DEPARTMENT OF PUBLIC WORKS

Jacksonville
Where Florida Begins.

November 16, 2016

TO: Gregory W. Pease, Chairman
Professional Services Evaluation Committee

THRU: John P. Pappas, P.E.
Director

FROM: Tom Fallin, P. E.
Chief, Engineering and Construction Management Division

Melissa M. Long, P.E.
Chief, Environmental Quality Division

SUBJECT: P-36-16 NPDES Engineering and Permit Administration Services- Annual Contract
Consultant Services Account Nos.: PWGM461SW-03109 $810,673.70
PWML011-03109 $25,000
PWEN1F1NPDES-03109-PWS027-03 $75,139.00
Internal Services Account No.: PWEN011AD

The Engineering Division has negotiated with the consultant selected for NPDES Engineering and Permit Administration Services- Annual Contract resulting in the attached Scope of Services, Exhibit A and Contract Fee Schedule, Exhibit B, attached. MBE firms to be utilized to meet the 15% Participation Percentage Plan for this contract are detailed on a separate attachment.

Accordingly, this is to recommend that the City of Jacksonville enter into a contract with England, Thims & Miller, Inc. for NPDES Engineering and Permit Administration Services- Annual Contract, that includes the attached Scope of Services identified as Exhibit "A" and Fee Schedule identified as Exhibit "B", to provide a lump sum amount for NPDES Engineering and Permit Administration Services in the amount of $865,812.70 and not to exceed limits for: PWD Special Project Requests in the amount of $10,000. EQD Special Project Requests in the amount of $10,000.00 and M&LM Division Special Project Requests in the amount of $25,000.00 with the maximum indebtedness to the City in the amount of $910,812.70. The initial Period of Service will be for two (2) years with the option to extend such contract for two (2) additional two (2) year periods upon satisfactory performance by the Consultant. Initial contract expiration date shall be 2 years from date of contract execution. All other terms and conditions of the Contract shall be as provided in the Request for Proposals and the Department of Public Works Prototype Agreement for professional services, as applicable.

TF/lw

Attachments: Exhibits A & B
MBE Participation

cc: Lori A. West, Engineering Contract Specialist
Alex Baker, Procurement

SCOPE OF SERVICES
CITY OF JACKSONVILLE CONTRACT XXXX-Y
NPDES ENGINEERING and PERMIT ADMINISTRATION SERVICES
NOVEMBER 03, 2016

INTRODUCTION

The City's Stormwater Utility is responsible for the operation and maintenance of the MS4. The following City departments and divisions actively support the Utility's Stormwater Management Program.

- Public Works Department (PWD)
  - Engineering and Construction Management Division
  - Right of way and Stormwater Maintenance (RWSM) Division
  - Mowing & Landscape Maintenance (M&LM) Division
  - Solid Waste Division
- Neighborhoods Department
  - Environmental Quality Division (EQD) Water Branch
- Planning & Development Department
  - Development Services Division

The purpose of this Scope of Services defines England, Thims, & Miller, Inc.'s. (ETM's) NPDES Cycle 4 Permit Year 1 Work. The objective of Scope of Services is to assist the City with the update of its Stormwater Management Program (SWMP) as required by the NPDES Cycle 4 MS4 Permit including:

- Review and update Standard Operating Procedures (SOPs) and Plans implemented during the NPDES Cycle 3 Permit particularly as related to department and division cross coordination.
- Development, update, and technical support of inspection, analysis and reporting tools and related databases in accordance with permit requirements and updated SOPs.
- Support the planning, tracking and coordination of proactive maintenance activities completed as part of the City's Stormwater Action Team (SWAT) initiative.
- Analyze extracted MAXIMO work order data to enable the reporting of stormwater infrastructure maintenance and inspection activities in accordance with NPDES Cycle 4 Permit requirements.
- Support the City's Environmental Quality Division's (EQD) ongoing activities to fulfill delegated responsibilities related to:
  - Inspection of MS4 Structural Controls,
  - Identification and elimination of illicit discharges and connections,
  - Routine and high priority industry inspections,
  - Private lift station inspections,
  - Preparation of the City's NPDES Cycle 4 Permit Year 1 Annual Report.
- Fulfill Cycle 4 Permit TMDL Self-Implementation requirements.
- Assist EQD with update of the City's water quality monitoring plan and implementation of a water quality assessment program as required by the Cycle 4 Permit.
- Support activities or special projects as may be needed to fulfill Permit requirements or City objectives

SCOPE OF WORK
The following is a per task description of the scope of work for Year 1 of this Contract.

