NC DEPARTMENT OF HEALTH AND HUMAN SERVICES
Division of Public Health

*Cedar Knolls lot #40

Permit/File #: 462490

This Section for Local Health Department Use Only

Initial submittal received: 11-6-25 (Date) by WTB (Initials)

G.S. 130A-335(a3) states the following:

When an applicant for an Improvement Permit submits to a local health department an Improvement Permit application, the permit fee charged by the local health department, the common form developed by the Department, and a soil evaluation pursuant to subsection (a2) of this section, the local health department shall, within five business days of receiving the application, conduct a completeness review of the submittal. A determination of completeness means that the Improvement Permit includes all of the required components. If the local health department determines that the Improvement Permit is incomplete, the local health department shall notify the applicant of the components needed to complete the Improvement Permit. The applicant may submit additional information to the local health department to cure the deficiencies in the Improvement Permit. The local health department shall make a final determination as to whether the Improvement Permit is complete within five business days after the local health department receives the additional information from the applicant. If the local health department fails to act within any period set out in this subsection, the applicant may treat the failure to act as a determination of completeness. The Department shall develop a common form for use as the Improvement Permit.

The review for completeness of this Improvement Permit was conducted in accordance with G.S. 130A-335(a3). This Improvement Permit is determined to be:

☐ Incomplete (If box is checked, information in this section is required.)

The following items are missing:

_____

_____

Copies of this were sent to the LSS and the Applicant on _____ (Date)

State Authorized Agent: _____ Date: _____

☒ Complete

State Authorized Agent: [signature] Date: 11/10/25

This Improvement Permit is issued pursuant to G.S. 130A-335 (a2) and (a3) using the signed and sealed LSS/LG evaluation(s) attached here. The issuance of this permit 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 permit 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 15A NCAC 18E and to the conditions of this permit.

The Department, the Department's authorized agents, and the local health departments shall be discharged and released from any liabilities, duties, and responsibilities imposed by statute or in common law from any claim arising out of or attributed to evaluations, submittals, or actions from a licensed soil scientist or licensed geologist pursuant to GS 130A-335(a2).

Improvement Permit Expiration Date: 11/10/30

See attached site sketch

Permit/File #: 162490

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES

ROY COOPER • Governor
KODY H. KINSLEY • Secretary
MARK BENTON • Chief Deputy Secretary for Health
SUSAN KANSAGRA • Assistant Secretary for Public Health
Division of Public Health

Submittal Includes: ☑ (a2) Improvement Permit ☑ (a2) Construction Authorization ☐ Fee $_____

IMPROVEMENT PERMIT FOR G.S. 130A-335(a2)

County: Granville

PIN/Lot Identifier: 183400151051

Issued To: Haven Homes

Property Location: 1208 Red Cedar Court

Subdivision (if applicable) Cedar Knoll Lot #: 40 Block: _____ Section: _____

LSS Report Provided: Yes ☑ No ☐

If yes, name and license number of LSS: Jason Hall, NC LSS #1248

New ☑ Expansion ☐ System Relocation ☐ Change of Use ☐

Facility Type: Single Family

Number of bedrooms: 4 Number of Occupants: <8 Other: _____

Design Wastewater Strength: ☑ Domestic ☐ High Strength ☐ Industrial Process Wastewater

Proposed Design Daily Flow: 480 GPD Proposed LTAR (Initial): 0.3 Proposed LTAR (Repair): 0.3

Proposed Wastewater System Type*: IIIbg, PM (Initial) Pump Required: ☑ Yes ☐ No ☐ May be required

Proposed Wastewater System Type*: IIIbe,PM-PPBPS Horizontal (Repair) Pump Required: ☑ Yes ☐ No ☐ May be required

**Please include system classification for proposed wastewater system types in accordance with Rule .1301 Table XXXII*

Effluent Standard: ☑ DSE ☐ HSE ☐ NSF/ANSI 40 ☐ TS-I ☐ TS-II ☐ RCW

Saprolite System (Initial): ☐ Yes ☑ No Saprolite System (Repair): ☐ Yes ☑ No

Fill System (Initial): ☐ Yes ☑ No If yes, specify: ☐ New ☐ Existing (when adding more than 6 inches of fill to system area provide a fill plan)

Fill System (Repair): ☐ Yes ☑ No If yes, specify: ☐ New ☐ Existing (when adding more than 6 inches of fill to system area provide a fill plan)

