WORK ORDER No. 3 FOR PROFESSIONAL SERVICES

TO: Marlin Engineering, Inc.
3363 W Commercial Boulevard,
Suite 115, Fort Lauderdale, Fl 33309
(954)-870-5070

DATE: November 4, 2024

The City of Doral authorizes the firm Marlin Engineering, Inc. to provide professional engineering to evaluate the intersection of NW 104 Avenue and NW 70 Street/NW 70 Terrace for a Multi-Way Stop control. Where Marlin Engineering, Inc. is part of the pre-qualified pool of consultants selected in accordance with RFQ 2023-08 requirements and approved by the City Council on March 13, 2024, via Resolution 24-54. The work should be performed in accordance with the contract provisions contained in the Professional Services Agreement between Marlin Engineering, Inc. and the City of Doral dated June 3, 2024, and the attached Proposal submitted on November 1, 2024, submitted by your firm for the above referenced project.

SCOPE OF SERVICES AND SCEHDULE:
The scope of the project will be as described in the attached proposal from Marlin Engineering dated November 1, 2024, to evaluate the intersection of NW 104 Avenue and NW 70 Street/NW 70 Terrace for a Multi-Way Stop control. The schedule requires the scoped of work to be completed within 4 weeks of NTP. All limitations of time set forth in this Work Order are of the essence. The performance of services associated with this Work Order will be executed on a time and material basis not to exceed the amount of $12,744.72.

You are required by the Professional Services Agreement to begin work subsequent to the execution of this Work Order, or as directed otherwise. If you fail to begin work subsequent to the execution of this Work Order, the City of Doral will be entitled to disqualify the Proposal and revoke the award.

This Work Order incorporates the terms and conditions set forth in the Professional Services Agreement dated June 6, 2024, between the parties as though fully set forth herein. In the event that any terms or conditions of this Work Order conflict with the Continuing Services Agreement, the provisions of this specific Work Order shall prevail and apply.
This Work Order is not binding until the City of Doral agrees and approves this Work Order.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the day and date first above written, in two (2) counterparts, each of which shall, without proof or accounting for the other counterpart be deemed an original Contract.

CONSULTANT: MARLIN ENGINEERING, INC.

BY: _____
NAME: Myka Patino
TITLE: Traffic Engineering Manager

WITNESSES:
1. _____
2. _____

SEAL:

Marlin Engineering, Inc. CORPORATE SEAL 1991 FLORIDA

OWNER: CITY OF DORAL

BY: _____
NAME: Rey Valdes
TITLE: City Manager

AUTHENTICATION:

BY: _____
NAME: Connie Diaz
TITLE: City Clerk

APPROVED AS TO FORM AND LEGAL SUFFICIENCY FOR THE SOLE USE OF THE CITY OF DORAL:

BY: _____
NAME: Gastesi, Lopez and Mestre, PLLC
TITLE City Attorney

MARLIN

November 1, 2024

Darlin Perez, P.E.
Chief of Engineering
City of Doral Public Works Department
8401 NW 53rd Terrace
Doral, FL 33166

Re: City of Doral – Vintage Place NW 104th Avenue Multi-Way Stop Warrant Analysis

Dear Ms. Perez:

As requested by the City, Marlin Engineering, Inc. (MARLIN) proposes to provide services to evaluate the intersection of NW 104th Avenue and NW 70th Street/NW 70th Terrace in the City of Doral in Miami-Dade County, Florida for a Multi-Way Stop control, pursuant to the Continuing Professional Services Agreement provided by the City of Doral ("City") for Professional General Engineering and Architectural Services, dated June 3rd, 2024.

I. General

The intersection of NW 104th Avenue and NW 70th Street/NW 70th Terrace is currently Two-Way Stop Controlled in the east and west approaches, which provide access to the Vintage Place residential community on both sides. NW 104th Avenue is a city-maintained road with a 30 MPH speed limit, while NW 70th Street and NW 70th Terrace are private roads within the gated communities. The southbound approach of NW 104th Avenue is two (2) lane minor road with a median and a left turn bay; the northbound approach is also 2 lanes but had no median or turn bays and has a skewed alignment with the northbound through receiving lane. The private roads are one lane in each direction. The City of Doral has received complaints from citizens in the area due to a lack of signage. Residents from Vintage Place on the east side do not have full visibility to the south when crossing the street to the west, and cars driving north do not stop. Stop signs are being proposed for the uncontrolled movements to improve safety at this location. The following tasks comprise the scope for this analysis.

