

HTE# 07-517897RRR Harnett County Department of Public Health

Improvement Permit

26721

A building permit cannot be issued with only an Improvement Permit

ISSUED TO: JOHN P. BENSON PROPERTY LOCATION: SHERMAN PINES DR
 NEW ☒ REPAIR ☐ EXPANSION ☐ SUBDIVISION SHERMAN PINES LOT # 20
 Type of Structure: SFD (54'x70') Site Improvements required prior to Construction Authorization Issuance:
 Proposed Wastewater System Type: PUMP TO 25% REDUCTION INITIAL DRAIN FIELD AREA MUST BE
 Projected Daily Flow: 360 GPD FENCED OFF TO PREVENT ANY CONSTRUCTION
 Number of bedrooms: 3 Number of Occupants: 6 max TRAFFIC FROM DAMAGING SITE, SEE IP
 Basement ☐ Yes ☒ No SKETCH
 Pump Required: ☒ Yes ☐ No ☐ May be required based on final location and elevations of facilities
 Type of Water Supply: ☐ Community ☒ Public ☐ Well Distance from well 100 feet Permit valid for: ☒ Five years
 Permit conditions: THIS PERMIT BASED ON A PROPOSAL SUBMITTED WITH APPLICATION ☐ No expiration

Authorized State Agent: [Signature] Date: 10/28/11 SEE ATTACHED SITE SKETCH
 The issuance of this permit by the Health Department in no way guarantees the issuance of other permits. The permit holder is responsible for checking with appropriate governing bodies in meeting their requirements. This site is subject to revocation if the site plan, plat, or the intended use changes. The Improvement Permit shall not be affected by a change in ownership of the site. This permit is subject to compliance with the provisions of the Laws and Rules for Sewage Treatment and Disposal and to conditions of this permit.

Construction Authorization

(Required for Building Permit)

The construction and installation requirements of Rules .1950, .1952, .1954, .1955, .1956, .1957, .1958, and .1959 are incorporated by references into this permit and shall be met. Systems shall be installed in accordance with the attached system layout.

ISSUED TO: JOHN P. BENSON PROPERTY LOCATION: SHERMAN PINES DR
 Facility Type: SFD (54'x70') ☒ New ☐ Expansion ☐ Repair
 Basement? ☐ Yes ☒ No Basement Fixtures? ☐ Yes ☒ No
 Type of Wastewater System** PUMP TO 25% REDUCTION w/ PRESSURE MANIFOLD (Initial) Wastewater Flow: 360 GPD
 (See note below, if applicable ☐) AT GRADE LPP (Repair)

Installation Requirements/Conditions
 Septic Tank Size _____ gallons Exact length of each trench _____ feet Trench Spacing: _____ Feet on Center
 Pump Tank Size _____ gallons Trenches shall be installed on contour at a Soil Cover: _____ inches
SEE ATTACHED DESIGN FOR ALL SPECIFICATIONS Maximum Trench Depth of: _____ inches (Maximum soil cover shall not exceed 36" above the trench bottom)
 Pump Requirements: _____ ft. TDH vs. _____ GPM in all directions
 Conditions: KEEP DRAIN FIELD AREA FENCED OFF Aggregate Depth: _____ inches below pipe
 _____ inches above pipe
 _____ inches total

**WATER LINES (INCLUDING IRRIGATION) MUST BE 10FT. FROM ANY PART OF SEPTIC SYSTEM OR REPAIR AREA.
 NO UTILITIES ALLOWED IN INITIAL OR REPAIR DRAIN FIELD AREA.**

**If applicable: I understand the system type specified is different from the type specified on the application. I accept the specifications of this permit.

