

TASK ORDER 2-22 ENG

DESIGN OF STORMWATER DRAINAGE AT GREEN STREET, ELIZABETH STREET AND CAROLINE STREET FROM SIMONTON STREET

This TASK ORDER 2-22 ENG 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. ("CONSULTANT") executed on November 03, 2017, amended on April 19, 2021, which are incorporated herein by this reference.

A. SCOPE OF SERVICES

Specific services which the CONSULTANT agrees to furnish are summarized on the below document entitled TASK ORDER 2-22 ENG, "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 AGREEMENT.

B. TIME OF COMPLETION

Start date for this project will be no later than ten days after execution of this authorization. The duration of TO 2-22 ENG is estimated to be twelve (12) months.

C. COMPENSATION

Compensation for the labor will be on a lump sum fee basis as stipulated in Article 5, Paragraph 5.1.1 of the AGREEMENT. Compensation for all expenses will be on a Cost Reimbursable-Per Diem basis as stipulated in Article 5, Paragraph 5.1.2 of the AGREEMENT.

D. ACCEPTANCE

By signature, the parties each accept the provisions of this TASK ORDER 2-22 ENG, and authorize the CONSULTANT to proceed at the direction of the CITY's representative in accordance with the "SCOPE OF SERVICES."

For CH2M HILL Engineers, Inc.

For CITY OF KEY WEST

By: _____
Sirpa H. Hall
Sr. Business Vice President

By: _____
Patti McLauchlin
City Manager

Elaine Tolon
Project Manager

Dated the ____ day of _____, 2022

ATTEST: _____

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SCOPE OF SERVICES

Background

The City of Key West (CITY) will be contracting KCI under a separate Engineering Services Task Order to design the roadway and streetscape improvements on Greene Street (from Simonton Street to Elizabeth Street), on Elizabeth Street (from Greene Street to Caroline Street) and Caroline Street (from Elizabeth Street to Simonton Street). Per KCI's scope of services, the approximately 1,360 linear feet of existing roadway will be reconstructed "to implement a two (2) lane undivided roadway, new concrete sidewalks (minimum width 6 feet), a 5' wide bicycle lane in the southwest direction, parallel parking on one side of the road (northeast direction), landscape improvements, and decorative lighting installations."

The CITY has requested that the CONSULTANT provide the evaluation and design of the stormwater drainage and resiliency improvements needed for this roadway work. The CONSULTANT is best suited to provide these services as they have provided the City with other resilient engineering services through the Sea Level Rise Policy Development (TO 1-21 ENG) and Stormwater Master Plan 2021 Update (2-21 STM).

Scope of Services

Task A - Project Kickoff and Coordination with KCI

CONSULTANT will conduct a project kickoff meeting between City Staff, KCI and CONSULTANT's project Manager, with CONSULTANT's Drainage and Civil Engineers participating via conference call. The purpose of this meeting will be to discuss components of the project, design, coordination with KCI design team and to set delivery schedule for design milestones. Following the kick-off meeting, project design will commence, with agreed to review milestones for the CITY. The CONSULTANT will coordinate the meeting with KCI.

Coordination and collaboration on the design effort will continue with KCI throughout the duration of the project. It is assumed that three teleconferences, in addition to the kickoff meeting, will be held.

Deliverables - Submitted electronically - PDF

- Up to four CONSULTANTS to participate in Project Kickoff Meeting with KCI and CITY

- Up to four CONSULTANTS to participate in no more than three teleconferences with KCI and the City
- Agenda and Meeting minutes from Kickoff meeting and teleconferences

Task Assumptions:

- All coordination and meetings with the City and KCI will be done virtually
- KCI to be in attendance and participate in kickoff meeting and all three teleconferences

Task B – Data Collection and Review Support

This task includes the collection of information used to inform the development of the Basis of Design Report (BODR) detailed design. Readily available documents provided by the City and other readily available information will be collected and reviewed including existing topographic surveys, utility locations, as-built drawings and records of the area, public accessways, and existing drainage infrastructure. If new topographic data or underground utility surveys are determined to be required (lack of information or need more detail at a location), then a surveyor will be contracted to obtain accurate information of existing conditions.

