

**WORK ORDER No. 6 FOR PROFESSIONAL SERVICES**

TO: EAC Consulting Inc.  
5959 Blue Lagoon Drive, Suite 410  
Miami, Florida 33126  
(305) 265-5400

DATE: July 10, 2019

The City of Doral authorizes the firm of EAC Consulting Inc. to provide professional engineering design services for the structural analysis of the mast arms noted in the proposal provided. The work should be performed in accordance with the contract provisions contained in the Continuing Professional Services Agreement between EAC Consulting Inc. and the City of Doral dated February 26, 2018, and the attached Proposal submitted by your firm for the above referenced project.

**SCOPE OF SERVICES AND SCHEDULE:**

The scope of the project will be as described in the attached proposal from EAC Consulting Inc. dated July 2, 2019 for the analysis of existing mast arms at the intersection of NW 12 Street and NW 87 Avenue. The schedule requires the scoped of work to be completed within 30 days of Notice to Proceed. 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 Materials basis with a not to exceed amount of \$5,462.00.

You are required by the Continuing Service 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.

Work Order incorporates the terms and conditions set forth in the Continuing Services Agreement dated February 26, 2018 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. 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 three (3) counterparts, each of which shall, without proof or accounting for the other counterpart be deemed an original Contract.

CONSULTANT: EAC Consulting Inc.

BY: [Signature]  
NAME: Michael Adeife  
TITLE: Sr. Vice President

WITNESSES: SEAL:

1. [Signature]  
2. [Signature]

OWNER: City of Doral  
BY: [Signature]  
NAME: Albert P. Childress  
TITLE: City Manager

AUTHENTICATION:  
BY: [Signature]  
NAME: Connie Diaz  
TITLE: City Clerk



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

BY: [Signature]  
NAME: Luis Figueredo, ESQ.  
TITLE: City Attorney



July 2, 2019

Aurelio Del Valle  
Intersection Technology Systems Analyst  
City of Doral  
8401 NW 53<sup>rd</sup> Terrace  
Doral, FL 33166

**Re: Continuing Professional Services Final Agreement - RFQ # 2017-21  
Fee Proposal for the Analysis of Existing Mast Arms with New Camera Devices**

EAC Consulting, Inc. respectfully submits this fee proposal to provide structural analysis services for the City of Doral (City).

The following sub-consultant, selected as part of our team under RFQ #2017-21 will support our services on this project:

- Botas Engineering, Inc.

**PROJECT UNDERSTANDING**

It is our understanding that the City will be installing camera devices on existing mast arms at the intersection of NW 87<sup>th</sup> Avenue and NW 12<sup>th</sup> Street within the City. The installation of these cameras will require a structural engineer to analyze the impacts on the existing mast arms caused by the installation of camera equipment. The analyses will be conducted for three (3) existing mast arms (1 double mast arm and 2 single mast arms) located at the referenced intersection.

**SCOPE OF SERVICES:**

The mast arms mentioned above will be analyzed using the following requirements:

1. Florida Department of Transportation (FDOT)
2. American Association of State Highway and Transportation Officials (AASHTO)

**COMPENSATION:**

The fees for professional services were developed in accordance with the billing rates established between EAC Consulting, Inc. and the City of Doral under the referenced agreement. Our Not to Exceed (NTE) fee proposal breakdown is as follows:

Major Task Name and/or Part Description	Fee Amount	Fee Basis
Project Management	\$680.00	NTE
Structural Analysis and Reporting	\$4,782.00	NTE
<b>Sub-Total (NTE)</b>	<b>\$5,462.00</b>	<b>NTE</b>
<b>GRAND TOTAL (Professional Fees)</b>	<b>\$5,462.00</b>	<b>NTE</b>

**DELIVERABLES:**

- Signed and sealed letter stating the results of the analysis

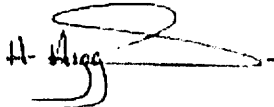
**ADDITIONAL SERVICES AND ASSUMPTIONS:**

- Any services other than the services listed above will require a supplemental service authorization
- The City of Doral will provide structural as-built plans for all three (3) existing mast arms
- The City of Doral will provide the specifications of the camera equipment to be installed
- The City of Doral will provide the exact mounting location of the camera equipment

This proposal is based on our understanding of the requirements for engineering services as itemized under the anticipated tasks listed above. Accordingly, we reserve the right to modify this proposal due to any changes in scope. If the above fee proposal and the terms above are acceptable to you, please provide us with a work authorization so we may begin work.

