



THE CITY OF KEY WEST

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MEMORANDUM

EXECUTIVE SUMMARY

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

FROM: Jay Gewin, Utilities Manager

DATE: May 19, 2012

RE: **Approval of a Change Order for Task Order # 12-02 from Perez Engineering and Development in the Amount of \$40,780 for Engineering Services for Additional Design Work from the Original Scope for the East Front Street Drainage Project. Authorizing Budget Transfers to Include Possible Additional Grant Revenue.**

ACTION STATEMENT:

This resolution will approve a change order to Task Order # 12-02 from Engineering and Development in the amount of \$40,780 for additional engineering services to include replacing an existing outfall and replacing Duval St. storm inlets for the East Front Street Drainage Project. This is beyond what the original scope of work established in the original task order approved via resolution # 12-036. However, the additional work is within the flood prevention scope of the grant.

The City will apply to FEMA for grant funding for 75% of the costs of this change order. The resolution will also authorize additional project costs and additional grant revenue, if the City's application is successful.

The agreement will be executed pursuant to F.S. 287.055 (CCNA), City Code 2-841, and the City's contract with Perez Engineering approved by Resolution # 07-332 and extended and amended through Resolution 10-294.

BACKGROUND:

The Front St. area is historically troubled with flooding after severe rains. Stormwater flows downhill all the way from Olivia St. towards this basin, and high tides can make drainage even more difficult. The City's two pump-

Key to the Caribbean – Average yearly temperature 77° F.

assisted wells at the end of Simonton St. can struggle to keep up with the inundation during severe rain events.

This project seeks to design stormwater gravity wells and other alternatives that will try to capture much of the rainwater flowing downhill before it can reach the low-lying busy Front St. area, and now will replace an existing outfall that is in poor condition.

The City has completed a Stormwater Master Plan to address areas of local flooding, standing water (puddling), and flood control measures. This document recommends a series of capital improvements based on stormwater modeling using new technology available to the City. The Master Plan has identified the best locations where gravity wells, outfalls, and other stormwater improvements can be built to maximize effectiveness.

In addition to decreasing the amount of stormwater flowing into the East Front St basin to help alleviate flooding, 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 Outstanding Florida Waters by eliminating or reducing stormwater discharges that contain nutrients, metals, hydro-carbons, and other stormwater pollutants.

In recognition of the repeated flooding that occurs on East Front St., FEMA has awarded the City a grant that will fund 75% of the design costs for stormwater infrastructure to help address the problem. The City Commission approved this grant via Resolution 11-123 on May 3, 2011. The federal share of the grant is \$143,273, with the City's share at \$47,758 (total grant - \$191,031). The City Commission approved a task order for Perez Engineering and Development to design 8-10 stormwater gravity wells via resolution 12-036 in the amount of \$191,000. However, with the completion of the Stormwater Master Plan, City Staff and Engineering Consultants are recommending a different approach to try to improve drainage for the East Front Street Basin.

Once the design work is finished, the City will submit these documents along with a benefit/cost analysis and other deliverables to FEMA, who will review our submittal for possible grant funding for construction.

PURPOSE AND JUSTIFICATION

The original task order approved by the City Commission included the design of 8-10 gravity injection wells and associated ADA and sidewalk improvements. However, the the City's newly-completed Stormwater Master Plan recommends a different approach to improve the drainage for the East Front St Basin:

With the inclusion of this change order, the scope of work within the task order will now include the following:

- Site evaluation, data collection, and surveying
- Design of 5 Stormwater Wells
 - Angela St. between Simonton and Duval
 - Simonton St between Eaton and Fleming

- Fleming St at Bahama St.
- Eaton St. at Bahama St.
- Whitehead St between Greene St. and Caroline St.
- Replacement of Front Street outfall that is in poor condition that runs underneath the Aquarium Building with a new upsized outfall terminating at Mallory Square.
- Replacing of small inlet tops on Duval St. with larger ones designed to capture more of the water flow
- FDEP permitting services
- Preparation of bid documents
- Preparation of benefit/cost analysis and other deliverables for FEMA grant

The additional work being added to the task order includes the design of a replacement outfall at Front St. The existing outfall is an old 12” line running underneath the Aquarium, which is far from ideal from a maintenance standpoint. Additionally, this line frequently gets clogged with sand and doesn’t function as effectively as it should.

The new outfall would be a 24” line connecting at the intersection of Whitehead and Front St., and run northbound on Front St. before heading west down through Wolfson Lane into Mallory Square.

Additionally, many of the inlets on Duval St. are too small to capture stormwater that runs downhill towards Front St. This project would replace these with larger inlets designed to capture more of the water and remove it from the street before it could reach Front St.

The City or OMI does not have the staff available with the technical expertise required to perform this design work independently. Staff has reviewed this submittal and found it consistent with the hourly rates established in the City’s contract extension with Perez Engineering.

Further, Staff does not feel that the hours that will be billed under this change order are disproportionately allotted to higher-wage management staff. In fact, the Principal of the firm only accounts for approximately 13.1% of the hours allotted in this task order.

OPTIONS / ADVANTAGES / DISADVANTAGES:

1. The City Commission can award the change order to Perez Engineering and proceed with the design of these gravity wells, inlets, and replacement outfall on a timely basis that will allow us to meet grant deadlines. The consultant has successful experience working with the City on other projects of a similar technical nature, and has very capable staff to ensure successful design. This option is recommended by City Staff, as the neither City nor OMI have the staff available with the ability to perform the scope of work included in this task order. It will also allow the City to proceed with design of the project, which will have significant benefits to a downtown high-traffic area that suffers from repeated flooding during heavy rains.
2. The City Commission can decline the change order from Perez Engineering. This option is not recommended by Staff, as the City will be unable to complete the Stormwater Master Plan’s recommendations for the East Front Street Stormwater project without properly engineered drawings and bid documents.

FINANCIAL IMPACT:

Costs for this change order total \$40,780 and are budgeted in account # 402-3802-538-65/ST1201.

The City will be apply for grant funding for a possible reimbursement of 75% of these costs from FEMA in the amount of \$30,585. The remaining \$10,195 would be funded through the City's stormwater fund. If the City is unsuccessful in our funding request, the stormwater fund would have to pay for the entire cost of this change order.

RECOMMENDATION:

Staff recommends that the City Commission select option 1, approving change order to Task Order 12-036 from Perez Engineering and Development in the amount of \$40,780 for the additional design work for the East Front St. Drainage Project.