



## ST. MARYS, GEORGIA CONSTRUCTION MANAGEMENT AT-RISK AND PROGRESSIVE DESIGN-BUILD HASKELL

The City of St. Marys consistently exceeded the capacity and discharge limits of their wastewater treatment operating permit due to unanticipated development in the area. The 0.9 MGD facility was experiencing flows of 1.2 MGD and consistently exceeding discharge limits. The city embarked on an emergency upgrade of the wastewater treatment plant to double the capacity of the facility to 1.8 MGD. The emergency upgrade needed to be completed on an accelerated schedule in order to avoid further fines. Immediately following the emergency upgrade project, the city initiated a 4 MGD expansion of the facility to satisfy their long-term capacity needs.

The city initially elected to utilize construction management at-risk (CMAR) delivery on both projects to accelerate the project schedule by setting the guaranteed maximum price (GMP) prior to completing design, expediting regulatory approval and permit acquisition, and releasing long-lead-time equipment early in the project. The GMP was especially important because the city secured municipal bond financing based on an early estimate of probable construction cost prepared by the Engineer of Record. The financing plan was based upon this strict construction cost that could not be exceeded.

The city chose Haskell as the CMAR firm. The city then expanded Haskell's CMAR contract to include design of all buildings resulting in a progressive design-build



engagement for a portion of the project, further accelerating project delivery. Haskell prepared milestone estimates and conducted value engineering studies to ensure the project construction costs were kept below the city's original estimate. The city accepted \$1.5 million in value engineering alternatives identified by Haskell. Haskell was also able to help the city save approximately \$500,000 in sales tax by suggesting and administering an owner direct-purchase program.

The emergency upgrade was successfully delivered in less than 12 months and the expansion was completed in 21 months. Following the completion of the projects, the city was never assessed any fines by the regulatory agencies. At the completion of the emergency upgrade, \$425,000 of savings was returned by Haskell to the city, with an additional \$494,000 returned at the completion of the expansion. In total, the project cost the city \$38 million.

