

18. WASTEWATER MANAGEMENT

- A. Provide, in the table given below, the projected wastewater generation at the end of each phase of development and proposed wastewater treatment. Identify the assumptions used to project this demand.

Estimates of average daily wastewater treatment demands are presented in **Table 18.A.1 (R) – Wastewater Treatment Flow**. Wastewater treatment demand rates are derived from sewage flow rates set forth in Miami-Dade Water and Sewer Department's 'Schedule of Daily Rated Gallonage for Various Occupancy'. Rates for the Land use categories per section 24-43 of the Miami-Dade County Code were applied to the proposed uses as follows:

| Table 18.A.1 (R) Wastewater Treatment Flow | | | | | |
|---|-----------|---------|------------------------------|-------------|---------|
| Proposed Development | | | Wastewater Treatment Flow | | |
| Use | Amount | Unit | Rate* (Gallons Per Day, GPD) | | Demand |
| Warehouse | 4,300,000 | Sq. Ft. | 0.02 | GRP/Sq. Ft. | 86,000 |
| Office | 750,000 | Sq. Ft. | 0.10 | GPD/Sq. Ft. | 75,000 |
| Retail | 320,000 | Sq. Ft. | 0.05 | GPD/Sq. Ft. | 16,000 |
| Restaurant - Fast Food | 338 | Seats | 35.00 | GPD/Seat | 11,830 |
| Restaurant - Full Service | 300 | Seats | 50.00 | GPD/Seat | 15,000 |
| Hotel | 350 | Rooms | 100.00 | GRD/Room | 35,000 |
| Total Gallons Per Day Demand | | | | | 238,830 |
| Source: PBS&J | | | | | |

* Wastewater treatment demand rates are derived from sewage flow rates set forth in Metropolitan Dade County Water and Sewer Department's 'Schedule of Daily Rated Gallonage for Various Occupancy'. See ADA Section 18.A for a discussion of methods and assumptions used to derive the proposed general use categories from categories provided in the Code.

Warehouse – 20 gallons per day per 1,000 square feet (20 gpd per 1,000 sq. ft.) for Warehouse Industrial uses

Office – 10 gpd per 100 sq. ft. for Office uses

Retail – As requested by the Miami-Dade Department of Environmental Resource Management (DERM), Table 18.1 has been revised to provide an estimate of restaurant wastewater treatment demand as a separate component of the proposed 350,000 square feet of retail use. The revised estimate was produced as follows:

- Assumed ten fast food restaurants occupying a total of 15,000 square feet and containing 338 seats total based on typical characteristics of fast food restaurants, and applied the 35 gpd per seat rate to these seats.
- Assumed three full-service restaurants occupying a total of 15,000 square feet and containing 300 seats total based on typical characteristics of full-service restaurants, and applied the 50 gpd per seat rate to these seats.
- Applied the 5 gpd per 100 sq. ft. rate for the "Shopping Center (dry uses)" category to the remaining 320,000 square feet of retail space not assumed to be restaurants as explained above.

Hotel –100 gpd per room for hotel/motel uses

The Applicant also proposes to offer a site in the southern portion of the Property to the City of Hialeah for development of a municipal recreation area and/or other public facilities. Since potable and non-potable water demands attributable to this area can vary significantly according to the types of uses the City elects to develop on the Site, no estimate of those demands is provided.

B. If applicable, generally describe the volumes, characteristics and pre-treatment techniques of any industrial or other effluents prior to discharge from proposed industrial-related use(s).

The general use categories proposed for this development primarily encompass uses that do not require pre-treatment of wastewater before it enters the collection system. Some specific uses, however, are required by state regulations to employ measures for disposal of certain materials prior to disposal (e.g. photo lab developers), but these are expected to be minor elements of the overall Project and are regulated individually.

C. 1. If off-site treatment is planned, identify the treatment facility and attach a letter from the agency or firm providing the treatment outlining present and projected excess capacity of the treatment and transmission facilities through build out, any other commitments that have been made for this excess and a statement of ability to provide service at all times during or after development.

The Applicant has attached **Exhibit 18-1 (R) – Letter of Available Service** requesting an indication of the ability and capacity of the City of Hialeah to provide wastewater treatment services to the Project and a response to the above information. The response will be forwarded when received.

