



INTEROFFICE MEMORANDUM
FROM
PUBLIC WORKS
UTILITIES

Date: May 5, 2011

TO: Brandon Dunn
Senior Planner, Planning Division

From: Howard Wegis *HSW*
Proj. Manager Sr., Utilities

SUBJECT: CPA 2010-08, RSW Lee Plan Amendment, Utilities Sufficiency Review

Lee County Utilities (LCU) has reviewed the April 14, 2011 response prepared by the applicant's consultant Johnson Engineering and in particular the revised Exhibit IV.B2.a&b, the Potable Water and Sanitary Sewer Analysis. It is LCU's opinion that the revised analysis submitted by the applicant sufficiently addresses the existing and future conditions regarding potable water, sanitary sewer and reclaimed water. More particularly:

Water

Existing Condition

LCU has in service the following water transmission lines available for connection to serve the proposed development: two 12" lines along Daniels Parkway from Chamberlain Parkway to Gateway Boulevard, a 16" line along Chamberlain Parkway, a 30" line along the south side of the Airport, and a 16" line along Fuel Farm Road.

LCU's Green Meadows Water Treatment Plant (WTP) serves the SW International Airport. Presently the plant has a capacity of 9.0 MGD, and the 2009 peak monthly usage was approximately 6.8 MGD, representing a current surplus capacity of 2.2 MGD. In addition, LCU is currently designing an expansion of the Green Meadows WTP to increase its capacity to 10.0 MGD. Further, LCU's existing SFWMD Consumptive Use Permit, which covers LCU's Olga, Corkscrew and Green Meadows water plants includes a permitted allocation of 30.37 MGD of raw water during a maximum month. The three facilities included in this permit produced an annual average daily finished water of 18.95 MGD in 2008.

Future Conditions

LCU agrees with the applicant that an appropriate point of connection would be the dual 16" lines along Daniels Parkway and the recommendation to loop, and connect to, a 16" line constructed from Chamberlain Parkway to Fuel Farm Road for redundancy.

LCU concurs with the analysis presented by the applicant that indicates an additional average day demand of 152,643 gallons per day will be placed on LCU's water system as a result of the proposed amendment. According to the Lee Plan adopted Level of Service for potable water, 250 gallons per day per Equivalent Residential Connection (gpd/ERC), these flows represent an additional required capacity of approximately 620

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ERC's. As stated above LCU's current surplus capacity at the Green Meadows WTP is 2.2 MGD which represents approximately 8,800ERC's. Following the completion of the Green Meadows WTP expansion to 10.0 MGD a surplus capacity of 12,800 ERC's will be available. Therefore there is currently sufficient capacity to support the proposed amendment. In addition, following expansion of the Green Meadows WTP there will be additional surplus capacity.

Sanitary Sewer

Existing Condition

Currently, the wastewater generated at the Airport is discharged to a LCU owned 10" force main on Chamberlain Parkway and is directed west to the City of Fort Myers Wastewater Treatment Plant for treatment. Currently there are 10", 12" and 24" "dry-line" force mains along Chamberlain and Daniels Parkways that could serve as a point of connection to send wastewater generated at the Airport to LCU's Gateway WWTP. LCU plans to utilize these "dry-lines" to direct wastewater generated at the Airport to the Gateway facility for treatment.

LCU concurs with the applicants projected increase in wastewater flow of 155,000 gallons per day as a result of the proposed amendment. Additionally, LCU agrees with the applicant's assessment that the Red Sox Training facility will also be contributing a projected wastewater flow of 113,000 gallons per day that would be directed to the Gateway WWTP. Further, LCU concurs with the applicant's analysis that considering the existing allocation to the Gateway community of 1.0 MGD and the commitment to serve the Red Sox Facility with 0.113 MGD of capacity, there remains a surplus of 1.887 MGD available to serve the proposed development under this amendment. The projected flow of 0.115 MGD as a result of this amendment will result in a surplus capacity at the Gateway WWTP of 1.772 MGD.

According to the Lee Plan adopted Level of Service for wastewater, 200 gallons per day per Equivalent Residential Connection (gpd/ERC), the proposed development represents 575 ERC's (115,000/200). The total capacity of the Gateway WWTP is 15,000 ERC's (3,000,000/200). Considering the 1.0 MGD (5,000 ERC's) allocated to the Gateway Community, the 0.113 MGD (565 ERC's) dedicated to the Red Sox Facility and the 0.115 MGD (575 ERC's) that would be dedicated to the proposed development under this amendment would result in a surplus capacity of 8,860 ERC's. LCU concurs with the applicant's conclusion that the expanded Gateway WWTP can accommodate the proposed project and maintain the Level of Service specified in the Lee Plan.

Reclaimed Water

LCU concurs with the applicant's assessment of the availability of reclaimed water to serve the project. As the applicant states, currently all reclaimed water produced at the Gateway WWTP is dedicated to the Gateway Community. However, in the future reclaimed water may become available for use by the applicant and the applicant is proposing provisions for accepting reclaimed water in the future when it becomes available.