



December 5, 2022

Blake Kidwell
Flynn Engineering
241 Commercial Boulevard
Lauderdale-By-The-Sea, FL 33308

Subject: **WATER AND WASTEWATER CAPACITY AVAILABILITY LETTER**
633 SE 3rd Avenue – DRC Case No. UDP-S22042
633 SE 3rd Avenue, Fort Lauderdale, FL 33301

Dear Blake Kidwell,

According to the information submitted, the project consists of a construction of a construction of an 830-unit multi-story condominium building with 12,798 SF of restaurant space to replace 30,949 SF office building. There are proposed water and sewer connections to City of Fort Lauderdale (City) utilities along SE 7th Street and SE 6th Court. This project lies within the City's Pump Station (PS) A-11 basin and will increase the average day water demand by approximately 0.1730 million gallons per day (MGD) and the average day sewer demand by approximately 0.1191 MGD.

The existing water infrastructure has the capacity to support the proposed development and no improvements are needed. The existing sewer infrastructure does not have the capacity to support the proposed development and improvements will be required to accommodate the proposed flow increase before the Certificate of Occupancy is issued.

If there are changes to the proposed development after issuance of this capacity availability letter, the Owner or Owner's authorized representative shall submit a revised request based on the updated plans. Failure to seek approval prior to changing the plans may result in revocation of permit and capacity allocation. The determination of capacity availability is based upon tools and data analysis as of the date of this letter. Availability of capacities, as calculated in the attached analysis, is not guaranteed and no existing system capacity shall be considered "committed" for this project until a permit has been issued and all fees have been paid. The City reserves the right to re-evaluate the availability of capacities at the time of permit application. If sufficient capacities are not available, the City may deny the permit application or ask the Owner/Developer to submit an alternate design prior to approval. Information contained in this letter will expire one year from the date issued.

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Should you have any questions or require any additional information, please contact me at (954) 828-5862.

Sincerely,

Igor Vassiliev, P.E.
Project Manager II

Enclosures: Water and Wastewater Capacity Analysis

cc: Alan Dodd, P.E., Public Works Director
Talal Abi-Karam, P.E., Assistant Public Works Director
Omar Castellon, P.E., Assistant Public Works Director
Daniel Rey, P.E., City Engineer
File: Water and Sewer Capacity Letters

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City of Fort Lauderdale
Public Works Department
Water and Wastewater Capacity Analysis

633 SE 3rd Avenue – DRC Case No. UDP-S22042
633 SE 3rd Avenue, Fort Lauderdale, FL 33301

PROJECT AND DESCRIPTION

The project consists of a construction of a construction of an 830-unit multi-story condominium building with 12,798 SF of restaurant space to replace 30,949 SF office building.

DESCRIPTION OF EXISTING UTILITIES

Water: The site is currently served by a 12-inch water main along SE 7th street, south of the project site. See Figure 1.

Wastewater: The site is currently served by an 8-inch gravity sewer main along SE 6th Court to the north of the project site and by an 18-inch gravity sewer on SE 7th Street to the south of the project site. See Figure 2.

Pumping Station: The site is served by PS A-11 which is located along SE 7th Street.

SUMMARY OF ANALYSIS AND REQUIRED ACTION

The existing water infrastructure has the capacity to support the proposed development and no improvements are needed. The existing sewer infrastructure does not have the capacity to support the proposed development and the following improvements will be required to accommodate the proposed flow increase before the Certificate of Occupancy is issued:

