# SECOND AMENDMENT TO AGREEMENT BETWEEN THE CITY OF JACKSONVILLE AND TAYLOR ENGINEERING, INC. FOR

# ENGINEERING SERVICES FOR CRYSTAL SPRINGS DRAINAGE IMPROVEMENTS

# **RECITALS:**

WHEREAS, on March 18, 2011, CITY and CONSULTANT made and entered into City of Jacksonville Contract No. 8567-01 (hereinafter the "Agreement"); and

WHEREAS, said Agreement has been amended once previously; and

WHEREAS, said Agreement should be amended: by adding, attaching, and incorporating Exhibit E, attached hereto and incorporated herein by this reference, so as to revise the Scope of Services; by adding, attaching, and incorporating Exhibit F, attached hereto and incorporated herein by this reference, so as to revise the Contract Fee Schedule; by increasing the lump-sum fee for Final Design Services by \$18,048.55 to a new limit of \$175,586.00; by increasing the not-to-exceed limit for Geotechnical Investigations by \$2,119.43 to a new not-to-exceed amount of \$26,696.82; by increasing the not-to-exceed limit for Survey by \$2,600.00 to a new not-to-exceed amount of \$88,125.00; by adding a new not-to-exceed limit for Wetland Delineation in the amount of \$1,500.00; by making conforming revisions in order to cite and reference new Exhibit F; and, by increasing CITY's

maximum indebtedness by an amount not-to-exceed \$24,267.98 to a new cumulative not-to-exceed maximum of \$531,711.70, with all other provisions, terms, and conditions of said Agreement remaining unchanged; now therefore

IN CONSIDERATION of the Agreement and of the mutual covenants and agreements hereinafter contained, and for other good and valuable consideration admitted by the parties to be legally sufficient, the parties agree to amend said Agreement as follows:

- 1. The above-stated recitals are accurate, true, and correct and are incorporated herein and made a part hereof by this reference:
- 2. Section 1.01, "STATEMENT OF CONSULTANT SERVICES", in said Agreement is amended in part so as to revise the Scope of Services by adding and incorporating **Exhibit E**, and as amended shall read as follows:

# "1.01 STATEMENT OF CONSULTANT SERVICES

The CONSULTANT shall furnish all services, documents, drawings, and other matters called for in this Agreement, as well as those contained in the "Scope of Services", attached hereto as Exhibits A, C, and E and by this reference made a part hereof. If any services, functions, or responsibilities not specifically described in this Agreement and/or the Scope of Services are necessary for the proper performance and provision of the Services, they shall be deemed to be implied by and included within the Scope of Services to the same extent and in the same manner as if specifically described in this Agreement. The Contractor shall be responsible for providing the equipment, supplies, personnel (including management, employees, and training), and other resources as necessary to provide the Services. The CONSULTANT accepts the special relationship established between itself and the CITY by this Agreement. The CONSULTANT covenants with the CITY that it is an expert in the design of the Project and will cooperate with Program Managers, Construction Managers, CITY

representatives, and others in fostering the interests of the CITY. The CONSULTANT shall employ sound business administration and superintendence to complete the Project in a manner consistent with the best interests of the CITY."

- 3. Section 3.01 in said Agreement is amended in part by increasing the lump-sum fee for Final Design Services, as described in **Exhibit E**, by \$18,048.55, as detailed in **Exhibit F**, to a new limit of \$175,586.00, and as amended shall read as follows:
  - "3.01.02. For Final Design Services, as described in Exhibits C and E, a lumpsum amount of ONE HUNDRED SEVENTY-FIVE THOUSAND FIVE HUNDRED
    EIGHTY-SIX AND 00/100 USD (\$175,586.00), as detailed in Exhibits D and F, attached
    hereto and incorporated herein by this reference. Payment of the entire lump-sum amount is
    contingent upon CONSULTANT's final completion of the entire Project as specified in this
    Agreement and in the exhibits attached hereto which constitute the Scope of Services. Such
    final completion of the Project must be acceptable to and accepted by the CITY. Such
    acceptability to and acceptance by the CITY may not be unreasonably denied. In the event the
    CONSULTANT does not complete the entire Project, then the lump-sum amount will be
    prorated using the ratio that the amount actually completed and which is acceptable to and
    accepted by CITY bears to the entire Project."
- 4. Section 3.02.01 in said Agreement is amended in part by increasing the not-to-exceed limit for Geotechnical Investigations, as described in **Exhibit E**, by \$2,119.43, as detailed in **Exhibit F**, to a new limit of \$26,696.82, and as amended shall read as follows:
  - "3.02.01. For Geotechnical Investigations, as described in Exhibits A, C, and E, an amount not-to-exceed TWENTY-SIX THOUSAND SIX HUNDRED NINETY-SIX AND 82/100 USD (\$26,696.82) as detailed in Exhibits B, D, and F."

