



NORTH CAROLINA
Environmental Quality

May 15, 2024

ROY COOPER
Governor

ELIZABETH S. BISER
Secretary

RICHARD E. ROGERS, JR.
Director

Lauren Raup-Plimmer, PE; Engineering Manager
Aqua North Carolina, Inc.
202 MacKenan Drive
Cary, NC 27511

Subject: Permit No. WQ0045166
Aqua North Carolina, Inc.
Parks at Meadowview: Phase 2-4
Wastewater Collection System Extension Permit
Chatham County

Dear Permittee:

In accordance with your application received February 19, 2024, and additional information received on April 25, 2024, we are forwarding herewith Permit No. WQ0045166 dated May 15, 2024, to Aqua North Carolina, Inc. (Permittee) for the construction and operation upon certification of the subject wastewater collection system extension. This permit shall be effective from the date of issuance until rescinded, and shall be subject to the conditions and limitations as specified therein. This cover letter shall be considered a part of this permit and is therefore incorporated therein by reference.

Please pay particular attention to the following conditions contained within this permit:

- Condition II.1: This permit shall not be automatically transferable; a request must be made and approved.
- Condition II.4: Requires that the wastewater collection facilities be properly operated and maintained in accordance with 15A NCAC 02T .0403 or any individual system-wide collection system permit issued to the Permittee.
- Condition II.7: Upon completion of construction and prior to operation of these permitted facilities, the completed Engineering Certification form with checklist attached to this permit shall be submitted with the required supporting documents to the address provided on the form. **Permit modifications are required for any changes resulting in non-compliance with this permit, regulations, or the Minimum Design Criteria.** [15A NCAC 02T.0116]

It shall be the responsibility of the Permittee to ensure that the as-constructed project meets the appropriate design criteria and rules. Failure to comply may result in penalties in accordance with North Carolina General Statute §143-215.6A through §143-215.6C, construction of additional or replacement



North Carolina Department of Environmental Quality | Division of Water Resources
Raleigh Regional Office | 3800 Barrett Drive | Raleigh, North Carolina 27609
919.791.4200


Aqua North Carolina, Inc.
Permit No. WQ0045166

wastewater collection facilities, and/or referral of the North Carolina-licensed Professional Engineer to the licensing board.

If any parts, requirements, or limitations contained in this permit are unacceptable, you have the right to request an adjudicatory hearing upon written request within 30 days following receipt of this permit. This request must be in the form of a written petition, conforming to Chapter 150B of North Carolina General Statutes, and filed with the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, NC 27699-6714. Unless such demands are made, this permit shall be final and binding.

If you need additional information concerning this matter, please contact the Raleigh Regional Office via e-mail at DEQ.DWR.RRO.FastTracks@deg.nc.gov or 919-791-4200.

Sincerely,

DocuSigned by:

372DCBCB61EE4A8...

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

by Michael Hall, Regional Supervisor
Water Quality Regional Operations Section
Raleigh Regional Office
Division of Water Resources, NCDEQ

cc: David Whittington, PE; CE Group, Inc.
DWR Laserfiche
Chatham County Health Department



WASTEWATER COLLECTION SYSTEM EXTENSION PERMIT

In accordance with 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 the

Aqua North Carolina, Inc.
Chatham County

for the construction and operation of approximately 20,000 linear feet of 8-inch gravity sewer; a 543-gallon per minute pump station with duplex pumps, on-site audible and visual high water alarms, telemetry, and a permanent generator with automatic transfer switch, a 329-gallon per minute pump station with duplex pumps, on-site audible and visual high water alarms, telemetry, and a permanent generator with automatic transfer switch; as well as approximately 7,310 linear feet of 8-inch force main and approximately 1,680 linear feet of 6-inch force main to serve 309 four-bedroom Single Family homes, 144 four-bedroom Single Family Townhomes, 120 persons swimming pool and bath house as part of the Parks at Meadowview: Phases 2-4, and the discharge of 137,100 gallons per day of collected domestic wastewater into the Chapel Ridge Wastewater Treatment Plant's existing sewerage system, pursuant to the application received February 19, 2024, and additional information received on April 25, 2024 and in conformity with 15A NCAC 02T; the Division's Gravity Sewer Minimum Design Criteria adopted February 12, 1996 and updated in March 2008, as applicable; the Division's Minimum Design Criteria for the Fast-Track Permitting of Pump Stations and Force Mains adopted June 1, 2000 as applicable; and other supporting data subsequently filed and approved by the Department of Environmental Quality and considered a part of this permit.

