RESOLUTION 17-127

A RESOLUTION OF THE CITY OF PANAMA CITY BEACH, FLORIDA APPROVING TASK ORDER #2017-02 TO THE MASTER SERVICES AGREEMENT WITH DEWBERRY ENGINEERS, INC. RELATED TO THE GLADES/LAIRD BASIN STORMWATER FEASIBILITY STUDY IN AN AMOUNT OF \$69,925. TO BE PAID BY BOTH CITY AND COUNTY AS MORE PARTICULARLY SET FORTH IN THE BODY OF THE RESOLUTION.

BE IT RESOLVED that the appropriate officers of the City are authorized but not required to accept and deliver on behalf of the City that certain Task Order 2017-02 between the City and Dewberry Engineers, Inc., relating to the Glades/Laird Basin Stormwater Feasibility Study, in the total lump sum amount of Sixty Nine Thousand, Nine Hundred Twenty Five Dollars (\$69,925), of which \$52,443.75 (75%) will be paid by Bay County, in substantially the form attached and presented to the Council today, with such changes, insertions or omissions as may be approved by the City Manager and whose execution shall be conclusive evidence of such approval.

THIS RESOLUTION shall be effective immediately upon passage.

PASSED in regular session this Harday of September, 2017.

CITY OF PANAMA CITY BEACH

By:

Mike Thomas, Mayor

ATTEST:

City Clerk

COMBINED TASK ORDER AND NOTICE TO PROCEED

T	Δ	SK	OR	DER	NO	201	7-02

DATE	September	. 2017
	Dentelline	. 2017

Reference is made to that certain MASTER SERVICES AGREEMENT BETWEEN CITY OF PANAMA CITY BEACH AND <u>Dewberry/Preble-Rish</u>, <u>Inc.</u> RELATING TO MAJOR ANALYSIS, PLANNING, DESIGN AND CONSTRUCTION PROFESSIONAL STORMWATER ENGINEERING SERVICES dated May 16 2017, (the "Agreement"), the terms, conditions and definitions of which are incorporated herein as if set forth in full. Neither party is in breach of the Agreement.

Pursuant to the Agreement, Engineer agrees to perform the specific tasks set forth upon incorporated Exhibit B Attachments, Scope of Services, relating to the Glades/Laird Basin Stormwater Feasibility Study.

Engineer's total compensation	n shall be (check one):		
X a stipulated sur	n of \$ \$69,925.00	; or	
a stipulated sum	of \$ plu	s one or more specified allowances listed	
below which r	nay be authorized in writing	; or some or more specified allowances listed and by the City Manager or his designee,	
Allowance of	\$ for	, and; or	
Allowance of	\$ for_	; or	
a fee determined	on a time-involved basis a	at the rates set forth upon incorporated	
Attachment E	3, Hourly Fee Breakdow	n (if applicable), with a maximum cost	
of \$and shall be paid in monthly installmen	; ots as specified in the Agre	ement	
and share of para in moneraly motermion	na as specified in the Agre	Joineir.	
Work shall begin on completion of all work is therefore the rate of \$0 per day. There are no ac as specified in the Agreement.	, 2017, and shall be comp , 2017 Li Iditional rights and obligat	leted within <u>three months</u> . The date of quidated delay damages, if any, are set a tions related to this Task Order other than	
Upon execution of this task or	der by both the Engineer a	and City Engineer is directed to proceed.	
IN WITNESS WHEREOF the the date shown.	parties have caused these	presents to be executed in their names or	
Witness:	Dewberry/Prebl	le-Rish, Inc.	
	By:	Date:	
ATTEST:	CITY OF PANAMA CITY BEACH, FLA.		
	Bv:	Date:	
	City M	Date:anager	
City Clerk	Only Ma	arrabo.	

