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: 7/13/2023 (Date) by BB (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.): Jay-Cai Builders, LLC

Mailing address: 105 Yellow Birch Pl City: Mooresville State: NC Zip: 28117

Telephone number: (980) 339-0068 E-mail Address: dylanlimper@yahoo.com

2. Professional Engineer (PE) name: George D. Barrier License number: 019221

Mailing address: PO Box 26072 City: Charlotte State: NC Zip: 28221

Telephone number: (704) 201-1487 E-mail Address: CarolinaSepticSystems@carolina.rr.com

3. Licensed Soil Scientist (LSS) name: Larry Thompson, LSS License number:_____

Mailing address: PO Box 541 City: Midland State: NC Zip: 28107

Telephone number: 704-301-4881 E-mail Address: larry@thompsonenv.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: Juan Carlos Rocha License number: 5240

Mailing address: 2602 Gold Mine Road City: Monroe State: NC Zip: 28081

Telephone number: 704-242-3202 E-mail Address: carlosseptic@gmail.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 identificatio nnumber or s ubdivision lot, block number of the property to be permitted): 103 Dublin Court, Statesville, Iredell County, NC PIN:4713971049.000
   County Name: Iredell
8. Type of facility: ☒ Place of residence No. Bedrooms: 3 No. Occupants: 2
   ☐ Place of business Basis for flow calculation: _____
   ☐ Place of public assembly Basis for flow calculation: _____
9. Factors that would affect the wastewater load: Design is for domestic wastewater strength only.
10. Type and location of proposed wastewater system: Pump to Prefabricated Permeable Block Panel system located immediately behind the home. System Type IIIg.
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, George D. Barrier 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

08JUN23
Date

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, Jay-Cai Builders, LLC hereby designate George D. Barrier, 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.

Signature of Owner 06/08/23 *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.

This section for Local Health Department use only.

PART 2: ***LHD Completeness Review of the Notice of Intent to Construct***

"(c) Completeness Review for Notice of Intent to Construct. – The local health department shall determine whether a notice of intent to construct, as required pursuant subsection (b) of this section, is complete within 15 business days after the local health department receives the notice of intent to construct. A determination of completeness means that the notice of intent to construct includes all of the required components. If the local health department determines that the notice of intent to construct is incomplete, the department shall notify the owner or the professional engineer of the components needed to complete the notice. The owner or professional engineer may submit additional information to the department to cure the deficiencies in the notice. The local health department shall make a final determination as to whether the notice of intent to construct is complete within 10 business days after the department receives the additional information from the owner or professional engineer. If the department fails to act within any time period set out in this subsection, the owner or professional engineer may treat the failure to act as a determination of completeness."

The review for completeness of this Notice of Intent was conducted in accordance with G.S. 130A-336.1(c). This NOI is determined to be:

☐ INCOMPLETE (If box is checked, Information in this section is required.)

Based upon review of information submitted in Part 1, the following items are missing: _____

_____

Copies of this form listing missing items were sent to the design PE and the Owner on _____
Date

via _____ with directions to re-submit missing items using Page 5 of this form.
Email, FAX, USPS, hand-delivered

_____	_____	_____
Print Name of Authorized Agent of the LHD	*Signature of Authorized Agent of the LHD*	*Date*

☒ COMPLETE (If box is checked, information in this section is required.)

Based upon review of information submitted in Part 1 of this form, this NOI is deemed COMPLETE.

Copies of this signed form were sent to the design PE and the Owner on 7/13/23 via Email.
Date *Email, FAX, USPS, hand-delivered*

A copy of this NOI and tracking information was sent to the State on 7/13/23 via Email.
Date *Email, FAX, USPS, hand-delivered*

Benjamin A Botkins	Benjamin A Botkins	_____
Print Name of Authorized Agent of the LHD	*Signature of Authorized Agent of the LHD*	*Date*

 OSWP-2023-29467 LHD Reference:_____

Re-submittal of NOI with missing items included

This Section is for use by the owner or PE to submit items noted as missing during LHD Completeness Review above. Resubmittals must be accompanied by a cover letter from the PE.

LHD USE ONLY: This NOI resubmittal received: _____ by _____
Date *Initials*

Item # from initial NOI	Resubmittal description

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

I, _____hereby attest that the information re-submitted for this Notice of
Licensed Professional Engineer (Print Name)
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 *Date*

The section below is for Local Health Department use after submittal of items noted as missing above.

LHD Follow-up Completeness Review of Notice of Intent to Construct

This follow-up review for completeness of this Notice and Intent was conducted in accordance with G.S. 130A-336.1(c). This NOI is determined to be:

☐ INCOMPLETE
Based upon review of information submitted in the RESUBMITTAL above, this Notice of Intent remains INCOMPETE because the following items from Part 1 of this form remain missing: _____
_____.

Copies of this signed form were sent to the design PE and the Owner on _____via_____.
Date *Email, FAX, USPS, Hand-delivered*

_____ _____ _____
Print name of authorized Agent of the LHD *Signature of authorized Agent of the LHD* *Date*

☐ COMPLETE
Based upon review of information submitted in the RESUBMITTAL above in addition to information provided in Part 1 of this form, this NOI is deemed complete.

Copies of this signed form were sent to the PE and the Owner on _____via _____.
Date *Email, FAX, USPS, Hand-delivered*

A complete copy of this form with tracking information was sent to the State: _____via _____.
Date *Email, FAX, USPS, hand-delivered*

_____ _____ _____
Print name of authorized Agent of the LHD *Signature of authorized Agent of the LHD* *Date*

PART 3: **Authorization to Operate (ATO)**

Except for date received, the Section below is to be completed by the Owner or the PE.

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

Date of Post-construction Conference: _____

Post-construction Conference waived in accordance with G.S. 130A-336.1(j): _____

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

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)	[X] Yes	[ ] No
2.	Operation and management program and ORC contract, if applicable	[X] Yes	[ ] No
3.	Fee (as applicable)	[X] Yes	[ ] No
4.	Notarized letter documenting Owner's acceptance of the system from the PE	[X] Yes	[ ] No
5.	Owner meets requirements of ownership or control of the system per 15A NCAC 18A .1938(j)	[X] Yes	[ ] No
6.	Easement, right of way, or encroachment agreement required per 15A NCAC 18A .1938(j)	[ ] Yes	[X] No N/A
7.	Multi-party agreements required, as applicable, pursuant to 15A NCAC 18A. .1937(h)	[ ] Yes	[X] No N/A

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, George D. Barrier, PE hereby attest that all items indicated above have been provided to the
Print name of Owner or Professional Engineer
Iredell County LHD and the system shall meet applicable federal, State, and local laws, regulations, rules and ordinances in accordance with G.S. 130A-336-.1(e)(6).

_____ 2/23/24
Signature of Owner or Professional Engineer *Date*

This section for LHD Use Only.

LHD Review of required information for the ATO

[ ] INCOMPLETE

Based upon review of information submitted in the Section above, the following items are missing from the information required for an Authorization to Operate for an EOP: _____

_____.

Copies of this signed form were sent to the design PE and the Owner on _____ (Date) via _____ (Email, FAX, USPS, Hand-delivered).

_____ _____ _____
Print name of authorized Agent of the LHD *Signature of authorized Agent of the LHD* *Date*

[x] COMPLETE

Based upon review of information submitted in the Section above, this Authorization to Operate is hereby issued in accordance with G.S. 130A-336.1(m).

A copy of this complete NOI/ATO with tracking information was sent to the State on No longer required (Date) (Email, FAX, USPS, Hand-delivered).

Danielle Wieberg REHS _____ D. Wieberg _____ 05/16/2024
Print name of authorized Agent of the LHD *Signature of authorized Agent of the LHD* *Date*

ISSUANCE OF CERTIFICATE OF OCCUPANCY: Once the LHD determines completeness based upon the ATO submission, the owner may apply to the local permitting agency for permanent electrical service to a residence, place of business or place of public assembly pursuant to G.S. 130A-339.