Usable Depth to LC (Initial)[x]: 42" Usable Depth to LC (Repair)[x]: 48" *[x] Limiting Condition*

Max. Trench Depth (Initial)[‡]: 25" Max. Trench Depth (Repair)[‡]: 28" *[‡] Measured on the downhill side of the trench*

Artificial Drainage Required: ☐ Yes ☑ No If yes, please specify details: _____

Type of Water Supply: ☑ Private well ☐ Public well ☐ Shared well ☐ Municipal Supply ☐ Spring ☐ Other: _____

Drainfield location meets requirements of Rule .0508: Yes ☑ No ☐ Drainfield location meets requirements of Rule .0601: Yes ☑ No ☐

Permit valid for: ☑ Five years [site plan submitted pursuant to GS 130A-334(13a)] ☐ No expiration [plat submitted pursuant to GS 130A-334(7a)]

Permit conditions:
Divert all drains, gutters, and downspouts away from all parts of the septic system. Fence off entire septic area.

LICENSED SOIL SCIENTIST JASON M. HALL STATE OF NORTH CAROLINA

Licensed Soil Scientist Print Name: Jason Hall

Licensed Soil Scientist Signature: _____ Date: 10/28/25

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/File #: 462420

This Section for Local Health Department Use Only

Initial submittal received: 11-6-25 (Date) by WTB (Initials)

G.S. 130A-335(a5) states the following:

When an applicant for a Construction Authorization, or an Improvement Permit and Construction Authorization together, submits a Construction Authorization, or an Improvement Permit and Construction Authorization application together, the permit fee charged by the local health department, the common form developed by the Department, and any necessary signed and sealed plans or evaluations conducted by a person licensed pursuant to Chapter 89C of the General Statutes as a licensed engineer or a person certified pursuant to Article 5 of Chapter 90A of the General Statutes as an Authorized On-Site Wastewater Evaluator, the local health department shall, within five business days of receiving the application, conduct a completeness review of the submittal. A determination of completeness means that the Construction Authorization or Improvement Permit and Construction Authorization includes all of the required components. If the local health department determines that the Construction Authorization or Improvement Permit and Construction Authorization is incomplete, the local health department shall notify the applicant of the components needed to complete the Construction Authorization or Improvement Permit and Construction Authorization. The applicant may submit additional information to the local health department to cure the deficiencies in the Construction Authorization or Improvement Permit and Construction Authorization. The local health department shall make a final determination as to whether the Construction Authorization or Improvement Permit and Construction Authorization is complete within five business days after the local health department receives the additional information from the applicant. If the local health department fails to act within any period set out in this subsection, the applicant may treat the failure to act as a determination of completeness. The applicant may apply for the building permit for the project upon the decision of completeness of the Construction Authorization or Improvement Permit and Construction Authorization by the local health department or if the local health department fails to act within five business days. The Authorized On-Site Wastewater Evaluator or licensed engineer submitting the evaluation pursuant to this subsection may request that the local health department revoke or suspend the Construction Authorization or Improvement Permit and Construction Authorization for cause. Upon written request of the Authorized On-Site Wastewater Evaluator or licensed engineer, the local health department shall suspend or revoke the Construction Authorization or Improvement Permit and Construction Authorization pursuant to G.S. 130A-23. The Department shall develop a common form for use as the Construction Authorization.

The review for completeness of this Construction Authorization was conducted in accordance with G.S. 130A-335(a5). This Construction Authorization is determined to be:

☐ Incomplete (If box is checked, information in this section is required.)

The following items are missing: _____

Copies of this were sent to the AOWE/PE and the Applicant on _____ (Date)

State Authorized Agent: _____ Date: _____

☑ Complete

State Authorized Agent: [signature] Date of Issuance: 11/10/25

This Construction Authorization is issued pursuant to G.S. 130A-335(a2) and (a5) using the signed and sealed plans or evaluations attached here. This Construction Authorization is subject to revocation if the site plan, plat, or the intended use changes. The Construction Authorization shall not be affected by 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.

