



OFFICE OF THE CITY MANAGER

NO. LTC #318-2008

LETTER TO COMMISSION

TO: Mayor Matti Herrera Bower and Members of the City Commission

FROM: Jorge M. Gonzalez, City Manager

DATE: December 8, 2008

SUBJECT: 51<sup>st</sup> Street and Blackhawk Avenue Intersection

**BACKGROUND**

The purpose of this Letter to Commission (LTC) is to provide you with the status of a request by residents for the installation of stop signs at the intersection of 51<sup>st</sup> Street and Blackhawk Avenue. According to residents, motorists speeding on 51<sup>st</sup> Street has been an increasing problem, that has created a dangerous situation for pedestrians in the neighborhood, as well as made it more difficult for those traveling south on Blackhawk Avenue to enter the roadway on 51<sup>st</sup> Street. Residents believe that a three-way stop would result in traffic calming and would bring order to the intersection movements.

**ANALYSIS OF EXISTING CONDITIONS**

City staff forwarded the request to the Miami-Dade County Public Works Department, Traffic Engineering Division (the County). The County then initiated a study to evaluate existing traffic conditions and to determine the feasibility of implementing either an "All Way" stop control or providing for traffic calming devices at this location.

An "All Way" stop control could be installed at the intersection if certain traffic conditions as defined in the Federal Highway Administration's Manual on Uniform Traffic Control Devices (MUTCD) are met. These traffic conditions include the following: approximately equal vehicular volumes on the intersecting roads; and these volumes should be a minimum of 3,000 vehicles per day on the major street and 2,000 per day on the minor street.

The speed and volumes were measured by the County during a recent 24-hour period and the results are indicated in Table 1.

**Table 1. Existing Traffic Volumes and Speed**

Street Name and Direction	85 <sup>th</sup> Percentile Speed (Miles per Hour (MPH))	Volume (Vehicles per day)
51 <sup>st</sup> Street, Eastbound	30	1162
51 <sup>st</sup> Street, Westbound	30	1168
Blackhawk Avenue, Southbound	---	29

The traffic data collected revealed that the traffic volumes on 51<sup>st</sup> Street and Blackhawk Avenue are far below the minimum required for the requested stop signs. Furthermore, a search of crash reports for the last three (3) years revealed that there were no reported crashes at this intersection. As such, the County has not approved the installation of "All Way" stop control signs at this location.

LTC

December 4, 2008

51<sup>st</sup> Street and Blackhawk Intersection

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### TRAFFIC CALMING

In order to install traffic calming devices, the street or road must meet certain minimum criteria established by the County's Public Works Department. Minimum traffic volumes must be greater than 150 vehicles per hour or 1500 vehicles per day; and the 85<sup>th</sup> percentile speed, which is defined as "the speed that is set by most municipalities to separate the bottom 85% of vehicles from the top 15%". The theory behind this is that most drivers will travel at a speed that is reasonable and prudent for a given roadway segment. Most U.S. jurisdictions report the 85% speed as the best indicator of the prevailing or reasonable speed. In this case in order to warrant traffic calming, the 85% percentile must be at least 10 MPH greater than the established speed limit of the road.

As shown in Table 1 the traffic volume is less than 1,500 per day and the 85<sup>th</sup> percentile does not exceed by 10 MPH of the 30 MPH street posted speed limit. Therefore, the County did not approve installation of traffic calming devices. However, should conditions change in the future, the City will reconsider the installation of traffic calming devices or other traffic control signs.

### RECOMMENDATION

At this time, the County has not approved the installation of stop signs or other traffic calming measures at the intersection of 51<sup>st</sup> Street and Blackhawk Avenue. The City will continue to coordinate with the County in an effort to monitor the performance of the intersection in the future and to recommend appropriate solutions if necessary.

  
H/FHB/PV/XF/CB

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