Permit #:	



ROY COOPER • Governor

KODY H. KINSLEY • Secretary

MARK BENTON • Deputy Secretary for Health

SUSAN KANSAGRA • Assistant Secretary for Public Health

Division of Public Health

Submittal Includes:	(a2) Improvement Permit	(a2) Construction Authorization	Fee \$
	IMPROVEM	IENT PERMIT FOR G.S. 130A-335	5(a2)
County:			
PIN/Lot Identifier:			
Issued To:			
Subdivision (if applical	ble)	Lot #:	Block: Section:
LSS Report Provided:	Yes No No		
If yes, name and licens	se number of LSS:		
New 🗌	Expansion	System Relocation	Change of Use
Proposed Structure: _			
Number of bedrooms:	Number of Occupants:	Other:	
Design Wastewater St	rength: domestic	high strength industri	al process
Proposed Design Daily	Flow:GPD	Proposed LTAR (Initial): Pr	oposed LTAR (Repair):
Proposed Wastewater	System Type*:	(Initial) Pump Req	uired: Yes No May be required
Proposed Wastewater	System Type*:	(Repair) Pump Req	uired: Yes No May be required
*Please include system	n classification for proposed wastev	vater system types in accordance with 15A	NCAC 18A .1961 Table V(a)
Saprolite System (initia	al): 🗌 Yes 🔲 No Saprolit	e System (repair): 🗌 Yes 🔲 No	
Fill System (Initial):	Yes No If yes, specify: Ne	ew 🔲 Existing (when adding more than 6	inches of fill to system area provide a fill plan)
Fill System (repair):	Yes No If yes, specify: Ne	ew 🔲 Existing (when adding more than 6	inches of fill to system area provide a fill plan)
Usable Soil Depth (Init	cial): Usable S	Soil Depth (Repair):	
Max. Trench Depth (In	nitial)‡: Max. Tr	ench Depth (Repair)‡: ‡	Measured on the downhill side of the trench
Artificial Drainage Req	juired: Yes No If yes, pleas	se specify details:	
Type of Water Supply:	Private well Public well	Shared well Municipal Supply	Spring Other:
Drainfield location me	ets requirements of Rule .1945: Ye	es 🔲 No 🔲 Drainfield location meets i	requirements of Rule .1950: Yes 🔲 No 🗌
Permit valid for: Fi	ve years [site plan submitted pursu	ant to GS 130A-334(13a)] No expiratio	n [plat submitted pursuant to GS 130A-334(7a)
Permit conditions:			
Licensed Soil Scientist	Print Name:		
Licensed Soil Scientist	Signature:	amo	Date:

The LSS evaluation is being submitted pursuant to and meets the requirements of G.S. 130A-335(a2).

See attached site sketch

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES • DIVISION OF PUBLIC HEALTH



Permit #:

This Section for Local Health Department Use Only

	Initial submittal received:		by	
		Date	Initials	
G.S. 130A-335(a3) states the follow	ving:			
When an applicant for an Improvement Pedepartment, the common form developed within five business days of receiving the appearant includes all of the required component department to cure the deficiencies in the list is complete within five business days after act within any period set out in this subsect common form for use as the Improvement	by the Department, and a soil evaluation plication, conduct a completeness revents. If the local health department de some seed to complete the Improvement may over the local health of the local health department receives the local health department the failur	on pursuant to su view of the submin termines that the nt Permit. The app department shall he additional info	bsection (a2) of this section, tal. A determination of com Improvement Permit is inco Vilicant may submit additiona make a final determination o rmation from the applicant.	the local health department shall, oleteness means that the Improvemen mplete, the local health department il information to the local health as to whether the Improvement Permit fithe local health department fails to
The review for completeness of th Permit is determined to be:	is Improvement Permit was co	nducted in ac	cordance with G.S. 130	A-335(a3). This Improvement
☐ Incomplete (If box is checked,	information in this section is r	equired.)		
The following items are missing:	5/6		198	N.
Copies of this were sent to the LSS		VZ 2	433	
		Date		
State Authorized Agent:	1 1 2 1 2		Dat	e:
☐ Complete	1 95//8			2 1/2
State Authorized Agent:		-11/-30	Dat	e:
This Improvement Permit is issue attached here. The issuance of the permit holder is responsible for coto revocation if the site plan, plat ownership of the site. This permit Disposal and to the conditions of The Department, the Department any liabilities, duties, and responsevaluations, submittals, or action	his permit by the Health Depar hecking with appropriate gove , or the intended use changes t is subject to compliance with this permit. I's authorized agents, and the sibilities imposed by statute o	ertment in no verning bodies The Improventhe provision local health derin common le	vay guarantees the issi in meeting their requi ement Permit shall not ns of the Laws and Rul epartments shall be di aw from any claim aris	uance of other permits. The rements. This permit is subject be affected by a change in es for Sewage Treatment and ischarged and released from sing out of or attributed to
Improvement Permit Expiration C	Pate:			

