



North Carolina Onsite Wastewater Contractor Inspector Certification Board
Authorized Onsite Wastewater Evaluator Permit Option for Non-Engineered Systems
Notice of Intent (NOI) to Construct

___ New ___ Expansion ___ Repair ___ Relocation ___ Relocation of Repair Area

Owner or Legal Representative Information:

Name: _____
Mailing address: _____ City: _____ State: _____ Zip: _____
Phone: _____ Email: _____

Authorized Onsite Wastewater Evaluator Information:

Name: _____ Certification #: _____
Mailing address: _____ City: _____ State: _____ Zip: _____
Phone: _____ Email: _____



Site Location Information:

Site address: _____
Tax parcel identification number or subdivision lot, block number of property: _____
County: _____

System Information:

Wastewater System Type: IVd-Alternating Dual Fields with pressure dosed gravity distribution
Daily Design Flow: _____
Saprolite System: ___ Yes ___ No Subsurface Operator Required: ___ Yes ___ No
Water Supply Type: ___ Private Well ___ Public Water Supply ___ Spring ___ Other: _____

Facility Type:

___ Residential ___ # Bedrooms ___ Maximum # of Occupants
___ Business Type of Business and Basis for Flow: _____
___ Public Assembly Type of Public Assembly and Basis for Flow: _____

Required Attachments:

___ Plat or Site Plan
___ Evaluation of Soil and Site Features by Licensed Soil Scientist

Attest: On this the ___ day of ___, _____ by signature below I hereby attest that the information required to be included with this NOI to Construct is accurate and complete to the best of my knowledge. Furthermore, I hereby attest that I have adhered to the laws and rules governing onsite wastewater systems in the state of North Carolina.

This NOI shall expire on ___ day of ___, _____.

Signature of Authorized Onsite Wastewater Evaluator: 

Signature of Owner or Legal Representative: _____

Disclosure: The owner may apply for a building permit for the project upon submitting a complete NOI to Construct and the fee required (if any) to the local health department. An onsite wastewater system authorized by an authorized onsite wastewater evaluator shall be transferable to a new owner with the consent of the authorized onsite wastewater evaluator.

Local Health Department Receipt Acknowledgment:

Signature of Local Health Department Representative: _____ Date: _____

Southeastern Soil & Environmental Associates, Inc.

P.O. Box 9321
Fayetteville, NC 28311
Phone/Fax (910) 822-4540
Email mike@southeasternsoil.com

October 23 2025

Mr. Blake Dickerhoff
Dream Finders Homes, LLC
3709 Raeford Road
Fayetteville, NC 28304

Re: Soil/site evaluation for subsurface waste disposal (GS 130A-336.2(AOWE), 622 Blossom Trail, Lillington, NC, PIN 9596-46-8385, Lot 51, Magnolia Ridge Subdivision, Harnett County.

Dear Mr. Dickerhoff,

A soil/site evaluation has been conducted on the aforementioned property at your request. The purpose of the investigation was to determine if soils were suitable or provisionally suitable for a subsurface waste disposal system (conventional, accepted and innovative) to serve a proposed single-family residence (3-bedroom home). All ratings and determinations were made in accordance with "Laws and Rules for Wastewater Treatment and Dispersal Systems, 15A NCAC 18E". **This LSS evaluation is being submitted to meet the requirements of GS 130A-336.2 (AOWE).**

The soil evaluation was completed on October 5, 2025. Hand auger borings were advanced under moist soil conditions. The site essentially lies on a small ridge and linear slope landscape (5% slope). Soil borings conducted in most of this area consisted of 20 or more inches of sandy clay loam underlain by sandy 48 or more inches below the soil surface. Soil wetness was not observed in the initial system area and was not observed shallower than 32 inches below the soil surface in the repair area. Parent material (greater than 50%) was not observed shallower than 33 inches below the soil surface (initial and repair system). All other soil characteristics were suitable to at least 48 inches (initial and repair system).

Based on soil borings and site conditions, the site would be designated Suitable for a pump dual alternating field of horizontal PPPBPS trenches with 50% reduction subsurface waste disposal drainfield (0.4 gal/day/ft² LTAR; initial system and repair). A map showing the approximate location of the site and proposed septic layout accompanies this report. **[Note: No grading, rutting or other soil disturbance can occur in or near the proposed septic area. Any grading can alter the findings of this report and render the site unusable. As such, we recommend the builder protect the proposed septic areas with rope, flagging, fencing, etc.]**

