

RECEIVED

2007 JUN 25 PM 11:52

CITY CLERK'S OFFICE



MIAMI BEACH

OFFICE OF THE CITY MANAGER

NO. LTC # 144-2007

LETTER TO COMMISSION

TO: Mayor David Dermer and Members of the City Commission

FROM: Jorge M. Gonzalez, City Manager

For JMG A handwritten signature in blue ink, appearing to read "JMG" followed by a stylized name.

DATE: June 22, 2007

SUBJECT: **Status of Prairie Avenue Drainage Improvements**

The purpose of this letter is to inform you about the status of the City's review of drainage improvements along Prairie Avenue, required due to the construction of the Miami Beach High School.

Background

The Public Works Department has had numerous discussions regarding the drainage design along Prairie Avenue with the Miami Beach Senior High School, TYLIN International/HJ Ross and Zyscovich Inc.

In these meetings, City staff's message to the consultant has been consistent throughout. The School Board must provide a "functional and sustainable design" to address the flooding concerns along Prairie Avenue.

The City's specific design criteria requires that the stormwater system for Prairie Avenue must be able withstand and release the rainfall intensity of a 5yr/24hr storm event. The 5yr/24hr storm event criteria is consistent with the South Florida Water Management District requirements for flood protection of local roads, as well as the adopted level of service for drainage in local streets as incorporated in the City's Comprehensive Plan.

The rationale for a "functional and sustainable design" pivots around the fact that the raising of the School Board's property has triggered a displacement in the historic basin storage and a subsequent alteration in the historic runoff patterns (flood plain encroachment) of the original runoff basin. The natural course existing prior to the School's construction for the storage conveyance and discharge of stormwater runoff has been altered without mitigation.

It is staff's opinion that the design as presented does not provide sufficient proof that would indicate the design is both "functional and sustainable".

Design Requirements

In order to properly contain and discharge the rainfall generated by a 5yr/24hr event, the design calculations would need to show that the swale can collect, treat, convey and discharge the volume of water that is generated by this event. If the design fails, flooding in the Prairie Avenue neighborhood would be anticipated.

The design submitted to the City for review has a swale system that discharges into a pipe collection system that is connected directly to a Collins Canal outfall. Although the swale appears to have enough capacity to store the rainfall generated within Prairie Avenue, the design does not provide sufficient proof that a direct connection to Collins Canal will be able to discharge during high tide. If the system is unable to discharge, then it runs the risk of backing up and overflowing the swale, therefore leaving standing water in the swale for over 30 hours which may become a safety and health hazard to both residents and students.

Presently the City has disapproved the plans and calculations issued by TYLIN International/HJ Ross submitted on May 24, 2007. The basis of this disapproval is that the Engineer of Record has not met the aforementioned design requirement.

Conclusion

City staff continues to work with the School Board's Engineer to assist the project in moving as expeditiously as possible. In the meantime, the City is cognizant of the existing flooding conditions which have taken place during construction, and the nuisance and impacts this has caused to the residents living along Prairie Avenue.

In the absence of a prompt response by the School Board representatives, The City has undertaken an emergency response system to immediately alleviate flooding during rainfall events, until such time a functional and sustainable system is approved and such system becomes fully operational. The City effort was under taken to alleviate the impacts on residents while the City and School Board resolve final responsibility.

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


JMG/RCM/FHB/FV