The Landings P3 Lot 79

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: 7/13/2023 (Date) by BB (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.): Jay-Cai Builders, LLC
Mailing address: 105 Yellow Birch Pl City: Mooresville State: NC Zip: 28117
Telephone number: (980) 339-0068 E-mail Address: dylanlimper@yahoo.com

2. Professional Engineer (PE) name: George D. Barrier License number: 019221
Mailing address: PO Box 26072 City: Charlotte State: NC Zip: 28221
Telephone number: (704) 201-1487 E-mail Address: CarolinaSepticSystems@carolina.rr.com

3. Licensed Soil Scientist (LSS) name: Larry Thompson, LSS License number: _____
Mailing address: PO Box 541 City: Midland State: NC Zip: 28107
Telephone number: 704-301-4881 E-mail Address: larry@thompsonenv.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: Juan Carlos Rocha License number: 5240
Mailing address: 2602 Gold Mine Road City: Monroe State: NC Zip: 28081
Telephone number: 704-242-3202 E-mail Address: carlosseptic@gmail.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

The Landings P3 Lot 79
103 Dublin Nol

7. Property location (physical address, tax parcel identificatio nnumber or s ubdivision lot, block number of the property to be permitted): 103 Dublin Court, Statesville, Iredell County, NC PIN:4713971049.000
   County Name: Iredell
8. Type of facility: ☒ Place of residence No. Bedrooms: 3 No. Occupants: 2
   ☐ Place of business Basis for flow calculation: _____
   ☐ Place of public assembly Basis for flow calculation: _____
9. Factors that would affect the wastewater load: Design is for domestic wastewater strength only.
10. Type and location of proposed wastewater system: Pump to Prefabricated Permeable Block Panel system located immediately behind the home. System Type IIIg.
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, George D. Barrier 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).

_____ 08JUN23
Signature of Licensed Professional Engineer *Date*

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, Jay-Cai Builders, LLC hereby designate George D. Barrier, 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.

_____ 06/08/23

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.

This section for Local Health Department use only.

PART 2: *LHD Completeness Review of the Notice of Intent to Construct*

"(c) Completeness Review for Notice of Intent to Construct. – The local health department shall determine whether a notice of intent to construct, as required pursuant subsection (b) of this section, is complete within 15 business days after the local health department receives the notice of intent to construct. A determination of completeness means that the notice of intent to construct includes all of the required components. If the local health department determines that the notice of intent to construct is incomplete, the department shall notify the owner or the professional engineer of the components needed to complete the notice. The owner or professional engineer may submit additional information to the department to cure the deficiencies in the notice. The local health department shall make a final determination as to whether the notice of intent to construct is complete within 10 business days after the department receives the additional information from the owner or professional engineer. If the department fails to act within any time period set out in this subsection, the owner or professional engineer may treat the failure to act as a determination of completeness."

The review for completeness of this Notice of Intent was conducted in accordance with G.S. 130A-336.1(c). This NOI is determined to be:

☐ INCOMPLETE (If box is checked, Information in this section is required.)

Based upon review of information submitted in Part 1, the following items are missing: _____

_____

Copies of this form listing missing items were sent to the design PE and the Owner on _____
Date

via _____ with directions to re-submit missing items using Page 5 of this form.
Email, FAX, USPS, hand-delivered

_____ _____ _____
Print Name of Authorized Agent of the LHD *Signature of Authorized Agent of the LHD* *Date*

☒ COMPLETE (If box is checked, information in this section is required.)

Based upon review of information submitted in Part 1 of this form, this NOI is deemed COMPLETE.

Copies of this signed form were sent to the design PE and the Owner on 7/13/23 via Email.
Date *Email, FAX, USPS, hand-delivered*

A copy of this NOI and tracking information was sent to the State on 7/13/23 via Email.
Date *Email, FAX, USPS, hand-delivered*

Benjamin A Botkins Benjamin A Botkins _____
Print Name of Authorized Agent of the LHD *Signature of Authorized Agent of the LHD* *Date*

OSWP-2023-29467

LHD Reference:_____

Re-submittal of NOI with missing items included

This Section is for use by the owner or PE to submit items noted as missing during LHD Completeness Review above. Resubmittals must be accompanied by a cover letter from the PE.

LHD USE ONLY: This NOI resubmittal received: _____ by _____
Date *Initials*

Item # from initial NOI	Resubmittal description

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

I, _____hereby attest that the information re-submitted for this Notice of
Licensed Professional Engineer (Print Name)
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 *Date*

The section below is for Local Health Department use after submittal of items noted as missing above.

LHD Follow-up Completeness Review of Notice of Intent to Construct

This follow-up review for completeness of this Notice and Intent was conducted in accordance with G.S. 130A-336.1(c). This NOI is determined to be:

☐ INCOMPLETE
Based upon review of information submitted in the RESUBMITTAL above, this Notice of Intent remains INCOMPETE because the following items from Part 1 of this form remain missing: _____
_____.

Copies of this signed form were sent to the design PE and the Owner on _____via_____.
Date *Email, FAX, USPS, Hand-delivered*

_____ _____ _____
Print name of authorized Agent of the LHD *Signature of authorized Agent of the LHD* *Date*

☐ COMPLETE
Based upon review of information submitted in the RESUBMITTAL above in addition to information provided in Part 1 of this form, this NOI is deemed complete.

Copies of this signed form were sent to the PE and the Owner on _____via _____.
Date *Email, FAX, USPS, Hand-delivered*

A complete copy of this form with tracking information was sent to the State: _____via _____.
Date *Email, FAX, USPS, hand-delivered*

_____ _____ _____
Print name of authorized Agent of the LHD *Signature of authorized Agent of the LHD* *Date*

OSWP-2023-29467

LHD Reference:_____

PART 3: Authorization to Operate (ATO)

Except for date received, the Section below is to be completed by the Owner or the PE.

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

Date of Post-construction Conference: _____

Post-construction Conference waived in accordance with G.S. 130A-336.1(j): _____

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

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. Fee (as applicable) ☐ Yes ☐ No
4. Notarized letter documenting Owner's acceptance of the system from the PE ☐ Yes ☐ No
5. 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, _____ hereby attest that all items indicated above have been provided to the
Print name of Owner or Professional Engineer
_____County LHD and the 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 Owner or Professional Engineer *Date*

This section for LHD Use Only.

LHD Review of required information for the ATO

☐ INCOMPLETE

Based upon review of information submitted in the Section above, the following items are missing from the information required for an Authorization to Operate for an EOP: _____
_____.

Copies of this signed form were sent to the design PE and the Owner on _____via _____.
Date *Email, FAX, USPS, Hand-delivered*

_____ _____ _____
Print name of authorized Agent of the LHD *Signature of authorized Agent of the LHD* *Date*

☐ COMPLETE

Based upon review of information submitted in the Section above, this Authorization to Operate is hereby issued in accordance with G.S. 130A-336.1(m).

A copy of this complete NOI/ATO with tracking information was sent to the State on _____via _____.
Date *Email, FAX, USPS, Hand-delivered*

_____ _____ _____
Print name of authorized Agent of the LHD *Signature of authorized Agent of the LHD* *Date*

ISSUANCE OF CERTIFICATE OF OCCUPANCY: Once the LHD determines completeness based upon the ATO submission, the owner may apply to the local permitting agency for permanent electrical service to a residence, place of business or place of public assembly pursuant to G.S. 130A-339.

PRELIMINARY SOIL AND SITE EVALUATION

103 Dublin Court
Statesville, NC 28677

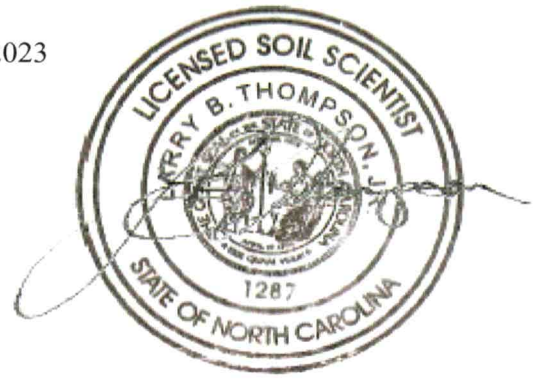
Prepared For:

Carolina Septic Systems, PC
PO Box 26072
Charlotte, NC 28221

Prepared By:

Thompson Environmental Consulting, Inc.
PO Box 541
Midland, NC 28107

May 29, 2023



INTRODUCTION & SITE DESCRIPTION

This Soil and Site Evaluation was performed on a 0.402-acre lot located at 103 Dublin Court, Statesville, North Carolina (Iredell County Parcel No.: 4713971049.000).