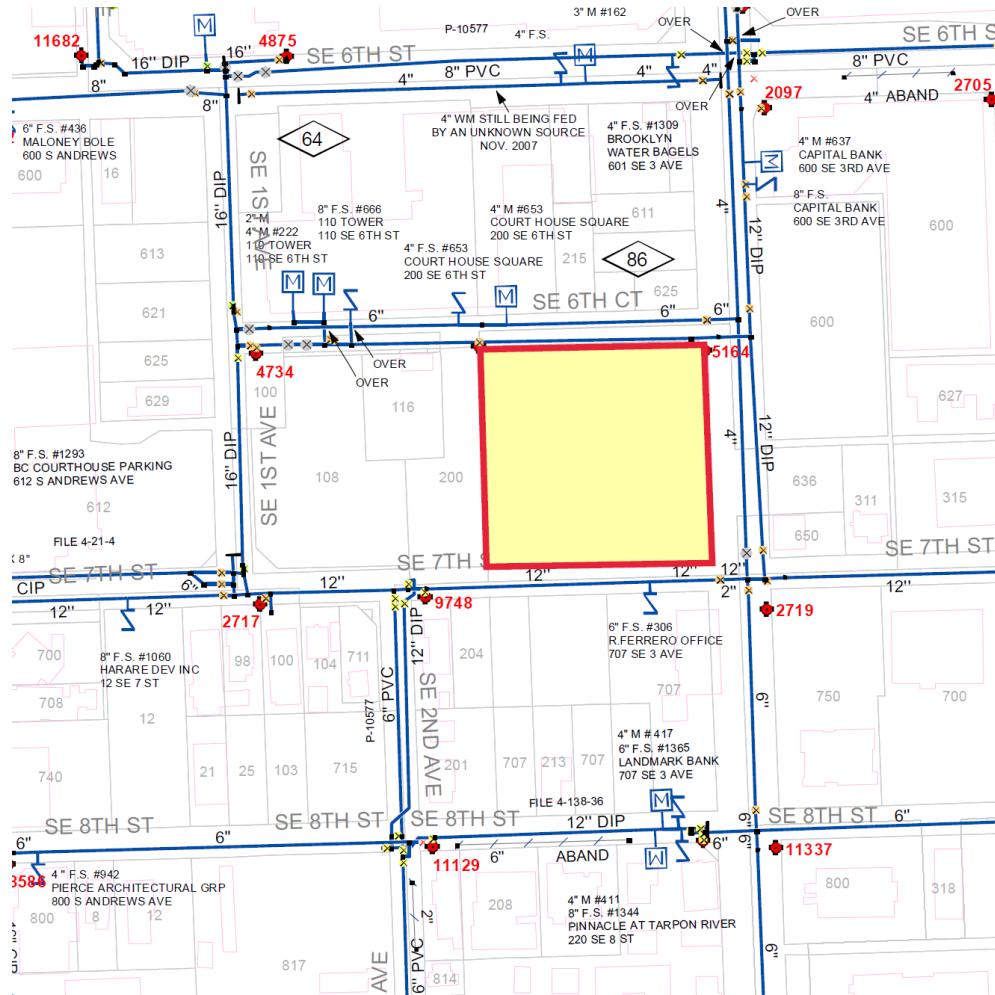
- Approximately 440 LF of 18-inch gravity line along SE 7th Street will have to be upsized to 24 inches (see Figure 6).
- Approximately 1,103 LF of 18-inch and 24-inch gravity lines along SE 7th Street will have to be upsized to 30 inches (see Figure 6).
- PS A-11 projected NAPOT will increase to 16.87 hours, therefore the PS A-11 will have to be upgraded to be able to handle the flow increase from the project.

