Dunn, Brandon

From:

Wegis, Howard

Sent:

Monday, January 03, 2011 2:35 PM

To:

Dunn, Brandon

Cc:

Meurer, Douglas; Osterhout, Thom; Hill, Thomas; Edelstein, Rand

Subject:

RE: CPA2010-08 (RSW Comprehensive Plan Amendment)

Attachments:

CPA201008A1 RSW Airport Utility Section with comments.pdf

Brandon,

See attached comments on Utilities analysis.

Howard S. Wegis Staff Engineer Lee County Utilities P.O. Box 398 Fort Myers, FL 33901 Phone#: (239) 533-8163

Fax#: (239) 485-8385

From: Dunn, Brandon

Sent: Tuesday, December 14, 2010 4:20 PM

To: Calvert, Daniel; Campbell, Gerald; Clark, Roger; Collins, Donna Marie; Dave Lindsay, East County Water Control District; Dickerson, Kim (Mary); Eckenrode, Peter; Ellen Lindblad; Fredyma, John; Griffith, Douglas; Hock, Donna M.; Horsting, Michael; Houck, Pamela; Karuna-Muni, Anura; Kevin Farrell, Sheriffs Office; Lee, Samuel; Lis, Carol; Loveland, David; Maguire, Karen L; Manzo, Barbara; Meurer, Douglas; Miller, Janet; Moore, James; Myers, Steve; Newman, William; Noe, Susan; Olson, Cathy; Osterhout, Thom; Ottolini, Roland; Pavese, Michael; Philpott, Josh; Price, Robert; Roberts, Rickey; Sajgo, Gloria; Sampson, Lindsey; Stewart, Robert; Sweigert, Rebecca; Wayne Gale, Director Mosquito Control; Wegis, Howard; Wilson, John; Wu, Lili; Zettel, Mary

Cc: Burris, Richard; Noble, Matthew; Ebaugh, Kathleen; Blackwell, Peter; Dunn, Brandon

Subject: CPA2010-08 (RSW Comprehensive Plan Amendment)

Hello all,

Planning staff are seeking a sufficiency review for the following amendment:

CPA2010-08 (RSW Comp Plan Amendment)

Amend Lee Plan Policy 1.2.7 and 47.3.4 of the Future Land Use and Transportation elements and Table 5(a) Southwest Florida International Airport Development Schedule to modify the development parameters allowed within the future non-aviation areas.

I have included a link to the application: http://www3.leegov.com/dcd3/NOI/CPA/CPA201008A1.pdf

The deadline for sufficiency comments is January 4, 2011.

Thank you very much. Please contact me if you have any questions.

Sincerely,

Brandon D Dunn, Senior Planner

Lee County Division of Planning P.O. Box 398

Exhibit IV.B.2.a & b Potable Water and Sanitary Sewer Analysis for RSW Comprehensive Plan Amendment

WATER

Existing Conditions

Presently Lee County Utilities owns two (2) 16-inch water mains that have been installed parallel along Daniels Parkway from Chamberlain Parkway to Gateway Boulevard. In addition an existing 16-inch water main serves the airport that is directed south and east along Chamberlain Parkway. Per Lee County Utilities staff, an additional 30-inch water main is directed from the Green Meadows Water Treatment Plant and serves the Airport from the south side. And a 16-inch water main is directed south along Fuel Farm Road from Daniels Parkway.

Plant Capacity

The Green Meadows Water Treatment Plant serves the Southwest International Airport along with the immediate area around the airport. Presently this plant is designed for 9 Million Gallons per Day (MGD) of production. Per the County Concurrency Report (2009), the projected Peak Month Daily usage is applifyimately 6.8 MGD. Therefore, there is an estimated surplus capacity of 2.2 MGD. As mentioned in the Lee Plan an expansion of this Water Treatment Plant (to 20 MGD) is set for fiscal year 2012/13. This may be pushed back a few years due to the economic downturn.

The existing South Florida Water Management District (SFWMD) consumptive water use permit #36-00003-W (which covers the Olga, Green Meadows and Corkscrew plants) states that the permitted allocation is 30.37 MGD of raw water during a maximum month. Per the Lee County Concurrency Report, a total of 18.95 MGD of finished water was actually produced by the three water treatment plants during 2008.

Future Conditions

For this project, the ideal connection points would be along Daniels Parkway. The dual 16-inch water mains allow for the greatest reliability and are the most economically feasible. It is recommended to loop the 16-inch water main from Chamberlain Parkway to Fuel Farm Road to further allow for redundancy and reliability. If a loop was installed, connections could be made at any point along the loop.

