



NORTH CAROLINA
Environmental Quality

ROY COOPER
Governor

ELIZABETH S. BISER
Secretary

RICHARD E. ROGERS, JR.
Director

June 30, 2023

TIM SMITH – MANAGER
FLYING CROWN RANCH LLC
105 WESTON ESTATES WAY
CARY, NORTH CAROLINA 27513

Subject: Permit No. WQ0043977
The Retreat at Haw River WWTP
Reclaimed Water Generation and
Dedicated Utilization System
Chatham County

Dear Mr. Smith,

In response to your permit application request received on December 2, 2022, and subsequent additional information received on April 4, 2023, we are forwarding herewith Permit No. WQ0043977 dated June 30, 2023, to Flying Crown Ranch LLC for the construction and operation of the subject reclaimed water generation and dedicated utilization facilities.

This permit is effective from the date of issuance through January 31, 2030, and is subject to the conditions and limitations therein. **The Permittee shall submit a renewal application no later than August 4, 2029.**

Please pay attention to the monitoring requirements listed in Attachments A and B for they may differ from the previous permit issuance. Failure to establish an adequate system for collecting and maintaining the required operational information may result in future non-compliance.

This permit can be contested as provided in [Chapter 150B of the North Carolina General Statutes](#) by filing a Petition for a Contested Case Hearing (Petition) with the North Carolina Office of Administrative Hearings (OAH) within 30 calendar days. Requirements for filing a Petition are set forth in [Chapter 150B of the North Carolina General Statutes](#) and [Title 26 of the North Carolina Administrative Code](#). Those interested in filing may access additional information regarding the requirements for filing a Petition and Petition forms at the OAH [website](#) or by calling the OAH Clerk's Office at (919) 431-3000. A party filing a Petition shall serve a copy of the Petition on the Department of Environmental Quality's Office of General Counsel at 1601 Mail Service Center, Raleigh, NC 27699-1601. If the party filing the Petition is not the Permittee, then the party shall also serve the Permittee pursuant to [G.S. 150B-23\(a\)](#).



North Carolina Department of Environmental Quality | Division of Water Resources
512 North Salisbury Street | 1617 Mail Service Center | Raleigh, North Carolina 27699-1617
919.707.9000

Included with this permit are Division-approved plans and specifications. If you need additional information concerning this permit, please contact Erick Saunders at (919) 707-3659 or erickson.saunders@deq.nc.gov.

Sincerely,

DocuSigned by:

Nathaniel Thornburg

D1043082680C483...

Richard E. Rogers, Jr., Director
Division of Water Resources

cc: Chatham County Health Department (Electronic Copy)
Raleigh Regional Office, Water Quality Regional Operations Section (Electronic Copy)
Daniel K. Peplinski, PE – McKim & Creed (Electronic Copy)
Mark P. Ashness, PE – CE Group, Inc. (Electronic Copy)
Operator Certification Program (Electronic Copy)
Laserfiche File (Electronic Copy)
Digital Permit Archive (Electronic Copy)

NORTH CAROLINA
ENVIRONMENTAL MANAGEMENT COMMISSION
DEPARTMENT OF ENVIRONMENTAL QUALITY
RALEIGH

RECLAIMED WATER GENERATION and DEDICATED UTILIZATION SYSTEM PERMIT

Pursuant to the provisions of Article 21 of Chapter 143, General Statutes of North Carolina as amended,
and other applicable Laws, Rules, and Regulations

PERMISSION IS HEREBY GRANTED TO

Flying Crown Ranch LLC
Chatham County

FOR THE

construction and operation of a 114,900 gallon per day (GPD) reclaimed water generation and dedicated utilization facility consisting of:

a 130,000 GPD reclaimed water generation system consisting of: an influent flow meter; a flow splitter box with a manual bar screen; a 32,316 gallon aerated flow equalization (EQ) basin with two 90 cubic feet per minute (CFM) blowers and dual 112 gallon per minute (GPM) pumps to recycle back into the flow splitter box; two 82,000 gallon aeration basins with three 450 CFM blowers; two 17,753 gallon clarifiers with airlift sludge return; a 750 gallon magnesium hydroxide tank with a peristaltic pump; a 30,000 gallon aerated sludge tank with two 80 CFM blowers; a two-chambered tertiary filter with four 340 GPM pumps (two mudwell pumps for backwashing to the EQ basin and two for filter backwash) and two 40 CFM filter backwash air scour blowers; two banks of two 90.28 GPM ultraviolet (UV) disinfection units (four units total); an effluent flow measuring device; an effluent sampling station; a turbidimeter; a 586,000 gallon five-day upset pond with two 299 GPM upset return pumps; a 250 kilovolt-amp (kVA) auxiliary generator; and all associated piping, valves, controls, and appurtenances

and a 114,900 GPD reclaimed water dedicated utilization facility consisting of: a 13.3 million gallon (MG) effluent storage pond with two 800 GPM irrigation pumps; a weather station with a rain sensor; a 48.8 acre spray utilization area; and all associated piping, valves, controls, and appurtenances

to serve the Retreat at Haw River WWTP, with no discharge of wastes to surface waters, pursuant to the application received on December 2, 2022, and subsequent additional information received on April 4, 2023, and in conformity with the Division-approved plans and specifications considered a part of this permit.

This permit is effective from the date of issuance through January 31, 2030, and is subject to the following conditions and limitations:

I. SCHEDULES

1. Upon completion of construction and prior to operation of this permitted facility, the Permittee shall submit an engineering certification from a North Carolina licensed Professional Engineer certifying that the permitted facility has been constructed pursuant to [G.S. 143-215.1](#), [Administrative Code Title 15A Subchapter 02U](#), this permit, and the Division-approved plans and specifications. For phased and partially certified facilities, the Permittee shall retain the responsibility to track further construction approved under this permit and shall provide a final engineering certification upon project completion. The Permittee shall submit the Engineering Certification via the Non-Discharge [online portal](#). [[15A NCAC 02T .0116\(a\)](#), [02U .0116](#)]
2. The Permittee shall notify the Raleigh Regional Office, telephone number (919) 791-4200, at least two business days in advance of the initial operation of the constructed facilities so that the Division can conduct a startup inspection. [[15A NCAC 02T .0108\(b\)\(1\)\(A\)](#), [02U .0108](#)]
3. Prior to the operation of the reclaimed water generation and utilization system, the Permittee shall install gauges to monitor freeboard levels in the 586,000 gallon five-day upset pond and the 13.3 MG effluent storage pond. [[15A NCAC 02T .0108\(b\)\(1\)\(B\)](#), [02U .0108](#), [02U .0401\(h\)](#)]
4. Prior to the operation of the reclaimed water generation and utilization system, the Permittee shall submit a final Operation and Maintenance Plan. The Permittee shall submit the final Operation and Maintenance Plan via the Non-Discharge [online portal](#). [[15A NCAC 02T .0108\(b\)\(1\)\(B\)](#), [02U .0108](#), [02U .0801\(a\)](#)]
5. If the permitted facilities change ownership or the Permittee changes its name, the Permittee shall submit a permit modification request on Division-approved forms within 90 days of the change of ownership. The Permittee shall comply with all terms and conditions of this permit until the Division transfers the permit to the successor-owner. [[G.S. 143-215.1\(d3\)](#)]
6. The Permittee shall request renewal of this permit on Division-approved forms no later than August 4, 2029. [[15A NCAC 02T .0105\(b\)](#), [02T .0109](#), [02U .0105](#), [02U .0109](#)]