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Figure 1 – City Water Atlas



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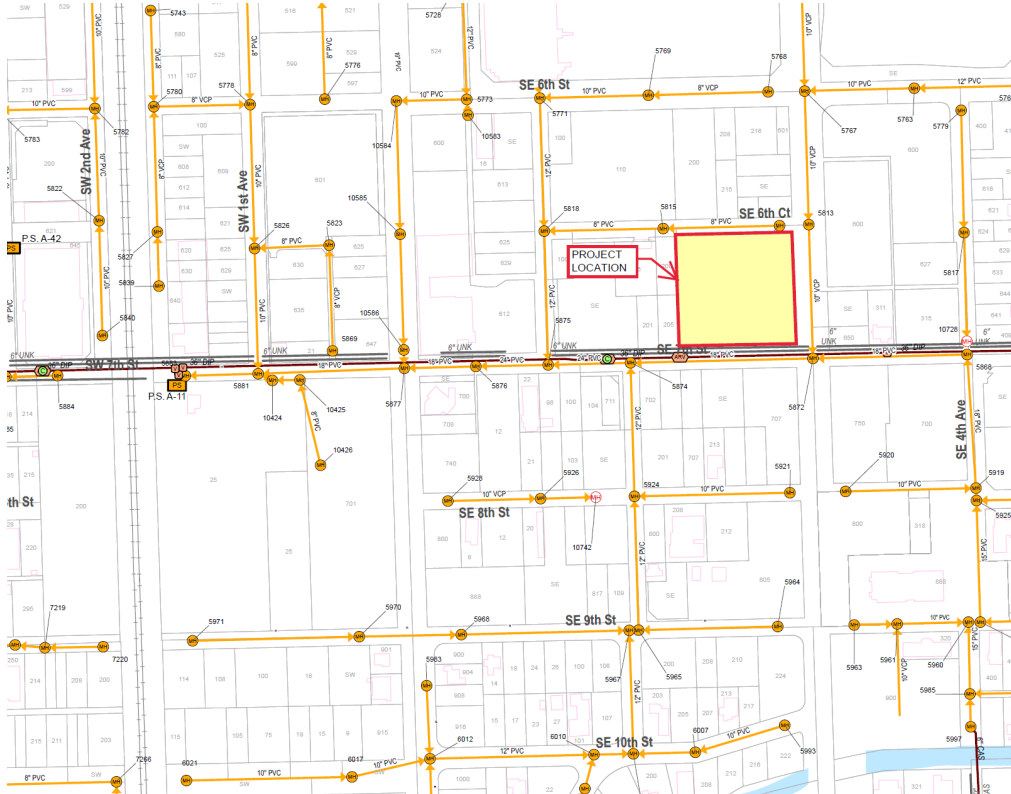
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Figure 2 – City Sewer Atlas



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WATER CAPACITY ANALYSIS

Requested Demand: Based on the applicant's site plan and building use information, the estimated average day potable water demand is approximately 172982 gallons per day (GPD), which equates to 0.1730 MGD. Average day water use demands are calculated by reducing the calculated max day water use demands by a factor of 1.18. The max day water use demands are calculated using the City's Guidelines for the Calculations of Sanitary Sewer Connection Fees and are based on City Ordinance No. C-19-29.

Evaluation of impact on existing distribution pipe: According to the site plan, the applicant is proposing to utilize the 12-inch water main along SE 7th street, south of the project site. The InfoWater hydraulic model was analyzed to determine the impact of this project on the existing 12-inch water main.

Evaluation of impact of Permitted Water Plant Capacity: The Fiveash and the Peele Dixie Water Treatment Plants are designed to treat 70 MGD and 12 MGD of raw water respectively (82 MGD total). The total permitted Biscayne aquifer water withdrawals for these plants is limited to 52.55 MGD per the South Florida Water Management District (SFWMD) permit number 06-00123-W.

The current twelve-month rolling average production at the two plants is 39.17 MGD. The previously committed demand from development projects in the permitting or the construction stage is 5.15 MGD. Combining these figures with the demand from the proposed project of 0.1730 MGD, the required production would be 44.49 MGD. This is less than the allowable withdrawal limit of 52.55 MGD. Therefore, the water plants have sufficient capacity to serve this project. See Figure 3 below.

Recommended Water Infrastructure Improvements: No improvements required.