Design Summary

- 360 gal/day flow rate (3BR)
- Pump to alternating dual septic fields
- Initial System and Repair System: Pump to PPBPS (Horizontal) trenches with 50% reduction (120' for each field for a total of 240', see septic layout)
- Pump to deliver 26.81 gallons/min at 21.14 total dynamic head
- 101 gallons dose volume
- 18" maximum trench depth as measured on the downhill side
- 0.4 gpd/ft² LTAR
- 1000-gallon septic tank and 1000-gallon pump tank (**each certified watertight**)
- No grading, rutting or filling in septic areas
- No vertical cuts (greater than 2') within 15' of septic lines/areas
- Keep tanks and drainlines 10' from property lines
- Keep supply line 5 or more feet from property lines
- **Install in dry soil conditions**
- Maintain natural contours when clearing the lots
- Direct gutter water away from septic system

This subsurface wastewater system will require contracting with a Private Certified Operator to maintain and inspect the system in accordance with NCAC 18E .1301

During site construction, it is important not to impact and suitable or provisionally suitable soil areas with activities such as excavation or filling. Only the vegetation should be removed in the areas of the proposed septic drainfields to prevent any disturbance of naturally occurring soil. We recommend all lot clearing activity be delayed until the local health department issues a permit.

To the extent possible, we have identified the soil types that will impact the flow of wastewater on this site and have provided a professional opinion as to the best septic system layout. This report does not guarantee that the proposed septic system will properly function for any specific length of time.

Sincerely,



John Kase

NC Licensed Soil Scientist #1323

NC Authorized Wastewater Evaluator #10060E

NC REHS #1785



I, MICHAEL P. GRIFFIN, certify that under my direction and supervision this map was drawn from an actual field survey; that the error of closure of the survey as calculated by coordinates is 1: 10,000+; that the area shown hereon was calculated by coordinates. Dashed lines shown hereon were not surveyed.

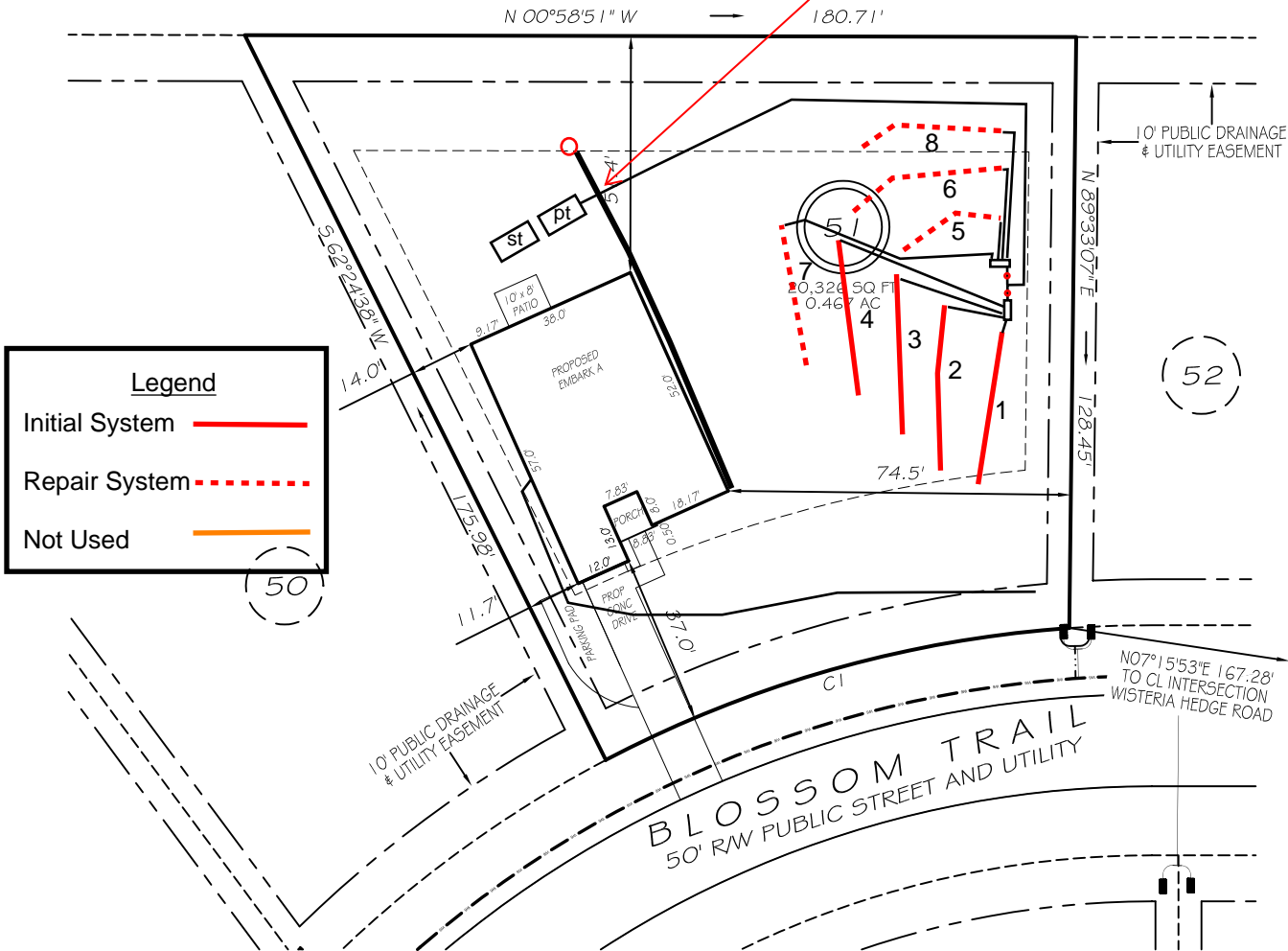
Witness my hand and seal this day of MONTH 2025.

