



THOMAS ENGINEERING, PA

www.thomasengineeringpa.com
1316-B Commerce Drive
Post Office Box 1309
New Bern, NC 28563

John G. Thomas, Professional Engineer

johnthomas@thomasengineeringpa.com
P: 252.637.2727
F: 252.636.2448
M: 252.671.5855

Re: Engineered Option Permit Wastewater System
G.S. 130A-336.1 and 15A NCAC 18A .1971
Lot A-12 Carolina Seasons
361 Ponderosa Trail Cameron, NC 28326
Harnett County, NC PID: 9567-30-2261

Please be advised that Adams Homes, AEC, LLC, by Shirley Macy, GM, has reviewed the Engineer's Report as described in G.S. 130A-336.1(k)(1) and hereby accepts as described in G.S. 130A-336.1(k)(2) from Thomas Engineering, P. A., (John G. Thomas, PE), the wastewater system for the above referenced facility.

ADAMS HOMES AEC, LLC

By Shirley Macy G.M. Date 5-8-24

NORTH CAROLINA
Wake COUNTY

I, Rosa L. Hernandez Abrego a Notary Public of the aforesaid County and State, hereby certify that Shirley Macy personally appeared before me this day and acknowledged the execution of the foregoing instrument.

Witness my hand and Notarial Seal, this the 8 day of May, 2024.

Rosa L. Hernandez Abrego
NOTARY PUBLIC

My commission expires: 05/27/2024





NC DEPARTMENT OF
**HEALTH AND
HUMAN SERVICES**

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

COMMON FORM FOR ENGINEERED OPTION PERMIT

LHD USE ONLY: Initial submittal of this NOI received: _____ by _____
Date Initials

PART 1: Notice of Intent to Construct (NOI) - Please check all that apply

Single System or Multiple Systems

AND

New Expansion Relocation of all or part of the Existing System Relocation of Repair Area

Repair – LHD Permit Number _____ Repair – EOP/LSS COVID 19/AOWE Permit Number _____

1. Facility Owner's name: (Owner, Company Name, Utility, Partnership, Individual, etc.): _____
Adams Homes AEC, LLC

Mailing address: US Hwy 70 West City: Garner State: NC Zip: 27529

Telephone number: 919-233-6747 E-mail Address: raleighpermits@adamshomes.com

2. Professional Engineer (PE) name: John G. Thomas License number: 010147

Mailing address: P.O. Box 1309 City: New Bern State: NC Zip: 28563

Telephone number: 252-637-2727 E-mail Address: johnthomas@thomasengineeringpa.com

3. Licensed Soil Scientist (LSS) name: R. Haywood Pittman II License number: 1262

Mailing address: 1073-1 Gregory Fork Road City: Richlands State: NC Zip: 28574

Telephone number: 910-324-2892 E-mail Address: pittmansoil@yahoo.com

4. Licensed Geologist (LG) (if applicable) name: _____ License number: _____

Mailing address: _____ City: _____ State: _____ Zip: _____

Telephone number: _____ E-mail Address: _____

Note: new installer

5. On-Site Wastewater Contractor name: Yellow Dog Grading License number: 4621

Mailing address: 2693 Mcdougald Road City: Lillington State: NC Zip: 27546

Telephone number: 910-890-0328 E-mail Address: ramoss225@yahoo.com

6. Proof of Errors and Omissions or other appropriate liability insurance for the following persons is attached that includes the name of the insurer, name of the insured and the effective dates of coverage:

PE LSS LG On-site Wastewater Contractor

7. Property location (physical address, tax parcel identification number or subdivision lot, block number of the property to be permitted): 361 Ponderosa Trail; PIN: 9567-30-2261; Lot 12; Carolina Seasons

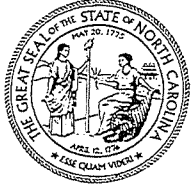
NC DEPARTMENT OF HEALTH AND HUMAN SERVICES • DIVISION OF PUBLIC HEALTH

LOCATION: 5605 SIX FORKS RD, RALEIGH NC 27609

MAILING ADDRESS: 1642 MAIL SERVICE CENTER, RALEIGH NC 27699-1642

www.ncdhhs.gov • TEL: 919-707-5874 • FAX: 919-845-3972

AN EQUAL OPPORTUNITY / AFFIRMATIVE ACTION EMPLOYER



NC DEPARTMENT OF
**HEALTH AND
HUMAN SERVICES**

ROY COOPER • Governor
KODY H. KINSLEY • Secretary
HELEN WOLSTENHOLME • Interim Deputy Secretary for Health
MARK T. BENTON • Assistant Secretary for Public Health
Division of Public Health

COMMON FORM FOR ENGINEERED OPTION PERMIT
See Instructions for Use in Appendix A

Except for "Date received", this Section to be completed by the Professional Engineer licensed in accordance with G.S. 89C

LHD USE ONLY: Initial submittal of this NOI received: _____ by _____
Date Initials

PART 1: Notice of Intent to Construct (NOI) - Please check all that apply

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AND

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Repair – LHD Permit Number _____ Repair – EOP/LSS COVID 19/AOWE Permit Number _____

1. Facility Owner's name: (Owner, Company Name, Utility, Partnership, Individual, etc.): Adams Homes AEC, LLC.

Mailing address: 140 US Hwy 70 West City: Garner State: NC Zip: 27529

Telephone number: 919-233-6747 E-mail Address: raleighpermits@adamshomes.com

2. Professional Engineer (PE) name: John G. Thomas License number: 010147

Mailing address: P.O. Box 1309 City: New Bern State: NC Zip: 28563

Telephone number: 252-637-2727 E-mail Address: johnthomas@thomasengineeringpa.com

3. Licensed Soil Scientist (LSS) name: R. Haywood Pittman II License number: 1262

Mailing address: 1073-1 Gregory Fork Road City: Richlands State: NC Zip: 28574

Telephone number: 910-324-2892 E-mail Address: pittmansoil@yahoo.com

4. Licensed Geologist (LG) (if applicable) name: _____ License number: _____

Mailing address: _____ City: _____ State: _____ Zip: _____

Telephone number: _____ E-mail Address: _____

5. On-Site Wastewater Contractor name: Thornton's Footings, Hauling & Septic, INC. License number: 2534

Mailing address: 3160A Vinson Road City: Clayton State: NC Zip: 27527

Telephone number: 919-550-4833 E-mail Address: thorntonshr@embarqmail.com

6. Proof of Errors and Omissions or other appropriate liability insurance for the following persons is attached that includes the name of the insurer, name of the insured and the effective dates of coverage:

PE LSS LG On-site Wastewater Contractor

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

LOCATION: 5605 Six Forks Road, Raleigh, NC 27609
MAILING ADDRESS: 1642 Mail Service Center, Raleigh, NC 27699-1642
www.ncdhhs.gov • TEL: 919-707-5874 • FAX: 919-845-3972

AN EQUAL OPPORTUNITY / AFFIRMATIVE ACTION EMPLOYER

County Name: Harnett

8. Type of facility: Place of residence No. Bedrooms: 3 No. Occupants: 5
 Place of business Basis for flow calculation: _____
 Place of public assembly Basis for flow calculation: _____

9. Factors that would affect the wastewater load: N/A

10. Type and location of proposed wastewater system: Type III Horizontal Panel Block Septic System, Located left side of the lot as viewed from the street.

11. Design wastewater flow: 360 gpd (For flow > 3,000 gpd and industrial process, duplicate plans shall be sent to the State.)

Design wastewater strength: domestic high strength industrial process

12. A plat as defined in G.S. 130A-334(7a) is attached: Yes No

13. Location of proposed or existing wells (drinking water, irrigation, geothermal, groundwater monitoring, sampling, etc.) and any potable and non-potable water conveyance lines is indicated on attached plans and complies with 15A NCAC 18A .1950: Yes No

This is a saprolite system. Yes No

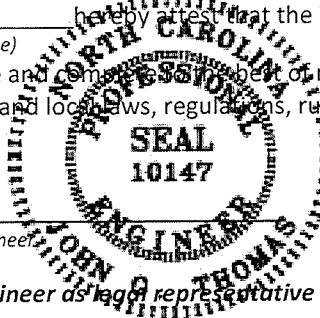
14. Evaluation(s) of soil conditions and site features in accordance with G.S. 130A-335(a1) signed and sealed by a LSS is attached: Yes No

15. Evaluation of geologic and hydrogeologic conditions signed and sealed by a LG is attached Yes NA

16. Proposed landscape, site, drainage, or soil modifications are attached: Yes NA

Attestation by Professional Engineer licensed in North Carolina pursuant to G.S. 89C

I, John G. Thomas, PE hereby attest that the information required to be included with
Registered Professional Engineer (Print Name)
this Notice of Intent to Construct is accurate and complete to the best of my knowledge and that the proposed system shall meet applicable federal, State, and local laws, regulations, rules, and ordinances in accordance with G.S. 130A-336-.1(e)(6).



Signature of Licensed Professional Engineer

5/1/2024
Date

Designation of Registered Professional Engineer as legal representative of Owner for this Notice of Intent:

I, Adams Homes AEC, LLC by Shirley Macy GM hereby designate John G. Thomas, PE
Print Name of Owner Print Name of Registered Professional Engineer

as my legal representative for purposes of this Notice of Intent pursuant to G.S. 130A-336.1.

SEE ATTACHED SIGNED AUTHORIZATION

Owner self-submittal of NOI:

I, _____ hereby submit this NOI prepared by _____
Print Name of Owner Print Name of Licensed PE

pursuant to G.S. 130A-336.1.

Signature of Owner

Date

PART 3: Authorization to Operate (ATO)

This section is for Owner use to either designate PE as their legal representative or to self-submit the NOI.

Designation of Registered Professional Engineer as legal representative of Owner for this Notice of Intent:

I, Adams Homes AEC, LLC. Shirley Macy G.M. hereby designate John G. Thomas PE
Print Name of Owner *Print Name of Registered Professional Engineer*

as my legal representative for purposes of this Notice of Intent pursuant to G.S. 130A-336.1.

Shirley Macy G.M. 10-25-23
Signature of Owner *Date*

Owner self-submittal of NOI:

I, _____ hereby submit this NOI prepared by _____
Print Name of Owner *Print Name of Licensed PE*

pursuant to G.S. 130A-336.1.

Signature of Owner *Date*

NOTES:

LIABILITY: *The Department, the Department's authorized agents, or local health departments shall have no liability for wastewater systems designed, constructed, and installed pursuant to an Engineer Option Permit [G.S. 130A-336.1(f)]*

RIGHT OF ENTRY: *The submittal of this Notice of Intent to Construct grants right of entry to the Local Health Department and the State to the referenced property.*

ISSUANCE OF BUILDING PERMIT: *Once the LHD deems that the Notice of Intent to Construct is complete via signature in the section below, the owner may apply to the local permitting agency for a permit for electrical, plumbing, heating, air conditioning or other construction, location, or relocation activity under any provision of general or special law pursuant to G.S. 130A-338.*

The following items are included in this Authorization to Operate for an EOP:

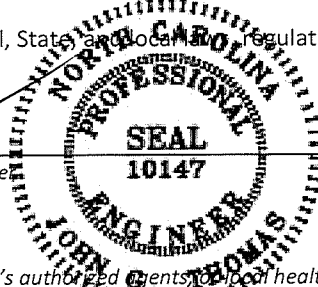
LHD USE ONLY: Initial submittal of request for ATO received: _____ by _____
Date Initials

- 1. Signed and sealed copy of the Engineer’s report that includes the information in G.S. 130A-336.1(k)(1) and 15A NCAC 18A .1971(f) Yes No
 - 2. Operation and management program and ORC contract, if applicable Yes No
 - 3. Letter documenting Owner’s acceptance of the system from the PE Yes No
 - 4. Owner meets requirements of ownership or control of the system per 15A NCAC 18A .1938(j) Yes No
 - 6. Easement, right of way, or encroachment agreement required per 15A NCAC 18A .1938(j) Yes No
 - 7. Multi-party agreements required, as applicable, pursuant to 15A NCAC 18A .1937(h) Yes No
- If yes, agreements filed in _____ County Register of Deeds in Deed Book _____ Page _____

Attestation by the Owner or the PE for Authorization to Operate

I, John G. Thomas, PE hereby attest that all items indicated above have been provided
Print name of Owner or Professional Engineer
and the system meets applicable federal, State, and local regulations, rules, and ordinances in accordance with G.S. 130A-336-.1(e)(6).

Signature of Owner or Professional Engineer



5/1/2024
Date

NOTES:

LIABILITY: The Department, the Department’s authorized agents, or local health departments shall have no liability for wastewater systems designed, constructed, and installed pursuant to an Engineer Option Permit [G.S. 130A-336.1(f)]

NORTH CAROLINA FARM BUREAU MUTUAL INSURANCE COMPANY, INC.