See attached site sketch



Permit #:	
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Re-submittal of Improvement Permit

							\neg
	LHD USE ONLY:	This IP resubmittal rece	eived:	Date	by	Initials	
The following it	tems are being resub	omitted pursuant to G.S. 1	130A-335(a3) f	for issuance o	f the Improv	vement Permit:	
				THE STATE OF THE S			
		THE	SIAI	Eor	A Pr		
is accurate and		hereby a her					n this re-submittal cable federal,
Signature	e of Licensed Soil Scientis	st			Date		
	The section below	w is for Local Health Depart	tment use after s	submittal of it	ems noted as	missing above.	
LHD Follow-u	p Completenes	s Review of Improve	ment Permi				
	completeness of this ermit is determined	s Improvement Permit re I to be:	e-submittal was	conducted i	n accordanc	e with G.S. 130	A-335(a3). This
☐ Incomplete	(If box is checked, i	nformation in this sectio	n is required.)				
The following ite	ems are missing:						
Copies of this w	ere sent to the LSS	and the Applicant on	Date				
State Authorized	d Agent:				D	ate:	
☐ Complete							
State Authorized	d Agent:				D	ate:	



Permit #:	
-----------	--

CONSTRUCTION AUTHORIZATION FOR G.S. 130A-335(a2)

County:
PIN/Lot Identifier:
Issued To:
Property Location:
AOWE/PE Plans/Evaluations Provided: Yes 🔲 No 🔲 If yes, name and license number of AOWE/PE:
Facility Type:
☐ New ☐ Expansion ☐ Repair ☐ System Relocation ☐ Change of Use
Basement? Yes No Basement Fixtures? Yes No
Type of Wastewater System*(Initial)(Repa
*Please include system classification for proposed wastewater system types in accordance with 15A NCAC 18A .1961 Table V(a)
Design Daily Flow: GPD Wastewater Strength: _ domestic _ high strength _ industrial process
Session Law 2014-120 Section 53, Engineering Design Utilizing Low-flow Fixtures and Low-flow Technologies?
Installation Requirements/Conditions
Septic Tank Size: gallons Total Trench/Bed Length: feet Trench/Bed Spacing: feet on center
Trench/Bed Width: inches LTAR: gpd/ft ²
Soil Cover: inches Slope Corrected Maximum Trench/Bed Depth [‡] : inches * Measured on the downhill side of the trench
Aggregate Depth:inches above pipeinches below pipeinches total
Pump Tank Size (if applicable): gallons Requires more than 1 pump? 🔲 Yes 🔲 No
Pump Requirements: ft. TDH vs GPM Grease Trap Size (if applicable): gallons
Distribution Method: Serial D-Box or Parallel Pressure Manifold(s) LPP Other:
Artificial Drainage Required: Yes 🗌 No 🔲 If yes, please specify details:
Legal Agreements (If the answer is "Yes" to any type of legal agreements, please attach a copy of the agreement.)
Multi-party Agreement Required [.1937(h)]: Yes No
Easement, Right-of-Way, or Encroachment Agreement Required [.1938(j)]: 🔲 Yes 🔲 No
Declaration of Restrictive Covenants: Yes No
Pre-Construction Conference Required: Yes No No
Conditions:
The construction and installation requirements of Rules .1950, .1952, .1954, .1955, .1956, .1957, .1958, and .1959 are incorporated by reference
into this permit and shall be met. Systems shall be installed in accordance with the attached system layout.
AOWE/PE Print Name: Expiration Date:
AOWE/PE Signature: Date:

This AOWE/PE submittal is pursuant to and meets the requirements of G.S. 130A-335(a2) and (a5).

