



Meeting Date: 01/11/11

ACTION	TYPE OF ITEM
<input type="checkbox"/> Approved Recommendation	<input checked="" type="checkbox"/> Info/Consent
<input type="checkbox"/> Ord. No(s). _____	<input type="checkbox"/> Report
<input type="checkbox"/> Res. No(s). _____	<input type="checkbox"/> Public Hearing (Info/consent)
<input type="checkbox"/> Other _____	<input type="checkbox"/> Other _____

Prepared By: Lou Balderrama, City Engineer Agenda Item No. I-13

Reviewed By: City Manager [Signature] City Attorney [Signature] Finance [Signature] Public Works

DATE: December 30, 2010

TO: City Council

FROM: Rob Roshanian, Interim Public Works Director
Public Works Department

SUBJECT: Change Order No. 15 to Agreement No. A-7259 with McCarthy Building Companies, Inc. for the Advanced Water Purification Facility

RECOMMENDATION

That City Council approve and authorize the Mayor to execute Change Order No. 15 to Agreement No. A-7259 with McCarthy Building Companies, Inc. in the amount of \$111,440 for construction costs associated with electrical modifications, with the provision that the City reserves the right with respect to ultimate responsibility for cost of the change.

DISCUSSION

The original design and construction of the Electrical Service Connection for the Advanced Water Purification Facility (AWPF) Project was provided by Southern California Edison (SCE) via an Added Services Agreement. The agreement provided for connection to the SCE Grid, installation of step-down transformers, as well as providing high voltage conductors from the transformers to the AWPF switchgear equipment. The SCE equipment complies with standards approved by the California Public Utilities Commission (CPUC). SCE is not subject to the standards of the National Electric Code (NEC).

The Electrical System Specifications for the overall AWPF Project, prepared by CH2M Hill, require that all electrical system components meet the NEC Standards. Subsequent to project award, McCarthy Building Companies, Inc. (McCarthy) ordered NEC approved switchgear for the AWPF Project. Consistent with NEC requirements, this switchgear was configured to facilitate the use of copper cable.

McCarthy coordinated with SCE regarding the electrical service, as per the contract documents. As a result of the coordination effort between McCarthy and SCE, it was discovered that SCE's CPUC-approved standard uses aluminum cabling exclusively. SCE informed McCarthy that it would not make an exception to use copper cabling. It was further determined that the pull sections designed into the switchgear ordered by McCarthy would not accommodate aluminum cabling.

Change Order No. 15 provides for cost adjustments to the AWPF Project related to the construction costs associated with the electrical modifications necessary to overcome this issue of two different

electrical standards. McCarthy will procure copper electrical cables for the cable runs between the three (3) SCE transformers on the project site to the main switchgear in Electrical Rooms 1 and 2. This work is being deleted from SCE's original scope of work and is being added to McCarthy's scope of work. The additional cost to the City for the copper cables will be partially offset by a credit back from SCE to the City for deletion of the aluminum cables.

The AWPf project team, which includes City staff, CH2M Hill (designer), AECOM (Construction Project Manager) and McCarthy Building Companies (Contractor), considered the following two options to solve this problem:

- **Option #1. Redesign the AWPf switchgear to meet SCE requirements.** This option would negatively impact the project schedule, due to redesign time and delay of fabrication.
- **Option #2. Delete the cabling work from SCE's scope and install the cabling per NEC requirements.** This option would not impact the schedule of the switchgear; however, there would be additional cost for installation of copper cables (per NEC requirements) in lieu of aluminum cables.

The project team chose Option #1, which will install copper cabling. This option will have the least impact upon the project schedule, which is critical to receiving the \$20 million federal grant funding. Option #2 would have taken the switchgear order out of production and would have resulted in significant delays due to the redesign/approval process and subjected the City to the uncertainty of the manufacturer's production schedule.

To implement this option on an immediate basis to avoid delay costs, staff prepared Change Order No. 15 and obtained approval from the City Manager and the Mayor Pro-Tem, subject to City Council ratification.

A related issue to the conductor cabling materials issue is whether the cable trench that provides a conduit for the cabling between the SCE transformers and AWPf switchgear was properly identified and defined in the Plans and Specifications, as prepared by CH2M Hill. City staff and AECOM are still evaluating the issue. As procurement of copper cable of this size requires significant lead time, the project team recommends moving forward with the procurement of the copper cabling now and addressing the cable trench issue separately.

Based on a review of the Project Plans and Specifications, City staff and AECOM do not believe that the additional cost associated with Change Order No 15, or related future Change Orders, are the City's responsibility. The Contractor and Project Designer have been put on notice that the City reserves its rights to further evaluate the facts associated with this issue and determine the party or parties responsible for the cost of this change.

Change Order No. 15 for \$111,440 covers cost adjustments for McCarthy to furnish copper cabling, per NEC requirements. This additional cost will be offset by an estimated credit of \$65,000 from SCE for deletion of aluminum cabling from its scope.

