

963-2010 ADDENDUM 1

WEST END WATER POLLUTION CONTROL CENTRE HVAC REPLACEMENT

URGENT

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

ISSUED: January 26, 2011
BY: Art Gossen, P.Eng.
TELEPHONE NO. (204) 774-7859

**THIS ADDENDUM SHALL BE INCORPORATED
INTO THE BID OPPORTUNITY AND SHALL
FORM A PART OF THE CONTRACT
DOCUMENTS**

Template Version: A20070419

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 10 of Form A: Bid may render your Bid non-responsive.

PART B – BIDDING PROCEDURE

Revise: B2.1 to read: The Submission Deadline has been revised to 12:00 noon Winnipeg time, February 16, 2011

PART E – SPECIFICATIONS

DRAWINGS

Replace: 963-2010_Drawing_1-0103A-P0007-001-R00 with 963-2010_Drawing_1-0103A-P0007-001-R01
Drawing Number LG2.1 (1-0103A-P0007-001) – General, Drawing List > Drawing Number LE 2.11 (1-0103A-E0017-001) – Area L – General and Siteworks, Electrical Site Plan is not shown on the drawing list, the drawing list will be revised to show this drawing.

Reissue: 963-2010_Drawing_1-0103G-M0027-001-R00
Drawing Number HM2.11 (1-0103G-M0027-001) > shows a drawing for the administrative building and shall be replaced with the appropriate drawing as found attached to this addendum.

Replace: 963-2010_Drawing_1-0103A-E0012-001-R00 with 963-2010_Drawing_1-0103A-E0012-001-R01
Drawing Number LE2.6 (1-0103A-E0012-001) – MCC-1S Single Line Diagram and Physical Line Up > has been modified as discussed in the RFI E1-4.

Add:

- 963-2010_Addendum-1_Drawing_FE1.01-R02 (reference drawing, for RFI E2-2, for Electrical)
- 963-2010_Addendum-1_Drawing_HE1.01-R04 (reference drawing, for RFI E2-2, for Electrical)
- 963-2010_Addendum-1_Drawing_HE2.01-R04 (reference drawing, for RFI E2-2, for Electrical)
- 963-2010_Addendum-1_Drawing_SE1.01-R02 (reference drawing, for RFI E2-2, for Electrical)
- 963-2010_Addendum-1_Drawing_SE1.02-R01 (reference drawing, for RFI E2-2, for Electrical)
- 963-2010_Addendum-1_Drawing_SE1.03-R01 (reference drawing, for RFI E2-2, for Electrical)
- 963-2010_Addendum-1_Drawing_SE1.04-R01 (reference drawing, for RFI E2-2, for Electrical)
- 963-2010_Addendum-1_Drawing_SE2.01-R01 (reference drawing, for RFI E2-2, for Electrical)
- 963-2010_Addendum-1_Drawing_SE2.02-R02 (reference drawing, for RFI E2-2, for Electrical)
- 963-2010_Addendum-1_Drawing_SE2.03-R03 (reference drawing, for RFI E2-2, for Electrical)
- 963-2010_Addendum-1_Drawing_SE3.01-R01 (reference drawing, for RFI E2-2, for Electrical)
- 963-2010_Addendum-1_Drawing_SE3.02-R02 (reference drawing, for RFI E2-2, for Electrical)
- 963-2010_Addendum-1_Drawing_SE3.03-R02 (reference drawing, for RFI E2-2, for Electrical)