See attached site sketch



Permit #:

This Section for Local Health Department Use Only

	Initial submittal received:	b	,
		Date	Initials
G.S. 130A-335(a5) states the follo	_		
mprovement Permit and Construction All Department, and any necessary signed and Ingineer or a person certified pursuant to department shall, within five business day the Construction Authorization or Improved the English of the Construction Authorization of the Construction Authority policant of the components needed to consider the Information to the local health Authorization. The local health department for the project of the building permit for the project of the English of the building permit for the project of the English of	athorization application together, the pend sealed plans or evaluations conducted of Article 5 of Chapter 90A of the General as of receiving the application, conduct of the General and Construction Authorization or Improvement Permit and Construction Authorization or Improvement Permit and Construction Authorization of the Construction Authorization of the Authorization as to the Salah and the Authorization as to the Salah and the Authorization of the Authorization as to the Salah and the Authorization of the Incal health department for the Incal health department for pursuant to this subsection may required Construction Authorization for cause. It all suspend or revoke the Construction Authorization for cause.	rmit fee charged by the lo d by a person licensed pur. Statutes as an Authorized a completeness review of t ation includes all of the re truction Authorization is in or Improvement Permit and the Construction Authorization whether the Construction and treat the failure to act the Construction Authorization the Construction Authorization act within five busine est that the local health a Upon written request of the uthorization or Improvem	ation together, submits a Construction Authorization, or an an acal health department, the common form developed by the suant to Chapter 89C of the General Statutes as a licensed of On-Site Wastewater Evaluator, the local health the submittal. A determination of completeness means that required components. If the local health department and construction Authorization. The applicant may submit and construction Authorization. The applicant may submit and construction or Improvement Permit and Construction and information from the applicant. If the local health ect as a determination of completeness. The applicant may reaction or Improvement Permit and Construction as a determination of completeness. The applicant may reaction or Improvement Permit and Construction ress days. The Authorized On-Site Wastewater Evaluator or department revoke or suspend the Construction are Authorized On-Site Wastewater Evaluator or licensed and Construction Authorization pursuant to G.S.
The review for completeness of t	his Construction Authorization v	was conducted in acc	cordance with G.S. 130A-335(a5). This
Construction Authorization is def	termined to be:		
☐ Incomplete (If box is checked	d, information in this section is r	equired.)	
The following items are missing:			
Copies of this were sent to the A	OWE/PE and the Applicant on _	Date	4V 76 //
State Authorized Agent:			Date:
☐ Complete	Florence		
State Authorized Agent:	W ZPRIL	12 1776	Date of Issuance:
attached here. This Construction Construction Authorization shall to compliance with the provision of the Department, the Department in y liabilities, duties, and respondans, evaluations, preconstruct the General Statutes as a license Authorized On-Site Wastewater	n Authorization is subject to revious function and the affected by a change in most of the Laws and Rules for Sevent's authorized agents, and the insibilities imposed by statute or ion conference findings, submited engineer or a person certified Evaluator in GS 130A-335(a2), (artments shall be responsible a	ocation if the site pl ownership of the sit vage Treatment and local health departn r in common law fro tals, or actions from d pursuant to Article (a5), and (a7). The D nd bear liability for	ing the signed and sealed plans or evaluations an, plat, or the intended use changes. The te. This Construction Authorization is subject Disposal and to the conditions of this permit. The enerts shall be discharged and released from many claim arising out of or attributed to a a person licensed pursuant to Chapter 89C of 5 of Chapter 90A of the General Statutes as an epartment, the Department's authorized their actions and evaluations and other pursuant to GS 130A-337.
Construction Authorization Expi	ration Date:		

