

February 22, 2016

Alfredo Quintero Jr., EI, CFM, CGC, CCC
Director of Public Works
Town of Cutler Bay
Cutler Bay Town Center
10720 Caribbean Blvd.
Suite 105
Cutler Bay, FL 33189

RE: Townwide Traffic Calming Alternatives Master Plan

Dear Mr. Quintero:

Thank you for the award of this contract and Marlin Engineering, Inc. (MEI) is pleased to respond to your request for proposal.

1. PROJECT

The purpose and goal of the study is to identify particular locations which present speeding/traffic volume problems, determine whether and where traffic calming measures are needed and if so to develop suggestions as to what type of traffic calming measures are recommended for that particular street location in order to reduce any identified speeding and/or traffic volume problem for that particular street.

Traffic calming is a system of design and management strategies that aim to balance traffic on streets with other uses. It is founded on the idea that streets should help create and preserve a sense of place, that their purpose is for people to walk, stroll, look, gaze, meet, play, shop and even work alongside cars – but not dominated by them. The tools of traffic calming take a different approach from treating the street only as a conduit for vehicles passing through at the greatest possible speed. They include techniques designed to lessen the impact of motor vehicle traffic by slowing it down, or literally “calming” it. This helps build human-scale places and an environment friendly to people on foot.

When performing any traffic calming, MEI’s study goals are to:

1. To increase the quality of life;
2. Incorporate the preferences and requirements of the residents;
3. Create safe and attractive streets; and
4. Help to reduce the negative effects of motor vehicles on the environment; and promote pedestrian, bicycle and transit use.

The study area is bounded by the Town limits, generally encompassing the following: on the North, SW 184th Street (Eureka Drive), on the West, the east side of the Busway to the coast, on the South, north of 232nd Street, and on the East, the Biscayne Bay National Park, forming a Town of approximately 10 square miles.

To maximize funding for the Town of Cutler Bay, the study will be broken up into two (2) phases, including:

- A. Phase 1 – Traffic Calming Study to develop Townwide Traffic Calming Alternatives Master Plan
- B. Phase 2 – Design of Final Construction Plans and Technical Specifications, including obtaining necessary permits from MDPWD. Post Design Services, including preparation of bid documents and construction inspection services will also be included.

2. SCOPE OF WORK FOR TRAFFIC ENGINEERING SERVICES:

The study shall reflect traffic calming measures in an effort to reduce or eliminate cut-thru traffic and speeding within the neighborhood. The Town of Cutler Bay will be divided into logical quadrants to maximize efficiency. Suggested traffic calming devices for which the traffic intrusion analysis will examine are listed, but not limited to:

- Speed humps and/or tables
- Neckdowns
- Traffic circles
- Half closures
- Full closures
- Channelization
- Chicanes
- Chokers
- Lane narrowing
- Traffic medians
- Diverters
- Raised intersections

Traffic-calming devices can be effective in a variety of ways. However, each device has its own specific applications, and not every one fits every single circumstance. Some devices are more effective if used in combination with each other, or with alternative transportation approaches like bicycles, buses or light rail. The right use hinges on existing conditions along a street and the desired outcomes. MEI will develop a complete balance of these devices.

A. Kick-Off Meeting

MEI will meet with neighborhood residents to provide the residents an opportunity to identify the existing traffic issues within the study area, to provide direction for the study's focus. Items for discussion may include:

- Objectives of the Traffic Study
 - Purposes of a Town-wide Traffic Calming Alternatives Master Plan
 - Types of Data Collection
 - Locations of Data Collection
 - Analysis Procedures
 - Potential policy updates to Comprehensive Plan tailored towards Complete Streets, Context Sensitive Design (CSD), Smart Transportation and Traffic Calming
- Proposed schedule
- Key issues/areas for residents

Deliverables:

- a. Sign-in Sheets to document attendees
- b. Display boards
- c. Comment Cards
- d. Map(s) of the area to allow residents to post "stickys" to document concerns

B. Traffic Data Collection

MEI will document areas of initial concern from consultations with Town staff. The areas identified will serve as our initial concern locations and represent the core concentration areas of the study.