2. If service cannot be provided, identify the required capital improvements, cost, timing, and proposed responsible entity necessary to provide service at all times during and after development.

The development schedule will be contingent on availability of sufficient treatment and distribution capacity to meet the needs of the Project. The Applicant will pursue an agreement with the City providing assurance that adequate capacity will be available to serve the Project throughout the development period.

D. If septic tanks will be used on-site, indicate the number of units to be served, general locations and any plans for eventual phase-out.

No septic tanks are planned.

E. Indicate whether proposed wastewater service will be provided within an established service area boundary.

The Beacon Countyline Property is in the City of Hialeah and within the City's service area boundary.

Exhibit 18-1 (R)

Letter of Available Service



An employee-owned company

April 11, 2008

Mr. Armando Vidal
City of Hialeah
Department of Water and Sewer
501 Palm Avenue
Hialeah, FL 33010

SUBJECT: Beacon Countyline DRI – Water and Wastewater Treatment Services

Dear Mr. Vidal:

The Flagler Development Group proposes to develop a business park on approximately 496 acres in the western part of the City of Hialeah (see enclosed Location Map). The proposed development, called Beacon Countyline, is a development of regional impact (DRI) pursuant to Section 380.06, Florida Statutes, and my firm is assisting in preparing submittals for the DRI review process. This request is based on the premise that both Hialeah and WASD have available interim capacity to serve this project and WASD is in the process of increasing the existing 2.0 MGD to Hialeah in order to provide for the subject project.

Questions 17 and 18 of the DRI Application for Development Approval (ADA) address potential impacts on potable water and wastewater facilities, respectively. These Questions require the DRI applicant to request a letter from the potable water and wastewater service providers addressing the following information:

- the projected excess capacities of the water supply and wastewater treatment facilities to which connection will be made at present and through completion of the project,
- any other commitments that have been made for this excess capacity and
- a statement from the agency or firm's ability to provide services at all times during and after development.

Enclosed is Attachment 'A' that contains Tables 17.1, 17.2 and 18.1 showing the estimates of potable water, non-potable irrigation water and wastewater treatment demands by type of use in the proposed development. Please note that these tables have been revised since the ADA was originally filed in order to correctly describe the current development proposal and also to respond to review agency comments and requests. Also please note that irrigation water will be provided from a non-potable source and would not affect potable water demand.

Mr. A Vidal
April 11, 2008
Page 2 of 2

It is anticipated that, initially, water supply to the project would rely on the existing capacity that WASD allocates to the City subject to a small increase to the new wholesale agreement. In the future, supply would be supplemented by the proposed water treatment plant to be located next to the project site.

The applicant has begun the process of closing the landfill now on the property and anticipates commencement of development about two years after receiving DRI approval. I would appreciate your written reply to the information requirements above so that we forward it to review agencies as soon as possible. Please call Jose Gonzalez of the Flagler Development Group (305-520-2372), or me (305-514-3419) if you have any questions about this request.

Thank you for your assistance in this matter.

Sincerely,



Michael A. Lee
Senior Project Manager

001179703
C: / Hialeah Utility Letter.doc
Enclosures
Cc: J. Gonzalez, FDG
R. Curtis, The Curtis Group

Attachment 'A'

Section 17, Water Supply

| TABLE 17.1 | | | | | |
|---|---------------|--------------|-------------------------------------|-------------|----------------|
| Average Daily Potable Water Demand | | | | | |
| Proposed Development | | | Potable Water Demand | | |
| Use | Amount | Units | Rate* (Gallons Per Day, GPD) | | Demand |
| Warehouse | 4,300,000 | Sq. Ft. | 0.02 | GPD/Sq. Ft. | 86,000 |
| Office | 750,000 | Sq. Ft. | 0.10 | GPD/Sq. Ft. | 75,000 |
| Retail | 320,000 | Sq. Ft. | 0.05 | GPD/Sq. Ft. | 16,000 |
| Restaurant – Fast Food | 338 | Seat | 35 | GPD/Seats | 11,830 |
| Restaurant – Full Service | 300 | Seat | 50 | GPD/Seats | 15,000 |
| Hotel | 350 | Rooms | 100 | GPD/Room | 35,000 |
| Total Gallons Per Day Demand | | | | | 238,830 |
| Source: PBS&J | | | | | |