Thompson Environmental Consulting, Inc. (TEC) was retained to determine whether the soils were suitable for onsite subsurface wastewater treatment and disposal. The property was evaluated in accordance with North Carolina statutes for waste disposal ("Laws and Rules for Sewage Treatment and Disposal Systems", amended April 1, 2017).

INVESTIGATION METHODOLOGY & SITE PHYSICAL CHARACTERISTICS

Individual soil borings were evaluated, and soil color was determined with a Munsell Soil Color Chart. Observations of the landscape (slope, drainage patterns, etc.) as well as soil properties (depth, texture, structure, seasonal wetness, restrictive horizons, etc.) were recorded.

The project study is currently undeveloped and is vegetated with mixed grasses in areas that are not eroded.

FINDINGS

A field survey was conducted on March 22, 2022. Five soil borings were advanced with a hand-held auger, and their locations noted in the attached Figure 1.

Borings 3 and 4 were rated as Provisionally Suitable for the installation of a subsurface wastewater treatment and disposal system utilizing a Prefabricated Permeable Block Panel System and are denoted in the attached Figure as green points. Surfaces typically exhibited friable clay loam textures with weak, medium, subangular blocky structure 10 to 14 inches in depth. Upper subsurface horizons exhibited firm clay to clay loam textures with moderate, medium, subangular blocky structure to a depth of 34 to 37 inches. A long-term acceptance rate (LTAR) of 0.3 gal./day/sq. ft. would be recommended for these soils.

Boring 8 was rated as Provisionally Suitable for the installation of Non-Treated Subsurface Drip Dispersal System drainfield product and is denoted in the attached Figure as a yellow point within a yellow polygon. The surface horizon exhibited a firm clay loam texture with weak, medium,subanguluar blocky structure to 10 inches in depth. The lower subsurface horizon exhibited a firm clay texture with moderate, medium, subangular blocky structure to 21inches in depth before encountering sandy loam saprolite. A long-term acceptance rate (LTAR) of 0.1 gal./day/sq. ft. would typically be recommended for this soil area.

Borings 1, 2, and 5 were rated as Unsuitable for the installation of a subsurface wastewater treatment and disposal system due to shallow soil depths. These borings may benefit from a deep pit evaluation.

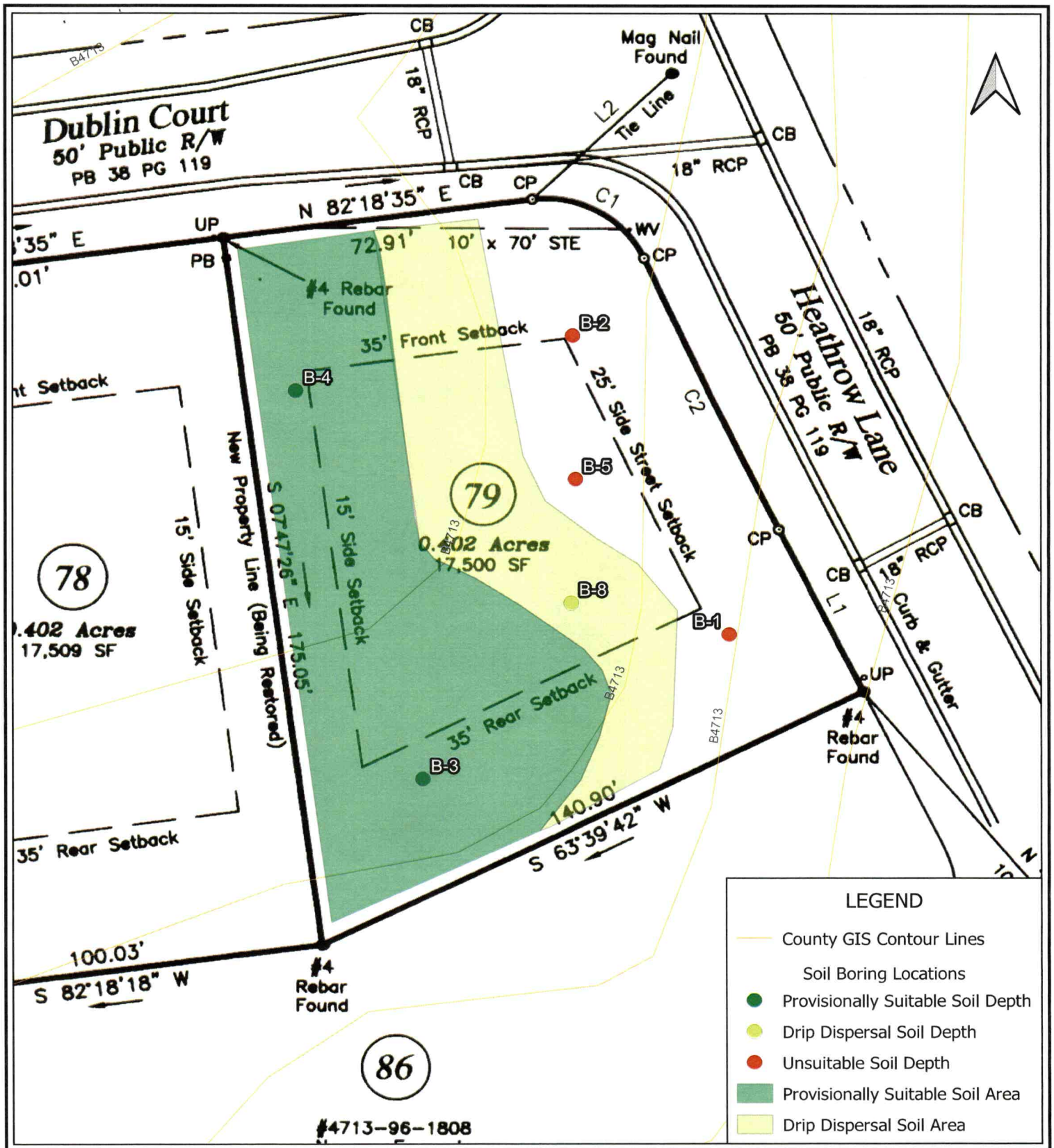
DISCUSSION

The soils observed within the project study area will support the installation of a subsurface wastewater treatment and disposal system utilizing Prefabricated Permeable Block Panel System drainfield product. It is estimated that approximately 4,000 square feet of suitable soil area would need to be allocated and left completely available for the installation and required repair area for a Prefabricated Permeable Block Panel System serving a 4-bedroom single-family residence.

Given the limited area available for a new system installation, the proposed repair system type will likely need to be classified as a Subsurface Drip Dispersal System and utilize the area located behind the proposed house site.

CONCLUSION

The findings presented herein represent TEC's professional opinion based on our Soil and Site Evaluation and knowledge of the current laws and rules governing on-site wastewater systems in North Carolina. Soils naturally change across a landscape and contain many inclusions. As such, attempts to quantify them are not always precise and exact. Due to this inherent variability of soils and the subjectivity when determining limiting factors, there is no guarantee that a regulating authority will agree with the findings of this report.



Thompson Environmental Consulting
WATER - WASTEWATER - WETLANDS

Prepared For:
Jay-Cai Builders LLC

Soil and Site Evaluation

103 Dublin Court
Statesville, NC 28677
Iredell County

Date: March 2022
Scale: 0 15 30 ft
TEC Job #: 22-98

Figure 1

Soil Evaluation Form

Thompson Environmental Consulting, Inc.
PO Box 541
Midland, NC 28107-0541

Sheet 1 of 1
Job: 103 107 Dublin Ct
County: Iredell
Date: 3-22-22

Soil Borings

	B1	B2	B3	B4	B5	B6	B7	B8		
Landscape Position	L	L	L	R	L	L	L	L		
Slope (%)	8	6	5	3	8	3	4	6		
Horizon 1 Depth	0-6	0-6	0-26	0-14	0-5	0-34	0-10	0-10		
Texture	CL	CL	C	CL	CL	C	CL	CL		
Consistence	FI	FI	FI	FI	FR	FI	FI	FI		
Structure	SBK	SBK	SBK	SBK	SBK	SBK	SBK	SBK		
Clay Mineralogy	SE	SE	SE	SE	SE	SE	SE	SE		
Horizon 2 Depth	6-26	6-16	26-34	14-36+	5+	34+	10-33	10-21		
Texture	SiL	SiL	CL	C	SiL	SL	C	C		
Consistence	FR	FR	FI	FI	FR	FR	FI	FI		
Structure	M	M	SBK	SBK	M	M	SBK	SBK		
Clay Mineralogy	SE	SE	SE	SE	S	S	SE	SE		
Horizon 3 Depth		AR	34+				33-37+	21+		
Texture			SiL				CL	SL		
Consistence			FR				FI	FR		
Structure			M				SBK	M		
Clay Mineralogy			SE				SE	SE		
Horizon 4 Depth										
Texture										
Consistence										
Structure										
Clay Mineralogy										
Horizon 5 Depth										
Texture										
Consistence										
Structure										
Clay Mineralogy										
Soil Wetness										
Restrictive Horizon										
Saprolite	6	6	34		5	34		21		
Other										
CLASSIFICATION	4	4	PS	PS	4	PS	PS	Drip		
LTAR (gpd/ft^2)			0.3	0.3		0.3	0.3			