II. PERFORMANCE STANDARDS

1. The Permittee shall operate and maintain the subject reclaimed water generation and dedicated utilization facilities so there is no discharge to surface waters, nor any contravention of groundwater or surface water standards. In the event the facilities do not perform as designed, including the creation of nuisance conditions due to improper operation and maintenance, or failure of the utilization areas to assimilate the reclaimed water, the Permittee shall take immediate corrective actions, including Division-required actions, such as the construction of additional or replacement reclaimed water generation and dedicated utilization facilities. [[15A NCAC 02T .0108\(b\)\(1\)\(A\)](#), [02U .0108](#)]
2. This permit shall not relieve the Permittee of its responsibility for contravention of groundwater or surface water standards resulting from the operation of this facility. [[15A NCAC 02T .0108\(b\)\(1\)\(A\)](#), [02U .0108](#)]
3. Reclaimed water quality shall not exceed the limitations specified in Attachment A. [[15A NCAC 02U .0301](#)]
4. The Permittee shall not utilize generated reclaimed water in exceedance of the hydraulic and agronomic rates specified in Attachment B. [[15A NCAC 02U .0401\(g\)](#)]
5. The attached Operational Agreement is a condition of this permit. Noncompliance with the terms of the Operational Agreement shall subject the Permittee to all measures pursuant to [G.S. 143-215.6A](#), [G.S. 143-215.6B](#), and [G.S. 143-215.6C](#) for violation of or failure to act pursuant to the terms and conditions of this permit. [[15A NCAC 02T .0115](#), [02U .0115](#)]

6. The Permittee shall connect the reclaimed water utilization system to a rain or moisture sensor designed to prevent irrigation during precipitation events or wet conditions. [[15A NCAC 02U .0401\(k\)](#)]
7. The Permittee shall tag or label all reclaimed water valves, storage facilities, and outlets to warn the public or employees that the reclaimed water is not for drinking. [[15A NCAC 02U .0403\(b\)](#)]
8. The Permittee shall color-code, tape, or otherwise mark all reclaimed water piping, valves, outlets, and other appurtenances to identify the source of the water as reclaimed water as follows:
 - a. All reclaimed water piping and appurtenances shall be either colored purple (Pantone 522 or equivalent) and embossed or integrally stamped or marked "CAUTION: RECLAIMED WATER - DO NOT DRINK" or installed with a purple (Pantone 522 or equivalent) identification tape or polyethylene vinyl wrap. The warning shall be on opposite sides of the pipe and repeated every three feet or less.
 - b. Identification tape shall be at least three inches wide and have white or black lettering on a purple (Pantone 522 or equivalent) field stating "CAUTION: RECLAIMED WATER - DO NOT DRINK." The Permittee shall install identification tape on top of reclaimed water pipelines fastened at least every 10 feet to each pipe length and run continuously the entire length of the pipe.
 - c. The Permittee shall tape or otherwise identify existing underground distribution systems retrofitted for conveying reclaimed water as described in Paragraphs a. and b. above. The Permittee shall perform this identification within 10 feet of any potable water supply line or sanitary sewer line crossing a reclaimed water line. The Permittee does not need to perform this identification for the entire length of the distribution system.

[[15A NCAC 02U .0403\(c\)](#)]
9. The Permittee shall secure all reclaimed water valves and outlets such that only Permittee-authorized personnel can operate them. [[15A NCAC 02U .0403\(d\)](#)]
10. The Permittee shall place hose bibs in locked, below-grade vaults and label them non-potable. The Permittee may place hose bibs above ground and label them non-potable if the hose bibs require a tool to operate. [[15A NCAC 02U .0403\(e\)](#)]
11. There shall be no direct cross-connections between the reclaimed water and potable water systems unless such connection is Department-approved pursuant to [15A NCAC 18C .0406](#). [[15A NCAC 02U .0403\(f\)](#)]
12. For reclaimed water irrigation fields permitted on or after September 1, 2006, the Division has established the compliance and review boundaries at the irrigation area boundary. Any exceedance of groundwater standards at or beyond the compliance boundary shall require the Permittee to take corrective action. The Division shall note any Division-approved relocation of the compliance boundary in Attachment B. The Division shall consider multiple contiguous properties under common ownership and permitted for use as a disposal system as a single property regarding the determination of a compliance boundary. [[15A NCAC 02L .0106\(e\)](#), [02L .0107\(c\)](#), [02L .0107\(f\)](#), [02T .0105\(h\)](#), [02U .0501\(a\)\(6\)](#)]
13. The Permittee shall notify the Division of any sale or transfer of property affecting a compliance boundary (i.e., parcel subdivision). [[15A NCAC 02L .0107\(l\)](#)]
14. The Permittee or any landowner who owns land within the compliance boundary shall not construct any water supply wells within the compliance boundary. [[15A NCAC 02L .0107\(i\)](#)]
15. Reclaimed water distribution lines shall be at least five feet horizontally from and 18 inches below any water line if practicable. If these separation distances cannot be met, the piping and integrity testing procedures shall meet water main standards pursuant to [15A NCAC 18C](#). [[15A NCAC 02U .0403\(g\)](#), [02U .0403\(h\)](#)]

16. Reclaimed water distribution lines shall not be less than 50 feet from a well unless the piping and integrity testing procedures meet water main standards pursuant to [15A NCAC 18C](#), but in no case shall they be less than 25 feet from a private well. [[15A NCAC 02U .0403\(g\)](#), [02U .0403\(i\)](#)]

17. Reclaimed water distribution lines shall meet the separation distances to sewer lines pursuant to [15A NCAC 02T .0305](#). [[15A NCAC 02U .0403\(g\)](#), [02U .0403\(j\)](#)]

18. The Permittee shall operate and maintain the permitted facilities pursuant to the following setbacks:

a. The Division originally permitted the reclaimed water irrigation sites on June 30, 2023, with an application received on December 2, 2022. The setbacks for spray reclaimed water irrigation sites originally permitted or modified with an application received on or after September 1, 2018, are as follows (all distances in feet):

- i. Surface waters classified SA: 100
- ii. Surface waters not classified SA: 25
- iii. Each well with exception of monitoring wells: 100

[[15A NCAC 02U .0701\(c\)](#), [02U .0701\(d\)](#)]

b. The Division originally permitted the treatment and storage units on June 30, 2023, with an application received on December 2, 2022. The setbacks for treatment and storage units originally permitted or modified with an application received on or after September 1, 2018, are as follows (all distances in feet):

- i. Each habitable residence or place of assembly under separate ownership: 100¹
- ii. Each private or public water supply source: 100
- iii. Surface waters: 50
- iv. Each well with exception of monitoring wells: 100
- v. Each property line: 50²

¹ Habitable residences or places of assembly under separate ownership constructed after the Division originally permitted or subsequently modified the facilities are exempt from this setback.