Owner/Legal Representative Signature: _____ Date: _____

This Construction Authorization is subject to revocation if the site plan, plat, or the intended use changes. The Construction Authorization shall not be transferred when there is a change in ownership of the site. This Construction Authorization is subject to compliance with the provisions of the Laws and Rules for Sewage Treatment and Disposal and to the conditions of this permit. SEE ATTACHED SITE SKETCH

Authorized State Agent: [Signature] Date: 11/8/11
 Construction Authorization Expiration Date: 11/8/16

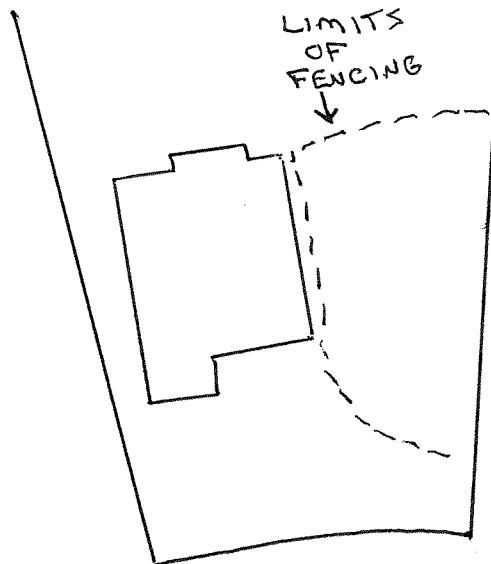
HTE# 07-5-17897 RRR

Permit # 26721

Harnett County Department of Public Health Site Sketch

ISSUED TO: JOHN P. BENSON PROPERTY LOCATOR: SHERMAN PINES Pk
SUBDIVISION SHERMAN PINES LOT # 20
Authorized State Agent: ~~RENS (OLIVER TOLSON)~~ Date: 10/28/11

• THIS DRAWING IS FOR THE IP ONLY. THIS IS NOT A
CONSTRUCTION DRAWING.





February Associates, Inc.

700 OLD OAKS LANE
PITTSBORO NC 27312

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At Grade Pressure Manifold

prepared by Kathy Morris

revised 10-24-11

PROJECT DESCRIPTION: Owner wishes to change house footprint & location from that permitted in 2007 (24346). Additional soils area evaluated by Mike Eaker has at least 21" soil for at-grade LPP repair.

Date: 10/18/2011
County: Harnett

Name:	John Benson Sr. 14523 Mirasol Manor Ct Tampa FL 33626		P.I.N. #:		Permit #	Oliver Tolksdorf
Phone:	contact John Benson Jr. 919-793-8074		Property address:	Sherman Pines	Lot#:	20
DESIGN PARAMETERS			TANKAGE LOCKABLE RISERS RECOMMENDED			
LTAR	0.4	gal/sq.ft/day	SEPTIC TANK	1000	gallons	
# BEDROOMS	3		with filter			
BASEMENT	no	slab foundation	PUMP TANK	1000	gallons	
REPAIR:	at grade LPP @ 0.2 gal/sf/day			21	gallons/inch	
DIMENSIONS			TRENCHES			
SQ. FT	900		WIDTH	36	inches	
LINEAR FT	225	at grade, 25% reduction	DEPTH	12	with 6" of approved cover mat'l	
	240	(actual)	TRENCH FILL	accepted media: chambers		
TAP SIZE VARIES WITH TRENCH LENGTH.			STONE DEPTH	n/a	inches	
SEE TAP CHART.			STONE SIZE	n/a	or larger	
MANIFOLD & SUPPLY			PUMP CRITERIA			
DIAMETER	4	inches	Sch. 80	ELEVATION HEAD	6.90	ft
LENGTH	42	inches	(minimum)	DESIGN HEAD	2.00	ft
# OF TAPS	4			FRICTION & FITTINGS LOSS	4.28	ft
				TOTAL	13.18	ft
SUPPLY LINE	125	feet		FLOW RATE	33.60	gpm
DIAMETER	2	inches	2.067	DOSING VOLUME	116	gallons
				DRAWDOWN	5.5	inches
PUMP AND CONTROLS						
PUMP	Zoeller N 151			PANEL:	Rhombus "Wake County" simplex	
	1 phase, 115 volts, 6.0 amps				with event counter, elapsed time meter, NEMA 4X box,	
					separate alarm circuit	
other equipment that meets or exceeds the specifications may be substituted. Contact designer if questions.						
The plans & specs for this Onsite Sewage Treatment & Disposal System have been prepared according to criteria in North Carolina's rules and regulations covering onsite systems, to additional county standards (if applicable), and to generally-accepted design principles. February Associates, Inc. makes no representation regarding soils conditions on this property. LTAR's, trench dimensions, and wasteloads are determined by the county Health Department (or other soil science professionals) and are included as conditions of the permit. February Associates, Inc. accepts no responsibility for changes in these plans & specs unless we specifically authorize such changes in advance. If changes in specifications or locations of components are needed, please contact us for assistance in making such alterations <i>before</i> the component is installed.						
Note: February Associates, Inc. accepts no responsibility for handwritten alterations made to these plans by others.						

