

TASK ORDER 3-15 SW

**ENGINEERING SERVICES FOR LONG TERM CARE COMPLETION CERTIFICATION
OF THE STOCK ISLAND LANDFILL**

This TASK ORDER 3-15 SW 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 Engineers, Inc. ("Engineer") executed on November 19, 2012, which is incorporated herein by this reference.

A. SCOPE OF SERVICES

Specific services which the Engineer agrees to furnish are summarized on the attached statement entitled TASK ORDER NO. 3-15 SW, "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 November 19, 2012, Master Agreement.

B. TIME OF COMPLETION

Work under this Task Order will begin immediately following acceptance and completed expeditiously subject to coordination with the City staff.

C. COMPENSATION

Compensation for the labor portions and all expenses of TASK ORDER 3-15 SW, Tasks A-H will be on a Cost Reimbursable-Per Diem basis as stipulated in Article 5, Paragraph 5.1.2 of the AGREEMENT The estimated compensation is shown on the attached statement entitled TASK ORDER 3-15 SW COMPENSATION.

D. ACCEPTANCE

By signature, the parties each accept the provisions of this TASK ORDER NO. 3-15 SW, 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 Engineers, Inc.

For City of Key West

By: _____
William Beddow, P.E.
Vice President

By: _____
Jim Scholl
City Manager

Sean McCoy, P.E.
Key West Project Manager

Dated the ____ day of _____, 20__

ATTEST: _____

TASK ORDER 3-15 SW

ENGINEERING SERVICES FOR LONG-TERM CARE COMPLETION CERTIFICATION OF THE STOCK ISLAND LANDFILL

SCOPE OF SERVICES

Project Description

This Scope of Services includes work requirements to certify completion of the long-term care period of the Stock Island Landfill ("Landfill"). Specific activities include:

- Performing a review of the long-term care maintenance plan and data derived during the twenty years of long-term care,
- Conducting a teleconference Florida Department of Environmental Protection ("FDEP") key personnel to discuss completion of long-term care issues, expected submittals, and City future responsibilities,
- Obtaining topographic survey data for subsidence evaluation, if required by FDEP as part of the pending stabilization report,
- Performing a site inspection by the professional engineer to assess the cover system integrity and closure appurtenances,
- Compiling and evaluating groundwater data collected throughout the post-closure period with emphasis on the past five years,
- Preparing a letter outlining future City responsibilities for the care of the property,
- Finalizing review of long-term care information and preparing a stabilization report, as required by 62-701, Florida Administrative Code ("F.A.C.") (*current Rule*) The Stabilization Report will be incorporated in the Completion of Long-Term Care Certification Report,
- Preparing a Completion of Long-Term Care Certification Report in accordance with 62-701, F.A.C. A signed and sealed copy of the report will be submitted to FDEP following City review and approval.

Purpose

The goal of certifying completion of the long-term care period is to officially end FDEP Solid Waste Section long-term care requirements of the Landfill.

Scope of Services

Task A – Review of the Long-Term Care Maintenance Plan and Historical Data

The Engineer will review the long-term care maintenance plan, related data, consent order and related addendums, and obtainable maintenance requirements agreed to throughout the twenty year (20) long-term care period. To achieve this, the Engineer will collect record documentation and data available through the City, Engineer's files, and FDEP (primarily by

means of the online porthole, "OCULUS"). Long-term care maintenance requirements and related data will be evaluated and tabulated to determine what requirements were achieved, and where deficiencies may need to be addressed as part of long-term care certification.

Deliverable

- Data request memorandum (electronic)

Task B – Conduct Teleconference with FDEP

Within two (2) weeks of receipt of the data requested under Task A, the Engineer will conduct a teleconference with FDEP officials to discuss details pertaining to certification of completion of the long-term care period of the Landfill, as well as maintenance expectations extending beyond the completion of the long-term care period. The Engineer will prepare a meeting agenda for distribution and discussion with attendees. The teleconference is expected to last approximately two (2) hours.

Following the meeting, the Engineer will prepare a draft meeting summary, identifying critical discussion points for review and comment by all.

Deliverables

- Agenda (electronic)
- Draft Meeting Summary (review by all) (electronic)
- Final Meeting Summary (electronic)

Task C - Conduct Topographic Surveying

The Engineer shall retain a professional land surveyor to conduct a topographic survey of the Landfill site. The survey shall locate all known existing infrastructure and other physical features within the survey limits depicted in Attachment A, including existing above ground utilities, stormwater basin and pipe invert elevations, benchmarks, and monitoring well locations.

Elevations will be provided in accordance with accepted standards using NGVD 1929 or NGVD 88 Datum. Horizontal coordinates shall be in U.S. Survey feet and reflect a projection of grid coordinates in the State of Florida Plane Coordinate System Transverse Mercator-West Zone, NAD 1983-1990. The topographic map shall be at a scale of 1 inch = 50 feet with 1-foot contour intervals.