- 5. Section 3.02.04 in said Agreement is amended in part by increasing the not-to-exceed limit for Survey by \$2,600.00 to a new not-to-exceed amount of \$88,125.00, and as amended shall read as follows:
  - "3.02.04. For Survey, as described in Exhibits C and F, an amount not-to-exceed EIGHTY-EIGHT THOUSAND ONE HUNDRED TWENTY-FIVE AND 00/100 USD (\$88,125.00), as detailed in Exhibits D and F."
- 6. Section 3.02 in said Agreement is amended, in part, by adding and inserting a new paragraph 3.02.08 providing for a new not-to-exceed limit for Wetland Delineation, as described in **Exhibit E**, in the amount of \$1,500.00, as detailed in **Exhibit F**, and as amended shall read as follows:
  - "3.02.08. For Wetland Delineation, as described in Exhibit E, an amount not-to-exceed ONE THOUSAND FIVE HUNDRED AND 00/100 USD (\$1,500.00), as detailed in Exhibit F."
- 7. Section 3.03 in said Agreement is amended, in part, by making conforming revisions in order to cite and reference new **Exhibit F**, and as amended shall read as follows:
  - "3.03. The CONSULTANT shall submit invoices for payment or reimbursement under this subsection on an "as incurred" basis. Such invoices shall be combined with the CONSULTANT's regular invoices as set forth tin Subsection 3.04 hereof. The cost of services provided by the CONSULTANT shall be paid at the rates (including direct labor, indirect costs, and profit) shown in the "Contract Fee Summary Format" attached hereto as **Exhibits B**, **D**, and **F**. The cost of services provided to the CONSULTANT by others shall be reimbursed at the invoiced amount without markup by CONSULTANT. Travel expenses, if provided for as a reimbursable expense in **Exhibits B**, **D**, and **F**, shall be reimbursed only to the extent provided by Chapter 106, Part 7 of the Ordinance Code of the CITY. Travel expenses not specifically

covered by said chapter shall be reimbursed only to the extent provided by the uniform policies and practices of the CITY."

- 8. Section 3.06 in said Agreement is amended in part by increasing CITY's maximum indebtedness by an amount not-to-exceed \$24,267.98 to a new cumulative not-to-exceed maximum of \$531,711.70, and as amended shall read as follows:
  - "3.06. The maximum indebtedness of the CITY for all Services to be performed by CONSULTANT pursuant to this Agreement shall not exceed the sum of FIVE HUNDRED THIRTY-ONE THOUSAND SEVEN HUNDRED ELEVEN AND 70/100 USD (\$531,711.70), for the term of this Agreement."
  - 9. Attach Exhibits E and F to said Agreement and incorporate them therein.

**SAVE AND EXCEPT** as expressly amended in and by this instrument, the provisions, terms, and conditions of said Agreement of March 18, 2011, shall remain unchanged and shall continue in full force and effect.

[Remainder of this page is intentionally left blank. Signature page follows immediately.]

IN WITNESS WHEREOF, the parties hereto have duly executed this Second Amendment the day and year first above written.

