

City of Hallandale Beach City Commission Agenda Cover Memo

Meeting Date:		File No.:	Ite	Item Type:			1 st Reading		2 nd Reading
6/18/2025			⊠ Resolution		Orc	Ordinance Reading		Ά	N/A
		25-182	☐ Ordinance ☐ Other		Public Hearing				
		25-102			Adv	ertising Required			
					Qua	asi-Judicial:			
Fiscal Impact (\$):		Account Balance (\$):				Funding Source:		Project Number:	
\$339,112		\$339,112			Tr	Tranche 2 Bond Proceeds		CIP2607	
Contract/P.O. Required		RFP/RFQ/Bid Number:			Sponsor Name:			Department:	
⊠ Yes	□ No	RFP # FY 2018-2019-012 CONSULTANT COMPETITIVE NEGOTIATION ACT (CCNA) CONTINUING PROFESSIONAL ARCHITECTURAL AND ENGINEERING SERVICES AND OTHER SERVICES		MPETITIVE CT (CCNA) FESSIONAL AL AND RVICES AND	Jeffrey Towne Interim Director of Public Works			Public Works	
Strategic Plan Focus Areas:									
☐ Fiscal Stability		□ Resid Service					☐ Economic Development & Affordable Housing		
Implementation Timeline:									
Estimated Start Date: 6/30/2025					E	Estimated End Date: 1/26/2027			

SHORT TITLE:

A RESOLUTION OF THE MAYOR AND CITY COMMISSION OF THE CITY OF HALLANDALE BEACH, FLORIDA, AUTHORIZING A CCNA WORK AUTHORIZATION FOR AND SAWYER TO **UPDATE** THE WASTEWATER MODEL AND EVALUATE THE HYDRAULIC FEASIBILITY OF CONVEYING THE DISCHARGE OF LIFT THE STATION NO. 8 TO **MIAMI-DADE** COUNTY WASTEWATER SYSTEM FOR THE MIAMI-DADE COUNTY SEWER TRUNK LINE PROJECT FOR A NOT-TO-EXCEED AMOUNT OF THREE HUNDRED, THIRTY-NINE THOUSAND, ONE HUNDRED AND TWELVE DOLLARS (\$339,112); AND PROVIDING AN EFFECTIVE DATE.

STAFF SUMMARY:

Summary:

This agenda item seeks the City Commission's approval to retain the services of Hazen and Sawyer to update the City's Wastewater Model and to evaluate the hydraulic feasibility of conveying discharge from the City's Wastewater Lift Station No. 8 to the Miami-Dade County wastewater system, as part of the City's project, "Miami-Dade County Sewer Trunk Line (CIP2607)", in accordance with RFP #2018-2019-012 Continuing Professional Architectural and Engineering Services, for an amount not-to-exceed \$339,112. The above-listed consultant will be providing services based on the following discipline: Provide Water Resources/Stormwater Design/Wastewater Engineering. The preliminary opinion of probable cost for the Miami-Dade County Sewer Trunk Line (CIP2607) project is \$4,575,000 (Exhibit 4).

Background:

In 2001, the City of Hallandale Beach contracted Hazen and Sawyer to produce a computer model of the City's sanitary sewer infrastructure. This type of model is a computer program that performs hydraulic calculations necessary to help engineers design and analyze complex piping systems, such as sanitary sewer pipe networks and lift stations. The goal of this type of model is to make sure that available hydraulic capacity exists for present and future growth as well as analyze options to achieve infrastructure needs to accommodate that growth.

On April 18, 2006, the City Commission approved funding for Hazen and Sawyer to perform the 2006 model updates and summarize the findings in a detailed technical memorandum. The purpose of the report was to evaluate the City's wastewater transmission system and to recommend wastewater infrastructure improvements. A final report outlining the findings and recommendations was submitted to the City in December 2007. Based on the findings from the 2006 updates and subsequent report, the City proceeded to repair, replace, and add infrastructure components to the existing wastewater collection system.

As a general comment, wastewater transmission systems and infrastructure must be updated from time to time because cities are dynamic and new development is inevitable. This new development has an impact on the wastewater system; therefore, City's must update their modeling to project future wastewater flow as well as determine infrastructure that may be needed to accommodate increased changes in flow/demand.

During 2014, the City Commission approved a project that would update flow projections and related infrastructure improvements to include recently completed development within the City. Hazen and Sawyer calibrated the model to verify that it had a reasonable predictor of future wastewater treatment and disposal requirements. However, these predictors did not anticipate the current massive increase in new development applications. Therefore, it was necessary to take that potential new development at that time into account and develop a wastewater master plan sufficient to model future increased potential flow and ensure that City's infrastructure would keep up with demand.

In 2016, the City Commission approved a project that defined both short and long-term planning goals through the year 2035 and identified the operational and maintenance needs of the City's

wastewater system. Short and long-term planning goals incorporated impacts of the proposed major development as well as anticipated future development. Hazen and Sawyer developed up to three alternative improvement model scenarios for correcting system hydraulic deficiencies that the model identified.