Materials

Lot 20 Sherman Pines

This summary of materials includes major components of the system, and is meant to assist the installer in preparing an estimate. It does not include consumable supplies (glue, etc.), exact numbers of fittings, or materials incidental to standard installation. It does not include any specified drainage - curtain drains, etc.

<u>septic tank</u>	1000	gallon		
<u>effluent filter</u>	yes			
<u>pump tank</u>	1000	gallon		
 <u>pump</u>	one	Zoeller N 151	1 phase, 115 volts, 6.0 amps	
<u>panel</u>	simplex	Rhombus	"Wake County"	
<u>floats</u>	three	with panel	mounted on float tree	
<u>check valves</u>	one	2" diameter	1 in PT	
<u>gate valves</u>	two	2" diameter	1 in PT	1 at manifold
<u>threaded unions</u>	one	2" diameter	1 in PT	
 <u>supply line</u>	125	feet	2" Sch. 40	LENGTH IS APPROXIMATE
 <u>manifolds</u>	42	inch (minimum)	4" diam. Sch. 80,	in approved vault
	1/2" Sch 40:	3/4" Sch 40:	1	1" Sch 40:
4	1/2" Sch 80:	2	3/4" Sch 80:	1
			1" Sch 80:	
 <u>flow dividers</u>	two			
<u>tees or y's</u>	none			
<u>inspection ports</u>	4	If installed outside manifold vault, install as tee, riser, and cap in each feeder pipe		
<u>feeder pipes</u>	as needed	3" Sch. 40		
 <u>trenches</u>	240	accepted		
 <u>fittings</u>	couplings, tees, elbows, etc. as needed to connect components			
	cleanouts, valve boxes, etc, as needed to provide access and protection to components			

TAP CHART - INITIAL SYSTEM

Lot 20 Sherman Pines

Bench Mark 5.10 color rod read Elevation available used tap size flow/tap gal/day trench area LINE LTAR

Design Head: 2.00

is = 100.00 set at pink (top of repair, see site plan)

line	color	rod read	Elevation	available	used	tap size	flow/tap	gal/day	trench area	LINE LTAR
1	orange	6.4	98.70	35	35	3/4" 80 w/ fd	5.05	54.11	105	0.515
2	blue	6.6	98.50	35	35	above	5.05	54.11	105	0.515
3	red	6.7	98.40	40	40	1/2" 80	5.50	58.93	120	0.491
4	neon	7.0	98.10	45	40	1/2" 80	5.50	58.93	120	0.491
5	orange	7.1	98.00	45	45	3/4" 40 w/ fd	6.25	66.96	135	0.496
6	blue	7.5	97.60	45	45	above	6.25	66.96	135	0.496

total feet = 240
minimum: 225

GPM = 33.60

antisiphon

0.00

LTAR = 0.400

LTAR + 5% = 0.420

REDUCTION LTAR 0.533

(ltar + 5%) 0.560

TOTAL FLOW GPM 33.60

ELEVATIONS: pump tank 97.30

pump 92.30

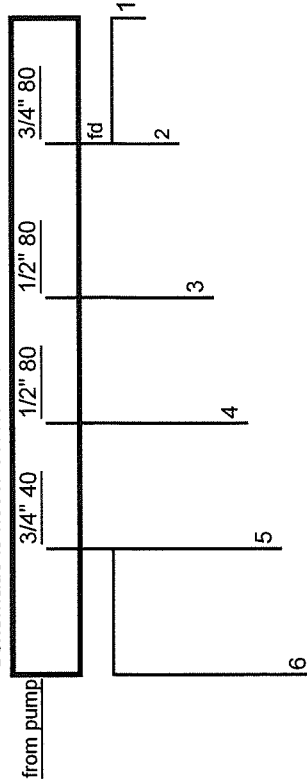
manifold 99.20

other

(such as highest point on supply line, if between pump tank and field)