BK 2025 PG5 35-37
HARNETT CO. REGISTRY

Initial System	
System Type:	IVd - Pump to alternating fields
Trench Type:	PPBPS Horizontal
Line Numbers:	1-8
Total Trench Length:	240'
Maximum Trench Depth:	18"
(measured on the downhill side)	

RO NIE & JAMI
DB 3504,
ZONE: RA-20R
PIN 9596-46-6968.000

Install 2" Sch 40 PVC
Supply Line no less
than 18" under the
foundation drain

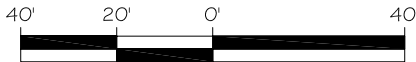


REVISION: MOVE HOUSE 9/23/25
REVISION: PARKING PAD 6/5/25
REVISION: MOVE BACK 6/2/25
REVISION: MOVE LEFT & FORWARD 5/20/25
REVISION: NEW PLANS 4/17/25

IMPERVIOUS AREAS

HOUSE	1433 SQ. FT.
DRIVE & WALKS	675 SQ. FT.
PATIO	80 SQ. FT.
TOTAL	2188 SQ. FT.
ALLOWED	5000 SQ. FT.

CI R=255.00' L=105.51' S16°59'34"E 104.76'



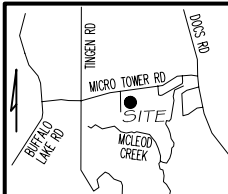
GRAPHIC SCALE
1"=40'

ZONING: RA-20R
SETBACKS

FRONT	35'
REAR	25'
SIDE	10'
CORNER SIDE	20'

LEGEND

EIP	EXISTING IRON PIPE	FES	FLARED END SECTION
ISS	IRON STAKE SET	WM	WATER METER
R/W	RIGHT OF WAY	CO	CLEAN OUT
N/F	NOW OR FORMERLY	FH	FIRE HYDRANT
EIS	EXISTING IRON STAKE	LP	LIGHT POLE



GRIFFIN LAND SURVEYING, INC.

P. O. BOX 148
FUQUAY-VARINA, NC 27526
(919) - 567 - 1963

FIRM LIC.# C-1345

PLOT PLAN
FOR

DREAM FINDERS HOMES, LLC

MAGNOLIA RIDGE

LOT 51

BLOSSOM TRAIL

LILLINGTON, N.C.

HARNETT COUNTY BARBECUE TOWNSHIP

DRAWN BY KDF

DATE 2/28/25

CHECKED BY MPG

SCALE 1" = 40'

PROPOSED SUBSURFACE WASTE DISPOSAL SYSTEM DETAIL SHEET

LOT _____

REPAIR: _____

DISTRIBUTION

LOCATION

LTAR

PUMP TANK SIZE

<u>LINE</u>	<u>FLAG COLOR</u>	<u>ELEVATION(FT)</u>	<u>LENGTH(FT)</u>
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[illegible]

DATE _____

THERE SHALL BE NO GRADING,

CUTTING, LOGGING OR OTHER SOIL
DISTURBANCE IN SEPTIC AREA

DESIGNS DO NOT GURANTEEE FUNCTIONALITY

SOUTHEASTERN SOIL & ENVIRONMENTAL ASSOCIATES, INC.
RESIDENTIAL PRESSURE MANIFOLD DESIGN

Address/PIN

Magnolia Ridge Lot 51

of BDR:

3

Daily Flow:

360

gal/dayL.T.A.R.:

0.4000

gal/day/sq.ft

Septic Tank:

1000

galsPump Tank:

1000

galsSq. Foot:

360

System Type:

PPBPS-Horizontal

Number of Taps:

4

Length of Trenches:

120

ft(See Tap Chart for Details)

Depth of Trenches:

18

inManifold Length:

42

in

Manifold Diameter:

4in sch 80pvc

Tap Configuration: 6 in spacing

1

side(s) of manifold

Supply Line: length:

180

ftDiameter:

2

in sch 40pvc

Friction Loss + Fitting Loss:

2.92

ft(supply line length + 70' for fittings in pump tank)

Design Head:

2

ftElevation Head:

13.20

ft

Total Head:

18.12

ftPump to Deliver:

21.92

gals/min at

18.12

ft head

Dosing Volume:

101

gals,

Drawdown:

101

gals divided by

20

gals/in =

5.0

inches

Simplex Control Panel required; elapsed time meter and cycle counter required; Floats to be determined by type of pump tank used. A septic tank filter is required.

