

**Flamingo Pointe – Scope of Benefits**  
**June 30, 2020 LUSC**

**Benefits Recommended by the City Administration:**

In order to provide tangible, long term water management benefits, the developer shall provide a stormwater management system as described below, designed to drain an area of 90 acres or more for the Flamingo Park Neighborhood. The stormwater management system shall be capable of disposing runoff in accordance with applicable City of Miami Beach standards and requirements. At a minimum, the following benchmark shall be met:

- City of Miami Beach 10-Year, 24-Hour, 8.75" rainfall storm (which includes a 1.25 factor of safety)

In order to achieve this benchmark, the following shall be provided as part of a development agreement, or similar instrument:

1. The property owner shall convey a permanent easement along the north side of the property, in order to accommodate a stormwater pipe, drainage outfall, stormwater pump station, emergency generator, and related apparatus. Such easement shall contain sufficient space to access, maintain, repair, remove, replace all of the aforementioned assets.
2. The property owner shall design, permit and install a stormwater pipe and outfall, along the north side of the property. Such pipe shall be 96 inches (inside diameter), watertight and connect to a stormwater pump station at the NW corner.
3. The property owner shall provide a connection for a gravity pipe along 16<sup>th</sup> Street, from Alton Road to Bay Road and then along the eastern side of the Flamingo Pointe property, terminating at the pump station at the NW corner of the Flamingo Point property.
4. The property owner shall design, permit and install a stormwater pump station, including all related apparatus and an emergency generator, located at the northwest corner of Flamingo Pointe. Such pump station shall include the following:
  - a. Six (6) pumps, each with a 20,000 gallons per minute (GPM) capacity.
  - b. Pump station control panel for electrical, instrumentation and controls.
  - c. A Variable Frequency Drive for each pump.
  - d. Permanent bi-fuel engine driven emergency generator sized to operate the pump station with all pumps on with sound attenuated aluminum enclosure.
  - e. Water quality treatments structures capable of treating 135 CFS of flow with a bypass capacity of 120,000 GPM.
  - f. A trash rack structure upstream of the water treatment structures with stainless steel type 316 grate bars.
  - g. An energy dissipater unit downstream of the pumps designed to limit the discharge flow velocity not to cause scouring.
  - h. Installation of manatee grates aluminum or stainless steel 316 type.
5. The property owner shall provide at least one of the following additional water quality treatment options:

- a. 30 shallow wells for a total capacity of 30@2,000 GPM or 60,000 GPM. This will provide for water quality treatment for 90 acres which is equivalent to approximately on fifth of the Flamingo Neighborhood basin.
- b. 11.3 acre–feet of storage underground area between 1’ above the water table and the surface. This will provide for water quality treatment for 90 acres which is equivalent to approximately on fifth of the Flamingo Neighborhood basin.
- c. Bioswales, within the greenspace, provided the City receives credit from DERM for water quality treatment equivalent to a 90 acre site which is equivalent to approximately on fifth of the Flamingo Neighborhood basin.
- d. The property owner may also provide any combination of the aforementioned shallow wells, underground storage or bioswales to provide for water quality treatment equivalent to a 90 acre site which is equivalent to approximately on fifth of the Flamingo Neighborhood basin.

The aforementioned water treatment options shall promote the cleaning of the first flush of rainfall from the lift station to the bay. The capacity of the above water treatment options shall not be utilized towards on-site stormwater management and a separate stormwater management system shall be constructed as described above.

- 6. At a minimum, the following benchmarks shall be met for any shallow injection wells:
  - a. All wells shall be provided for the sole purpose of improving the performance and quality of storm water runoff from the proposed stormwater system, within the South Pointe Neighborhood.
  - b. All wells shall have a minimum combined capacity of 60,000 gallons per minute with no well design assuming more than 2,000 gallons per minute per individual well.
  - c. All wells shall be designed and constructed in accordance with regulatory requirements.
  - d. All wells shall be permitted for use as injection wells with passive pressure relief by means of an orifice plate or other method approved by applicable regulatory authorities and the City.
  - e. All wells shall contain a header, with an appropriate passive pressure relief device, manifolded all wells to a proposed pump station.
  - f. All wells shall be spaced in a manner to ensure that no well capacity is limited by another.
  - g. All wells shall be tested to confirm minimum required capacity is achieved.
- 7. The property owner shall provide cisterns on the site, to capture water runoff during storm events and provide reuse opportunity to irrigate planting.
- 8. The property owner shall construct a continuous perimeter bio-swale to contain storm and irrigation runoff water on the property.