This permit shall be effective from the date of issuance until rescinded and shall be subject to the specified conditions and limitations contained therein.

DocuSigned by:

372DCBCB61EE4A8...

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

Permit Number: WQ0045166
Permit Issued: May 15, 2024

SUPPLEMENT TO PERMIT COVER SHEET

Aqua North Carolina, Inc. is hereby authorized to:

Construct, and then operate upon certification the aforementioned wastewater collection extension. The sewage and wastewater collected by this system shall be treated in the Chapel Ridge Wastewater Treatment Plant in accordance with Permit Number WQ0022870.

Permitting of this project does not constitute an acceptance of any part of the project that does not meet 15A NCAC 02T; the Division's Gravity Sewer Minimum Design Criteria adopted February 12, 1996 as applicable; and the Division's Minimum Design Criteria for the Fast-Track Permitting of Pump Stations and Force Mains adopted June 1, 2000 as applicable, unless specifically mentioned herein. Division approval is based on acceptance of the certification provided by a North Carolina-licensed Professional Engineer in the application. It shall be the Permittee's responsibility to ensure that the as-constructed project meets the appropriate design criteria and rules.

Construction and operation is contingent upon compliance with the Standard Conditions and any Special Conditions identified below.

I. SPECIAL CONDITIONS

1. No flow in excess of the quantity permitted herein, 137,100 GPD, shall be made tributary to the subject sewer system until an application for permit modification for an increase in flow has been submitted to and approved by the Division. [15A NCAC 02T.0304(b)]
2. Each pump station shall be clearly and conspicuously posted using a weatherproof sign with a pump station identifying name/number, 24-Hour Emergency telephone number, and name of the owner/operator of the sewer system/pump station and instructions to call the number in the event of alarm activation or other emergency. Simplex pump stations or vacuum sewer pits serving a single-family residence may have a placard or sticker on the control panel in lieu of a sign. [15A NCAC 02T .0305(h)(2)]

II. STANDARD CONDITIONS

1. This permit shall not be transferable. In the event there is a desire for the wastewater collection facilities to change ownership, or there is a name change of the Permittee, a formal permit request shall be submitted to the Division accompanied by documentation from the parties involved, and other supporting materials as may be appropriate. The approval of this request shall be considered on its merits and may or may not be approved. [15A NCAC 02T.0116; G.S 143-215.1(d3)]
2. This permit shall become voidable unless the wastewater collection facilities are constructed in accordance with the conditions of this permit; 15A NCAC 02T; the Division's Gravity Sewer Minimum Design Criteria adopted February 12, 1996 as applicable; the Division's Minimum Design Criteria for the Fast-Track Permitting of Pump Stations and Force Mains adopted June 1, 2000 as applicable; and other supporting materials unless specifically mentioned herein. [15A NCAC 02T.0110]
3. This permit shall be effective only with respect to the nature and volume of wastes described in the application and other supporting data. [15A NCAC 02T .0110]