112 is 75%

TAP CHART

Benchmark

7.1

is = 100.00rear P.C.

Pump tank elev.

8.9

98.20

Pump elev.

93.20

Design Head:

2

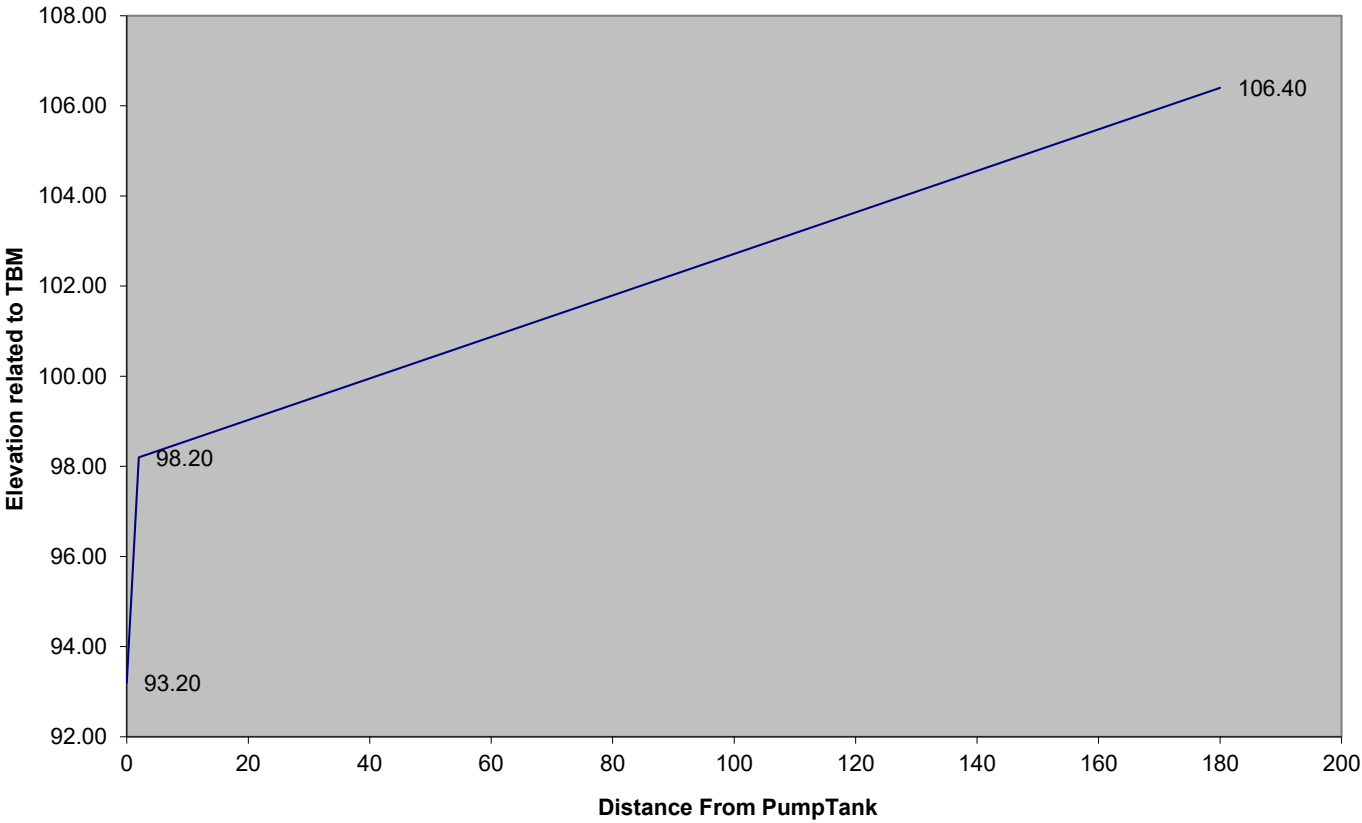
Manifold elev.

