

**CITY OF MARATHON, FLORIDA
RESOLUTION 2008-21**

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MARATHON, FLORIDA, AUTHORIZING CHANGE ORDER # 4 TO WASTEWATER ENGINEERING CONTRACT IN THE AMOUNT OF \$7,232,751 APPROVED BY RESOLUTION 2005-104, TO PROVIDE GPS AND GIS DATA COLLECTION, INPUT AND ANALYSIS FOR THE CITY'S SANITARY SEWER AND STORM WATER PROJECT IN AN AMOUNT NOT TO EXCEED \$881,935.08

WHEREAS, the wastewater utility has purchased Trimble GPS data collection equipment to form a database of location, photographs and correct as-builts; and

WHEREAS, the City does not have the personnel to collect, process and integrate this data into our existing GIS mapping system. With this information we will have the necessary foundation for an overall Asset Management and Computerized Maintenance System, reducing future operation and maintenance costs ; and

WHEREAS, Weiler Engineering is performing construction contract administration services on the wastewater/stormwater construction project; and

WHEREAS, the provision of these additional services are subject to all the terms and conditions of the existing agreement.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF MARATHON, FLORIDA, that:


Section 1. The above recitals are true and correct and incorporated herein.

Section 2. Council authorizes change order #4 to wastewater engineering contract in the amount of \$7,232,751 approved by Resolution 2005-104, to provide GPS and GIS data collection, input and analysis for the City's sanitary sewer and storm water project in an amount not to exceed \$881,935.08

Section 3. This resolution shall take effect immediately upon its adoption.

PASSED AND APPROVED by the City Council of the City of Marathon, Florida, this 12th day of February, 2008.

THE CITY OF MARATHON, FLORIDA



Edward P. Worthington, Mayor

AYES: Tempest, Bull, Cinque, Worthington
NOES: Vasil
ABSENT: None
ABSTAIN: None

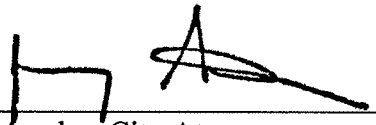
ATTEST:



Diane Clavier, City Clerk

(City Seal)

APPROVED AS TO FORM AND LEGALITY FOR THE USE AND RELIANCE OF THE CITY OF MARATHON, FLORIDA ONLY:



Jimmy Morales, City Attorney

EXHIBIT A to Change Order No. 4
Weiler Engineering Corporation/City of Marathon

AMENDMENT TO MARATHON SEWER EXPANSION – SCOPE OF SERVICES – BASIC SERVICES - EXHIBIT A TO PROVIDE GPS AND GIS DATA COLLECTION, INPUT AND ANALYSIS FOR THE SANITARY SEWER AND STORM WATER PROJECT BEING CONSTRUCTED BY THE CITY.

The Weiler Engineering Corporation “Engineer” is currently contracted by the City to evaluate and prepare the necessary designs, specifications, reports and applications to construct wastewater and stormwater facilities throughout the City and to provide services during construction of the facilities. The City Staff and the Engineer agree that it is prudent and economically advantageous to develop a database necessary for the future operation and maintenance (O&M) of the City’s \$100 million investment. It is our general understanding that the City wishes to modify the existing Contract for Professional Services referenced above for Engineer to assist the City to prepare the first phase of a three phase project, that includes data collection, post processing and GIS integration throughout the City within and adjacent to the areas outlined in the current agreement as Service Areas 1 – 7 and Little Venice Phase I and II. The resulting database is an essential component of the City’s overall Asset Management and Computerized Maintenance System.

Services will generally include those outlined in the current agreement:

- GPS Data Collection*
- GPS Post Processing*
- GIS Database Development & Integration*

GPS DATA COLLECTION

WEC will provide GPS field data collection services to record location and attributes for the sewer and stormwater system assets that have already been constructed on Sombrero Beach and Little Venice Phases I & II. This includes review of the record drawings, identification of the asset on the plans, assignment of the appropriate attributes in the field, collection of the GPS position, and adding comment and photos when appropriate. The feature attributes collected will be in accordance with the City’s Data Dictionary (Exhibit I) as modified based on field experience during initial data collection efforts in Sept/Oct 2007.

