



## ADDENDUM TO THE CONTRACT

for the

### AUGUSTUS BROWN POOL DIGITAL CONTROLS CONVERSION

Contract No. E16-078

**ADDENDUM NO.:** TWO

**CURRENT DEADLINE FOR BIDS:**  
December 17, 2015

**PREVIOUS ADDENDA:** ONE

**ISSUED BY:** City and Borough of Juneau  
ENGINEERING DEPARTMENT  
155 South Seward Street  
Juneau, Alaska 99801

**DATE ADDENDUM ISSUED:** December 11, 2015

The following items of the contract are modified as herein indicated. All other items remain the same. This is a faxed addendum. A confirming copy will not be mailed to you. This addendum has been issued and is posted online. Please refer to the CBJ Engineering Contracts Division webpage at:  
<http://www.juneau.org/engineering ftp/contracts/Contracts.php>

#### **PROJECT MANUAL:**

Item No. 1 SECTION 00030 - NOTICE INVITING BIDS, COMPLETION OF WORK and SECTION 00500 – AGREEMENT, ARTICLE 2 - CONTRACT COMPLETION TIME. **Delete** and **Replace** with the following:

“Substantial completion of all Work must be on or before June 5, 2016. Final completion shall be June 20, 2016. Substantial completion is defined as achieving a fully operating and commissioned DDC system per the plans and specifications.”

Item No. 2 SECTION 00030 - NOTICE INVITING BIDS, DESCRIPTION OF WORK, SECTION 00500 – AGREEMENT, ARTICLE 1 – WORK, Second Paragraph, and SECTION 01010 - SUMMARY OF WORK Part 1 - GENERAL, Article 1.2 A - DESCRIPTION OF WORK. **Delete** in its entirety and **replace** with the following:

“Base Bid: The WORK includes all mechanical, electrical, automatic controls, related accessories and equipment, testing and balancing, cutting, patching, and other related work to provide a complete and fully operating Direct Digital Control (DDC) system per the drawings and specifications. Contractor is to schedule the majority of shutdown and installation work during the pool’s annual maintenance shutdown which will occur between Sunday, May 22, 2016 and Sunday, June 5, 2016 and perform all WORK as described in these Contract Documents.

Additive Alternate #1: Provide all WORK necessary for the replacement of fans GEF-1, GEF-2, and GEF-3.”

- Item No. 3 SECTION 00310 – BID SCHEDULE. **Delete** in its entirety and **replace** with the attached SECTION 00310 – BID SCHEDULE, labeled Addendum No. 2.
- Item No. 4 SECTION 01010 - SUMMARY OF WORK, PART 1 – GENERAL, Article 1.5 - CONTRACTOR USE OF PROJECT SITE. **Add** the following Paragraph G.:  
“G. Installation WORK by Contractor and subcontractor in non-occupied spaces before the pool shutdown period (May 22, 2016, through June 5, 2016) is approved if normal pool operations are not affected. Coordinate proposed work tasks, locations and schedules with the CBJ Project Manager and Augustus Brown Pool Manager at the Pre-Construction meeting.”
- Item No. 5 **ADD** SECTION 01230 – ALTERNATES attached to this addendum.
- Item No. 6 SECTION 230926 – BUILDING AUTOMATION SYSTEM AND AUTOMATIC CONTROLS, PART 1 - GENERAL, Article 1.3 – SYSTEM DESCRIPTION, Paragraph A – Scope of WORK, Subparagraph 6. **Delete** in its entirety and **replace** it with the following:  
“6. All wiring/cabling shall be installed in conduit except where located above accessible lay-in ceilings. Existing conduit may be reused where in good condition. All existing control wiring shall be removed and replaced. Existing control wiring shall not be re-used.”
- Item No. 7 SECTION 230926 – BUILDING AUTOMATION SYSTEM AND AUTOMATIC CONTROLS, PART 1 - GENERAL, Article 1.3 – SYSTEM DESCRIPTION, Paragraph A – Scope of WORK – **Add** the following subparagraph 18.  
“18. Contractor shall provide and install CAT-5E plenum rated data cable and connection between desired DDC control panel location in Fan Room B to the CBJ network rack located in the Staff Office. Contractor shall coordinate all network connection and internet access requirements with CBJ.”
- Item No. 8 SECTION 230926 – BUILDING AUTOMATION SYSTEM AND AUTOMATIC CONTROLS, PART 2 - PRODUCTS, Article 2.12 – VARIABLE FREQUENCY DRIVES (VFD) FOR TEF-1, GEF-1, GEF-2, GEF-3. **Remove** “GEF-1, GEF-2, GEF-3” from title.
- Item No. 9 SECTION 230926 – BUILDING AUTOMATION SYSTEM AND AUTOMATIC CONTROLS, PART 2 - PRODUCTS, Article 2.13 – WIRING. Paragraph A, Subparagraph 1. Low-voltage control wiring (12-24v). **Delete** “All wiring shall be enclosed in conduit” and **Replace** it with the following:  
“All wiring/cabling shall be installed in RMC, IMC, or EMT conduit except where located above accessible lay-in type ceilings and wiring/cabling is plenum rated.”  
Paragraph A, Subparagraph 3. **Delete** “All wiring shall be enclosed in conduit throughout building”.
- Item No. 10 SECTION 230926 – BUILDING AUTOMATION SYSTEM AND AUTOMATIC CONTROLS, PART 3 - EXECUTION, Article 3.3 – WIRING AND RACEWAYS, Paragraph A – General, Subparagraph 2. **Delete** in its entirety and **Replace** it with the following:  
“2. All wiring/cabling shall be installed in RMC, IMC, or EMT conduit except where located above accessible lay-in type ceilings. Accessible lay-in ceilings are located in Lobby, Waiting, Staff, Office, Women’s Staff Lockers, Family Locker.