An allowance of \$15,294.00 is included as part of this task to cover the cost of retaining a professional land surveyor.

Deliverables

- Signed and sealed topographic survey of the Landfill site
- Electronic digital terrain model of topographic survey in format compatible with MicroStation InRoads

Task D – Inspection of Closure Cover System by Engineer

The senior project manager and engineer certifying the Completion of Long-Term Care Report will conduct an inspection of the Landfill, identify potential long-term issues, create a photographic record for the Certification of Completion of Long-Term Care Report, and

prepare a list of items of work to be addressed. The inspection will include the entire project site including the final cover system, the passive landfill gas system, the secondary stormwater management system, the perimeter ditches and detention ponds, and the perimeter road and articulating block revetment. CH2M HILL will review any deficiencies with the City.

For scoping purposes, one (1) full day of travel is scheduled for the inspection, and one (1) full day is allotted for the inspection and completion of long-term care reporting.

Deliverable

- List of items requiring attention prior to drafting a Certification of Completion of Long-Term Care Report (electronic)

Task E – Review and Report on Groundwater Monitoring Plan Results

The Engineer will review and subsequently summarize in a report groundwater data collected throughout the long-term care period and specifically the last five (5) years. The Engineer assumes this data is available electronically either from the City or through a file search within the FDEP OCULUS database.

The Final Groundwater Report summarizing the data taken throughout the long-term care period will be prepared, a draft sent to the City for review, then finalized.

Deliverable

- A draft and final Groundwater Report summarizing the data taken throughout the long-term care period. (The final Groundwater Report will be integrated into the Certification of Completion of Long-term Care Report.)

Task F – City and Engineer Meeting to Discuss Future Landfill Maintenance Obligations

The Engineer will conduct a teleconference with City officials to discuss future Landfill maintenance obligations extending beyond the completion of long-term care. The Engineer will prepare a meeting agenda with a list of ongoing maintenance issues for distribution and discussion with attendees.

In addition, although outside the scope of the FDEP Solid Waste Section, the facilities stormwater permit and groundwater remediation requirements will be evaluated and reviewed with the City for future management of the Landfill.

Following the meeting, the Engineer will prepare a draft meeting summary, identifying future Landfill maintenance obligations discussed and agreed to by attendees for review and comment.

Deliverables

- Agenda (electronic)
- Draft Meeting Summary (review by all) (electronic)
- Final Meeting Summary (electronic)
- Draft and final Letter recommending City future Landfill maintenance obligations

Task G - Stabilization Report

The Engineer will produce a Stabilization Report meeting the requirements in Chapter 62-701.620(6), F.A.C. The Report will address stabilization of the landfill. The deliverable will include the technical report required in Paragraph 62-701.510(8)(b), F.A.C., and will also address subsidence, barrier layer effectiveness, storm water management, and gas production and management.

A draft stabilization report will be submitted for review and comment by the City. The Engineer will adjudicate City comments and finalize the report for inclusion in the final Certification of Completion of Long-Term Care Report.

Deliverable

- Draft and Final Stabilization Report

Task H - Completion of Long-Term Care Certification Report

At completion of the long-term care period for the Landfill, FDEP requires that the City prepare a Certification of Completion of Long-Term Care Report, signed and sealed by a professional engineer, for submittal to FDEP.

The Engineer will prepare a draft Certification of Completion of Long-term Care Report and submit the report for review and comment by the City. The Engineer will adjudicate City comments and finalize the report for inclusion in the final Certification of Completion of Long-Term Care Report prior to submission to FDEP. Following submittal to FDEP, the Engineer will respond to up to 2 (two) Requests for Additional information (RAIs) within this task order. Once accepted by FDEP, the Completion of Long-term Care Certification Report should be placed in the operating record as it will determine the date of completion of the Landfill long-term care period upon FDEP acceptance.

Unless directed otherwise by FDEP, the Certification of Completion of Long-Term Care Report will include the certified topographic survey of the Landfill site, the final Groundwater Monitoring Report summarizing the data taken throughout the long-term care period, a letter recommending City future Landfill maintenance obligations, and the Final Stabilization Report.

Deliverables

- Certification of Completion of Long-Term Care Report with attachments
- Up to two (2) Responses to FDEP Requests for Information (if needed)

Assumptions

The following assumptions were used in the development of this Task Order

- The work stated in this Task Order will be completed in calendar year 2016.
- Within one (1) week of the City's issuance of a Notice to Proceed, the Engineer will submit a data request memorandum requesting background data for the Landfill. The City will respond within two (2) weeks of the request.

- Any work that must be performed based on the assessment under Task D will not be performed by CH2M under this Task Order without written modification and additional compensation. Legal, easement, or plat surveys will not be required.
- The City will pay for all permit application fees.
- United States Army Corp of Engineers permit/ authorization or modification of existing 404 permit will not be required for this project; according a budget for such services has not been included.
- Two (2) responses to FDEP RAIs assumed.
- CH2M HILL shall not be responsible for Regulatory Agency delays.