² Setbacks to property lines are not applicable when the Permittee, or the entity from which the Permittee is leasing, owns both parcels separated by the property line.

[[15A NCAC 02T .0506\(b\)](#), [02U .0701\(a\)](#), [02U .0701\(h\)](#), [02U .0701\(i\)](#)]

c. The Division originally permitted the final effluent storage units on June 30, 2023, with an application received on December 2, 2022. The setbacks for final effluent storage units originally permitted or modified with an application received on or after September 1, 2018, are as follows (all distances in feet):

- i. Each private or public water supply source: 100
- ii. Surface waters: 50
- iii. Each well with exception of monitoring wells: 100
- iv. Each property line for final effluent storage units constructed on or after June 18, 2011: 50¹

¹ Setbacks to property lines are not applicable when the Permittee, or the entity from which the Permittee is leasing, owns both parcels separated by the property line.

[[15A NCAC 02U .0701\(b\)](#), [02U .0701\(h\)](#), [02U .0701\(i\)](#)]

III. OPERATION AND MAINTENANCE

1. The Permittee shall operate and maintain the subject facilities as a non-discharge system. [[15A NCAC 02U .0101](#)]
2. The Permittee shall maintain an Operation and Maintenance Plan, which shall include:
 - a. A description of the operation of the system in sufficient detail to show what operations are necessary for the system to function and who shall conduct the operations.
 - b. A description of the anticipated maintenance of the system.
 - c. Provisions for safety measures, including restriction of access to the site and equipment.
 - d. Spill control provisions that include response to upsets and bypasses, including control, containment, and remediation; and contact information for personnel, emergency responders, and regulatory agencies.

[[15A NCAC 02U .0801\(a\)](#)]
3. Upon the Water Pollution Control System Operators Certification Commission's (WPCSOCC) classification of the subject non-discharge facilities, the Permittee shall designate and employ a certified Operator in Responsible Charge (ORC), and one or more certified operators as Back-up ORCs. The ORC or its Back-up shall operate and visit the facilities as required pursuant to [15A NCAC 08G .0204](#) and [08G .0205](#). [[15A NCAC 02T .0117](#), [02U .0117](#)]
4. An operator certified by the Water Pollution Control System Operators Certification Commission (WPCSOCC) of a grade equivalent or greater than the facility classification shall be on call 24 hours per day. [[15A NCAC 02U .0401\(e\)](#)]
5. The Permittee shall maintain a year-round vegetative cover on the irrigation area such that crop health is optimal and allows even reclaimed water distribution and inspection of the irrigation system. [[15A NCAC 02U .0801\(b\)](#)]
6. The Permittee shall take measures to prevent reclaimed water ponding in or runoff from the irrigation area. [[15A NCAC 02U .0801\(c\)](#)]
7. The Permittee shall not irrigate generated reclaimed water during inclement weather or when the soil is in a condition that will cause ponding or runoff. [[15A NCAC 02U .0401\(k\)](#)]
8. The Permittee shall test and calibrate the irrigation equipment once per permit cycle. [[15A NCAC 02U .0801\(d\)](#)]
9. The Permittee shall only irrigate reclaimed water generated from the Retreat at Haw River WWTP onto the sites listed in Attachment B. [[15A NCAC 02U .0101](#)]
10. The Permittee shall not allow vehicles or heavy machinery on the irrigation area, except during equipment installation or maintenance activities. [[15A NCAC 02U .0801\(e\)](#)]
11. The Permittee shall prohibit public access to the reclaimed water generation and storage facilities. [[15A NCAC 02T .0108\(b\)\(1\)\(A\)](#), [02U .0108](#)]
12. The Permittee shall control public access to reclaimed water utilization sites during active site use. [[15A NCAC 02U .0501\(a\)\(2\)](#)]
13. The Permittee shall dispose of or utilize generated residuals in a Division-approved manner. [[15A NCAC 02T .1101](#), [02U .0802](#)].
14. The Permittee shall not divert or bypass untreated or partially treated reclaimed water from the subject facilities. [[15A NCAC 02U .0402\(g\)](#)]

15. The Permittee shall maintain a freeboard of not less than two feet in the 586,000 gallon five-day upset pond and the 13.3 MG effluent storage pond. [[15A NCAC 02U .0401\(h\)](#)]
16. The Permittee shall provide gauges to monitor freeboard levels in the 586,000 gallon five-day upset pond and the 13.3 MG effluent storage pond. These gauges shall have readily visible permanent markings, at inch or tenth of foot increments, indicating the following elevations: the maximum liquid level at the top of the temporary liquid storage volume, the minimum liquid level at the bottom of the temporary liquid storage volume, and the lowest point on top of the dam. [[15A NCAC 02U .0801\(f\)](#)]
17. The Permittee shall establish and maintain a protective vegetative cover on all berms, pipe runs, erosion control areas, surface water diversions, and earthen embankments (i.e., the outside toe of the embankment to the maximum allowable temporary storage elevation on the inside of the embankment). The Permittee shall remove all trees, shrubs, and other woody vegetation from earthen dikes and embankments. The Permittee shall keep all earthen embankments mowed or otherwise controlled and accessible. [[15A NCAC 02U .0801\(g\)](#)]
18. The Permittee shall test and calibrate metering equipment annually. [[15A NCAC 02U .0801\(d\)](#)]
19. The Permittee shall provide an automatically activated standby power source or other means to prevent improperly treated wastewater from entering the storage, distribution, or utilization system. If the Permittee employs a generator as an alternate power supply, the Permittee shall test it weekly. [[15A NCAC 02U .0401\(d\)](#)]
20. The Permittee shall provide continuous online monitoring and recording for turbidity or particle count and flow prior to storage, distribution, or utilization of reclaimed water. [[15A NCAC 02U .0401\(b\)](#)]
21. If the generated reclaimed water exceeds 10 nephelometric turbidity units (NTUs) or the pathogen limits in Attachment A, the Permittee shall route all generated reclaimed water to the five-day upset pond until the Permittee corrects all problems associated with the reclaimed water generation system. The Permittee shall pump all water in the five-day upset pond back to the treatment plant headworks for re-treatment or treat the water in the five-day upset pond prior to utilization. [[15A NCAC 02U .0402\(d\)](#)]
22. The Permittee shall provide notification to the public and its employees about the use of reclaimed water and that reclaimed water is not for drinking. The Permittee shall provide notification to employees in a language they understand. [[15A NCAC 02U .0501\(a\)\(2\)](#)]
23. The Permittee shall develop and implement an education program to inform users and its employees about the proper use of reclaimed water. The Permittee shall provide educational material to all residents and/or other facilities provided with reclaimed water. The Permittee shall make all educational materials available to the Division upon request. [[15A NCAC 02U .0501\(a\)\(4\)](#)]