To identify supplemental concentration areas to build a comprehensive Town-Wide Traffic Calming Master Plan, MEI will use input gained through the kick-off meeting, perform field reviews in the study area, collect 24-hour roadway volume counts and speed data to measure the existing traffic conditions at key locations within the study area. In addition, MEI will utilize Bluetooth data collection devices to collect origin-destination counts to identify cut-through traffic, where appropriate.

- Readily available pedestrian/bike data available from the *Bicycle and Pedestrian Master Plan* will be utilized.
- Crash data shall be obtained from the Town of Cutler Bay Police Department and/or the Miami-Dade County Sherriff's Office.

Note: A.M. and P.M. peak hour intersection turning movement counts will not be included within the scope of this data collection effort.

Deliverables:

- a. Field Review Summary (existing conditions, traffic patterns, existing devices, etc.)
- b. 24-Hour Average Daily Traffic
- c. 85th Percentile Speed Data
- d. Origin-Destination Data
- e. Crash Data Summary
- f. Pedestrian/Bike Data

C. Data Analysis

MEI will utilize the results from the data collection efforts to:

- a. Identify particular locations which present speeding/traffic volume problems
 - i. Existing traffic conditions; including the magnitude of speeding, volume and cut-through traffic
- b. Determine whether and where traffic calming measures are needed
 - i. Future traffic conditions considering the proposed traffic management strategies developed in this study
- c. Develop suggestions as to what type of traffic calming measures are recommended for a particular location/street, to:
 - i. Reduce speeding and/or
 - ii. Traffic volumes and/or
 - iii. Cut-Through

Deliverables:

- a. Map(s) of Areas of Concerns identifying locations for:
 - i. Speeding Issues and/or
 - ii. Volume Issues and/or
 - iii. Cut-Through and/or
 - iv. Crash Patterns and/or
 - v. Pedestrian/Bike Issues

D. Development of Traffic Calming Alternatives

Utilizing the map(s) of the areas of concerns throughout the Town, MEI will develop several suitable traffic calming alternatives that will address the concern, with an area-wide systematic traffic calming approach. Considerations will be made the recommendations in the *Cutler Bay 2014-19 Strategic*

Master Plan, Cutler Bay Pavement and Sidewalk Assessment Report, Cutler Bay Bicycle and Pedestrian Master Plan and the Cutler Bay Transportation Master Plan.

Speed control alternatives may include vertical deflection measures, horizontal deflection measures and constrictions. Typical volume control or cut-through control alternatives may include diverters and full or partial closures.

Prioritization

Using a prioritization and scoring system, MEI will prioritize and rank locations for alternatives. Factors that will be included in prioritization will include 85% speed, average daily traffic (ADT), crashes, pedestrian and bicycle activity and amenities.

Deliverables:

- a. Recommendations for traffic calming devices to install on residential streets, where concerns are identified
- b. Prioritized list of traffic calming locations

E. Development of Town-wide Traffic Calming Master Plan

MEI will develop a Town-wide Traffic Calming Alternatives Master Plan, incorporating results of the data analysis; alternatives prioritization; and supplementing and encompassing the recommendations of the *Cutler Bay 2014-19 Strategic Master Plan, Cutler Bay Pavement and Sidewalk Assessment Report, Storm water Master Plan, Cutler Bay Bicycle and Pedestrian Master Plan and the Cutler Bay Transportation Master Plan..*

This plan will then be presented at a "Follow-Up" neighborhood meeting to obtain 67% resident approval in the affected areas (67%). Upon resident approval, the Master Plan will be brought forward for Town Council adoption, prior to submittal to MDPWD to obtain County approval.

