

WORK ORDER No. 9 FOR PROFESSIONAL SERVICES

TO: A&P Consulting Transportation Engineers
10305 N.W. 41 Street, Suite 115
Miami, Florida 33178
(305) 592-7283

DATE: October 2, 2017

The City of Doral authorizes the firm of A&P Consulting Transportation Engineers to provide professional engineering services for the Post Hurricane Irma Traffic Signal Arterial Assessment. The work should be performed in accordance with the contract provisions contained in the Continuing Professional Services Agreement between A&P Consulting Transportation Engineers and the City of Doral dated January 20, 2015, 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 A&P Consultant Transportation Engineers dated October 2, 2017 for the performance of traffic signal arterial assessment. The schedule requires the signal assessment and retiming to be completed within 30 calendar days of the 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 \$14,734.32.

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 January 20, 2015 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: A&P Consulting Transportation Engineers
BY: [Signature]
NAME: Antonio G. Arce
TITLE: President

WITNESSES: SEAL:
1. [Signature]
2. [Signature]



OWNER: City of Doral
BY: [Signature]
NAME: Edward Rojas
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: WEISS, SEROTA, HELFMAN, COLE, & BIERMAN, PL
TITLE: City Attorney

Background

The City of Doral has implemented, in coordination with the Miami-Dade County Traffic Management Center, signal timing improvements along the following major City arterials: NW 41st Street, NW 107th Avenue and NW 87th Avenue. Miami-Dade County was affected by Hurricane Irma on September 11, 2017 which had a significant impact on signal operations countywide. Some of the impacts include equipment failure such as signal controllers as well as damage to signalization equipment such as signal heads, etc. At this time most signals are operational, however, there is a need to confirm if the current operation corresponds to their typical time of day plan or if there are any detector failures which are not apparent by field inspection. The following tables show the list of traffic signals along NW 87th Avenue, NW 41st/³⁶th Street and NW 107th Avenue which will be reviewed as part of this effort.

NW 87th Avenue From NW 12th Street to NW 58th Street

No.	Intersections at Corridor	Asset No.	MDC Section No.
1	NW 87 Avenue at NW 12 Street	4338	212
2	NW 87 Avenue at NW 13 Terrace	4732	212
3	NW 87 Avenue at NW 1400 Block	6890	212
4	NW 87 Avenue at NW 17 Street	5144	212
5	NW 87 Avenue at NW 18 Terrace	5377	212
6	NW 87 Avenue at NW 21 Terrace	5379	212
7	NW 87 Avenue at NW 25 Street	4333	212
8	NW 87 Avenue at NW 27 Street	5772	212
9	NW 87 Avenue at NW 33 Street	4864	212
10	NW 87 Avenue at NW 36 Street	4477	257
11	NW 87 Avenue at NW 41 Street	4332	257
12	NW 87 Avenue at NW 53 Street	4667	258
13	NW 87 Avenue at NW 58 Street	4596	258

NW 41st/36th Street from Turnpike SB Ramp to NW 7100 Block

No.	Intersections at Corridor	Asset No.	MDC Section No.
1	NW 41 Street at Turnpike SB	5155	266
2	NW 41 Street at Turnpike NB	5154	266
3	NW 41 Street at NW 115 Avenue	6908	266
4	NW 41 Street at NW 114 Avenue	5942	266
5	NW 41 Street at NW 112 Avenue	6457	266
6	NW 41 Street at NW 107 Avenue	4887	263
7	NW 41 Street at NW 104 Avenue	6074	263
8	NW 41 Street at NW 102 Avenue	5381	263
9	NW 41 Street at NW 97 Avenue	4885	263
10	NW 41 Street at NW 93 Court	5382	263
11	NW 36 Street at NW 8800 Block	6957	263
12	NW 36 Street at NW 87 Avenue	4477	257
13	NW 36 Street at NW 8400 Block	4571	257
14	NW 36 Street at NW 8300 Block	6732	257
15	NW 36 Street at NW 82 Avenue	4569	257
16	NW 36 Street at NW 79 Avenue	3954	199
17	NW 36 Street at SR-826 SB Off Ramp	5429	199
18	NW 36 Street at SR-826 NB Off Ramp	5428	199
19	NW 36 Street at NW 72 Avenue	3163	76
20	NW 36 Street at NW 7100 Block	3830	76

NW 107th Avenue from SR 836 EB Off Ramp to NW 74th Street

No.	Intersections at Corridor	Asset No.	MDC Section No.
1	NW 107 Avenue at SR 836 EB Off Ramp	4608	292
2	NW 107 Avenue at SR 836 WB Off Ramp	6097	292
3	NW 107 Avenue at SR 836 WB On Ramp	6048	292
4	NW 107 Avenue at NW 12 Street	4592	292
5	NW 107 Avenue at NW 14 Street	4599	292
6	NW 107 Avenue at NW 17 Street	6789	292
7	NW 107 Avenue at NW 19 Street	5892	292
8	NW 107 Avenue at NW 25 Street	4697	265
9	NW 107 Avenue at NW 27 Street	6109	265
10	NW 107 Avenue at NW 33 Street	5436	265
11	NW 107 Avenue at NW 41 Street	4887	263
12	NW 107 Avenue at NW 52 Street	6314	263
13	NW 107 Avenue at NW 58 Street	6095	258
14	NW 107 Avenue at NW 66 Street	6697	258
15	NW 107 Avenue at NW 74 Street	6576	83

Scope of Services

The scope of services for this effort includes the tasks necessary to assess if there are any signal operation deficiencies associated with detector failure or “non-typical” time of day (TOD) plans at the intersections listed above.