See attached site sketch



Permit #:

Re-submittal of Construction Authorization

	THD LICE ONLY:	This CA resultmittal resolved:		by	
	LHD 03E ONLY.	This CA resubmittal received:	Date	by	
The following in	tems are being resub	mitted pursuant to G.S. 130A-33	55(a5) for issuance of	of the Construction Authoriz	zation:
		ST	ATE	<i>y</i>	
l,			at the information re	equired to be included with	this re-submittal
is accurate and		or (Print Name) t of my knowledge and that the lations, rules, and ordinances.	proposed Construct	tion Authorization meets al	l applicable
Signatur	e of Authorized On-Site V			Date	
		v is for Local Health Department use		ems noted as missing above.	
LHD Follow-ւ	up Completeness	Review of Construction A	uthorization		
	completeness of this on Authorization is d	Construction Authorization re-s etermined to be:	submittal was condu	icted in accordance with G.	S. 130A-335(a5).
☐ Incomplete (If box is checked, in	formation in this section is requi	red.)		
The following it	ems are missing:				
		TASSE OLIAL	M VIDERLY	. //	
Copies of this w	rere sent to the AOV	/E/PE and the Applicant on	Date		
State Authorize	d Agent:			Date:	
☐ Complete					
State Authorize	d Agent:			Date:	

Adams Soil Consulting, PLLC 1676 Mitchell Road Angier, NC 27501 919-414-6761

alexadams@bcsoil.com

July 27, 2023 Project #479

"The LSS/LG evaluation(s) attached to this application is to be used to issue an Improvement Permit in accordance with G.S. 130A-335(a2) and (a3)."

"The plans or evaluations attached to this application are to be used to issue a Construction Authorization in accordance with G.S. 130A-335 (a2), (a5), and (a6)"

"This AOWE/PE submittal is pursuant to and meets the requirements of G.S. 130A-335(a2) and (a5)."

RE: 226 Castle Pone Way – Fuquay-Varina. NC (Harnett County) -Lot #50 – Prince Place Subdivision for Davidson Homes

To whom it may concern:

Adams Soil Consulting (ASC) conducted a preliminary soil evaluation on the above referenced parcel to determine the areas of soils which are suitable for subsurface wastewater disposal systems (conventional & LPP). The soil/site evaluation was performed using hand auger borings during moist soil conditions based on the criteria found in the State Subsurface Rules, 15ANCAC 18A .1900 "Laws and Rules for Sewage Treatment and Disposal Systems". From this evaluation, ASC is providing the attached 5-bedroom septic design. This lot will utilize an engineered flow reduction resulting in a daily design flow of 480 gallons.

The suitable soils found on the subject property were relatively consistent in the initial and repair areas. The area designated for the initial/primary septic system (see attached septic plan) was found to contain soils with greater than 24 inches in depth before a restrictive horizon was encountered.

Please find the attached wastewater soil/site evaluation forms for specific soil properties found in the initial and repair areas as well as assigned soil long term acceptance rate (LTAR). Numerous soil borings were made throughout the property and representative soil profile descriptions for the primary septic field and repair area are provided. A location sketch for profile descriptions is also attached. The initial and primary septic fields were sized based on a flow rate of 480 gallons/day and utilizing Accepted Status. Any unauthorized site disturbance, filling, soil removal, or layout changes may result in the permit being revoked.

The septic installer contractor shall install the primary and repair (if needed) system on contour, see attached site plan for the primary system and repair locations. No underground utilities, water lines, or sprinkler systems shall be placed into the initial or repair septic areas. Installation must meet all state and local county regulations for septic system installation. The trenches must be installed in the same location as the site plan. If the installation is in question at the time of installation call me (Alex Adams) at 919-414-6761.

This report discusses the location of provisionally suitable soils identified on the property and does not guarantee the future function of any waste water disposal system installed.

If you have any questions regarding the findings on the attached map or in this report, please feel free to contact me anytime.

