



Memorandum

Memorandum No: 23-001

Date: January 4, 2023

To: Honorable Mayor, Vice Mayor, and Commissioners

From: Greg Chavarria, City Manager 
Greg Chavarria (Jan 4, 2023 16:16 EST)

Re: Prospect Lake Water Treatment Plant

The purpose of this memorandum is to provide an update on the Prospect Lake Water Treatment Plant Project (WTP), including an overview of the draft Comprehensive Agreement, draft Labor Services Agreement, and financial impacts associated with the project. The WTP is being considered as a Public Private Partnership (P3) between the City of Fort Lauderdale and the Project Team, formed by Prospect Lake Holdings, LLC, (Ridgewood Infrastructure) and IDE PLCWC, Inc (IDE; together with Ridgewood Infrastructure), to meet long term, clean water treatment needs for the City.

On December 21, 2020, the City received an unsolicited proposal from the Project Team pursuant to Section 255.065, Florida Statutes, followed by a second unsolicited proposal on May 17, 2021, to design, construct, operate, and maintain one or more new water treatment plants and associated systems for the City's water utility.

On June 1, 2021, the City Commission approved Resolution 21-108, providing notice of intent to enter into a Comprehensive Agreement for a qualifying project submitted as an unsolicited proposal to design, construct, operate, and maintain one or more new water treatment plants and associated systems for the City's water utility, and notice of intent to accept other proposals for the same project. The period to accept other proposals ran for 90 days from the initial date of publication of June 9, 2021, to September 7, 2021. During that time, two additional proposals were received.

On January 18, 2022, City staff and Ernst & Young Infrastructure Advisors, LLC presented results of a technical and financial analysis, followed by presentations by the four proposers at the March 1, 2022, Conference Meeting. On March 1, 2022, the City Commission approved Resolution 22-57, providing notice of the decision to proceed with the unsolicited proposal submitted by the Project Team and authorizing negotiations of a proposed Interim Agreement or Comprehensive Agreement or both in accordance with Section 255.065 Florida Statutes.

Comprehensive Agreement:

The draft Comprehensive Agreement (Agreement), together with its 23 Annexes, is attached. The Agreement is the result of over 6 months of negotiations between the City, its legal, financial, and technical advisors, and the Project Team in order to memorialize contract terms and conditions. These working drafts are still in coordination between City staff and the Project Team and are not in final execution form for consideration by the City Commission. The Agreement provides detailed terms and conditions for financing, design, construction, operation, and maintenance of a Water Treatment Plant (WTP) (referred to as “The Project”) capable of producing 50 Million Gallons per Day (MGD) at the Prospect Lake Wellfield site, generally located north of Prospect Road and west of NW 31st Ave. The Project Team, utilizing Kiewit Corporation as design-builder and an IDE Americas, Inc. affiliate as the Operations and Maintenance (O&M) services provider, will collectively deliver the Project to the City in a 42-month construction period followed by 30-year operational period. The City will retain legal ownership of the site and the Project throughout the term of the agreement.

The proposed Project has an aggregate, fixed project cost of \$485M, which provides for construction of a treatment facility utilizing a combination of nanofiltration membrane and ion exchange technologies capable of producing 50 MGD of treated water, connections to both the existing raw groundwater wellhead network pipe and production water delivery pipe, chemical storage tanks, one deep injection well, backup generators, control room, laboratory, and administrative and warehouse space. Annex M identifies design requirements and construction standards for each element of the facility, while Annex C contains performance testing and commissioning plans for acceptance of the facility.

Connecting the Project into the City’s existing water system requires additional infrastructure investments and improvements beyond what is in the proposal. Integration of the new treatment plant into the City’s existing water system and adapting the proposed design for existing site conditions requires an additional investment of approximately \$181M for infrastructure elements, referred to as the Project Enabling Works, which is separate from the Project Team’s original scope of responsibility under the Project. These additional investments, identified in Annex B and Section 11.02(b), are to be fully funded by the City but will be constructed, or cause to be constructed, by either the City or the Project Team, with the City fully or partially retaining cost, schedule, and performance risk for the scope which shall remain under the city, while the Project Team shall retain such risks for scope performed under its responsibility. Improvements include modifications to the existing wellfield raw water supply pipelines, construction of a new 54” product water transmission line connecting the Prospect WTP to the existing Fiveash distribution system, upgrades to the Fiveash distribution pumps, a 13.2 kV electrical power feed and transformer building, water and wastewater utility connections, and a communication system to allow plant operators to synchronize wellfield raw water withdrawals and finished water distribution. In addition, Section 8.01 and 11.02 identify infrastructure necessary to accommodate existing wellfield conditions and finished water

standards, including a pretreatment facility to boost pressure and filter sand and debris from the wellheads, as well as a second injection well and providing certain Chemical Systems to meet Florida Department of Environmental Protection (FDEP) requirements and City standards for providing high quality water to residents.

In order to leverage the City's financing power and to maximize the potential for lowering the water tariff to residents and customers, the City determined it would provide 75% of the initial Capital Expense (CapEx) with the Project Team providing 25% of CapEx for construction of the Project. The City will also provide 100% of funding for all Project Enabling Works. The Project Team assumes risk for cost overruns or delays associated with the Project. Annex A of the agreement identifies relief events that are beyond the control of the Project Team for which the City will assume risk should they occur. Section 4.04 and 4.07 authorize the City to review and approve Project design documents and inspect work as completed to ensure it meets City standards. Sections 8.02 and 8.03 provide a process to approve change orders to the approved design standards and construction standards, if requested by either the City or the Project Team, if necessary due to unforeseen environmental conditions, new regulatory requirements, or other requirements. As construction ends, Annex C identifies responsibilities for commissioning and performance testing, and final acceptance, while Section 4.06 provides a one-year warranty for the Project. Should the Project Team fail to complete construction and begin commercial operations within 48 months after Notice-To-Proceed, Section 4.10 provides liquidated damages until commercial operations are achieved. This construction period may be adjusted should any relief events or approved changes occur.