106.40

line	color	rod read	Elevation	length	hole size	flow/tap	gal/day	trench area	LINE LTAR	# of Panels (PPBPS)	
1	Green	1.70	105.40	30	1/2in SCH 80	5.48	90.00	90	1.0000	7	
2	Orange	2.70	104.40	30	1/2in SCH 80	5.48	90.00	90	1.0000	7	
3	Blue	3.60	103.50	30	1/2in SCH 80	5.48	90.00	90	1.0000	7	
4	Yellow	4.50	102.60	30	1/2in SCH 80	5.48	90.00	90	1.0000	7	
			107.10			0	0.00	0	#DIV/0!	0	
			107.10			0	0.00	0	#DIV/0!	0	
			107.10			0	0.00	0	#DIV/0!	0	
			107.10			0	0.00	0	#DIV/0!	0	
			107.10			0	0.00	0	#DIV/0!	0	
			107.10			0	0.00	0	#DIV/0!	0	
Total Feet =				120	gal/min =	21.92	LTAR =				0.4000
					Velocity =	2.10	(ltar + 5%)				0.4200
Total # of Panels (PPBPS)					Des. Flow	360	(ltar w/50% red)				0.8000
% of Dose Vol.					Pump Run=	16.42	(ltar + 5%)				0.8400
Dose Volume					Tank Gal/IN	20					
Dose Pump Time					Elev. Head	13.20					
Drawdown in Inches											
Comments:											

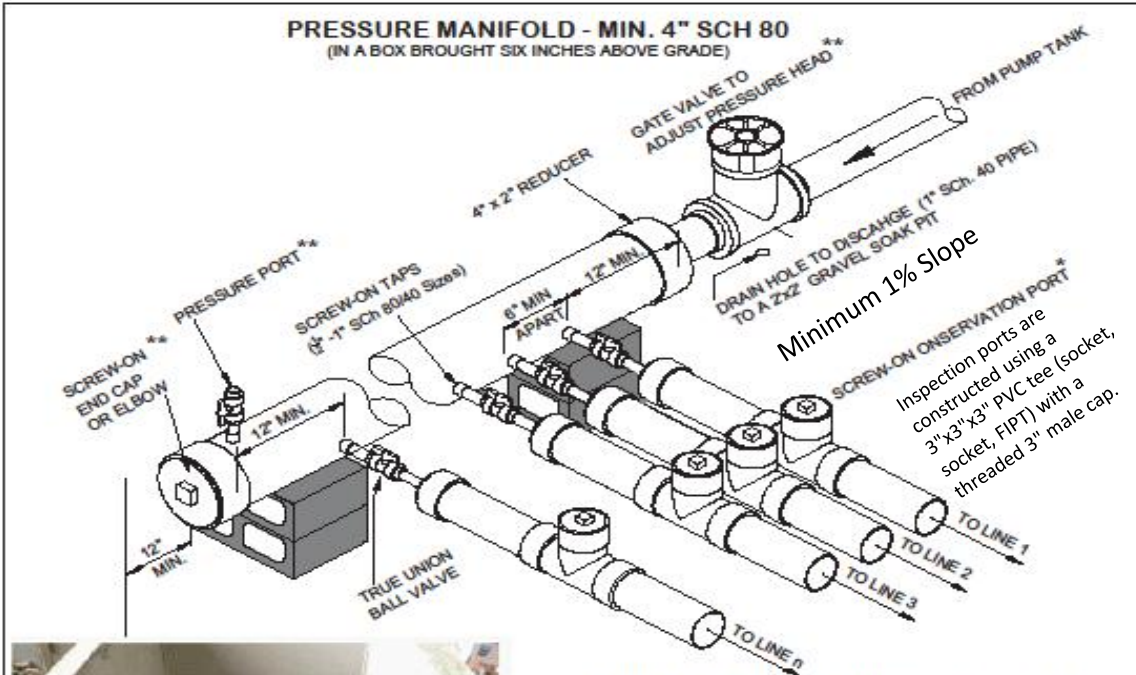
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Hydraulic Profile