Unenclosed cabling shall be plenum rated. All wiring/cabling shall be new.”

Paragraph A – General, Subparagraph 5. **Delete** in its entirety and **Replace** it with the following:

“5. Due to corrosive environment, exposed conduit located in Natatorium pool area, Mens Lockers, Womens Lockers, Mens Locker Toilet Room, Womens Locker Toilet Room, Storage G, Storage E, Pool Systems, and Chlorine room shall be aluminum –or- shall be painted 2 coats epoxy paint of color selected by Project Manager.”

Item No. 11 SECTION 230926 – BUILDING AUTOMATION SYSTEM AND AUTOMATIC CONTROLS, PART 3 - EXECUTION, Article 3.9 – SEQUENCE OF OPERATIONS, Paragraph J – AIR HANDLING UNIT AHU-W (NATATORIUM BACKUP HEATING AND DEHUMIDIFICATION), Subparagraph 4-Back-up De-Humidification mode:, 3<sup>rd</sup> sentence. **Remove** “and GEF-2 VFD shall modulate.”

Item No. 12 SECTION 230926 – BUILDING AUTOMATION SYSTEM AND AUTOMATIC CONTROLS, PART 3 - EXECUTION, Article 3.9 – SEQUENCE OF OPERATIONS, Paragraph J - AIR HANDLING UNIT AHU-W (NATATORIUM BACKUP HEATING AND DEHUMIDIFICATION). **Delete** Subparagraph 7 in its entirety and **replace** with the following:

“7. GEF-2 Graphics: Indicate fan operation status, damper position, and alarms.”

Item No. 13 SECTION 230926 – BUILDING AUTOMATION SYSTEM AND AUTOMATIC CONTROLS, PART 3 - EXECUTION, Article 3.9 – SEQUENCE OF OPERATIONS, Paragraph P. **Delete** paragraph P in its entirety and **Replace** it with the following:

“P. GENERAL EXHAUST FANS (GEF-1 and GEF-3): Existing magnetic starter with three position switch, located in the MCC where shown. In AUTO position of MCC, exhaust fan to operate according to BAS enable. In HAND position of MCC, exhaust fan to operate continuously.

1. GEF-1 and GEF-3 shall have individual enable commands from graphics. GEF -1 and GEF-3 do not have a schedule. Fans to be enabled manually on BAS graphics when operation by maintenance staff as desired.
2. Alarm generated when exhaust fan does not operate when enabled.
3. Relief air damper (RLD) shall open when respective fan operates.
4. Graphics: Indicate fan operation status, damper position, and alarms.”

Item No. 14 SECTION 230926 – BUILDING AUTOMATION SYSTEM AND AUTOMATIC CONTROLS, PART 3 - EXECUTION, Article 3.9 – SEQUENCE OF OPERATIONS, Paragraph Q. **Delete** Paragraph Q in its entirety and **Replace** with the following:

“Q. GENERAL EXHAUST FANS (GEF-2): Existing magnetic starter with three position switch, located in the MCC where shown. In AUTO position of MCC, exhaust fan to operate according to BAS enable. In HAND position of MCC, exhaust fan to operate continuously.

1. GEF-2 shall operate when enabled by AHU-2 De-Humidification mode. See AHU-2 Sequence.
2. GEF-2 shall be enabled to provide relief air and maintain negative pressurization in the Natatorium during AHU-2 dehumidification mode.

4. Relief air damper (RLD) shall open when GEF-2 fan operates.
5. Graphics: Indicate fan operation status, damper position, and alarms.