IV. MONITORING AND REPORTING

1. The Permittee shall conduct and report any Division-required monitoring, including the monitoring of groundwater, surface water or wetlands, waste, reclaimed water, residuals, soil, treatment processes, lagoon or storage ponds, and plant tissue, if necessary to evaluate this facility's impact on groundwater and surface water. [[15A NCAC 02T .0108\(c\)](#), [02U .0108](#)]
2. A Division-certified laboratory shall conduct all analyses for the required parameters specified in Attachment A. [[15A NCAC 02H .0805](#)]
3. The Permittee shall continuously monitor flow through the treatment facility and report daily flow values on Form NDMR. Facilities with a permitted flow of less than 10,000 GPD may estimate its flow from water usage records provided the water source has a metering device. [[15A NCAC 02T .0105\(k\)](#), [02T .0108\(c\)](#), [02U .0105](#), [02U .0108](#)]

4. The Permittee shall monitor the generated reclaimed water at the frequencies and locations for the parameters specified in Attachment A. [[15A NCAC 02T .0105\(k\)](#), [02T .0108\(c\)](#), [02U .0105](#), [02U .0108](#)]
5. The Permittee shall maintain records tracking the amount of reclaimed water irrigated, which shall include the following information for each irrigation site listed in Attachment B:
 - a. Date of irrigation.
 - b. Volume of effluent irrigated.
 - c. Site irrigated.
 - d. Length of site irrigation time.
 - e. Continuous weekly, monthly, and year-to-date hydraulic (inches/acre) loadings.
 - f. Continuous monthly and year-to-date loadings for any non-hydraulic parameter specifically limited in Attachment B.
 - g. Weather conditions.
 - h. Maintenance of cover crops.

[[15A NCAC 02T .0108\(c\)](#), [02U .0108](#)]
6. The Permittee shall measure and record weekly to the nearest inch or tenth of a foot of freeboard (i.e., the waste level to the lowest embankment elevation) in the 586,000 gallon five-day upset pond and the 13.3 MG effluent storage pond. The Permittee shall maintain the weekly freeboard records for eight years and shall make them available to the Division upon request. [[15A NCAC 02T .0108\(c\)](#), [02U .0108](#)]
7. On or before the last day of the month following the previous month's sampling, the Permittee shall submit monitoring data (as specified in Conditions IV.3 and IV.4) on Form NDMR for each PPI and operation and disposal records (as specified in Conditions IV.5 and IV.6) on Form NDAR-1 for every site in Attachment B. If no activities occurred during the monitoring month, the Permittee shall still submit monitoring reports documenting the absence of the activity. The Permittee shall submit the reports via the Non-Discharge [monitoring report portal](#). [[15A NCAC 02T .0105\(l\)](#),
8. The Permittee shall maintain records of all residuals removed from this facility. The Permittee shall maintain these records for eight years and shall make them available to the Division upon request. These records shall include:
 - a. Name of the residuals hauler.
 - b. Non-Discharge permit number authorizing the residuals disposal, or a letter from a municipality agreeing to accept the residuals.
 - c. Residuals hauling date.
 - d. Volume of residuals removed.

[[15A NCAC 02U .0802\(b\)](#)]
9. The Permittee shall keep a log of all maintenance done at this facility. The Permittee shall maintain this log for eight years and shall make it available to the Division upon request. This log shall include:
 - a. Date of flow measurement device calibration.
 - b. Date of irrigation equipment calibration.
 - c. Date of turbidimeter calibration.
 - d. Visual observations of the plant and plant site.
 - e. Record of preventative maintenance (e.g., changing of equipment, adjustments, testing, inspections, cleanings, etc.).
 - f. Date and results of the alternate power supply testing.
 - g. Record of all discharges of reclaimed water to surface waters or the land surface, including the date of occurrence, estimated volume, and corrective action taken.

[[15A NCAC 02U .0801\(h\)](#)]

10. Noncompliance Notification:

The Permittee shall report to the Raleigh Regional Office, telephone number (919) 791-4200, within 24 hours of first knowledge of the following:

- a. Treatment of wastes abnormal in quantity or characteristic, including the known passage of a hazardous substance.
- b. Any process unit failure (e.g., mechanical, electrical, structural, etc.) that makes the facility incapable of adequate reclaimed water generation.
- c. Any facility failure resulting in a discharge to surface waters.
- d. Any time self-monitoring indicates the facility has gone out of compliance with its permit limitations.
- e. Ponding in or runoff from the irrigation sites.
- f. Any failure resulting in a discharge of reclaimed water directly to surface waters or any release of reclaimed water to land surface greater than or equal to 5,000 gallons. The Permittee shall document releases less than 5,000 gallons to land surface pursuant to Condition IV.9.g. but does not require Regional Office notification.

Emergencies requiring reporting outside normal business hours shall call the Division's Emergency Response personnel at the telephone number (800) 858-0368. All noncompliance notifications shall file a written report to the Raleigh Regional Office within five days of first knowledge of the occurrence, and this report shall outline the actions proposed or taken to ensure the problem does not recur. [[15A NCAC 02T .0108\(b\)\(1\)\(A\)](#), [02U .0108](#)]

V. INSPECTIONS

1. The Permittee shall perform inspections and maintenance to ensure proper operation of the reclaimed water generation and dedicated utilization facilities. [[15A NCAC 02U .0801\(i\)](#)]
2. The Permittee shall inspect the reclaimed water generation and dedicated utilization facilities to prevent malfunctions, facility deterioration, and operator errors that may result in discharges of wastes to the environment, threats to human health, or public nuisances. The Permittee shall maintain an inspection log that includes the date and time of inspection, observations made, and maintenance, repairs, or corrective actions taken. The Permittee shall maintain this inspection log for eight years from the date of the inspection and shall make this log available to the Division upon request. [[15A NCAC 02U .0801\(h\)](#), [02U .0801\(i\)](#)]
3. Division-authorized representatives may, upon presentation of credentials, enter and inspect any property, premises, or place related to the permitted reclaimed water generation and dedicated utilization facilities at any reasonable time for determining compliance with this permit. Division-authorized representatives may inspect or copy records maintained under the terms and conditions of this permit and may collect influent, treatment process water, generated reclaimed water, residual, soil, plant tissue, groundwater, or surface water samples. [[G.S. 143-215.3\(a\)\(2\)](#)]