A map with the location is shown below.

- Study Intersection

II. Scope of Services:

Although NW 104th Avenue is a city road, it is understood that a warrant analysis must be performed to justify an All-Way Stop in order to obtain approval from Miami-Dade County (MDC) Department of Transportation and Public Works (DTPW) Traffic Division for any changes to the traffic control at the intersection.

Task 1 – Existing Conditions

The roadway characteristics of both roads, along with any pertinent data from GIS maps, will be obtained. A field review will be also be conducted to confirm the research collected. Posted speed limits, observed speeds, and pedestrian/bicycle activity will be noted. The conflict points will also be documented.

Task 2 – Data Collection

MARLIN will collect the following data for use in the warrant analysis:

- 12-hour Turning Movement Counts (including pedestrian, bicycle and heavy vehicles)
- 24-hour Speed Data (85th percentile)

Traffic data will be collected on typical midweek (non-event) days, adhering to the Florida Department of Transportation's (FDOT's) Manual on Uniform Traffic Studies (MUTS) and other applicable standards. A field review of the study area will be conducted during the same time that the traffic data is collected to the extent possible.

Task 3 – Safety Review

A crash analysis will be conducted as part of the warrant justification. Crash data for the last 3 years of available data will be obtained at the subject location. The review of the crash data will focus mainly on the critical movements (left turn, right turn and right-angle collisions) that are susceptible to correction from a multi-way stop control.

Task 4 – Intersection Analysis

An analysis of the projected volumes will be made using Highway Capacity Software (HCS) in order to estimate the delay for the proposed 4-legged intersection with the current 2-way stop control on the north-south approaches. The delay data will be utilized in the warrant analysis.

Task 5 – Multi-Way Stop Warrant Analysis

A Multi-Way Stop Warrant Analysis will be conducted based on guidance from the Federal Highway Administration's Manual on Uniform Traffic Control Devices (MUTCD) Section 2B.07, using the results of the previous tasks. Criteria to be evaluated will include approach volumes, 85th percentile speeds, crash review. Other criteria that may be utilized include left turn conflicts, high pedestrian volumes, sight distance issues, and design and operating characteristics of the roadways.

Task 6 – Documentation

MARLIN shall produce a technical memorandum documenting the above tasks including appendices or figures (as appropriate). The results will be compiles and recommendations will be made based on the analysis conducted. MARLIN will submit a draft technical memorandum to the City, as well as to the County for formal review through their Design Review Portal. *It is anticipated that the County's review will take a minimum of 25 days.* Any review comments provided by the City and the County will be incorporated into the final technical memorandum.

Task 7 – Project Meetings/Coordination

MARLIN staff will attend up to two (2) meetings to coordinate the study submittal and present the findings and mitigation strategies with the City and County staff, as necessary. MARLIN will provide status updates on the schedule in a timely manner.

Schedule of Work – Time of Performance

MARLIN shall submit the Deliverables and perform the Work as depicted in the tables below

Task or Activity ID#	Major Task, Sub-Task, Activity, or Deliverables	Anticipated Delivery Date
1	Existing Conditions	NTP+1 week
2	Data Collection	+ 2 weeks
3	Safety Review	+ 2 weeks
4	Intersection Analysis	+ 3 weeks
5	Multi-Way Stop Warrant Analysis	+ 3 weeks
6	Draft Documentation	+ 4 weeks
7	Project Management/Meetings	+ 8 weeks

MARLIN will provide the City with the Services defined in the Scope section above. The anticipated Notice to Proceed for these Services is TBD.

III. Compensation

Consultant shall perform the work detailed in this Proposal for a Total fee of $ 12,744.72. The City shall not be liable for any fee, cost, expense or reimbursable expense, or other compensation beyond this amount unless approved in a supplemental work order.

IV. Schedule & Deliveries

The draft report documenting the results of the warrant evaluation will be submitted providing all pertinent information, as detailed in the scope. 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.

V. Additional Services

Additional services and unforeseen circumstances beyond established scope shall be negotiated in good faith and at the sole discretion of the City.

VI. City Furnished Documents & Data

CITY shall provide MARLIN with any data information available to perform the scope of work.

VII. Project Manager

Consultant's Project Manager for this Project will be Ms. Myra E. Patino, P.E., PMP

Marlin Engineering Inc. appreciates the opportunity to submit this scope and Fee Estimate and we look forward to being of service. If you have any questions with respect to this proposal, do not hesitate to contact us. On behalf of MARLIN ENGINEERING Inc, I thank you again, for the opportunity with you on this important project.