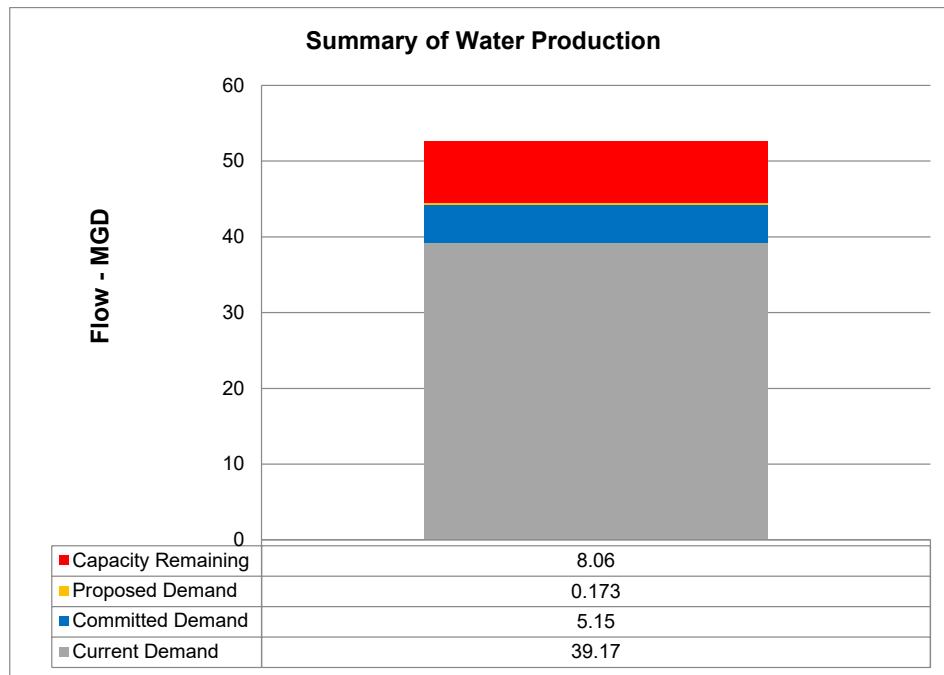


Figure 3

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WASTEWATER CAPACITY ANALYSIS

Requested Demand: Based on the applicant's site plan and building use information, the estimated average day sewer use demand is approximately 119070 GPD, which equates to 0.1191 MGD. Average day sewer use demands are calculated using the City's Guidelines for the Calculations of Sanitary Sewer Connection Fees and are based on City Ordinance No. C-19-29.

Evaluation of impact on existing collection pipe: According to the site plan, the applicant is proposing to utilize the 8-inch gravity sewer main along SE 6th Court to the north of the project site and the 18-inch gravity sewer on SE 7th Street to the south of the project site. The City uses a peak hourly flow factor of 3.0. Accounting for existing flows and based on the tools and information available to the City staff, it has been calculated that the pipes downstream of the proposed development will flow greater than the City's governance plan threshold of 70% during peak flows. Therefore, the pipes downstream of the developments do not have adequate capacity to serve the project and will have to be upsized prior to issuing the Certificate of Occupancy for the proposed development.

Evaluation of impact on pumping station: PS A-11 has a duty point of 1049 gallons per minute (GPM) and has a Nominal Average Pumping Operating Time (NAPOT) of approximately 9.07 hours per day. Based on projected sewage flows, the pumping run times would increase approximately 114 minutes per day. Additionally, there are other committed flows from proposed developments within the PS A-11 basin resulting in 354.66 minutes of additional runtime. PS A-11 will have a NAPOT of 16.87 hours once the proposed developments are complete, greater than the recommended average of 10 hours per day. See Figure 4 below. Therefore, the upgrades to PS A-11 are required and will have to be completed prior to issuing the Certificate of Occupancy for the proposed development.

