Comparable Systems History

EXPERIENCE AND QUALIFICATIONS

The City of Richmond Hill, Georgia

EOM started working with the City of Richmond Hill in 2013 to facilitate the Operations & Maintenance of the City's infrastructure including water treatment and distributions, water reclamation facility, wastewater collection and transportation system (WCTS), streets and rights-of-way, drainage, and vehicle maintenance. Since that time, the scope has increased to include engineering services, trenchless technology assessments and park and tree services. This long-standing, mutually beneficial relationship continues today.

EOM manages and maintains the City's water treatment and distribution system which consists of 4 wells from both the Upper and Lower Floridan Aquifers, an elevated storage facility, and 65 miles of water piping with over 6,500 service connections. Distribution infrastructure and piping consists of asbestos cement pipe, ductile iron pipe, galvanized steel pipe, polyvinylchloride pipe, and polyethylene pipe.

With the recently added Belfast Keller Interchange, the City is expanding both water and sewer service to the new mixed use Industrial Park. Adding 12 lift stations, and 1 elevated storage tank. The City's WCTS consists of approximately 390,000 linear feet of gravity sewer and 154,000 linear feet of force mains. These networks of the WCTS convey flow to the City's Sterling Creek Water Reclamation Facility. The WCTS includes 50 wastewater pumping stations. These pump stations are all duplex or triplex stations with submersible pumps ranging from 3 HP to 88 HP. The system also includes 95 residential grinder pumps which range from 1.5 HP to 2 HP.

The Sterling Creek Water Reclamation Facility is one of the first state-of-the-art Membrane Bioreactor (MBR) facilities in the state of Georgia. Completed in 2016, and brought online by EOM, the project consisted of planning, design and construction of a new 4.0 million gallons per day (MGD) five-stage biological nutrient removal and membrane bioreactor (MBR) plant. The new plant, an Ovivo Kubota flat plate MBR system and the first of its kind in coastal Georgia, is able to treat up to 3 MGD – double its previous capacity of 1.5 MGD. By installing additional membrane cassette equipment, the plant can readily expand to 4.0 MGD, which the City is already permitted for.

The plant utilizes several steps in treating sewage including biological treatment and solids separation via the membrane bioreactors. Treated effluent from the new facility is pumped to the City's current outfall location at Elbow Swamp, as well as reused to sustain the isolated constructed wetlands system.

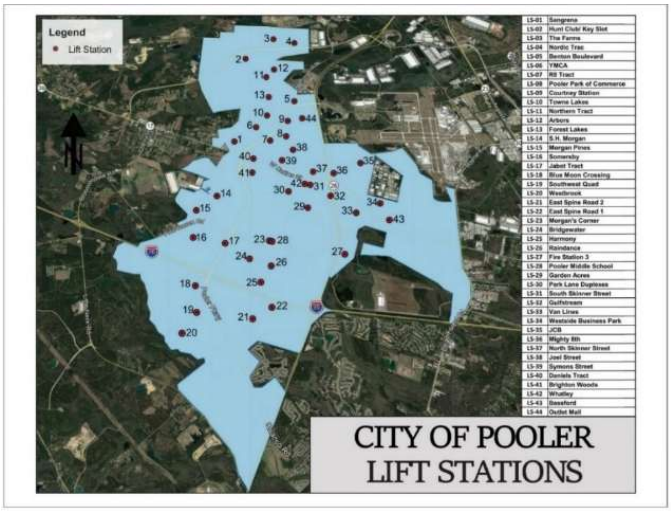
EOM played a vital role in bringing this 4.0 MGD facility online. As the O&M partner, our diverse team of operators and engineers advised and consulted through the expansion of its original plant which contained overland flow fields and constructed wetlands. wastewater collection and transportation system (WCTS), water well operations, public works, park and t. This long-standing, mutually beneficial relationship continues today. The City of Richmond Hill WCTS consists of approximately 390,000 linear feet of gravity sewer and 154,000 linear feet of force mains. These networks of the WCTS convey flow to the City's Sterling Creek Water Reclamation Facility.