Sincerely,

Alex Adams

NC Licensed Soil Scientist #1247 AOWE Certification: 10021E





Prince Place Phase II - Lot #50 5-Bedroom - 480 gallon/day Septic Design

(Engineered Flow Reduction)

226 Castle Pond Way - Fuquay-Varina, NC Davidson Homes

Harnett County PIN: 0633-75-7683

*Not a Survey Sketched from a plot plan supplied by owner

System: Pressure Manifold

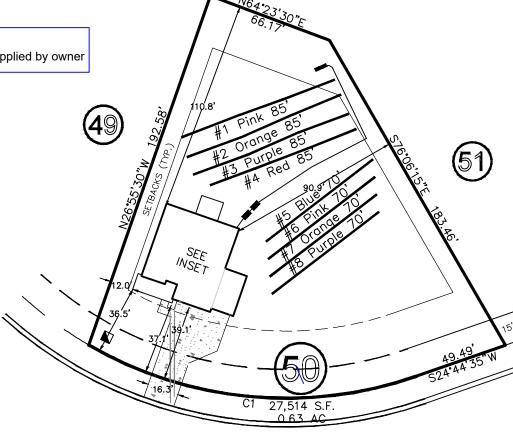
Lines: 1-4 (340') 0.375 LTAR

22" Max Trench Bottom Accepted Status System Repair: Pressure Manifold

Lines: 5-8 (280') 0.375 LTAR

22" Max Trench Bottom

PPBS - T&J Panel Block -50% reduction



**1250 Gallon Septic and Pump Tank
Tank and trenches to be located minimum of 10'
from any property line and minimum of 5'
from any building foundation.

- *Do Not Cut, Fill, or Alter Drainfield or Repair Area
- *Comply with all setbacks
- *Contact local health dept. and/or Alex Adams prior to or during installation with any questions or concerns.

CASTLE POND WAY

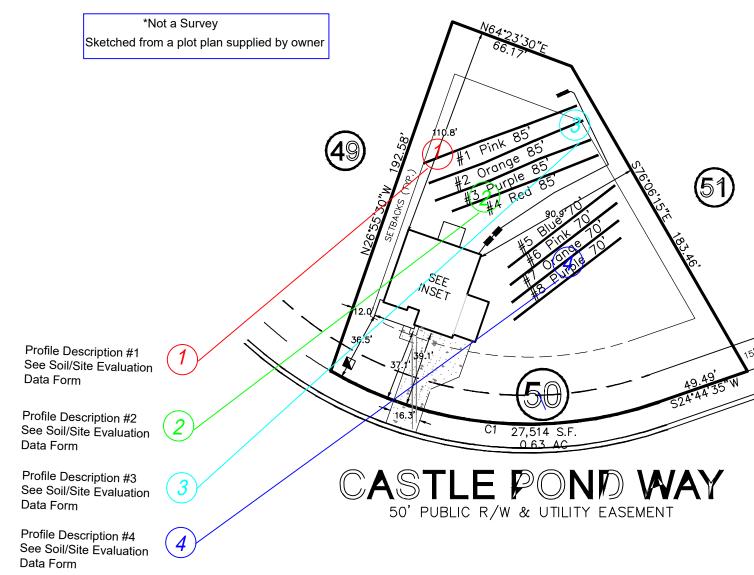
50' PUBLIC R/W & UTILITY EASEMENT

Adams
Soil Consulting
919-414-6761
Job #479

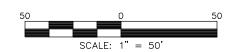


Prince Place Phase II - Lot #50
Soil Boring Map
226 Castle Pond Way - Fuquay-Varina, NC
Davidson Homes

Harnett County PIN: 0633-75-7683



Adams
Soil Consulting
919-414-6761
Job #479



SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM

(Complete all fields in full)

OWNER: Davidson Homes

ADDRESS:

APPLICATION DATE: DATE EVALUATED: 7-23-23

PROPERTY SIZE: .63 Acres

 $PROPOSED\ FACILITY: Single\ Family,\ 5\text{-bedroom} \quad PROPOSED\ DESIGN\ FLOW\ (.1949):\ 480gpd$