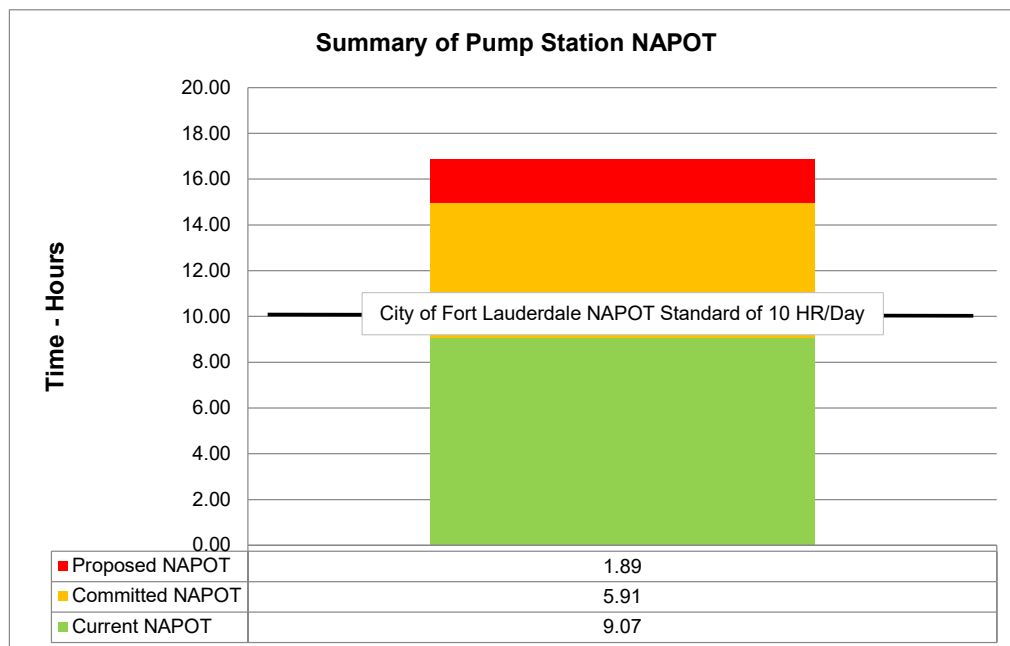


Figure 4

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Evaluation of impact of Permitted Wastewater Plant Capacity: The City of Fort Lauderdale owns and operates the George T. Lohmeyer Regional Wastewater Treatment Plant (GTL), which provides wastewater treatment for the City of Fort Lauderdale. The Broward County's Environmental Protection and Growth Management Department's (EPGMD) Environmental Licensing & Building Permitting Division's licensed capacity for GTL is 48 MGD-AADF (Million Gallons per Day – Annual Average Daily Flow). The annual average daily flow (AADF) to the plant is 43.51 MGD. Combining the committed flows for previously approved projects of 4.24 MGD plus the 0.1191 MGD net contribution from the project results in a total projected flow of 47.88 MGD. This is less than the permitted treatment plant capacity of 48 MGD. Therefore, the treatment plant has sufficient capacity to serve this project. See Figure 5 below.