CITY OF PANAMA CITY BEACH MASTER SERVICES AGREEMENT

Professional Stormwater Engineering Services (Major Analysis, Planning, Design & Construction)

TASK ORDER 2017-02

This Task Order is for the purpose of Dewberry Engineers, Inc. as the Engineer to provide professional services for the Glades/Laird Basin Stormwater Feasibility Study to the City of Panama City Beach (City) acting by and through its Council. Dewberry Engineers, Inc. understands that the City is requesting modeling and analysis to serve as a planning and evaluation tool on the modeling platform (ICPR) to determine the Level of Service achieved from various proposed improvements within the city's and county's respective Glades/Laird basin. The proposed effort will provide the ability for the city and county to determine the value of creating regional stormwater improvements to serve the referenced basin. Dewberry Engineer, Inc. has developed the following scope of services and associated fee schedule to meet the needs of this task order. Please note that a portion of the GIS and modeling effort covering this study area have already been budgeted through Task order 2017-01, therefore the services outlined below serve to further the level of detail already-scoped under Task Order 2017-01 within the City limits, and expand the analysis over the County.

DESCRIPTION OF SCOPE OF SERVICES

PROJECT MANAGEMENT & COORDINATION - \$2,285.00

A. Project Coordination & Technical Evaluation Process

- 1. In addition to the regular status updates to be provided to the City, significant coordination between the Dewberry Team, City of Panama City Beach, Bay County and FDOT will be necessary due to:
 - Coordination meeting of GIS Model setup to establish baseline existing conditions between city and county staff.
 - Preliminary draft review meeting of various storm events, model scenario alternatives (estimate 6 alternatives) and results.

FIELD RECONNAISSANCE AND SURVEYING - \$12.725.00

A. Field and Data Reconnaissance (Budget \$6,225.00)

- In concert with the GIS and modeling effort, the Dewberry team will track down available as-built surveys and/or site plans from the City of Panama City Beach, Bay County, FDOT, NWFWMD, FEMA, and private entities (as needed).
- 2. Field-verification of existing conditions are to be reflected in the modeling. These locations may include drainage basin divides, control structures, culverts, and channels etc.

B. Survey (Budget \$6,500.00)

After assessing our inventory and field reconnaissance information, we anticipate the need to capture
additional surveys of hydraulic structures or channel cross sections located in the Glades/Laird Basin. This
will be a limited effort, but still necessary to ensure the modeling products reflect accurate existing
conditions.

ENGINEERING SERVICES - \$53,165.00

A. Data Inventory and Preparation

- 1. Review and harvest the XP-SWMM modeling (or other modeling) information from the following:
 - a) Bay County CDMs Glades Model
 - b) Sports Village/Complex Proposed Improvements
 - c) FDOT US 98 (Back Beach Road) Widening Improvements
 - d) Pelican Pointe & Terra Verde (Reroute)
 - e) Bay County GIS Inventory (Invert Data)
 - f) Glades/Laird Basin (High Water Mark Inventory)
- 2. The modeling information will be retrieved, prioritized, and inventoried within a GIS framework. We will review the internal consistency between the provided modeling and provided GIS (or CAD) files.

B. GIS Updates

- 1. We will modify and improve upon the GIS drainage basins based on our reconnaissance.
- 2. The GIS (and eventual ICPR model) will include details in the Glades/Laird Basin contributing areas.
- Once GIS is established, conversion of the Glades XP model to ICPR will be modified based on field recon and updated GIS and survey records.

- 4. There are several aspects of the XP-SWMM modeling that will need to be scrutinized and regenerated since minimal information can be translated to ICPR for these elements. The major aspects include:
 - a) Infiltration parameters (NRCS CN method or Green-Ampt method).
 - b) Hydrograph generation (including selection of appropriate peak rate factors, time of concentration and AMC based on the calibration run).
 - c) Control structures (XP-SWMM does not have a drop structure option as is available in ICPR).
 - d) Channels (XP-SWMM only allows a single cross section for each channel, however, ICPR allows the use of different cross sections in defining the ends of each channel).
 - e) Channels will need to include an accompanying exclusion polygon where applicable.
- 5. We will include additional overland weirs, as verified and necessary.
- 6. GIS and Modeling QA/QC Coordination (City of Panama City Beach/Bay County/FDOT)

