# **RESOLUTION NO. 14-56**

A RESOLUTION OF THE MAYOR AND THE CITY COUNCIL OF THE CITY OF DORAL, FLORIDA, APPROVING A WORK ORDER BETWEEN THE CITY OF DORAL AND KING ENGINEERING ASSOCIATES, INC. FOR THE PROVISION OF AN UPDATED DRAINAGE STUDY FOR THE AREA OF CITY OF DORAL COMMONLY KNOWN AS THE CITY OF DORAL FOR AN AMOUNT NOT TO EXCEED \$23,035.00; AUTHORIZING THE CITY MANAGER TO EXECUTE THE WORK ORDER AND EXPEND BUDGETED FUNDS ON BEHALF OF THE CITY; AND PROVIDING FOR AN EFFECTIVE DATE

WHEREAS, the City of Doral Public Works Department wishes to secure a firm to update the "Conceptual Tile Row Stormwater Improvements" study performed in June of 2007 by URS Corporation (the "Study") for the area commonly known as the "Tile District," which is an area bound by NW 37 Street to the north, NW 29 Street to the south, NW 79 Avenue to the west, and NW 77 Court to the east (the "Study Area"); and

WHEREAS, the Study Area is subject to extensive flooding along private roads that can be attributed to the lack of outlets/outfalls, low area elevations, and a high groundwater table; and

WHEREAS, the purpose for the Study is to develop updated stormwater alternatives that would help alleviate flooding on private roads and take into consideration changes to existing conditions done as part of a recent Florida Department of Transportation NW 25 Street / Viaduct construction project (North Line Canal Culvert), including, but not limited to, alternative modeling, analysis, and development, meetings and coordination with Miami-Dade County for permitting requirements, cost estimates for up to five (5) alternatives, and review of applicability of Brownfield designation; and

**WHEREAS,** King Engineering Associates, Inc., ("King Engineering") is a prequalified provider of professional services selected in accordance with requirements of Chapter 287, Florida Statutes, and approved by the City Council in September of 2011.

WHEREAS, following a review of the experience and qualifications for the pool of prequalified firms, it was determined that King Engineering has relevant experience to perform the Study; and

WHEREAS, Staff recommends approval of a Work Order with King Engineering to perform the Study, in an amount not to exceed \$23,035.00; and

**WHEREAS,** the Mayor and City Council find that the performance of the Study to further the healthy, safety and wellness of the residents of the City of Doral and otherwise be in the best interest of the City of Doral.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND CITY COUNCIL
OF THE CITY OF DORAL AS FOLLOWS:

**Section 1.** Recitals. The above-stated recitals are hereby adopted, confirmed, and incorporated herein by reference.

Section 2. Approval. The Work Order between the City and King Engineering Associates, Inc. for the update to the "Conceptual Tile Row Stormwater Improvements" study, in an amount not to exceed \$23,035.00, a copy which is attached hereto as Exhibit "A", is hereby approved.

Section 3. Authorization. The City Manager is authorized to execute the Work Order, to expend budgeted funds on behalf of the City, and to take such other actions as may be necessary to implement the terms of the Work Order and this Resolution.

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<u>Section 4.</u> <u>Effective Date.</u> This Resolution shall take effect immediately upon adoption.

The foregoing resolution was offered by Vice Mayor Fraga who moved its adoption.

The motion was seconded by Councilmember Rodriguez Aguilera and upon being put to a vote, the vote was as follows:

Mayor Luigi Boria	Yes
Vice Mayor Christi Fraga	Yes
Councilwoman Ana Maria Rodriguez	Yes
Councilwoman Bettina Rodriguez Aguilera	Yes
Councilwoman Sandra Ruiz	Yes

PASSED and ADOPTED this 9th day of April, 2014

LUIC BORIA, MAYOR

ATTEST:

BARBARA HERRERA, CITY CLERK

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

WEISS SEROTA HELFMAN PASTORIZA COLE & BONISKE, P.L. CITY ATTORNEY

# **EXHIBIT "A"**

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

TO: King Engineering Associates, Inc. DATE: April 9<sup>th</sup>, 2014

8390 NW 53<sup>rd</sup> St, Suite 200 Doral, FL 33166 Phone (305) 392-9979 Fax (305) 392-9912

#### PROJECT DESCRIPTION:

The City of Doral authorizes the firm of <u>King Engineering Associates</u> to proceed with the Tile District Drainage Study as of the date of this Work Order. The work should be performed in accordance with the terms and conditions of the City of Doral Engineering and Architectural Services Contract Master Agreement dated November 7, 2011, and the attached Proposal submitted by your firm for the above referenced project.