LOCATION OF SITE: 226 Castle Pond Way, Fuquay Varina, 27526

WATER SUPPLY: Public Water

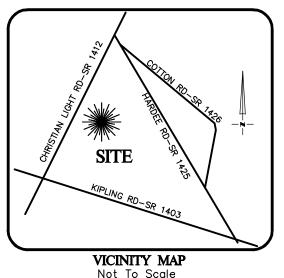
EVALUATION METHOD: Auger Boring TYPE OF WASTEWATER: Sewage

P R O F I L E	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	MORP	SOIL HOLOGY 1941)	OTHER PROFILE FACTORS					
			.1941 STRUCTURE/ TEXTURE	.1941 CONSISTENCE/ MINERALOGY	.1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR	
	Linear SS	0-12	GR/SL	FR/SEXP/NS	36	N/A	N/A	N/A	P.S/.375	
	4%	12-20	SBK/SCL	FI/SEXP/SS						
1		20-37	WKSBK/SCL	FI/SEXP/SS						
	Linear SS 4%	0-20	GR/SL	FR/SEXP/NS	36	N/A	N/A	N/A	P.S/.375	
		20-36	SBK/SCL	FI/SEXP/SS						
2										
	Linear SS	0-18	GR/SL	FR/SEXP/NS	35	N/A	N/A	N/A	P.S/.375	
	4%	18-36	SBK/SCL	FI/SEXP/SS						
3										
	Linear SS 4%	0-21	GR/SL	FR/SEXP/NS	35	N/A	N/A	N/A	P.S/.375	
		21-36	SBK/SCL	FI/SEXP/SS						

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM	OTHER FACTORS (.1946):				
Available Space (.1945)	S	S	SITE CLASSIFICATION (.1948) /P.S				
System Type(s)	Type III B	Type III B	EVALUATED BY:A. Adams OTHER(S) PRESENT:				
Site LTAR	0.375	0.375					

COMMENTS:_

Updated February 2014

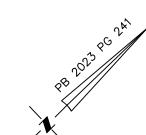




IMPERVIOUS SURFACE AREA						
DESCRIPTION	AREA					
HOUSE w/ PORCH	2,161 S.F.					
CV PORCH/HVAC	129 S.F.					
DRIVEWAY & WALKS	982 S.F.					
TOTAL (PROPOSED)=	3,272 S.F.					
*TOTAL (ALLOWED)=	4,208 S.F.					

WATER METER

*PB 2023 PG 241

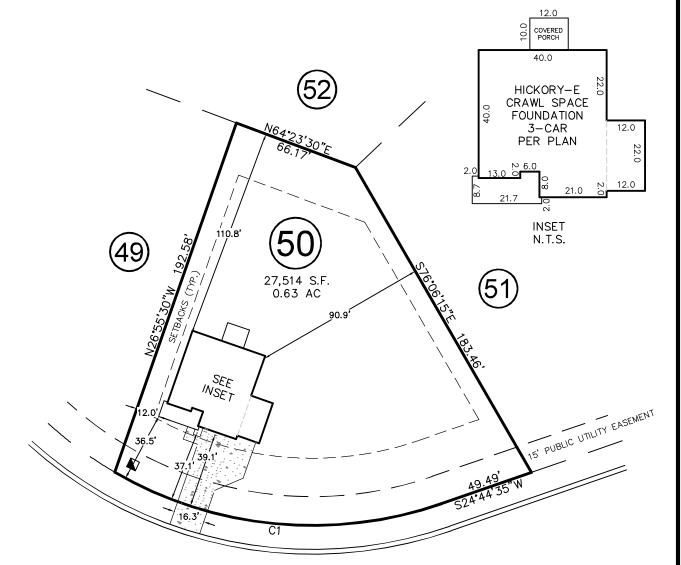


SETBACKS: (PB 2023 PG 240)

FRONT: 35' FROM R/W

REAR: 25' SIDE: 10'

CORNER LOT SIDE: 20'