963-2010_Addendum-1_Drawing_SE4.01-R02 (reference drawing, for RFI E2-2, for Electrical)
963-2010_Addendum-1_Drawing_TE1.01-R02 (reference drawing, for RFI E2-2, for Electrical)
963-2010_Addendum-1_Drawing_TE1.02-R02 (reference drawing, for RFI E2-2, for Electrical)
963-2010_Addendum-1_Drawing_TE1.03-R02 (reference drawing, for RFI E2-2, for Electrical)
963-2010_Addendum-1_Drawing_TE2.01-R03 (reference drawing, for RFI E2-2, for Electrical)
963-2010_Addendum-1_Drawing_WEP-78-R01 (reference drawing, for RFI E2-2, for Electrical)
963-2010_Addendum-1_Drawing_WEP-79-R01 (reference drawing, for RFI E2-2, for Electrical)
963-2010_Addendum-1_Drawing_WEP-160-R01 (reference drawing, for RFI E2-2, for Electrical)
963-2010_Addendum-1_Drawing_WEP-161-R01 (reference drawing, for RFI E2-2, for Electrical)
963-2010_Addendum-1_Drawing_WEP-162-R01 (reference drawing, for RFI E2-2, for Electrical)
963-2010_Addendum-1_Drawing_WEP-163-R01 (reference drawing, for RFI E2-2, for Electrical)
963-2010_Addendum-1_Drawing_WEP-195-R01 (reference drawing, for RFI E2-2, for Electrical)
963-2010_Addendum-1_Drawing_WEP-196-R01 (reference drawing, for RFI E2-2, for Electrical)
963-2010_Addendum-1_Drawing_WEP-197-R01 (reference drawing, for RFI E2-2, for Electrical)
963-2010_Addendum-1_Drawing_WEP-198-R01 (reference drawing, for RFI E2-2, for Electrical)
963-2010_Addendum-1_Drawing_WEP-236-R01 (reference drawing, for RFI E2-2, for Electrical)
963-2010_Addendum-1_Drawing_WEP-237-R01 (reference drawing, for RFI E2-2, for Electrical)
963-2010_Addendum-1_Drawing_WEP-269-R01 (reference drawing, for RFI E2-2, for Electrical)
963-2010_Addendum-1_Drawing_WEP-270-R01 (reference drawing, for RFI E2-2, for Electrical)
963-2010_Addendum-1_Drawing_WEP-271-R01 (reference drawing, for RFI E2-2, for Electrical)
963-2010_Addendum-1_Drawing_WEP-272-R01 (reference drawing, for RFI E2-2, for Electrical)
963-2010_Addendum-1_Drawing_WEP-293-R01 (reference drawing, for RFI E2-2, for Electrical)
963-2010_Addendum-1_Drawing_WEP-294-R01 (reference drawing, for RFI E2-2, for Electrical)
963-2010_Addendum-1_Drawing_WEP-323-R01 (reference drawing, for RFI E2-2, for Electrical)
963-2010_Addendum-1_Drawing_WEP-324-R01 (reference drawing, for RFI E2-2, for Electrical)
963-2010_Addendum-1_Drawing_WEP-325-R01 (reference drawing, for RFI E2-2, for Electrical)
963-2010_Addendum-1_Drawing_WEP-326-R01 (reference drawing, for RFI E2-2, for Electrical)

SPECIFICATIONS AND SCHEDULES

- Info:** Specification 23 31 13.01 – Metal Ducts to 750 Pa > Stainless Steel Ducting (except in Admin. Building) shall conform to SMACNA HVAC Duct Construction Standards. Metal and Flexible shall have a No. 3 B Finish.
- Info:** The specifications for the roofing system indicated on Drawing Number SS2.2 (1-0103S-S0021-001-R00) - Secondary Clarifiers 1 and 2 – New Penthouse - Roof Plan, is to follow the Roofing SBS Modified specification shown on drawing US2.4 (1-0103V-S0004-001-R00) – Mechanical Bay – Building Sections.
- Info:** Contractor to supply and install trolley and chain hoist shown on Drawing Number SS2.6 (1-0103S-S20026-001-R00) – Area S – Odour Dispersion Room - Maintenance Platform & Monorail and Drawing Number HS2.3 (1-0103G-S0003-001-R00) – Area H – Headworks – Lower Process Level – Access Platform.
Approved Products;
Trolley - Yale Type FWE ¼ to 5 ton Capacity or approved equal in accordance with B.6,
Chain Hoist – Yale Type SHA ½ to 50 ton Capacity or approved equal in accordance with B.6.
- Info:** Communication antenna shown on structural drawing, Drawing Number HS2.1 (1-0103G-S0001-001-R00) – Headworks – Mechanical Room Roof Plan and Drawing Number HE2.1 (1-0103G-E0001-001-R00) – Headworks – Mechanical Room New Equipment – Plan – Electrical, indicates the Contractors is responsible for relocating this equipment.
This work will be done by City Corporate Communications Branch by June 2, 2011.
- Revise:** **Specification 23 51 00 to Specification 23 51 00-R01**
Specification 23 51 00 – Breeching Chimneys & Stacks, has been revised to include Type A Gas Vents. Type A Gas Vents will be required to replace Type B vent that is extended beyond functional height as determined by CAN/CGA B149.1, Natural Gas and Propane Installation Code.