The Department, the Department's authorized agents, and the local health departments shall be discharged and released from any liabilities, duties, and responsibilities imposed by statute or in common law from any claim arising out of or attributed to plans, evaluations, preconstruction conference findings, submittals, or actions from a person licensed pursuant to Chapter 89C of the General Statutes as a licensed engineer or a person certified pursuant to Article 5 of Chapter 90A of the General Statutes as an Authorized On-Site Wastewater Evaluator in GS 130A-335(a2), (a5), and (a7). The Department, the Department's authorized agents, and the local health departments shall be responsible and bear liability for their actions and evaluations and other obligations under State law or rule, including the issuance of the operations permit pursuant to GS 130A-337.

Construction Authorization Expiration Date: 11/10/30

See attached site sketch

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES
Division of Public Health

Permit/File #: 46249D

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

County: Granville **Pre-Construction Conference Required:** Yes ☐ No ☑

PIN/Lot Identifier: 183400151051, Lot 40 Cedar Knolls

Issued To: Haven Homes

Property Location: 1208 Red Cedar Court

AOWE/PE Plans/Evaluations Provided: Yes ☑ No ☐ If yes, name and license number of AOWE/PE: Jason Hall, AOWE #10004E

Facility Type: single family

Number of bedrooms: 4 Number of Occupants: <8 Other:

☑ New ☐ Expansion ☐ Repair ☐ System Relocation ☐ Change of Use

Basement? ☐ Yes ☑ No Basement Fixtures? ☐ Yes ☑ No

Crawl Space? ☑ Yes ☐ No Slab Foundation? ☐ Yes ☑ No

Type of Wastewater System* IIIbg, PM (Initial) IIIbe, PM-PPBPS Horizontal (Repair)

**Please include system classification for proposed wastewater system types in accordance with Rule .1301 Table XXXII*

Design Daily Flow: 480 GPD Wastewater Strength: ☑ Domestic ☐ High Strength ☐ Industrial Process WW

Session Law 2014-120 Section 53, Engineering Design Utilizing Low-flow Fixtures and Low-flow Technologies? ☐ Yes ☑ No
(if yes, please provide engineering documentation)

Effluent Standard: ☑ DSE ☐ HSE ☐ NSF/ANSI 40 ☐ TS-I ☐ TS-II ☐ RCW

Type of Water Supply: ☑ Private well ☐ Public well ☐ Shared well ☐ Municipal Supply ☐ Spring ☐ Other:

Installation Requirements/Conditions

Septic Tank Size: 1000 gallons Total Trench/Bed Length: 420 feet Trench/Bed Spacing: 9 feet on center

Trench/Bed Width: 36 inches LTAR: 0.3 gpd/ft² Usable Depth to LC (Initial)[x]: 42" *[x]Limiting condition*

Additional Soil Cover: ____ inches Slope Corrected Maximum Trench/Bed Depth[‡]: 25 inches *[‡] Measured on the downhill side of the trench*

Pump Tank Size (if applicable): 1200 gallons Requires more than 1 pump? ☐ Yes ☑ No

Pump Requirements: 17.58 ft. TDH vs. 36.14 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 [.0204(g)]: ☐ Yes ☑ No Declaration of Restrictive Covenants: ☐ Yes ☑ No

Easement, Right-of-Way, or Encroachment Agreement Required [.0301(b)]: ☐ Yes ☑ No

Management Entity Required: ☐ Yes ☑ No Minimum O&M Requirements:

Permit conditions:
Divert all drains, gutters, and downspouts away from all parts of the septic system, fence off entire septic area.

The requirements of 15A NCAC 18E are incorporated by reference into this permit and shall be met. Systems shall be installed in accordance with the attached site sketch. *This Construction Authorization is subject to revocation if the site plan, plat, or the intended use changes.* The Construction Authorization shall not be affected by a change in ownership of the site. This Construction Authorization is subject to compliance with the provisions of 15A NCAC 18E, or 15A NCAC 18A .1900, as applicable, and to the conditions of this permit.