Change Order No. 15 to Agreement No. A-7259 with McCarthy Building Companies, Inc. for the
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FINANCIAL IMPACT

The cost of Change Order No. 15 is funded by the AWPF Project No. 066010 in the amount of \$111,440, with \$83,580 from Account No. 609-6553-821-8604 and \$27,860 from Account No. 276-6553-821-8604. Sufficient funds exist to cover the cost of Change Order No. 15.

Attachment #1 - Change Order No. 15 to Public Works Contract No. A-7259
#2 Copy of December 29, 2010 Correspondence to McCarthy Building Companies, Inc.
#3 Copy of December 29, 2010 Correspondence to CH2M Hill, Inc.

Note: Attachment No. 1 has been provided to the City Council. Copies are available for review at the Help Desk (second floor) in the Main Library after 6:00 p.m. on the Thursday prior to the Council meeting, and at the City Clerk's Office after 8:00 a.m. on Monday.



ROB ROSHANIAN
Interim Public Works Director

Public Works Department - Public Works Administration
305 West Third Street • Oxnard, CA 93030 • (805) 385-8281 • Fax (805) 385-7907

December 29, 2010

US MAIL and
Electronic Mail

Mr. Curtis Horner
Project Manager
McCarthy Building Companies, Inc.
20401 S.W. Birch St. Ste. 300
Newport Beach, CA 92660

Subject: AWPf Project – Copper Cable and Cable Trench Issues

Dear Mr. Horner,

The original design and construction of the Electrical Service Connection for the Advanced Water Purification Facility (AWPF) Project was to be provided by Southern California Edison (SCE) via an Added Services Agreement. This effort includes connection to the SCE Grid, installation of step-down transformers, as well as providing high voltage conductors from the transformers to the AWPf switchgear equipment.

The Electrical System Specifications for the overall AWPf Project require that all electrical system components meet the National Electric Code (NEC) Standards. Subsequent to project award, McCarthy Building Companies, Inc. (McCarthy) ordered NEC approved switchgear for the AWPf Project. Consistent with NEC requirements, this switchgear was configured to facilitate the use of copper cable. As a result of the coordination effort between SCE and McCarthy, SCE, who is exempt from NEC requirements, informed the Contractor that SCE's standard was to use aluminum conductors exclusively. It was further determined that the pull section designed into the switchgear ordered by McCarthy would not accommodate aluminum conductors.

This issue was discussed with members of the AWPf project team, which includes City staff, CH2M Hill (designer), AECOM (Construction Project Manager) and McCarthy Building Companies (Contractor).

The following two options were considered:

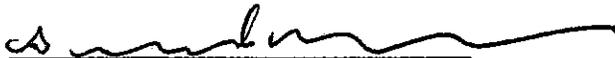
- **Option #1 Redesign of the switchgear to meet SCE requirements.** This option would impact the project schedule due to redesign time and delay of fabrication.
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Mr. Horner
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Based on consideration of both options, the decision was made by the City to install switchgear, copper cable and/or cable trench not risk project schedule impacts associated with the switchgear redesign. Redesign of the switchgear would have taken the switchgear order out of production and subject to the redesign/approval process as well as being subjected to the uncertainty of the manufacturer's production schedule. These changes have resulted in additional project cost.

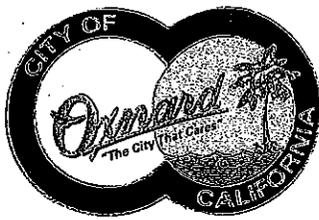
City staff does not believe that the additional cost associated with the subject changes are the City's responsibility. The City is hereby notifying the Contractor (McCarthy Construction) and Design Engineer (CH2MHILL) that the City reserves its right to evaluate the facts associated with this issue and determine the party or parties responsible for the cost of this change.

Should you have any questions, please do not hesitate to contact me at (805) 385-7682.



Rob Roshanian, Interim Public Works Director

Cc: Edmund F. Sotelo, City Manager
Alan Holmberg, City Attorney
Lou Balderrama, City of Oxnard
Mark Norris, City of Oxnard
Thien Ng, City of Oxnard
Jim Creager, AECOM
Robert Stein, AECOM
File



ROB ROSHANIAN
Interim Public Works Director

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December 29, 2010

US MAIL and
Electronic Mail

Mary Vorissis
Project Manager
CH2MHILL, Inc.
325 East Hill Crest Drive, Suite 125
Thousand Oaks, CA 91360-5828

Subject: AWPf Project – Copper Cable and Cable Trench Issues

Dear Ms. Vorissis:

The original design and construction of the Electrical Service Connection for the Advanced Water Purification Facility (AWPF) Project was to be provided by Southern California Edison (SCE) via an Added Services Agreement. This effort includes connection to the SCE Grid, installation of step-down transformers, as well as providing high voltage conductors from the transformers to the AWPf switchgear equipment.

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Ms. Vorissis
December 29, 2010
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City staff does not believe that the additional cost associated with the subject changes are the City's responsibility. The City is hereby notifying the Contractor (McCarthy Construction) and Design Engineer (CH2MHILL) that the City reserves its right to evaluate the facts associated with this issue and determine the party or parties responsible for the cost of this change.

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