4. The wastewater collection facilities shall be properly maintained and operated at all times. The Permittee shall maintain compliance with an individual system-wide collection system permit for the operation and maintenance of these facilities as required by 15A NCAC 02T .0403. If an individual permit is not required, the following performance criteria shall be met:
 - a. The sewer system shall be effectively maintained and operated at all times to prevent discharge to land or surface waters, and to prevent any contravention of groundwater standards or surface water standards.
 - b. A map of the sewer system shall be developed and shall be actively maintained.
 - c. An operation and maintenance plan including pump station inspection frequency, preventative maintenance schedule, spare parts inventory and overflow response has been developed and implemented.
 - d. Pump stations that are not connected to a telemetry system shall be inspected every day (i.e. 365 days per year). Pump stations that are connected to a telemetry system shall be inspected at least once per week.
 - e. High-priority sewer lines shall be inspected at least once per every six-months and inspections are documented.
 - f. A general observation of the entire sewer system shall be conducted at least once per year.
 - g. Overflows and bypasses shall be reported to the appropriate Division regional office in accordance with 15A NCAC 2B .0506(a), and public notice shall be provided as required by North Carolina General Statute §143-215.1C.
 - h. A Grease Control Program is in place as follows:
 1. For public owned collection systems, the Grease Control Program shall include at least biannual distribution of educational materials for both commercial and residential users and the legal means to require grease interceptors at existing establishments. The plan shall also include legal means for inspections of the grease interceptors, enforcement for violators and the legal means to control grease entering the system from other public and private satellite sewer systems.
 2. For privately owned collection systems, the Grease Control Program shall include at least bi-annual distribution of grease education materials to users of the collection system by the permittee or its representative.
 3. Grease education materials shall be distributed more often than required in Parts (1) and (2) of this Subparagraph if necessary to prevent grease-related sanitary sewer overflows.
 - i. Right-of-ways and easements shall be maintained in the full easement width for personnel and equipment accessibility.
 - j. Documentation shall be kept for Subparagraphs (a) through (i) of this Rule for a minimum of three years with exception of the map, which shall be maintained for the life of the system.
5. The Permittee shall report by telephone to a water resources staff member at the Raleigh Regional Office, telephone number (919) 791-4200, as soon as possible, but in no case more than 24 hours, following the occurrence or first knowledge of the occurrence of either of the following:

- a. Any process unit failure, due to known or unknown reasons, that renders the facility incapable of adequate wastewater transport, such as mechanical or electrical failures of pumps, line blockage or breakage, etc.; or
- b. Any SSO and/or spill over 1,000 gallons; or
- c. Any SSO and/or spill, regardless of volume, that reaches surface water

Voice mail messages or faxed information is permissible, but this shall not be considered as the initial verbal report. Overflows and spills occurring outside normal business hours may also be reported to the Division of Emergency Management at telephone number (800) 858-0368 or (919) 733-3300. Persons reporting any of the above occurrences shall file a spill report by completing and submitting Part I of Form CS-SSO (or the most current Division approved form) within five days following first knowledge of the occurrence. This report must outline the actions taken or proposed to be taken to ensure that the problem does not recur. Part II of Form CS-SSO (or the most current Division approved form) can also be completed to show that the SSO was beyond control. [G.S. 143-215.1C(a1)]

6. Construction of the gravity sewers, pump stations, and force mains shall be scheduled so as not to interrupt service by the existing utilities nor result in an overflow or bypass discharge of wastewater to the surface waters of the State. [15A NCAC 02T.0108(b)]
7. Upon completion of construction and prior to operation of these permitted facilities, the completed Engineering Certification form with checklist attached to this permit shall be submitted with the required supporting documents to the address provided on the form. A complete certification is one where the form is fully executed and the supporting documents are provided as applicable. Any wastewater flow made tributary to the wastewater collection system extension prior to completion of this Engineer's Certification shall be considered a violation of the permit and shall subject the Permittee to appropriate enforcement actions.

If the permit is issued to a private entity with an Operational Agreement, then a copy of the Articles of Incorporation, Declarations/Covenants/Restrictions, and Bylaws that have been appropriately filed with the applicable County's Register of Deeds office shall be submitted with the certification.

A complete certification is one where the form is fully executed and the supporting documents are provided as applicable. Supporting documentation shall include the following:

- a. One copy of the project construction record drawings (plan & profile views of sewer lines & force mains) of the wastewater collection system extension. Final record drawings should be clear on the plans or on digital media (CD or DVD disk) and are defined as the design drawings that are marked up or annotated with after construction information and show required buffers, separation distances, material changes, etc.
- b. One copy of the supporting applicable design calculations including pipe and pump sizing, velocity, pump cycle times, and level control settings, pump station buoyancy, wet well storage, surge protection, detention time in the wet well, and force main, ability to flush low points in force mains with a pump cycle, and downstream sewer capacity analysis. If a portable power source or pump is dedicated to multiple stations, an evaluation of all the pump stations' storage capacities and the rotation schedule of the portable power source or pump, include travel timeframes, shall be provided.