CERTIFICATE OF LIABILITY INSURANCE

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

INSURED NAME AND ADDRESS
 RONALD HAYWOOD PITTMAN II
 DBA PITTMAN'S SOIL CONSULTING
 1003 GREGORY FORK RD
 RICHLANDS NC 28574

CERTIFICATE HOLDER
 THOMAS ENGINEERING PA
 1316-B COMMERCE DR
 NEW BERN NC 28562

COVERAGES

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

X	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
<input checked="" type="checkbox"/>	COMMERCIAL GENERAL LIABILITY - OCCURRENCE GEN'L AGGREGATE APPLIES PER POLICY						GENERAL AGGREGATE	\$
							PRODUCTS - COMP/OPS AGGREGATE	\$
							PERSONAL & ADV INJURY	\$
							EACH OCCURRENCE	\$
							DAMAGE TO RENTED PREMISES (Ea Occurrence)	\$
							MED EXP (Any one person)	\$
<input type="checkbox"/>	BUSINESSOWNERS						EACH OCCURRENCE	\$
							AGGREGATE	\$
<input checked="" type="checkbox"/>	AUTOMOBILE LIABILITY			BAP 2134903	7/14/2023	1/14/2024	COMBINED SINGLE LIMIT (Each accident)	\$1,000,000
<input checked="" type="checkbox"/>	SCHEDULED AUTOS						BODILY INJURY (Per person)	\$
<input type="checkbox"/>	HIRED AUTOS						BODILY INJURY (Per accident)	\$
<input type="checkbox"/>	NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	\$
<input type="checkbox"/>	GARAGE LIABILITY							
<input type="checkbox"/>	(Other)							
<input type="checkbox"/>	EXCESS LIABILITY - OCCURRENCE						EACH OCCURRENCE	\$
							AGGREGATE	\$
<input checked="" type="checkbox"/>	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY POLICY APPLIES TO THE WORKERS COMPENSATION LAW IN THE STATE OF NC	N/A		WC 0243634	10/6/2022	10/6/2023	WC STATUTORY LIMITS	
							E.L. EACH ACCIDENT	\$500,000
							E.L. DISEASE - EA EMPLOYEE	\$500,000
							E.L. DISEASE - POLICY LIMIT	\$500,000
<input type="checkbox"/>	OTHER:							

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES:

CANCELLATION
 SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE
 TW
 DATE 7/27/2023

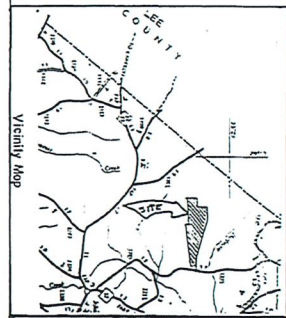
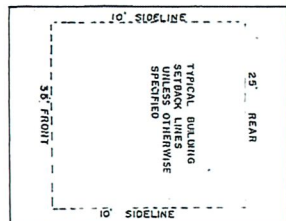
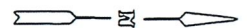
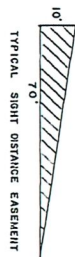
Inup Woodard

FINAL PLAT OF
CAROLINA SEASONS
 Section One

JOHNSONVILLE TWP,
 HARNETT CO., N.C.
 SCALE 1" = 200'
 October 11, 1990



Waycross, Ga
 E 85-C
 230
 400
 91
 Goldenshoe, Ga
 Carolina 91



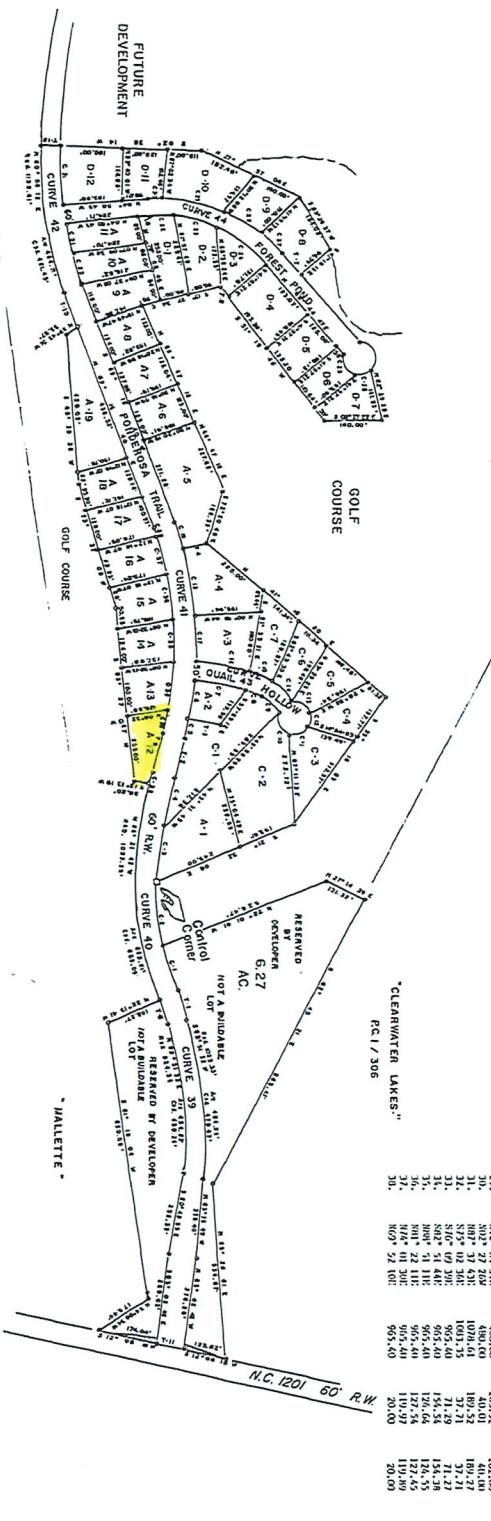
ROBERT J. BRACKEN, COUNTY REGISTRAR
 DIRECTOR AND SUPERVISOR OF THE COUNTY ARCHIVE
 FROM AN ACTUAL FIELD SURVEY THAT THE
 ERROR OF CLOSURE IS 0.00000 BY LATITUDE
 AND 0.00000 BY LONGITUDE. THE SURVEY
 WAS PREPARED IN accordance with G.S. 42-20 AS
 AMENDED.
 Robert J. Bracken
 REGISTRAR
 I, A. PAUL BRACKEN, COUNTY ARCHIVE
 A REGISTERED LAND SURVEYOR, HEREBY
 CERTIFY THAT THE FOREGOING IS A TRUE
 AND CORRECT REPRESENTATION OF THE
 SURVEY AND THE EXISTING RECORDS ON SEA.
 THIS DAY OF OCTOBER 1990.
 A. Paul Bracken
 REGISTERED LAND SURVEYOR
 No. 1234
 N.C. 42-20

CONDITIONS AND RESTRICTIONS TO BE OBSERVED BY THE BUYER OF ANY LOT IN THIS PLAT:
 1. THE BUYER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE APPLICABLE AGENCIES.
 2. THE BUYER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY UTILITIES.
 3. THE BUYER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY EASEMENTS.
 4. THE BUYER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY RECORDS.
 5. THE BUYER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY RECORDS.
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 9. THE BUYER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY RECORDS.
 10. THE BUYER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY RECORDS.

ACREAGE	ACREAGE
A-1 - 0.38 AC.	D-1 - 0.55 AC.
A-2 - 0.38 AC.	D-2 - 0.47 AC.
A-3 - 0.38 AC.	D-3 - 0.47 AC.
A-4 - 0.38 AC.	D-4 - 0.69 AC.
A-5 - 0.38 AC.	D-5 - 0.47 AC.
A-6 - 0.46 AC.	D-6 - 0.41 AC.
A-7 - 0.46 AC.	D-7 - 0.43 AC.
A-8 - 0.46 AC.	D-8 - 0.84 AC.
A-9 - 0.47 AC.	D-9 - 0.48 AC.
A-10 - 0.48 AC.	D-10 - 0.48 AC.
A-11 - 0.48 AC.	D-11 - 0.48 AC.
A-12 - 0.38 AC.	D-12 - 0.69 AC.
A-13 - 0.49 AC.	
A-14 - 0.47 AC.	
A-15 - 0.49 AC.	
A-16 - 0.48 AC.	
A-17 - 0.47 AC.	
A-18 - 0.47 AC.	
A-19 - 0.47 AC.	
A-20 - 0.88 AC.	

ALL LOTS PUBLIC WATER
 RA-20-R ZONING
 CEED REFERENCE FOR TRACT
 PAGES - 287-280

CHISE	C.L. MARKS	CHISE	CHISE	CHISE	CHISE
1.	597.46 4.94	1.	517.16 4.79	1021.35	155.36
2.	807.02 4.54	2.	807.02 2.02	1021.35	191.20
3.	812.79 5.44	3.	812.79 5.44	1021.35	191.20
4.	812.79 5.44	4.	812.79 5.44	1021.35	191.20
5.	812.79 5.44	5.	812.79 5.44	1021.35	191.20
6.	812.79 5.44	6.	812.79 5.44	1021.35	191.20
7.	812.79 5.44	7.	812.79 5.44	1021.35	191.20
8.	812.79 5.44	8.	812.79 5.44	1021.35	191.20
9.	812.79 5.44	9.	812.79 5.44	1021.35	191.20
10.	812.79 5.44	10.	812.79 5.44	1021.35	191.20
11.	812.79 5.44	11.	812.79 5.44	1021.35	191.20
12.	812.79 5.44	12.	812.79 5.44	1021.35	191.20
13.	812.79 5.44	13.	812.79 5.44	1021.35	191.20
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15.	812.79 5.44	15.	812.79 5.44	1021.35	191.20
16.	812.79 5.44	16.	812.79 5.44	1021.35	191.20
17.	812.79 5.44	17.	812.79 5.44	1021.35	191.20
18.	812.79 5.44	18.	812.79 5.44	1021.35	191.20
19.	812.79 5.44	19.	812.79 5.44	1021.35	191.20
20.	812.79 5.44	20.	812.79 5.44	1021.35	191.20
21.	812.79 5.44	21.	812.79 5.44	1021.35	191.20
22.	812.79 5.44	22.	812.79 5.44	1021.35	191.20
23.	812.79 5.44	23.	812.79 5.44	1021.35	191.20
24.	812.79 5.44	24.	812.79 5.44	1021.35	191.20
25.	812.79 5.44	25.	812.79 5.44	1021.35	191.20
26.	812.79 5.44	26.	812.79 5.44	1021.35	191.20
27.	812.79 5.44	27.	812.79 5.44	1021.35	191.20
28.	812.79 5.44	28.	812.79 5.44	1021.35	191.20
29.	812.79 5.44	29.	812.79 5.44	1021.35	191.20
30.	812.79 5.44	30.	812.79 5.44	1021.35	191.20
31.	812.79 5.44	31.	812.79 5.44	1021.35	191.20
32.	812.79 5.44	32.	812.79 5.44	1021.35	191.20
33.	812.79 5.44	33.	812.79 5.44	1021.35	191.20
34.	812.79 5.44	34.	812.79 5.44	1021.35	191.20
35.	812.79 5.44	35.	812.79 5.44	1021.35	191.20
36.	812.79 5.44	36.	812.79 5.44	1021.35	191.20
37.	812.79 5.44	37.	812.79 5.44	1021.35	191.20
38.	812.79 5.44	38.	812.79 5.44	1021.35	191.20
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41.	812.79 5.44	41.	812.79 5.44	1021.35	191.20
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43.	812.79 5.44	43.	812.79 5.44	1021.35	191.20
44.	812.79 5.44	44.	812.79 5.44	1021.35	191.20



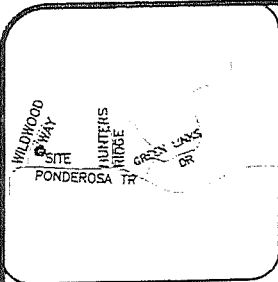
DEVELOPER
CAROLINA SEASONS
 VAN GROCE
 PO Box 2825
 SANFORD, N.C.
 Jax 10 40, 03-5561-0001
 THAL 03-9041-0030
 03-9041-0030
 03-9041-0030
 03-9155-0001-04

DATE OF THIS PLAT: 10/11/90
 JASON J. WILKINSON
 12 DEC 10
 MICKEL D. ECK

RESERVED BY DEVELOPER
 CONTROL
 CURVE 40
 CURVE 41
 CURVE 42
 CURVE 43
 CURVE 44
 CURVE 45
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RESERVED BY DEVELOPER
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 CURVE 94
 CURVE 95
 CURVE 96
 CURVE 97
 CURVE 98
 CURVE 99
 CURVE 100

BRACKEN & ASSOCIATES, P.A.
 ENGINEERS & SURVEYORS
 110 WOODLAND AVE.
 SANFORD, N.C. 27330
 DEBBE C. HILL, R.S., C - 5689



VICINITY MAP (NTS)

SETBACKS PER
PC E PG 85-C

FRONT 35'
SIDE 10'
REAR 25'

IMPERVIOUS AREA

HOUSE 1,828 SQ.FT.
DRIVE TO R/W 679 SQ.FT.
WALK 90 SQ.FT.
TOTAL 2,597 SQ.FT.

- LEGEND**
- AC=AIR CONDITIONING UNIT
 - BCC=BACK OF CURB
 - DW=CONC DRIVEWAY
 - EB=ELECTRIC BOX
 - EOP=EDGE OF PAVEMENT
 - P=PATIO
 - PO=PORCH
 - SCO=CLEANOUT
 - SW=SIDEWALK
 - TP=TELEPHONE PEDESTAL
 - WM=WATER METER
 - IRON PIPE FOUND
 - ⊙ IRON PIPE SET
 - NAIL SET



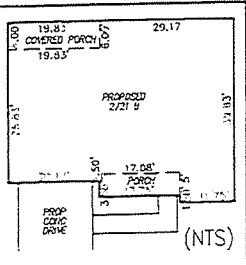
THIS EXHIBIT MAP IS OF AN EXISTING PARCEL OR PARCELS OF LAND AND DOES NOT CREATE A NEW STREET OR CHANGE AN EXISTING STREET.

