEWICK DRIVE
FORT MILL, SOUTH CAROLINA 29715

Michael Athanas, NCLSS	***Brady Freeman, RS***
E-mail: mathanas@comporium.net	***E-mail: bfree209@yahoo.com***
Cell: 704-576-3887	***Cell: 704-746-6497***

Attached is an onsite wastewater septic design for a 6 bedroom residential home on lot 98 sec. 7 CL&T in Iredell County, NC.

Contents: **Page**

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

Design Information

Applicant and design specifications---------- 2

Line Specifications---------- 3

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

DOT approval for road crossing sealed by PE to run under road

November 4, 2010

CL&T SEC 7 LOT 98
APPLICANT AND DESIGN SPECIFICATIONS

Applicant:	**JOEL SUGARMAN**
Phone:	**704-746-6497**
Address:	**439 BARBER LOOP**
	MOORESVILLE, NC 28117
County:	Iredell
Location:	CL&T SEC 7 LOT 98
Application for:	6 Bedroom Single Family Residence
Gallons per day:	720
Linear feet:	650
Loading Rate (gpd/ft.2):	.275-.3
Trench Depth:	36"
Trench Width:	36"
Septic Tank Size:	1500
Pump Tank Size:	1500
Estimated Supply line Length/ft:	145
Supply Line Diameter:	2"
Dosing volume:	ON DEMAND
Lateral line volume:	424.45
Supply Manifold:	4 "
Manifold Length:	36"
Pressure Head:	2'
Friction Head:	4.50
Elevation Head:	44.80
Friction factor:	3.03 per 100'
TDH:	61.56
Pump Run:	7.6 MIN
Threaded Union:	IN TANK
Gate Valves:	IN TANK
Check Valves:	IN TANK
Anti-Siphon Hole:	N/A
Design flow:	**284.3815**
Trench Bottom FT/SQ:	**1950**
Number of fields	**1**
Supply line length	**340'**
Draw down:	**9.1"**
Comments:	Soil suitability was performed by Michael Athanas & Associates.

*Pump tank draw down based on 31 gallons per inch. Draw down may vary depending on tank manufacturers.