ATTEST: CITY OF JACKSONVILLE	
CIT OF MCROOK TILLE	
By James R. McCain, Jr. Corporation Secretary  By James R. Mayor  Alvin Brown, Mayor	
ATTEST: TAYLOR ENGINEERING, INC.	
By Signature Signature Signature	
Type/Print Name  JONATHAN ARMSQUSTER  Type / Print Name  C	
Type/Print Name Type / Print Name  ASST. Dilezion  Vice President, Waterfoot Engheere	_

In compliance with Section 24.103(e) of the *Ordinance Code* of the City of Jacksonville, I do certify that there is an unexpended, unencumbered and unimpounded balance in the appropriation sufficient to cover the foregoing Agreement and that provision has been made for the payment of the monies provided therein to be paid.

Director of Finance

Title

Contract Number: 8567-01, Amd #2

BY

Form Approved:

ffice of General Counse

Title

Karen Bowling

Chief Administrative Officer

For: Mayor Alvin Brown Under Authority of:

Executive Order No. 2013-04

# **SCOPE OF SERVICES**

# **AMENDMENT 2**

# CYRSTAL SPRINGS AREA DRAINAGE IMPROVEMENTS CITY OF JACKSONVILLE, FLORIDA

# Modeling

For additional modeling tasks, a total of 80 hours are included in the proposal to update the preliminary model with survey data and to run 3 simulations (5yr, 25yr, and 100yr) including QA/QC. These additional modeling tasks have revealed themselves beyond the original scope of work.

- Upon further inspection of survey data during the final design phase, the need to relocate the weir upstream warranted additional modeling efforts. The relocation of the weir allows the City to take advantage of the local terrain, minimizing Cost to the City. Taylor Engineering will perform three
   (3) model iterations to optimize the weir function at the new proposed location. The simulations are necessary to adjust the weir dimensions such that water surface elevations does not exceed existing water surface elevations. A total of 20 additional hours are estimated to be spent on adjusting model geometry; setting up and performing the simulations; and extracting model results.
- 2. The City of Jacksonville is in the process of negotiating additional land acquisition for the pond site. To assist the City in determining an appropriate amount of land to purchase, Taylor Engineering will need to model two (2) scenarios for pond acreage. The simulations are to analyze the effects on the system performance by increasing the pond from 5 Acres to 6.5 Acres and 9 Acres. Taylor Engineering estimates a total of 8 additional hours to adjust pond geometry; set up and perform the simulations; and extract the model results.
- 3. The FDOT Drainage Connection Permit requires a critical duration analysis of 48 different storms for existing conditions and proposed conditions for the 2-, 5-, 10-, 25-, 50- and 100-year storms with 1-, 2-, 4-, 8-, 24-, 72-, 168-, and 240-hr durations resulting in the setup, execution, and analysis of 96 model runs. The proposal budget for permitting does not include adequate time for modeling this number of simulations. Taylor Engineering estimates the FDOT critical storm analysis will require an additional 40 hours to complete.

# Design

Several design modifications are needed to progressed the project beyond the 60% completion.

- Upon review of the budget for design tasks, a total of 20 hours is allocated for weir design. The
  original design consisted of a 60-ft wide, 6-ft high concrete structure with foundation and
  reinforcement design. Taylor Engineering estimates an additional 20 hours for designing an
  earthen structure with culverts.
- 2. The 30% pond design included a 5 Acre pond with a berm to contain the 25yr-24-hr storm high water level. Based on ETM's 30% review, recommendation was made to increase the perimeter

berm elevation to contain the 100yr-24hr storm high water level plus 1-ft of freeboard. The increased berm elevation requires the perimeter berm to extend around the pond and to the banks of McGirts Creek Tributary 14A, upstream of the weir. The original proposal budget does not include time for design of the perimeter berm. Taylor Engineering estimates an additional 40 hours to redesign the pond and berm features.

- 3. The City original request for the project's construction phasing occur such that a one (1) lane MOT at the intersection of Joes Road and Blair Road, to allow the intersection to remain open during the construction of the new box culverts under the intersection. We will provide that design to the City, and design a temporary MOT road to bypass traffic around the intersection during construction. The MOT road will alleviate traffic congestion and speed up construction of the box culverts, as well as minimize the interaction with the existing utilities. The MOT is complicated by the number and locations of the utilities at the intersection. Taylor Engineering estimates an additional 12 hours to design and draft the temporary MOT road.
- 4. Part of the City of Jacksonville's Development Review will require a floodplain cut/fill analysis to be performed for the construction of the weir, berms, and pond. Taylor Engineering estimates an additional 24 hours for this analysis.