DB FLOYD, PLS L-3640 DATE

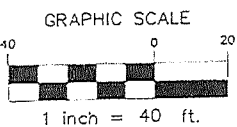
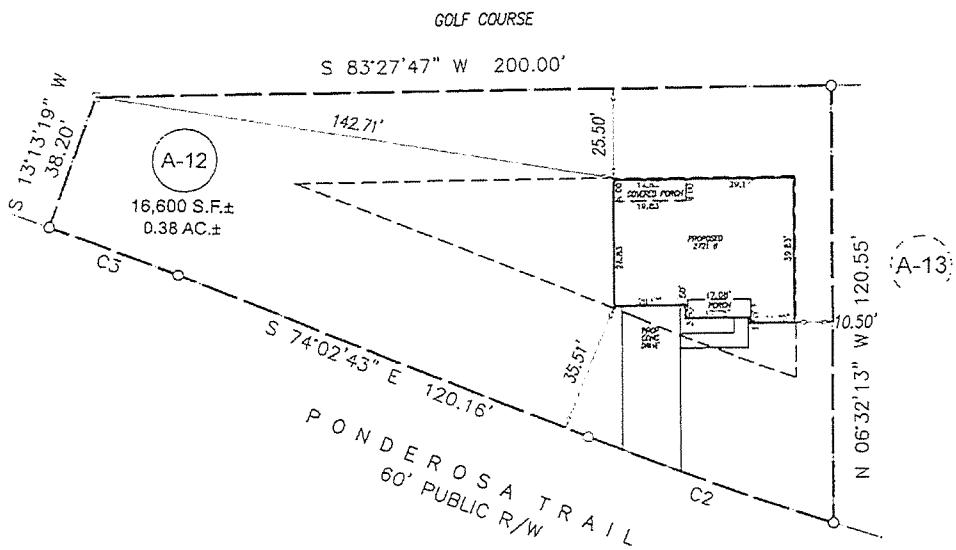
THIS MAP IS ONLY INTENDED FOR THE PARTIES AND PURPOSES SHOWN. THIS MAP IS NOT FOR RECORDATION. NO TITLE REPORT PROVIDED.

THIS MAP MAY NOT BE A CERTIFIED SURVEY AND HAS NOT BEEN REVIEWED BY LOCAL GOVERNMENT AGENCY FOR COMPLIANCE WITH ANY APPLICABLE LAND DEVELOPMENT REGULATIONS AND HAS NOT BEEN REVIEWED FOR COMPLIANCE WITH RECORDING REQUIREMENTS FOR PLATS.

- GENERAL NOTES:
1. ALL DISTANCES ARE HORIZONTAL GROUND DISTANCES IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.
 2. AREAS SHOWN HEREON WERE COMPUTED USING THE COORDINATE METHOD.
 3. LINES NOT SURVEYED ARE SHOWN AS DASHED LINES FROM INFORMATION REFERENCED ON THE FACE OF THIS SURVEY.
 4. PROPERTY MAY BE SUBJECT TO ANY/ALL EASEMENTS AND RESTRICTIONS OF RECORD. THIS SURVEY IS A CORRECT REPRESENTATION OF THE LAND PLATTED AND OR DEEDED AND HAS BEEN PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT. A NORTH CAROLINA LICENSED ATTORNEY-AT-LAW SHOULD BE CONSULTED REGARDING CORRECT OWNERSHIP, WIDTH AND LOCATION OF EASEMENTS, AND OTHER TITLE QUESTIONS REVEALED BY TITLE EXAMINATION.
 5. DRIVEWAY IMPERVIOUS CALCULATION SHOWN HEREON CALCULATED TO THE FRONT PROPERTY LINE/RIGHT-OF-WAY.
 6. THIS PARCEL IS NOT LOCATED WITHIN A FLOOD HAZARD ZONE AS INDICATED ON CID NO. 370328 PANEL 9546, SUFFIX L HARNETT COUNTY WITH AN EFFECTIVE DATE OF 10/17/2006.



(NTS)



CURV	PLS	LENGTH	BEARING	AREA	ANGLE	CHORD	BEARING	CHORD	LENGTH
C2		71.29	S 78°09'38" E	965.40	471.51	71.29	S 78°09'38" E	71.29	71.29
C3		57.71	S 75°02'36" E	1081.35	1159.40	57.71	S 75°02'36" E	57.71	57.71

PRELIMINARY PLOT PLAN

PROJECT	2023 CAROLINA SEASONS
	DRAWN BY: SEER
	SCALE: 1"=40'
	DATE: 07-12-2023

FOR
ADAMS RALEIGH
361 PONDEROSA TRAIL
LOT A-12 CAROLINA SEASONS SUBDIVISION
JOHNSONVILLE TWP., HARNETT CO., NC
P.C. E, PG. 85-C

ECLS GLOBAL
U.S. VETERAN-OWNED
19 N MCKINLEY ST
COATS, NC 27521
910.897.3267 XELSGLOBAL@GMAIL.COM
910.897.2229 (FAX) COFS-4173



THOM-11

OP ID: DS

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
04/22/2024

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Robinson and Stith Insurance 513 Pollock Street P. O. Box 177 New Bern, NC 28563 Debra Strachan	252-633-1174	CONTACT NAME: PHONE (A/C, No, Ext): 252-633-1174 FAX (A/C, No): 252-633-5429 E-MAIL ADDRESS: <table style="width: 100%; border: none;"> <tr> <td style="text-align: center; border: none;">INSURER(S) AFFORDING COVERAGE</td> <td style="text-align: right; border: none;">NAIC #</td> </tr> <tr> <td style="border: none;">INSURER A : Cincinnati Insurance Company</td> <td style="border: none; text-align: right;">10677</td> </tr> <tr> <td style="border: none;">INSURER B : James River Ins Co</td> <td style="border: none;"></td> </tr> <tr> <td style="border: none;">INSURER C :</td> <td style="border: none;"></td> </tr> <tr> <td style="border: none;">INSURER D :</td> <td style="border: none;"></td> </tr> <tr> <td style="border: none;">INSURER E :</td> <td style="border: none;"></td> </tr> <tr> <td style="border: none;">INSURER F :</td> <td style="border: none;"></td> </tr> </table>	INSURER(S) AFFORDING COVERAGE	NAIC #	INSURER A : Cincinnati Insurance Company	10677	INSURER B : James River Ins Co		INSURER C :		INSURER D :		INSURER E :		INSURER F :	
INSURER(S) AFFORDING COVERAGE	NAIC #															
INSURER A : Cincinnati Insurance Company	10677															
INSURER B : James River Ins Co																
INSURER C :																
INSURER D :																
INSURER E :																
INSURER F :																
INSURED Thomas Engineering, PA, PO Box 1309 New Bern, NC 28563-1309																

COVERAGES

CERTIFICATE NUMBER:

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS														
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:			ECP0250395	05/01/2024	05/01/2025	<table style="width: 100%; border: none;"> <tr><td>EACH OCCURRENCE</td><td style="text-align: right;">\$ 2,000,000</td></tr> <tr><td>DAMAGE TO RENTED PREMISES (Ea occurrence)</td><td style="text-align: right;">\$ 2,000,000</td></tr> <tr><td>MED EXP (Any one person)</td><td style="text-align: right;">\$ 10,000</td></tr> <tr><td>PERSONAL & ADV INJURY</td><td style="text-align: right;">\$ 2,000,000</td></tr> <tr><td>GENERAL AGGREGATE</td><td style="text-align: right;">\$ 4,000,000</td></tr> <tr><td>PRODUCTS - COMP/OP AGG</td><td style="text-align: right;">\$ 4,000,000</td></tr> <tr><td></td><td style="text-align: right;">\$</td></tr> </table>	EACH OCCURRENCE	\$ 2,000,000	DAMAGE TO RENTED PREMISES (Ea occurrence)	\$ 2,000,000	MED EXP (Any one person)	\$ 10,000	PERSONAL & ADV INJURY	\$ 2,000,000	GENERAL AGGREGATE	\$ 4,000,000	PRODUCTS - COMP/OP AGG	\$ 4,000,000		\$
EACH OCCURRENCE	\$ 2,000,000																				
DAMAGE TO RENTED PREMISES (Ea occurrence)	\$ 2,000,000																				
MED EXP (Any one person)	\$ 10,000																				
PERSONAL & ADV INJURY	\$ 2,000,000																				
GENERAL AGGREGATE	\$ 4,000,000																				
PRODUCTS - COMP/OP AGG	\$ 4,000,000																				
	\$																				
A	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO OWNED AUTOS ONLY <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS ONLY			EBA0087044	05/01/2024	05/01/2025	<table style="width: 100%; border: none;"> <tr><td>COMBINED SINGLE LIMIT (Ea accident)</td><td style="text-align: right;">\$ 1,000,000</td></tr> <tr><td>BODILY INJURY (Per person)</td><td style="text-align: right;">\$</td></tr> <tr><td>BODILY INJURY (Per accident)</td><td style="text-align: right;">\$</td></tr> <tr><td>PROPERTY DAMAGE (Per accident)</td><td style="text-align: right;">\$</td></tr> <tr><td></td><td style="text-align: right;">\$</td></tr> </table>	COMBINED SINGLE LIMIT (Ea accident)	\$ 1,000,000	BODILY INJURY (Per person)	\$	BODILY INJURY (Per accident)	\$	PROPERTY DAMAGE (Per accident)	\$		\$				
COMBINED SINGLE LIMIT (Ea accident)	\$ 1,000,000																				
BODILY INJURY (Per person)	\$																				
BODILY INJURY (Per accident)	\$																				
PROPERTY DAMAGE (Per accident)	\$																				
	\$																				
	<input type="checkbox"/> UMBRELLA LIAB <input type="checkbox"/> EXCESS LIAB DED RETENTION \$						<table style="width: 100%; border: none;"> <tr><td>EACH OCCURRENCE</td><td style="text-align: right;">\$</td></tr> <tr><td>AGGREGATE</td><td style="text-align: right;">\$</td></tr> <tr><td></td><td style="text-align: right;">\$</td></tr> </table>	EACH OCCURRENCE	\$	AGGREGATE	\$		\$								
EACH OCCURRENCE	\$																				
AGGREGATE	\$																				
	\$																				
A	<input checked="" type="checkbox"/> WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) <input type="checkbox"/> Y <input checked="" type="checkbox"/> N If yes, describe under DESCRIPTION OF OPERATIONS below		N/A	EWC0318297 09	05/01/2024	05/01/2025	<table style="width: 100%; border: none;"> <tr><td><input checked="" type="checkbox"/> PER STATUTE</td><td><input type="checkbox"/> OTH-ER</td><td></td></tr> <tr><td>E.L. EACH ACCIDENT</td><td></td><td style="text-align: right;">\$ 1,000,000</td></tr> <tr><td>E.L. DISEASE - EA EMPLOYEE</td><td></td><td style="text-align: right;">\$ 1,000,000</td></tr> <tr><td>E.L. DISEASE - POLICY LIMIT</td><td></td><td style="text-align: right;">\$ 1,000,000</td></tr> </table>	<input checked="" type="checkbox"/> PER STATUTE	<input type="checkbox"/> OTH-ER		E.L. EACH ACCIDENT		\$ 1,000,000	E.L. DISEASE - EA EMPLOYEE		\$ 1,000,000	E.L. DISEASE - POLICY LIMIT		\$ 1,000,000		
<input checked="" type="checkbox"/> PER STATUTE	<input type="checkbox"/> OTH-ER																				
E.L. EACH ACCIDENT		\$ 1,000,000																			
E.L. DISEASE - EA EMPLOYEE		\$ 1,000,000																			
E.L. DISEASE - POLICY LIMIT		\$ 1,000,000																			
B	Errors & Omissions			00105540-3	07/22/2023	07/22/2024	<table style="width: 100%; border: none;"> <tr><td>Per Occurr</td><td style="text-align: right;">\$ 1,000,000</td></tr> <tr><td>Aggregate</td><td style="text-align: right;">\$ 1,000,000</td></tr> </table>	Per Occurr	\$ 1,000,000	Aggregate	\$ 1,000,000										
Per Occurr	\$ 1,000,000																				
Aggregate	\$ 1,000,000																				

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER

CANCELLATION

THOMA14

LR Thomas & Sons
 PO Box 1309
 New Bern, NC 28563

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE
 Debra Strachan

CERTIFICATE OF LIABILITY INSURANCE

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INSURED YELLOW DOG GRADING &
NAME AND LANDSCAPING LLC
ADDRESS 2693 MCDUGALD RD
 LILLINGTON NC 27546

