TASK ORDER 3-21 SWR AMENDMENT 1

ENGINEERING SERVICES FOR THE CITY OF KEY WEST COMPOST MARKET RESEARCH AND PLANNING

This AMENDMENT to TASK ORDER 3-21 SWR is issued under the terms and conditions of the AGREEMENTTO FURNISH GENERAL ENGINEERING SERVICES TO THE CITY OF KEY WEST

("AGREEMENT") between the City of Key West ("CITY") and CH2M HILL, Engineers, Inc. ("CONSULTANT") dated November 3, 2017 which is incorporated herein by this reference.

A. SCOPE OF SERVICES

Specific services which the CONSULTANT agrees to furnish are summarized on the attached statement entitled TASK ORDER 3-21 SWR AMENDMENT 1 "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 3, 2017, 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 of Key West staff.

C. COMPENSATION

Compensation for the labor portions of TASK ORDER 3-21 SWR AMENDMENT 1, Task A will be on a lump sum fee basis as stipulated in Article 5, Paragraph 5.1.1 of the AGREEMENT. Compensation for equipment procurement and all expenses 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 3-21 SWR AMENDMENT 1 COMPENSATION.

D. ACCEPTANCE

By signature, the parties each accept the provisions of this TASK ORDER 3-21 SWR AMENDMENT 1 and authorize the CONSULTANT 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 two (2) days after execution of this authorization.

For	CH2M HILL ENGINEERS, INC.	For CITY OF KEY WEST
Ву:		By:
	Sirpa H. Hall, P.E.	Patti McLauchlin
	Senior Business Vice President	Interim City Manager
		Dated theday of, 2022
	Elaine Tolon, P.E.	
	Key West Project Manager	ATTEST:

TASK ORDER 3-21 SWR AMENDMENT 1

ENGINEERING SERVICES FOR THE CITY OF KEY WEST COMPOST MARKET RESEARCH AND PLANNING

SCOPE OF SERVICES

Project Background

Currently, Jacobs Engineering, Inc. (JACOBS) is working with the City of Key West (City), under Task Order 03-21, on a compost pilot study being operated at the Key West Wastewater Treatment Plant Facility. The purpose of this study is to evaluate the potential of composting wastewater solids as a management method to eliminate the land-distance hauling and disposal cost. It is anticipated that the study will be completed in April 2022.

The City has expressed interest in also evaluating the potential market for the compost product for local landscape use.

Project Description

Jacobs Engineering, Inc. (JACOBS) in partnership with R. Alexander Associates, Inc. (RAA) are pleased to submit this proposal for the Key West Compost Market Research and Planning proposal. Jacobs and RAA will be working in coordination to evaluate the potential of the compost and mulch markets in Key West, as well as developing a preliminary marketing plan for its perspective products. As presented in their attached proposal (Attachment B), RAA has unique experience in compost marketing and familiarity with the Florida marketplace.

Scope of Services

Execution of the Compost Market Research and Planning is proposed to occur under three tasks as outlined below.

Task 1 – WWTP Audit/ Tour and Promotional Event

- 1. Facility Audit/Tour
 - a. The Consultant's Principle will tour the Key West WWTP and complete a facility audit and pilot product review. The audit will allow the Consultants to meet with operational, management, and consulting staff, and evaluate product in greater detail. It will also allow the Consultants to review any distribution and marketing plans (and data) in detail, as well as evaluate its current product sales/distribution infrastructure. Further, the audit will allow the Consultants to understand the history of the program, as well as elicit information regarding product feedstocks and expected 'finished' products, current markets being considered, any potential large-scale end users, identify any support services needed, regulatory constraints, etc. Also, the Consultants and Key West staff will discuss any existing issues which may impede the development of a compost distribution/marketing program. The Consultants will also have in-depth conversations with the management team in order to determine overall distribution/marketing program goals, revenue requirements, evaluate staff ideas, and explore potential distribution/marketing strategies for its bulk compost products.
 - One JACOBS CONSULTANT to attend one day of the facility audit/tour.
 - b. Deliverable: Agenda and Meeting minutes
 - c. Assumptions: City staff and Key West WWTP Operations team will be available for meetings with RAA and JACOBS Staff. Key West WWTP staff will provide access to the facility, as needed.

