



# 468-2016 ADDENDUM No. 1

## REPLACEMENT OF BOILERS AND POOL WATER HEAT EXCHANGERS AT PAN AM POOL - 25 POSEIDON BAY

### **URGENT**

**PLEASE FORWARD THIS DOCUMENT TO  
WHOEVER IS IN POSSESSION OF THE BID  
OPPORTUNITY**

ISSUED: 3 June 2016  
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**THIS ADDENDUM SHALL BE INCORPORATED  
INTO THE BID OPPORTUNITY AND SHALL  
FORM A PART OF THE CONTRACT  
DOCUMENTS**

Template Version: A20150105

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**Please note the following and attached changes, corrections, additions, deletions, information and/or instructions in connection with the Bid Opportunity, and be governed accordingly. Failure to acknowledge receipt of this Addendum in Paragraph 8 of Form A: Bid may render your Bid non-responsive.**

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### **PART E – SPECIFICATIONS**

#### **DIVISION 22:**

##### **Section 22 11 16 - Domestic Water Piping**

Add: 2.1.2 Pool water piping:

- .1 NPS 2 1/2 and smaller: Copper tube, hard drawn, type L: to ASTM B88M.
- .1 NPS 3 and larger: Rigid polyvinyl chloride (PVC), Schedule 80, to CSA B137.3.

Add: 2.4.3 Pool water gate isolation valves:

- .1 NPS 2 1/2 and smaller: Solder end rising stem, bronze, threaded bonnet, solid bronze disc, Lead free, certified to NSF 61/NSF 372. Acceptable Product: "Apollo Valves" model 101S or approved equivalent according to B7.
- .2 NPS 3 and larger: Class 125 flanged OS&Y, full port, lead free, certified to NSF 61 and NSF 372. Acceptable Product: "Apollo Valves" model 611F or approved equivalent according to B7.

#### **DIVISION 23:**

Add: 468-2016\_Addendum\_1-NMS\_Section\_221317

Add: 468-2016\_Addendum\_1-NMS\_Section\_231123

##### **Section 23 05 19.01 - Thermometers and Pressure Gauges**

Add: 2.2.2 The following product(s) have been approved as equal provided they meet all requirements of the drawings and specifications: (Direct Reading Thermometers) - H.O. Trerice.

Add: 2.3.3 The following product(s) have been approved as equal provided they meet all requirements of the drawings and specifications: (Thermometer Wells) - H.O. Trerice.

Add: 2.4.3 The following product(s) have been approved as equal provided they meet all requirements of the drawings and specifications: (Pressure Gauges) - H.O. Trerice.

### Section 23 21 14 - Hydronic Specialties

- Add: 2.1.4 The following product(s) have been approved as equal provided they meet all requirements of the drawings and specifications: Expansion Tank (EXP-1) - Armstrong Series L, Bell & Gossett, Taco.
- Add: 2.2.3 The following product(s) have been approved as equal provided they meet all requirements of the drawings and specifications: (Air Vents) – Taco, Bell & Gossett.
- Add: 2.3.4 The following product(s) have been approved as equal provided they meet all requirements of the drawings and specifications: (Air Purger) – Taco.
- Add: **2.5 EXTERNAL LOW WATER CUT OFF**
- .1 Adjustable BX outlet, dual precision switches for dependable operation, packless bellows, 25 mm NPT equalizing pipes.
  - .2 Acceptable Product: “McDonnell & Miller” model Series 64 or approved equivalent according to B7.

### Section 23 21 13.02 - Hydronic Piping Systems

- Add: 2.1.2 Boiler Condensate Piping: Rigid polyvinyl chloride (PVC), Schedule 40, to CSA B137.3.
- Add: 2.4.4.3 The following product(s) have been approved as equal provided they meet all requirements of the drawings and specifications: (Balancing Valves) - Bell & Gossett.
- Add: 2.4.5.2 NPS 3 (75mm) and over: Flanged cast iron swing check, suitable for vertical installation, class 125, conforms to MSS SP-71. Acceptable Product: “Apollo Valves” model 910F or approved equivalent according to B7.