CERTIFICATE THOMAS ENGINEERING, PA
HOLDER 1316-B COMMERCE DR
 PO BOX 1309
 NEW BERN NC 28563

COVERAGES

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

X	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
<input checked="" type="checkbox"/>	COMMERCIAL GENERAL LIABILITY - OCCURRENCE GEN'L AGGREGATE APPLIES PER POLICY			CPP 0135427	10/04/2023	10/04/2024	GENERAL AGGREGATE	\$1,000,000
							PRODUCTS - COMP/OPS AGGREGATE	\$1,000,000
							PERSONAL & ADV INJURY	\$1,000,000
							EACH OCCURRENCE	\$1,000,000
							DAMAGE TO RENTED PREMISES (Ea Occurrence)	\$100,000
							MED EXP (Any one person)	\$5,000
<input type="checkbox"/>	BUSINESSOWNERS						EACH OCCURRENCE	\$
							AGGREGATE	\$
<input checked="" type="checkbox"/>	AUTOMOBILE LIABILITY			BAP 2166556	02/13/2024	08/13/2024	COMBINED SINGLE LIMIT (Each accident)	\$500,000
<input checked="" type="checkbox"/>	SCHEDULED AUTOS						BODILY INJURY (Per person)	\$
<input checked="" type="checkbox"/>	HIRED AUTOS						BODILY INJURY (Per accident)	\$
<input checked="" type="checkbox"/>	NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	\$
<input type="checkbox"/>	GARAGE LIABILITY							
<input type="checkbox"/>	(Other)							
<input type="checkbox"/>	EXCESS LIABILITY - OCCURRENCE						EACH OCCURRENCE	\$
							AGGREGATE	\$
<input checked="" type="checkbox"/>	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY POLICY APPLIES TO THE WORKERS COMPENSATION LAW IN THE STATE OF NC	N/A		WC 0248742	02/11/2024	02/11/2025	WC STATUTORY LIMITS	
							E.L. EACH ACCIDENT	\$100,000
							E.L. DISEASE - EA EMPLOYEE	\$100,000
							E.L. DISEASE - POLICY LIMIT	\$500,000
<input type="checkbox"/>	OTHER:							

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES:

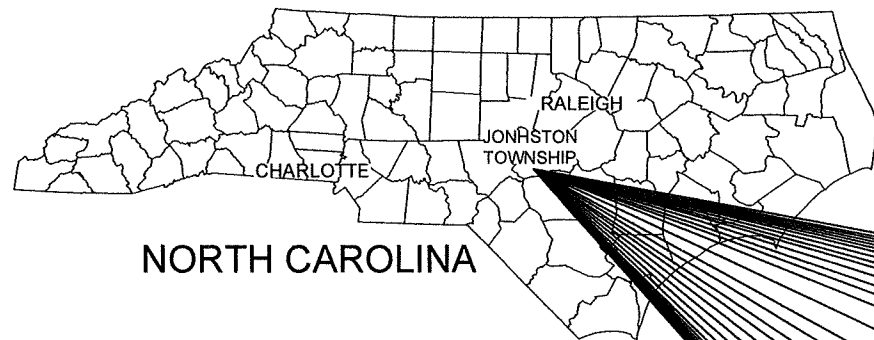
CANCELLATION
 SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

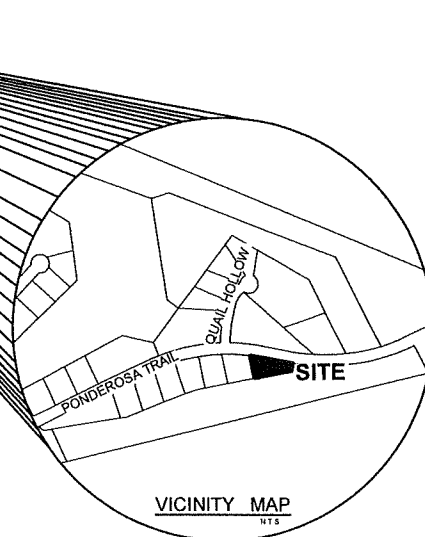
DATE 03/27/2024

Anna Litten

SINGLE FAMILY RESIDENCE ONSITE WASTEWATER SYSTEM FOR LOT A - 12 CAROLINA SEASONS SUBDIVISION JOHNSONVILLE TOWNSHIP HARNETT COUNTY - NORTH CAROLINA



NORTH CAROLINA



CONSULTING ENGINEER:

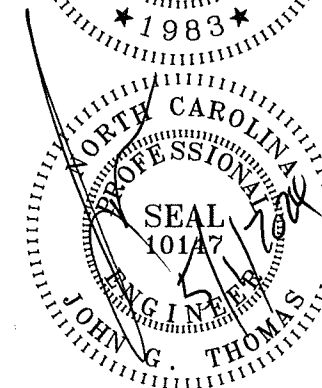
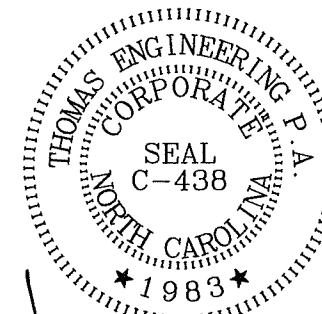
THOMAS ENGINEERING, P.A.
P.O. BOX 1309
NEW BERN, NORTH CAROLINA 28563
(252) 637-2727 FAX: (252) 636-2448

SOIL SCIENTIST:

R. HAYWOOD PITTMAN II
1073-1 GREGORY FORK ROAD
RICHLANDS, NORTH CAROLINA 28574
(910) 330-2784

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SCHEDULE OF DRAWINGS

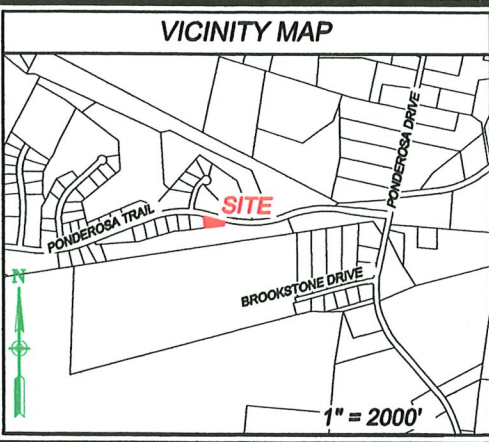
SHEET	TITLE
1	COVER
2	SITE PLAN
3	TANK & D-BOX
4-5	DISPOSAL SYSTEM LAYOUT
6	SPECIFICATIONS
7	OPERATION & MAINTENANCE
8	DESIGN CALCULATIONS
9	SOIL EVALUATION
10	CONTRACTOR'S STATEMENT / ENGINEER'S CERTIFICATE

RECORD DRAWINGS

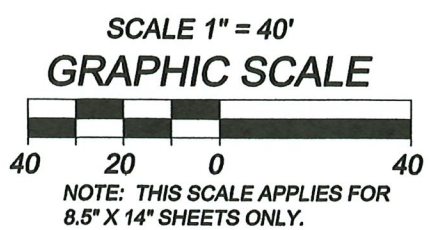
COVER SHEET	
CAROLINA SEASONS LOT A - 12 SINGLE FAMILY RESIDENCE ONSITE WASTEWATER SYSTEM	
JOHNSONVILLE TOWNSHIP HARNETT COUNTY NORTH CAROLINA	
OWNER ADAMS HOMES AEC, LLC. 149 US HWY 70 WEST GARNER, NORTH CAROLINA 27529	
SCALE: N.T.S.	DATE: 02/19/2024
PROJECT #: 2023_029	SHEET: 1 of 10

THOMAS ENGINEERING, PA est 1983
civil engineering • land development • project management

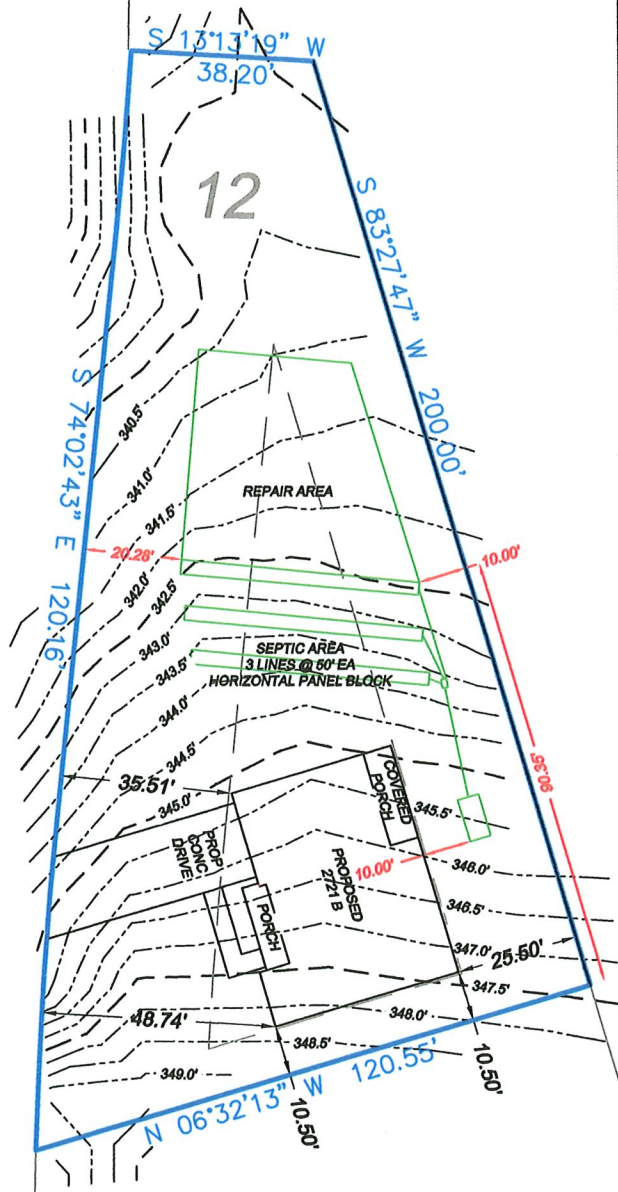
1316-B Commerce Drive, New Bern, NC 28562
P.O. Box 1309, New Bern, NC 28563
www.ThomasEngineeringPA.com
Office: 252.637.2727 Fax: 252.636.2448



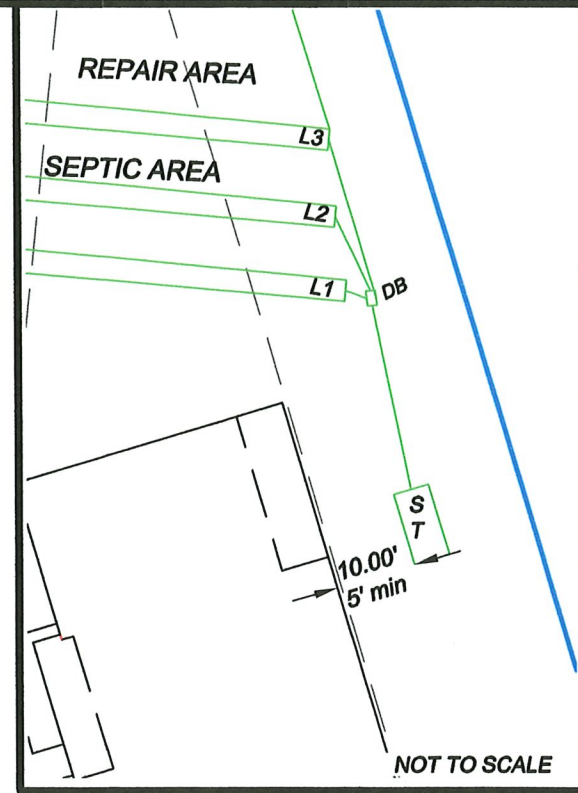
- SITE NOTES AND DATA**
1. PARCEL ID #:9567-30-2261
 2. PARCEL ADDRESS: 361 PONDEROSA TRAIL CAMERON, NC 28326
 3. EASEMENTS:
a) AS SHOWN ON PLAT
 4. MINIMUM BUILDING SETBACKS AREA AS SHOWN.
 5. MAP REFERENCE:
CAROLINA SEASONS SECTION ONE PLAT/MAP BOOK: E, PAGES: 85 C
 6. IN ACCORDANCE WITH FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP NUMBER 3710956600J, DATED 10/03/2006, LOT 12 IS NOT LOCATED IN A FLOOD ZONE (ZONE X). THIS REPORT IN NO WAY SUPERCEDES THE ABOVE REFERENCED F.I.R.M.
 7. ELEVATION DATUM: NAVD 88
 8. WATER SERVICE PROVIDED BY NORTHERN NASH.
 9. SEWER SERVICE PROVIDED BY INDIVIDUAL SEPTIC SYSTEM.
 10. AFTER INSTALLATION THE SITE SHOULD BE LANDSCAPED TO SHED SURFACE WATER. ANY ALTERATIONS TO THE SITE MAY IMPACT SOIL CONDITIONS.