* Potable water demand rates are the equivalent of sewer flow rates set forth in Metropolitan Dade County Water and Sewer Department's 'Schedule of Daily Rated Gallonage for Various Occupancy'. See ADA Section 17A for a discussion on methods and assumptions used to derive rates for the proposed general use categories from categories provided in the Code.

| TABLE 17.2 | | | |
|--|--------------|-----------------------------------|------------------------|
| Average Non-Potable Water Demand for Irrigation (High Period) | | | |
| Proposed Development | | Irrigation Water Demand* | |
| Use | Acres | Acres Requiring Irrigation | Gallons Per Day |
| Warehouse | 270 | 10% of Total | 104,731 |
| Office | 58 | 10% of Total | 22,498 |
| Retail and Restaurants | 51 | 10% of Total | 19,782 |
| Hotel | 8 | 20% of Total | 6,206 |
| Total Gallons Per Day Demand | | | 153,217 |
| Source: PBS&J | | | |

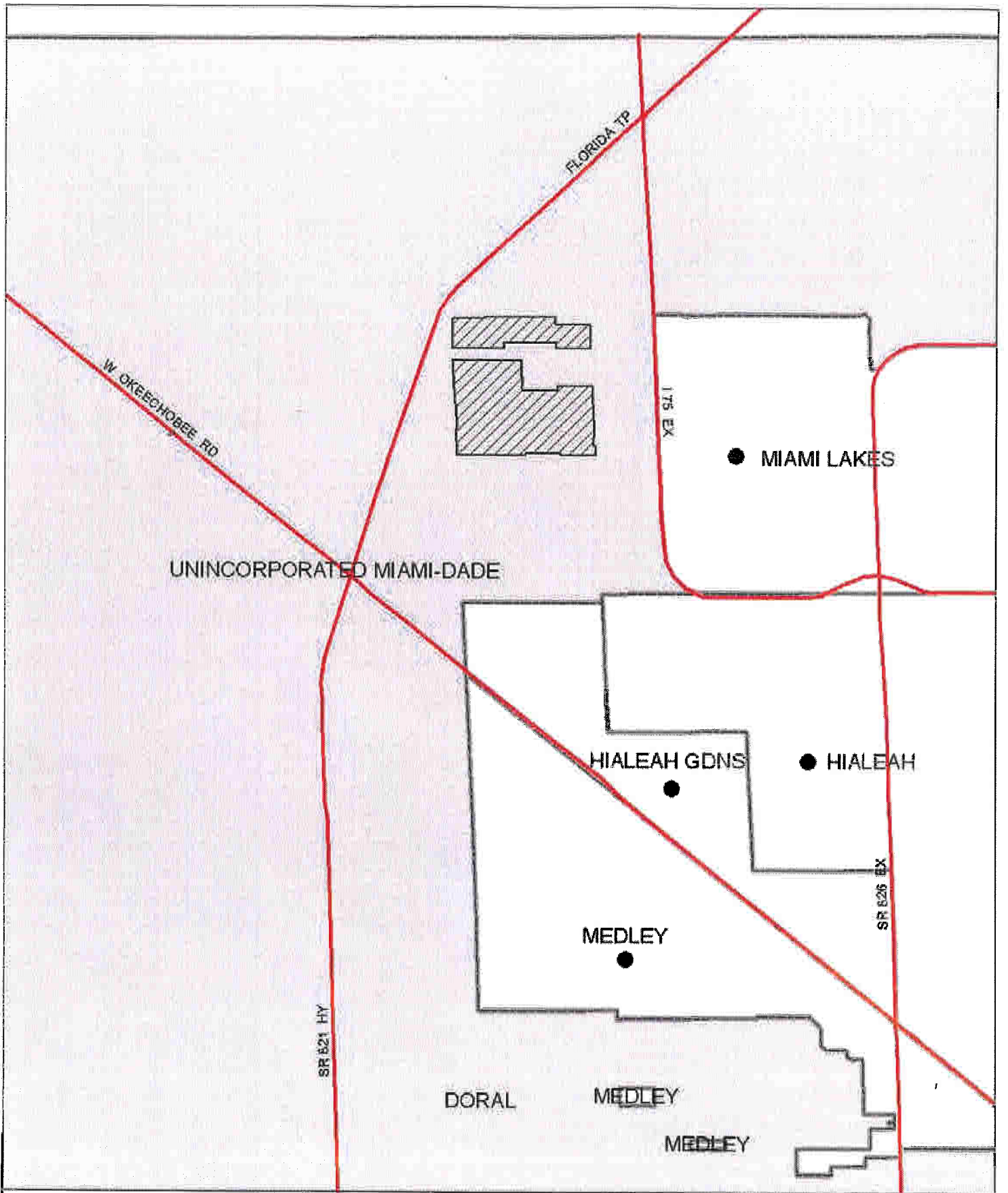
* Estimates are for application of one inch weekly to areas requiring irrigation, representing usage in a warm period with low rainfall. The estimates assume that 10% of warehouse, office and retail tracts, and 20% of the hotel site, will require irrigation.