In order for MDPWD to provide final approval, the following documentation must also be obtained:

- Letters from affected entities such as Police, Fire, and Solid Waste Departments stating that they concur with the aforementioned traffic flow modifications and that they will not adversely impact their services.
- Concurrence from the affected residents/property owners. In lieu of concurrence from the affected residents/property owners, the Town Council may adopt a resolution after a public hearing.
- An executed Intergovernmental Agreement that the Town will be responsible for the installation and maintenance of traffic calming devices, and assume liabilities associated with the installation of said devices.

Deliverables:

- a. Traffic Calming Master Plan (24" x 36" color plot)

F. Miami-Dade County Public Works Department (MDPWD) Coordination

MEI will coordinate with Miami-Dade County Public Works Department (MDPWD) to obtain approval will be an on-going and continuous process. This will assist in obtaining favorable and prompt approvals of the Master Plan.

Deliverables:

- a. Approval of the Traffic Calming Alternatives Master Plan
- b. Approval of the recommendation of the Final Report Study

G. Report

MEI will summarize the results of the study. Five (5) bound copies and one (1) electronic (PDF) of the final report will be provided to the Town of Cutler Bay.

Deliverables:

- a. Final Report Study

H. Meetings/Council Presentation

MEI will perform at least (2) presentations to the Town Council as part of this study, one to introduce the study and another to discuss the results, present the Master Plan and obtain Council adoption.

I. Next Steps

Following the procedures outlined in the Miami-Dade County Street Closure and Traffic Flow Modification Manual, MEI will begin Phase II of the traffic calming study to develop final signed and sealed construction plans and technical specifications for the approved traffic calming measures within the Traffic Calming Alternatives Master Plan.

Note: NEXT STEPS ARE NOT PART OF THIS PROPOSAL. An additional proposal for Phase II will be developed by MEI based on the recommendations of the Traffic Calming Alternatives Master Plan. Permits for the final signed and sealed construction plans will be obtained in this phase.

3. CONTRACT SUM

For the services performed under paragraph 2, the Client will pay the Engineer the lump sum fee of **(\$84,621.96)** payable as follows. Any additional services will be negotiated as needed.

4. PAYMENTS

Subsequent progress payments of the above lump sum fees shall apply and invoice monthly in proportion to the services performed.

Should the client wish us to provide and/or negotiate with third parties, any of the aforementioned services or any other additional work not included in this proposal under the Scope of Work, we will provide it on a Time Charge plus Expenses basis, computed as the sum the following:

- Approved Employee Category and Certified Wage Rates
- Non-Salary expenses times a multiplier of 1.05

Non-Salary expenses include such typical expenses as cost of: transportation and subsistence; toll telephone calls and telegraph; printing and reproduction; computer time and programming costs; identifiable supplies; subcontract services such as: surveys, subsurface investigation and testing by commercial laboratories.

5. CLIENT RESPONSIBILITIES

Provide access to and make all provisions for the Engineer to enter upon public and private lands as required for the Engineer to perform his work under this proposal.

Place at the disposal of the Engineer all available information pertinent to the project upon which the Engineer can rely, including previous reports and any other data related to the design and construction of the project.

Designate a person to act as the Client's representative with respect to the work to be performed, such person to have complete authority to transmit instructions, receive information, interpret and define the Client's policies and decisions with respect to the work covered by this proposal.

6. SCHEDULE & DELIVERIES

A "signed and sealed" Report documenting the results of the study will be submitted, as detailed in the scope of services. The Engineer has neither jurisdiction nor control over the regulatory agencies and their plans review process, therefore the Engineer shall not be liable for the delays created by said agencies.

7. ACCEPTANCE

The return of an executed copy of this proposal would constitute our authorization to proceed.

Very truly yours

MARLIN ENGINEERING, INC.



James E. Spinks III, PE, PTOE
Sr. Vice President - South Florida

ACCEPTED BY: _____ DATE: _____

TITLE: _____