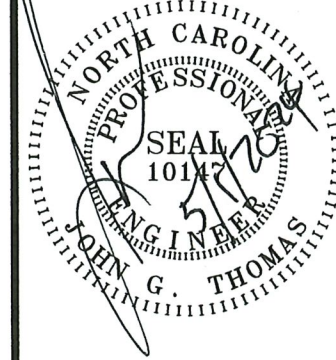
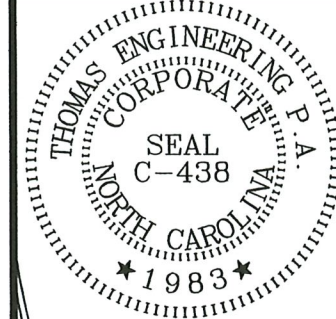
PONDEROSA TRAIL
60' RW PUBLIC



13



NOT TO SCALE



LEGEND	
SYMBOL	DESCRIPTION
	Temporary Benchmark
	Minimum Setback Line
	Easement Line
	2" Supply Line
	Major Contour Lines
	Minor Contour Lines
MBL	Minimum Building Line
	Staking Box Corner
	SOD
	Transformer
	Electrical Service
	Light Pole
	Water Meter
ST / PT	Septic Tank / Pump Tank
DB	Distribution Box
L#	Septic Line
R/W	Right of Way

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RECORD DRAWINGS

SITE PLAN

CAROLINA SEASONS
LOT A - 12
SINGLE FAMILY RESIDENCE
ONSITE WASTEWATER SYSTEM

JOHNSONVILLE TOWNSHIP HARNETT COUNTY NORTH CAROLINA

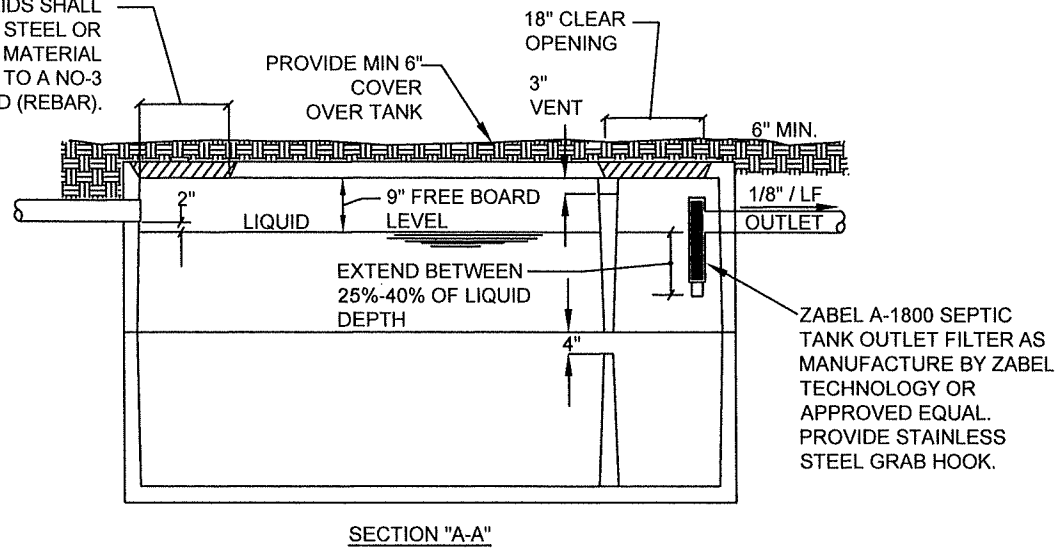
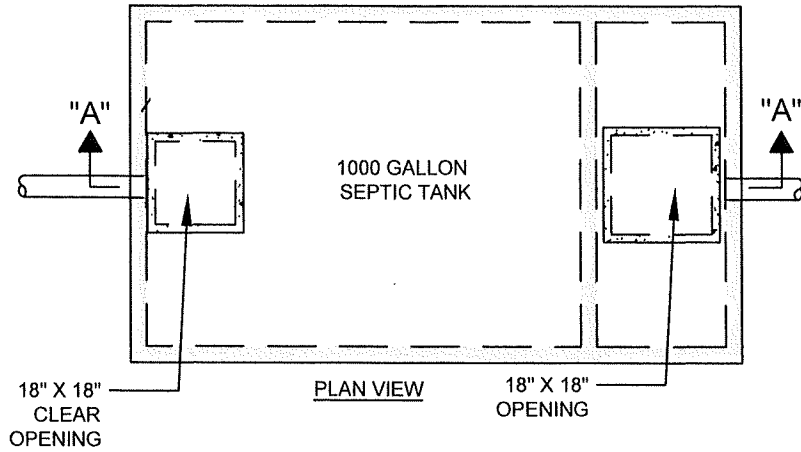
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ADAMS HOMES AEC, LLC.
149 US HWY 70 WEST
GARNER, NORTH CAROLINA 27529

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PROJECT #: 2023_029	SHEET: 2 of 10

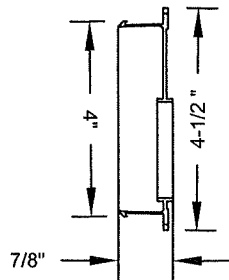
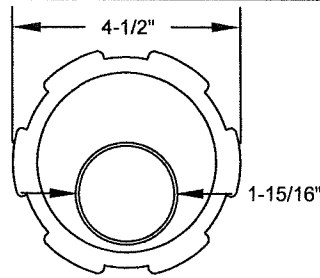
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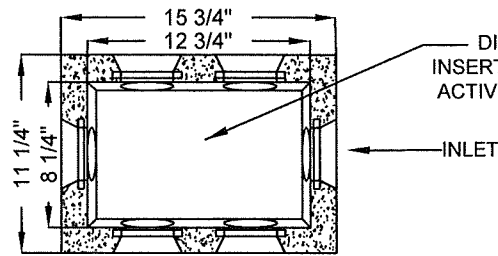
18" CLEAR OPENING TANK LIDS SHALL HAVE A HANDLE OF STEEL OR OTHER ROT-RESISANT MATERIAL EQUIVALENT IN STRENGTH TO A NO-3 REINFORCING ROD (REBAR).



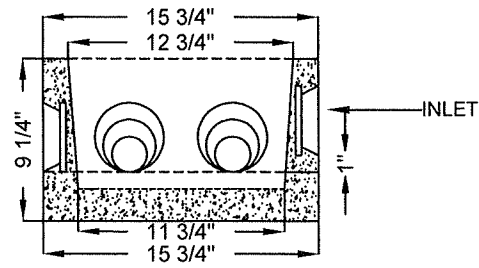
SEPTIC TANK



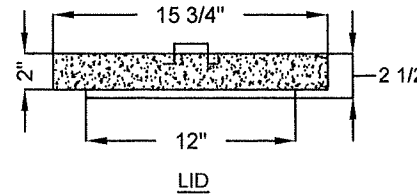
DIAL-A-FLOW REGULATOR (TYP.)



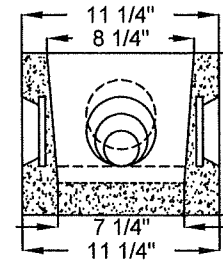
TOP VIEW



SIDE VIEW



LID



END VIEW

DISTRIBUTION BOX

OWNER
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149 US HWY 70 WEST
GARNER, NORTH CAROLINA 27529

SOIL SCIENTIST
R. HAYWOOD PITMAN II
1073-1 GREGORY FORK ROAD
RICHLANDS, NORTH CAROLINA 28574

PROFESSIONAL ENGINEER
THOMAS ENGINEERING PA.
JOHN G. THOMAS
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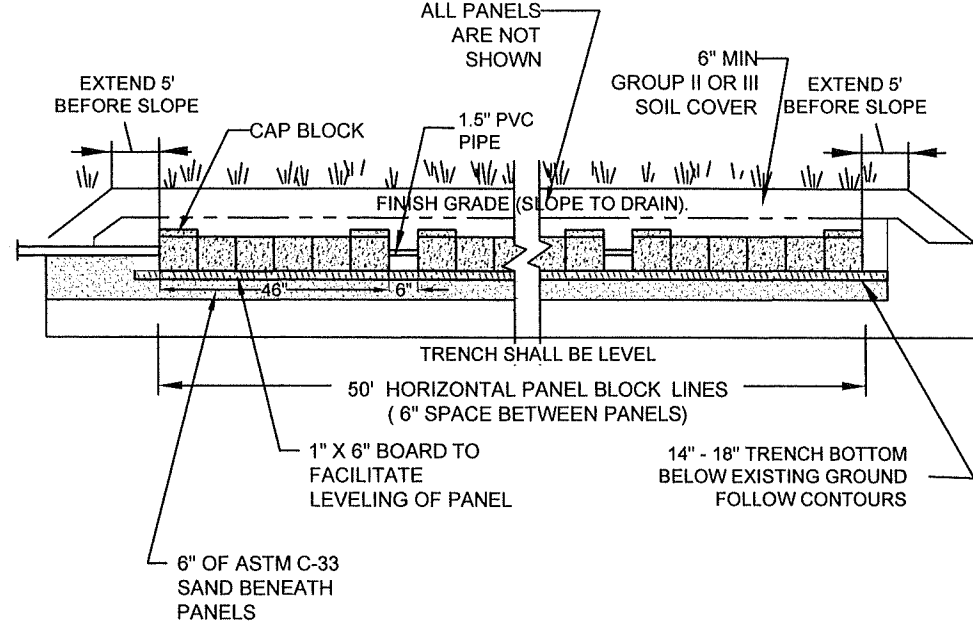
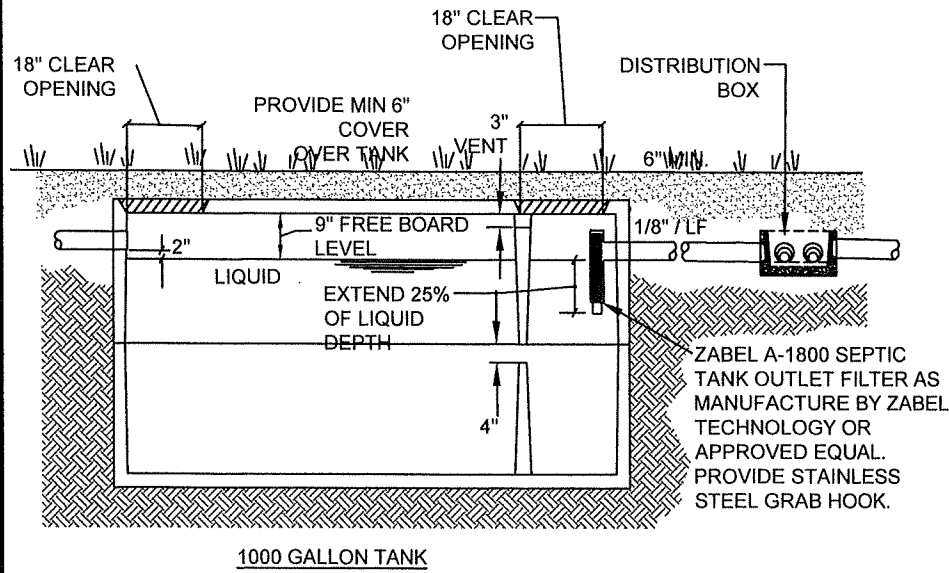
RECORD DRAWINGS

TANK & DISTRIBUTION BOX
CAROLINA SEASONS
LOT A - 12
SINGLE FAMILY RESIDENCE
ONSITE WASTEWATER SYSTEM
JOHNSONVILLE TOWNSHIP HARNETT COUNTY NORTH CAROLINA

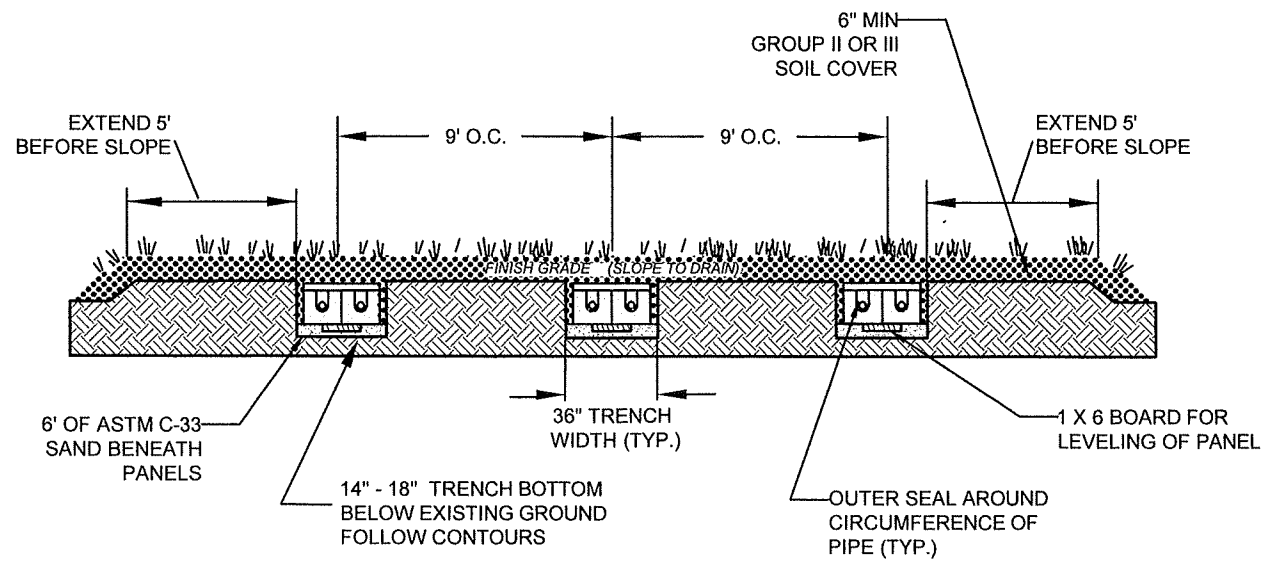
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TYPICAL SECTION