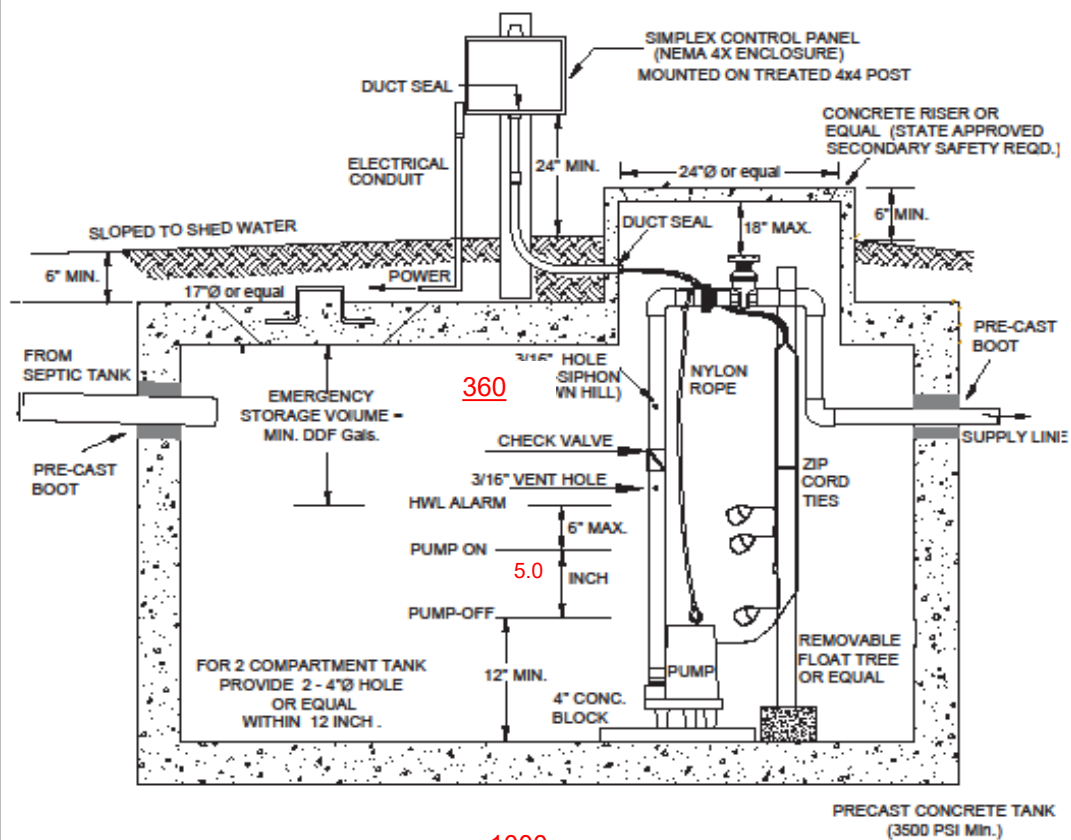
PM Draw

	Line 1	Line 2	Line 3	Line 4	Line 5	Line 6	Line 7	Line 8	Line 9	Line 10
Taps	1/2in SCH 80	1/2in SCH 80	1/2in SCH 80	1/2in SCH 80						
Flow	5.48	5.48	5.48	5.48	0	0	0	0	0	0



** MAY BE LOCATED INSIDE OR OUTSIDE MANIFOLD BOX. WHEN LOCATED OUTSIDE VALVE BOX IS REQUIRED.
* MAY BE INSIDE BOX OR IF OUTSIDE, BRING 6" ABOVE GRADE

LINE #	TAPS	LENGTH
1	1/2in SCH 80	30
2	1/2in SCH 80	30
3	1/2in SCH 80	30
4	1/2in SCH 80	30



1000 GALLON (Min.)

**STATE APPROVED PUMP TANK WITH A PT NUMBER
(TRAFFIC RATED TANK REQUIRED FOR > 3' BURIAL)**

PUMP CURVE AND SPECIFICATIONS

Pump and Control Panel Specification Required:

Pump:

Pump to be UL or equal listed

TDH and Pumping rate calcs & curve

Dose volume

3 floats system in a float tree or bracket of non-corrosive material

Highwater alarm within 6" from "on" float

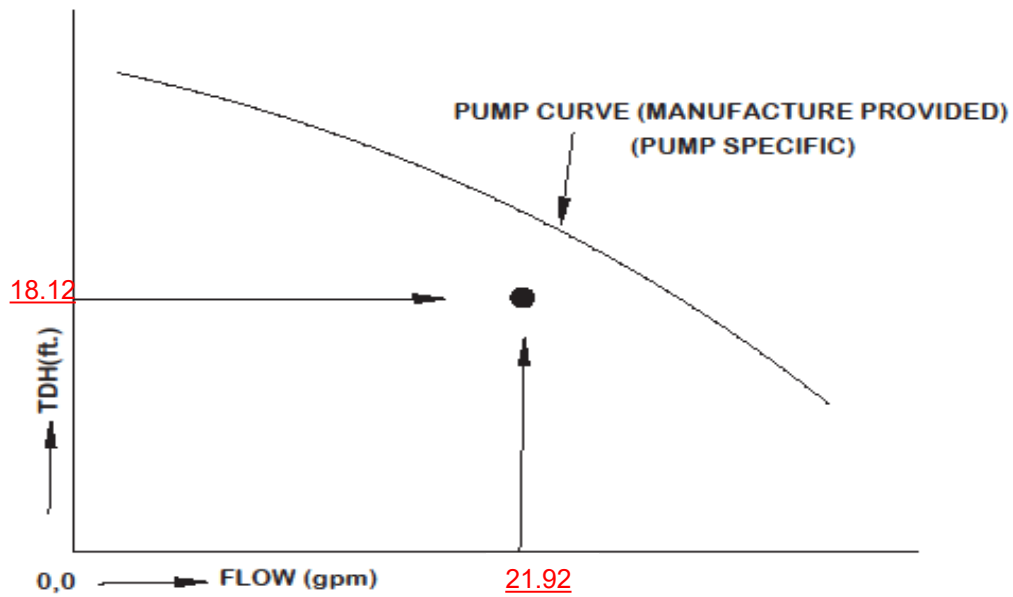
Off float at min. 12" from bottom of tank or to submerge pump