The scope of the project will be as described in the attached Proposal dated February 18<sup>th</sup>, 2014 which includes attendance to meetings with City Staff and Miami-Dade County, collection and review of relevant data, review documentation related to Brownfield designation, existing conditions and alternative analysis modeling, cost estimates and preparation of a technical memorandum. The schedule requires the work to be completed 60 calendar days after issuance of the notice to proceed.

The performance of services associated with this Work Order will be executed on a time and material basis with a not to exceed amount of \$23,035.00.

You are required by the contract documents to execute this Work Order and begin work within ten (10) days from the date of this Work Order, or as directed otherwise.

If you fail to execute said Work Order and begin work within ten (10) days the City of Doral will be entitled to disqualify the Proposal, and revoke the award.

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.

CONSULT	WNER: City of Doral  C:  Joe Carollo		WITNESSES:	SEAL:
BY: NAME: TITLE:		1. 2.		_
OWNER:	City of Doral		AUTHENTICATION:	
BY:		BY:		_
NAME:	Joe Carollo	NAME:	Barbara Herrera	
TITLE:	City Manager	TITLE:	City Clerk	
APPROVE	D AS TO FORM:			
BY:				
NAME:	John Herin			
TITLE:	City Attorney			

# TILE DISTRICT DRAINAGE STUDY FOR CITY OF DORAL

#### SCOPE OF SERVICES

King Engineering Associates, Inc. (King) is pleased to submit this proposal to provide professional engineering services to the City of Doral (City) for the preparation of a stormwater drainage feasibility study to address persistent drainage problems and flooding within the tile district area. The study area generally comprises the area bound by NW 37 St., NW 29<sup>th</sup> St., NW 79<sup>th</sup> Ave, and NW 77<sup>th</sup> Ct.

This area has a history of flooding and ponding during significant storm events due to low ground elevations and the lack of adequate drainage. The City wants to explore alternatives to reduce or eliminate flooding. King will prepare a drainage study to assess the current level of flooding, evaluate alternatives to improve levels of service, and provide recommendations for upgrades to the drainage system.

#### Scope of Work

#### 1. Meetings & Coordination

Two meetings with City staff are anticipated as part of this effort. Following the Notice to proceed, King will attend a brief kick-off meeting with the City to discuss the project deliverables. A second meeting will occur after the submittal of the draft technical memorandum to discuss City comments.

#### 2. Data Compilation and Review

King will compile and review readily available information for use in this evaluation including the following:

- Draft Doral Stormwater Master Plan Update
- Draft Doral Stormwater Master Plan Model
- Water level data representative of the 41<sup>st</sup> St. canal east of NW 79<sup>th</sup> Ave.
- Water table elevations from Miami-Dade County
- Topographic data from the Miami-Dade GIS library.
- Existing drainage infrastructure provided by the City of Doral

Following review of the pertinent data, a field visit of the study area will be conducted.

#### 3. Identify Miami-Dade RER Permitting Requirements

Two meetings will be held with representatives of the Miami-Dade RER Department to identify potential permitting requirements, design and pre-treatment requirements, and any requirements in the event that contaminated soils are found in the area. One meeting



## DRAINAGE FEASIBILITY STUDY FOR CITY OF DORAL

will be held after project kick-off and a follow-up meeting after completion of the analysis of alternatives. A summary of each meeting will be prepared and incorporated into the final technical memorandum deliverable.

# 4. Document "Brownfield" Designation of Study Area

King will compile and review readily available information regarding the designation of the study area as a "Brownfield". The objective is to determine if that designation is limited to the City of Doral only or if it also applies at the state and Federal levels. Based on this review, King will also identify any requirements or benefits that may accrue to the area due to this designation, including the potential for grant funding to assist with the construction of the proposed drainage improvements.

# 5. Existing Conditions and Alternative Analysis Modeling

King will rely on existing information to delineate the drainage basins contributing runoff to the study area and create a stormwater model of the study area. King will input all relevant data into an ICPR model network and run an existing conditions model for a 5-year, 24-hour storm event in order to assess the current level of service provided by the existing stormwater infrastructure.

King will evaluate up to five (5) alternatives which may include a 41 St. canal outfall, exfiltration trenches, pipe sizes, pipe locations, and combinations thereof. A simple sketch will be prepared for each alternative outlining pipe locations, pump station location, length, diameters, and capacities. At this feasibility stage, the conceptual design of alternatives is not intended to address detailed topography (surveying), utility conflicts, subsoil conditions, route analysis, ROW/easement, power supply, or infrastructure ownership and operation. These issues would be addressed at a later stage during preliminary design.

The flood control benefits of each of the alternatives will be evaluated in terms of peak flood level, maximum depth of flooding, and duration of ponding (above grate elevation) resulting from a 5-year storm event. Given the severe drainage problems and low elevations, it may not be possible to meet the 5-yr level of service in this area.