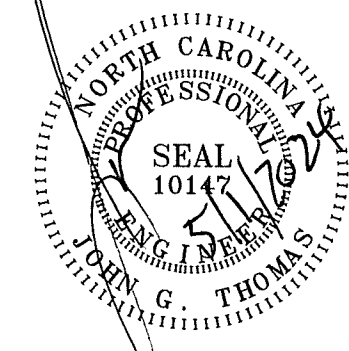
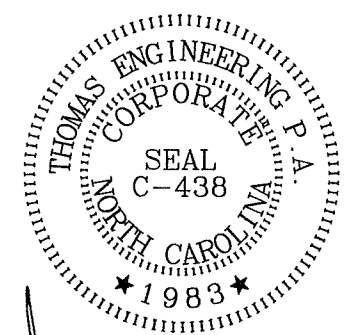
TYPICAL CROSS SECTION

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RECORD DRAWINGS

PANEL BLOCK SYSTEM
CAROLINA SEASONS
LOT A - 12
SINGLE FAMILY RESIDENCE
ONSITE WASTEWATER SYSTEM

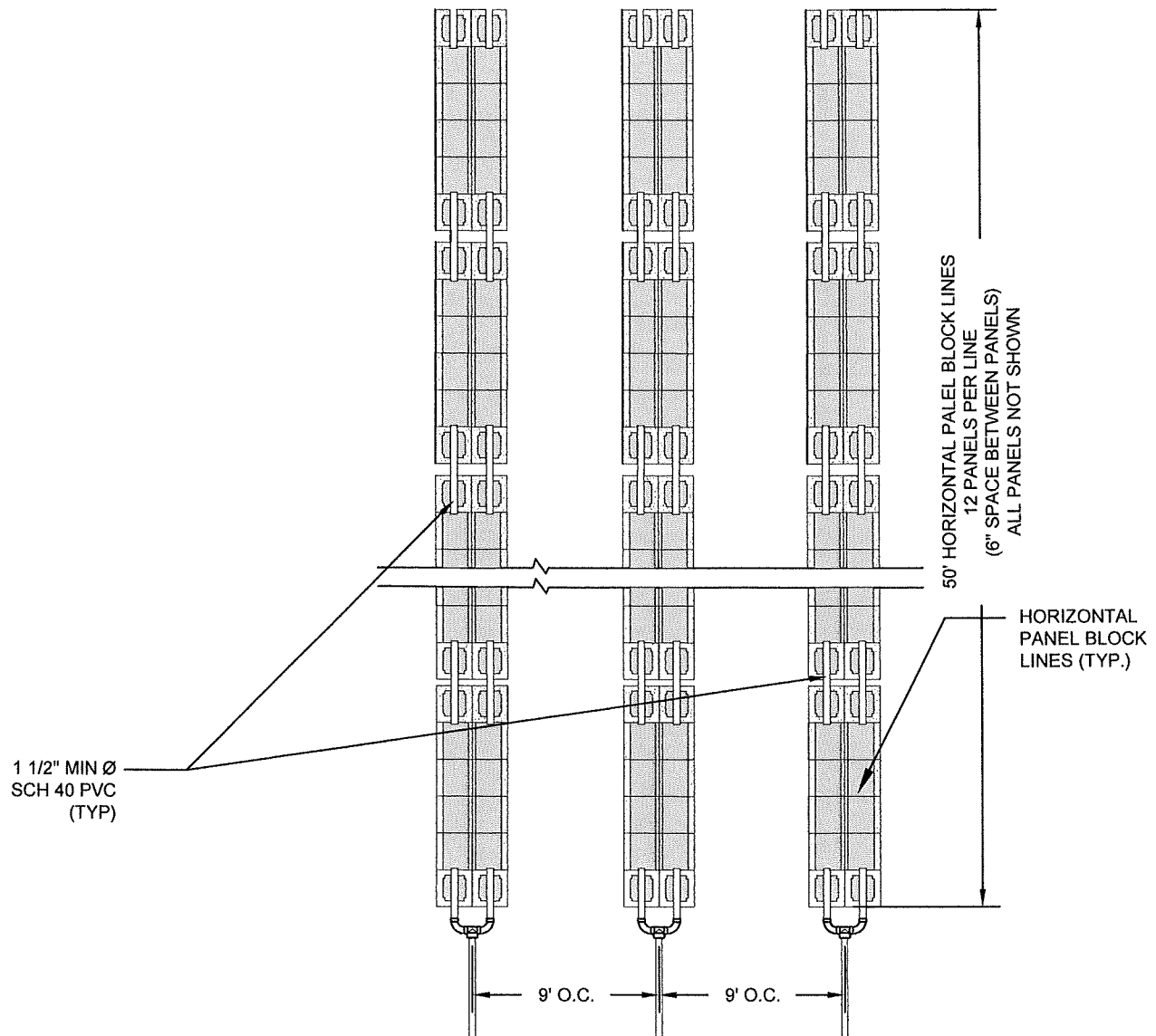
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1 1/2" MIN Ø
SCH 40 PVC
(TYP)

50' HORIZONTAL PANEL BLOCK LINES
12 PANELS PER LINE
(6" SPACE BETWEEN PANELS)
ALL PANELS NOT SHOWN

HORIZONTAL
PANEL BLOCK
LINES (TYP.)

9' O.C. 9' O.C.

TYPICAL PLAN VIEW

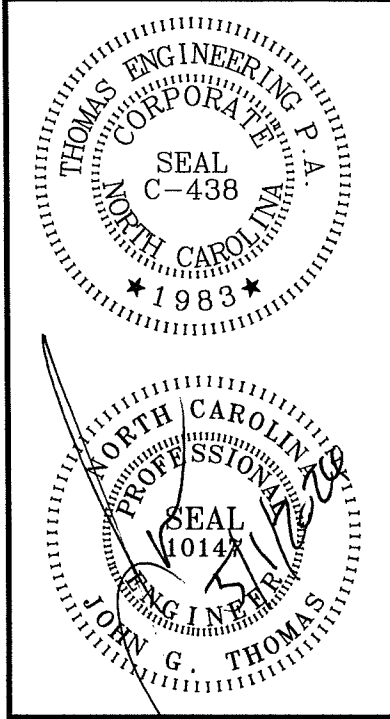


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RECORD DRAWINGS

HORIZONTAL PANEL BLOCK
CAROLINA SEASONS
LOT A - 12
SINGLE FAMILY RESIDENCE
ONSITE WASTEWATER SYSTEM
JOHNSONVILLE TOWNSHIP HARNETT COUNTY NORTH CAROLINA

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SPECIFICATIONS

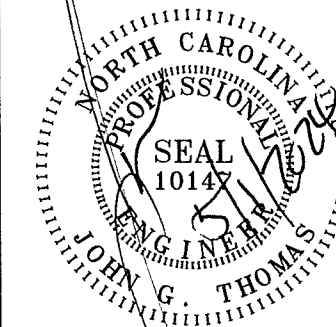
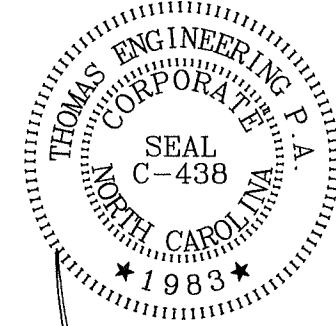
1. SEPTIC TANKS SHALL MEET THE MINIMUM STANDARDS OF DESIGN AND CONSTRUCTION AS REQUIRED BY NORTH CAROLINA ADMINISTRATIVE CODE 15A. 18A. 1954 ENTITLED "MINIMUM STANDARDS FOR PRECAST REINFORCED CONCRETE TANKS".
2. SEPTIC TANKS SHALL BE INSTALLED LEVEL.
3. THE EFFLUENT FILTER SHALL BE ZABEL A-1800 AS MANUFACTURED BY ZABEL ENVIRONMENTAL TECHNOLOGY OR APPROVED EQUAL. A STAINLESS STEEL GRAB HOOK SHALL BE PROVIDED.
4. DISTRIBUTION BOXES SHALL BE MANUFACTURER OUT OF CONCRETE AND SHALL MEET THE STANDARDS OF NORTH CAROLINA ADMINISTRATIVE CODE 15A. 18A. 1955(J). DIAL-A-FLOW INSERTS SHALL BE USED TO LEVEL AND EQUALIZE THE EFFLUENT FLOW TO EACH DRAIN LINE. THE DISTRIBUTION BOXES SHALL BE INSTALLED LEVEL.
5. ALL PIPING SHALL BE SCHEDULE 40 PVC AND INSTALLED AT A MINIMUM SLOPE OF 1/8" PER FOOT.
6. ALL CONNECTING PIPING BETWEEN THE SEPTIC TANK, DISTRIBUTION BOXES, AND DRAIN LINES SHALL BE WATER TIGHT.
7. THE DISPOSAL SYSTEM IS A HORIZONTAL PANEL BLOCK SEWAGE EFFLUENT SUBSURFACE DISPOSAL SYSTEM.
 - a. HORIZONTAL PANEL BLOCK USED IN NITRIFICATION TRENCHES SHALL BE INSTALLED ACCORDING TO THE MINIMUM AND MAXIMUM DIMENSIONS IN TABLE VI. B OF THE ABOVE DOCUMENT. INSTALLATION FOR MULTIPLE LINE SYSTEMS SHALL BEGIN IN THE MOST CONFINING AREA AND WORKED TO THE MORE OPEN AREAS.
 - b. THE INLET TO THE HORIZONTAL PANEL BLOCK SHALL BE IN THE UPPERMOST PORTION OF THE BEGINNING PANEL BLOCK WITH CAP CLOSEST TO THE TANK.
 - c. BACKFILL SHALL BE PLACED BENEATH THE PANELS THE WIDTH OF THE TRENCH TO A MINIMUM THICKNESS OF 6 INCHES AND SHALL ALSO BE PLACED BETWEEN THE TRENCH AND HORIZONTAL PANEL BLOCK SIDEWALL TO A MINIMUM COMPACTED (CAREFULLY WALKED IN) HEIGHT THAT IS EQUAL TO THE TOP OF THE HORIZONTAL PANEL BLOCK PLUS 6" MINIMUM SOIL CAP. INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION REQUIREMENTS. BACKFILL SAND MATERIAL SHALL BE A CLEAN, SCREENED, MEDIUM-GRADE SAND THAT IS NATURALLY OCCURRING. ACCEPTABLE SANDS ARE SANDS THAT ARE SUITABLE FOR THE PRODUCTION OF READY-MIX CONCRETE AND CLEAN OF ORGANIC DEBRIS AND STONE. IN TRUE GROUP I SOILS, PANELS CAN BE INSTALLED DIRECTLY ON THE TRENCH BOTTOM (WHEN SOIL DEPTH IS LIMITED). ADDITIONAL BACKFILL SAND USED DURING INSTALLATION SHOULD MEET GRADE AND SPECS AS LISTED. PRODUCT DESCRIPTION INCLUDES, BUT IS NOT LIMITED TO: CONCRETE SAND, NC-2S SAND, ASTM C-33 SAND, FA-10 SAND AND GRADE "A" SAND. PRODUCT SUITABILITY IS AN IMPORTANT COMPONENT OF THE SYSTEM.
 - d. HORIZONTAL PANEL BLOCK SYSTEMS SHALL BE INSTALLED UTILIZING FOAM SEALERS, AS INDICATED ON THE DRAWINGS. INNER SEAL AND OUTER SEAL LOCATIONS AND PROCEDURES SHALL BE FOLLOWED.
 - e. VEHICULAR TRAFFIC OR CONSTRUCTION EQUIPMENT MAY TRAVERSE THE HORIZONTAL PANEL BLOCK SYSTEM ONLY WHEN THE LOAD IS BRIDGED OVER THE TRENCH SO AS NOT TO DISTURB THE PANEL BLOCKS. THE LOAD MAY BE BRIDGED WITH A MINIMUM OF 6 INCHES OF COMPACTED SOIL COVER OVER SHALLOW HORIZONTAL PANEL BLOCKS.
 - f. HORIZONTAL PANEL BLOCK TRENCHES SHALL BE CONSTRUCTED LEVEL IN ALL DIRECTIONS WITH A PLUS OR MINUS ONE-HALF-INCH TOLERANCE FROM SIDE-TO-SIDE AND MAXIMUM FALL IN A SINGLE TRENCH BOTTOM NOT EXCEEDING ONE-FOURTH INCH IN 10 FEET END-TO-END FOR ANY CONTINUOUS CONTOURED SEGMENT. TRENCHES SHALL FOLLOW THE CONTOUR OF THE GROUND SURFACE ELEVATION (UNIFORM DEPTH).
 - g. AFTER DETERMINATION OF THE EXISTING GRADE AND CONTOURS, USING THE LOWEST OR SHALLOWEST GRADE ON CONTOUR, ADD THE SPECIFIED TRENCH DEPTH. EXCAVATE THE TRENCH TO THE REQUIRED ELEVATION, CHECKING GRADE FREQUENTLY. RECOMMENDED TRENCH WIDTH FOR HORIZONTAL PANELS IS THREE (3) FEET WIDE AND SPACED AT NINE (9) FEET ON CENTER.
 - h. IF SMEARING OF A THE SIDE WALLS IS PRESENT (AS IS THE CASE IN MOST CLAY DOMINANT MINERALOGY), SIDE WALLS EFFECTED SHALL BE RAKED TO BRING THEM BACK TO ORIGINAL STRUCTURE. INSTALL A SIX (6) INCH LAYER OF APPROPRIATE BACKFILL SAND (NATURAL, CLEAN, SCREENED) IN THE THREE (3) FOOT WIDE TRENCH AND LEVEL TO SPECIFIED GRADE.
 - i. INSTALL 1X6 INCH BOARDS FLAT DOWN ALONG THE MIDDLE OF THE ENTIRE LENGTH OF THE TRENCH.