Obligations of the City

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

- Prompt review and comment on all deliverables (within 10 working days of receipt)
- Facilitate access to any required facilities
- Attendance / Availability (teleconferences) of key personnel at meetings as requested
- Payment of all permit application fees

Additional Services

N/A

Compensation

The estimated compensation for TASK ORDER NO. 3-15 SW, is shown on Attachment B entitled TASK ORDER NO. 3-15 SW, COMPENSATION.

Completion Dates

Table 1 below presents the estimated timeframe to complete the scope of work following NTP.

Activity	Target Completion Date Following NTP
Data Request Memorandum Issued	1 Week
Data Received	3 Weeks
FDEP Teleconference	5 Weeks
Topographic Surveying	6 weeks
Inspection of Closure Cover System	6 Weeks
Groundwater Monitoring Plan Summary Memorandum	8 Weeks
Future Landfill Maintenance Obligations Meeting	10 Weeks
Stabilization Report	12 Weeks
Long-Term Care Certification Report	20 Weeks

Attachment A



ATTACHMENT B COMPENSATION BREAKDOWN						
Task Order 3-15 SW Long Term Care Completion Certification of the Stock Island Landfill						
TASK NO.	TASK DESCRIPTION	HOURLY RATE	TOTAL HOURS	LABOR	EXPENSES	TOTAL COST
A	Plan Review / Historical Data Search					
	Sr. Technologist/Sr. Project Manager	\$ 170.00	12	\$2,040		\$2,040
	Project Manager, Engineering Specialist	\$ 157.00	2	\$314		\$314
	Project Engineer	\$ 135.00	28	\$3,780		\$3,780
	Clerical	\$ 63.00	4	\$252		\$252
	Subtotal Task A		46	\$6,386	\$0	\$6,386
B	FDEP Teleconference					
	Sr. Technologist/Sr. Project Manager	\$ 170.00	8	\$1,360		\$1,360
	Project Manager, Engineering Specialist	\$ 157.00	2	\$314		\$314
	Project Engineer	\$ 135.00	16	\$2,160		\$2,160
	Clerical	\$ 63.00	14	\$882		\$882
	Subtotal Task B		40	\$4,716	\$0	\$4,716
C	Topographic Survey					
	Sr. Technologist/Sr. Project Manager	\$ 170.00	3	\$510		\$510
	Project Manager, Engineering Specialist	\$ 157.00	2	\$314		\$314
	Project Engineer	\$ 135.00	2	\$270		\$270
	Associate Engineer	\$ 120.00	2	\$240		\$240
	Clerical	\$ 63.00	4	\$252		\$252
	Survey Subcontractor (Avirom)				\$15,294.00	
	Subtotal Task C		13	\$1,586	\$15,294	\$16,880
D	Closure Cover System Inspection					
	Sr. Technologist/Sr. Project Manager	\$ 170.00	24	\$4,080		\$4,080
	Project Manager, Engineering Specialist	\$ 157.00	8	\$1,256		\$1,256
	Project Engineer	\$ 135.00	26	\$3,510		\$3,510
	Travel Expenses				\$2,200	
	Subtotal Task D		58	\$8,846	\$2,200	\$11,046
E	Groundwater Monitoring Review/Report					
	Sr. Technologist/Sr. Project Manager	\$ 170.00	12	\$2,040		\$2,040
	Project Engineer	\$ 135.00	60	\$8,100		\$8,100
	Staff Engineer I	\$ 94.00	40	\$3,760		\$3,760
	Subtotal Task E		112	\$13,900	\$0	\$13,900
F	Future Maintenance Obligations					
	Sr. Technologist/Sr. Project Manager	\$ 170.00	9	\$1,530		\$1,530
	Project Manager, Engineering Specialist	\$ 157.00	6	\$942		\$942
	Project Engineer	\$ 135.00	17	\$2,295		\$2,295
	Expenses				\$50	
	Subtotal Task F		32	\$4,767	\$50	\$4,817
G	Stabilization Report					
	Sr. Technologist/Sr. Project Manager	\$ 170.00	12	\$2,040		\$2,040
	Project Manager, Engineering Specialist	\$ 157.00	1	\$157		\$157
	Project Engineer	\$ 135.00	62	\$8,370		\$8,370
	Clerical	\$ 63.00	4	\$252		\$252
	Expenses				\$50	
	Subtotal Task G		79	\$10,819	\$50	\$10,869
H	Completion Long Term Care Cert. Report					
	Sr. Technologist/Sr. Project Manager	\$ 170.00	16	\$2,720		\$2,720
	Project Manager, Engineering Specialist	\$ 157.00	1	\$157		\$157
	Project Engineer	\$ 135.00	32	\$4,320		\$4,320
	Expenses				\$50	
	Subtotal Task H		49	\$7,197	\$50	\$7,247
	Sub Totals		429	\$58,217	\$17,644	
	TOTAL FEE ESTIMATE					\$75,861