TASK 1 - MS4 INVENTORY UPDATE AND MAINTENANCE (Permit Part II)
The permit requires that the City maintain a current map based inventory of it MS4 infrastructure to support MS4 operations, maintenance and inspection activities and the reporting of these activities in its Annual Report.

Task 1.A MS4 Update
ETM will, in accordance with MS4 Permit requirements, maintain an up to date inventory of the MS4 infrastructure owned and maintained by the City of Jacksonville (City) and FDOT District 2. FDOT District 2 MS4 infrastructure located within Jacksonville Beach, Neptune Beach, and Atlantic Beach are not included within ETM's scope of work.

- All MS4 update work will be posted to the NPDES GIS database and hosted web site maintained by ETM. A copy of the updated MS4 inventory will be forwarded in ESRI geodatabase format to the City's Information Technology Department (ITD), GIS Section at completion of work for posting by ITD to the City's intranet site.
- The MS4 database maintained on the ETM hosted web site will serve as the MS4 infrastructure dataset accessed and used by the City to support MS4 structural control inspections, proactive and reactive Illicit Discharge Detection & Elimination (IDDE) investigations and other stormwater management plans and activities as required by the Permit.
- ETM in conjunction with PWD Engineering will determine procedures by which PWD approved drainage as-built drawings will be filed and made available to ETM for MS4 inventory update purposes. All as-built drawings will be forwarded as CAD drawing files unless CAD as-built drawing files were not submitted by the design consultant or contractor.
- Drainage as-built drawings for FDOT District 2 owned MS4 Infrastructure within the City will be made available to ETM via the FDOT intranet site or directly to ETM by FDOT's NPDES Coordinator.
- Positional accuracy of information will be relative to the City's parcel layer which serves as the NPDES GIS base map.

Information as depicted on the as-built drawing will be used to facilitate entry of the following MS4 infrastructure information (attributes) into the NPDES GIS database:

- Manhole, inlet and control structure rim & bottom invert elevations
- Control structure weir elevations
- Manhole, inlet and control structure type
- Open & closed conveyance segment lengths
- Open & closed conveyance upstream & downstream invert/bottom elevations
- Open & closed conveyance material & year constructed
- Closed conveyance (pipe) dimensions & shape
- Owner (City or FDOT)

ETM will during the first 2 months of year 1 work with the City's CIP Manager to document a procedure by which approved as-built drawings will be forwarded to ETM. City of Jacksonville As-built drawings forwarded will include the following.

- Public Works Engineering – Roadway and Drainage Capital improvement and DSR projects
- JTA Roadway and Drainage improvement projects
- Private Development Redevelopment projects for which the roadways and MS4 infrastructure has been transferred to the City
- Code 70 minor drainage addition and repair projects

All City provided as-built drawings will be forwarded as CAD drawing files unless not submitted as such by the project design consultant or contractor.

Drainage as-built drawings for FDOT District 2 MS4 infrastructure within the City will be forwarded to ETM by the FDOT District 2 NPDES Coordinator or made available for download by ETM from the FDOT District 2 INFONET Site.

ETM's MS4 update scope of work also includes the following:

- Update parcel information via a download of Duval County Property Appraisers Office parcel map during the 4th quarter of Permit year 1.

- Update of roadway centerlines and related attributes. Information required for update will forwarded to ETM by the City's Planning and Development Department.
    - Private, FDOT District 2, and City-owned and maintained roadways shall be depicted via line style and/or color.
    - MS4 infrastructure located in roadways transferred from FDOT to the City will be reviewed with the City Surveyor and added to the City's MS4 inventory, as appropriate.

- The following boundaries (polygons) will be reviewed and, if required, updated
    - FDEP waterbody boundaries (WBIDs)
    - City Council Districts
    - Citizen Planning Advisory Committee (CPAC)
    - City Roadway and Stormwater Maintenance Division (RWSM) maintenance areas and sectors

- Forward the updated MS4 GIS inventory database to the City's Information Technology Department (ITD) annually.

Task 1.B M&LM Division Database Update

The M&LM Division is responsible for routine maintenance (mowing, litter removal, and vegetation management/spraying) of roadside and off road ditches, conveyance swales and MS4 Ponds. To support effective maintenance of the MS4 ETM will:

- Add to the M&LM Division's Inspection Module database roadside and outfall ditches cleaned/re-graded by SWAT crews not already maintained by M&LM Division for routine maintenance and vegetation management purposes.
- Update and add to the Division's database City ponds posted to the NPDES GIS database (Task 1.A) and/or transferred to the M&LM Division for routine maintenance.
- Update all M&LM Division contractor maintenance schedules for Fiscal Year 2016/17 within 30 business days of receipt.

