CITY COUNCIL STAFF REPORT

DATE: JANUARY 7, 2015 CONSENT AGENDA

SUBJECT: OPTERRA ENERGY SERVICES, INC. CHANGE ORDER #6 – ADDITION OF ENERGY MANGEMENT COMMUNICATIONS SYSTEM

FROM: David H. Ready, City Manager

BY: Special Projects Coordinator

SUMMARY

The proposed action is to approve a Change Order with Opterra Energy Services to add a fiber optic energy management computer communications system between facilities in the Municipal Complex.

RECOMMENDATION:

1. Approve Change Order # 6 to Agreement A6375 with Opterra Energy Services, Inc., adding a fiber optic energy management computer communications system for the Municipal Complex, in the amount of $97,008.

2. Authorize the City Manager to execute all documentation related to the Change Order.

STAFF ANALYSIS:

Opterra (formerly Chevron) continues the implementation of its City wide energy retrofit project. One of the key components to the overall system is the ability of the various facilities to communicate with each other over a computer network. This type of a communications system is necessary for the successful operation and performance guarantee from Opterra and it will allow for remote monitoring and troubleshooting of installed systems. When the original audits were conducted Chevron assumed that they would be able to access the City's existing network for the remote monitoring but due to network security concerns that access should not be granted. A new network made up of DSL lines and routers was installed at the Sunrise complex as there were no existing available conduits between the facilities. In the Municipal Complex there does exist available conduit space between buildings and rather than to depend on DSL

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line availability it is recommended that a fiber optic network be installed for this purpose. The City has additional needs for electronic communications between its various buildings and therefor the contractor was asked to provide 8 additional fiber pairs when it pulls in those needed for their system. The total cost of establishing this network is $97,008 and of that $6800 is the cost of installing the extra 8 pairs of fiber.

FISCAL IMPACT:

Funding for this proposed change order will come from the contingency account which currently has over $300,000 in its balance; account 550-5812-54073.

Allen F. Smoot, Special Projects Coordinator

David H. Ready, City Manager

Attachment: Change Order #6

CHANGE ORDER NO. 6

PROJECT TITLE: City Wide Energy Conservation Measures Project

CONTRACT: Energy Services Contract (CU 1361)

CONTRACT NO.: A6375

CONTRACT DATE: July 29, 2013

CONTRACTOR: Opterra Energy Services

The following changes are hereby made to the Contract:

#	Item	Cost (Credit)
1.	PCO#27: IP (Internet Protocol) Infrastructure upgrade for Muni Complex to include 6 pair fiber optic between City Buildings, Option 2.	$97,008

Justification:

Item #1: The existing City computer network is not available for use for energy management communications so either the City must install a new network or seek a proposal for Opterra. The proposal includes 12 strands of fiber optic cable between City buildings, which will leave 8 available pair for other City use in the future.

CHANGE TO CONTRACT AMOUNT

Original Contract Amount:	$17,507,842
Current Contract Amount, as adjusted by previous Change Orders:	$18,260,280
The Contract Amount due to this Change Order will be changed by:	$ 97,008 add
Contract Amount due to this Change Order will be:	$18,357,288

CHANGE TO CONTRACT TIME

The Contract Time is not affected by this Change Order.

Approvals Required:

To be effective, this Change Order must be approved by both Opterra ES and City, unless otherwise permitted under the terms of the Contract.

Recommended by_____ date_____
City's Representative

Ordered by _____ date_____
City Manager

ATTEST: _____date _____
City Clerk

Accepted by _____ date_____
Opterra Energy Services

Opterra ES acknowledges and agrees, on behalf of Opterra ES, all subcontractors and all suppliers, that, except as provided above, the stipulated compensation provided for in this Change Order includes payment for all work contained in this Change Order, plus all payments for interruption of schedules, incremental extended overhead costs, acceleration costs, delay and all impact, ripple effect or cumulative impact on all other work arising out of, or related to, the work that is the subject of this Change Order. In addition, Opterra ES agrees that this Change Order comprises the total compensation due Opterra ES, and all subcontractors and all suppliers, for the work or change defined in this Change Order, including all impacts arising out of or related to this Change Order, including all impacts arising out of or related to this Change Order, except for the additional time-related issues noted above, if required.

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Barry Kirschenbaum
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December 19, 2014

Mr. Allen Smoot
Special Project Coordinator
City of Palms Springs
3200 E. Tahquitz Canyon Way
Palm Springs, CA 92262

Re: OES PROJECT 32261 / ESC # CU-1361 / COPS Contract # A6375 / CO # 27
(IP Infrastructure upgrade for Muni Co-Gen Plant, Airport, City Hall, Police, Police Training, IHUB, Fire Station # 2 and City Maintenance Yard all buildings related to our DDC EMS control system upgrades and Muni-Cogen Plant.