Section 18, Wastewater Management

| TABLE 18.1 Wastewater Treatment Demand | | | | |
|---|---------------|-------------|-------------------------------------|----------------|
| Proposed Development | | | Wastewater Treatment Demand | |
| Use | Amount | Unit | Rate* (Gallons Per Day, GPD) | Demand |
| Warehouse | 4,300,000 | Sq. Ft. | 0.02 GPD/Sq. Ft. | 86,000 |
| Office | 750,000 | Sq. Ft. | 0.10 GDP/Sq. Ft. | 75,000 |
| Retail | 320,000 | Sq. Ft. | 0.05 GPD/Sq. Ft. | 16,000 |
| Restaurant – Fast Food | 338 | Seats | 35 GPD/Seat | 11,830 |
| Restaurant – Full Service | 300 | Seats | 50 GPD/Seat | 15,000 |
| Hotel | 350 | Rooms | 100 GPD/Room | 35,000 |
| Total Gallons Per Day Demand | | | | 238,830 |

Source: PBS&J

*Wastewater treatment demand rates are derived from sewage flow rates set forth in Metropolitan Dade County Water and Sewer Department's 'Schedule of Daily Rated Gallonage for Various Occupancy'. See ADA Section 18A for a discussion of methods and assumptions used to derive rates for the proposed general use categories from categories provided in the Code.



Source: Miami-Dade GIS 2007; Adapted by The Curtis Group, 2008



-  DRI Boundary
-  Municipalities
-  Unincorporated Miami-Dade

Map A (R)
Location Map
Beacon Countyline DRI



An employee-owned company

April 11, 2008

Ms. Bertha Goldenberg
Asst. Director of Regulatory Compliance and Planning
Miami-Dade, Water and Sewer Department
3071 SW 38th Avenue, Suite 547
Miami, FL 33146

SUBJECT: Beacon Countyline DRI – Water and Wastewater Services

Dear Ms. Goldenberg:

The Flagler Development Group proposes to develop a business park on approximately 496 acres in the western part of the City of Hialeah (see enclosed Location Map). The proposed development, called Beacon Countyline, is a development of regional impact (DRI) pursuant to Section 380.06, Florida Statutes, and my firm is assisting in preparation of the DRI Application for Development Approval (ADA). This request is based on the premise that both Hialeah and WASD have available interim capacity to serve this project and WASD is in the process of increasing the existing 2.0 MGD to Hialeah in order to provide for the subject project.

ADA Questions 17 and 18 address potential impacts on potable water and wastewater facilities, respectively. These Questions require the DRI applicant to request a letter from the potable water and wastewater service providers addressing the following information:

- the projected excess capacities of the water supply and wastewater treatment facilities to which connection will be made at present and through completion of the project,
- any other commitments that have been made for this excess capacity and
- a statement from the agency or firm's ability to provide services at all times during and after development.

It is our understanding that WASD is a bulk supplier of both water and wastewater services to the City of Hialeah however DERM has requested that a letter of availability be obtained from both WASD and the City. Enclosed is Attachment 'A' that contains Tables 17.1, 17.2 and 18.1 showing the estimates of potable water, non-potable irrigation water and wastewater treatment demands by type of use in the proposed development. Please note that the irrigation water would be supplied from a non potable source and would not affect potable water demand.

Ms. Bertha Goldenberg
April 11, 2008
Page 2 of 2

It is anticipated that, initially, water supply to the project would rely on the existing capacity that WASD allocates to the City subject to a small increase to the new wholesale agreement. In the future, supply would be supplemented by the proposed water treatment plant to be located next to the project site.