- CHECK THE GRADE OF THE BOARDS BY SHOOTING THE GRADE OFF THE TOP OF THE BOARDS. ONCE GRADE BOARDS HAVE BEEN SET AND ESTABLISHED, PANELS MAY BE SET INTO THE TRENCH ON TOP OF THE BOARDS USING EQUIPMENT AND A LIFT CHAIN, OR IF NEEDED BE BY HAND. PANELS CAN BE PLACED ABOUT 6 INCHES APART. THIS SPACING CAN BE ADJUSTED TO ENSURE THE CORRECT NUMBER OF PANELS CAN BE PLACED INTO EACH NITRIFICATION LINE.
- j. AT THE BEGINNING OF EACH LINE, INSTALL AND ENTRY 'T' (FOR GRAVITY DISTRIBUTION) TO DIVIDE THE GRAVITY FLOW, AS CLOSE TO THE BEGINNING OF THE FIRST PANEL AS POSSIBLE.
 - k. INSTALLATION OF AN APPROVED FOAM SEALER OR TAR SEAL ROPE SHALL BE PLACE IN THE BOTTOM OF THE 'U' OUTS FOR FOAM SEALS AROUND THE PIPE AS INDICATED ON THE DRAWINGS AND IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.. ONCE THE FOAM SEALER OR TAR SEAL ROPE IS IN PLACE, INSTALLATION OF THE PVC DISTRIBUTION PIPE(S) ALONG THE LENGTH OF THE TRENCH FROM PANEL TO PANEL SHALL BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS PER THE TYPE OF SYSTEM TO BE INSTALLED (GRAVITY/PRESSURE DISTRIBUTION).
 - l. AFTER COMPLETION OF THE PIPE INSTALLATION, USING THE FOAM SEALER OR TAR SEAL ROPE, FORM A COMPLETE SEAL OF ALL OUTER CUTOUTS IN THE BLOCKS, AND INSURE THAT THE INNER SEALS ARE PARTIAL SEALS THAT DO NOT EXTEND OVER THE TOP OF THE PVC PIPE. AFTER COMPLETING THE INNER AND OUTER SEALS, PLACE A CAP BLOCK ON EACH END OF THE PANEL TO COVER ALL OPENINGS. THE CAP BLOCK WILL SERVE AS AN INSPECTION PORT IN THE FUTURE.
 - m. USING THE SAME BACKFILL SAND AS USED IN THE TRENCH BOTTOM TO BACKFILL UP TO THE TOP OF THE PANEL BLOCK. THE SYSTEM IS NOW READY FOR FINAL INSPECTION. UPON FINAL INSPECTION, SOIL COVER IS TO BE ADDED OVER THE TOP OF THE PANEL BLOCK SYSTEM.
 - n. HORIZONTAL PANEL BLOCK SYSTEMS INSTALLED ON A SLOPING SITE MAY USE DISTRIBUTION DEVICES OR STEP-DOWNS AS DESCRIBED IN 15A NCAC 18A.1955(J) AND (L) WHEN IT IS NECESSARY TO CHANGE LEVEL NITRIFICATION LINE SEGMENTS FROM UPPER TO LOWER ELEVATIONS. HOWEVER, THE REQUIREMENT TO FULLY UTILIZE THE UPSTREAM NITRIFICATION TRENCH APPLIES TO AN ELEVATION AT LEAST EQUAL TO THE TOP OF THE HORIZONTAL PANEL BLOCKS.
 - o. MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR THE APPLICABLE HORIZONTAL PANEL BLOCK SYSTEM USED IN SEPTIC TANK SYSTEMS SHALL BE FOLLOWED EXCEPT AS REQUIRED HEREIN OR 15A NCAC 18A.1900 ET.SEQ.
 - p. ALL HORIZONTAL PANEL BLOCK SYSTEMS SHALL BE INSTALLED BY A CONTRACTOR OR INSTALLER APPROPRIATELY CERTIFIED IN WRITING BY THE MANUFACTURER OR ITS AUTHORIZED REPRESENTATIVE.
 - q. ALL HORIZONTAL PANEL BLOCK SYSTEMS SHALL BE INSTALLED WITH COMPATIBLE PANEL ENDS AT THE INLET AND DISTAL ENDS OF EACH ROW.
8. SPECIAL INSPECTIONS
- a. THE ENGINEER SHALL BE NOTIFIED 48 HOURS IN ADVANCE OF THE START OF WORK.
 - b. NO WORK SHALL BE COVERED UNTIL THE ENGINEER HAS INSPECTED THE WORK AND AUTHORIZES THE WORK TO BE IN COMPLIANCE WITH THE PLANS AND SPECIFICATIONS.
 - c. ANY DISCREPANCIES IN THE COMPLETE WORK AT THE ENGINEER'S DESIGN SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION.
 - d. THE ENGINEER WILL PROVIDE SPECIAL INSPECTIONS ON A PERIODIC BASIS FOR OBSERVING THE CONSTRUCTION OF THE SYSTEM.
 - e. NO TESTING WILL BE REQUIRED FOR THIS INSTALLATION.
 - f. SEPTIC TANKS WILL BE CHECKED FOR SIZE AND QUALITY OF CONSTRUCTION. THE ENVIRONMENTAL HEALTH SERVICE APPROVAL NUMBER WILL BE VERIFIED.
 - g. PIPE AT TANK SEALS WILL BE CHECKED FOR WATER TIGHTNESS.
 - h. SUPPLY LINE PIPING WILL BE CHECKED FOR COMPLIANCE WITH MATERIALS SPECIFICATION AND MINIMUM GRADE.
 - i. NITRIFICATION LINE TRENCH WILL BE CHECKED FOR PROPER GRADE AND INSTALLATION.
 - j. ALL COMPONENTS WILL BE CHECKED FOR COMPLIANCE WITH THE PLANS AND SPECIFICATIONS.

OWNER
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SOIL SCIENTIST
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PROFESSIONAL ENGINEER
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RECORD DRAWINGS

SPECIFICATIONS
CAROLINA SEASONS
LOT A - 12
SINGLE FAMILY RESIDENCE
ONSITE WASTEWATER SYSTEM

JOHNSONVILLE TOWNSHIP HARNETT COUNTY NORTH CAROLINA

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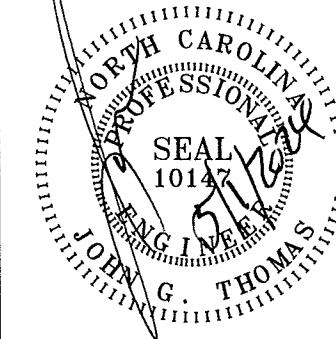
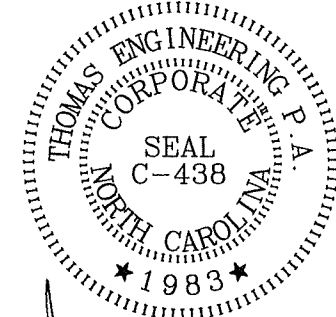
OPERATION AND MAINTENANCE

1. THE PURPOSE OF THE OPERATION AND MAINTENANCE PLAN IS TO ENSURE THAT THE SYSTEM IS PROPERLY FUNCTIONING, TO MAXIMIZE SYSTEM RELIABILITY, AND TO ENSURE THAT THE SYSTEM MEETS ITS EXPECTED SERVICE LIFE AND DOES NOT REQUIRE UNNECESSARY AND EXCESSIVE REPAIRS. THIS SECTION INCLUDES INFORMATION ON PREVENTATIVE MAINTENANCE PROCEDURES AND INCLUDES A MAINTENANCE SCHEDULE FOR THE DESCRIBED TASKS.
2. THE SYSTEM SHALL BE OPERATED IN ACCORDANCE WITH THE LAWS (ARTICLE 11 CHAPTER 130A OF THE GENERAL STATUTES OF NORTH CAROLINA) AND RULE (NORTH CAROLINA ADMINISTRATIVE CODE 15A. 18A. 1900) FOR SEWAGE TREATMENT AND DISPOSAL SYSTEMS.
3. THE ISSUANCE OF THE "AUTHORIZATION TO OPERATE" THIS SYSTEM INDICATES ONLY THAT THE SYSTEM HAS BEEN INSTALLED IN ACCORDANCE WITH STATE REGULATIONS AND IN NO WAY, SHOULD BE TAKEN AS A GUARANTEE THAT THE SYSTEM WILL FUNCTION SATISFACTORILY FOR ANY GIVEN LENGTH OF TIME.
4. THE SYSTEM MUST BE OPERATED AND MAINTAINED IN A MANNER WHICH WILL NOT CREATE A PUBLIC HEALTH HAZARD OR NUISANCE BY DISCHARGING TO THE GROUND SURFACE, SURFACE WATERS, OR GROUND WATER AT ANY TIME DURING THE OPERATION OF THE SYSTEM.
5. THE OWNER OF THE SYSTEM SHALL KEEP THE PLUMBING SYSTEM IN THE FACILITY IN GOOD REPAIR AND ELIMINATE LEAKS, DRIPS, OR EXCESS FLOWS AS THEY ARE FOUND.
6. ADEQUATE MEASURES SHALL BE TAKEN TO DIVERT STORM WATER OR ANY STANDING WATER FROM THE DISPOSAL FIELD AREA.
7. THE OWNER/OPERATOR SHALL REPORT AS SOON AS POSSIBLE, BUT IN NO CASE MORE THAN 48 HOURS, TO THE COUNTY ENVIRONMENTAL HEALTH SECTION UPON FINDING THE SYSTEM IS MALFUNCTIONING (I.E. THE SURFACING OR BACK-UP OF EFFLUENT, OR THE DISCHARGING OF EFFLUENT DIRECTLY INTO THE GROUND WATER OR SURFACE WATERS) OR WHEN REPAIRS ARE NEEDED.
8. KNOW WHERE ALL COMPONENTS OF THE SYSTEM ARE, SUCH AS CLEAN OUTS, SEPTIC TANK, DISTRIBUTION BOXES, SOIL ABSORPTION AREA, AND REPAIR AREA.
9. DOMESTIC WASTE SHALL ONLY BE PUT INTO THE SYSTEM. TRASH ITEMS THAT SHOULD NOT GO INTO THE SYSTEM ARE CIGARETTE BUTTS, KITTY LITTER, HYGIENE PRODUCTS, TISSUES AND WIPES, FLUSHABLE WIPES, SANITARY NAPKINS, COTTON SWABS, COFFEE GROUNDS, DISPOSABLE DIAPERS, AND LEFT OVER MEDICINES. KITCHEN WASTE THAT SHOULD NOT GO INTO THE SYSTEM ARE COOKING OILS AND GROUND UP SOLIDS FROM A GARBAGE DISPOSAL, RESTRICT USE OF THE GARBAGE DISPOSAL WHEREAS IT ADDS SOLIDS TO THE SYSTEM. OTHER ITEMS THAT ARE HARMFUL TO THE SYSTEM ARE CHEMICALS, SUCH AS SOLVENTS, OILS, PAINTS, THINNERS, DISINFECTANTS, PESTICIDES, POISONS, AND OTHER SUBSTANCES.
10. IT IS RECOMMENDED THAT THE SEPTIC TANK SHALL BE CHECKED ANNUALLY AND PUMPED OUT AS NEEDED. WHEN THE BUILDUP OF SOLIDS IN THE TANK ARE 25-30% OF THE TANK VOLUME, THE TANK SHOULD BE PUMPED. GENERALLY, EVERY THREE TO FIVE YEARS, THE SEPTIC TANK MUST BE PUMPED TO REMOVE SLUDGE AND SCUM. A CONTRACTED PROFESSIONAL MUST BE HIRED TO CONDUCT THIS WORK. ALL SEWAGE SOLIDS GENERATED BY THE SEPTIC TANK WILL BE TRANSPORTED TO A PERMITTED TREATMENT FACILITY. THERE IS A POTENTIAL FOR ODORS WHEN SLUDGE IS PUMPED AND HAULED, AS ODORS ESCAPE FROM THE ACCESS PORTS THAT ARE OPENED DURING MAINTENANCE. AFTER THE TANK HAS BEEN PUMPED OUT, FILL THE TANK BACK UP WITH WATER TO ELIMINATE THE POSSIBILITY OF THE TANK FLOATING OUT OF THE GROUND. DO NOT ADD SEPTIC TANK ADDITIVES SUCH AS RID-X AND ROOT KILLER TO THE SYSTEM.
11. THE SEPTIC TANK HAS AN EFFLUENT SCREEN THAT NEEDS TO BE CHECKED PERIODICALLY FOR CLOGGING, WHICH IF CLOGGED COULD CAUSE EFFLUENT TO BACK UP INTO THE HOUSE. THE SCREEN CAN BE ACCESSED THROUGH THE RISER ON THE OUTLET END OF THE TANK, LIFTED OUT, AND WASHED OFF DIRECTLY INTO THE TANK.
12. IN THE AREA OF THE DISPOSAL FIELD AND REPAIR AREA, MAINTAIN A GRASS COVER OVER THE AREA THAT WILL HELP EVAPORATE EFFLUENT AND RECYCLE NUTRIENTS, AS WELL AS PREVENT SOIL EROSION. DO NOT ALLOW TREES TO GROW IN THESE AREAS.
13. REDIRECT ROOF RUNOFF (GUTTERS AND DOWNSPOUTS) AWAY FROM THE DISPOSAL FIELD AND REPAIR AREAS.
14. AVOID DRIVING ON THE SYSTEM AREA, INCLUDING THE SEPTIC TANK, DISPOSAL AREA, AND REPAIR AREA.
15. THE DISPOSAL AREA AND THE DESIGNATED REPAIR AREA (WHICH SHALL BE RESERVED FOR THE INSTALLATION OF AN ADDITIONAL DISPOSAL AREA) SHALL NOT BE COVERED WITH STRUCTURES OR IMPERVIOUS MATERIALS, INCLUDING ASPHALT, CONCRETE, OR GRAVEL.
16. THE DISPOSAL FIELD DOES NOT HAVE UNLIMITED CAPACITY. WITH ONSITE SYSTEMS, WATER CONSERVATION IS A MUST AND THE LIFE OF THE SYSTEM DEPENDS ON THIS. CHECK FOR AND FIX LEAKS PROMPTLY.