AOWE/PE Print Name: Jason Hall

AOWE/PE Signature: Jason Hall Date: 10/28/25

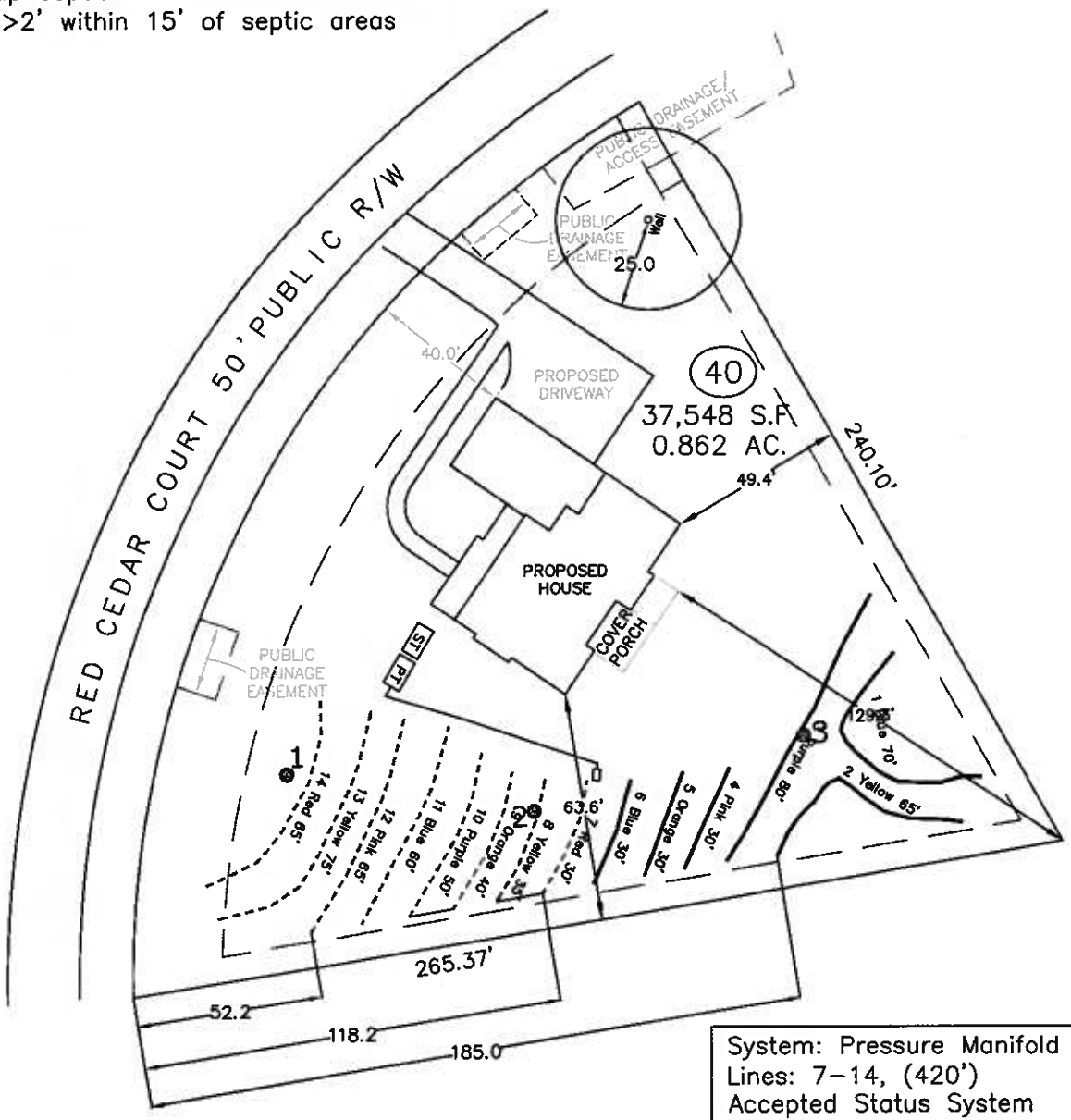
This AOWE/PE submittal is pursuant to and meets the requirements of G.S. 130A-335(a2) and (a3).

See attached site sketch

ON-SITE WASTEWATER SYSTEM EVALUATOR Certification Number 10004

*Keep tanks and drain lines 10' from property lines.
*Not a survey.
*Not a guarantee of a septic permit.
*Keep supply lines >5' from property lines.
*Some lines are flagged longer in the field than lengths indicate.
*No grading septic area.
*No adding soil within septic area
*No rutting-up septic area
*No cuts of >2' within 15' of septic areas

System: -------
Repair: ———



GRAPHIC SCALE
1" = 50'
50 0 50 100

System: Pressure Manifold
Lines: 7-14, (420')
Accepted Status System
0.3 Soil LTAR
25" Trench Bottom

Repair: Pressure Manifold
Lines 1-6, (305')
T&J Panel 50% Reduction
0.3 Soil LTAR
28" Trench Bottom