Comments:

Evaluated by : E. Morgan M. Wood

LICENSED SOIL SCIENTIST
HARRY B. THOMPSON
1287
STATE OF NORTH CAROLINA

Residential Subsurface Wastewater Treatment and Disposal System Engineered Option Permit

for

103 Dublin Court
Statesville, Iredell County, NC

Parcel Tax Identification # 4713971049.000
June 7, 2023

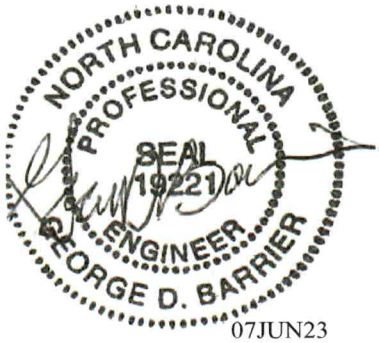
Prepared for:

Dylan Limper
Jay-Cai Builders, LLC
105 Yellow Birch Loop
Mooresville, NC 28117



Prepared by:

Carolina Septic Systems, PC
Thompson Environmental Consulting, Inc.
George Barrier, PE
Larry Thompson, NCEHS, NCLSS



07JUN23

Details

Jay-Cai Builders, LLC has contracted with Carolina Septic Systems, PC (CSS) and Thompson Environmental Consulting, Inc. (TEC) to developed residential on-site wastewater treatment and disposal system design for a 3-bedroom primary residence to be located at 103 Dublin Ct, Statesville, Iredell County, NC (Iredell County Tax Parcel: 4713971049.000). The primary residence will be served by a municipal water supply.

Based upon a soils investigation performed by TEC it was determined that a sufficient amount of "Suitable" Group IV soils is available on this property for the installation of a **Pump-To Prefabricated Permeable Block Panel System** (PPBPS) for both the initial system as well as the proposed repair system. CSS and TEC propose a design based upon 360 gallons per day flow at a 0.25 GPD/sq/ft long term acceptance rate (LTAR) for the soils.

CSS and TEC would like to request that the following design performed pursuant to 15A NCAC 18a.1971 be approved for permitting under NC General Statute 130A-336.1 (Engineered Option Permit).

Location

From Statesville, take U.S. HWY70 west to Old Mountain Road. Proceed south one-half mile then left on Bethlehem Road. Continue east for one mile and then right on Greenwich Drive. One quarter mile south, turn left onto Heathrow and in one-quarter mile the site will be on your right at the southwest corner of the intersection of Heathrow Lane and Dublin Court.

References

Laws and Rules for Sewage Treatment and Disposal Systems, 15A NCAC 18A, Section .1900, Department of Environment and Natural Resources, Division of Environmental Health, On-Site Wastewater Section, April 1, 2017.

Design, Installation and Maintenance of the T & J Panel Wastewater Treatment System; Sixth Edition, published by T & J Panel.

Primary Investigator's Credentials

NC Registered Sanitarian No. 1208
NC Licensed Soil Scientist No. 1287
NC Authorized Onsite Wastewater Evaluator No. 10016E
SC Professional Soil Classifier No. 111
NC Subsurface Septic System Operator No. 22199
NC Grade IV Wastewater System Installer/Inspector No. 1762/17621

Primary Designer's Credentials

NC Professional Engineer No. 19221
GA Professional Engineer No. PE042759
SC Registered Professional Engineer No.19378
VA Professional Engineer No. 0402054100

Plans and Specifications

A. Septic Tank

1. The septic tank shall be State approved (Section .1953 of 15A NCAC 18A) and non-traffic rated, watertight, structurally sound, and 1,000 gallons in capacity.
2. The septic tank will be fitted with an approved effluent filter.
3. It is the responsibility of the septic contractor to thoroughly inspect the septic tank prior to accepting delivery to assure that the tank has had time to properly cure and is free of cracks or other structural deficiencies.

B. Pump Tank

1. The pump tank shall be State approved and non-traffic rated, of one-piece construction, watertight, structurally sound and 1,000 gallons in capacity. Again, it is the responsibility of the septic tank contractor to thoroughly inspect each pump tank prior to accepting delivery.
2. All pipe penetrations into the tank shall be booted (i.e., C-293 boot with a stainless steel strap).
3. The pump tank shall have access risers that extend, at a minimum, 6 inches above finished grade and must have less than 36 inches of fill over its top once finished grade has been established (a reinforced concrete tank will be required if finished soil cover is 36 inches or greater in depth).
4. Floats, pump and control circuits, and the control panel shall meet the requirements of Rule .1952(c). Panel and control equipment shall include lightning protection, be protected from unauthorized access, and remain accessible at all times to the system operator.
5. The pump and alarm controls shall be provided with manual circuit disconnects within a watertight, corrosion resistant, Nema 4x rated control panel. The control panel must be securely mounted outside, adjacent to the pump tank riser and at a minimum of 12 inches above finished grade. Pump and float control wiring should be long enough to reach from the tank to the control panel without splicing, routed through wire conduit, and sealed at the openings within the pump tank as well as the control panel enclosure. It is paramount that the conduit is properly sealed to prevent the escape of flammable gases from the pump tank. Furthermore, there must be two electrical circuits for the pump tank controls: one for the pump and one for the alarm controls.
6. Float switch tie downs must be made of a corrosion resistant material (per OWPS, all metal in the tanks shall be stainless steel). Floats should be mounted on a separate "float tree" rather than the pump supply line (see pump tank detail).
7. The pump removal system will be via a pump tether made of nylon rope or its equivalent. The tether material should be resistant to mildew and rot.

C. Pipes and Fittings

1. All discharge piping, connectors and supply lines should be made of SCH 40 PVC.
2. All joints must be properly "welded" utilizing the appropriate PVC cement for each application.

3. The supply line from the pump tank to the pressure manifold shall be 2-inch Schedule 40 PVC (approximate length of supply line is 80 feet).

D. Distribution Method – Pressure Manifold

1. A pressure manifold shall be used to distribute wastewater to three drainlines.
2. The pressure manifold shall be contained within an adequately sized box/vault that will allow future repair lines to be installed and is designed to allow for drainage of effluent that may accumulate in it during flushing and head pressure adjustments. The box should be placed upon a gravel base.
3. A gate valve shall be provided at the pressure manifold box to allow for final pressure adjustment (2 foot of head pressure as per design).
4. The pressure manifold shall be constructed of SCH 80 PVC.
5. There shall be 3 taps (1/2-inch SCH. 40 PVC - direct thread or saddle).
6. The connecting pipe between the pressure manifold taps and the drainfield shall be constructed of PVC.

E. Backfill

1. Backfill sand shall be clean, washed, medium sand that is naturally occurring and falls within the gradation of ASTM C-33 specification (used in the ready mix industry and is readily available).

F. Drainfield Installation

1. The drainfield and the proposed septic tank location have been marked on-site utilizing metal stemmed flags. Once this area has been approved by the county, the property owner/builder should mark this area and isolate it as much as possible from construction traffic. Prior to the system installation, the septic contractor shall contact the county for a preconstruction conference at which time the drainfield area will be re-verified.
2. Under no circumstances shall any construction take place within the drainfield area while the soil is in a wet condition. If the installer has doubts as to whether or not the drain field area is dry enough to begin construction, the environmental health specialist for this area should be contacted for permission to proceed with the installation.
3. The specified system is a Type IV horizontally installed pre-fabricated permeable block panel system – specifically the system manufactured by T&J Panel Wastewater Treatment System, Patent No. 4013559; telephone: 1-800-222-2577. The installer must follow the manufacturer's guidelines for installing the T&J Panel System and should request an installation manual from the manufacturer prior to beginning construction.
4. The initial drain field consists of three (3) 84-foot long lateral trenches at lengths shown in the plans, in sections ranging from 24 to 60 feet (see plan sheet 1 of 4). Total drainline length is 252 feet.
5. It is essential that the lateral trenches be constructed on contour with the land, with each trench being excavated level from beginning to end. The use of a tripod

mounted engineer's level is essential to assure that each trench is constructed as level as possible.