- c. Changes to the project that do not result in non-compliance with this permit, regulations, or the Minimum Design Criteria should be clearly identified on the record drawings, on the certification in the space provided, or in written summary form.

Prior to Certification (Final or Partial): Permit modifications are required for any changes resulting in non-compliance with this permit (including but not limited to pipe length changes of 10% or greater, increased flow, pump station design capacity design increases of 5% or greater, and increases in the number/type of connections), regulations, or the Minimum Design Criteria. Requested modifications or variances to the Minimum Design Criteria will be reviewed on a case-by-case basis and each on its own merit. Please note that variances to the Minimum Design Criteria should be requested and approved during the permitting process prior to construction. After-construction requests are discouraged by the Division and may not be approved, thus requiring replacement or repair prior to certification & activation. [15A NCAC 02T .0116]

8. Gravity sewers installed greater than ten percent below the minimum required slope per the Division's Gravity Sewer Minimum Design Criteria shall not be acceptable and shall not be certified until corrected. If there is an unforeseen obstacle in the field where all viable solutions have been examined, a slope variance can be requested from the Division with firm supporting documentation. This shall be done through a permit modification with fee. Such variance requests will be evaluated on a case-by-case basis. Resolution of such request shall be evident prior to completing and submitting the construction certification. [15A NCAC 02T.0105(n)]
9. A copy of the individual permit and construction record drawings shall be maintained on file by the Permittee for the life of the wastewater collection facilities. [15A NCAC 02T .0116]
10. Failure to abide by the conditions and limitations contained in this permit; 15A NCAC 02T; the Division's Gravity Sewer Design Criteria adopted February 12, 1996 as applicable; the Division's Minimum Design Criteria for the Fast-Track Permitting of Pump Station and Force Mains adopted June 1, 2000 as applicable; and other supporting materials may subject the Permittee to an enforcement action by the Division, in accordance with North Carolina General Statutes §143-215.6A through §143-215.6C, construction of additional or replacement wastewater collection facilities, and/or referral of the North Carolina-licensed Professional Engineer to the licensing board. [15A NCAC 02T .0108(b-c)]
11. In the event that the wastewater collection facilities fail to perform satisfactorily, including the creation of nuisance conditions, the Permittee shall take immediate corrective action, including those as may be required by this Division, such as the construction of additional or replacement facilities. [15A NCAC 02T .0110; 15A NCAC 02T .0108(b)]
12. The issuance of this permit shall not exempt the Permittee from complying with any and all statutes, rules, regulations, or ordinances that may be imposed by the Division any other Federal, State, or Local government agencies which have jurisdiction or obtaining other permits which may be required by the Division or any other Federal, State, of Local government agencies. [G.S. 143-215.1(b)]

CERTIFICATION CHECKLIST

To be completed by the certifying engineer prior to operation of the permitted sewers, per 15A NCAC 02T.0116.

Certifying Engineer: _____

Certification Review Date: _____

Project Name: _____

WQ00 _____ Project County: _____

- 1) Has permittee information changed since the permit was issued (or last modified): change of mailing address, change of ownership, transfer from developer to HOA/POA, etc. Yes No
 - If yes, please provide either a change of ownership form or new contact information. Note that transfer of permits from the developer to the HOA/POA must occur with the first certification.
- 2) Have the as-built drawings have been signed, sealed, and dated by an N.C. PE? Yes No
- 3) Final Engineering certification? Yes No
 - **If Partial Engineering certification, provide detailed narrative including what is being certified in the current phase, what was previously certified (if applicable), and what is left to be certified.**
- 4) Adequate information related to sewer lines: Yes No N/A
 - Three feet minimum cover has been provided for all sewers unless ferrous pipe was installed.
 - Minimum diameters for gravity sewers are 8-inches for public lines and 6-inches for private lines.
 - Manholes have been installed: At the end of each line, at all changes in grade, size, or alignment, at all intersections, and at distances not greater than 425 feet; minimum diameter shall be 4 feet (48-inches).
- 5) Adequate information related to pump stations: Yes No N/A
 - Ensure power reliability option was selected per [15A NCAC 02T.0305\(h\)](#).
- 6) Was project construction completed in accordance with all of the following: Yes No N/A
 - [15A NCAC 02T, Minimum Design Criteria \(MDC\) for the permitting of Gravity Sewers](#) (latest version), and [MDC for the Permitting of Pump Stations and Force Mains](#) (latest version)?