Item No. 15 SECTION 232113 – HYDRONIC PIPING, PART 2 - PRODUCTS, Article 2.2 – HEATING WATER PIPING, ABOVE GRADE, Paragraph A – Steel Pipe. **Add** the following subparagraph 2.

- “2. Steel press joints, similar to Megapress acceptable where connecting to existing black steel piping. Piping surface shall be free of indentations, pits, and deformations and must be clean and free of debris, rust, scale, paint, oil, and grease. Existing connections (interior and exterior) shall be sanded smooth per manufacturer’s instructions. Shall be similar to Viega Megapress with EPDM sealing element and smart connect feature.”

#### **DRAWINGS:**

Item No. 16 DRAWING SHEET M001 - SCHEDULES AND DETAIL

DETAIL 1 – GEF FAN UNIT DETAIL - TYP.OF GEF-1, GEF-2, GEF-3. **Add** the following Note.

“Note: GEF-1, GEF-2, and GEF-3 replacement in Alternate Work. Control damper replacement and control work in Base Bid.”

Item No. 17 DRAWING SHEET M001 SCHEDULES AND DETAIL - TYP.OF GEF-1, GEF-2, GEF-3, FAN SCHEDULE, Electrical Characteristics. **Remove** “VFD”

Features and Accessories. **Remove** “Variable Frequency Drives”.

#### **Add**

“Note: GEF-1, GEF-2, and GEF-3 fan unit replacement in Alternate Work. Control damper replacement and control work for GEF-1, GEF-2, and GEF-3 in Base Bid.”

Item No. 18 DRAWING SHEET M101 FLOOR PLANS, Construction Note 9. **Remove** “Install VFD for each”. **Add** “Alternate Work” to end of sentence.

Item No. 19 DRAWING SHEET M402 CONTROLS

DETAIL 7 – CONTROL SCHEMATIC FOR GEF-1, GEF-2, GEF-3

**Remove** VFD and related points (BACnet connection, Enable, Speed) shown for the GEF units and **Replace** with Enable and Status control points.

By:   
Greg Smith,  
Contract Administrator

Total number of pages contained within this Addendum: 7

## SECTION 00310 - BID SCHEDULE

Bid Schedule for construction of **E16-078 named Augustus Brown Pool Digital Controls Conversion**, in accordance with the Contract Documents.

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**BASE BID** - Furnish all mechanical, electrical, automatic controls, related accessories and equipment, testing and balancing, cutting, patching, and other related work to provide a complete and fully operating Direct Digital Control (DDC) system per the drawings and specifications. Contractor is to schedule the majority of shutdown and installation work during the pool's annual maintenance shutdown which will occur between Sunday, May 22, 2016, and Sunday, June 5, 2016 and perform all WORK as described in these Contract Documents.

**BASE BID** \$ \_\_\_\_\_  
(Price in Figures)

**ADDITIVE ALTERNATE #1:** Provide all WORK necessary for the replacement of fans GEF-1, GEF-2, and GEF-3."

**ADDITIVE ALTERNATE #1 BID** \$ \_\_\_\_\_  
(Price in Figures)

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**Date:** \_\_\_\_\_ **Bidder:** \_\_\_\_\_  
(Company Name)

**END OF SECTION**

## **SECTION 01230 - ALTERNATES**

### **PART 1 - GENERAL**

#### **1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

#### **1.2 SUMMARY**

- A. Section includes administrative and procedural requirements for alternates.

#### **1.3 DEFINITIONS**

- A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the Bidding Requirements that may be added to or deducted from the base bid amount if OWNER decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
  - 1. Alternates described in this Section are part of the WORK only if enumerated in the Agreement.
  - 2. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternate into the WORK. No other adjustments are made to the Contract Sum.

#### **1.4 PROCEDURES**

- A. Coordination: Modify or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
  - 1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.
- B. Notification: Immediately following award of the Contract, notify each party involved, in writing, of the status of each alternate. Indicate if alternates have been accepted, rejected, or deferred for later consideration. Include a complete description of negotiated modifications to alternates.
- C. Execute accepted alternates under the same conditions as other work of the Contract.
- D. Schedule: A schedule of alternates is included at the end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve the work described under each alternate.

## **SECTION 01230 - ALTERNATES**

### **PART 2 - PRODUCTS (Not Used)**

### **PART 3 - EXECUTION**

#### **3.1 SCHEDULE OF ALTERNATES**

- A. ADDITIVE Alternate No. 1: Provide all Work necessary for the replacement of fans GEF-1, GEF-2, and GEF-3.

**END OF SECTION 01230**