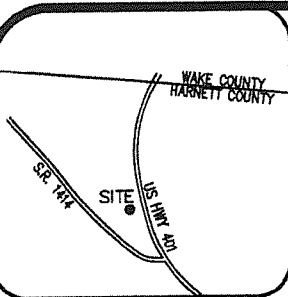
% PIPE VOLUME	74.04%	DESIGN FLOW	360	gpd
DOSE VOLUME	116	PUMP RUN TIME	10.71	min/day
DOSE PUMP TIME	3.44	PUMP TANK GAL/IN	21	gal/finch
DRAWDOWN	5.50	ELEVATION HEAD	6.90	feet
SUPPLY LINE LENGTH	125	PUMPING UP HILL?	Y	
SUPPLY LINE VELOCITY	3.21			

Schematic is not to scale. Place flow dividers and/or tees OUTSIDE the manifold vault.



Note: February Associates, Inc. accepts no responsibility for handwritten alterations made to these plans by others.

Lot 20	Sherman Pines	LPP repair	360	gpd	1800	sq. ft.							
Bench Mark	5.1	=100.00	0.2	LTAR	360	lin. ft							
		set at		top line									
line	color	rod read	elev.	elev. dif.	head	length	hole size	flow/hole	spacing	# holes	1st/last	flow/lat	inst. flow rate
1	pink	5.1	100.00	0.00	2.00	26	5/32	0.41	3.00	7	4.00	2.85	0.110
2	blue	5.3	99.80	-0.20	2.20	31	9/64	0.35	3.00	9	3.50	3.11	0.100
3	orange	5.5	99.60	-0.40	2.40	42	5/32	0.45	4.00	9	5.00	4.01	0.096
4	red	5.7	99.40	0.00	2.00	42	5/32	0.41	3.00	11	6.00	4.48	0.107
5	blue	5.8	99.30	-0.10	2.10	42	5/32	0.42	4.00	10	3.00	4.17	0.099
6	red	6.0	99.10	-0.20	2.20	42	5/32	0.43	4.00	9	5.00	3.84	0.091
7	blue	7.7	97.40	0.00	2.00	37	5/32	0.41	3.00	9	6.50	3.66	0.099
8	orange	7.8	97.30	-0.10	2.10	37	5/32	0.42	4.00	7	6.50	2.92	0.079
9	blue	7.9	97.20	-0.20	2.00	35	5/32	0.41	5.00	6	5.00	2.44	0.070
10	orange	8.0	97.10	-0.30	2.30	26	5/32	0.44	6.00	3	7.00	1.31	0.050
						total				total		29.05	
						360							



VICINITY MAP

LEGEND

PO=POPCH
P=PATIO
SW=SIDEWALK
DW=CONC DRIVEWAY
EB=ELECTRIC BOX
SCO=CLEANOUT
TP=TELEPHONE PEDESTAL
WM=WATER METER
AC=AIR CONDITIONING UNIT

- IRON PIPE FOUND
- ⊙ IRON PIPE SET
- NAIL SET

CURVE TABLE				
CURVE	LENGTH	RADIUS	BEARING	CHORD
C1	100.40	325.00	S 65°13'30" W	100.00

SETBACKS
FRONT 35'
SIDE 10'
REAR 25'

I HEREBY CERTIFY THAT THIS MAP IS CORRECT AND THAT THE BUILDING LIES WHOLLY ON THE LOT AND THAT ALL VISIBLE ENCROACHMENTS ON SAID LOT ARE SHOWN HEREON.