VI. GENERAL

1. The Permittee's failure to comply with this permit's conditions and limitations may subject the Permittee to a Division enforcement action. [[G.S. 143-215.6A](#), [143-215.6B](#), [143-215.6C](#)]
 2. This permit is effective only for the nature and volume of wastes described in the permit application and Division-approved plans and specifications. [[G.S. 143-215.1\(d\)](#)]
 3. There are no variances to administrative codes or general statutes governing the construction or operation of the permitted facilities unless the Permittee specifically requested a variance in the application and the Division approved the variance as noted in this permit's facility description. [[15A NCAC 02T .0105\(b\)](#), [02U .0105](#)]
 4. This permit does not exempt the Permittee from complying with all statutes, rules, regulations, or ordinances that other jurisdictional government agencies (e.g., local, state, and federal) may require. [[15A NCAC 02T .0108\(b\)\(1\)\(A\)](#), [02U .0108](#)]
 5. The Permittee shall retain this permit and the Division-approved plans and specifications for the life of the permitted facilities. [[15A NCAC 02T .0105\(o\)](#), [02T .0116\(d\)](#), [02U .0105](#), [02U .0116](#)]
 6. The Permittee shall comply with all permit conditions and requirements until the proper closure of the permitted facilities, or until another appropriate authority permits the facilities. [[15A NCAC 02T .0105\(j\)](#), [02U .0105](#)]
 7. This permit is subject to revocation or modification upon 60-day notice from the Division Director in whole or part for:
 - a. Violation of any terms or conditions of this permit or [15A NCAC 02U](#).
 - b. Obtaining a permit by misrepresentation or failure to disclose all relevant facts.
 - c. The Permittee's refusal to allow authorized Department employees upon presentation of credentials:
 - i. To enter the Permittee's premises where a system is located or where the Permittee keeps any Division-required records under the terms and conditions of this permit.
 - ii. To have access to any permit-required documents and records.
 - iii. To inspect any monitoring equipment or method as required in this permit.
 - iv. To sample any pollutants.
 - d. The Permittee's failure to pay the annual fee for administering and compliance monitoring.
 - e. A Division determination that the conditions of this permit conflict with the North Carolina Administrative Code or General Statutes.
- [[15A NCAC 02T .0110](#), [02U .0110](#)]

8. Unless the Division determines that the Permittee needs a permit modification for the construction of facilities to resolve non-compliance with any environmental statute or rule, or the Division Director grants a variance, expansion of the permitted facilities shall not occur if any of the following apply:
 - a. The Permittee or any parent, subsidiary, or other affiliate of the Permittee has been convicted of environmental crimes under [G.S. 143-215.6B](#) or under Federal law that would otherwise be prosecuted under [G.S. 143-215.6B](#), and the Permittee or any parent, subsidiary, or other affiliate of the Permittee has abandoned or exhausted all appeals of this conviction.
 - b. The Permittee or any parent, subsidiary, or other affiliate of the Permittee has previously abandoned a wastewater treatment facility without properly closing the facility in accordance with its permit or [15A NCAC 02U](#).
 - c. The Permittee or any parent, subsidiary, or other affiliate of the Permittee has not paid a civil penalty, and the Permittee or any parent, subsidiary, or other affiliate of the Permittee has abandoned or exhausted all appeals of this penalty.
 - d. The Permittee or any parent, subsidiary, or other affiliate of the Permittee is currently not compliant with any compliance schedule in a permit, settlement agreement, or order.
 - e. The Permittee or any parent, subsidiary, or other affiliate of the Permittee has not paid an annual fee pursuant to [15A NCAC 02T .0105\(e\)\(2\)](#) via [15A NCAC 02U .0105](#).
[\[15A NCAC 02T .0120\(b\), 02T .0120\(d\), 02U .0120\]](#)
9. Unless the Division Director grants a variance, the Division shall not renew this permit if the Permittee or any affiliation has not paid an annual fee pursuant to [15A NCAC 02T .0105\(e\)\(2\)](#). [[15A NCAC 02T .0120\(c\)](#), [02T .0120\(d\)](#), [02U .0105](#), [02U .0120](#)]
10. The Permittee shall pay an annual fee for each year of the term of this permit pursuant to the schedule in [G.S. 143-215.3D\(a\)](#). The Permittee shall continue to pay annual fees for any facility operating on an expired permit that the Division has not rescinded or revoked. [[15A NCAC 02T .0105\(e\)\(2\)](#), [02U .0105](#)]

Permit issued this the 30th day of June 2023

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

DocuSigned by:

D1043082680C483...

Richard E. Rogers, Jr., Director
Division of Water Resources
By Authority of the Environmental Management Commission

Permit Number WQ0043977

ENGINEERING CERTIFICATION

Partial Final

I, _____, as a duly licensed North Carolina Professional Engineer, having periodically / fully observed the construction of the permitted facilities, do hereby state to the best of my abilities that the facility was constructed in compliance with [G.S. 143-215.1, Administrative Code Title 15A Subchapter 02U](#), this permit, and the Division-approved plans and specifications.

Documentation of any variation to this permit, and the Division-approved plans and specifications, is in the attached as-built drawings.

Description of variations: _____

| | | | |
|------------------------------|-------|----------|---------------------------|
| Professional Engineer's Name | | | Seal, Signature, and Date |
| Firm Name | | Firm No. | |
| Address | | | |
| City | State | Zip Code | |
| Telephone | Email | | |

THE PERMITTEE SHALL SUBMIT THE COMPLETED ENGINEERING CERTIFICATION, INCLUDING ALL SUPPORTING DOCUMENTATION, VIA THE NON-DISCHARGE [ONLINE PORTAL](#).

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ATTACHMENT A – LIMITATIONS AND MONITORING REQUIREMENTS

Certification Date: June 30, 2023

Flying Crown Ranch LLC

Permit Number: WQ0043977 Version: 1.0

PPI 001 – Reclaimed Water Generation System Effluent

| EFFLUENT CHARACTERISTICS | | EFFLUENT LIMITS | | | | | MONITORING REQUIREMENTS | |
|--------------------------|------------------------------------------|------------------|-----------------|------------------------|---------------|---------------|-------------------------|-------------|
| PCS Code | Parameter Description | Units of Measure | Monthly Average | Monthly Geometric Mean | Daily Minimum | Daily Maximum | Measurement Frequency | Sample Type |
| 00310 | BOD, 5-Day (20 °C) | mg/L | 10 | | | 15 | 2 x Month | Composite |
| 31616 | Coliform, Fecal MF, M-FC Broth, 44.5 °C | #/100 mL | | 14 | | 25 | 2 x Month | Grab |
| 50050 | Flow, in Conduit or thru Treatment Plant | GPD | 114,900 | | | | Continuous | Recorder |
| 00610 | Nitrogen, Ammonia Total (as N) | mg/L | 4 | | | 6 | 2 x Month | Composite |
| 00625 | Nitrogen, Kjeldahl, Total (as N) | mg/L | | | | | 2 x Month | Composite |
| 00620 | Nitrogen, Nitrate Total (as N) | mg/L | | | | | 2 x Month | Composite |
| 00600 | Nitrogen, Total (as N) | mg/L | | | | | 2 x Month | Composite |
| 00400 | pH | Su | | | | | 5 x Week | Grab |
| 00665 | Phosphorus, Total (as P) | mg/L | | | | | 2 x Month | Composite |
| 00530 | Solids, Total Suspended | mg/L | 5 | | | 10 | 2 x Month | Composite |
| 00076 | Turbidity, HCH Turbidimeter | NTU | | | | 10 | Continuous | Recorder |

