## 20. SOLID WASTE/HAZARDOUS WASTE

A. Provide a projection of the average daily volumes of solid waste generated at the completion of each phase of development. Use the format below and identify the assumptions used in the projection.

**Table 20-1, Projected Solid Waste Generation**, provides a breakdown of the average daily volume of solid waste for the development. At project completion, the projected solid waste generation is estimated to be 17,305 cubic yards per day (CYD), or 2,102 tons per day (TPD).

TABLE 20-1 PARKLAND PROJECTED SOLID WASTE GENERATION						
Land Use	Intensity of Use	Generation Rate <sup>1</sup> (Ibs/unit/day)	Solid Waste Generation			
			CYD ⁴	TPD⁴		
Residential <sup>1</sup>						
Single Family	3,693 du	6.05	91.9	11.9		
Multi-Family	3,248 du	3.91	52.2	6.3		
Commercial <sup>2</sup>						
Retail	200,000 sf	7.47	6,148	747		
Medical Office	100,000 sf	2.97	1,222	148		
Industrial – Flex Space	550,000 sf	2.25	5,092	618		
School		7.68				
Hospital <sup>3</sup>	200 beds	3.62	4,469	543		
Community Uses	50,000 sf	1.12	230	28		
Total Proposed Generation			17,305	2,102		
Source: The Curtis Group						

<sup>&</sup>lt;sup>1</sup> Based on SWA of Palm Beach County 1997 Residential Generation Study Single-family residential: 42.38 lbs/unit/week (6.05 lbs/unit/day) Multi-family residential: 27.40 lbs/unit/week (3.91 lbs/unit/day)

1 cubic foot = 9 lbs of waste

1 cubic yard = 27 cubic feet

1 cubic yard = 9 lbs times 27 cubic feet = 243 lbs

1 ton = 2,000 lbs = 8.23 cubic yards

B. 1. Please specify the extent to which this project will contain laboratories, storage facilities, and warehouse space where hazardous materials may be generated or utilized. What types of hazardous waste or toxic materials are likely to be generated? Will a hazardous materials management plan be prepared covering all uses of hazardous materials on-site? If so, please discuss contents and enforcement provisions.

<sup>&</sup>lt;sup>2</sup> Based on SWA of Palm Beach County 1995 Commercial Generation Study

<sup>&</sup>lt;sup>3</sup> Based on a 300,000 sf hospital

<sup>&</sup>lt;sup>4</sup> The following conversion rates were used:

None of the uses included within Parkland are expected to contain hazardous wastes except for the proposed hospital and the 100,000 sf of medical offices which will generate biohazardous waste.

Prior to the issuance of a certificate of occupancy for any hospital use that will entail any significant hazardous material usage, the owner, developer, or leaseholder, will submit, as required, a Hazardous Materials Management Plan (HMMP) for review and approval by Miami-Dade County, DERM, the Florida Department of Environmental Protection (FDEP), and the South Florida Regional Planning Council (SFRPC), which conforms to the requirements of Rule 9J-2.044(5)(b)2 of the Florida Administrative Code and applicable County regulations. A copy of this plan will also be provided to the Miami-Dade Fire Department and shall be incorporated into the development by recorded restriction, lease, or other appropriate documentation.

The handling and disposal of biohazardous materials would be the responsibility of the facility generating the waste and a certified biohazardous waste disposal contractor will be utilized for disposal of this waste.

2. Please discuss what measures will be taken to separate hazardous waste from the solid waste stream. What plans and facilities will be developed for hazardous or toxic waste handling, generation, and emergencies?

To the extent that hazardous materials usage on the Project Site will have a "significant hazardous material usage impact", hazardous waste will be separated from the solid waste stream by implementing the "point of origin" disposal method as required by Rule 10D-104 Florida Administrative Code.

3. Please identify off-site disposal plans for hazardous waste generated by this development and provide assurance of proper disposal by a qualified contractor.

To the extent that hazardous materials usage on the Project Site will have a "significant hazardous material usage impact", the applicant will prepare and submit a Hazardous Materials Management Plan or restrictive covenant in accordance with the requirements of Rule 9J-2.044(5)(b)(1) and (2) of the Florida Administrative Code.

4. What local and state regulations, permits and plans will regulate the generation and handling of hazardous waste at this development?

The Applicant, its successors or assigns, will comply with all legislation governing hazardous waste generation and handling. The handling and generation of any hazardous waste will be regulated by the U.S. Environmental Protection Agency and other local, state and federal agencies. If dry cleaning facilities are included as part of the Project, special rules (Chapter 62-781, F.A.C.) apply. Chapter 62-761, F.A.C., will

apply in the unlikely event that a gasoline station or other petroleum storage facility is included in the Project.

Hazardous waste generation and handling are regulated by Chapter 24 of the Miami-Dade County Code.

- C. For all waste disposal planned (on or off site), attach a copy of the letter from the developer describing the types and volumes of waste and waste disposal areas requested, and attach a letter from the agencies or firms providing services outlining:
  - 1. the projected excess capacity of the facilities serving the development at present and for each phase through completion of the project,
  - 2. any other commitments that have been made for this excess capacity,
  - 3. a statement of the agency's or firm's ability to provide service at all times during and after development (the agency or firm must be supplied with the solid waste generation table in (A) above).

On-site disposal of solid waste is neither planned nor anticipated for the Project. Exhibit 20-1, Letters to and from Miami-Dade County Department of Solid Waste Management, includes a letter requesting an indication of the ability and capacity of the department to provide solid waste services for the proposed Project. A response from Miami-Dade County Department of Solid Waste Management indicating their ability to provide service to the project will be included as soon as it is received.