Submitted by:

Myra E. Patino, P.E., PMP
Traffic Engineering Manager

Reviewed and approval in concept recommended by:

_____ _____

Department Director Procurement Manager

_____

City Manager

MARLIN

CITY OF DORAL

Multi-Way Stop Warrant Analysis (NW 104th Avenue and NW 70th Street/NW 70th Terrace)

11/1/2024

STAFF HOUR ESTIMATE

Task	Activity	Project Manager	Senior Engineer	Project Engineer	GIS Technician	Engineering Technician	CADD Technician	Clerical	TOTAL
	Rates	$ 257.80	$ 238.40	$ 199.85	$ 138.44	$ 142.40	$ 125.15	$ 94.13	
1	**Existing Conditions**								
	Conduct Field Review		3.0	3.0					6.0
	Obtain Traffic Data			0.5	1.0				1.5
	Sub-total Hours	-	**3.0**	**3.5**	**1.0**	-	-	-	**7.5**
	Sub-total Salary Cost	$ -	$ 715.20	$ 703.47	$ 138.44	$ -	$ -	$ -	$ 1,557.11
2	**Data Collection**								
	Summarize Volume & Speed Data		1.0	1.0		1.0			3.0
	Develop Exhibits & Figures			0.5	1.0				1.5
	Sub-total Hours	-	**1.0**	**1.5**	**1.0**	**1.0**	-	-	**4.5**
	Sub-total Salary Cost	$ -	$ 238.40	$ 299.78	$ 138.44	$ 142.40	$ -	$ -	$ 819.02
3	**Safety Review**								
	Download Crash Data					1.0			1.0
	Summarize Crashes	0.5	1.0	1.0					2.5
	Sub-total Hours	**0.5**	**1.0**	**1.0**	-	**1.0**	-	-	**3.5**
	Sub-total Salary Cost	$ 128.90	$ 238.40	$ 199.85	$ -	$ 142.40	$ -	$ -	$ 709.55
4	**Intersection Analysis**								
	Conduct HCS analysis	0.5	1.0	1.0					2.5
	Summarize delay		0.5			1.0			1.5
	Sub-total Hours	**0.5**	**1.5**	**1.0**	-	**1.0**	-	-	**4.0**
	Sub-total Salary Cost	$ 128.90	$ 357.60	$ 199.85	$ -	$ 142.40	$ -	$ -	$ 828.75
5	**Multi-Way Stop Warrant Analysis**								
	Summarize Criteria		1.0	1.0					2.0
	Develop Recommendations	1.0	2.0	2.0			2.0		7.0
	Sub-total Hours	**1.0**	**3.0**	**3.0**	-	-	**2.0**	-	**9.0**
	Sub-total Salary Cost	$ 257.80	$ 715.20	$ 599.55	$ -	$ -	$ 250.30	$ -	$ 1,822.85
6	**Documentation**								
	Draft Technical Memorandum	1.0	2.0	2.0	1.0			1.0	7.0
	Agency Review Coordination		1.0						1.0
	Final Technical Memorandum	0.5	1.0	1.0	0.5			0.5	3.5
	Sub-total Hours	**1.5**	**4.0**	**3.0**	**1.5**	-	-	**1.5**	**11.5**
	Sub-total Salary Cost	$ 386.70	$ 953.60	$ 599.55	$ 207.66	$ -	$ -	$ 141.20	$ 2,288.71
	Project Management								
	Project Administration	4.0						2.0	6.0
	Meetings	1.0	1.0						2.0
	Sub-total Hours	**5.0**	**1.0**		-	-	-	**2.0**	**8.0**
	Sub-total Salary Cost	$ 1,289.00	$ 238.40		$ -	$ -	$ -	$ 188.26	$ 1,715.66
	Marlin Engineering Total Hours	**8.5**	**14.5**	**13.0**	**3.5**	**3.0**	**2.0**	**3.5**	**48.0**
	Marlin Engineering Salary Cost	$ 2,191.30	$ 3,456.80	$ 2,602.05	$ 484.54	$ 427.20	$ 250.30	$ 329.46	$ 9,741.64
Miami-Dade County	12-hour Turning Movement Count (TMC)					1	$ 1,424.56	Per location	$ 1,424.56
	48-hour Traffic Count (Volume & Speed)					2	$ 789.26	Per location	$ 1,578.52
						0	$ 812.40	Per location	$ -
								Data Collection Subtotal	$ 3,003.08

TOTAL	**$ 12,744.72**