2. Pilot Product Review

- a. The Consultant will review and evaluate any analytical testing data from the composting pilot study to determine the product's suitability for a variety of potential end uses. It is understood that the pilot compost will be tested by a US Composting Council Seal of Testing Assurance Program certified lab, as well as a lab certified to test for heavy metals and pathogens for the Florida DEP. This data may assist the Consultant in suggesting process modifications which may improve the product's characteristics, marketability and/or value. This process will also compare the product to the Florida DOT and/or other standards, in order to consider potential product modifications, if deemed necessary, to enter specific markets, as well as suggest a line of compost-based products. Requirements necessary for registering the product for sale through the Florida Department of Agriculture and Consumer Services will also be outlined.
 - JACOBS to assist RAA in compiling analytical testing data from the compost pilot study and review RAA's evaluation and conclusions.
- b. Deliverable: Suggested process modifications to improve marketability and/or value; recommendations of potential product

- modifications as needed; outline of requirements necessary for registering the product for sale through Florida Department of Agriculture and Consumer services.
- c. Assumptions: As part of original Task Order (TO 3-21 SWR), pilot compost will be tested by a US Composting Council Seal of Testing Assurance Program certified lab, as well as a lab certified to test for heavy metals and pathogens for the Florida DEP

3. Promotional/Educational Event

- a. The Key West promotional/educational trip will be planned to take place during the same trip the Consultant takes to complete the facility audit. The event will be used to promote the production and utilization of a Key West biosolids compost to end users, specifiers, and the FDEP. RAA will prepare and complete a PowerPoint presentation pertaining to product end use and benefits at the event.
 - Two JACOBS CONSULTANTS to attend the promotional/educational event and assist both RAA and the City in arranging the event. JACOBS to review presentation material.
- b. Deliverable: Draft and final PowerPoint Presentation for promotional and education event.
- c. Assumptions: City staff to reserve location for promotional/educational event and assist with inviting stakeholders.

Task 2 – Market Research and Planning

- 1. Market Research and Planning
 - a. To further evaluate regional markets for the biosolids compost product(s), the Consultant will complete some preliminary market research. The goal will be to evaluate the overall marketability and value of the product(s) and identify potential purchasers and/or marketing partners. RAA will complete market research within the regional horticultural industries (e.g., landscapers, nurseries, topsoil dealers, etc.). As necessary, agricultural, and environmental markets will also be investigated. Markets for fine and coarse composts will be evaluated, as well as a possible mulch product.

Data collection will be completed using a standard survey form in order to determine industry interest in the products and to obtain valuable qualitative and quantitative marketing data. Data collection will be focused on current/potential end users/resellers and competing product manufacturers. Data collection will also identify the most easily accessible markets, potential impediments to market development, competition, product value and market positioning, etc. Surveying will initially be completed through the telephone, then in order to improve data collection and long-term market development efforts, a series of companies will be surveyed in-person (face-to-face / likely 5-10 companies). Data regarding potential applications, product quality issues, seasonality of use, usage volumes, viable geographical market (based on shipping costs and competitors) and product biases will also be obtained as possible.

This market research task will likely yield Key West with a list of qualified customer leads. It is understood that RAA's main goal within this task is to

better understand the marketplace and develop a preliminary marketing plan, but another goal will be to identify potential buyers for the product. Further, Key West staff may accompany RAA on some of these market research calls, if desired. Along with the market research, market demographics and distance to market analysis will be completed, and a contact list will be developed for the market research (and future market development efforts).

One JACOBS CONSULTANT to attend up to two days of the in-person company surveys with RAA. JACOBS to review survey to be used for data collection and provide guidance to RAA on market research.

- b. Deliverable: List of qualified customers leads, identify potential buyers for the compost product and develop preliminary marketing plan.
- c. Assumptions: Initial company surveys to be conducted virtually. Five to ten companies will be surveyed in person.