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ATTACHMENT B – APPROVED LAND APPLICATION SITES AND LIMITATIONS

Certification Date: June 30, 2023

Flying Crown Ranch LLC

Permit Number: WQ0043977 Version: 1.0

| IRRIGATION AREA INFORMATION | | | | | | | | APPLICATION LIMITATIONS | | | |
|-----------------------------|------------------------|------------|---------|------------|-------------|-------------|----------------------|----------------------------------------|-------------|------------|--------|
| Field | Owner | Parcel No. | County | Latitude | Longitude | Net Acreage | Dominant Soil Series | Parameter | Hourly Rate | Yearly Max | Units |
| 1 | Flying Crown Ranch LLC | 87217 | Chatham | 35.775111° | -79.123250° | 2.0 | Badin | 01284 – Non-Discharge Application Rate | 0.3 | 22.84 | inches |
| 2 | Flying Crown Ranch LLC | 3027 | Chatham | 35.773083° | -79.129417° | 0.7 | Badin | 01284 – Non-Discharge Application Rate | 0.35 | 22.84 | inches |
| 3 | Flying Crown Ranch LLC | 3027 | Chatham | 35.772389° | -79.130806° | 6.1 | Georgeville | 01284 – Non-Discharge Application Rate | 0.35 | 37.48 | inches |
| 4 | Flying Crown Ranch LLC | 3027 | Chatham | 35.771472° | -79.130500° | 1.5 | Badin | 01284 – Non-Discharge Application Rate | 0.35 | 22.84 | inches |
| 5 | Flying Crown Ranch LLC | 3027 | Chatham | 35.770556° | -79.132139° | 8.8 | Georgeville | 01284 – Non-Discharge Application Rate | 0.3 | 37.48 | inches |
| 6 | Flying Crown Ranch LLC | 3027 | Chatham | 35.769508° | -79.132306° | 2.9 | Badin | 01284 – Non-Discharge Application Rate | 0.35 | 22.84 | inches |
| 7 | Flying Crown Ranch LLC | 3027 | Chatham | 35.769861° | -79.135722° | 0.8 | Badin | 01284 – Non-Discharge Application Rate | 0.3 | 22.84 | inches |
| 8 | Flying Crown Ranch LLC | 3027 | Chatham | 35.769889° | -79.134833° | 2.2 | Georgeville | 01284 – Non-Discharge Application Rate | 0.3 | 37.48 | inches |
| 9 | Flying Crown Ranch LLC | 3027 | Chatham | 35.768556° | -79.133667° | 2.1 | Badin | 01284 – Non-Discharge Application Rate | 0.3 | 22.84 | inches |
| 10 | Flying Crown Ranch LLC | 3027 | Chatham | 35.768417° | -79.134056° | 0.9 | Georgeville | 01284 – Non-Discharge Application Rate | 0.35 | 37.48 | inches |
| 11A | Flying Crown Ranch LLC | 3027 | Chatham | 35.767194° | -79.133139° | 5.3 | Georgeville | 01284 – Non-Discharge Application Rate | 0.3 | 37.48 | inches |
| 11B | Flying Crown Ranch LLC | 3027 | Chatham | 35.766444° | -79.131750° | 6.5 | Georgeville | 01284 – Non-Discharge Application Rate | 0.3 | 37.48 | inches |
| 12 | Flying Crown Ranch LLC | 3027 | Chatham | 35.766333° | -79.126528° | 2.1 | Georgeville | 01284 – Non-Discharge Application Rate | 0.3 | 37.48 | inches |
| 13 | Flying Crown Ranch LLC | 3027 | Chatham | 35.764306° | -79.126000° | 3.7 | Georgeville | 01284 – Non-Discharge Application Rate | 0.35 | 37.48 | inches |
| 14 | Flying Crown Ranch LLC | 3027 | Chatham | 35.764507° | -79.124516° | 3.2 | Georgeville | 01284 – Non-Discharge Application Rate | 0.3 | 37.48 | inches |
| Total: | | | | | | 48.8 | | | | | |

OPERATIONAL AGREEMENT

This AGREEMENT made pursuant to G.S. 143-215.1 (d1) and entered into this _____ day of _____ 2023, by and between the North Carolina Environmental Management Commission, an agency of the State of North Carolina, hereinafter known as the COMMISSION; and FLYING CROWN RANCH LLC, a corporation/general partnership registered/licensed to do business in the State of North Carolina, hereinafter known as the DEVELOPER.

WITNESSETH:

1. The DEVELOPER is the owner of the certain lands lying in CHATHAM County, upon which it is erecting and will erect dwelling units and other improvements, said development to be known as THE RETREAT AT HAW RIVER (hereinafter the Development).
2. The DEVELOPER desires, to construct a wastewater collection system with pumps, wastewater treatment works, and/or disposal facilities (hereinafter Disposal System) to provide sanitary sewage disposal to serve the Development on said lands.
3. The DEVELOPER has applied to the COMMISSION for the issuance of a permit pursuant to G.S. 143-215.1 to construct, maintain, and operate the Disposal System.
4. The DEVELOPER has created or shall create unit ownership in said dwellings units, other improvements and lands through filing of a Declaration of Unit Ownership (hereinafter Declaration), pursuant to Chapter 47C of the North Carolina General Statutes.
5. The DEVELOPER has caused to be formed or will cause to be formed at the time of filing of the Declaration, the (Unit Owners' Association) THE RETREAT AT HAW RIVER HOA (hereinafter Association), a non-profit corporation organized and existing under and by the virtue of the laws of the State of North Carolina, for the purpose, among others, of handling the property, affairs and business of the Development; of operating, maintaining, re-constructing and repairing the common elements of the lands and improvements subject to unit ownership, including the Disposal System; and of collecting dues and assessments to provide funds for such operation, maintenance, re-construction and repair.
6. The COMMISSION desires to assure that the Disposal System of the Development is properly constructed, maintained and operated in accordance with law and permit provisions in order to protect the quality of the waters of the State and the public interest therein.

NOW, THEREFORE, in consideration of the promises and the benefits to be derived by each of the parties hereto, the COMMISSION and DEVELOPER do hereby mutually agree as follows:

1. The DEVELOPER shall construct the Disposal System in accordance with the permit and plans and specifications hereafter issued and approved by the COMMISSION, and shall thereafter properly operate and maintain such systems and facilities in accordance with applicable permit provisions and law.
2. The DEVELOPER shall not transfer ownership and/or control of the Disposal System to the Association until construction has been completed in accordance with the permit and approved plans, and the staff of the Division of Water Resources has inspected and approved of the facilities. In order to change the name of the permit holder, the DEVELOPER must request that the permit be reissued to the Association. The request must include a copy of the Association Bylaws and Declaration.
3. The DEVELOPER shall not transfer, convey, assign or otherwise relinquish or release its responsibility for the operation and maintenance of its Disposal System until a permit has been reissued to the DEVELOPER's successor.