The applicant has begun the process of closing the landfill now on the property and anticipates commencement of development about two years after receiving DRI approval. I would appreciate your reply to the information requirements above with regard to WASD's ability to serve the needs of this project. Please call me at (305) 514-3419 or Jose Gonzalez at Flagler Development Group (305)-520-2372) if you have any questions about this request.

Sincerely

A handwritten signature in black ink that reads "Michael A. Lee". The signature is written in a cursive style with a horizontal line extending to the right.

Michael A. Lee, P.E.
Senior Project Manager

001179703
C: / WASD Utility Letter.doc
Enclosures
Cc: J. Gonzalez, FDG
R. Curtis, The Curtis Group

Attachment 'A'

Section 17, Water Supply

| TABLE 17.1 Average Daily Potable Water Demand | | | | | |
|--|---------------|--------------|-------------------------------------|-------------|----------------|
| Proposed Development | | | Potable Water Demand | | |
| Use | Amount | Units | Rate* (Gallons Per Day, GPD) | | Demand |
| Warehouse | 4,300,000 | Sq. Ft. | 0.02 | GPD/Sq. Ft. | 86,000 |
| Office | 750,000 | Sq. Ft. | 0.10 | GPD/Sq. Ft. | 75,000 |
| Retail | 320,000 | Sq. Ft. | 0.05 | GPD/Sq. Ft. | 16,000 |
| Restaurant – Fast Food | 338 | Seat | 35 | GPD/Seats | 11,830 |
| Restaurant – Full Service | 300 | Seat | 50 | GPD/Seats | 15,000 |
| Hotel | 350 | Rooms | 100 | GPD/Room | 35,000 |
| Total Gallons Per Day Demand | | | | | 238,830 |
| Source: PBS&J | | | | | |

* Potable water demand rates are the equivalent of sewer flow rates set forth in Metropolitan Dade County Water and Sewer Department's 'Schedule of Daily Rated Gallonage for Various Occupancy'. See ADA Section 17A for a discussion on methods and assumptions used to derive rates for the proposed general use categories from categories provided in the Code.

| TABLE 17.2 Average Non-Potable Water Demand for Irrigation (High Period) | | | |
|---|--------------|-----------------------------------|------------------------|
| Proposed Development | | Irrigation Water Demand* | |
| Use | Acres | Acres Requiring Irrigation | Gallons Per Day |
| Warehouse | 270 | 10% of Total | 104,731 |
| Office | 58 | 10% of Total | 22,498 |
| Retail and Restaurants | 51 | 10% of Total | 19,782 |
| Hotel | 8 | 20% of Total | 6,206 |
| Total Gallons Per Day Demand | | | 153,217 |
| Source: PBS&J | | | |