### Subcontractor Fees

The additional land acquisition for the pond site will require additional services by the Survey, Geotechnical, and Environmental subcontractor site work.

- Surveying RE Holland Additional topographic survey data will be required for the newly
  acquired pond site and boundary survey data will be required for the adjacent properties. The
  surveyor will also need to survey additional SPT boring locations and acquire survey information
  for additional wetland delineation flags. The scope of additional services will equate to an
  additional \$2,600 in surveyor fees and coordination efforts by Taylor Engineering.
- Geotechnical Meskel & Associates The expanded pond and berm footprint will require four
   (4) additional SPT borings. The scope of additional services will equate to an additional \$2,119 in geotechnical fees and coordination efforts by Taylor Engineering.
- Environmental Environmental Services Inc. The expanded pond and berm footprint will
  require additional wetland delineation mapping and flagging in the newly acquired land. The
  scope of additional services will equate to an additional \$1,500 in environmental fees and
  coordination efforts by Taylor Engineering.

# EXHIBIT "F" CONTRACT FEE SUMMARY FORMAT FOR ENGINEERING DIVISION CITY OF JACKSONVILLE, FLORIDA

Γ		CENERAL						
PART I - GENERAL  1. Project				2. Proposal Number				
Crystal Springs Drainage Project - Final Design - Amendment #2				P-20-10				
3. Name of Consultant				Date of Propos	al			
Taylor Engineering				12/16/2013				
PART II - LABOR RELATED COSTS								
5. Direct Labor	Hourly	Estimated		Estimated				
	Rate	Hours		Cost		TOTAL		
Principal	\$ 69.60		\$	0.00				
Project Manager	\$ 47.26	20.5	\$	968.83				
Senior Engineer	\$ 45.19	31	\$	1,400.89				
Senior Scientist	\$ 40.99		\$	0.00				
Design Engineer	\$ 41.37	46.5	\$	1,923.71				
Designer	\$ 34.14		\$	0.00				
Drafter	\$ 27.02	84	\$	2,269.68				
Editor	\$ 25.48		\$	0.00				
Clerical	\$ 17.83		\$	0.00				
TOTAL DIRECT LABOR	\$ 36.06	182			\$	6,563.11		
6. Overhead (Combined Fringe Ben			· · · · · ·			,		
Overhead Rate		% x Total I	Direc	t Labor	\$	9,844.66		
7. SUBTOTAL: Labor + Overhea					\$	16,407.77		
8. PROFIT: Labor Related Co.				10%		1,640.78		
PART III -	<del></del>							
9. Miscellaneous Direct Costs								
Transportation & Shipping			\$	0.00				
Original Reproducible			\$	0.00				
Reproduction			\$	0.00				
Other			\$	0.00				
MISCELLANEOUS DIRECT COSTS SUB-TOTAL						_		
MISCELLANEOUS DIRECT COSTS SUB-TOTAL \$ -  10. SUBCONTRACTS (Lump Sum)								
Other	,		\$					
Other			\$					
Other			\$					
SUB-CONTRACT SUB-TOTAL			Ψ		\$	_		
TOTAL LUMP SUM AMOUNT	(Items 5	6 8 9 and 1	10)		\$	18,048.55		
11. REIMBURSABLE COSTS (Lin			<u> </u>			10,0 10.00		
Geotechnical Investigations (MAE)		<b></b>	\$	2,119.43				
Design Survey (RE Holland)			\$	2,600.00				
Wetland Delineation (ESI)			\$	1,500.00				
SUB-TOTAL REIMBURSABLES			Ψ	1,500100	\$	6,219.43		
		0,413110						
PART IV - SUMMARY  12. TOTAL AMOUNT OF AMENDMENT #2 (Lump Sum Plus								
Poimburgable (Itams 5 6 8 0 10 and 11)								
					\$	24,267.98		
13. Current Amount of Contract thru Amendment No. 1 \$ 507,443.								
14. New Amount of Contract (Including	ng Amendm	ent No. 2)			\$	531,711.70		