### TASK ORDER 5-11 FAC

### ENGINEERING SERVICES FOR PAVEMENT MANAGEMENT AND ASSESSMENT REPORT FOR THE CITY OF KEY WEST

This TASK ORDER 5-11 FAC is issued under the terms and conditions of the MASTER AGREEMENT TO FURNISH GENERAL ENGINEERING SERVICES TO THE CITY OF KEY WEST ("AGREEMENT") between the City of Key West ("CITY") and CH2M HILL, Inc. ("ENGINEER") executed on September 18, 2007, which is incorporated herein by this reference.

#### A. <u>SCOPE OF SERVICES</u>

Specific services which the ENGINEER agrees to furnish are summarized on the attached statement entitled TASK ORDER 5-11 FAC "SCOPE OF SERVICES." The "Scope of Services" defines the work effort anticipated for the Task Order.

This Task Order, when executed, shall be incorporated in and shall become an integral part of the September 18, 2007, Master Agreement.

#### B. <u>TIME OF COMPLETION</u>

Work under this Task Order will begin immediately following acceptance and completed expeditiously subject to coordination with the City of Key West staff. Work may be performed at any time as requested by the CITY within 12 months after the date of execution of this Task Order, at which time the Task Order will expire.

#### C. <u>COMPENSATION</u>

Compensation for the labor portions of TASK ORDER 5-11 FAC, Task A will be on a lump sum fee basis as stipulated in Article 2, Paragraph 2.1 of the AGREEMENT. Compensation for all expenses will be on a Cost Reimbursable-Per Diem basis as stipulated in Article 2, Paragraph 2.2 of the AGREEMENT. The estimated compensation is shown on the attached statement entitled TASK ORDER 5-11 FAC COMPENSATION.

#### D. <u>ACCEPTANCE</u>

By signature, the parties each accept the provisions of this TASK ORDER 5-11 FAC, and authorize the ENGINEER to proceed at the direction of the CITY's representative in accordance with the "SCOPE OF SERVICES." Start date for this project will be no later than ten (10) days after execution of this authorization.

For CH2M HILL, INC.	For CITY OF KEY WEST				
By: Wendy Nero Vice President	By: Jim Scholl City Manager				
	Dated the day of, 2011				
Andrew H. Smyth, P.E. Key West Office Manager	ATTEST:				

### TASK ORDER 5-11 FAC

# ENGINEERING SERVICES FOR PAVEMENT MANAGEMENT AND ASSESSMENT REPORT FOR THE CITY OF KEY WEST

# SCOPE OF SERVICES

### **Project Description**

#### Pavement Management

The City of Key West (CITY) owns approximately 100 miles of paved streets. With estimated costs of \$520,681 per mile for milling and resurfacing costs and at \$2,549,139 per mile for new construction. , the City has a substantial investment in its paved roadway structures. Preservation of existing street systems is a priority for all levels of government. Funds designated for street maintenance and rehabilitation are typically in short supply and must be used as effectively as possible. One proven method to obtain maximum value of available funding for street preservation is through the use of a pavement management system.

Pavement management is the process of planning, budgeting, funding, designing, constructing, monitoring, evaluation, maintaining, and rehabilitating the pavement network to provide maximum benefits for available funds. A pavement management *system* is a set of tools or methods that assists decision makers in finding optimum strategies for providing and maintaining pavement in a serviceable condition over a given time period. A properly implemented paving program enables a city to apply appropriate pavement surface treatments to with the goal of bringing the streets to an acceptable level using reasonable operational costs. Having a prioritized plan assists in advance planning, is necessary to obtain FDOT funding, provides capital planning tools for the City's budget, and helps coordination with other utility projects to avoid disturbing newly paved streets.

The project includes verifying all streets in the City's network, conducting pavement condition surveys on each street to develop a pavement condition rating, and preparing a report including all the data and recommendations for implementing pavement management strategies based funding levels designated by the City.

### Purpose

The CITY has requested that the ENGINEER provide engineering services for a pavement assessment of the City-owned streets of Key West and Stock Island. This Task Order describes the ENGINEER's Scope of Services. Specific activities to be performed under this Task Order include:

- Verification of all streets in the City's network,
- Pavement condition survey of each street to develop a pavement condition rating,
- Preparation of a pavement assessment report including recommendations for pavement management strategies,

# **Scope of Services**

The following tasks describe the activities to be performed and the work products to be prepared by the ENGINEER.

### Task A – Pavement Management Assessment

This task details the activities related to the pavement management assessment. During this task, the ENGINEER will:

- Conduct a kickoff meeting with the CITY to review the existing inventory or mapping of the City's street network, review the specific information that will be collected, and discuss the timeline for data collection.
- Incorporate comments from CITY into the pavement management assessment plan. Proposed budget, priority for maintenance, attitudes towards different techniques, etc. This plan will become the basis of the report. The plan outlines the work that will be done. The report will report the results and recommendations.)
- Verify all streets within the City's network.
- Retain the services of a company that specializes in the condition assessment of roadways using automated data collection and infrared camera technology to conduct a pavement condition survey of each street to assist in the development a pavement condition rating.
- Prepare a draft pavement assessment report.
- Conduct review meeting and incorporate comments from CITY into the pavement management report.
- Prepare a final pavement assessment report including recommendations for pavement management strategies.