### Section 23 21 23 - Hydronic Pumps

- Add: **1.5 DELIVERY LEAD TIME:**
- 1.5.1 Delivery lead time shall be 4 weeks or less.
- Add: 2.1.9 The following product(s) have been approved as equal provided they meet all requirements of the drawings and specifications: Pumps (PU-1 to PU-6) – Taco, Bell & Gossett.

### Section 23 52 00 - Heating Boilers

- Add 1.1.1.4 Building Elevations: (For bidding purposes only. Actual elevations to be confirmed on site by Contractor):
- .1 Top of Roof Parapet: 156' – 10"
  - .2 U/S of Roof Truss: 146' – 4"
  - .3 Top of Concourse: 110' – 0"
  - .4 Top of Main Floor: 100' – 0"
  - .5 Top of Boiler Room Floor: 84' – 6"
- Add: 2.1.13.2 A single condensate neutralizer tank shall serve two boilers.
- Add: 2.2.16 The following product(s) have been approved as equal provided they meet all requirements of the drawings and specifications: Positive Pressure Vent: Saf-T Vent CI Plus
- Add: **2.3 CONDENSATE NEUTRALIZER (Single neutralizer for installation on both main vent base tees)**
- .1 System shall include 18 litre (4.8 U.S. gallons) tank and lid made from polypropylene construction with two 25mm (1") FNPT inlet/outlet connections. Neutralizers shall come with 18kg (40lbs) of neutralization media.
  - .2 Acceptable Product: “Axiom” model NT25 or approved equivalent according to B7.

Add: **3.6 BOILER PLANT SEQUENCE OF OPERATION:**

- .1 Provide all controls and sensors required to operate the boiler plant. The six boilers shall be operated as a single boiler plant and it shall operate as follows:
  - .1 Building Heating Mode (When Outdoor Temperature is below heating mode set point):
    - .1 Modulate boiler plant to maintain heating loop temperature at set point. The heating loop temperature shall be re-set on a linear curve based on outdoor air temperature.
    - .2 When a given boiler is firing, the associated circulation pump shall operate. When a given boiler is not firing, the associated pump shall stop after a time delay as recommended by the manufacturer.
    - .3 On call for domestic water heating, override outdoor re-set until domestic water demand is satisfied. Modulate boiler plant to maintain domestic water setpoint.
    - .4 Provide minimum of two occupancy schedules for each day.
  - .2 Non-Building Heating Mode (When outdoor air temperature is above set point).
    - .1 Maintain domestic water temperature at set point.
    - .2 Provide a domestic hot water remote sensor and associated control wiring.

**Section 23 57 00 – Heat Exchangers**

Add: 1.1.3 All wetted parts including connections shall be titanium.

Revise: 2.1.7 Tags: HX-1, HX-2

Connections:

	HOT	COLD
In	100mm (4" 150#)	100mm (4" 150#)
Out	100mm (4" 150#)	100mm (4" 150#)

Add: 2.1.8 The following product(s) have been approved as equal provided they meet all requirements of the drawings and specifications: Heat Exchangers (HX-1 & HX-2) – Bell & Gossett.

Add: 2.2.8 The following product(s) have been approved as equal provided they meet all requirements of the drawings and specifications: Heat Exchangers (HX-102) – Bell & Gossett.

Add: 2.3.8 The following product(s) have been approved as equal provided they meet all requirements of the drawings and specifications: Heat Exchangers (HX-103) – Bell & Gossett.

**DRAWINGS**

Replace: 468-2016\_Drawing\_M07-R0 with 468-2016\_Addendum\_1\_Drawing\_M07-R1

Replace: 468-2016\_Drawing\_M08-R0 with 468-2016\_Addendum\_1\_Drawing\_M08-R1