- Replace: Schedule 23 74 00-H600 with Schedule 23 74 00-H600-Rev1**
Schedule for unit H600 was revised and replaced in order to:
- show correct temperature rise required.
- Replace: Schedule 23 74 00-H650 with Schedule 23 74 00-H650-Rev1**
Schedule for unit H650 was revised and replaced in order to:
- show correct temperature rise required.
- Replace: Schedule 23 74 00-H700 with Schedule 23 74 00-H700-Rev1**
Schedule for unit H700 was revised and replaced in order to:
- show correctly converted imperial heat input requirements.
- show correct temperature rise required.
- Replace: Schedule 23 74 16-H725 with Schedule 23 74 00-H725-Rev1**
Schedule for unit H725 was revised and replaced in order to:
- show correct temperature rise required.
- Replace: Schedule 23 74 00-U600 with Schedule 23 74 00-U600-Rev1**
Schedule for unit U600 was revised and replaced in order to:
- show correct temperature rise required.
- Replace: Schedule 23 74 00-S600 with Schedule 23 74 00-S600-Rev1**
Schedule for unit S600 was revised and replaced in order to:
- show increased heat input requirements.
- show new temperature rise required.
- Replace: Schedule 23 74 00-S650 with Schedule 23 74 00-S650-Rev1**
Schedule for unit S650 was revised and replaced in order to:
- show increased heat input requirements.
- show new temperature rise required.
- Replace: Schedule 23 74 00-U610 with Schedule 23 74 00-U610-Rev1**
Schedule for unit U610 was revised and replaced in order to:
- show increased heat input requirements.
- show new temperature rise required.
- Replace: Schedule 23 74 00-U640 with Schedule 23 74 00-U640-Rev1**
Schedule for unit U640 was revised and replaced in order to:
- show correct temperature rise required.
- Replace: Schedule 23 74 00-P600 with Schedule 23 74 00-P600-Rev1**
Schedule for unit P600 was revised and replaced in order to:
- show imperial heat input requirements.
- show correct temperature rise required.
- Replace: Schedule 23 74 00-P650 with Schedule 23 74 00-P650-Rev1**
Schedule for unit P650 was revised and replaced in order to:
- show increased heat input requirements.
- show new temperature rise required.
- Replace: Schedule 23 54 16-U700 with Schedule 23 54 16-U700-Rev1**
Schedule for unit U700 was revised and replaced in order to:
- show correct temperature rise required.
- show aluminized steel as material for fixed plate heat exchanger instead of stainless steel.

Replace: Schedule 23 54 16-U705 with Schedule 23 54 16-U705-Rev1
Schedule for unit U705 was revised and replaced in order to:
- show correct temperature rise required.
- show aluminized steel as material for fixed plate heat exchanger instead of stainless steel.

Replace: Schedule 23 54 16-U710 with Schedule 23 54 16-U710-Rev1
Schedule for unit U710 was revised and replaced in order to:
- show correct temperature rise required.
- show aluminized steel as material for fixed plate heat exchanger instead of stainless steel.

Replace: Schedule 23 54 16-U780 with Schedule 23 54 16-U780-Rev1
Schedule for unit U780 was revised and replaced in order to:
- show correct temperature rise required.
- show aluminized steel as material for fixed plate heat exchanger instead of stainless steel.

Replace: Schedule 23 54 16-U785 with Schedule 23 54 16-U785-Rev1
Schedule for unit U785 was revised and replaced in order to:
- show correct temperature rise required.

Replace: Schedule 23 54 16-U787 with Schedule 23 54 16-U787-Rev1
Schedule for unit U787 was revised and replaced in order to:
- show correct temperature rise required.

Meeting Minutes

Info.: Bid Opportunity Meeting No. 1, Meeting Minutes attached.

Info.: Bid Opportunity Meeting No. 2, Meeting Minutes attached.

Requests For Information (RFIs)

RFI M1

**M1-1Q Throughout the drawings you have shown manual isolation dampers. With notes stating “see specifications”.
However I am unable to find these specifications.**

M1-1A Section 23 33 14 – Dampers Balancing, is the applicable specification for the manual isolation dampers shown.

RFI E1

E1-1Q Is there a cable list going to be issued for new construction?

E1-1A No cable schedule is to be issued.

E1-2Q Are there different area classification under the CEC section18 code, pertaining to the different area's of this building?

E1-2A No. Due to the ventilation rates there are no area classifications. The only exception is light fixtures and lighting wiring. In the event of a high combustible gas alarm there are process areas which will be de-energized. However there will be a need for staff to investigate and so the lighting would remain on. That is why some areas have light fixtures and wiring which have a hazardous rating. For purposes of this contract, only the light fixtures being moved/relocated are required to have hazardous rating.