TASK 2 – TMDL SELF IMPLEMENTATION

The Cycle 4 Permit requires the City continue its TMDL self-implementation efforts as documented in the Ribault River Bacteria Pollution Control Plan. The also requires the City to select an additional WBID for TMDL self-implementation during year 1 and submit an implementation plan with its year 3 annual Report. ETM's Cycle 4 Permit year 1 TMDL self-implementation scope of services is described below.

Task 2.A – TMDL Prioritization Report

FDEP has stated that the City is not required to select a WBID for Nutrient TMDL self-implementation provided that the TMDL Prioritization Plan restates that all WBIDs with a Nutrient TMDL are a part of the LSJR Nutrient BMAP and reaffirms that it based on cost and load reduction achieved prioritize future drainage improvements within LSJR tributary WBIDs.

ETM in conjunction with PWD and EQD, will review each of the WBID's within the City with an FDEP adopted bacteria TMDL but not under a BMAP. The objective of the review is to rank each WBID. As with the TMDL Prioritization Plan submitted during the Cycle 3 Permit, the ranking and selection of the WBID's will be based on the following:

- Level of impairment
- Assessment and identification of potential sources
- Recently completed and planned drainage projects
- Existence and ranking of DCHD identified Septic Tank Failure Areas
- Overall number of septic tanks within close proximity to surface water and priority ranking for the phase out of septic tanks
- Number and frequency of Sanitary Sewer Overflows (SSO).

The WBID selected for TMDL Self-Implementation will also fulfill FDOT District 2's requirement. FDOT's role and responsibilities as stakeholder will be documented in the implementation plan submitted with the NPDES year 3 annual report.

Task 2.B – Ribault River Bacteria Pollution Control Plan Status Report

Support preparation of Ribault River Bacteria Pollution Control Plan status report. ETM's scope of work includes the following.

- Development of activity table summarizing EQD's proactive and reactive inspections, RWSM's maintenance work, septic tanks phased out, DCHD's septic tank inspections and enforcement actions, and JEA's SSO response and maintenance activities completed
- Update of exhibit maps referenced in the status report.
- Review of narrative text prepared by EQD to confirm all required status report activities have been updated to reflect accomplishments water quality improvement trends.

TASK 3 - WATER QUALITY MONITORING PLAN & ASSESSMENT PROGRAM IMPLEMENTATION
The cycle 4 permit requires that the City submit and updated water quality monitoring plan and water quality assessment program plan with its year 1 Annual Report.

Task 3.A – Water Quality Monitoring Plan & Assessment Program Update
The City submitted an updated water quality plan in conjunction with its Cycle 3 year 4 annual report. As the City was not informed about the addition of this requirement under the Cycle 4 Permit the plan as submitted did not include a water quality assessment program plan. Through discussions with FDEP and co-permittees the City gained valuable insight as to how the plan as submitted could be modified to fulfill Permit water quality assessment program objectives and annual reporting requirements.

ETM will assist the City with update of its water quality monitoring plan and development of a water quality assessment program. Tasks completed by ETM are listed below.

- In conjunction with EQD update water quality monitoring sites and related sampling schedule.
- The addition of sampling sites to support co-permittee water quality assessment reporting. This includes documenting co-permittee roles and responsibilities related to sample collection, analysis, and annual water quality trend reporting as required by the permit.
- Review impact of assessment program annual reporting on the Cycle 4 Permit inter-agency agreement with FDOT District 2.
- Review current Event Mean Concentration calculation tables and develop plans to update land use acreage, major and non-major outfalls during permit year 2.
- Assist the City with development of program specific inter-local agreements with the Cities of Atlantic and Neptune Beach and FDOT District 2.

TASK 4 - PERMIT ADMINSTRATION TOOLKIT DEVELOPMENT AND SUPPORT
The purpose of this task is to further integrate use of inspection modules MAXIMO scripts developed during the Cycle 3 Permit within the City's stormwater operations and maintenance activities and support St. Johns Main Stem BMAP and Tributaries I & II BMAP obligations.