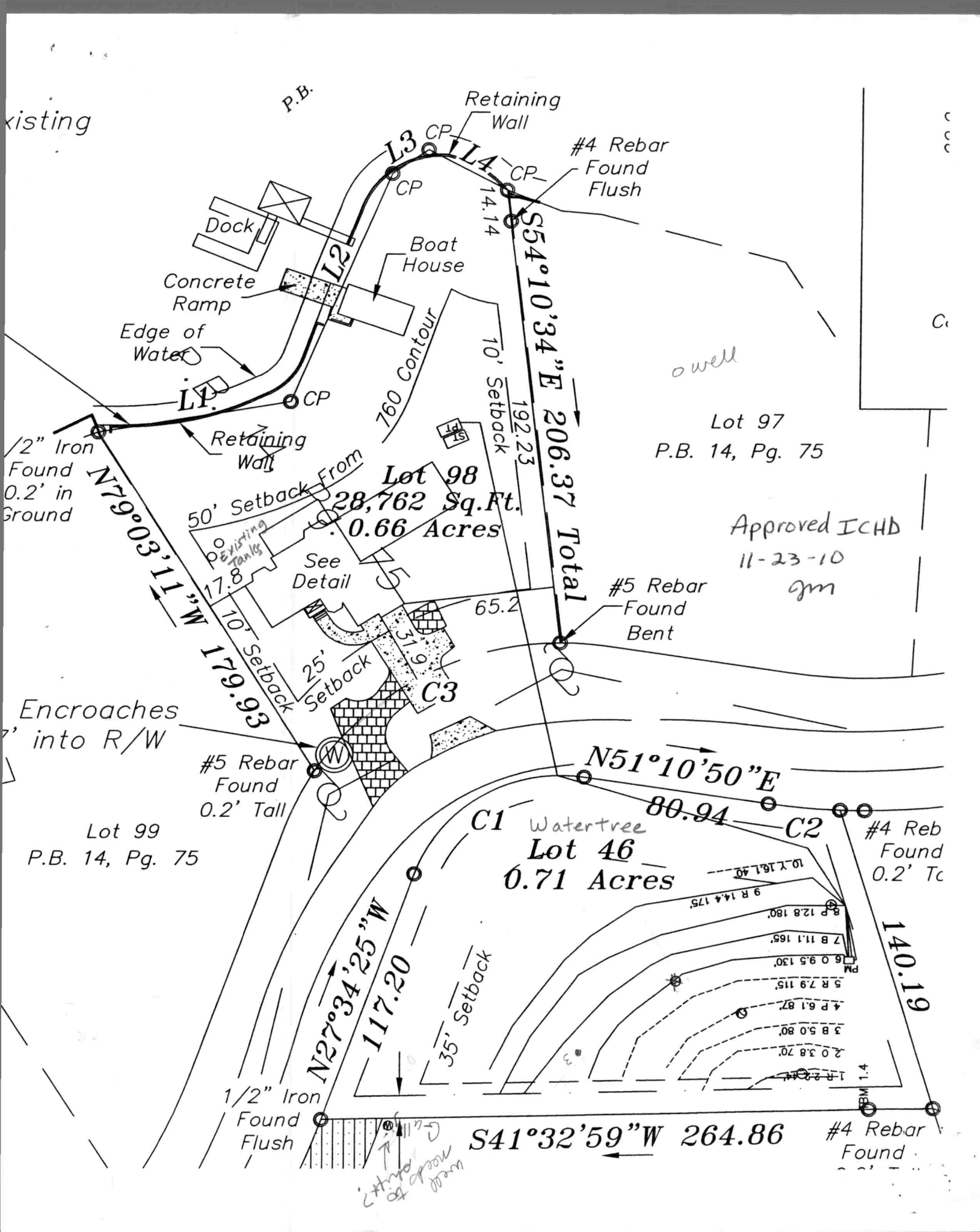
CL&T LOT 98

SYSTEM TYPE	**25% REDUCTION**
SYSTEM LTAR	**0.275-.3 GPD/FTSQ**
SYSTEM LINE LENGTH	**650**
REPAIR TYPE	*LP PPBPS*
REPAIR LTAR	*0.3 GPD/FTSQ*
REPAIR LINE LENGTH	*436*

LINE #	FLAG COLOR	SHOT ELEVATION	LINE LENGTH
1	RED	2.20	44
2	ORANGE	3.80	70
3	BLUE	5.00	80
4	PINK	6.10	87
5	RED	7.90	115
6	***ORANGE***	***9.50***	***130***
7	***BLUE***	***11.10***	***165***
8	***PINK***	***12.80***	***180***
9	***RED***	***14.40***	***175***
10	YELLOW	16.10	40
		Total	**1086**
TBM		***1.40***	
HOUSE CORNER		***36.80***	
TANK		***47.00***	

CL&T LOT 98

Line #	Color	Elev	Length	Hole Size	Flow/Tap	flow required per line	Percent per line
5B	PINK	94.6	**130**	SCH 40 1/2	**7.11**	7.29	97.47
6	YELLOW	93.8	**165**	SCH 80 3/4	**10.1**	9.26	91.67
7	ORANGE	92.6	**180**	SCH 80 3/4	**10.1**	10.10	100.00
8	BLUE	91.7	**175**	SCH 80 3/4	**10.1**	9.82	97.22
	total	**feet =**	**650**	**gal/min =**	**37.41**		


xisting
P.B.
Retaining Wall
CP
L3
L4
CP
CP
CP
#4 Rebar Found Flush
14.14
S54°10'34"E 206.37 Total
Dock
Boat House
L2
Concrete Ramp
Edge of Water
L1
CP
760 Contour
10' Setback
192.23
owell
Lot 97
P.B. 14, Pg. 75
/2" Iron Found 0.2' in Ground
Retaining Wall
N79°03'11"W 179.93
50' Setback From
Lot 98
28,762 Sq.Ft.
0.66 Acres
Existing Tanks
17.8
See Detail
Approved ICHD
11-23-10
gm
#5 Rebar Found Bent
65.2
10' Setback
25' Setback
31.9
C3
Encroaches
' into R/W
#5 Rebar Found 0.2' Tall
N51°10'50"E
80.94
C1
C2
#4 Reb Found 0.2' To
Watertree
Lot 46
0.71 Acres
Lot 99
P.B. 14, Pg. 75
N27°34'25"W
117.20
35' Setback
140.19
1/2" Iron Found Flush
S41°32'59"W 264.86
#4 Rebar Found