The City of Pooler, Georgia

EOM was selected by the City of Pooler in 2018 to facilitate the Operations & Maintenance of the City's wastewater treatment and collection and transportation system (WCTS). The City of Pooler's WCTS consists of approximately 501,600 linear feet of gravity sewer and 198,000 linear feet of force mains. These networks of the WCTS convey flow to the City's Wastewater Treatment Facility.

The WCTS includes 44 pump stations (Figure 3). These pump stations are all duplex stations with the exception of the Symons Street Station which is an above ground single pump simplex station. The pumps in these stations range from 2 HP to 88 HP. They are all submersible pumps with the exception of two above ground stations (Symons and South Skinner Street). The system also includes 209 residential grinder pumps which range from 1.5 HP to 2 HP.

Figure 3: Pooler Lift Station Map



The Pooler Wastewater Treatment Facility serves most of the population in the City of Pooler as well as the City of Bloomingdale. The South Rogers Street plant currently treats 2.5 MGD of sanitary wastewater but can treat up to 3.3 MGD. The City has found it necessary to continue to evolve their treatment processes due to massive population growth – from the design of the original lagoon system plant in the 80s to the design of the new greenfield 2.5 MGD facility and expansion to 3.3 MGD, to the most recent upcoming expansion to 6.223 MGD.

The Pooler Wastewater Treatment Facility expanded its aerated lagoon plant with a water reclamation facility in 2015. The first phase of this project consisted of a new 2.5 MGD hollow fiber (GE ZeeWeed) membrane bioreactor (MBR) plant constructed on a very small tract of land next to an existing 0.98 MGD aerated lagoon facility. This plant performs 10/30 eco-aeration treatment and is the first full-scale facility to apply this technology in the US. Upgrades in water reclamation technology allow treated effluent to be reused for irrigation of a local golf course community, recreational fields, and other commercial/industrial locations. Non-use effluent is discharged to the Hardin Canal, a tributary to the Ogeechee River, located south of the City of Pooler.

EOM's operators have actively participated in the planning and operations for the upcoming plant expansion to increase treatment capacity from 3.3 MGD to 6.223 MGD; to improve headworks screening including wet weather flows to equalization pond; and to improve biological treatment process to remove phosphorous.

In addition to wastewater operations, EOM is also contracted for the City's stormwater management, emergency response, and engineering services.

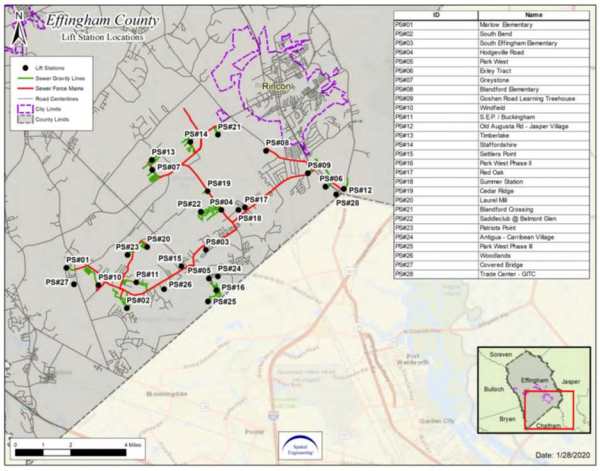
Effingham County, Georgia

EOM became a working partner with Effingham County in 2015 to facilitate the Operations & Maintenance of the County's water treatment and distribution system, wastewater reclamation facility, wastewater collection and transportation system (WCTS), emergency response, streets and rights-of-way and drainage systems. In 2016 the scope was increased to include the County's Fleet Maintenance Department. The scope was increased again in 2018 to include engineering services.

Effingham County covers an area of approximately 483 square miles with a population of over 65,000. The County's water treatment and distribution system consists of raw water supplied from the Floridan Aquifer and treated surface water purchased from the City of Savannah. Water is piped from the Savannah I&D plant and pumped from 14 ground water well systems. The County also has 2 elevated storage tanks and 1 booster station. The distribution system has approximately 65 miles of water pipe supplying water to the county's population ranging from ductile pipe, galvanized pipe, polyvinylchloride pipe, and polyethylene pipe.