Task 4.A MAXIMO Extract Refinement
During Cycle 3 Permit years 4 and 5 ETM and PWD MAXIMO support staff defined repeatable standard MAXIMO extract scripts as part of this ETM will on quarterly basis and with the support PWD MAXIMO support staff extract data from MAXIMO to enable ETM to:

- Continue to refine existing extract scripts to enable the extract of data in accordance with updated MAXIMO work description and activity codes.
- Summarize SWAT accomplishments.
- Consolidate work order data for NPDES, Ribault River BPCP, and Tributaries I & II BMAP reporting purposes.
- Analyze and format extracted MAXIMO data to support PWD special project presentation needs and routine reporting for the following:
    - SWAT accomplishment tracking including number of pre and post CARE requests received;

- City wide, maintenance area and maintenance sector CARE requests and work order trends and costs.
- Analyze RWSM performance metrics as related to completion of maintenance investigations and work orders as documented in the RWSM Maintenance Procedure Manual

- In conjunction with RWSM, review historical data to assist RWSM in planning proactive maintenance activities.

All MAXIMO programming and related documentation will be completed by City MAXIMO support staff.

Task 4.B – Update Inspection Modules
During the Cycle 3 NPDES Permit period ETM developed a series of Inspection Modules. Through conversations with users during the Cycle 3 Permit administrative extension period the following minor updates were identified. The primary purpose of each update is to improve scheduling, resource allocation, coordination, and progress monitoring.

- Reconfigure excel extract tables to eliminate columns not required to complete data analysis and reporting and re-order columns so that related data can be more easily analyzed.
- Add a Dashboard to the MS4 structural Control, IDDE, and HPI Inspection Module to enable supervisory personnel to monitor number of structures inspected relative to permit requirements and increase number or realign inspection assignments.

- The Permit requires that the following structures are inspected annually during the first 2 years of operation. To more easily identify these MS4 structures, that are a part of the City's MS4, ETM will add a column to the Inspection Module tables indicating year installed, based on as-built date. ETM will also add a filter to enable supervisory staff to more easily identify select structures for assignment.
  - Detention and Filtration Systems
  - Dry Retention Systems
  - Dry Detention Systems
  - Wet Detention Systems
  - Underdrain Filter Systems
  - Exfiltration Trench/French Drains
  - Grass Treatment Swales

Task 4.C - Technical Support & Systems Administration
ETM will host and maintain the NPDES web site and the below listed modules developed or updated under during the Cycle 3 Permit period or as part the scope of services described in this document.

User account creation, deactivation and general administration for each of the above modules is the responsibility of City staff designated as administrator(s) for each module. The City's NPDES Administrator or his/her authorized representative is responsible for Master web site user account administration.

ETM will provide initial user training and support for 30 calendar days following initial release of each module developed or updated during the scope of services period. User training and support of

previously released modules updated as part of this scope of services will be limited to 15 calendar days. The City's function group manager or supervisor is responsible for responding to user questions regarding proper usage of each released or updated module and maintaining the integrity of all data entered and the database associated with each module after the 30-day and 15-day user training and support periods described above.

All technical support requests will be forwarded to ETM by the appropriate City function group manager or supervisor via email. The email forwarded will include a description of the issue and related screen shots of the problem encountered and the module generated error notification.

ETM will respond to all technical support requests within 24 hours of receipt. ETM will resolve technical issues in a timely manner but cannot commit to completing all technical support requests within 24 hours. ETM will also inform the City function group manager or supervisor if and when the application will be taken off line to test and post a "fix" to the module.

ETM will assist if requested but is not responsible for resolving connectivity or performance caused by City or FDOT District 2 owned or maintained local area networks, routers, Citrix, air cards or web site access restrictions.

TASK 5 - PROJECT MANAGEMENT

ETM is responsible for the preparation and distribution of monthly status reports to all project stakeholders. The status report will summarize the status of all work in progress, describe work completed and planned as well as any outstanding issues that may impact timely completion of all work authorized under this and/or prior amendments.

Task 6 - REIMBURSABLE SERVICES

The purpose of the Reimbursable Services scope of work is to enable the City's Project Manager and NPDES Coordinator to authorize ETM to provide NPDES Permit special project services on an as needed basis. Reimbursable services authorized may include but not limited to the following.

Task 6.A - PWD NPDES Permit Special Project Requests

- Maps and related structure excel files to support SWAT crew field activities
- SWAT accomplishment mapping and reports
- Creation of City Council, general public, and other special purpose reports or presentation maps
- Special purpose and general work planning MAXIMO work order history/trend reports and maps

Task 6.B - EQD NPDES Permit Special Project Requests

- Update of existing or development of new contractor and staff annual refresher training courses.
- Funding of certification level training courses led by FSA or other state certified trainer.
- Batch close of MS4 structural control inspections for roadside and outfall ditches and connected culverts cleaned or repaired and replaced by SWAT crews.