4. The DEVELOPER shall provide in the Declaration and Association Bylaws that the Disposal System and appurtenances thereto are part of the common elements and shall thereafter be properly maintained and operated in conformity with law and the provisions of the permit for construction, operation, repair, and maintenance of the system and facilities. The Declaration and Bylaws shall identify the entire wastewater treatment, collection and disposal system as a common element, which will receive the highest priority for expenditures by the Association except for Federal, State, and local taxes and insurance.
5. The DEVELOPER shall provide in the Declaration and Association Bylaws that the Disposal System will be maintained out of the common expenses. In order to assure that there shall be funds readily available to repair, maintain or construct the Disposal System, beyond the routine operation and maintenance expenses, the Declaration and Association Bylaws shall provide that a fund be created out of the common expenses. Such fund shall be separate from the routine maintenance funds allocated for the facility and shall be part of the yearly budget.
6. In the event the common expense allocation and separate fund are not adequate for the construction, repair, and maintenance of the Disposal System, the Declaration and Association Bylaws shall provide for special assessments to cover such necessary costs. There shall be no limit on the amount of such assessments, and the Declaration and Bylaws shall provide that such special assessments can be made as necessary at any time.
7. If a wastewater collection system and wastewater treatment and/or disposal facility provided by any city, town, village, county, water and sewer authorities, or other unit of government shall hereinafter become available to serve the Development, the DEVELOPER shall take such action as is necessary to cause the existing and future wastewater of the Development to be accepted and discharged into said governmental system, and shall convey or transfer as much of the Disposal System and such necessary easements as the governmental unit may require as condition of accepting the Development's wastewater.
8. Recognizing that it would be contrary to the public interest and to the public health, safety and welfare for the Association to enter into voluntary dissolution without having made adequate provision for the continued proper maintenance, repair and operation of its Disposal System, the DEVELOPER shall provide in the Association Bylaws that the Association shall not enter into voluntary dissolution without first having transferred its said system and facilities to some person, corporation or other entity acceptable to and approved by the COMMISSION by the issuance of a permit.
9. The agreements set forth in numbered paragraphs 1, 2, 3, 4, 5, 6, 7, and 8 above shall be conditions of any permit issued by the COMMISSION to the DEVELOPER for the construction, maintenance, repair and operation of the Disposal System.
10. A copy of this agreement shall be filed at the Register of Deeds in the County(ies) where the Declaration is filed and in the offices of the Secretary of State of North Carolina with the Articles of Incorporation of the Association.

IN WITNESS WHEREOF, this agreement was executed in duplicate originals by the duly authorized representative of the parties hereto on the day and year written as indicated by each of the parties named below:

FOR THE ENVIRONMENTAL
MANAGEMENT COMMISSION

DocuSigned by:

Nathaniel Thornburg
Richard E. Rogers, Jr., Director
Division of Water Resources

6/30/2023

(Date)

FLYING CROWN RANCH LLC

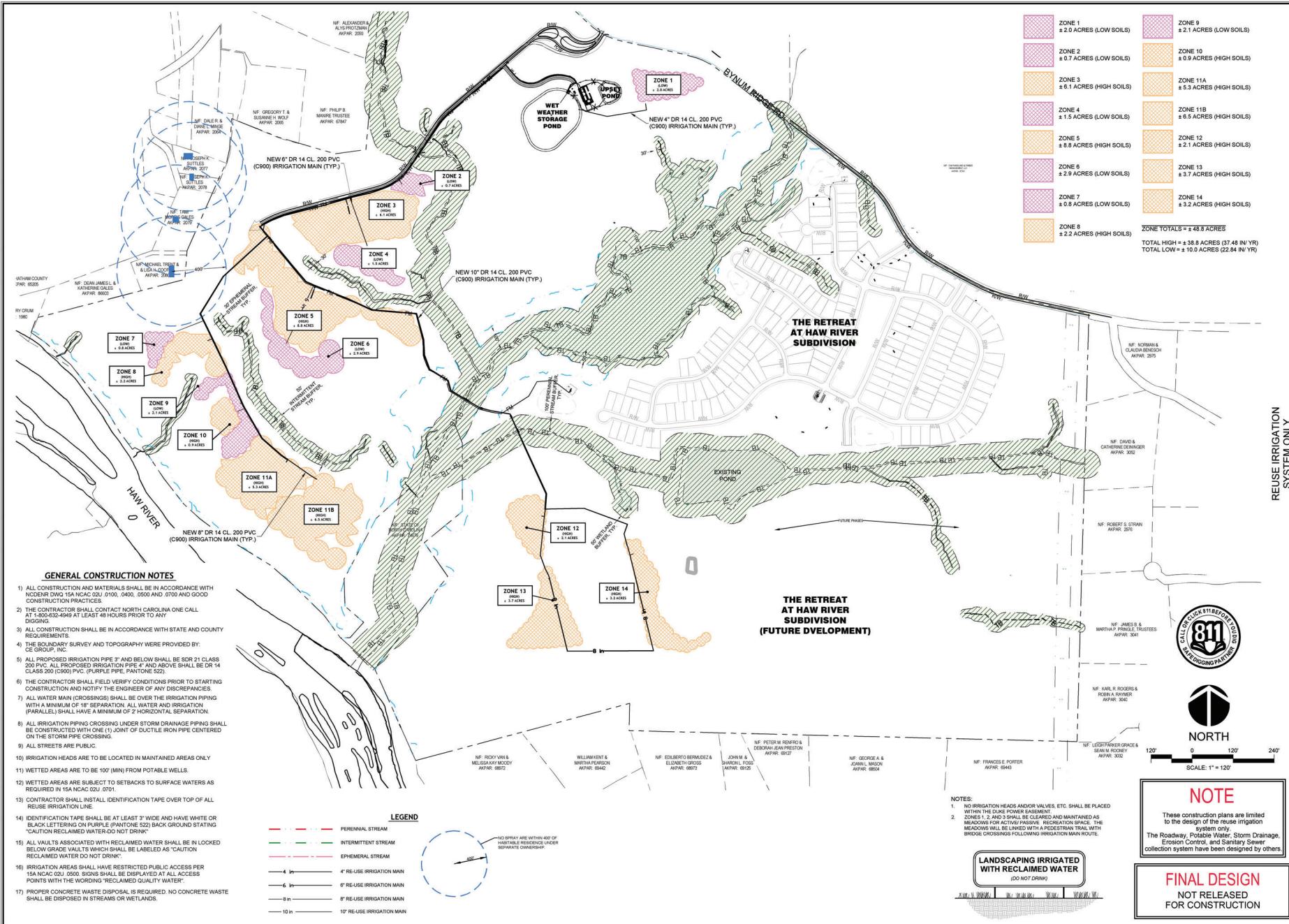
Name of DEVELOPER

By: [Signature]
(Signature)