During construction, WEC’s Resident Project Representatives (RPR), supplemented by office personnel when necessary, will collect GPS data for sewer and stormwater features prior to backfill. The feature and attributes collected during construction will be similar to the above, with the exception that the elevation of the feature below existing grade will be measured by the RPR and included as an attribute with the GPS point. Photos will also be collected for each feature and will be linked to the GPS point. In addition, field personnel will note any construction irregularities including conflicts with other utilities and document their location and conflict resolution with GPS points, photos, and field inspection reports.

Field personnel will maintain a set of red line drawings documenting the location of data points and the feature associated with each point. These red line drawings will be made available during GPS post-processing and GIS integration

GPS POST PROCESSING

WEC will assist the City in regular transfers of the information on the GPS units and process the information with the GPS correction data to achieve maximum accuracy from the data collected. Post processing includes inventory and review of the data collected, correction of the data to achieve maximum accuracy, comparison with red line drawings, surveyed as-builts, field notes and photos. These Quality Control measures are essential to development and maintenance of a complete and accurate asset inventory as part of the City's overall Asset Management System.

GIS DATABASE DEVELOPMENT & INTEGRATION

Upon completion of GPS Post Processing, WEC will incorporate the GPS data as GIS data layers (ESRI Shapefiles) compatible with the City's existing GIS. This includes regularly aggregating the GPS field data files into up-to-date complete GIS layers, checking the attribute database with the red lined drawings from the field inspection, and enabling hyperlinks from the field photos to the appropriate wastewater feature in the database. WEC will also link the details from the record drawings to the appropriate features in the database, as well as exploded exploded parts diagrams from the manufacturers' shop drawings. As part of this GIS database development process, WEC staff will also incorporate the actual record drawings as a georeferenced layer within the City's GIS. WEC will also assist the City in utilizing and editing the wastewater GIS database in combination with other GIS data (for example, the Monroe County Property Appraisers database or FKAA water meters data).

For additional Quality Control during GIS database development, WEC will review the GIS layers for completeness and accuracy as compared to the original corrected GPS data and red line drawings, and make appropriate corrections to the GIS database.

WEC will provide metadata for each GIS layer in accordance with the City's GIS metadata requirements.

The resulting GIS database is an essential component of the City's overall Asset Management and Computerized Maintenance System.

CHANGE ORDER # 4

TO: City of Marathon

PROJECT: Wastewater Engineering Consulting, Design & Contract Administration
Services In The Amount Of \$7,232,751 Approved By Resolution 2005-104

Agenda Item: Resolution 2008-21 – Change Order # 4

ENGINEER: Weiler Engineering

DATE: February 12, 2008

This Change Order will authorize the following change to the Agreement:

The Work as set forth in the Agreement is hereby amended to include the items set forth on Exhibit "A" attached hereto and by this reference made a part hereof.

This Change Order constitutes full, final, and complete compensation to Weiler for all costs, expenses, overhead, and profit, and any damages of every kind that Weiler may incur in connection with the above referenced changes in the Design Work or any other effect on any of the Construction Management Work under this Agreement. Weiler acknowledges and agrees that (a) the Guaranteed Maximum Price of \$7,232,751 under the Agreement will be [unchanged] [changed] by this Change Order, and (b) the schedule for performance of Design Work will be [unchanged] [changed] by this Change Order. Weiler expressly waives any claims for any additional compensation, damages or time extensions in connection with the above-referenced changes. Except as herein or heretofore expressly modified, all terms of the Agreement shall remain in full force and effect and shall cover the performance of, and payment for, any work authorized hereunder. Any defined terms not defined in this Change Order shall have the meanings set forth in the Agreement.

By signing below the parties indicate acceptance of this Change Order as set forth herein.

CITY OF MARATHON
a Florida municipal corporation

By: Clyde Burnett

Name: CLYDE BURNETT

Title: CITY MANAGER

WEILER ENGINEERING CORP.

By: Jeff Weiler

Name: JEFF WEILER

Title: PRESIDENT