Task 6.C - M&LM Division NPDES Permit Special Project Requests

- Update of existing or development of new M&LM Inspection Module functions not included as part of "TASK 5 - PERMIT ADMINSTRATION TOOLKIT DEVELOPMENT AND SUPPORT" scope of work.
- Creation of City Council, general public, and other special purpose reports or presentation maps

Budget amounts allocated to each reimbursable service can be redistributed as deemed necessary by the City's Project Manager or authorized representative.

ETM will prepare and submit to the requesting department/division's authorized representative and the City's NPDES Coordinator a statement of work and cost estimate for each special project request requiring more than 40 hours of labor to complete.

For requests that require less than 40 hours of labor to complete, email correspondence between ETM and the COJ authorized representative will be used to authorize and document the work to be performed.

CONTRACT FEE SUMMARY FORMAT FOR ENGINEERING DIVISION
CITY OF JACKSONVILLE, FLORIDA

PART I - GENERAL

1. Project NPDES Engineering and Permit Administration Services	**2. Proposal Number** P-36-16
3. Name of Consultant England-Thims & Miller, Inc.	**4 Date of Proposal** 11/3/2016

PART II - LABOR RELATED COSTS

5. Direct Labor	Hourly Rate	Estimated Hours	Estimated Cost	TOTAL
Principal-in-Charge	$ 80.00	60	$ 4,800.00	
Client Manager	$ 61.55	134	$ 8,247.70	
Project Manager	$ 54.80	816	$ 44,716.80	
Senior Engineer	$ 48.14	1056	$ 50,835.84	
Senior Scientist	$ 41.64	156	$ 6,495.84	
Senor Programmer	$ 39.96	1144	$ 45,714.24	
GIS Programmer	$ 36.64	1272	$ 46,606.08	
GIS Analyst	$ 31.43	1562	$ 49,093.66	
GIS Technician	$ 18.73	1260	$ 23,599.80	
Clerical	$ 23.91	124	$ 2,964.84	
TOTAL DIRECT LABOR		7584		$ 283,074.80
6. Overhead (Combined Fringe Benefit & Administrative)				
Overhead Rate	164.42 % x Total Direct Labor			$ 465,431.59
7. SUBTOTAL: Labor + Overhead (Items 5 & 6)				$ 748,506.39
8. PROFIT: Labor Related Costs (Item 7)		x	10%	$ 74,850.64

PART III - OTHER COSTS

9. Miscellaneous Direct Costs		
Transportation	$ 1,275.68	
Web Site Hosting and Administration	$ 31,800.00	
Reproduction	$ 8,300.00	
Shipping	$ 80.00	
Provide Data Extracts and Maps to Other Agencies	$ 1,000.00	
SUB-TOTAL MISCELLANEOUS DIRECT COSTS	$	$ 42,455.68
10. CREDITS		
	$ 0.00	
CREDITS SUB-TOTAL	$ 0.00	$ -
TOTAL LUMP SUM AMOUNT (Items 5, 6, 8, 9 and 10)		$ 865,812.70
11. Reimbursable Service Costs - Limiting Amount		
A - PWD Special Project Requests	$ 10,000.00	
B - EQD Special Project Requests	$ 10,000.00	
C - M&LM Division Special Project Requests	$ 25,000.00	
SUB-TOTAL REIMBURSABLE SERVICES		$ 45,000.00

PART IV - SUMMARY

TOTAL AMOUNT OF CONTRACT (Lump Sum Plus Reimbursables) (Items 5, 6, 8, 9, 10 and 11)	$ 910,812.70
12. PRIOR CONTRACT AMOUNT	$ -

Equal Opportunity Employer

DEPARTMENT OF PUBLIC WORKS
Engineering Division

MINORITY PARTICIPATION
Attachment to Fee & Contract Negotiations or Contract Amendment

Title: NPDES Engineering and Permit Administration Services
Project No.: P-36-16
Date: November 3, 2016

	Company's Name (Minority Subconsultant)	Classification (Minority Status)	Type of Work (Scope of Services)	Dollar Value
1.)	4Waters Engineering	WBE	GIS Support Services	$170,000
2.)				$
3.)				$
4.)				$
5.)				$
6.)				

Check one:

This is: Original Fee Negotiation X

This is: Contract Amendment No.: _____

Date of this Document: Nov. 3, 2016