As part of this work, King will evaluate potential constraints to the use of exfiltration trenches in the study area, including maximum potential to divert water underground and potential issues associated with draining the water table. Exfiltration trench calculations will be based on available information including an assumed open hole test value based on similar values obtained from other areas in Doral.

#### 6. Cost Estimates

A preliminary opinion of probable construction cost will be will be prepared for each of the alternatives evaluated above. King will provide the take-off quantities associated



# DRAINAGE FEASIBILITY STUDY FOR CITY OF DORAL

with each alternative and the City will provide drainage infrastructure unit costs from recent bids that will be the basis of the estimate.

#### 7. Technical Memorandum

King will prepare a technical memorandum summarizing the findings and provide recommendations for drainage improvements, cost, and expected benefits.

## Compensation

Total compensation was estimated at \$23,035 on a time and material basis based on the attached fee spreadsheet. Invoices will be submitted monthly based on hours worked and expenses incurred.

#### **Deliverable Schedule**

The draft Technical Memorandum will be delivered in electronic format within 60 days after notice proceed. Within two weeks after comments are received from the City, King will finalize and deliver three hard copies of the final Technical Memorandum along with an electronic copy.



# CITY OF DORAL TILE DISTRICT DRAINAGE STUDY FEE PROPOSAL

Firm Name: King Engineering Assoc., Inc. Prepared By: A Maristany Date: 02/18/14

SUMMARY FEE SHEET									
		Sr Project Manager & QA/QC \$160.00		Design Engineer \$90.00		Administrative Assistant \$55.00			
ACTIVITY	Man- Hours	Fees	Man- Hours	Fees	Man- Hours	Fees	Manhrs By Activity	Expenses	Total Activity Fee
1. Meetings and Coordination									
Kick-off Meeting	1	\$160.00	1	\$90.00			2		\$250.00
Draft TM Coordination Meeting	1	\$160.00	1	\$90.00			2		\$250.00
2. Data Collection & Review	_								
	-	\$0.00	4	#2.co.oo			4		#2.co.oo
Draft Doral Stormwater Master Plan	1	\$160.00	4	\$360.00 \$360.00			5		\$360.00 \$520.00
Draft Doral Stormwater Master Plan Model	1						5		\$520.00 \$520.00
Water level data for 41st St. Canal Water table data	1	\$160.00 \$160.00	4	\$360.00 \$360.00			5		\$520.00 \$520.00
Topograpihe data from MD GIS	1	\$160.00	6	\$540.00			7		\$700.00
Existing drainage infrastructure	1	\$160.00	3	\$270.00			4		\$430.00
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3. Identify Miami-Dade RER Permitting Requirements									
Two meetings with RER	4	\$640.00					4	\$50.00	\$690.00
Summary of meeting	2	\$320.00					2		\$320.00
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4. Document "Brownfield" Designation									
Compile and review Brownfield documents	2	\$320.00	6	\$540.00	1	\$55.00	9		\$915.00
Identify requirements and benefits	1	\$160.00	4	\$360.00			5		\$520.00
Identify Brownfield grants	1	\$160.00	4	\$360.00			5		\$520.00
5. Existing Conditions and Alternative Modeling	+								
Field visit	4	\$640.00	4	\$360.00			8		\$1,000.00
Delineate basins and calculate basin characteristics	1	\$160.00	8	\$720.00			9		\$880.00
Calculate basin stage-storage	1	\$160.00	8	\$720.00			9		\$880.00
Create overflow basin boundaries sections	1	\$160.00	8	\$720.00			9		\$880.00
Create existing conditions model and run 5-year storm	4	\$640.00	16	\$1,440.00			20		\$2,080.00
Identify alternatives	2	\$320.00	8	\$720.00			10		\$1,040.00
Create alternative models and run 5-yr storm	4	\$640.00	20	\$1,800.00			24		\$2,440.00
Summarize results and compare alternatives	2	\$320.00	8	\$720.00			10		\$1,040.00
Assess effectiveness of exfiltration trenches	2	\$320.00	8	\$720.00			10		\$1,040.00
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6. Cost Estimates	1	\$160.00	8	\$720.00			9		\$880.00
Compile unit prices Opinion of probable construction cost	2	\$160.00	8	\$720.00 \$720.00			10		\$1,040.00
Opinion of produce construction cost		ψ320.00	8	\$120.00			10		φ1,040.00
7. Technical Memorandum									
Draft Technical Memorandum	2	\$320.00	24	\$2,160.00	4	\$220.00	30		\$2,700.00
Final Technical Memorandum	1	\$160.00	4	\$360.00			5	\$100.00	\$620.00
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TOTALS	44	\$7,040.00	173	\$15,570.00	5	\$275.00	222	\$150.00	\$23,035.00
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Check \$23,035.00

TOTAL FEE = \$23,035.00