The wastewater collections and transportation system consisting of over 100 miles of gravity sewer lines and force mains and 35 wastewater pumping stations. The pump stations are all duplex stations with pumps ranging from 2 HP to 88 HP. These networks of the WCTS convey flow via (1) singular force main to the County's South Effingham Wastewater Reclamation Facility.

The Effingham Water Reclamation Facility (WRF) serves South Effingham County's unincorporated areas. This water reclamation facility is currently permitted to treat 0.75 MGD monthly average of sanitary wastewater. Effingham WRF was constructed to handle a 1.0 MGD annual capability. The plant was designed for future expansion to 2.5 MGD and then to 5.0 MGD. Annual flows to the plant currently average about 515,000 GPD. The Effingham Water Reclamation Facility was constructed in 2005 and is located on 40 acres just west of the County of Rincon using a VTSCADA software platform. The plant utilizes a conventional activated sludge process. Upgrades in water reclamation technology allows treated effluent to be reused for residential and commercial irrigation purposes. Non-use effluent is discharged 100 percent to three irrigation zones located adjacent to the plant facility.



Port Wentworth, Georgia

On October 6, 2022, City of Port Wentworth requested a 30 day interim partnership with EOM to assume responsible charge and manage the city's wastewater treatment facility, a portion of its collections system, the wastewater pumping stations, as well as water wells. This was a result of multiple Consent Orders received from the Georgia Department of Environmental Protection Division. EOM completed an in-depth evaluation of the current systems and made numerous repairs to get the wastewater plant and stations back into normal operating conditions.

In June 2023, the City terminated their multi-year contract with their current provider and awarded EOM the operations services for their wastewater treatment facility, wastewater pumping stations and water wells. EOM also assists the City's staff with emergency repair services, stormwater management compliance and engineering services.

The City of Woodstock, Georgia

EOM became a working partner with the City of Woodstock, Ga in 2021 to facilitate the Operations & Maintenance of the City's wastewater collection and transportation system (WCTS). The City's WCTS consists of gravity sewer lines, force mains and 19 pump stations. These pump stations are all duplex stations with pumps ranging from 3 HP to 100 HP. The networks of the WCTS convey flow to the Rubes Creek Water Reclamation Facility.

The Rubes Creek WRF serves the City's 33,705 population. This Zenon/GE Membrane Bioreactor (MBR) water reclamation facility is currently permitted to treat 2.5MGD of sanitary wastewater with a capacity to treat 3.0MGD.

Chatham County, Georgia

EOM has responded to many cities and counties in emergent situations when their current operations contractor did not have the capability or equipment to respond.

In 2017, EOM was contacted by Chatham County during Hurricane Irma to respond to a lift station power failure (Figure 2). Having the equipment and local manpower readily available, EOM mobilized and prevented a sanitary sewer overflow (SSO).

In 2020, Chatham County public works department solicited contractors to provide wastewater system repairs due to a reported lack of capability from their current operations company. EOM was awarded the annual contract for wastewater system repairs and emergency response.

In 2023, Chatham County solicited contractors to provide operations and maintenance services for the wastewater collections system and the contract was awarded to EOM.

Phillips 66 Lubricants Savannah, Georgia

EOM started working with Phillips 66 Lubricants Plant in 2019, performing electrical and mechanical installation, repairs and maintenance services. The 36 acre industrial facility is located in Savannah, Georgia adjacent to the Savannah River.

Throughout the years EOM has performed electrical, instrumentation and controls installation and repairs as well as piping system fabrication and installation, millwright services, welding, shutdown and maintenance services and supplemental manpower to the facility. EOM is committed to providing the safest possible conditions for our employees and clients and ensures all staff are properly trained.

EOM's services have included electrical installation and repairs, instrumentation and controls installation and repairs, piping system fabrication and installation and millwright services.

We are proud to be an active member of ISNetworld. We are a certified Georgia Drug-Free Workplace, possess an Experience Modification Rate (EMR) below industry standards, and have all leadership personnel OSHA certified.

Georgia Pacific Rincon, Georgia

In 2019, EOM began performing industrial installation and repair services for Georgia Pacific's Savannah River Mill. The industrial facility sits on roughly 1900 acres in Rincon, Georgia.