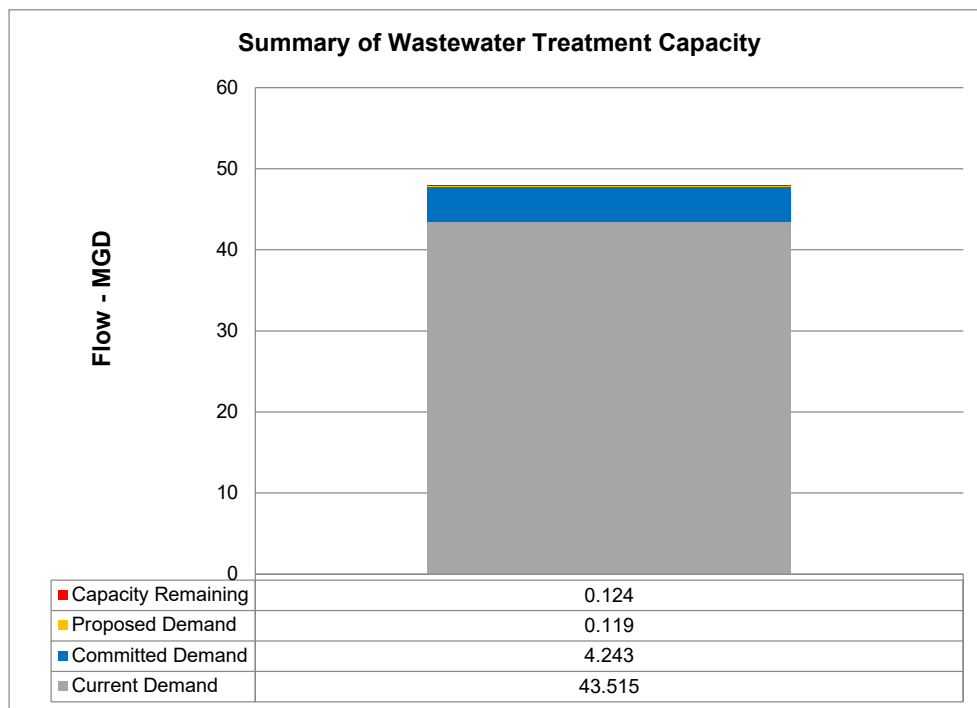


Figure 5

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Recommended Wastewater Infrastructure Improvements: The existing sewer infrastructure does not have the capacity to support the proposed development and the following improvements will be required to accommodate the proposed flow increase before the Certificate of Occupancy is issued:

- Approximately 440 LF of 18-inch gravity line along SE 7th Street will have to be upsized to 24 inches (see Figure 6).
- Approximately 1,103 LF of 18-inch and 24-inch gravity lines along SE 7th Street will have to be upsized to 30 inches (see Figure 6).
- PS A-11 projected NAPOT will increase to 16.87 hours, therefore the PS A-11 will have to be upgraded to be able to handle the flow increase from the project.

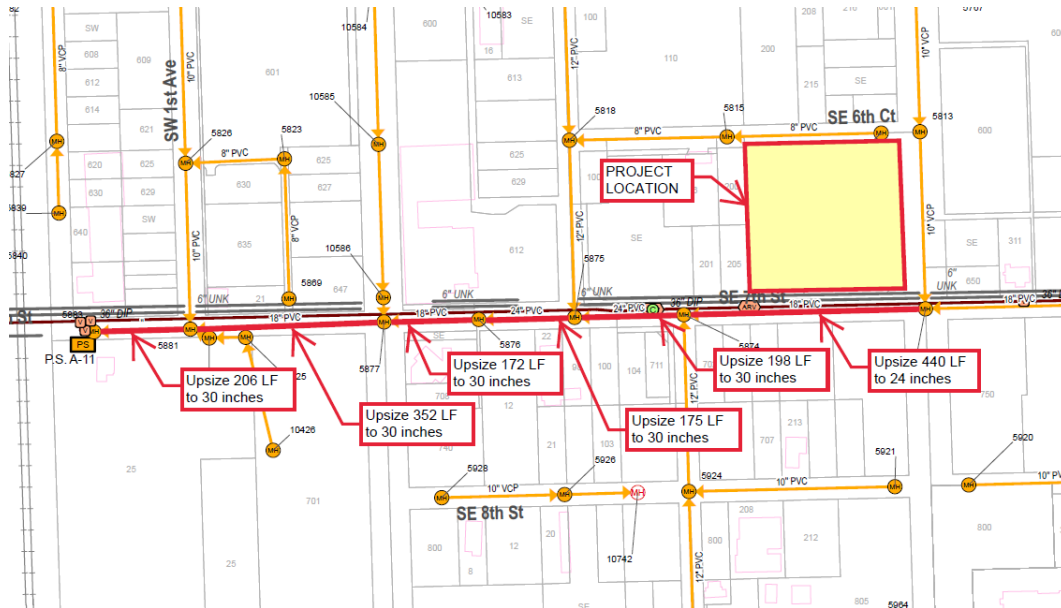


Figure 6

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