- E1-3Q** Spec 26 05 21 wire & cable , showing all teck related cabling to have an explosion proof rated connector, is this correct? please clarify as to which area this is required.
- E1-3A No other than for lighting. See item 1-2.
- E1-4Q** Spec 26 05 01 2.9.2.3 states to supply&install starter for EF S695 , should this be clouded on drawing 1-0103A-E0012-001 location 4A as a new wrapper?
- E1-4A Yes S695 should be clouded. Drawing revised and attached.
- E1-5Q** Drawing 1-0103S-E0016-001 note2, will there be panel and circuit #'s issued for the lighting and outlets in this area?
- E1-5A No, wire to closest lighting panel (Not being used as an instrumentation panel).
- E1-6Q** Drawing 1-0103S-E0015-001, the fixtures on this drawing, are they being shown as new install or as a relocation of existing with new ballasts?
- E1-6A Lighting for areas shown shall all be new vapour tight. Remove and dispose of existing lighting for area.
- E1-7Q** Drawing 1-0103P-E0002-001 , the fixtures on this drawing , are they shown as new install or as a relocation of existing with new ballasts, and is there a spec being issued for the type B fixture?
- E1-7A All fixtures shall be new Vapour Tight Type A where shown as type B
- E1-8Q** Drawing 1-0103P-E0002-001 , showing two switches by the doors leading into the intake plenums , are these for lighting inside of the plenum's? If so what type of fixture is required?
- E1-8A Yes, supply and install an industrial globe with cage inside plenum.
- E1-9Q** Drawing 1-0103V-E0010-001, is there a spec being issued for the duct clean-out fixture on this drawing?
- E1-9A Supply and install an industrial globe with cage inside plenum.
- RFI E2**
- E2-1Q** We would like to get an extension (minimum 2 weeks) first due to another large project closing the same day and second due to the amount of information/clarification we require.
- E2-1A Submission deadline is extended to 12:00 noon, February 16, 2011.
- E2-2Q** We would like to get a more detailed drawing of the overall floor plan than that shown on drawing E00017-001. We would like to see grid lines shown and locations of MCC'S and PLC'S with information regarding elevations.
- E2-2A Original EarthTech construction drawings shall be made available for reference.
- E2-3Q** We would like to see a cable list preferably one with estimated lengths of cable required.
- E2-3A No cable list is being provided.

- E2-4Q** We require additional information or clarification as to what is existing and what is new and what is required.
As an example drawing 1-0103A-E0014-001
- E2-4aQ** H605-AEF, H672-EF, P605-EF, H655-EF each are shown on a detailed wiring diagram as to power and instruments and each show a new bucket with breakers or starters feeding them.
- E2-4aA All motor starters require a new MCC bucket due to addition of PLC control wiring.
- E2-4bQ** H600-MUA, H650-MUA, H700-MUA, P600-MUA each are shown on a detailed wiring diagram and none are shown requiring a new bucket with breakers. Are new buckets and breakers required for these items shown on this drawing? What is the extent of wiring required for these items as shown on the detailed wiring diagram? (example H600-MUA shown on drawing 1-0103G-E0005-001) Nothing? Everything?
- E2-4bA Since these are just a disconnect from the MCC and no control wiring present within the bucket no new bucket is required unless the unit has been upsized.
- E2-4cQ** The above two examples are typical of equipment shown on drawings 1-0103A-E0010-001, 1-0103A-E0011-001, 1-0103A-E0012-001, 1-0103A-E0013-001, 1-0103A-E-0014-001, and 1-0103A-E-0015-001 and their respective detailed wiring diagrams.
- The following is a list of equipment we require clarification for:
15A BREAKER U-610MUA IN MCC-1U ?
70A BREAKER U-600MUA IN MCC-1U ?
20A BREAKER U-605 IN MCC-2U ?
40A BREAKER U-640 IN MCC-2U ?
40A BREAKER S-600MUA IN MCC-1S ?
40A BREAKER S-650MUA IN MCC-2S ?
40A BREAKER P-600MUA IN MCC-1H ?
40A BREAKER H-600MUA IN MCC-1H ?
40A BREAKER H-650MUA IN MCC-1H ?
15A BREAKER H-700MUA IN MCC-1H ?
15A BREAKER H-725MUA IN MCC-2H ?
40A BREAKER P-650MUA IN MCC-2H ?
SIZE 1 BUCKET S-695 IN MCC-1S ?
- E2-4cA S-695 does require a new bucket and the single line drawing has been revised to reflect this.
- E2-5Q** Specific to control wiring, will we be allowed to combine multiples of conductors from the MCC'S/PLC'S to the final destination (junction box) within the general area of the devices to be wired? This will help prevent overloading of cable trays with multitudes of cables.
- E2-5A For control wiring this is acceptable as long as all related drawings (starter schematics and loop drawings) are revised by the contractor to reflect this change.
- E2-6Q** Drawing 1-0103V-E0009-001 two VFD'S shown in the electrical room to be replaced? Do you have any information regarding requirements for these unit's or what they feed?
- E2-6A The two VFD's located within the electrical room are the existing drives for EF-S735 and EF-S745. The existing VFD's are to be removed and the two new drives (100HP each) for the motors are to be located here. Refer to SLD 1-0103A-E0010-001 and 1-0103A-E0011-001.