In 2017, in an effort to effectively fulfill its responsibilities, to provide a high level of service to its residents and customers, and to accommodate growth and economic development, and protect public health, safety, and the environment, the City updated the Wastewater Master Plan. That Master Plan considered factors such as population growth, new development, aging of existing infrastructure, and new regulatory requirements.

Based on recommendations of that Master Plan, the City is currently addressing the capacity and aging infrastructure issues of the existing transmission system. This includes upgrades at various lift stations as well as improvements to the force main network which are currently design and/or construction.

Current Situation:

The City of Hallandale Beach (City) currently owns, operates, and maintains a wastewater collection and transmission system including lift stations, monitoring systems, gravity sewers and force mains. Wastewater is collected primarily from residential and commercial connections and pumped to the City of Hollywood's Southern Regional Wastewater Treatment Plan (SRWWTP) for treatment and disposal through four metered connections. Fifteen lift stations are owned, operated, and maintained by the City of Hollywood. In addition to the lift stations, the City maintains a network of 12 miles of force main and 57 miles of gravity sewer.

To support long-term system planning and ensure informed decision-making, the City is undertaking a multi-faceted strategy that addresses both current operational challenges and future capacity needs. As part of this effort, the City seeks to update the wastewater hydraulic model to reflect existing system conditions and forecasted development. This model will serve as a foundational tool for the City's consulting engineers to refine pump sizing and force main alignments, ensuring that future infrastructure upgrades are appropriately designed and cost-effective.

In parallel, and as a forward-looking measure to manage capacity constraints, the City is also exploring the potential to divert a portion of its wastewater southward into the Miami-Dade County wastewater collection, transmission, and treatment system. Although this initiative is distinct from the internal model update, both efforts are strategically aligned to a common goal: protecting system reliability, accommodating growth, and ensuring compliance with interlocal service agreements. Together, these initiatives reflect the City's commitment to proactive planning, operational resilience, and the responsible stewardship of public infrastructure.

As per Resolution No. 2020-054 (Exhibit 2), approved by the City Commission on August 5, 2020, authorizing continuing service agreements to be awarded in accordance with the Consultant Competitive Negotiation Act (CCNA), a proposal has been secured to provide water resources/stormwater design/wastewater engineering services.

The purpose of this agenda item is to update the existing wastewater hydraulic model for use by the City's other consultants as well as to establish baseline modeling criteria for uniformity across the City (Exhibit 3).

The consultant will apply the calibrated wastewater collection and transmission hydraulic model to evaluate the hydraulic feasibility of conveying the discharge of Lift Station No. 8 to the Miami-Dade County wastewater system. The consultant will define a corridor for the required force main and will add this force main to the InfoWorks ICM hydraulic model. The consultant will coordinate with the planning section at the Miami-Dade Water and Sewer Department (WASD), with two main objectives:

- 1) Define the pressure at the point of connection that the City will use to size the required force main and evaluate the capacity of the current Lift Station No. 8 pumping equipment; and
- 2) Evaluate the effect that the additional flows the City sends to WASD's system will have on the Miami-Dade transmission and treatment system.

The Consultant will determine and document the recommended improvements for wastewater infrastructure owned, operated, and maintained by the City. The technical memorandum will also include estimated costs and recommended timing of projects based on population projections.

This agenda item requests the use of bond proceeds from Tranche 2 as the source of funding to accomplish the scope of work outlined in the proposal (Exhibit 3). A bond reimbursement resolution for Tranche 2 bond funding was approved by the City Commission in May 2025.

Why Action is Necessary:

Pursuant to Chapter 23, Section 23-4, Competitive Bidding Required, all purchases of and contracts for equipment, supplies, and contractual services, when the estimated cost shall exceed \$50,000.00 shall be based on competitive bids. Furthermore, pursuant to Chapter 23, Section 23-6, Award of Contract, the City Manager, shall have the authority to recommend to the City Commission award of contracts.

Additionally, Section 23-8(7) Continuing Services Agreements, Individual purchases for professional services not exceeding \$75,000 made pursuant to continuing services agreements resulting from a publicly solicited request for proposals may be approved by The City Manager.

Cost Benefit:

The Public Works team will be able to prioritize force main improvements and lift station improvements based on the results of the hydraulic modeling effort. This will ensure that the appropriate projects are constructed for the City, saving the City money overall. This will also provide additional capacity for the City's sewerage disposal, which is a major benefit for the City's future.

PROPOSED ACTION:

The City Commission considers the attached Resolution.

ATTACHMENT(S):

Exhibit 1 – Resolution

Exhibit 2 – Resolution No. 2020-054

Exhibit 3 – Scope of Services Proposal

Exhibit 4 – Opinion of Probable Costs - Construction

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Marc Gambrill, P.E. City Engineer

Reviewed By: Jeffrey Towne

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Interim Director of Public Works

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Assistant City Manager