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RECORD DRAWINGS

OPERATION & MAINTENANCE

CAROLINA SEASONS
LOT A - 12
SINGLE FAMILY RESIDENCE
ONSITE WASTEWATER SYSTEM

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DESIGN CALCULATIONS

1. Daily Wastewater Flow (Domestic) (15A NCAC 18A .1949(a))

a. Single Family Dwelling Unit (3 bedroom):
 (240 gpd/unit + 1 bedrooms x 120 gpd/bedroom) 360 gpd

2. System Components

a. 1 - 1000 gallon septic tank with effluent filter

b. 3 - 50 Horizontal Panel Block Lines

c. Septic Tank (15 A NCAC 18A .1952(b))

a. Design liquid capacity: minimum liquid capacity = 1000 gallons

b. Tank Buoyancy Check

Weight of tank per manufacturer: 7,400 lbs

Weight of soil over tank (minimum .5" cover):
 (40 sf tank surface x 0.5 ft cover x 115 lbs/cf soil) = 2,300 lbs
 Total weight = 9,700 lbs

Weight of water displaced: [(2 ft)(40 sf)][62.4 lbs/cf] = 4,992 lbs

The tank weighs more than the displaced water, therefore the tank will not float under the assumed conditions.

8. Initial Subsurface System (per attached Pittman Soil Report)

a. System Type: "Horizontal Panel Block" Septic System per On-site Water Protection Branch, Environmental Health Section.

b. System Classification: Type III (15A NCAC 18A .1961).

c. Long Term Loading Rate (LTAR): 0.4 gpd/sf

d. Total computed trench bottom area: 360 gpd /0.4 gpd/sf LTAR =900 sf

e. Required linear footage for Horizontal Panel Block System:
 (900 sf /3) .5 = 150 lf (3 lines @ 50 ft)

f. Panel Per Line (50' x 12") / 52 = 11.5 use 12 panels per line with 6" space between each panel.

g. Trench Bottom Depth: 14 - 18 in.

6. Repair Area System

a. System Type: 1800' Anaerobic Drip

b. System Classification: Type: V

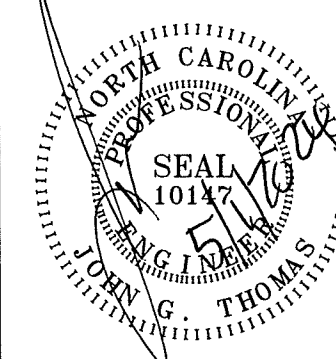
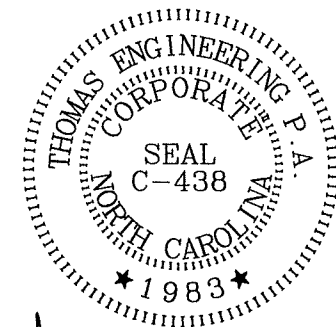
c. Long Term Loading Rate (LTAR): 0.2 gpd/sf

d. Trench Bottom Depth: 4 in.

OWNER
 ADAMS HOMES AEC, LLC.
 149 US HWY 70 WEST
 GARNER, NORTH CAROLINA 27529

SOIL SCIENTIST
 R. HAYWOOD PITMAN II
 1073-1 GREGORY FORK ROAD
 RICHLANDS, NORTH CAROLINA 28574

PROFESSIONAL ENGINEER
 THOMAS ENGINEERING PA.
 JOHN G. THOMAS
 P.O. BOX 1309
 NEW BERN, NORTH CAROLINA 28563



RECORD DRAWINGS

DESIGN CALCULATIONS
 CAROLINA SEASONS
 LOT A - 12
 SINGLE FAMILY RESIDENCE
 ONSITE WASTEWATER SYSTEM
 JOHNSONVILLE TOWNSHIP HARNETT COUNTY NORTH CAROLINA
 OWNER
 ADAMS HOMES AEC, LLC.
 149 US HWY 70 WEST
 GARNER, NORTH CAROLINA 27529
 SCALE: N.T.S. DATE: 02/19/2024
 PROJECT #: 2023_029 SHEET: 8 of 10

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SOIL EVALUATION

Pittman Soil Consulting

1003 Gregory Fork Road
Richlands, NC 28574
Phone (910)330-2784
pittmansoil@yahoo.com

NOVEMBER 3, 2023

Ref: CAROLINA SEASONS LOT A-12, 361 PONDEROSA TRAIL

A soil evaluation was conducted on the above referenced tract to determine the sites suitability for septic. The current laws and rules of NC was used as guide for this evaluation.

Hand Auger borings on the site were used to characterize the soil texture, structure, physical and chemical properties, and depth to the soil wetness condition. The attached plot plan shows the location of the septic system in the most ideal location on the site. The soil wetness condition was found to be 26-30" from the surface with a clay loam texture. I have assigned an LTAR of 0.4 gpd/sqft for a 360 gpd 3 bedroom residence. This will require the installation of 3-50' horizontal panel block lines that shall be installed in accordance with the current rules. The depth to soil wetness of 26-30" would constitute a 14-18" trench bottom. The system will require 6" of Group II or III soil cover that shall extend 5' from the edge of the system. The system will require a 1000 gallon septic tank.

Soils in the repair area showed soil wetness at depths of 16" from the surface with a clay loam texture. The repair area will require 1800 SQFT anaerobic drip installed at 4" from the surface with an LTAR of 0.2 gpd/sqft.

After installation the site should be landscaped to shed surface water. Any alterations to the site may impact soil conditions. System shall not be installed in wet conditions.

If you have any questions please feel free to contact me at 910-330-2784. Thank You.

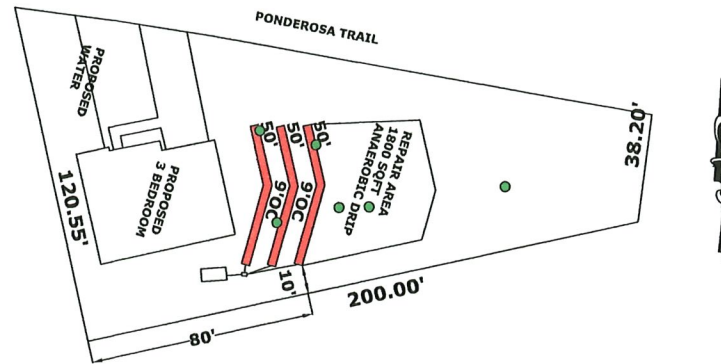
Sincerely,



R. Haywood Pittman II
NC Licensed Soil Scientist

Owner: CAROLINA SEASONS
Address: LOT A-12
Location: 361 PONDEROSA TRAIL

PITTMAN SOIL CONSULTING
PO BOX 1387
RICHLANDS, NC 28574
910-330-2784
pittmansoil@yahoo.com



INITIAL
3 BEDROOM
LTAR 0.4
3-50' HORIZONTAL PANEL BLOCK LINES
14-18" TRENCH BOTTOMS
>6" SOIL COVER REQUIRED OVER SYSTEM AND 5' BEYOND SYSTEM

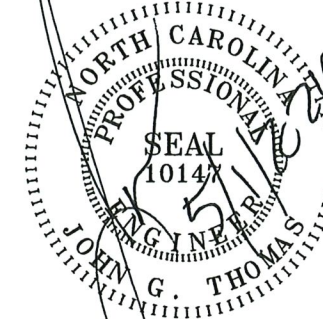
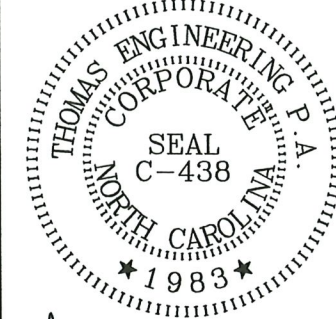
REPAIR AREA
3 BEDROOM
LTAR .2
1800 SQFT ANAEROBIC DRIP
4" TRENCH BOTTOMS
>6" SOIL COVER REQUIRED OVER SYSTEM AND 5' BEYOND SYSTEM

APPROX SCALE 1"=40'

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RECORD DRAWINGS

SOIL EVALUATION
CAROLINA SEASONS
LOT A - 12
SINGLE FAMILY RESIDENCE
ONSITE WASTEWATER SYSTEM

JOHNSONVILLE TOWNSHIP HARNETT COUNTY NORTH CAROLINA

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SCALE: N.T.S. DATE: 02/19/2024
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NOTE: EVALUATION INFORMATION IS AS PROVIDED ON THIS SHEET, AS PREPARED BY HAYWOOD PITTMAN OF PITTMAN SOIL CONSULTING PLS (L-1262), DATED NOVEMBER 3, 2023

CONTRACTOR STATEMENT / ENGINEER'S CERTIFICATE

THOMAS ENGINEERING, PA
 www.thomasengineeringpa.com
 1316-B Commerce Drive
 Post Office Box 1309
 New Bern, NC 28563

John G. Thomas, Professional Engineer
 Johnthomas@thomasengineeringpa.com
 P: 252.637.2727
 F: 252.636.2448
 M: 252.671.5855

CONTRACTOR'S STATEMENT of RESPONSIBILITY

Re: Engineered Option Permit Wastewater System
 G.S. 130A-336.1 and 15A NCAC 18A .1971
 Lot A-12 Carolina Seasons Subdivision
 361 Ponderosa Trail, Johnsonville, NC
 Harnett County, NC

Please be advised that the undersigned for Yellow Dog Grading, Inc. has reviewed the plans and specifications as prepared by John G. Thomas, PE (Thomas Engineering, PA) for the referenced project, and as described in G.S. 130A-336.1(4)a&b., hereby acknowledges awareness of the requirements for the installation of the referenced wastewater systems and special inspections.

Yellow Dog Grading, Inc.

Alex Moss
 Printed Name
[Signature]
 Signature

April 17 2024
 Date

THOMAS ENGINEERING, PA
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John G. Thomas, Professional Engineer
 Johnthomas@thomasengineeringpa.com
 P: 252.637.2727
 F: 252.636.2448
 M: 252.671.5855

ENGINEER'S CERTIFICATION & INSPECTION REPORT

"Final"

Re: Engineered Option Permit Wastewater System
 G.S. 130A-336.1 and 15A NCAC 18A .1971
 Lot A-12 Carolina Seasons
 361 Ponderosa Trail Cameron, NC 28326
 Harnett County, NC PID: 9567-30-2261

I, **John G. Thomas**, as a duly registered Professional Engineer in the State of North Carolina, having been authorized to observe periodically the construction of the referenced project (see inspection record below), hereby state that, to the best of my abilities, due care and diligence was used in the observation of the project construction such that the construction was observed to be built to completion within substantial compliance and intent of the approved plans and specifications, and approved modifications of record.

Inspection Record

April 17, 2024 - Installation of system inspected with no corrections needed.
 May 01, 2024 - Final Inspection
 Post-Construction Conference Waived

Thomas Engineering, P.A.
 P.O. Box 1309
 New Bern, N.C. 28563-1309
 (252) 637-2727
 (252) 636-2448

By: **John G. Thomas, P.E.**

Signature

Date

[Signature]
5/1/2024



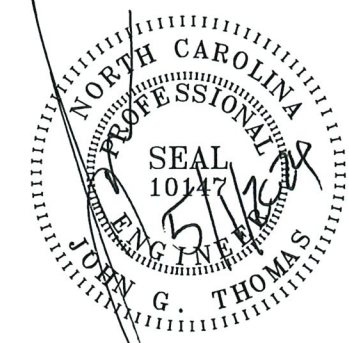
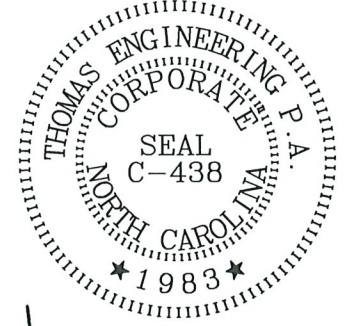
Registration No. 10147

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RECORD DRAWINGS

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**CAROLINA SEASONS
 LOT A - 12
 SINGLE FAMILY RESIDENCE
 ONSITE WASTEWATER SYSTEM**

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