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

Sheet ____ *of* ____
PROPERTY ID #: ____
COUNTY: Iredell

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: Joel Sugarman
ADDRESS: ____ APPLICATION DATE ____
PROPOSED FACILITY: Res PROPOSED DESIGN FLOW (.1949): ____ DATE EVALUATED: ____
LOCATION OF SITE: ____ PROPERTY SIZE: ____
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	
1	LSS 5-10%	0-4	BSCL VFR	fri SSSP	—	48	—	—	.3
		4-28	RCL MFSM	fri SSSP Smp					
		28-48	RCL WSM	fri SSSP Smp					
				SAP Rock.					
2		0-6	BSCL VFR	VFR fri SSSP Smp	—	48	—	—	.3
		6-42	RCL MFSM	fri SSSP Smp					
		42-48	RCL WSM	fri SSSP Smp					
				Common SAP					
3		0-4	BSCL VFR	fri SSSP	—	48	—	—	.3
		4-36	RCL MFSM	fri SSSP					
		36-48	RCL WSM	fri SSSP					
				Many SAP					
4		0-6	BSCL VFR	fri SSSP	—	48	—	—	.3
		6-30	RCL MFSM	fri SSSP					
		30-48	RCL WSM	fri SSSP Smp					
				Many SAP					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	PS
System Type(s)	25%	RRBPS
Site LTAR	.275 .3	.275 .3

OTHER FACTORS (.1946): ____
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: MICHAEL ATHANAS & ASSOCIATES
OTHER(S) PRESENT: ____
Approved ICHD 11-23-10 jm

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 #
Joel Sugarman	439 Barber Loop		573 268 7905
Owner Name	Mailing Address	Home Phone #	Alternate Phone #

4. **Property Information:**

Street Address	Subdivision Name	Section/Phase and Lot Number
	C I T	Lot 98 S-7

Driving Directions: _____

****

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 6
Maximum Number of Occupants 12
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 ( ) Conventional ( ) Innovative ( ) Modified Conventional (✓) Other Aerobic ( ) No Preference

****

8. **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. industry) 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.

9. **Signature:** _____ 11/18/10
Property owner or owner's legal representative signature (SIGNATURE REQUIRED) DATE

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

Zoning Permit

Permit Number: 164304ZO

Printed: 11/19/2010

Master #: 164304

Associated Permits:
164304ZO Zoning

Applicant

Name: Michael Athanas
Phone: 803-802-4402
Address: 1999 Candlewick Dr
Fort Mills, SC 29715

Parcel

Parcel Number: 4615893880.000
Zoning: RR
Address: 439 BARBER LOOP
Mooresville , NC 28117
Township: 1700
Area: 0.67
Subdivision:
Lot(s): 98
Directions to Parcel: Brawley School,r Chuckwood,turns Into Barber,on Lt

Owners

Name: JOEL SUGARMAN
Address: 439 BARBER LOOP
MOORESVILLE, NC 28117

Contractors

Contractor Type:
Name: Michael Athanas
Phone: 803-802-4402
Address: 1999 Candlewick Dr
Fort Mills, SC 29715

Fees and Receipts:

Number	Description	Amount
FEE-220661-07	Zoning - Permit / Inspection	$75.00
FEE-220662-07	Technology and Administrative Fee	$2.25
FEE-220663-07	Environmental Health - Type I or II Fast Track	$335.00

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

EUGENE A. CONTI, JR.
SECRETARY

December 7, 2010

COUNTY: Iredell

SUBJECT: Right of Way Encroachment Agreement
SR 1458

Joel Sugarman
439 Barber Loop
Mooresville, NC 28117

Attached is an approved Right of Way Encroachment Agreement covering the installation of 60' bore & jack with 4" ductile iron casing for 2" PVC sewer line.

The encroaching party shall comply with all applicable state and federal environmental regulations, and shall obtain all necessary state and federal environmental permits, including but not limited to, those related to sediment control, storm water, wetland, streams, endangered species, and historical sites.

Approval is given subject to provisions in the Agreement and attachments thereto which are made a part of the Agreement.

It would be appreciated if you would advise our District Engineer at (704) 876-3947 at least forty-eight (48) hours prior to the date of beginning work on installation of this encroachment. Furthermore, it will be necessary for you to notify the District Office in writing when work is completed on this installation.

The Department of Transportation does not guarantee the right of way on this road, nor will it be responsible for any claim for damages brought by any property owner by reason of the installation.

