



# MIAMIBEACH

OFFICE OF THE CITY MANAGER

NO. LTC # 286-2005

## LETTER TO COMMISSION

TO: Mayor David Dermer and Members of the City Commission  
FROM: Jorge M. Gonzalez, City Manager   
DATE: November 18, 2005  
SUBJECT: Sunset Harbour Stormwater System

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On November 10, 2005, at a meeting organized by Mayor David Dermer, City Administration staff met with representatives of the Sunset Harbour Neighborhood. Commissioner Luis Garcia attended a portion of the meeting. The following members of the City staff were present at the meeting:

Robert Middaugh, Assistant City Manager  
Fred Beckmann, P.E., Director of Public Works  
Fernando Vazquez, P.E., City Engineer  
John Heffeman, Aide to Mayor Dermer

Representing Sunset Harbour were:

Mario from Joe Allen's Restaurant  
Linda Arama-Sunset Harbour North  
Dwight Kraai-Sunset Harbour North  
Frank Kruszewski- Sunset Harbour South

The meeting was requested by residents concerned with the street flooding in Sunset Harbour neighborhood. Flooding that has historically occurred in this neighborhood is more common during the months of April and October which are the months that traditionally have the highest tides of the year. This past October, in addition to the impacts of Hurricanes Katrina and Wilma, the tides were the highest experienced in the past few years, exacerbating the flooding problem. At the meeting City staff reviewed construction to date and future plans to address the flooding.

The City in 2004 completed the construction of three deep drainage wells at three locations on Sunset Harbour Drive. The wells were constructed in front of Publix on Sunset Harbour Drive and West Avenue; adjacent to the Marina at Sunset Harbour Drive and 18<sup>th</sup> Street; and at the north-west corner of Sunset Harbour Drive and Dade Boulevard. The system was designed to operate as a gravity system; however, due to known problems with gravity drainage wells, the City used the well in front of the Marina as a test site and equipped it with pumps to make it a more efficient injection well. The structure of the other two wells was constructed in such a way that they could be retrofitted with pumps in the future for conversion into injections wells. The injection well at the Marina is working as designed; however, at times of tidal flooding, the well capacity is exceeded because the pumping

system cannot handle the amount of Bay water that backflows into the pipes and floods the streets. In addition, the northern seawall along Dade Boulevard has several areas that are below extraordinary tide elevations, therefore causing additional flooding during very high tides.

During the meeting, the City presented a plan of action to improve the stormwater drainage system along Sunset Harbour and also agreed to incorporate into the plan recommendations made by the residents and business owners attending the meeting. The plan of action consists of:

1. The City will complete the design and obtain the appropriate permits to install pumps in the two remaining deep gravity wells in the neighborhood. The retrofit will increase the discharge capacity for each gravity well from 750 gallons per minute to 4,000 gallons per minute. The conversion of the deep gravity wells into injection wells is planned to be completed by the end of March 2006.
2. The City will install flow valves in all neighborhood drainage outfalls into Biscayne Bay. These valves will minimize the Biscayne Bay water backflowing into the stormwater system which in turn overflows onto the streets during high tidal conditions. These installations will be somewhat experimental for the City as they have previously been unused. If successful in averting the tidal flooding, other areas of the City may also benefit from similar installations. This will also be completed by March 2006.
3. At the request of the residents the City will make every attempt to minimize the footprint of the electrical control panels.
4. The City plans to replace the northern seawall along Dade Boulevard to prevent flooding that currently occurs during very high tides when Bay water flows over the seawall onto Dade Boulevard and adjacent intersections. This project is currently under design and is expected to be awarded for construction in 2006. In the meantime the City will pursue temporary measures such as the installation of sand bags.

Please feel free to contact me if you have any other concerns or questions.

JMG\RCM\FHB\nl

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