Central Carolina Soil Consulting, PLLC
1900 South Main Street, Suite 110
Wake Forest, North Carolina 27587
Phone (919)569-6704 Fax (919)569-6703

4-Bedroom Septic Layout
Lot 40, Cedar Knolls S/D
Granville County, North Carolina

Job#: 5125
Drawn By: AH
Date: 10/3/2025
Revision:

Pressure Manifold
Septic System Design

for

Cedar Knolls S/D, Lot 40
Franklin County, North Carolina

Designed by:

Aaron Holder
Central Carolina Soil Consulting, PLLC
Wake Forest, North Carolina

10/6/2025

Cedar Knolls S/D, Lot 40

Table of Contents

Cedar Knolls S/D, Lot 40

Contact Information

Client:
Attn:
Street Address:

Phone:
Fax:

Designer: Central Carolina Soil Consulting, PLLC
Attn: Jason Hall
Designed By: Aaron Holder
Street Address: 1900 Main Street Suite 110
Wake Forest, NC 27587
Office Phone: 919-569-6704
Cell Phone: 919-537-1139
Fax: 919-569-5703
Email: Aholder@centralcarolinasoil.com

Cedar Knolls S/D, Lot 40

Layout/Design Specifications

Facility Type:	Single Family Home	
# of Bedrooms:	4	
Daily Flow:	480	gal/day
L.T.A.R.:	0.3	gal/day/sq.ft
Trench Depth:	25	in
Trench Width:	36	in
Stone Depth:	EZ-FLOW	in
Manifold Length:	54	in
Manifold Diameter:	4	in sch 80pvc
Supply Line Length:	72	ft
Supply Line Diameter:	2	in sch 40pvc
Supply Line Volume:	12.53	gallons
Friction Loss + Fitting Loss:	4.18	ft(supply line length + 70' for fittings in pump tank)
Design Head:	2	ft
Elevation Head:	11.40	ft
Total Head:	17.58	ft
Dose Volume:	196.56	gals
% of Pipe Vol.	.72	
Drawdown:	10.00	in @ 19.65 gal/in
Pump Run Time:	5.44	Mins
Control Panel:	SJE Rhombus Model112 control panel (or approved equivalent)	
Pump:	Zoeller M137 Flow-Mate (or approved equivalent)	
Septic Tank Effluent Filter:	Zoeller 170-0078 residential effluent filter (or approved equivalent)	
Septic Tank:	Brantley 1,000 Gallon ST 502	
Pump Tank:	Brantley 1,200 Gallon PT 463	

Cedar Knolls S/D Lot 40
Initial System TAP CHART

Bench Mark:								Elevation Head:	11.40
Pump tank elev.		10	90.00	Pump elev.	84.60			Manifold elevation:	96.00
line	color	rod read	Elevation	length	hole size	flow/tap	gal/day	trench area	LINE LTAR
7&8	Red/Yell	5.00	95.00	65	1/2in SCH 80	5.48	72.78	195	0.3732
9&10	Org/Pur	6.60	93.40	90	1/2in SCH 40	7.11	94.43	270	0.3498
11	Blue	8.40	91.60	60	1/2in SCH 80	5.48	72.78	180	0.4044
12	Pink	9.30	90.70	65	1/2in SCH 80	5.48	72.78	195	0.3732
13	Yellow	10.00	90.00	75	1/2in SCH 40	7.11	94.43	225	0.4197
14	Red	10.60	89.40	65	1/2in SCH 80	5.48	72.78	195	0.3732

	total	feet =	420	gal/min =	36.14	LTAR =	0.3000
						LTAR + %5	0.3150
% of Dose Volume	72		Des. Flow	480		(ltar W/ INOV)	0.4000
Dose Volume	196.56		Pump Run=	13.28		(ltar W/ INOV + 5%)	0.4200
Dose Pump Time	5.44		Tank Gal/IN	19.65			
Drawdown in Inches	10.00						