A recent fire flow test near the Airside Loop Road (along Daniels Parkway) shows an available fire flow of approximately 6,100 gallons per minute at 20 psi residual. It appears there is plenty of capacity within these mains for some future development.



Summary of Comments on CPA201008A1 RSW Airport Utility Section with comments. pdf

Page: 1

Sequence number: 1 Author: wegishs Subject: Note

Date: 12/15/2010 1:02:31 PM

The Lee Plan does not mention an expansion of Green Meadows WTP to 20 MGD. The FY 09/10 CIP is included in the Lee Plan and the CIP list does include a project for Green Meadows WTP Expansion budgeted for FY12/13. However, the scope of this project was an expansion of the Green Meadows WTP to 16.0 MGD. The applicant suggests that this planned expansion may be pushed back. In reality the project was not pushed back but the scope of the project has changed. On 12/14/10 the Lee County BOCC adopted the approved FY 10/11 CIP into the Lee Plan. This newly adopted CIP still includes a project for the expansion of capacity at the Green Meadows WTP scheduled for FY 12/13 however the expansion is to a capacity of 10.0 MGD.

The Proposed Water and Wastewater Flows for this project are derived from the Development Schedule, Table 5(A). The Factors shown within Table 1 are provided from the Florida Administrative Code Chapter 64E-6.

Table 1: Proposed Water and Wastewater Flows

	TOTAL through	2030 using Opti	on 1 or 2			
Unit Type	Units	Factor (GPD/Unit)	Average Daily Flow	Average Daily Flow	Peak Factor	Peak Day Flow
			Gallons per Day	Gallons per Minute		Gallons per Minute
Commercial, Retail, Restaurant and Service (square feet)	248,750	0.15	37,313	26	4	104
Gas Station (square feet)	5,000	0.15	750	1	4	2
Hotel (ropms)	187	100	18,700	13	4	52
Light Manufacturing/Assembly (square feet)	147,500	0.15	22,125	15	4	61
Warehouse (square feet)	329,200	0.15	49,380	34	4	137
Office (square feet)	162,500	0.15	24,375	17	4	68
TOTAL			152,643	106		424

Minimum Level of Service

As stated within "The Lee Plan," (Policy 95.1.3)

Minimum Acceptable Level of Service (LOS):

Within certificated, franchised, or designated service areas only: supply and treatment capacity of 250 gallons per day per Equivalent Residential Connection (ERC) for the peak month, except that facilities serving only mobile home residential structures must have a capacity of 187.5 gallons per day, and facilities serving only travel trailer residential structures must have a capacity of 150 gallons per day. Where a private water utility has provided an alternate standard for application within its certificated or franchised area, and that standard has been adopted into this comprehensive plan, that will be the standard to be used for concurrency management the respective certificated or franchised are \square

Presently if the County meets the minimum LOS for the Green Meadows Water Treatment Plant, there are 27,200 ERC's allowed. After the expansion to 20 MGD there will be a total of 80,000 ERC's allowed. This is a 200% increase in the amount of treatment capacity and ERC's. Per the 'Bureau of Economic Business Research' Lee County is projected to grow by approximately 50% by 2030 in population.

The anticipated 155,000 GPD for this project adds approximately 620 ERC to the treatment facility. It appears that the present plant capacity along with the future plant expansion should be able to accommodate this project. In addition it appears that Lee County's schedule for the plant expansion will sustain the LOS required by the Lee Plan.



Page: 2

Sequence number: 1
Author: wegishs
Subject: Note
Date: 12/15/2010 1:30:21 PM

If the applicant is referring to the surplus capacity at Green Meadows as it relates to equivalent ERC's given a LOS of 250 gpd/erc, this figure is incorrect. Based on the analysis provided in the previous section there is an 2.2 mgd surplus; therefore, 2,200,000/250gpd/erc would equal a surplus of 8,800 ERC's not 27,000 ERC's.

Sequence number: 2

Author: wegishs
Subject: Note
Date: 12/15/2010 1:32:17 PM
Again, the current plan is to expand the Green Meadows WTP to a capacity of 10.0 MGD not 20.0 MGD.

SANITARY SEWER

Existing Conditions

Presently the Port Authority owns the gravity sewer system that leads to the old and new terminals for the Southwest Florida International Airport. Two lift stations from the gravity system direct wastewater from the Airport to a master pump station located approximately one mile due west of the existing terminal, just west of Chamberlain Parkway. Presently this lift station discharges wastewater into the Lee County owned 10-inch force main along Chamberlain Parkway and is directed to the west underneath Interstate 75 and on to the City of Fort Myers Wastewater Treatment Plant. In addition along Chamberlain Parkway there is a "dryline" 12-inch force main that connects the 10-inch force main to a 24-inch force main (also owned by Lee County) along the south side of Daniels Parkway. The 24-inch force main, also a "dryline," is then directed to the Gateway Wastewater Treatment Plant (GWWTP) approximately 3.5 miles east of Chamberlain Parkway.