Deliverables - Submitted electronically - PDF:

- Memorandum containing summary of data collected and remaining data gaps.

Task Assumptions:

- Field or utility survey, as needed for critical infrastructure, is not included in this SOW, but can be provided as needed for additional fee, if approved by the City by an amendment.
- KCI will provide surveys, as-built plans, utility location drawings, records, and roadway drawings

Task C – Basis of Design Report (BODR)

This task includes the development of a BODR and supporting conceptual sketches of proposed facilities. Based on readily available information collection under Task C, including City Policy and the ongoing Stormwater Master Plan, the CONSULTANT will develop a project BODR that evaluates new drainage facilities (inlets, pipes, gravity wells) or resiliency measures that may be effective considering anticipated sea level rise at year 2035. This BODR will inform the drainage design, for City review and acceptance prior to starting the project design. The BODR will include the following elements:

- Project planning horizon based on anticipated design life
- Development of current and future boundary conditions (including tidal and sea level rise (SLR) projections).
- Model proposed design conditions for system improvements to achieve level of service and project objectives.
- Stormwater quantity requirements

- Design storm(s) for rainfall rates and depths for road spread, piped conveyance, and discharges, per City guidance.
- Level of service related to road and building flooding, per City guidance.
- Conceptual sketches of proposed stormwater infrastructure

Deliverables - Submitted electronically - PDF:

- Basis of Design Report summarizing proposed drainage improvements, stormwater boundary conditions and related project requirements

Task Assumptions:

- Evaluation of proposed drainage improvements will be completed using the stormwater model that was updated as part of the Stormwater Master Plan Update under TO 02-21.
- Raising the existing roadways will not be considered as it has already been deemed impractical to effectively elevate this roadway segment.
- A review of stormwater quality impacts and treatment is not included in the BODR.
- All improvements are anticipated to occur within public property and road right of ways.
- Securing temporary construction easements or land acquisition, including eminent domain or land valuation from private property holders is not included.

Task D - Detailed Drainage Design

Detailed Design (60% Design Documents)

The CONSULTANT will prepare 60% design drawings for the CITY and a Class III cost estimate.

The CONSULTANT will coordinate and conduct a workshop with the CITY and KCI to discuss the draft drawings and specifications. The comments received from this meeting will be incorporated into the 90% Design.

Deliverables

- A package with the 60% Design drawings in PDF in format 11" x 17"
 - Two hard copies and one electronic file (PDF format)
- Draft Technical Specifications for drainage improvements.
- Class III Cost Estimate for drainage improvements.
- Design workshop agenda and meeting minutes

Detailed Design (90% and 100% Design Documents)

The CONSULTANT will progress the design to 90% using the comments received from the 60% workshop.

The CONSULTANT will coordinate and conduct a 90% Design workshop with the CITY and KCI to discuss updated drawings, and specs. The comments received from this meeting will be incorporated into the 100% Construction Plans and Cost Estimate.

Following submission of the 90% design documents, the CONSULTANT will prepare a Class I Cost Estimate.

Deliverables

- A package with the 90% and 100% Design drawings in PDF in format 11" x 17"
 - o Two hard copies and one electronic file (PDF format)
- 90% and Final Specifications for the drainage improvements.
- Class I cost estimate for the drainage improvements.
- Design workshop agenda and meeting minutes.

Task Assumptions:

- KCI will provide construction plans for the roadway designed as outlined in their SOW to include the following:
 - o Roadway Typical Sections
 - o Roadway Plans / Details identifying areas of pavement to be resurfaced, ADA ramp and Sidewalk modifications and drainage modifications (Note: "Consultant (KCI) will work with City's Drainage/Resiliency consultant, Jacobs Engineering Group, to incorporate any additional resiliency improvements they may recommend.")
 - o Plans shall also include sidewalk restoration details and tree protection details
 - o Location and identification of utilities within the right of way area provided by the City of Key West
 - o Re-striping of roadway alignment (shown of signing and marking plan sheets)
 - o Standard Maintenance of Traffic narrative referencing applicable FDOT standard Indexes
 - o General Notes, Details, and specifications
- Per KCI's Scope of Work the "Drainage improvements will include modified/relocated drainage structures to maintain the existing drainage system and flow patterns."
- A new pump station or injection well will part of this design work.
- KCI will be compiling construction drawings provided by the CONSULTANT into a final bid package for the roadway improvements.
- KCI to combine drainage improvement specifications prepared by CONSULTANT into a final set of specifications for the roadway improvements

Task E – Permitting Support Services

This task includes preparation of project overview documentation, attending up to 2 pre-application meeting(s), preparation and submittal of permit determination request, and preparation and submittal of permit applications. The following regulatory agencies are anticipated being engaged in this task:

- South Florida Water Management District (SFWMD) – Environmental Resource permit (ERP)

This task also includes coordination with Florida Department of Transportation (FDOT) for work inside FDOT right of way (ROW) related to potential impacts to drainage facilities.

Deliverables - Submitted electronically - PDF:

- Pre-application and permit determination materials
- Meeting with regulatory agencies (virtual), as allowed
- ERP application

Task Assumptions:

- Project does not include hazardous materials (phase 1) survey, characterization, delineation or remediation, or related regulatory review or permits.
- Project does not include wetland or ecological surveys.
- No wetland impacts are anticipated.
- No improvements are anticipated within state submerged waters.
- All permit fees will be paid by the City.
- FDOT permitting is not included in this task.
- If required, regulatory permit applications will be completed and submitted to appropriate agencies; however, no guarantee of securing permits can be made. Up to 2 rounds of review agency RFIs will be addressed as part of this SOW, in an effort to obtain permits. Additional LOE will be conducted as T&M.

Task F – Project Management

Project manager will conduct monthly progress phone calls with the City to discuss completed and planned project activities, project schedule updates, budget and billing.

Deliverables

- Monthly phone calls and project progress invoices

Task Assumptions:

- Project duration is 12 months of NTP

Overall Task Order Assumptions

The following assumptions were used in the development of this Task order:

- Work under this Task Order will be completed in 12 months of NTP.

- This scope of work does not include bidding support services.
- The design will be based on the federal, state, and local codes and standards in effect at the start of the project. Any changes in these codes may necessitate a change in scope.
- The CONSULTANT's master specifications will be used as the basis for all technical sections in Divisions 1 through 49. CITY documents will be used for General Conditions, Supplemental Conditions, and other front-end documents. KCI will compile the specifications.
- Design deliverables listed above shall be in an approved digital format (PDF) unless specifically shown as otherwise.
- Legal plat surveys are not included in the scope of work.
- Existing system Record Drawings will be used when available. CONSULTANT will reasonably rely upon the accuracy and completeness of the information/data provided by the City or other third parties.
- In soils, foundation, groundwater, and other subsurface investigations, the actual characteristics may vary significantly between successive test points and sample intervals and at locations other than where observations, exploration, and investigations have been made. Because of the inherent uncertainties in subsurface evaluations, changed or unanticipated underground conditions may occur that could affect total project cost and/or execution. These conditions and cost/execution effects are not the responsibility of the CONSULTANT.
- All Permitting Fees will be paid by the City.
- This Task Order does not include any Building Department permit applications.
- Providing Construction/Cost Estimates - In providing opinions of cost, financial analyses, economic feasibility projections, for the project, the CONSULTANT has no control over cost or price of labor and materials; unknown or latent conditions of existing equipment or structures that may affect operation or maintenance costs; competitive bidding procedures and market conditions; time or quality of performance by operating personnel or third parties; and other economic and operational factors that may materially affect the ultimate project cost or schedule. Therefore, the CONSULTANT makes no warranty that Client's actual project costs, financial aspects, economic feasibility, will not vary from the CONSULTANT's opinions, analyses, projections, or estimates and the CONSULTANT shall have no liability for such variances.
- Review of Third-Party Design - Any review by CONSULTANT of design prepared by a third-party shall be for general conformance with the design intent, drawings and specifications but not a complete review of all design details and calculations. The Designer and their design professionals shall remain responsible for the accuracy and completeness of their design and construction documents. The CONSULTANT does not assume any liability for work product(s) prepared by third parties, including but not limited to design and related work and makes no representation or warranty regarding same. The CONSULTANT will reasonably rely upon the accuracy, and completeness of the information/data provided by the City or other third parties.

CITY's Responsibilities

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 document reception).
- Facilitate access to required facilities
- Attendance of key personnel at meeting and workshops as requested

Schedule

This TO 2-22 is proposed to be completed 12 months after the NTP.

Compensation

The estimated compensation for TASK ORDER 2-22 ENG **\$72,705.68**, is shown as Attachment B.

Attachment A: LIST OF DRAWINGS

Design of Drainage Improvements Green-Elizabeth-Caroline

Drawing #	Drawing Title
1	Coversheet
2	Signature Sheet
3	Drainage Map – Show Basin Boundaries
4	Drainage Details
5	Project Layout – Drainage Plan View
6	Project Layout – Drainage Plan View
7	Project Layout – Drainage Plan View
8	Special Profile for Intersection
9	Drainage Structure Cross Sections
10	Drainage Structure Cross Sections
11	Drainage Structure Cross Sections

Attachment B: COMPENSATION

City of Key West Greene, Elizabeth, and Caroline Street Drainage Design - Labor Hour Estimate

		Engineer 3 (PM)	Engineer 7 (QA)	Civil Engineer 4	Engineer 2	Technician 6	Tech Editor	Civil CAD Tech	Document Controls/Clerical	Total	Cost
Task No.	Description	\$151.62	\$243.88	\$176.92	\$132.68	\$141.52	\$89.71	\$99.82	\$80.87	Hours	Cost
A	Project Kickoff and Coordination with KCI	30	10	15	27	6	0	0	0	88	\$ 14,072.68
	Kickoff meeting with KCI and City	2	2	1	1	2					
	Three Teleconferences with KCI and City	8	6	6	6	2					
	Coordination on Design with KCI	20	2	8	20	2					
B	Data Collection and Review Support	0	6	6	12	4	0	0	0	28	\$ 4,683.04
	Review existing topography, utilities locations, public accessways, and drainage as provided by the KCI surveyors		2	2	4	2					
	Prepare Data collection Checklist of data gaps		2	2	4						
	Compile and review additional data		2	2	4	2					
C	Basis of Design	0	18	12	20	22	8	8	0	88	\$ 13,796.16
	Future Condition Modeling - Evaluate new drainage facilities		4			16					
	Conceptual sketches of proposed facilities		2	6	8	2		8			
	Basis of Design Report		12	6	12	4	8				
D	Detailed Drainage Design	0	12	12	72	8	0	70	18	192	\$ 24,177.78
	60% Construction Plans and Cost Estimate		4	4	24	2		28	6		
	90% Construction Plans and Cost Estimate		4	4	24	4		22	6		
	100% Construction Plans and Cost Estimate		4	4	24	2		20	6		
E	Permitting Support	0	4	8	40	0	0	0	0	52	\$ 7,698.08
	Prepare for SFWMD pre-app meeting				8						
	Attend pre-app meeting (2 staff)				8						
	Prepare and submit permit determination request				4						
	Prepare and submit ERP to SFWMD		4		20						
	Coordination with FDOT regarding occupancy permit and stormwater system impacts.			8							
F	Project Management	32	0	0	0	0	0	0	30	62	\$ 7,277.94
	Expenses										\$ 1,000.00
	Total	62	50	53	171	40	8	78	48	510	\$ 72,705.68