Opterra Energy Services is pleased to present this proposal to provide and install the necessary equipment to provide the upgraded EMS controls with a stable IP network for the Muni Building's and Airport that are related to our energy management system and stability required for data acquisition required for proper operation, proper control, SCAQMD data for annual documentation for the life of the Muni-Cogen Plant and SGIP rebate data for documentation for 5 years.

Scope:

Opterra Energy Services, Inc. will subcontract Southwest Networks, Inc. and NOVA to provide, install, configure and test the following network equipment in the City Hall IT room to communicate with Muni Buildings existing DSL modems/lines:

OPTION-1

Scope (6-Stand Fiber)

We will furnish and install a total of twenty-five (25) network switches and twenty-five (25) DC power supplies and install them in the existing Muni Buildings DDC control panels:

- Five (5) City Hall DDC control panels
- Two (2) Fire Station DDC control panels
- One (1) IHUB Building DDC control panel
- One (1) Police Training Building DDC control panel

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- Two (2) Police Dept Building DDC control panels
- One (1) City Maintenance Building DDC control panel
- Eleven (11) Airport DDC control panels
- Two (2) Palm Tree Lighting DDC control panels

Furnish and install a total of four (4) Guardian RED10 Remote Security Appliance devices and install them in the existing Muni Buildings DDC control panels. Southwest Networks, Inc. will setup and configure the RED10 devices.

Note: City of Palm Springs will be required to furnish DSL modems, connections and data plans for the following Muni Buildings:

- IHUB Building
- Police Training Building
- City Maintenance Building

PHASE 1: Submitted in CO # 26

Note: (Description only, no charge for Phase I to this CO # 27)

We will subcontract Southwest Networks, Inc. to rod conduit to make sure that the path is clear and are able to run the fiber optic cabling. Once Southwest Networks, Inc. is sure the path is clear, Southwest Networks, Inc. will then pull mule tape through the conduit to get a more accurate measurement of the fiber lengths. Once Southwest Networks, Inc. have all of the measurements, they will then order fiber and other materials needed for Phase-2 once approved.

***Damaged conduit repair is not the responsibility of Southwest Networks. If Southwest Networks discovers conduit(s) to be damaged or broken we will immediately report it to The City of Palm Springs.**

PHASE 2

CoGen Plant to City Hall

Southwest Networks to pull **6-Strand** 62.5 MM fiber approximately 750 through 1" conduit. Conduit has a 10 pair copper cable that we may be able to use to pull with as long as we pull it back into building.

Fire Department to City Hall

Southwest Networks to pull **6-Strand** 62.5 MM fiber approximately 500' feet with a run of straight conduit 960 feet between vaults.

Police Department to City Hall

Southwest Networks to pull **6-Strand** 62.5 MM fiber approximately 3000' feet with a run of straight conduit 550' feet between vaults.

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Police Department to Airport

Southwest Networks to pull **6-Strand** 62.5 MM fiber approximately 1500' feet with a run of straight conduit 650' feet between vaults.

Police building to Police training center

Southwest Networks will pull two (2) Cat 6 data cables (1 for spare) approximately 250' from room where DSL line comes in over to the room in the training yard.

PHASE 3:

Southwest Networks is to mount lockable fiber black boxes in all of the following locations. Fire Department, CoGen plant, Police Department and Airport. Southwest Networks will then mount lockable fiber black boxes in City Hall for Fire Department, Cogen plant, Police Department.

Southwest Networks will then route and land all fiber into fiber black boxes.
Southwest Networks will mount Fiber transceivers and cross connect them to fiber patch panel, using one pair of fiber to each location. (Need power nearby for transceivers) Create patch cables to go to from transceivers to equipment. Southwest Networks will then terminate and test the Cat-6 cabling that extends into the police training yard. Southwest Networks will then perform all cable management and labeling as well as test all of the fiber, to include recording of all final readings.

Clarifications:

This OPTION#1 includes 6-Strand Fiber.
Note: If broken conduit(s) are located and that cause Southwest Networks to go another route, then Phase-2 and Phase-3 pricing will need to be re-quoted.

All labor will be performed on normal business hours (Monday – Friday / 7:00am – 4:00pm).
We have not included any after hour labor.

OPTION# 1: Proposal Price..... $ 90,208.00

Breakout Costs:

Materials: **$ 42,000.00**

(Includes: Network switches, DC power supplies, RED10 devices, misc. wiring, etc.)

LABOR: **$ 39,708.00**

(Includes: Install, wiring & testing of network switches/DC power supplies, RED10 network devices, CAT-6 cabling, conduit runs, coordination labor with Southwest Networks, Inc. for each

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PHASE, engineering/design labor)

Opterra Energy Services Construction Management: $ 8,500.00

OPTION-2

Scope (12-Stand Fiber add in lieu of 6 strand):

Same work as Option # 1 above.
Install 12 strand fiber wire in lieu of 6 strand wire.

This will ensure spare strands for any future work the city may do for other projects.

Materials: **Add $ 6,800.00 to Option 1**

Please contact me if you have any questions with this proposal.

Respectfully,

Barry Kirschenbaum

Barry Kirschenbaum
Project Manager