(Manufacture may certify/specify pumps suitability taller than 12" if unsubmerged)

Supply Line Profile when variation in ground profile of more than 5'

Effluent Pump should handle min. 1/2 "solids"

Gate valve, true union disconnect and connection inside tank reachable within 18" from riser top



Control Panel Specifications:

Installed within 2 ft. and min. 18" above final grade to bottom of panel box

HOA switch provided

NEMA 4X box

Cycle counter & elapsed time meter

Alarm (audible/visible)

Separate circuits for alarm and pumps

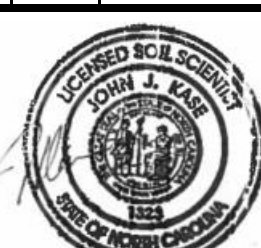
High voltage protection

Pump Pull Rope/chain (non-corrosive)

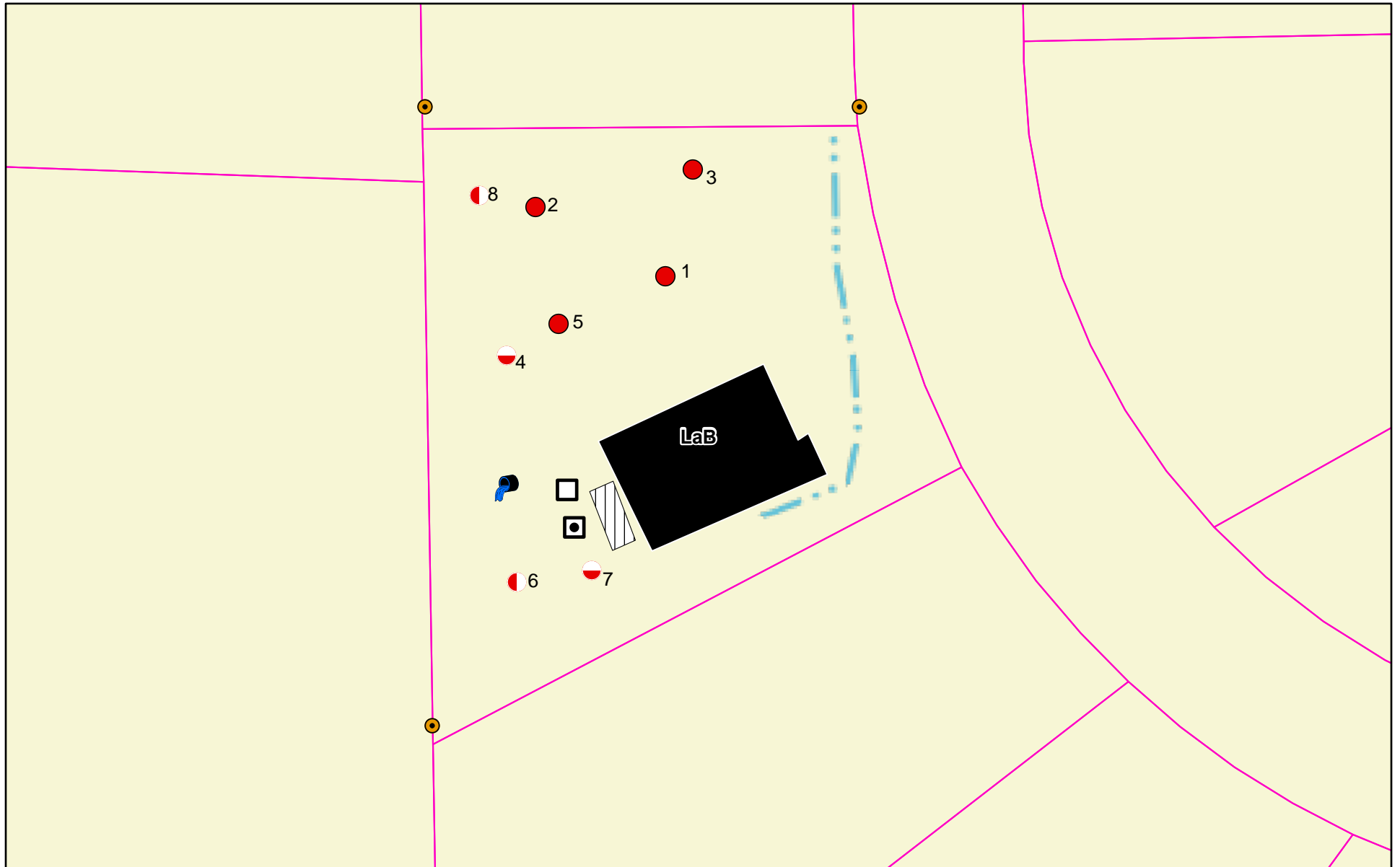
All duct sealed, no splices or junction boxes inside tanks

3/16th inch hole between Check valve (in vertical pipe) and pump

SOUTHEASTERN SOIL AND ENVIRONMENTAL ASSOCIATS, INC.			SOIL/SITE EVALUATION SHEET				Sheet #:		1	
OWNER/APP. NAME:		Dream Finders Homes LLC			SUBDIV./LOT#		Magnolia Ridge S/D Lot 51			
LOCATION OF SITE:		622 Blossom Trail								
COUNTY:		Harnett		PROPERTY ID #:		9596-46-8385		DATE EVALUATED:		10/5/2025
PROPOSED FACILITY:		SFR		PROPOSED DESIGN FLOW (.0400):		360 gpd		PROPERTY SIZE		0.467 acres
WATER SUPPLY:		Public			WATER SUPPLY SETBACK:		10'			
TYPE OF WASTEWATER:			Domestic			EVALUATION METHOD:			Auger	
P R O F I L E #	.0502 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY		OTHER PROFILE FACTORS				.0509 PROFILE CLASS & LTAR	
			.0503 STRUCTURE/ TEXTURE	.0503 CONSISTENCE/ MINERALOGY	.0504 SOIL WETNESS/ COLOR	.0505 SOIL DEPTH	.0506 SAPRO CLASS	.0507 RESTR HORIZ		
1		0-26	SCL - SBK	FR/SS/SP		40	NOT OBSER VED	NOT OBSE RVED	0.5	
	L-CC	26-32	SL - GR	VFR/NS/NP						
	5%	32	SL - GR	VFR/NS/NP	10YR7/2					
	.0502(d) SLOPE CORRECTION									
	1.8"									
2		0-14	CL - SBK	FR/SS/P		40	NOT OBSER VED	NOT OBSE RVED	S - 0.4	
	R	14-32	SCL - SBK	FR/SS/SP						
	5%	32-40	SL - GR	VFR/NS/NP						
	.0502(d) SLOPE CORRECTION	40	ROCK							
	1.8"				SWC NOT OBSERVED					
3		0-10	SCL - SBK	FR/SS/SP		48	NOT OBSER VED	NOT OBSE RVED	S - 0.5	
	SS	10-48	SL - GR	VFR/NS/NP						
	5%				SWC NOT OBSERVED					
	.0502(d) SLOPE CORRECTION									
	1.8"									
4		0-19	CL - SBK	FR/SS/P			NOT OBSER VED	NOT OBSE RVED	S	
	L	19-42	C - ABK	Vfi/S/VP	2.5Y6/1 AT 19"					
	7%									
	.0502(d) SLOPE CORRECTION									
	2.5"									
DESCRIPTION:		INITIAL SYSTEM		REPAIR SYSTEM		SITE CLASSIFICATION (.0509):		Suitable		
Available Space		Suitable		Suitable		EVALUATED BY:		John Kase		
System Type(s):		PPBPS - Hor.		PPBPS - Hor.		OTHER(S) PRESENT:				
Site LTAR:		0.400		0.400						
Maximum Trench		18"		18"						
Saprolite System:		No		No						
Comments:		Trench bottoms depth measure on downslope side of trench..								






Magnolia Ridge S/D Lot 51





10/23/2025




Preliminary Soil Borings

-  Anaerobic Drip (18-19")
-  Shallow/Ultra Shallow (24-29")
-  Conventional (30"+)

Tankage

-  Septic Tank
-  Pump Tank
-  House Box

Foundation

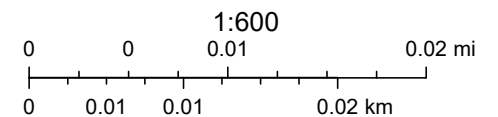
-  Drain Outlet
-  Polygons Generic
-  Deck



PropertyCorner

 NC1Map Parcels - Parcels (polys)

 NRCS Soil Data



Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community