

Client
City of Boca Raton

Scope of Services
Design, permitting, opinions of probable construction cost, and bidding services.

Contact
Mr. Chris Helfrich
Director of Utility Services
City of Boca Raton
1401 Glades Road
Boca Raton, Florida 33487
561.338.7303
chelfrich@ci.boca-raton.fl.us

Start Date
7/2018

Completion Date
TBD

Construction Cost
TBD

Key MBC Staff
Frank A. Brinson, P.E.
Melissa Campbell, E.I.
Audra McCafferty, P.E.
Andrew Barbra, E.I.

Key Features
Project included rehabilitation of the City's six multimedia gravity filter equipment, structures, filtered water clearwells, piping, and valves.

Gravity Filter System Rehabilitation

Boca Raton, Florida



The Project

The Glades Road Water Treatment Plant utilizes a 30 million gallon per day (mgd) capacity conventional lime softening process in parallel with a 40 mgd nanofiltration (NF) process. The lime softening process includes a gravity filter system downstream of the lime softening treatment units. The gravity filter system performs the final water treatment and disinfection prior to blending with the NF process water.

The gravity filter system consists of granular media (sand and anthracite), underdrains, agitator sweeps, washwater troughs, clearwells, a backwash system and a network of large diameter pipes and valves. Due to age, the gravity filter system components were in need of a comprehensive rehabilitation. Also, the filter media was approaching the end of its normal useful service life and was in need of replacement. McCafferty Brinson Consulting, LLC was retained to provide design, permitting, and bidding services for a comprehensive rehabilitation of the filter system. The technical specifications included development of a detailed construction sequencing and phasing plan to allow the work to be completed without disrupting production of treated water from the lime softening process. Design was completed and the project was advertised for bidding in June 2019. MBC is scheduled to provide engineering services during the construction phase of the project.