Task 3 – Memo Report

- 1. Preparation of Report and Marketing Plan
 - a. The Consultant will evaluate the information obtained in Tasks 1 and 2 and will use it as a basis for a short-written report and marketing plan. The memo report will be written in concise fashion in order to focus our efforts in market and product development. Any specific requirements necessary for enhancing market penetration, as well as other relevant information will also be provided in the report.

Among other subjects, the report will provide

- Market research findings,
- Professional market demographics (and distance to market analysis),
- List of marketing suggestions, and a
- List of any new potential areas of market expansion (e.g., market segments, applications, products) and customer leads.

JACOBS to review the report and marketing plan to verify that it meets City needs and expectations and is aligned with the findings of the Compost Pilot Study completed under Task 3-21 SWR.

- b. Deliverable: Draft and final report and marketing plan
- c. Assumptions: All necessary feedback and input from the City to complete the final memo report will be provided through Tasks 1 and 2 of this Task Order.

Task 4 – Project Management and Administration

- 1. Project Management and Administration for Compost Market Research and Planning
 - a. JACOBS Scope: Project manager to conduct monthly progress phone calls with the City and RAA as to completed and planned project activities, project schedule updates, budget and billing.
 - b. Deliverable: Monthly phone calls and project progress invoices
 - c. Assumptions: Project to be completed within 4 months of notice to proceed.

Assumptions

In addition to those listed above, the following assumptions were used in the development of this Task Order:

- All electronic deliverables will utilize Adobe format (pdf), or another common software format as noted in scope.
- Meetings may be held utilizing on-line resources (Microsoft Teams, or similar) for all or some of the attendees.
- CONSULTANT will reasonably rely upon the accuracy, and completeness of any information/data provided by the CITY or other third parties.

Obligations of the CITY

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

- City of Key West will assist in the coordination of the Promotional/Educational Event by reserving a location for the event and inviting stakeholders.
- Prompt review and comment on all deliverables.
- Facilitate access to any required facilities.
- Attendance of key personnel at meeting as requested.

Additional Services

The CONSULTANT 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, but are not limited to, the following:

- Additional design services if requested by the CITY
- Bid or construction phase services
- Permitting Services

Compensation

The estimated compensation for TASK ORDER 3-21 SWR AMENDMENT 1 Lump Sum of **\$46,745.00**. Compensation listed by task and per diem rate is included as Attachment A.

Schedule

Once Notice To Proceed is issued by the CITY, this project is estimated to be completed within 4 months. The work of this Task Order is to begin after the Compost Pilot Study (Task Order 03-21) has been completed.

Attachment A COMPENSATION

Key West Composting Facility Pilot Study Compensation										
	Role	PM	Senior Consultant	Process	Admin	Total Hours	Labor	Expenses	Travel	Total
Rate Category 2022 Rate		Engr. 5 \$204.71	Engr. 8 \$264.09	Engr. 3 \$151.63	Clerical \$80.88					
Task	A – Market Research and Planning									
1.0	WWTP Audit / Tour & Promotional Event		12	16		28	\$5,595		\$2,500	\$8,095
2.0	Market Research and Planning		4	24		28	\$4,695		\$1,500	\$6,195
3.0	Memo Report		4	8		12	\$2,269			\$2,269
4.0	Project Management and Administration	8			8	16	\$2,285			\$2,285
	Jacobs Labor and Expenses Subtotal	8	20	48	8	84	\$14,845	\$0	\$4,000	\$18,845
	Sub Consultant - R Alexander Associates, Inc.					112	\$22,400	\$0	\$5,500	\$27,900
	Task Order 3-21 Total	8	20	48	8	196	\$37,245	\$0	\$9,500	\$46,745