### Deliverables

The deliverables for the pavement management assessment will include:

- Draft and final Pavement Management Reports documenting project activities, results, and recommendations based on Key West's constraints and local conditions. The final report will include the following:
  - Network inventory (excluding private streets)
  - Present condition report, including distress factors
  - Operating parameters report and unit prices, including estimated prices for rehabilitation strategies
  - Recommended pavement rehabilitation strategies
  - Forward-view digital images at 25-ft intervals
- Electronic copy of kick off meeting minutes and draft report review meeting minutes
- Two (2) hardcopies and two (2) electronic copies of the draft report will be provided under this task

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• Four (4) hardcopies and four (4) electronic copies of the final report will be provided under this task

### Assumptions

The scope and fee for this Task Order are based on the following assumptions:

- The roadway network of the City-owned streets in Key West and Stock Island includes approximately 100 centerline miles of streets. Condition assessment and right of way asset surveys, and reporting for additional mileage will be considered as an Additional Service.
- The kick off meeting and draft report review meetings are assumed to take place in Key West with minimum of two (2) ENGINEER's staff attending. Other staff may attend via conference call.

# **Obligations of the CITY**

To assist meeting schedule and budget estimates contained in this proposal, the CITY will provide the following:

- A map illustrating the street network and indicating the streets that are owned by the City in GIS format.
- Coordination of parking lane closures for assessment areas (if required).
- Prompt review and comment on all deliverables (within 10 working days of receipt).
- Access to any required facilities.
- Attendance of key personnel at meeting as requested.
- Payment of all permit application fees (if required).

# **Additional Services**

The ENGINEER will, as directed, provide additional services that are related to the project but not included within this Scope of Services. These and other services can be provided, if desired by the CITY, as an amendment to the Task Order. Work will begin for the Additional Services after receipt of a written notice to proceed from the CITY. Additional services may include the following:

- Pavement condition or right of way asset surveys of additional streets over the quantity of 100 centerline miles.
- Databases and reports regarding curb and gutter, sidewalks, ADA ramps, or street catch basins.
- Databases and reports regarding traffic signage, pavement marking, and traffic signals.
- Measure retroreflectivity levels of traffic signs
- Other related work as requested.

# Compensation

The estimated compensation for TASK ORDER 5-11 FAC, is shown on Attachment A, entitled TASK ORDER 5-11 FAC, COMPENSATION.

# **Completion Dates**

The estimated time of completion for TASK ORDER 5-11 FAC is shown in the following table.

Task	Proposed Dates
Conduct kickoff meeting	2-3 weeks after NTP
Pavement condition survey of streets	2-3 months after kickoff meeting
Prepare draft report	1-2 months after receipt of survey data
Prepare final report	2 weeks after receiving City's review comments

# ATTACHMENT A TASK ORDER 5-11 FAC, COMPENSATION

TO\_5-11\_FAC\_STREET\_ASSESSMENT\_(PAVEMENT ONLY)\_021611.DOCX

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### Task Order 5-11 FAC ENGINEERING SERVICES FOR PAVEMENT MANAGEMENT AND ASSESSMENT **REPORT FOR THE CITY OF KEY WEST**

Task		Hours	Labor	Expenses	Total Cost
Task A1 - Pavement Assessment		242	\$30,432	\$51,880	\$82,312
	Total	242	\$30,432	\$51,880	\$82,312

COMPENSATION BREAKDOWN									
Task Order 5-11 FAC									
TASK NO.	TASK DESCRIPTION	HOURLY RATE	TOTAL HOURS	LABOR	EXPENSES	TOTAL COST			
A1	Pavement Assessment								
	Principal PM/Principal Technologist	\$172.00	66	\$11,352		\$11,352			
	Senior Technologist/Senior PM	\$158.00	8	\$1,264		\$1,264			
	Project Engineer	\$122.00	120	\$14,640		\$14,640			
	Technical Editor	\$ 84.00	8	\$672		\$672			
	Tech 3	\$ 74.00	16	\$1,184		\$1,184			
	Clerical	\$ 55.00	24	\$1,320		\$1,320			
	(3) - 3 Day trip to KWF				\$3,580	\$3,580			
	Sub Consultant				\$47,800	\$47,800			
	Printing/Reprographics/Shipping				\$500	\$500			
Pavem	ent Assessment SUBTOTAL		242	\$30,432	\$51,880	\$82,312			
PROJE	CT TOTALS								
	TOTAL HOURS		242						
	TOTAL FEE ESTIMATE			\$30,432	\$51,880	\$82,312			
TO 5-1	1 FAC TOTAL		242	\$30,432	\$51,880	\$82,312			

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