Cedar Knolls S/D Lot 40
T&J Panel Block Repair System, TAP CHART

Bench Mark:								Elevation Head:	16.00			
Pump tank elev.		10	90.00	Pump elev.	84.60			Manifold elevation:	100.60			
line	color	rod read	Elevation	length	hole size	flow/tap	gal/day	trench area	LINE LTAR	# of Panels	Spacing of Panels (in)	Feet of 1.5in PVC
1	Blue	0.40	99.60	70	3/4in SCH 80	10.1	103.72	210	0.4939	16	6.1	60
2	Yellow	1.20	98.80	65	3/4in SCH 80	10.1	103.72	195	0.5319	15	5.6	56
3	Purple	2.10	97.90	80	3/4in SCH 80	10.1	103.72	240	0.4322	18	6.9	68
4	Pink	3.00	97.00	30	1/2in SCH 80	5.48	56.28	90	0.6253	7	4.8	24
5	Orange	4.00	96.00	30	1/2in SCH 80	5.48	56.28	90	0.6253	7	4.8	24
6	Blue	5.00	95.00	30	1/2in SCH 80	5.48	56.28	90	0.6253	7	4.8	24

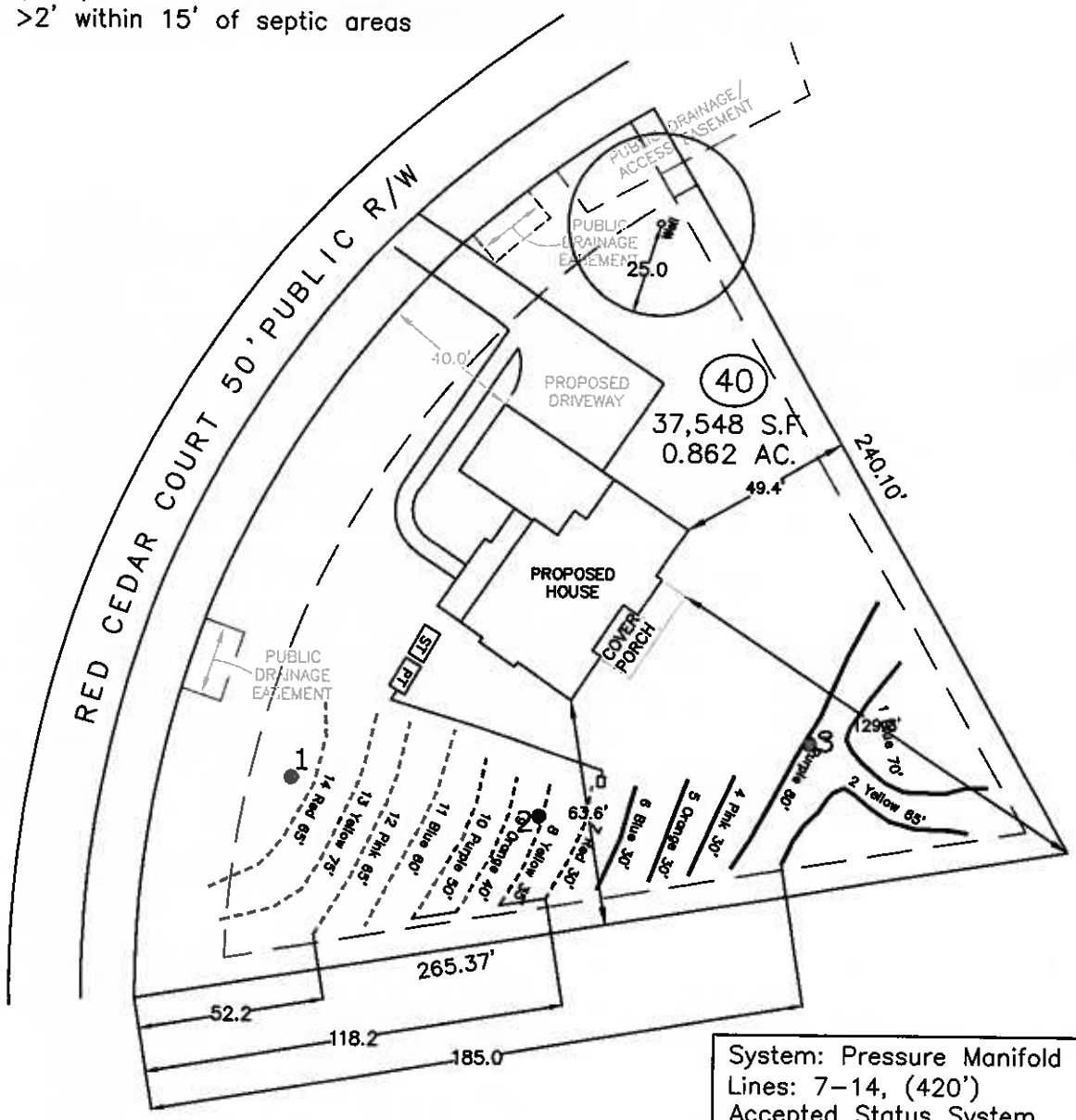
		total feet =	305	gal/min =	46.74	Total Number of Panels:	70
						T&J Panel Block Orientation:	Horizontal
						LTAR =	0.3000
% of Dose Vol.	0		Des. Flow	480		LTAR + %5	0.3150
Dose Volume	350.00		Pump Run=	10.27		(ltar W/ INOV)	0.6000
Dose Pump Time	7.49		Tank Gal/IN	19.65		(ltar W/ INOV + 5%)	0.6300
Drawdown in Inches	17.81						