We look forward to our continued services to the City of Doral.

Sincerely,  
EAC Consulting, Inc.



Huntley Higgins, P.E.  
Water Services Department Manager

cc: Michael Adeife, P.E.; Contracts File

Attached: Exhibit A - Fee Breakdown (EAC and Botas)  
Exhibit B - Botas' Proposal

**EXHIBIT "A" – FEE BREAKDOWN (EAC & BOTAS)**

EAC Consulting, Inc.  
 5959 Blue Lagoon Drive, Suite 410  
 Miami, FL 33126  
 (305) 265-5400  
 EAC Project No. 17077.WW01-05

**CONTRACT FEE COMPUTATION (BASIC SERVICES)**

Description: **City of Doral - NW 87th Ave. and 12th Street - Mast Arm Analysis**  
 City Contract No.: RFQ # 2017-21  
 City of Doral, Florida

NO./ACTIVITY	Principal Manhours	Project Manager Manhours	Senior Engineer Manhours	Project Engineer Manhours	Engineering Tech Manhours	Inspector Manhours	TOTAL Hours	Avg. Hourly Rate
Task	\$ 200.00	\$ 170.00	\$ 131.00	\$ 101.00				
Task 1: Project Management (EAC)		4.0					4.0	680.0
Task 2: Structural Analysis (Botas)	2.00	2.0	27.0	5.0			36.0	4782.0
TOTAL MANHOURS								
	2	6.00	27.00	5.00	0.00	0.00	40.00	\$5,462.00

DISTRIBUTION OF COST ELEMENTS TO BASIC ACTIVITIES		TOTAL CONTRACT FEE COMPUTATION		(Check Appropriate Box)
Task 1: Project Management (EAC)	\$680.00	Total Activity Salary Costs	\$5,462.00	<input checked="" type="checkbox"/> [ x ]
Task 2: Structural Analysis (Botas)	\$4,782.00	(a) Overhead Additives		<input type="checkbox"/> [ ]
	0	(1) Administration & General	0%	<input type="checkbox"/> [ ]
		(2) Fringe Benefits	0.00%	
		MULTIPLIER	100%	
		(b) Lump Sum for Operating Margin	0%	
		Sub-total(Salary Related Costs)	\$5,462.00	
		(c) Facilities Capital Cost of Money	0.000%	
		Sub-total(Cost elements applied to Basic Activities)	\$5,462.00	
		(d) Direct Reimbursables (Out-of-Pocket) (Lump)	\$0.00	
TOTAL	\$5,462.00	Sub-Total :	\$ 5,462.00	
Prepared By:	EAC CONSULTING, INC	TOTAL FEE	\$ 5,462.00	
Date:	July 2, 2019	Rounded Total	\$5,462	
Revised By:	EAC CONSULTING, INC			
Date:	July 2, 2019			

**EXHIBIT "B" - BOTAS' FEE PROPOSALS**



**BE** **BOTAS Engineering, Inc.**  
STRUCTURAL ENGINEERS

July 2, 2019

**EAC Consulting, Inc.**

5959 BLUE LAGOON DRIVE, SUITE 410 • MIAMI, FL 33126

**Attn:** Huntley Higgins, PE, PMP

**Subject:** Fee Proposal for the Analysis of Existing Mast Arms with New Camera Devices.  
**Location:** City of Doral- Intersection of NW 87<sup>th</sup> Ave. and 12<sup>th</sup> Street

Dear Huntley:

As requested, we are submitting our proposal to analyze three (3) existing mast arms ( 1 double mast arm and 2 single mast arms) located at the above-mentioned intersection. The analysis will incorporate the installation of camera devices with the corresponding equipment at each mast arm.