If not, a variance approval is required in accordance with [15A NCAC 02T.0105\(b\)](#), **prior to certification and operation.**

 - Contact the Central Office to discuss the variance to determine a course of action.
 - Applicant must submit two copies of the variance request form, plans, specifications, calculations, and any other pertinent information to the Central Office (one hard copy, one digital copy).
 - The central office will review the variance request, and if approvable, specific language regarding the variance will be incorporated into the permit, either via a special condition or a supplementary letter. A copy of the reissued permit with variance language or the variance letter must be maintained with the original documents.
- 7) Does the project contains high priority lines ([15A NCAC 02T .0402\(2\)](#))? Yes No
 - If yes, ensure that the permit already contains the necessary condition related to high priority lines 15A NCAC 02T.0403 (a)(5). If the permit does not include this language, the Fast Track reviewer will reissue the permit with the appropriate language.
- 8) Are Permit modifications are required for any changes resulting in non-compliance with this permit (including but not limited to pipe length changes of 10% or greater, change in flow, pump station design capacity design change of 5% or greater, and/or change in the number/type of connections)? Yes No
 - If yes, a permit modification request must be submitted to the appropriate Regional Office, and **a modified permit with revised certification must be issued prior to certification and operation.**

FAST TRACK SEWER ENGINEERING CERTIFICATION

PERMITTEE: Aqua North Carolina, Inc.
PERMIT #: WQ0045166
PROJECT: Parks at Meadowview: Phase 2-4
ISSUE DATE: May 15, 2024

This project shall not be considered complete nor allowed to operate in accordance with Condition 7 of this permit until the Division has received this Certification and all required supporting documentation. It should be submitted in a manner that documents the Division’s receipt. Send the required documentation to the Regional Supervisor, Water Quality Regional Operations Section at the address at the bottom.

Any wastewater flow made tributary to the wastewater collection system extension prior to completion of this Certification shall be considered a violation of the permit and shall subject the Permittee to appropriate enforcement actions. The Permittee is responsible for tracking all partial certifications up until a final certification is received. A Final Certification shall be a complete set of record drawings and design calculations regardless of whether partials have been submitted.

PERMITTEE’S CERTIFICATION

I, the undersigned agent for the Permittee, hereby state that this project has been constructed pursuant to the applicable standards & requirements, the Professional Engineer below has provided applicable design/construction information to the Permittee, and the Permittee is prepared to operate & maintain the wastewater collection system permitted herein or portions thereof.

Printed Name, Title

Signature

Date

ENGINEER’S CERTIFICATION

I, _____, as a duly registered Professional Engineer in the State of North Carolina, having been authorized to observe (periodically, weekly, full time) the construction of the project name and location as referenced above for the above Permittee hereby state that, to the best of my abilities, due care and diligence was used in the observation of the following construction: **approximately 20,000 linear feet of 8-inch gravity sewer; a 543-gallon per minute pump station with duplex pumps, a 329-gallon per minute pump station with duplex pumps, on-site audible and visual high water alarms, telemetry, and a permanent generator with automatic transfer switch for both pump stations; as well as approximately 7,310 linear feet of 8-inch force main and approximately 1,680 linear feet of 6-inch force main**; such that the construction was observed to be built within substantial compliance of this permit; 15A NCAC 02T; the Division of Water Resources’ (Division) Gravity Sewer Minimum Design Criteria adopted February 12, 1996 as applicable; the Division’s Minimum Design Criteria for the Fast-Track Permitting of Pump Stations and Force Mains adopted June 1, 2000 as applicable; and other supporting materials.

North Carolina Professional Engineer’s Seal w/signature & date:

Final Partial (include description)



Certification Comments/Qualifiers (attach if necessary):