TIM SMITH, MANAGER

Print Name and Title

3-31-23
(Date)



| | |
|------------------------------------|--------------------------------------|
| ZONE 1 ± 2.0 ACRES (LOW SOILS) | ZONE 9 ± 2.1 ACRES (LOW SOILS) |
| ZONE 2 ± 0.7 ACRES (LOW SOILS) | ZONE 10 ± 0.9 ACRES (HIGH SOILS) |
| ZONE 3 ± 6.1 ACRES (HIGH SOILS) | ZONE 11A ± 5.3 ACRES (HIGH SOILS) |
| ZONE 4 ± 1.5 ACRES (LOW SOILS) | ZONE 11B ± 8.5 ACRES (HIGH SOILS) |
| ZONE 5 ± 8.8 ACRES (HIGH SOILS) | ZONE 12 ± 2.1 ACRES (HIGH SOILS) |
| ZONE 6 ± 2.9 ACRES (LOW SOILS) | ZONE 13 ± 3.7 ACRES (HIGH SOILS) |
| ZONE 7 ± 0.8 ACRES (LOW SOILS) | ZONE 14 ± 3.2 ACRES (HIGH SOILS) |
| ZONE 8 ± 2.2 ACRES (HIGH SOILS) | |

ZONE TOTALS = ± 48.8 ACRES
TOTAL HIGH = ± 38.8 ACRES (37.48 IN YR)
TOTAL LOW = ± 10.0 ACRES (22.84 IN YR)

- GENERAL CONSTRUCTION NOTES**
- 1) ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH NCDENR DWO 15A NCAC 02L 0100, 0400, 0500 AND 0700 AND GOOD CONSTRUCTION PRACTICES.
 - 2) THE CONTRACTOR SHALL CONTACT NORTH CAROLINA ONE CALL AT 1-800-432-4949 AT LEAST 48 HOURS PRIOR TO ANY DIGGING.
 - 3) ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH STATE AND COUNTY REQUIREMENTS.
 - 4) THE BOUNDARY SURVEY AND TOPOGRAPHY WERE PROVIDED BY: CE GROUP, INC.
 - 5) ALL PROPOSED IRRIGATION PIPE 7" AND BELOW SHALL BE SDR 21 CLASS 200 PVC. ALL PROPOSED IRRIGATION PIPE 7" AND ABOVE SHALL BE DR 14 CLASS 200 (C900) PVC. (PURPLE PIPE, PANTONE 522)
 - 6) THE CONTRACTOR SHALL FIELD VERIFY CONDITIONS PRIOR TO STARTING CONSTRUCTION AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
 - 7) ALL WATER MAIN (CROSSINGS) SHALL BE OVER THE IRRIGATION PIPING WITH A MINIMUM OF 18" SEPARATION. ALL WATER AND IRRIGATION (PARALLEL) SHALL HAVE A MINIMUM OF 2' HORIZONTAL SEPARATION.
 - 8) ALL IRRIGATION PIPING CROSSINGS UNDER STORM DRAINAGE PIPING SHALL BE CONSTRUCTED WITH ONE (1) JOINT OF DUCTILE IRON PIPE CENTERED ON THE STORM PIPE CROSSING.
 - 9) ALL STREETS ARE PUBLIC.
 - 10) IRRIGATION HEADS ARE TO BE LOCATED IN MAINTAINED AREAS ONLY.
 - 11) WETTED AREAS ARE TO BE 100' (MIN) FROM POTABLE WELLS.
 - 12) WETTED AREAS ARE SUBJECT TO SETBACKS TO SURFACE WATERS AS REQUIRED IN 15A NCAC 02L 0701.
 - 13) CONTRACTOR SHALL INSTALL IDENTIFICATION TAPE OVER TOP OF ALL REUSE IRRIGATION LINE.
 - 14) IDENTIFICATION TAPE SHALL BE AT LEAST 3" WIDE AND HAVE WHITE OR BLACK LETTERING ON PURPLE (PANTONE 522) BACK GROUND STATING "CAUTION RECLAIMED WATER DO NOT DRINK"
 - 15) ALL VAULTS ASSOCIATED WITH RECLAIMED WATER SHALL BE IN LOCKED BELOW GRADE VAULTS WHICH SHALL BE LABELED AS "CAUTION RECLAIMED WATER DO NOT DRINK"
 - 16) IRRIGATION AREAS SHALL HAVE RESTRICTED PUBLIC ACCESS PER 15A NCAC 02L 0500. SIGNS SHALL BE DISPLAYED AT ALL ACCESS POINTS WITH THE WORDING "RECLAIMED QUALITY WATER"
 - 17) PROPER CONCRETE WASTE DISPOSAL IS REQUIRED. NO CONCRETE WASTE SHALL BE DISPOSED IN STREAMS OR WETLANDS.

LEGEND

| | |
|--|----------------------------|
| | PERENNIAL STREAM |
| | INTERMITTENT STREAM |
| | EPHEMERAL STREAM |
| | 4" RE-USE IRRIGATION MAIN |
| | 6" RE-USE IRRIGATION MAIN |
| | 8" RE-USE IRRIGATION MAIN |
| | 10" RE-USE IRRIGATION MAIN |



- NOTES:**
1. NO IRRIGATION HEADS AND/OR VALVES, ETC. SHALL BE PLACED WITHIN THE DUNE POWER BASINMENT.
 2. ZONES 1, 2, AND 3 SHALL BE CLEARED AND MAINTAINED AS MEADOWS FOR ACTIVE PASTURE. RECREATION SPACE. THE MEADOWS WILL BE LANDED WITH A PEDESTRIAN TRAIL WITH BRIDGE CROSSINGS FOLLOWING IRRIGATION MAIN ROUTE.

LANDSCAPING IRRIGATED WITH RECLAIMED WATER
(DO NOT DRINK)

NOTE

These construction plans are limited to the design of the reuse irrigation system only. The Roadway, Potable Water, Storm Drainage, Erosion Control, and Sanitary Sewer collection system have been designed by others.

FINAL DESIGN
NOT RELEASED FOR CONSTRUCTION

| | | |
|-----|-----------------------------|-----------|
| NO. | REVISIONS | DATE |
| 1 | REVISED PER NCDENR COMMENTS | 6/20/2023 |
| 2 | REVISED PER NCDENR COMMENTS | 6/20/2023 |
| 3 | REVISED PER NCDENR COMMENTS | 6/20/2023 |

CE GROUP

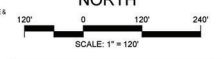
301 GLENWOOD AVE. 220
RALEIGH, NC 27603
PHONE: 919-367-8700
FAX: 919-322-0032

www.cegroupinc.com
License # C-1739



THE RETREAT AT HAW RIVER REUSE IRRIGATION PLANS OVERALL REUSE PLAN

CHATHAM COUNTY, NORTH CAROLINA



| | |
|---------------------|-----------------------|
| Date: | OCTOBER 5, 2022 |
| Scale: | 1" = 120' |
| Drawn: | |
| Checked: | |
| Project No.: | 135-19 |
| Computer Draw Name: | 135-19_irrigation.pln |
| Sheet No.: | 2 |

2
OF ...