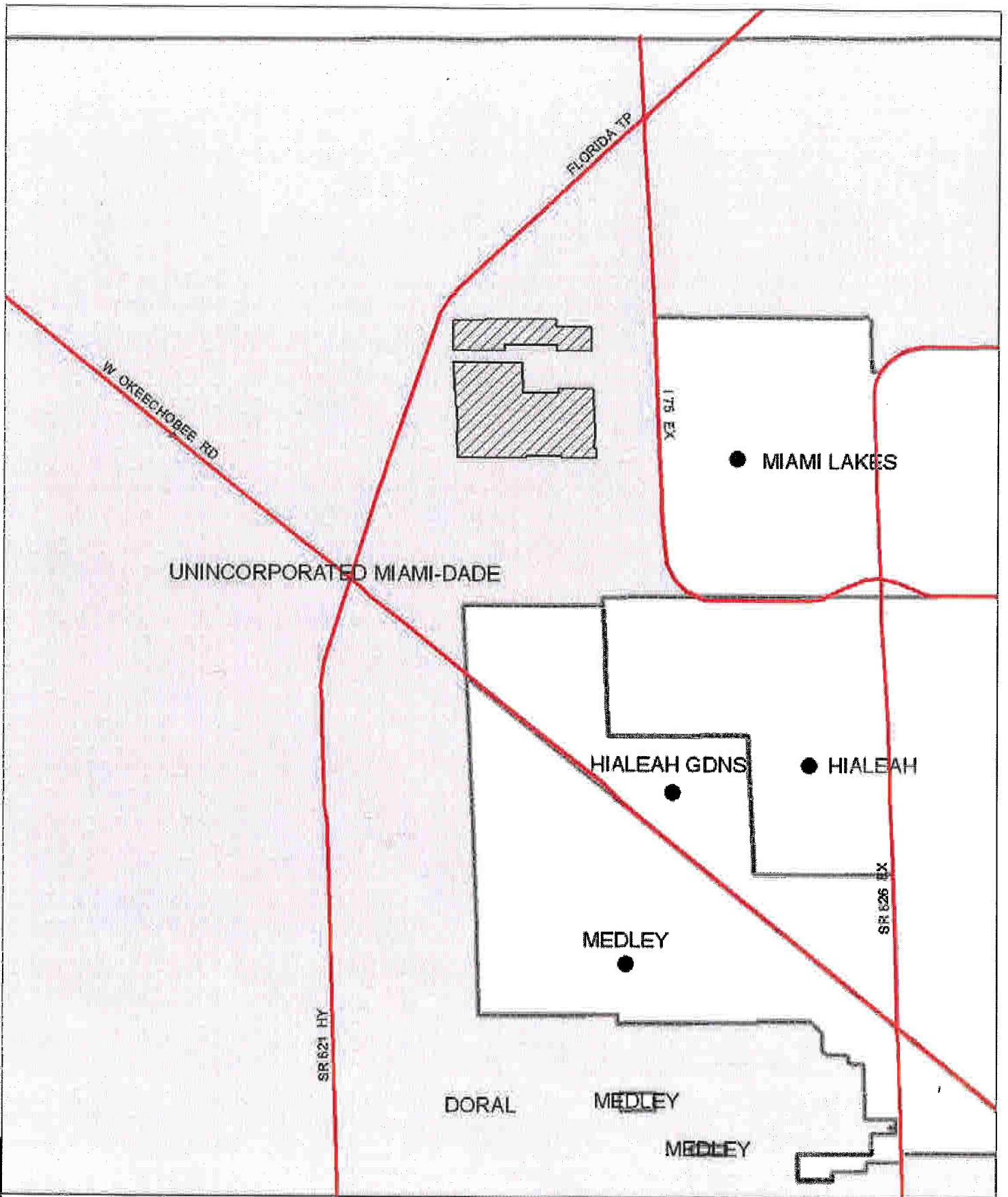
* Estimates are for application of one inch weekly to areas requiring irrigation, representing usage in a warm period with low rainfall. The estimates assume that 10% of warehouse, office and retail tracts, and 20% of the hotel site, will require irrigation.

Section 18, Wastewater Management

| TABLE 18.1 Wastewater Treatment Demand | | | | |
|---|---------------|-------------|-------------------------------------|----------------|
| Proposed Development | | | Wastewater Treatment Demand | |
| Use | Amount | Unit | Rate* (Gallons Per Day, GPD) | Demand |
| Warehouse | 4,300,000 | Sq. Ft. | 0.02 GPD/Sq. Ft. | 86,000 |
| Office | 750,000 | Sq. Ft. | 0.10 GDP/Sq. Ft. | 75,000 |
| Retail | 320,000 | Sq. Ft. | 0.05 GPD/Sq. Ft. | 16,000 |
| Restaurant – Fast Food | 338 | Seats | 35 GPD/Seat | 11,830 |
| Restaurant – Full Service | 300 | Seats | 50 GPD/Seat | 15,000 |
| Hotel | 350 | Rooms | 100 GPD/Room | 35,000 |
| Total Gallons Per Day Demand | | | | 238,830 |

Source: PBS&J

*Wastewater treatment demand rates are derived from sewage flow rates set forth in Metropolitan Dade County Water and Sewer Department's 'Schedule of Daily Rated Gallonage for Various Occupancy'. See ADA Section 18A for a discussion of methods and assumptions used to derive rates for the proposed general use categories from categories provided in the Code.



Source: Miami-Dade GIS 2007; Adapted by The Curtis Group, 2008



-  DRI Boundary
-  Municipalities
-  Unincorporated Miami-Dade

Map A (R)
Location Map
Beacon Countyline DRI