C. ICPR Base Model Development

- 1. We will generate the database elements to be used to develop the equivalent ICPR model.
- 2. We will convert the GIS features and data into an ICPR model.
- 3. We will review the ICPR model for technical issues, including instabilities and "glass walls". We will include additional overland weirs based on our review and field verification.
- We will develop appropriate boundary conditions to ensure the modeling results within the city and county are acceptable.
- We will review, confirm, or modify the initial conditions used in the ICPR model to represent "average" seasonal conditions.
- 6. We will validate the model based on a known rainfall event and either surveyed high water mark, or qualitative accounts of the high water from that event. This can be an iterative process, so model parameters may be adjusted. The intent is not to limit the model to match a single storm event, but to allow the model to eventually provide reasonable results from a range of hypothetical storms.

D. ICPR Model Simulations, Improvement Analysis, & Documentation

- We will perform the required critical storm analysis to satisfy the City, County, and FDOT. Do to the various scenarios and limited budgets, it will be critical to verify concurrence between the City and County to narrow down alternatives (estimate 6 alternatives). We will coordinate with the both the City and County on the desired storm alternatives prior to set up and execution.
- We will develop and simulate the baseline ICPR model representing existing conditions first, and then a follow-up ICPR version will be developed and simulated which will include the proposed improvement scenarios.
- Upon completion of the various model simulations and results, a follow up meeting between all parties will be coordinated to review and determine if a CLOMR is warranted prior to final documentation of model results.
- 4. Once the modeling has been completed and results reviewed, we will prepare a report documenting the assumptions, data, methodology, and results.

QUALITY CONTROL - \$1,750.00

A. Reviews

All GIS and ICPR deliverables will be reviewed by senior staff prior to submittal to the city and county. The
deliverables will meet FEMA regulatory requirements as well as currently-accepted engineering and
numerical modeling practice.

EXCLUSIONS

- 1. Stormwater Improvement Designs
- 2. Regulatory agency submittal(s), including application fees.
- 3. Capital Improvement Project Development.

FEE ESTIMATE

Professional Services Fees

A. Project Management \$2,285.00
B. Reconnaissance and Surveying \$12,725.00
C. Engineering Services \$53,165.00

D. Quality Control

Total \$69,925.00

\$1,750.00

IN WITNESS WHEREOF, the parties hereto have caused this Task Order to be executed by their undersigned officials as duly authorized.

CITY OF PANAMA CITY BEACH, FLORIDA 110 S. Arnold Road Panama City Beach, Florida 32413
Ву:
Name: Mario Gisbert
Title: City Manager
Witnessed:
Date:



OFFICE OF COUNTY MANAGER 840 W. 11th Street

Panama City, Florida 32401 Telephone: (850) 248-8140 Fax: (850) 248-8153

August 31, 2017

BOARD OF COUNTY COMMISSIONERS

www.baycountyfl.gov

City of Panama City Beach Mario Gisbert, City Manager 116 South Arnold Road Panama City Beach, FL 32413

Subject: Stormwater Feasibility Study - Glades/Laird Basin

840 W. 11[™] STREET PANAMA CITY, FL 32401 Dear Mr. Gisbert:

This letter serves as Bay County's commitment to cost share in the amount of \$52,443.75 (75%) with the City for the Glades/Laird Stormwater Basin Study.

COMMISSIONERS

If you have any questions or need additional information, please contact my office at 850-248-8140.

TOMMY HAMM DISTRICT I

ROBERT CARROLL
DISTRICT II

WILLIAM T. DOZIER DISTRICT III

GUY M. TUNNELL DISTRICT IV

PHILIP "GRIFF" GRIFFITTS
DISTRICT V

ROBERT J. MAJKA, JR. COUNTY MANAGER County Mainage

Roběrt J. Ma

Sincerely

JC/lw

Cc: Ken Schnell, P.E., Assistant County Manager
Joel Schubert, Assistant County Manager
Keith Bryant, P.E., PTOE, Public Works Director
Josee Cyr, P.E. Engineering Division Manager
Kelly Jenkins, Community Redevelopment Agency