Task 1: Signal Operations Assessment

The Consultant shall access the KITS central software and determine any detector failures or “non-typical” time of day plans at the intersections listed above. The Consultant shall prepare a list of deficiencies if any at these intersections.

Task 2: Field Reviews

The Consultant shall perform field reviews as needed to field verify the deficiencies noted through the assessment via the central software.

Task 3: Performance Review

The Consultant shall obtain RITIS data along the three study corridors and compare current travel times and travel speeds during the AM, Midday and PM peak hours and compare them with the before hurricane conditions. This task is intended to quantify the level of arterial operation degradation after the storm event.

Task 4: Coordination

The Consultant shall coordinate with the Miami-Dade County Traffic Management Center’s Area Engineer as needed as part of this assignment to implement the necessary modifications to the TOD plans. Coordination activities will include obtaining status on any on-going signal repairs along the three study corridors.

Task 5: Meetings

The Consultant shall prepare a presentation that will outline the work performed as part of the Doral Congestion Management Plan and the improvements to the study corridors for City Council.

ACTIVITY	SUMMARY FEE SHEET															
	PROJECT MANAGER		PRINCIPAL ENGINEER		SENIOR ENGINEER		PROJECT ENGINEER		ENGINEERING TECHNICIAN		CLERICAL		TOTAL HOURS		TOTAL DOLLARS	
	Man-Hour	Hourly Rate	Man-Hour	Hourly Rate	Man-Hour	Hourly Rate	Man-Hour	Hourly Rate	Man-Hour	Hourly Rate	Man-Hour	Hourly Rate	Man-Hour	Hourly Rate	Man-Hour	Hourly Rate
Project Management/QA/QC	6	\$187.48		\$190.75		\$139.43		\$130.47		\$81.52		\$52.20	6	\$1,124.88		\$0.00
NW 41 Street from Turnpike SB Ramp to NW 7100 Block (20 Signals)																
Task 1: Signal Operations Assessment		\$187.48		\$190.75		\$139.43	20	\$130.47		\$81.52		\$52.20	20	\$2,609.40		\$0.00
Task 2: Field Reviews		\$187.48		\$190.75		\$139.43	8	\$130.47		\$81.52		\$52.20	8	\$1,043.76		\$0.00
Task 3: Performance Review		\$187.48		\$190.75		\$139.43	8	\$130.47		\$81.52		\$52.20	8	\$1,043.76		\$0.00
Task 4: Coordination		\$187.48		\$190.75		\$139.43	2	\$130.47		\$81.52		\$52.20	2	\$260.94		\$0.00
NW 87 Avenue from NW 12 Street to NW 33 Street (13 Signals)																
Task 1: Signal Operations Assessment		\$187.48		\$190.75		\$139.43	13	\$130.47		\$81.52		\$52.20	13	\$1,696.11		\$0.00
Task 2: Field Reviews		\$187.48		\$190.75		\$139.43	6	\$130.47		\$81.52		\$52.20	6	\$782.82		\$0.00
Task 3: Performance Review		\$187.48		\$190.75		\$139.43	8	\$130.47		\$81.52		\$52.20	8	\$1,043.76		\$0.00
Task 4: Coordination		\$187.48		\$190.75		\$139.43	1	\$130.47		\$81.52		\$52.20	1	\$130.47		\$0.00
NW 107 Avenue from SR 836 EB Off Ramp to NW 33 Street (15 Signals)																
Task 1: Signal Operations Assessment		\$187.48		\$190.75		\$139.43	15	\$130.47		\$81.52		\$52.20	15	\$1,957.05		\$0.00
Task 2: Field Reviews		\$187.48		\$190.75		\$139.43	6	\$130.47		\$81.52		\$52.20	6	\$782.82		\$0.00
Task 3: Performance Review		\$187.48		\$190.75		\$139.43	8	\$130.47		\$81.52		\$52.20	8	\$1,043.76		\$0.00
Task 4: Coordination		\$187.48		\$190.75		\$139.43	1	\$130.47		\$81.52		\$52.20	1	\$130.47		\$0.00
Prepare Presentation and Attend Council Meeting	3	\$187.48		\$190.75		\$139.43	4	\$130.47		\$81.52		\$52.20	7	\$1,084.32		\$0.00
TOTALS	9	\$1,687.32	0	\$0.00	0	\$0.00	100	\$13,047.00	0	\$0.00	0	\$0.00	109	\$14,734.32		\$0.00

PROJECT: Post Hurricane Irma: Signal Operations Assessment
CONSULTANT: A&P Consulting Transportation Engineers
DATE: 3-Oct-17

Notes: