RESOLUTION NO. 09-182

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF KEY WEST, FLORIDA, APPROVING TASK ORDER 03-09-STM FROM CH2M HILL TO DESIGN DRAINAGE IMPROVEMENTS FOR 10 INTERSECTIONS IN THE AMOUNT OF $194,906; PROVIDING FOR AN EFFECTIVE DATE

BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF KEY WEST, FLORIDA, AS FOLLOWS:

Section 1: That the attached Task Order 3-09 to CH2M Hill, Inc. for engineering services in an amount not to exceed $194,906.00 is hereby approved.

Section 2: That this Resolution shall go into effect immediately upon its passage and adoption and authentication by the signature of the presiding officer and the Clerk of the Commission.

Passed and adopted by the City Commission at a meeting held this 21st day of July, 2009.

Authenticated by the presiding officer and Clerk of the Commission on July 22, 2009.

Filed with the Clerk July 22 2009

MORGAN MCPHERSON, MAYOR

ATTEST:

CHERYL SMITH, CITY CLERK

THE CITY OF KEY WEST
Post Office Box 1409 Key West, FL 33041-1409 (305) 809-3700

MEMORANDUM

EXECUTIVE SUMMARY

TO: Jim Scholl, City Manager
E. David Fernandez, Asst. City Manager

FROM: Gary W. Bowman, General Services Director

DATE: July 7, 2009

SUBJECT: **Approving Task Order 03-09-STM from CH2M Hill to Design Drainage Improvements for 10 Intersections in the Amount of $194,906.00**

ACTION STATEMENT:

This resolution will approve Task Order 03-09-STM from CH2M Hill in the amount of $194,906 for Stormwater Injection Well and Drainage Improvements at the following locations:

1. Intersection of Royal Street and Catherine Street
2. Intersection of Watson Street and Catherine Street
3. Intersection of Grinnell Street and Catherine Street
4. Intersection of Packer Street and Catherine Street
5. Intersection of Windsor Lane and Virginia Street
6. Intersection of William Street and Fleming Street
7. Intersection or Mid-block of William Street and Southard Street
8. Intersection or Mid-block of Eaton Street and Peacon Lane
9. Mid-block of William Street between Caroline and Eaton
10. Intersection of Caroline Street and Anne Street

The City will be reimbursed for 65% of this task order from US Army Corps of Engineers funding that was expedited through stimulus legislation. The agreement is executed pursuant to F.S. 287.055 (CCNA), City Code 2-841, and the City's contract with CH2M Hill approved by Resolution # 07-331.

BACKGROUND:

The City developed a Long Range Storm Water Utility Plan to address areas of local flooding, standing water (puddling), and flood control measures. The City has also adopted a Storm Water Utility Ordinance and Rate Structure to

alleviate the cost of implementing new projects and maintaining storm water systems. The City has prioritized the need for additional wells and is ready to proceed with the design and construction of additional gravity injection wells. The design and construction of these additional wells shall be compatible with the City's planned Long Range Storm Water Utility Plan.

Nearshore water quality improvements and minimizing the number of beach closures continues to be a priority. This project is expected to reduce discharges from nearshore stormwater outfalls and greatly reduce the amount of sediment discharged from the City's storm system into the nearshore waters, providing treatment to the stormwater prior to discharge.

PURPOSE & JUSTIFICATION:

The anticipated environmental results include reducing potential health risks to beach bathers by eliminating or reducing stormwater discharges to nearshore waters which may carry bacterial contamination. The project is also expected to aid in the protection of the aquatic resources in the nearshore waters by eliminating or reducing stormwater discharges that contain nutrients, metals, hydro-carbons, and other stormwater pollutants.

The City must demonstrate they are committed to implement and ready to construct additional drainage improvements in order to obtain the greatest amount of state and federal grant funds. This task order includes the following components pertaining to the construction of ten (10) gravity injection wells and associated grading and sidewalk improvements:

- Project management,
- Land surveying,
- FDEP permitting services, and
- Final construction plans and specifications.

OPTIONS:

1. The additional resources provided by CH2M Hill shall assist the City with implementing this storm water project on an accelerated basis. This gives the City the best opportunity to capture as much grant money as possible.

2. The City could choose not to use the additional resources and most likely delay implementation of the storm water plan. Failure to begin this project will lead to prolonged and more frequent beach closures, continued flooding problems, and could cause the City to lose future funding. The City does not currently have the staffing available to complete the design of this project in a timely manner.

FINANCIAL IMPACT:

The fees for this task order total $194,906 and will be funded through stormwater budget line item 402-3802-538-65. Funds are available to accommodate this task order.

The Army Corps of Engineers will reimburse the City for 65% of the cost of this project ($126,688.90) through federal funding that was expedited through the stimulus legislation. The City will pay the remaining $68,217.10

RECOMMENDATION:

The staff recommends that the City Commission choose option # 1, the approval of CH2M Hill task order 3-09-STM in the amount of $194,906 for the design of 10 stormwater gravity injection wells.

TASK ORDER 3-09 STM

ENGINEERING SERVICES FOR STORMWATER INJECTION WELL DRAINAGE IMPROVEMENTS

This TASK ORDER 3-09 STM 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. SCOPE OF SERVICES

Specific services which the ENGINEER agrees to furnish are summarized on the attached statement entitled TASK ORDER NO. 3-09 STM "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. 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. 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. COMPENSATION

Compensation for the labor portions of TASK ORDER NO 3-09 STM, Tasks A and B will be on a lump sum fee basis as stipulated in Article 2, Paragraph 2.1 of the AGREEMENT. Compensation for the labor portions of Tasks C and D and 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 NO. 3-09 STM COMPENSATION.

D. ACCEPTANCE

By signature, the parties each accept the provisions of this TASK ORDER NO. 3-09 STM, 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.

By: Richard Morales

Rick Morales, P.E.
South Florida Area Manager

Andrew H. Smyth for

Andrew H. Smyth, P.E.
Key West Office Manager

For CITY OF KEY WEST

By: J. K. Scholl

Jim Scholl
City Manager

Dated the 23rd day of JULY, 2009

ATTEST: Angela Brodle

TASK ORDER 3-09 STM

ENGINEERING SERVICES FOR STORMWATER INJECTION WELL DRAINAGE IMPROVEMENTS

SCOPE OF SERVICES

Project Description

In order to proactively address areas of local flooding and near shore water quality the City has developed a Long Range Storm Water Utility Plan. The plan includes installation of drainage well systems and sediment control structures. The City has also adopted a Storm Water Utility Ordinance and Rate Structure to alleviate the cost of implementing new projects and maintaining storm water systems.

Near shore water quality improvements and minimizing the number of beach closures continues to be a priority to the community. The City must demonstrate that they are committed and ready to construct additional drainage improvements to obtain the greatest amount of state and federal grant funds. This means that to be "shovel-ready," design documents must be developed.

The City has established a priority list of locations that are in need of drainage improvements and is prepared to proceed with the design and construction of the new drainage systems that are primarily based on gravity well technology.

The following is a list of locations for the proposed drainage improvements:

1. Intersection of Royal Street and Catherine Street
2. Intersection of Watson Street and Catherine Street
3. Intersection of Grinnell Street and Catherine Street
4. Intersection of Packer Street and Catherine Street
5. Intersection of Windsor Lane and Virginia Street
6. Intersection of William Street and Fleming Street
7. Intersection or Mid-block of William Street and Southard Street
8. Intersection or Mid-block of Eaton Street and Peacon Lane
9. Mid-block of William Street between Caroline and Eaton
10. Intersection of Caroline Street and Anne Street

The design and construction of these improvements shall be compatible with the City's planned Long Range Storm Water Utility Plan.

Purpose

The CITY has requested that the ENGINEER provide engineering services for the design, permitting and bid phase of gravity well and drainage improvements at 10 intersections throughout Key West.

Scope of Services

The scope of services provided below addresses the work to be completed for the project; and includes Task A (Background Investigation and survey), Task B (Design services), Task C (Permitting) and Task D (Bid services).

Task A - Background Investigation

A.1 Data Collection

The ENGINEER will meeting with the City and obtain the data required for design services;

- Kickoff Meeting: Attend a kickoff meeting with City staff to obtain/discuss background information pertaining to the design areas. This information may include copies of relevant planning and engineering reports, stormwater facility survey data, first floor elevation of buildings, drainage area maps, topographic maps, and land use maps, as appropriate.
- Field Investigation: The CONSULTANT shall complete a walking review of the drainage areas to observe land use and drainage characteristics of the area. This field investigation shall also be used to identify existing drainage problem areas, as observed by City staff and potential locations for future stormwater facilities.
- Review Background Information: Consultant shall review the background information provided by the City, and complete a preliminary evaluation of the potential usefulness for this project. Readily available additional mapping data will be obtained and assessed for its usefulness in developing updated maps.
- Delineate Drainage Boundaries: Using previously developed maps provided by the City, delineate the basin and subbasin boundaries that define the drainage areas into smaller subbasins. Estimate hydrologic parameters needed to simulate the performance of the drainage facilities.
- Determine Americans with Disability Act (ADA) Requirements: In conjunction with the data obtained above, the Consultant will review the ADA requirements for sidewalk improvements at each intersection.

A.2 Field Survey

The ENGINEER will provide the following surveying services:

- Provide a topographical survey of each intersection in the defined project in accordance with accepted standards using NGVD 1929 Datum of the areas where improvements are proposed.
- The survey shall locate all known existing infrastructure within the depicted survey limits, including existing above and below ground utilities.
- The survey shall include topographical information on sidewalks, building entrances and other items that will be required to be upgraded to bring the sidewalks replaced to ADA standards. It is anticipated that the survey limits will extend approximately 100

feet beyond each intersection. However, some locations are in mid-block so those surveys will extend approximately 300-LF.

Deliverables

The following deliverables will be provided under this Task:

- Two (2) copies of kick-off meeting minutes
- One (1) copy of full size survey
- Two (2) copies of half size survey
- One (1) electronic copy of survey

Task B –Design Services

This task entails activities related to the design of ten (10) gravity injection wells and associated drainage facilities. These designs will be consistent with ADA criteria for sidewalks and intersections. In the event of no sidewalks, the new facilities will be designed to not interfere with future construction that may add sidewalks. The task is divided into two subtasks- B.1 Preliminary Design and B.2 Final Design.

B.1 Detailed Design (40% Design)

The ENGINEER will perform the work to develop the preliminary project design construction documents for ten (10) gravity injection wells. The objectives of this task are to define the design approach and intent and to communicate the design assumptions to the CITY. The ENGINEER will conduct a design review meeting with the CITY prior to the conclusion of this task.

Specific work activities in this task are identified below:

- Develop plan base sheets for each injection well location. Prepare preliminary layouts and set preliminary elevations. Develop plan base sheets for sidewalk improvements for compliance with ADA requirements. Each sheet will show the limitations of sidewalk removal and replacement and access ramps at intersections where necessary.
- Evaluate each site for installation of the storm water injection system for the least impact to local business and traffic.
- Conduct hydrologic/hydraulic modeling to size facilities (needed for permitting documentation below)
- Conduct preliminary review meeting with the City.
- Identify any potential constructability issues.
- Prepare budget-level cost estimate.
- 40 % Design Review Meeting.

Deliverables

The following deliverables will be provided under this Task:

- Three (3) copies: Preliminary (40%) drawings
- Three (3) copies: Specification outline
- Three (3) copies: Design Calculations
- Three (3) copies: Design Data
- Three (3) copies: Preliminary Construction cost estimate
- Two (2) copies of 40% review meeting minutes

B.2 Final Design

During this subtask, the ENGINEER will complete the technical design based on the outcome of the 40% Review Meeting. At the end of this subtask the design documents will be considered complete and ready for bidding.

Specific work activities in this task are identified below:

- Finalize technical design
- Prepare legal and technical specifications, contract documents, including Bid Form, Notice to Bidders, General and Supplemental Conditions, Bond Forms, etc.
- Prepare 90% Drawings
- Based on 90% documents, prepare updated final construction cost estimate
- Conduct 90% review meeting and incorporate review comments from City into design documents.
- Submit final contract documents to the CITY

Deliverables

The following deliverables will be provided under this Task:

- Five (5) copies: 90% review documents
- Two (2) copies of 90% review meeting minutes
- Two (2) copies: Final construction cost estimate
- Eight (8) copies: Final Contract Documents, including drawings and specifications plus one (1) CD

Task C - Permitting

ENGINEER will prepare a permit application, consistent with state and local permitting requirements. This task will include:

- Florida Department of Environmental Protection (FDEP) permit
- Monroe County permit

The ENGINEER will discuss the projects with the FDEP and County by telephone to confirm permitting requirements. A call will also be made to the South Florida Water Management District (SFWMD) to explain the project and confirm that SFWMD ERP permitting is not required. One pre-application meeting is anticipated in Naples (FL) with the FDEP and is included in the level of effort. No pre-application meeting with SFWMD is included.

It is likely that these projects will avoid County rights-of-way, but some may encroach. This will be reviewed during the data collection phase and permit applications will be developed for the County if needed. It is anticipated that the FDEP application, or a very similar application, is all that the County would require.

The ENGINEER will develop and submit the draft permit application(s) for the project to the CITY for review and comments. Review comments received from the CITY will be incorporated into the revised Permit Application as appropriate. As the project owner, the CITY must sign the applications. The ENGINEER will submit signed and sealed copies of the final permit application and construction documents to the reviewing agency on behalf of the CITY. One response to requests for additional information, if required, is assumed in the level of effort.

Deliverables

The following deliverables will be provided under this Task:

- Two (2) copies to the City: Final FDEP and County permit application with attachments
- Four (4) copies to the FDEP and (4) copies to the County: Final applications

Task D - Bid Phase Services

Bidding services are based on a Bid Period of 30 days. The ENGINEER will provide the following services to the CITY to assist in the bidding process:

- Provide electronic copies of the contract documents available for distribution by the CITY.
- Coordinate with CITY to provide contract documents to DemandStar for bidding.
- All direct communications with bidders on matters related to the technical aspects of the design will be handled directly by the ENGINEER.

- Coordinate and conduct one pre-bid meeting to familiarize each bidder with the scope of work and to answer any questions that may arise.
- Issue ADDENDA, if required
- Bids will be received, opened, and read aloud by the CITY at the designated time and location.
- Review and evaluate bids for compliance and completeness. The engineer will prepare an award letter for the CITY recommending the successful bidder.
- After award, the ENGINEER will distribute to the successful contractor six sets of contract documents for execution. The contractor will be directed to return the documents to the ENGINEER for compliance review of the bidding requirements. After the ENGINEER reviews the contract documents, these six sets of documents will be sent to the CITY for final review and signatures.
- Prepare conformed contract documents for use by CITY, ENGINEER, and Contractor during construction.

Bid services will be considered complete upon the ENGINEER's review and forwarding of the Contractors executed documents to the CITY, and submittal of conformed documents to the CITY.

Deliverables

- Pre-bid meeting minutes
- Recommendation of award letter
- Contract Documents for execution
- Conformed Contract Documents

Assumptions

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

- The design and bid phase work on this project will be completed by the end of calendar year 2010.
- The design work included in this Task Order 03-09 is for ten (10) gravity injection wells systems consisting of up to four catch basins, one water quality box, and gravity well (box and detail information). All facilities will be located within one intersection or at one mid-block location. Sidewalk modifications will be noted on the plan sheets, as appropriate. Additions to the scope will require an amendment to this Task Order.
- 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 ENGINEER'S master specifications will be used as the basis for all technical sections in Division 1 through 49. The ENGINEER'S master specifications incorporating CITY requirements will be used for General Conditions, Supplemental Conditions, and other front end documents.
- The design documents will be prepared for a single construction contract.
- Prior to start of design work, the CITY and CONSULTANT will agree in writing to the locations of proposed wells and ADA intersections.
- No land costs shall be included in cost estimating for the gravity well projects. It will be assumed that all projects can be located in City rights-of-way (ROW). City ROW will be based on information available from the City, typically from past project documents or County GIS parcel maps.
- Legal, easement, or plat survey or acquisitions will be the responsibility of CITY.
- The CITY will pay for all permit application fees.
- The construction contract will be awarded after the first bidding process. Re-bidding will be considered as an "Additional Services".
- Concepts will be frozen at the end of each design phase and redesigns after those points will be additional services.
- Bid services will be considered complete upon the ENGINEER's review and forwarding of the Contractors executed documents to the CITY, and submittal of conformed documents to the CITY.

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.
- Facilitate access to any required facilities.
- Attendance of key personnel at meeting as requested.
- Execution of the permit applications as owner.
- Payments of all permit application fees.
- Prior to start of design work (Task B), the CITY and CONSULTANT will agree in writing to the locations of proposed wells and ADA intersections.
- CITY to provide existing topographic maps, data or existing subsurface investigation information.

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 of gravity wells and ADA intersection improvements
- Re-Bidding any, or all, portions of this project or bidding of multiple projects
- Construction phase services
- Resident observation, providing a full-time resident on-site and construction management during construction
- Additional permitting involving agencies other than the those listed under Task C

Compensation

The estimated compensation for TASK ORDER NO 3-09 STM, is shown on attachment A entitled TASK ORDER NO. 3-09 STM, COMPENSATION.

TASK ORDER 3-09 STM COMPENSATION

ENGINEERING SERVICES FOR STORMWATER INJECTION WELL DRAINAGE IMPROVEMENTS

Task	Hours	Labor	Expenses	Total Cost
Task A1 - Background Investigation	118	$14,878	$35,600	$50,478
Task B1 - Design Phase	1,006	$115,289	$3,000	$118,289
Task C1 - Permitting	118	$14,423	$1,100	$15,523
Task D1 - Bid Phase	84	$10,266	$350	$10,616
Total	**1326**	**$154,856**	**$40,050**	**$194,906**

COMPENSATION BREAKDOWN
Task Order 03-09 STM

TASK NO.	TASK DESCRIPTION	HOURLY RATE	TOTAL HOURS	LABOR	EXPENSES	TOTAL COST
A1	**Background Investigation**					
	Principal PM/Principal Technologist	$177.00	14	$2,478		$2,478
	Senior Technologist/Senior PM	$163.00	4	$652		$652
	Senior Professional	$153.00	38	$5,814		$5,814
	Assoc Engineer	$113.00	24	$2,712		$2,712
	Staff Engineer	$101.00	24	$2,424		$2,424
	Clerical	$ 57.00	14	$798		$798
	(3) - 2 Day trip to KWF				$3,600	$3,600
	Survey				$32,000	$32,000
	Printing/Reprographics/Shipping				$0	$0
Background Investigation SUBTOTAL			118	$14,878	$35,600	$50,478
B1	**Design Phase**					
	Principal PM/Principal Technologist	$177.00	64	$11,328		$11,328
	Senior Technologist/Senior PM	$163.00	36	$5,868		$5,868
	Senior Professional	$153.00	108	$16,524		$16,524
	Project Professional	$126.00	59	$7,434		$7,434
	Assoc Engineer	$113.00	262	$29,606		$29,606
	Staff Engineer	$101.00	64	$6,464		$6,464
	Tech 5	$106.00	64	$6,784		$6,784
	Tech 4	$ 96.00	262	$25,152		$25,152
	Technical Editor/Spec Processor/Staff Professional	$ 87.00	39	$3,393		$3,393
	Clerical	$ 57.00	48	$2,736		$2,736
	(2) - 2 Day trip to KWF				$2,400	$2,400
	Printing/Reprographics/Shipping				$600	$600
Design Phase SUBTOTAL			1006	$115,289	$3,000	$118,289
C1	**Permitting**					
	Principal PM/Principal Technologist	$177.00	24	$4,248		$4,248
	Senior Technologist/Senior PM	$163.00	4	$652		$652
	Senior Professional	$153.00	26	$3,978		$3,978
	Assoc Engineer	$113.00	7	$791		$791
	Staff Engineer	$101.00	28	$2,828		$2,828
	Tech 4	$ 96.00	7	$672		$672
	Clerical	$ 57.00	22	$1,254		$1,254
	(2) - 1 Day trip to FDEP				$800	$800
	Printing/Reprographics/Shipping				$300	$300
Permitting SUBTOTAL			118	$14,423	$1,100	$15,523
D1	**Bid Phase**					
	Principal PM/Principal Technologist	$177.00	12	$2,124		$2,124
	Senior Professional	$153.00	30	$4,590		$4,590
	Project Professional	$126.00	4	$504		$504
	Assoc Engineer	$113.00	2	$226		$226
	Tech 5	$106.00	8	$848		$848
	Tech 4	$ 96.00	2	$192		$192
	Technical Editor/Spec Processor/Staff Professional	$ 87.00	10	$870		$870
	Clerical	$ 57.00	16	$912		$912
	Printing/Reprographics/Shipping				$350	$350
Bid Phase SUBTOTAL			84	$10,266	$350	$10,616
PROJECT TOTALS						
	TOTAL HOURS		1,326			
	TOTAL FEE ESTIMATE			$154,856	$40,050	$194,906
TO 01-08 TOTAL			**1,326**	**$154,856**	**$40,050**	**$194,906**