Future Conditions

The GWWTP is in the final stages of construction developing the treatment capacity from 1 Million Gallons per Day (MGD) to 2 MGD. In the future (date to be determined) Lee County has mentioned they have the ability to expand the GWWTP to 4 MGD and then ultimately to 6 MGD.

Presently Lee County is in the process of providing a force main interconnect with the wastewater system to the west of Interstate 75 to the system near Chamberlain Parkway. This will create the ability for Lee County to send more wastewater to the GWWTP.

If this project were to send flow to the east it would need to manifold with the Red Sox Spring Training facility and be directed directly to the GW WTP. The approved Red Sox DRI mentions this facility will produce 0.113 MGD of average daily flow. This would leave 0.887 MGD for this project (the other 1 MGD of capacity is used by Gateway, as it is today). Therefore it is recommended to send wastewater to the GWWTP. All of the wastewater that is presently directed to the west can still be directed that way. Presently, this would leave 0.887 MGD of capacity for this project.

The total wastewater treatment capacity needed for this project is proposed to be approximately 155,000 gallons per day (as shown within Table 1). The estimated surplus treatment capacity of 0.887 MGD will be reduced to a surplus of 0.732 MGD. The ideal connection points would be along Daniels Parkway. The 24-inch force main is on the south side of the road, therefore no roads would be affected during installation.

If Lee County wishes to send more wastewater to the GWWTP additional analysis would need to take place in order to coordinate timing of the treatment facility expansion.



Page: 3

Sequence number: 1
Author: wegishs
Subject: Note
Date: 12/15/2010 1:35:37 PM

The Gateway WWTP has been expanded to a total treatment capacity of 3.0 MGD, not 2.0 MGD. LCU received the certificate of completion for this expansion from FDEP in November 2010.

Sequence number: 2
Author: wegishs
Subject: Note
Date: 12/16/2010 10:23:57 AM

The design of the expansion to 3.0 MGD included provisions for future expansions, however, there currently are no plans to expand the capacity of this facility beyond its current capacity of 3.0 MGD. the capacity of this facility beyond its current capacity of 3.0 MGD.

Minimum Level of Service

As stated within "The Lee Plan," (Policy 95.1.3)

Minimum Acceptable Level of Service:

Within certificated, franchised, or designated service areas only: average treatment and disposal capacity of 200 gallons per day per Equivalent Residential Connection (ERC) for the peak month, except that facilities serving only mobile home residential structures must have a capacity of 150 gallons per day, and facilities serving only travel trailer residential structures must have a capacity of 120 gallons per day. Where a private sewer utility has provided an alternate standard for application within its certificated or franchised area, and that standard has been adopted into this comprehensive plan, that will be the standard to be used for concurrency management in the respective certificated or franchised area.

Presently if the County meets the minimum LOS with the I MGD for the Gateway Wastewater Treatment Plant, there are 5,000 ERC's allowed. After the expansion to 2 MGD is finalized there will be a total of 10,000 ERC's allowed. This is a 100% increase in the amount of treatment capacity and ERC's. Per the 'Bureau of Economic Business Research' Lee County is projected to grow by approximately 50% by 2030 in population.

The anticipated 155,000 GPD for this project adds approximately 620 ERC to the treatment facility. It appears that the almost completed plant expansion should be able to accommodate this project, future growth and sustain the LOS required by the Lee Plan through 2030.

RECLAIMED WATER

Reclaimed water may become available in the future from the Gateway Wastewater Treatment Plant. Presently, approximately 20% of the Gateway service area uses reclaimed water for irrigation. This is due to the lack of reuse water availability. After the GWWTP expansion is finalized and more wastewater is sent to the plant, there may be a possibility of providing reclaimed water to parcels outside of Gateway.



Page: 4

Sequence number: 1
Author: wegishs
Subject: Note
Date: 1/3/2011 2:29:32 PM
Revise the analysis to reflect a current capacity of 3.0 MGD.



BOARD OF COUNTY COMMISSIONERS

John E. Manning

District One

October 25, 2010

Debi Pendlebury

Johnson Engineering, Inc. 2122 Johnson Street

Fort Myers, FL 33901

Brian Bigelow

Ray Judah

Tammy Hall

District Five

Karen B. Hawes County Manager

RE:

Potable Water and Wastewater Availability RSW - Comprehensive Plan Amendment (SWFIA)

STRAP#: 19-45-26-00-00002.00000

David M. Owen County Attorney

Dear Pendlebury:

Diana M. Parker County Hearing Examiner

Potable water lines and wastewater lines are in operation in the vicinity of the proposed project mentioned above. However, in order to provide service to the subject parcels, developer funded system enhancements such as line extensions may be required.