Attachment B

R. Alexander Associates, Inc.	- Key West	Compost Mark	et Research and	l Planning Propos	sal

R. Alexander Associates, Inc.

1212 Eastham Drive Apex, NC 27502 Office (919) 367-8350, Mobile (919) 349-0460 e-mail: Ron@alexassoc.net

11/18/21

Key West Compost Market Research and Planning Proposal

The Key West Wastewater Treatment Facility (Key West) is working with Jacobs Engineering to operate an aerated static pile compost demonstration project. This is expected to occur in the spring of 2022 and will allow for tours by the Florida DEP and other interested parties. If successful, Key West will consider composting it's biosolids, as a biosolids management technique, in the future. The plan would be to compost the Key West biosolids with yard waste generated in the region; potentially producing 8,600 cubic yards of Class AA compost a year. This feedstock recipe could produce both a fine compost for soil incorporation and turf topdressing, as well as coarse composts which could be used in erosion control and landscape mulching.

R. Alexander Associates, Inc. (RAA), possesses unique experience in compost marketing, as well as great familiarity with the Florida marketplace. It has prepared the following proposal to assist Key West in evaluating potential compost and mulch markets, as well as developing a preliminary marketing plan for its perspective products.

TASKS

TASK 1 - WWTP AUDIT / TOUR AND PROMOTIONAL EVENT

RAA's Principle will tour the Key West WWTP and complete a facility audit and pilot product review. The audit will allow RAA to meet with operational, management, and consulting staff, and evaluate product in greater detail. It will also allow RAA to review any distribution and marketing plans (and data) in detail, as well as evaluate its current product sales/distribution infrastructure. Further, the audit will allow RAA to understand the history of the program, as well as elicit information regarding product feedstocks and expected 'finished' products, current markets being considered, any potential large-scale end users, identify any support services needed, regulatory constraints, etc. Also, RAA and Key West staff will discuss any existing issues which may impede the development of a compost distribution/marketing program. RAA will also have in-depth conversations with the management team in order to determine overall distribution/marketing program goals, revenue requirements, evaluate staff ideas, and explore potential distribution/marketing strategies for its bulk compost products.

Further, RAA will review and evaluate any analytical testing data from the composting pilot study to determine the product's suitability for a variety of potential end uses. It is understood that the pilot compost will be tested by a US Composting Council Seal of Testing Assurance Program certified lab, as well as a lab certified to test for heavy metals and pathogens for the

Florida DEP. This data may assist RAA in suggesting process modifications which may improve the product's characteristics, marketability and/or value. This process will also compare the product to the Florida DOT and/or other standards, in order to consider potential product modifications, if deemed necessary, to enter specific markets, as well as suggest a line of compost-based products. Requirements necessary for registering the product for sale through the Florida Department of Agriculture and Consumer Services will also be outlined.

The facility audit trip will be planned to take place during the same trip RAA takes to complete the Key West promotional/educational event. The event will be used to promote the production and utilization of a Key West biosolids compost to end users, specifiers, and the FDEP. RAA will prepare and complete a PowerPoint presentation pertaining to product end use and benefits at the event.

TASK 2 - MARKET RESEARCH AND PLANNING

To further evaluate regional markets for the biosolids compost product(s), RAA will complete some preliminary market research. The goal will be to evaluate the overall marketability and value of the product(s) and identify potential purchasers and/or marketing partners. RAA will complete market research within the regional horticultural industries (e.g., landscapers, nurseries, topsoil dealers, etc.). As necessary, agricultural, and environmental markets will also be investigated. Markets for fine and coarse composts will be evaluated, as well as a possible mulch product.

Data collection will be completed using a standard survey form in order to determine industry interest in the products and to obtain valuable qualitative and quantitative marketing data. Data collection will be focused on current/potential end users/resellers and competing product manufacturers. Data collection will also identify the most easily accessible markets, potential impediments to market development, competition, product value and market positioning, etc. Surveying will initially be completed through the telephone, then in order to improve data collection and long-term market development efforts, a series of companies will be surveyed in-person (face-to-face / likely 5-10 companies). Data regarding potential applications, product quality issues, seasonality of use, usage volumes, viable geographical market (based on shipping costs and competitors) and product biases will also be obtained as possible.