Since the mast arms to be analyzed are relatively new, our fee considers that plans are available and will be provided. Also, we would need all the specifications of the equipment that will be installed and the location where it will be mounted.

The mast arms will be analyzed considering the FDOT and AASHTO requirements.

Our fee for the above-mentioned scope shall not exceed the amount of **\$4,782.**

Please, let us know if you have any question(s) or need any additional information.

Thank you for considering us for this project.

Regards,  
**BOTAS Engineering, Inc.**



Patricia M. Botas, P.E.  
President

\_\_\_\_\_  
Accepted

\_\_\_\_\_  
Date

**ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT**

Name of Project: City of Doral - NW 87th Ave and 12th Street f- Mast Arm Analysis  
 County: Miami-Dade  
 FPN:  
 FAP No.: N/A

Consult. Name **Botas Engineering**  
 Consult. No.  
 Date: 7/2/2019  
 Estimator: **Patricia Botas**

Staff Classification	Total Staff Hours From "SH Summary Firm"	Principle Engineer	Project Manager	Senior Engineer	Project Engineer	Senior Eng. Tech.	Cadd Technician	Staff Classification 7	Staff Classification 8	Staff Classification 9	Staff Classification 10	Staff Classification 11	Staff Classification 12	SH By Activity	Salary Cost By Activity	Average Rate Per Task
		\$200.00	\$170.00	\$131.00	\$101.00	\$101.00	\$65.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			
3. Project General Tasks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
4. Roadway Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
5. Roadway Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
6. Drainage Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
7. Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
8. Environmental Permits	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
9. Structure Summary	8	1	1	2	5	0	0	0	0	0	0	0	0	9	\$1,137	\$126.33
10. Structures - BDR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
11. Structures - Temporary Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
12. Structures - Short Span Concrete	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
13. Structures - Medium Span Concrete	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
14. Structures - Structural Steel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
15. Structures - Segmental Concrete	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
16. Structures - Movable Span	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
17. Structures - Retaining Walls	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
18. Structures - Miscellaneous	28	1	1	25	0	0	0	0	0	0	0	0	0	27	\$3,645	\$135.00
19. Signing & Marking Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
20. Signing & Marking Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
21. Signalization Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
22. Signalization Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
23. Lighting Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
24. Lighting Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
25. Landscape Architecture Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
26. Landscape Architecture Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
27. Survey	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
28. Photogrammetry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
29. Mapping	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
30. Geotechnical	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
31. Architecture Development	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
<b>Total Staff Hours</b>	<b>36</b>	<b>2</b>	<b>2</b>	<b>27</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>36</b>		
<b>Total Staff Cost</b>		<b>\$400.00</b>	<b>\$340.00</b>	<b>\$3,537.00</b>	<b>\$505.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>		<b>\$4,782.00</b>	<b>\$132.83</b>

Check = \$4,782.00

SALARY RELATED COSTS:		\$4,782.00
OVERHEAD:	0.00%	\$0.00
<b>SUBTOTAL:</b>		<b>\$4,782.00</b>
OPERATING MARGIN:	0%	\$0.00
FCCM (Facilities Capital Cost Money):	0.000%	\$0.00
<b>EXPENSES (Note 2):</b>		<b>\$0.00</b>
Survey (Field)	0.00	4-man crew da \$ - / day
<b>SUBTOTAL ESTIMATED FEE:</b>		<b>\$4,782.00</b>
Optional Services		\$0.00
<b>GRAND TOTAL ESTIMATED FEE:</b>		<b>\$4,782.00</b>

Notes:

1. This sheet to be used by Subconsultant to calculate its fee.
2. Provide backup for the expense calculation in a format acceptable to the Department.