Backfill Sand Needed: 51.9 tons
backfill sand needed +5%: 54.5 tons

Total Footage of 1.5in PVC: 256

*Keep tanks and drain lines 10' from property lines.
*Not a survey.
*Not a guarantee of a septic permit.
*Keep supply lines >5' from property lines.
*Some lines are flagged longer in the field than lengths indicate.
*No grading septic area.
*No adding soil within septic area
*No rutting-up septic area
*No cuts of >2' within 15' of septic areas

System: ------
Repair: ——



GRAPHIC SCALE
1" = 50'
50 0 50 100

System: Pressure Manifold Lines: 7-14, (420') Accepted Status System 0.3 Soil LTAR 25" Trench Bottom
Repair: Pressure Manifold Lines 1-6, (305') T&J Panel 50% Reduction 0.3 Soil LTAR 28" Trench Bottom

Central Carolina Soil Consulting, PLLC
1900 South Main Street, Suite 110
Wake Forest, North Carolina 27587
Phone (919)569-6704 Fax (919)569-6703

4-Bedroom Septic Layout
Lot 40, Cedar Knolls S/D
Franklin County, North Carolina

Job#: 5125
Drawn By: AH
Date: 10/3/2025
Revision:

GRANVILLE VANCE public health

Well Construction Permit

Granville Vance Public Health
Environmental Health
PO Box 367
Oxford NC, 27565
Phone: (252) 492-5263 Fax: (252) 492-2361

For Office Use Only

*CDP File Number 462490

PIN Number:

Tax Lot #: 40 Tax Block #:

Evaluated For:

PERMIT VALID UNTIL: 11/10/2030

Property Owner:	JSW PARTNERS	Applicant:	HAVEN HOMES
Address:	10931 STRICKLAND ROAD	Address:	1116 HAWK HOLLOW LANE
City:	RALEIGH	City:	WAKE FOREST
State/Zip:	NC	State/Zip:	NC
Phone #:	H: (919) 632-8264	Phone #:	H: (919) 291-4318

Property Location & Site Information

Address/Road #: 1208 RED CEDAR COURT

Subdivision: CEDAR KNOLLS Phase: Lot: 40

*Proposed use of Well:

If Other:

Applicant Email:

Owner Email:

Directions: GPS

Well Contractor Information

Drilling Contractor:

Driller Registration:

Permit Conditions

*Permit Conditions

Refer to soil scientist site sketch for well placement. Keep proposed well min. 50' off any part of septic (Including neighboring lots). Min. 25' off structural foundations. Min. 10' off property lines. Well driller responsible for maintaining all setbacks.

Well location, construction and protection must meet all state and local regulations and must be inspected and approved by an authorized representative of the Local Health Department. The permit may be revoked at any time for failure to comply with existing regulations. The siting of approved well construction area(s) by the Health Department is to provide protection from the known possible sources of contamination. The approved well area(s) may not be changed without permission from an authorized representative of the Local Health Department. Issuance of this well permit does not guarantee water quality or adequate water production from the well once it is installed or repaired.

*Issued By: Bullock, Will

Authorized State Agent: REHS

Owner/Applicant: JSW Partners / Haven Homes

*Date of Issue: 11/10/2025

○ Hand Drawing ⊘ Import Drawing

****Site Plan/Drawing attached.****

GRANVILLE VANCE
public health

Well Construction Permit

Granville Vance Public Health
Environmental Health
PO Box 367
Oxford NC, 27565
Phone: (252) 492-5263 Fax: (252) 492-2361

For Office Use Only

*CDP File Number 462490

PIN Number:

Tax Lot #: 40 Tax Block #:

Evaluated For:

PERMIT VALID UNTIL: 11/10/2030