6. The maximum trench depth for this system shall be **24 inches**. Each trench shall be 3 feet wide and placed on a minimum of 9 foot on centers.
7. Once trenches are dug, the side walls shall be raked, and a light dusting of lime applied.
8. Backfill the trench with 6 inches of sand and level to grade. Once leveled, place 1 x 6 inch boards on top of the sand the entire length of each trench. Once the grade boards have been set, the panels may be set into the trench. The panels should be placed 6 inches apart.
9. Once the panels have been set, line the top portion of each chamber with the T&J supplied sand alternative product (SAP – geotextile fabric). GE Foam Sealer or tar seal rope should be placed in the bottom of the U outs to form seals around the pipe as shown in earlier drawings.
10. Tar seal rope, or approved foam, should be placed in the "U" outs of each end of the panel to form seals. Once the tar rope is in place, the 1¼ inch Schedule 40 PVC laterals can be added, and the seal completed by the addition of more tar rope on the top and sides of the pipe. Now that the connection and seals are complete, a block cap is placed on each end of the panel so that all openings are covered.
11. The end of each lateral should be fitted with a short turn up topped by a threaded female coupling with cap. Each turn up must be fitted with a turf/gate valve box with lid fitted flush to finished grade.
12. Once the lateral has been installed and the panels closed, the trench is ready to be backfilled to the top with the sand used in the trench bottom. At this point, the trenches should be left open for the final inspection by the county.

G. Proper Operation Check

1. After all components of the wastewater disposal system have been installed and connected, the system shall be checked for proper operation.
2. With the electrical power turned off, fill the pump tank with water until the liquid rises to a level high enough to activate the high water alarm float. Turn on the electrical power. The alarm, alarm light and pump should activate at this time. Turn off the electrical power once these checks have been performed and prepare to set the head pressure at the valve box.

H. Pressure Head Adjustment

1. The pressure head must be adjusted to match the design specifications (2-Feet). The pressure head is measured by the height of the liquid coming from the pressure manifold.
2. Prepare a length of pipe (standpipe), cut to the desired head pressure height and fitted with a threaded adapter that will screw into the pressure manifold. Turn on pump and adjust the manifold gate valve within the supply manifold box to achieve the specified head pressure (liquid height in the standpipe should equal the design head pressure).
3. Once the pressure head has been adjusted, allow the pump to run through the remainder of the cycle. The pump float switch will automatically turn the pump

off if it is operating properly. Make sure that the effluent pump is completely submerged in the remaining water, adjusting the float switch(es) as needed. This completes the checks for proper operation of the pump, alarm and float switches.

4. At this point, the manifold standpipe may be removed and replaced with a threaded plug.

I. Final Landscaping

1. The drainfield shall be shaped to shed rainwater and be free from low spots.
2. The entire area of the drainfield should be planted with grass as soon as possible to prevent erosion. The soil should be properly tilled, limed (if necessary) and fertilized prior to planting. After applying grass seed, the area should be heavily mulched with straw or other suitable material.

J. Utility Conflicts

1. The builder and property owner must take special care in planning for utilities (water, power, gas, telephone, cable lines, etc.). All utilities shall be kept clear of the septic system and its proposed repair area. Improper planning for underground utilities can negatively impact the installation and, in some cases, cause irreparable damage and permit revocation.
2. Special care should be taken not to remove soil within the proposed drainfield area. It is recommended that the proposed drainfield area be protected by orange barrier fencing throughout project construction.
3. Water lines must be kept at least ten (10) feet from any portion of the septic system.
4. Irrigation systems should not be placed within 30 feet of the drain field area.

Maintenance

K. In General

1. The homeowner must maintain the drainfield area through periodic mowing. The drainfield must not be allowed to become overgrown.
2. The septic tank should be pumped every 4 years or when the solids within the septic tank reach an elevation that is equivalent to 25 percent of the volume of the tank. In some situations, the tanks may need to be pumped more frequently. If using a garbage disposal, it is recommended that the homeowner has the septic and pump tanks cleaned out annually.
3. When it becomes necessary to clean the effluent filter, the filter should be removed, and the accumulated debris washed back into the septic tank – not onto the lawn.
4. Any damp areas, leakages or malfunctions in the drainfield area should be addressed immediately.
5. Divert gutter downspouts and surface water runoff away from the septic and pump tanks.

Design Specifics

Daily Design Flow:	360 GPD – 3-bedroom house
Septic Tank Size:	1,000 Gallons
Pump Tank Size:	1,000 Gallons
Pump Requirements:	28.44 GPM at 10.69 Feet TDH
Recommended Pump:	Liberty FL50 or equiv.
Effluent Loading Rate:	0.3 GPD per sq. ft.
Drainfield Type:	PPBPS
Distribution Method:	Pressure Manifold
Number of Taps:	3 (1/2 Inch SCH 40 Taps)
Pressure Head:	4 Feet
Dosing Volume:	201.60 Gallons
Pump Run Time:	9.45 Minutes
Number of Drainlines:	3
Drain Lines:	3-ft Wide x 84-ft Long
Total Trench Length:	252 Linear Feet
Total Number of Panels:	57
Trench Depth:	24 Inches
Final Cover Requirement:	6 Inches

Repair Specifics

(Repair to be designed by a Licensed Professional Engineer at time of repair)

Repair System:	Non-treated Drip Dispersal
Required Drainfield Area:	1200 Square Feet
Total Area Available:	>1200 Square Feet

CAROLINA SEPTIC SYSTEMS, PC

PO Box 26072
Charlotte, NC 28221

Project Name: On-Site Drainfield System Proposal
Address: 103 Dublin Ct, Statesville, Iredell County, NC

Drawing By: GDB Reviewed By: GDB
Date: 07JUN23 Date: 07JUN23
Rev:

Prepared for review by: Owner ☐ Agent ☐ Eng/Arch/Contr ☐ Regulator ☒ Septic Contr ☐ Soil Scientist ☐