EXHIBIT 20-1 Letters to and from Miami-Dade County Department of Solid Waste Management



August 3, 2006

VIA EMAIL & MAIL

Ms. Kathleen Woods-Richardson, Director Miami Dade Department of Solid Waste Management 2525 NW 62 Street Miami, Florida 33147

Re: Parkland DRI

**Solid Waste Management** 

Dear Ms. Woods-Richardson

In accordance with Chapter 380.06, Florida Statutes, regarding Developments of Regional Impact (DRI), we are required to obtain information from Miami-Dade Department of Solid Waste Management on its ability to provide the proposed Parkland development with solid waste management. We had previously sent you a letter dated June 8, 2006, but we have revised the development program that was included in that letter.

Lennar Homes is seeking to develop a mixed-use project in unincorporated Miami-Dade County. **Parkland DRI** consists of 960 acres bounded by SW 136 Street on the north, SW 162 Avenue on the east (generally), SW 152 Street on the south (generally) and SW 177 Avenue on the west.

Enclosed for your use are the following:

- Aerial Photograph showing project location;
- Table 1 describing the proposed development program and;
- Table 2 Projected Solid Waste Generation Rate for Parkland

We request that your response address the following issues, as required by our application:

- 1. the projected excess capacity of the facilities serving the development at present and for each phase through the completion of the project;
- 2. any other commitments that have been made for this excess capacity;
- a statement of the agency's ability to provide service at all times during and after development.

Please indicate in your response whether the present facilities/staffing are capable of serving the Project or specifying the additional staffing/equipment necessary to serve the development.

I respectfully request your written response as soon as possible, since this will be an integral part of the DRI application process. Your prompt attention to this matter is greatly appreciated.

If you have any questions, please do not hesitate to contact me at (305) 663-5800.

Sincerely, Corral

The Curtis Group

COMPREHENSIVE DEVELOPMENT PLANNING

Ms. Woods-Richardson Parkland DRI August 3, 2006 Page 2

## **Development Program**

The Applicant proposes development of the following mix of uses:

Table 1 Parkland DRI Development Program					
Land Use	Units				
Residential					
Single Family	1,257 du				
Townhouse	2,436 du				
Condominium (MF)	<u>3,248 du</u>				
Total	6,941 du				
Retail	200,000 sf				
	20 acres				
Industrial – Flex space	550,000 sf				
	33 acres				
Schools	K-8 – 3,200 students				
	High School – 1,600 students				
Hospital	200 beds				
Medical Office	100,000 sf				
	15 acres				
Community Uses	50,000 sf				
Library, Police, Fire	5 acres				
Parks	46 acres				

## **Projected Waste Generation Rates for Parkland**

Table 2 Parkland PROJECTED SOLID WASTE GENERATION							
Land Use	Intensity of Use	Generation Rate <sup>1</sup> (Ibs/unit/day)	Solid Waste Generation  CYD  TPD TPD				
			CID	IFU			
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Single Family	3,693 du	6.05	91.9	11.9			
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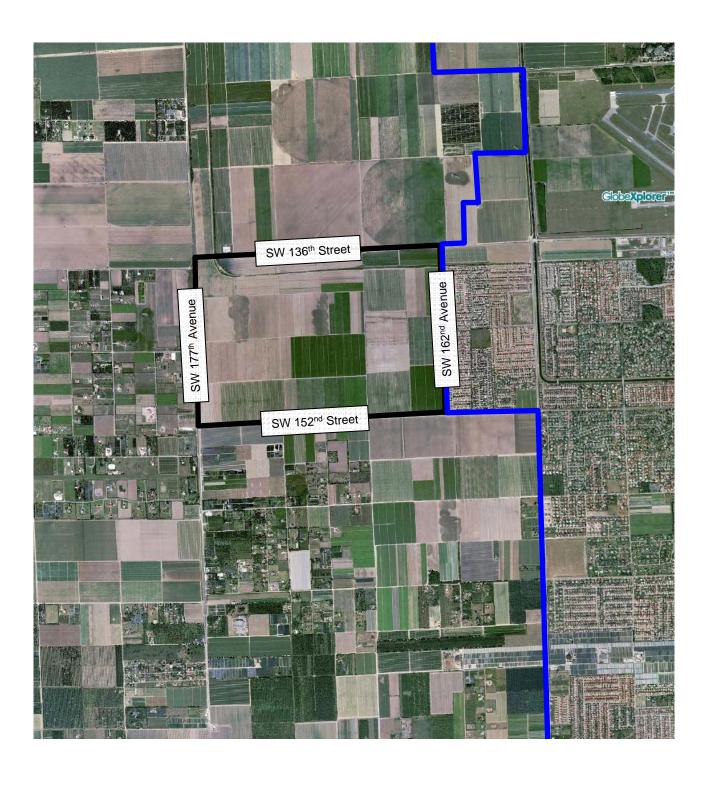
<sup>&</sup>lt;sup>2</sup> Based on SWA of Palm Beach County 1995 Commercial Generation Study

<sup>&</sup>lt;sup>3</sup> Based on a 300,000 sf hospital

<sup>&</sup>lt;sup>4</sup> The following conversion rates were used:

<sup>1</sup> cubic foot = 9 lbs of waste 1 cubic yard = 27 cubic feet

<sup>1</sup> cubic yard = 9 lbs times 27 cubic feet = 243 lbs 1 ton = 2,000 lbs = 8.23 cubic yards



Legend



Site Location

2005 Urban Development Boundary

Map B Aerial Map Parkland July 2006