Respectfully yours,

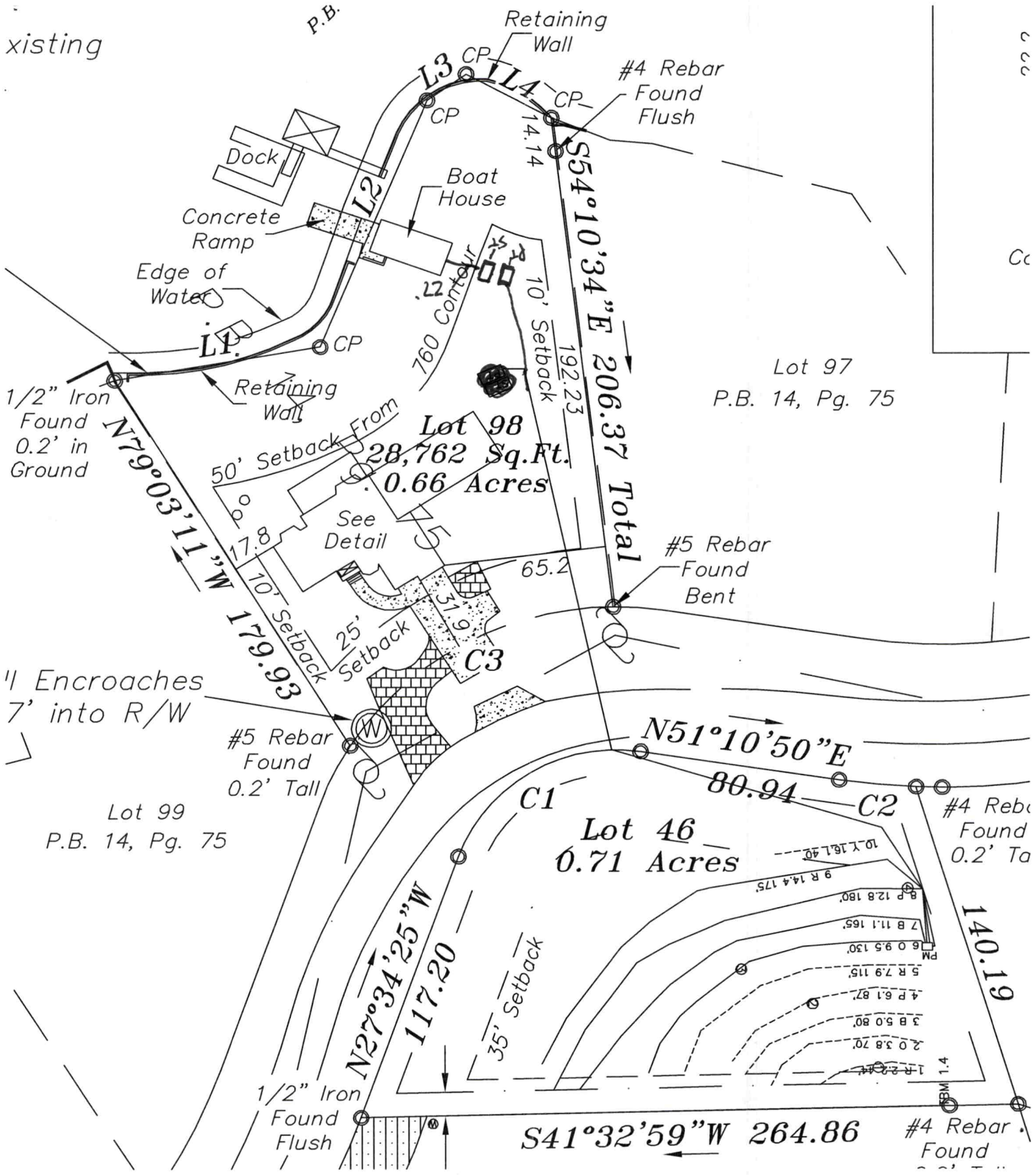
M. L. Holder

M. L. Holder, P.E.
Twelfth Division Engineer

:vgy

cc: Mr. Robert Memory, State Utility Agent (Attachments)
Mr. Patrick Norman, District Two Engineer (Attachments)

P. O. BOX 47, Shelby, North Carolina 28151-0047
Telephone: (704) 480-9020 Fax: (704) 480-5401


xisting
P.B.
Retaining Wall
#4 Rebar Found Flush
L3
L4
CP
CP
CP
14.14
S54°10'34"E 206.37 Total
Dock
Boat House
Concrete Ramp
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C3
'l Encroaches 7' into R/W
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C2
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