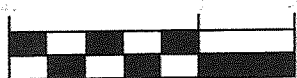
SHAWN T. RUMBERGER, PLS L-4909

DATE

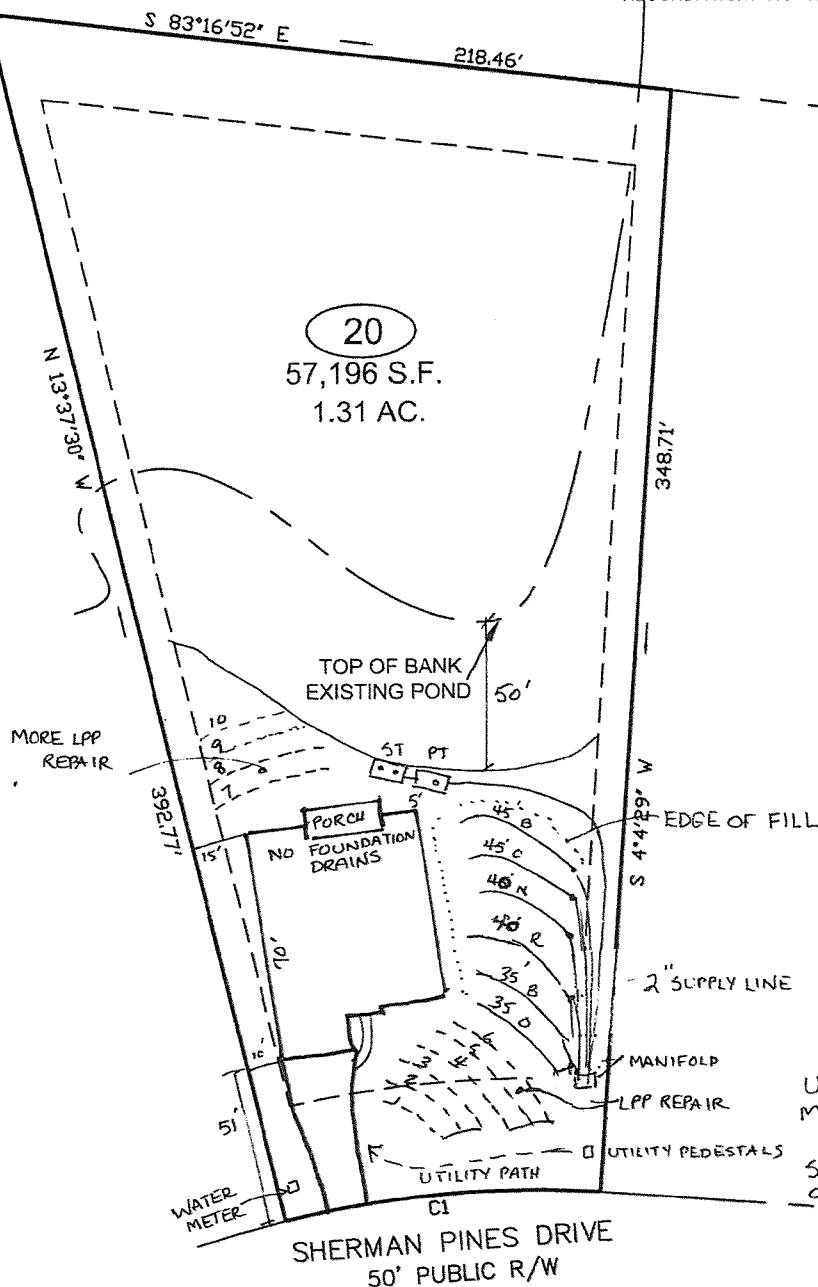
THIS MAP IS OF AN EXISTING PARCEL OF LAND AND IS ONLY INTENDED FOR THE PARTIES AND PURPOSES SHOWN. THIS MAP NOT FOR RECORDATION. NO TITLE REPORT PROVIDED.

NOTE: EXISTING POND TO BE FIELD LOCATED BY ECLS 08-29-11

GRAPHIC SCALE



1 inch = 60 ft.



PRELIMINARY
PLOT PLAN

UTILITIES
MUST NOT
CROSS
SEPTIC SYSTEM!
OR REPAIR AREA.

ECLS	PROJECT:	11-077 SHERMAN PINES
	DRAWN BY:	APS
	SCALE:	1"=60'
	DATE:	08-29-11

FOR
JOHN BENSON
48 SHERMAN PINES DRIVE
LOT 20 SHERMAN PINES
HECTORS CREEK TOWNSHIP, HARNETT COUNTY, NC
PB 2006 PG 373

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