Writer's Direct Dial Number: (239) 533-8532

Your firm has indicated that this project will consist of 253,750 sq. ft. of commercial, 329,200 sq. ft. of industrial, 162,500 sq. ft. of office, 147,500 sq. ft. of light manufacture, and a 187-room hotel, all with an estimated flow demand of approximately 152,643 gallons per day. Lee County Utilities presently has sufficient capacity to provide potable water and sanitary sewer service as estimated above.

Availability of potable water and sanitary sewer service is contingent upon final acceptance of the infrastructure constructed by the developer. Upon completion and final acceptance of this project, potable water service will be provided through our Corkscrew Water Treatment Plant.

Sanitary sewer service will be provided by Gateway Wastewater Treatment Plant. The Lee County Utilities' Design Manual requires the project engineer to perform hydraulic computations to determine what impact this project will have on our existing system.

Prior to beginning design work on this project, please schedule a meeting with Thom Osterhout to determine the best point of connection and discuss requirements for construction.

This letter is not a commitment to serve, but only as to the availability of service. Lee County Utilities will commit to serve only upon receipt of all appropriate connection fees, a signed request for service and/or an executed service agreement, and the approval of all State and local regulatory agencies.

Further, this letter of availability of Water and Wastewater service to be utilized for a Lee Plan Amendment for this project Only. Individual letters of availability will be required for the purpose of obtaining building permits.

Sincerely,

LEE COUNTY UTILITIES

Mary McCormic **Technician Senior**

UTILITIES ENGINEERING

VIA EMAIL Original Mailed

This page contains no comments



LEE COUNTY UTILITIES REQUEST FOR LETTERS OF AVAILABILITY

DATE: SEPTEMBER 8, 2010 To: Melissa Bibeau FROM: DEBI PENDLEBURY Utilities' Engineering Technician FIRM: JOHNSON ENGINEERING, INC. ADDRESS: 2122 JOHNSON STREET ADDRESS: FORT MYERS, FLORIDA 33901 PHONE#: (239)334-3661 FAX: (239)334-3661 E-MAIL ADDRESS: DPENDLEBURY@JOHNSONENG.COM PROJECT NAME: RSW COMPREHENSIVE PLAN AMENDMENT (SWFIA) PROJECT ID: STRAP#: 19-45-26-00-00002.0000 LOCATION/SITE ADDRESS: 11000 TERMINAL ACCESS ROAD FORT MYERS, FLORIDA 33913 PURPOSE OF LETTER: DEVELOPMENT ORDER SUBMITTAL FINANCING ☐ EFFLUENT REUSE PERMITTING OF SURFACE WATER MANAGEMENT (SOUTH FLORIDA WATER MANAGEMENT DISTRICT) OTHER: (PLEASE SPECIFY) COMP PLAN AMENDMENT FOR FUTURE DEVELOPMENT THRU 2030 PLANNED USE: COMMERCIAL INDUSTRIAL RESIDENTIAL - (SINGLE-FAMILY MULTI-FAMILY) ✓ OTHER: (PLEASE SPECIFY) NON-AVIATION USES PLANNED # OF UNITS/BUILDINGS: UNKNOWN AT THIS TIME TOTAL SQUARE FOOTAGE (COMMERCIAL/INDUSTRIAL)892,950 +/- + 187 HOTEL UNITS AVERAGE ESTIMATED DAILY FLOW (GPD): _____ (\overline{\text{W}} Waste-water \overline{\text{Reuse}} Reuse) PLEASE SHOW CALCULATION USED TO DETERMINE AVERAGE ESTIMATED DAILY FLOW (GPD) PER CRITERIA SET FORTH IN LEE COUNTY UTILITIES OPERATIONS MANUAL, SECTION 5.2: ESTIMATED GPD = 152,643 Commercial/retail = 253,750sf x 0.15 = 38,063 GPD Warehouse = 329,200sf x 0.15 = 49,380 GPD <u>Hotel rooms</u> = 187 rooms x 100 GPD = 18,700 GPD Office = 162,500sf x 0.15 = 24,375 GPD <u>Light Manufacture = $147,500sf \times 0.15 = 22,125 GPD</u>$ </u>

Please e-mail the completed form to <u>mbibeau@leegov.com</u> If you are unable to e-mail the completed form, please fax to (239) 485-8385. If you should have any questions or require assistance, please feel free to call our office at (239) 533-8525.

This page contains no comments