50' PUBLIC R/W & UTILITY EASEMENT

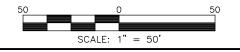
 CURVE
 RADIUS
 ARC
 LENGTH
 CH
 LENGTH
 CH
 BEARING

 C1
 205.00'
 176.41'
 171.02'
 N49'23'51"E

THIS PROPERTY MAY BE SUBJECT TO ANY AND ALL APPLICABLE DEED RESTRICTIONS, EASEMENTS, RIGHT-OF-WAY, UTILITIES AND RESTRICTIVE COVENANTS WHICH MAY BE OF RECORD OR IMPLIED

THIS DRAWING DOES NOT REFLECT AS-BUILT INFORMATION

PRELIMINARY PLAT NOT FOR RECORDATION, CONVEYANCES, OR SALES.



RESIDENTIAL LAND SERVICES, PLLC.

1917 Evans Road Cary, North Carolina 27513 Phone (919) 378—9316 Firm License # P-0873

	-		
HOUSE	LOCATION	PLOT	PLA

FOR

#226 CASTLE POND WAY LOT 50, PRINCE PLACE, PHASE 2

Hectors Creek Township, Harnett County, North Carolina

DAVIDSON HOMES PROPERTY OF: _

PLAT BOOK 2023 PAGE 240-241 DEED REFERENCE.

DRAWN: JLA SURVEYED: N/A CHECKED: DMR DATE: JULY 14, 2023

RESIDENTIAL PRESSURE MANIFOLD DESIGN

Lot 52 - Prince Place Phase II

of BDR: <u>5</u> Daily Flow: <u>480</u> gal/day L.T.A.R.: <u>0.3750</u> gal/day/sq.ft

*Engineered Flow Reduction to 480 gallons/day

Septic Tank: 1250 gals Pump Tank: 1250 gals Sq. Foot: 1020 System Type: Accepted

Number of Taps: $\underline{4}$ Length of Trenches: $\underline{340}$ ft(See Tap Chart for Details)

Depth of Trenches: $\underline{22}$ in Manifold Length: $\underline{42}$ in

Manifold Diameter: 4in sch 80pvc Tap Configuration: 6 in spacing 1 side(s) of manifold

Supply Line: length: $\underline{50}$ ft Diameter: $\underline{2}$ in sch 40pvc

Friction Loss + Fitting Loss: 2.27 ft(supply line length + 70' for fittings in pump tank)

Design Head: $\underline{2}$ ft Elevation Head: $\underline{13.00}$ ft

Total Head: 17.27 ft Pump to Deliver: 28.44 gals/min at 17.27 ft head

Dosing Volume: <u>155</u> gals,

Drawdown: 155 gals divided by $\underline{21.4}$ gals/in = $\underline{7.2}$ 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.

TAP CHART

Benchmark	0	is = 100.00	set at				Design Head:	2			
Pump tank elev.		12	88.00	Pump elev.	83.00		Manifold elev.	96.00			
			E1	1						# of Panels	Spacing of
line	color	rod read	Elevation	length	hole size	flow/tap	gal/day	trench area	LINE LTAR	(PPBPS)	Panels (in)
1	Pink	5.00	95.00	85	1/2in SCH 40	7.11	120.00	255	0.4706		
2	Orange	5.20	94.80	85	1/2in SCH 40	7.11	120.00	255	0.4706		
3	Purple	5.40	94.60	85	1/2in SCH 40	7.11	120.00	255	0.4706		
4	Red	5.70	94.30	85	1/2in SCH 40	7.11	120.00	255	0.4706		
			Total Feet =	340	gal/min =	28.44		LTAR =	0.3750		
			Feet Required =	320	Velocity =	2.72		(Itar + 5%)	0.3938		
Total # of Panels (PPBPS)				Des. Flow	480			(Itar w/25% red)	0.5000		
% of Dose Vol.		70		Pump Run=	16.88			(Itar + 5%)	0.5250		
Dose Volume		155		Tank Gal/IN	21.4						
Dose Pump Time		5.44		Elev. Head	13.00						
Drawdown in Inches		7.2									
Comments:											