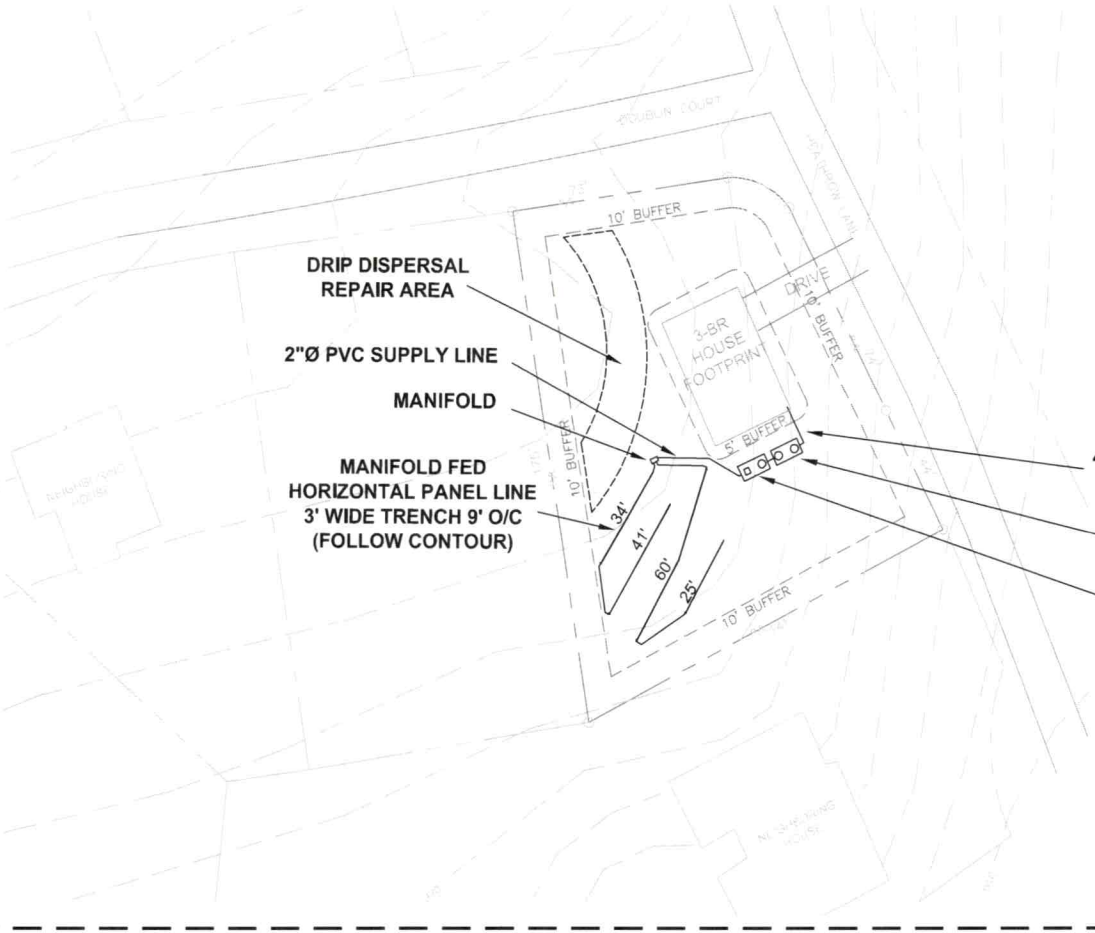
SEPTIC SYSTEM COMPONENT SKETCH

SCALE 1:40 (11 x17 PAPER)
PRINTED ACTUAL SIZE

0 20 40 60 80 100

GRAPHIC SCALE

APPROXIMATE NORTH
FOR ROUGH ILLUSTRATION ONLY
N



NORTH CAROLINA PROFESSIONAL SEAL 19221 ENGINEER GEORGE D. BARRIER
07JUN23

Notes

All dimensions given or inferred are approximate for illustration only, based on proposed house location courtesy of Client dated 4/22/23, topo ourtesy Iredell County GIS, and boundary courtesy Piedmont Design Assoc. with no date.
This drawing and the information contained in it are the property of Carolina Septic Systems, PC. and is intended for sole use by the Client for permit illustration purposes only.

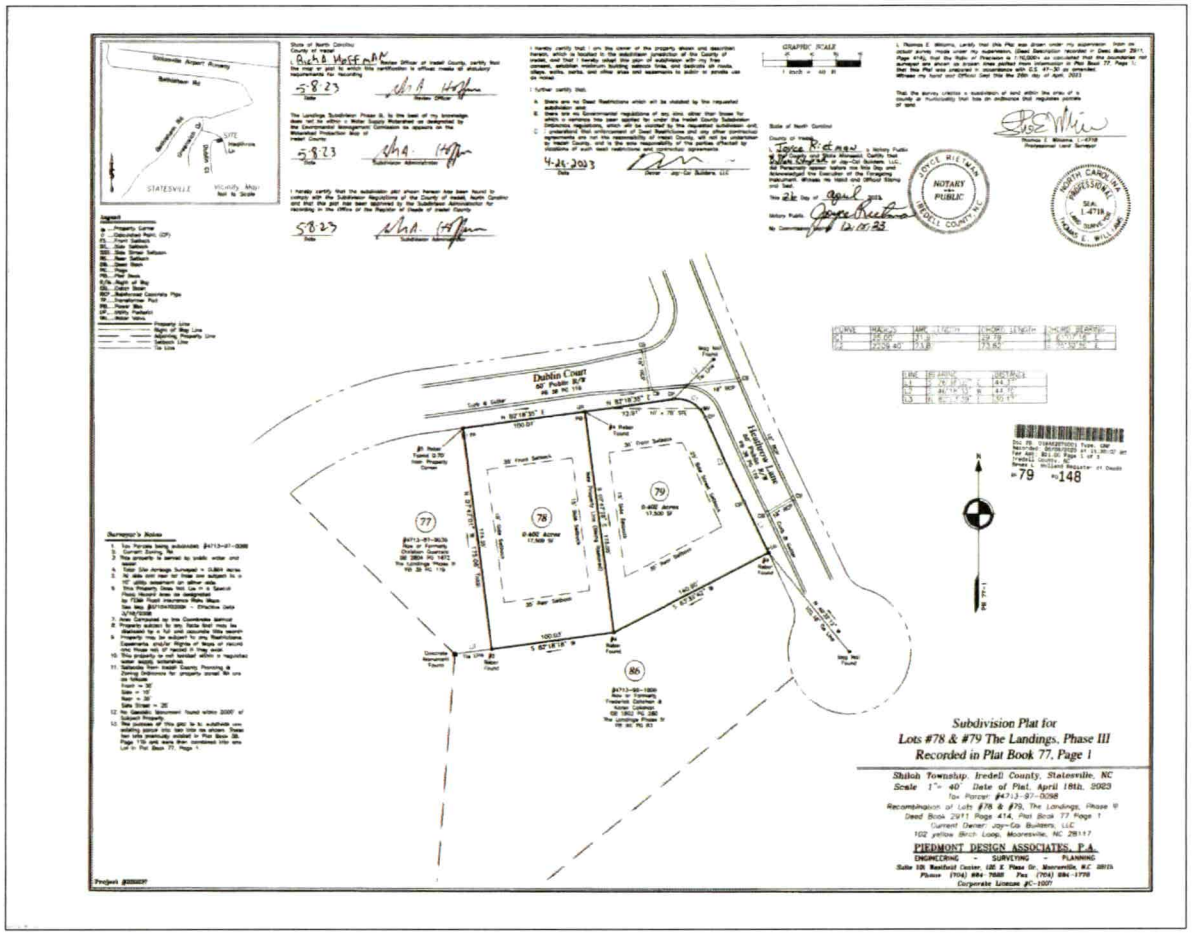
CAROLINA SEPTIC SYSTEMS, PC

PO Box 26072
Charlotte, NC 28221

Project Name: On-Site Drainfield System Proposal
Address: 103 Dublin Court, Statesville, Iredell County, NC

Drawing By: GDB Reviewed By: GDB
Date: 07JUN23 Date: 07JUN23
Rev:

Prepared for review by: Owner ☐ Agent ☐ Eng/Arch/Contr ☐ Regulator ☒ Septic Contr ☐ Soil Scientist ☐



PLAT

Notes

Plat courtesy of Piedmont Design Associates, dated 04-29-2021. The above is not to scale for illustration purposes only. For actual scaled dimensions, please refer to the original plat.

This drawing and the information contained in it are the property of Carolina Septic Systems, PC. and is intended for sole use by the client and permit illustration purposes only.

CAROLINA SEPTIC SYSTEMS, PC
PO Box 26072
Charlotte, NC 28221

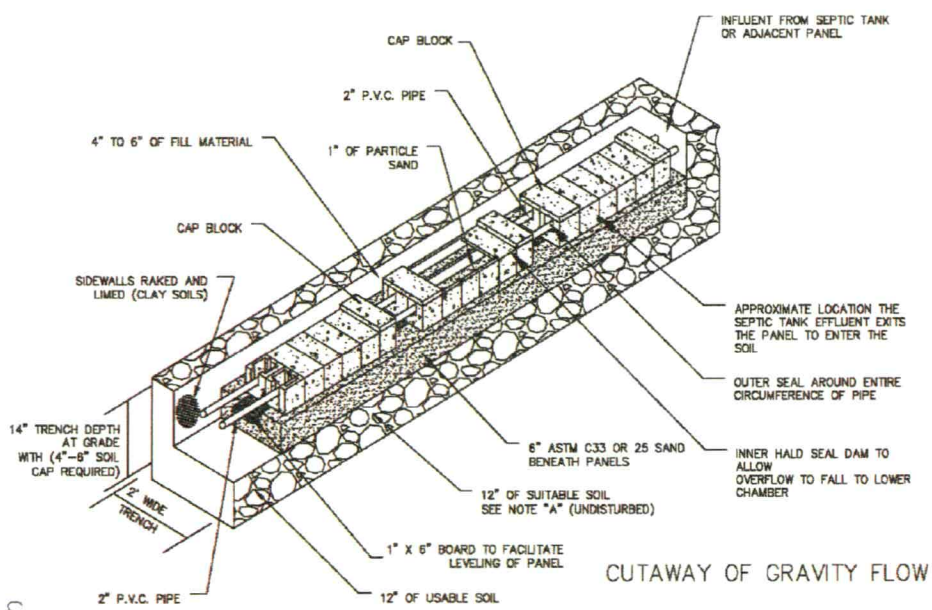
Project Name: Septic System Proposal
Address: 103 Dublin Court, Statesville, Iredell County, NC