This market research task will likely yield Key West with a list of qualified customer leads. It is understood that RAA's main goal within this task is to better understand the marketplace and develop a preliminary marketing plan, but another goal will be to identify potential buyers for the product. Further, Key West staff may accompany RAA on some of these market research calls, if desired. Along with the market research, market demographics and distance to market analysis will be completed, and a contact list will be developed for the market research (and future market development efforts).

TASK 3 - MEMO REPORT

RAA will evaluate the information obtained in Tasks 1 and 2, and will use it as a basis for a short written report and marketing plan. The memo report will be written in concise fashion in order to focus our efforts in market and product development. Any specific requirements

necessary for enhancing market penetration, as well as other relevant information will also be provided in the report.

Among other subjects, the report will provide

- Market research findings,
- Professional market demographics (and distance to market analysis),
- List of marketing suggestions, and a
- List of any new potential areas of market expansion (e.g., market segments, applications, products) and customer leads.

TASK BUDGETS AND TIMEFRAME

RAA's project budget is \$27,900 which includes billable hours and reimbursable expenses. Mr. Alexander's time is billed out at \$200 per hour, which includes the cost of ancillary RAA support staff for which there will be no additional billing. Reimbursable expenses will be substantiated with receipts and include travel costs and a contact list. Project Tasks 1 through 3 are expected to be completed over a 3-to-4-month period (depending on the start date), once the contract is signed.

Detailed budget

Tasks	Budget					
	Trips	Manpower	Expenses	Totals		
1. WWTP Audit / Tour & Promotional Event	1	\$8,000 (40hrs)	\$2,500	\$10,500		
2. Market Research and Planning	1	\$11,200 (56hrs)	\$3,000*	\$14,200		
3. Memo Report	0	\$3,200 (16hrs)	\$0	\$3,200		
TOTALS	3	\$22,400	\$5,500	\$27,900		

^{*}includes a marketing database, in electronic form

RAA reserves the right to move budget funds from task to task in order to best complete the overall project tasks and do so within the total budget. To enhance the timeliness of the market development efforts, RAA intends work to complete certain tasks simultaneously.

PROJECT STAFFING – Ron Alexander

Mr. Alexander will serve as the project technician and manager. He is one of the nation's most experienced biosolids compost marketing consultants, and has had several composting clients in Florida and the Southeastern US. Mr. Alexander possesses over 35 years of experience in compost marketing, market research and planning, and product development. He also possesses extensive practical experience in the production and marketing of biosolids compost, having actually marketing it from 8 facilities (while running a compost brokerage company in the 1980's and 1990's). Over his career, Mr. Alexander has been responsible for developing markets for millions of cubic yards of compost, and other soil amendments. Before becoming a consultant, he was Vice President of Marketing for PRSM, a West Chester, Pennsylvania based biosolids compost marketing firm (and a later one on West Palm Beach, Florida). Since becoming a consultant, he has completed over 500 compost and organic recycled product marketing projects.

Mr. Alexander has served as Co-Chairperson of the US Composting Council's Market Development Committee, and has authored several 'landmark' publications related to compost end use, sales and marketing. These publications include the 'Field Guide to Compost Use', and 'Landscape Architecture Specifications for Compost Utilization', and most recently, 'The Practical Guide to Compost Marketing and Sales'. He possesses a formal education in the field of agriculture/horticulture and has training and extensive experience in sales, market research and planning, sales training, and sales management.

Other Experience

- Completed many compost market research and development projects in Florida, working with private and public entities,
- Dealings with the University of Florida and Florida DOT,
- Industry Liaison to the American Association of Plant Food Officials (AAPFCO, State Department of Agricultural officials responsible for registering fertilizers and soil amendments),
- Recipient of the US Composting Council's Hi Kellogg Award for Outstanding Service to the Composting Industry and its Clean Water Award,
- Possesses an extensive library of product end use research, literature and advertisement examples.
- Certified composter in Washington State and Maryland,
- B.S. in Horticulture.