The Commercial Operations Date marks the end of the construction phase and beginning of the 30-year operational phase. In this phase the Project Team will be responsible for 100% of the inflation risk related to operation and maintenance of the facility, with exception of electricity, chemical, and labor costs.

The Project will produce up to 50 MGD of potable water for delivery to the City's water distribution system in accordance with an operational schedule provided two months in advance by the City in accordance with Section 6.03. Annexes G and H contain specific water quality standards for raw water entering the plant and production water being delivered to the City's water distribution system, respectively. These standards ensure that production water will meet or exceed all current regulatory requirements and City standards, with water testing completed on a daily schedule to ensure conformance. The Project Team will be responsible for planning and conducting all repairs, replacement, and maintenance of the plant as well as completing documentation necessary to meet regulatory requirements, thereby shifting these operating risks over the term of the operational phase to the Project Team as established in Annex F. While operational management will be provided by the Project Team, the City will provide a labor force of approximately 40 employees, for daily operations, as well as providing chemicals and electrical service to operate the Project, thereby taking advantage of the City's purchasing power for these services that result in a lower water rate for its customers.

Annex W provides that the City will make a monthly availability payment to the Project Team during the operating phase of the agreement related to the achieved/City approved construction, ongoing operations, and maintenance of the Project. This payment will be reduced in any month that the Project Team fails to deliver the agreed upon amount of water, the water fails to conform to water quality standards identified in the Agreement or other amounts are owed to the City under the Agreement. The Project Team has provided guaranteed maximum consumption rates for both electricity and chemicals during operations and is responsible for any exceedances in accordance with Annex L.

A key aspect of this Public Private Partnership is shifting cost inflation risk during construction and the 30-years of operations from the City to the Project Team. Since the September 6, 2022, presentation, the Project Team has held its fixed Project price. The Agreement includes details of the financing strategy to provide funding for the Project CapEx, Project Enabling Works, and operational costs throughout the 30-year period. The City will fund 75% of the \$485M CapEx and 100% of the \$181M Project Enabling Works costs, while the P3 will provide 25% of the \$485M CapEx funding. The City will make an initial availability payment of \$80,500 per day, which escalates by 5% annually for the first 5 years and then by 2.5% for the remaining 25 years of the agreement, equating to an initial rate of \$1.61 per 1,000 gallons produced by the Project if operating at full capacity. When input into the City's water and sewer financial model, the water rate is projected to increase from \$31 per month in 2022 to \$75 per month in 2032, or a 143% increase over the ten-year period. If the City were to complete this project without the risk transfer benefits provided by the Project Team (e.g., an expedited timeline, inflation de-risking, among others) the 2032 water rate is estimated to be \$73 per month or 2.7% lower.

The Labor Services Agreement (Annex N) provides terms for City employees to work at the Project under the operational control of the Project Team. The Project Team will provide technical and operational supervisory positions while approximately 40 City employees will staff the facility to provide for daily operations and maintenance requirements. A City appointed onsite liaison will serve as single point of contact for labor issues, with the City retaining authority for salaries and benefits, hiring and promotion decisions, disciplinary actions, and any actions related to the respective Union Collective Bargaining Agreements. The Project Team shall be responsible for providing training for the employees, and the City shall agree to maintain stability in employees assigned to the Project to the extent possible.

City staff, their external consultants, and the Project Team continue to review and finalize terms of the Comprehensive Agreement with annexes, including the Labor Services Agreement. The City has initiated discussions with the Teamsters to discuss any union concerns and ensure City employees are involved in this process. The City plans to conduct a town hall meeting for the public and establish a public website with all documents and presentations to increase awareness of the project with our residents.

The Comprehensive Agreement and Labor Services Agreement tentatively scheduled for City Commission consideration on February 7, 2023.

Attachments:

Comprehensive Agreement for the Prospect Lake Clean Water Center in Fort Lauderdale, Florida (draft)
Annex A Definitions
Annex B City Infrastructure Obligations
Annex C Commissioning Obligations, Performance Testing, and Transition Plan
Annex D Form of Construction Progress and Operations Period Reports
Annex E Site Description, Studies and Inspections, and Required Easements
Annex F O&M Standards
Annex G Feedstock Water Specifications
Annex H Product Water Legal and Contractual Standards and Non-Conforming Product Water Deductions
Annex I Government Approvals
Annex J Baseline Water Specifications
Annex K Required Insurance
Annex L Guaranteed Maximum Electricity and Chemical Consumption
Annex M Design Requirements and Construction Standards
Annex N Form of Labor Services Agreement
Annex O Authorized Representatives
Annex P Form of Subordinate Bond (tbd)
Annex Q Security Plan
Annex R Legal Opinion (tbd)
Annex S End of Term Handback Requirements
Annex T Form of Payment and Performance Bonds
Annex U Form of Funding Request
Annex V Communications Protocol
Annex W Availability Payment Rate

c: Anthony G. Fajardo, Assistant City Manager
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