Drawing By: GDB
Date: 18MAY23
Rev:

Reviewed By: GDB
Date: 18MAY23

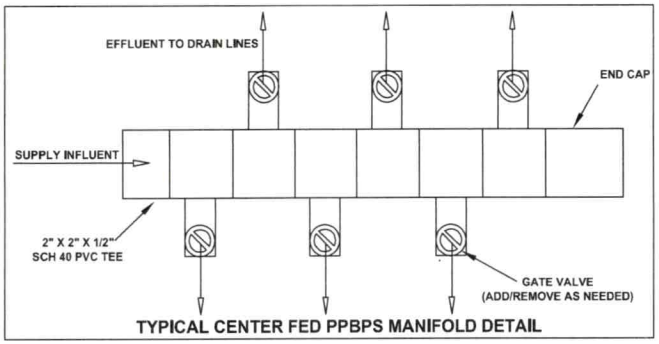
Prepared for review by: Owner ☐ Agent ☐ Engineer ☐ Regulator ☒ Installer ☐ Soil Scientist ☐

ISOMETRIC DRAWING OF A SEGMENT OF T&J PANEL HORIZONTAL INSTALLATION



CUTAWAY OF GRAVITY FLOW PANEL

N.T.S.



TYPICAL CENTER FED PPBPS MANIFOLD DETAIL

MANUFACTURER'S RECOMMENDED DETAILS



Notes
Manufacturers' details courtesy of T&J Panel.
This drawing and the information contained in it are the property of Carolina Septic Systems, PC. and is intended for sole use by Carolina Septic Systems, PC for permiting purposes only..

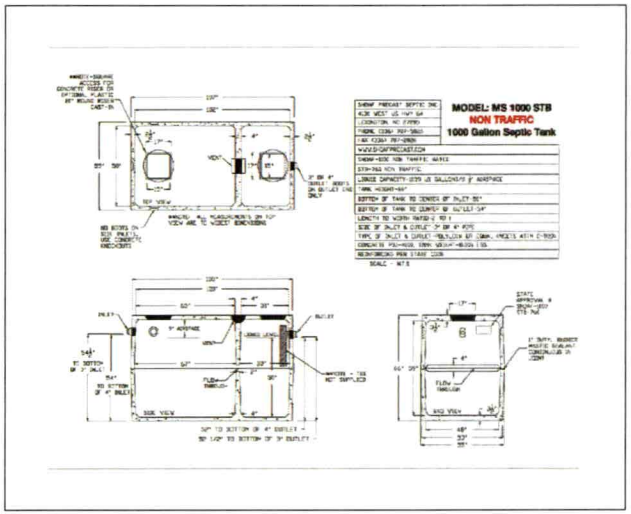
CAROLINA SEPTIC SYSTEMS, PC
PO Box 26072
Charlotte, NC 28221

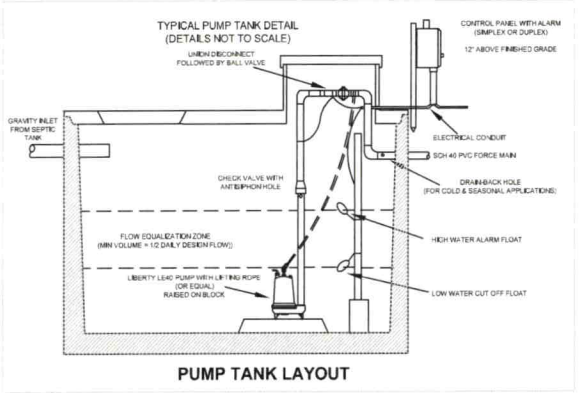
Project Name: On-Site Drainfield System Proposal
Address: 103 Dublin Court, Statesville, Iredell County, NC

Drawing By: GDB
Date: 07JUL23
Rev:

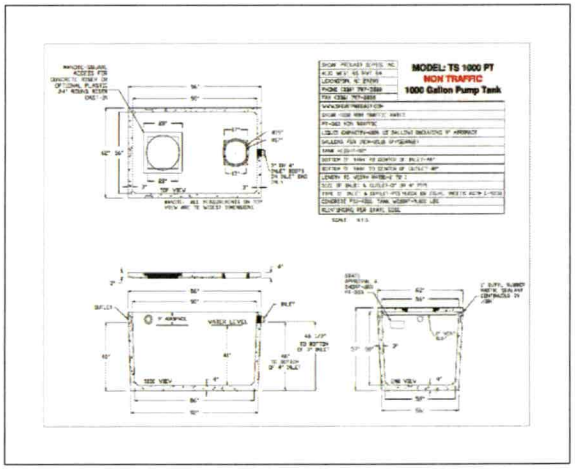
Reviewed By: GDB
Date: 07JUL23

Prepared for review by: Owner ☐ Agent ☐ Engineer ☐ Regulator [x] Installer ☐ Soil Scientist ☐





PUMP TANK LAYOUT



MANUFACTURERS' DETAILS



Notes

The above details are courtesy of the manufacturers indicated therein.
Any subsitiutions or changes in installation should be reported to the engineer for evaluation prior to construction. Proposed repairs to or expansions of the system should be reported to the engineer for evaluation.
This drawing and the information contained in it are the property of Carolins Septic Systems, PC, who should be angaged to supervise construction, inspection and preparation of "as-built"

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 8/23/2022

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 Higginbotham Insurance Agency, Inc. 500 W. 13th Street Fort Worth TX 76102 License#: 2081754	**CONTACT NAME:** David Vaughan **PHONE (A/C, No, Ext):** 9187797880 **FAX (A/C, No):** 817-882-9284 **E-MAIL ADDRESS:** dlvjr@higginbotham.net
INSURED Carolina Septic Systems, PC 3901 Davis Lane Charlotte NC 28269 CAROSEP-01	**INSURER(S) AFFORDING COVERAGE** — **NAIC #** **INSURER A :** Mid-Continent Casualty Company — 23418 **INSURER B :** **INSURER C :** **INSURER D :** **INSURER E :** **INSURER F :**

COVERAGES **CERTIFICATE NUMBER:** 484602894 **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	X **COMMERCIAL GENERAL LIABILITY**			04-GL-001085517	9/1/2022	9/1/2023	EACH OCCURRENCE	$ 1,000,000
	CLAIMS-MADE [X] OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 100,000
	X Professional						MED EXP (Any one person)	$ Excluded
							PERSONAL & ADV INJURY	$ 1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	$ 3,000,000
	X POLICY [ ] PRO-JECT [ ] LOC						PRODUCTS - COMP/OP AGG	$ 3,000,000
	OTHER:							$
	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	$
	ANY AUTO						BODILY INJURY (Per person)	$
	OWNED AUTOS ONLY / SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	HIRED AUTOS ONLY / NON-OWNED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	$
								$
	UMBRELLA LIAB OCCUR						EACH OCCURRENCE	$
	EXCESS LIAB CLAIMS-MADE						AGGREGATE	$
	DED RETENTION $							$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y / N						PER STATUTE / OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? [ ] N / A						E.L. EACH ACCIDENT	$
	(Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$
							E.L. DISEASE - POLICY LIMIT	$

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

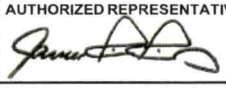
CERTIFICATE HOLDER

For Informational Purposes Only

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



© 1988-2015 ACORD CORPORATION. All rights reserved.

Erie Insurance

100 Erie Ins. Pl. • Erie, PA 16530

CERTIFICATE OF INSURANCE

- THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY -

CERTIFICATE HOLDER COPY

NAME AND NUMBER OF AGENCY		DATE ISSUED
ROBBINS & ASSOCS INS AGY INC 500 N CHURCH ST	JJ4299	04/25/2022
MONROE , NC 28112-4806	704-226-1300	NAME AND ADDRESS OF CERTIFICATE HOLDER
NAME AND ADDRESS OF NAMED INSURED		THOMPSON ENVIRONMENTAL CONSULTING INC PO BOX 541 MIDLAND NC 28107-
LAGO VISTA LAWNCARE & LANDSCAPING SERVICE LLC * 2602 GOLDMINE RD MONROE NC 28110-8947		

This is to certify that policies, as indicated by Policy Number below, are in force for the Named Insured at the time that the certificate is being issued.

TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE	POLICY EXPIRATION DATE	LIMITS OF INSURANCE		
GENERAL LIABILITY COMMERCIAL GENERAL LIABILITY OCCURRENCE FORM GEN'L AGGREGATE LIMIT APPLIES PER: PROJECT	Q260521176	02/05/2022	02/05/2023	EACH OCCURRENCE	$ 1000000	
				FIRE DAMAGE (Any one premises)	$ 1000000	
				MED EXP (Any one person)	$ 5000	
				PERSONAL & ADV INJURY	$ 1000000	
				GENERAL AGGREGATE	$ 2000000	
				PRODUCTS-COMP/OP AGG	$ 2000000	
				BODILY INJURY (EACH PERSON)	$	
				BODILY INJURY (EACH ACCIDENT)	$	
				PROPERTY DAMAGE	$	
				BODILY INJURY AND PROPERTY DAMAGE COMBINED	$	
				EACH OCCURRENCE		
				AGGREGATE		
WORKERS COMPENSATION AND EMPLOYERS LIABILITY	Q893000667	05/30/2022	05/30/2023	STATUTORY		
				BODILY INJURY BY — ACCIDENT	$ 100000	EACH ACCIDENT
				DISEASE	$ 500000	POLICY LIMIT
				DISEASE	$ 100000	EACH EMPLOYEE

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/EXCLUSIONS ADDED BY ENDORSEMENT/SPECIAL PROVISIONS

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.

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).

THIS CERTIFICATE IS ISSUED FOR INFORMATION PURPOSES ONLY AND CONFERS NO RIGHTS ON THE CERTIFICATE HOLDER. IT DOES NOT AFFIRMATIVELY OR NEGATIVELY LIST, AMEND, EXTEND OR OTHERWISE ALTER THE TERMS, EXCLUSIONS AND CONDITIONS OF INSURANCE COVERAGE CONTAINED IN THE POLICY(IES) INDICATED ABOVE. THE TERMS AND CONDITIONS OF THE POLICY(IES) GOVERN THE INSURANCE COVERAGE AS APPLIED TO ANY GIVEN SITUATION. LIMITS SHOWN MAY HAVE BEEN REDUCED BY CLAIMS PAID. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER AND CERTIFICATE HOLDER.

ERIE INSURANCE

SEE REVERSE SIDE

AUTHORIZED REPRESENTATIVE Marc Cipriani

UF-1568 09/12

CIF

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 9/7/2022

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
Higginbotham Insurance Agency, Inc.
500 W. 13th Street
Fort Worth TX 76102

License#: 2081754

CONTACT NAME: David Vaughan
PHONE (A/C, No, Ext): 9187797880 **FAX (A/C, No):** 817-882-9284
E-MAIL ADDRESS: dlvjr@higginbotham.net

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : Mid-Continent Casualty Company	23418
INSURER B : Hartford Underwriters Insurance Company	30104
INSURER C :	
INSURER D :	
INSURER E :	
INSURER F :	

INSURED
Thompson Environmental Consulting, Inc.
PO Box 541
Midland NC 28107-0541

THOMENV-01

COVERAGES **CERTIFICATE NUMBER:** 1600075032 **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	X COMMERCIAL GENERAL LIABILITY			04-GL-001086672	9/25/2022	9/25/2023	EACH OCCURRENCE	$ 1,000,000
	CLAIMS-MADE [X] OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 100,000
	X Professional						MED EXP (Any one person)	$ Excluded
	GEN'L AGGREGATE LIMIT APPLIES PER:						PERSONAL & ADV INJURY	$ 1,000,000
	X POLICY [ ] PRO-JECT [ ] LOC						GENERAL AGGREGATE	$ 3,000,000
	OTHER:						PRODUCTS - COMP/OP AGG	$ 3,000,000
								$
	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	$
	ANY AUTO						BODILY INJURY (Per person)	$
	OWNED AUTOS ONLY / SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	HIRED AUTOS ONLY / NON-OWNED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	$
								$
	UMBRELLA LIAB [ ] OCCUR						EACH OCCURRENCE	$
	EXCESS LIAB [ ] CLAIMS-MADE						AGGREGATE	$
	DED [ ] RETENTION $							$
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y / N	N / A		38WECNW6175	10/17/2021	10/17/2022	X PER STATUTE [ ] OTH-ER	
	ANYPROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? [N] (Mandatory in NH)						E.L. EACH ACCIDENT	$ 1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$ 1,000,000
							E.L. DISEASE - POLICY LIMIT	$ 1,000,000

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

CERTIFICATE HOLDER

For Informational Purposes

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



© 1988-2015 ACORD CORPORATION. All rights reserved.

The ACORD name and logo are registered marks of ACORD

Carolina Septic Systems, PC
PO Box 26072
Charlotte, North Carolina 28269

March 7, 2024

RE: Engineer's Report
103 Dublin Court, Statesville, Iredell County, NC
Parcel Tax Identification # 47139710 49

Dear Mr. Sir/ Ma'am,

Based on site observations, as-built sketch, and images supplied to Carolina Septic Systems, PC, by Carlos Rocha, Lago Vista, LLC, the septic system at the above referenced address was complete and was installed in general accordance with approved plans, specifications, and approved modifications.

Respectfully submitted,
Carolina Septic Systems, PC
By,



07MAR24

George D. Barrier, PE
Principal Engineer
Registered, NC 019221

Lago Vista LLC
2602 Goldmine Rd
Monroe, NC 28110

On-site Wastewater Contractor's signed statement

RE: 103 Dublin Court, Statesville, Iredell County, NC
Parcel Tax Identification # 4713971058

Our company, Lago Vista LLC, installed the septic system at the above referenced site. The system was installed in general accordance with the permitting documents prepared by Carolina Septic Systems, PC. The system has been start-up tested and is installed to function properly as permitted.

Lago Vista, LLC
by

Juan Carlos Rocha _____ 10/03/2024 _____

Juan Carlos Rocha Date:

Signature: Juan Carlos Rocha (Mar 10, 2024 21:37 EDT)

Email: carlosseptic@gmail.com

Contractors Certification 103 Duplin Ct

Final Audit Report 2024-03-11

Created:	2024-03-07
By:	George D. Barrier, PE (gbarrier@carolinasepticsystems.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAyV3JdwYLHZF54IxI1aOvmmp8nGK_vv-r

"Contractors Certification 103 Duplin Ct" History

Document created by George D. Barrier, PE (gbarrier@carolinasepticsystems.com)
2024-03-07 - 8:14:05 PM GMT

Document emailed to Carlos Rocha (carlosseptic@gmail.com) for signature
2024-03-07 - 8:14:08 PM GMT

Email viewed by Carlos Rocha (carlosseptic@gmail.com)
2024-03-11 - 1:35:20 AM GMT

Signer Carlos Rocha (carlosseptic@gmail.com) entered name at signing as Juan carlis Rocha
2024-03-11 - 1:37:53 AM GMT

Document e-signed by Juan carlis Rocha (carlosseptic@gmail.com)
Signature Date: 2024-03-11 - 1:37:55 AM GMT - Time Source: server

Agreement completed.
2024-03-11 - 1:37:55 AM GMT

February 22, 2024

Dylan Limper
Jay-Cai Builders, LLC
105 Yellow Birch Loop
Mooresville, NC 28117

RE: Owner's acceptance of the system from the PE
103 Dublin Court, Statesville, Iredell County, NC
Parcel Tax Identification # 4713971058

The system installed on my referenced property was permitted under an Engineered Option Permit by Carolina Septic Systems, PC and installed by Carlos Rocha of Lago Vista Lawncare & Landscaping Service. LLC. I, Dylan Limer, for Jay-Cai Builders, LLC, as property owner, do hereby accept the septic system installed on my property.

Sincerely,

Dylan Limper

Notary 3/1/2024

Deborah Fox
Notary Public
Iredell County
North Carolina
My Commission Expires 3/25/2024