



**RETURN BIDS TO:**

**RETOURNER LES SOUMISSIONS À:**

Public Works and Government Services Canada  
Canada Place/Place du Canada  
10th Floor/10e étage  
9700 Jasper Ave/9700 ave Jasper  
Edmonton  
Alberta  
T5J 4C3  
Bid Fax: (780) 497-3510

**SOLICITATION AMENDMENT  
MODIFICATION DE L'INVITATION**

The referenced document is hereby revised; unless otherwise indicated, all other terms and conditions of the Solicitation remain the same.

Ce document est par la présente révisé; sauf indication contraire, les modalités de l'invitation demeurent les mêmes.

**Comments - Commentaires**

**Vendor/Firm Name and Address  
Raison sociale et adresse du  
fournisseur/de l'entrepreneur**

**Issuing Office - Bureau de distribution**  
Public Works and Government Services Canada  
Canada Place / Place du Canada  
10th Floor / 10e étage  
9700 Jasper Ave / 9700 ave Jasper  
Edmonton  
Alberta  
T5J 4C3

<b>Title - Sujet</b> Sewer Lift Station Upgrade	
<b>Solicitation No. - N° de l'invitation</b> EP922-210257/A	<b>Amendment No. - N° modif.</b> 005
<b>Client Reference No. - N° de référence du client</b> AAFC EP922-210257	<b>Date</b> 2020-07-23
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$PWU-004-11855	
<b>File No. - N° de dossier</b> PWU-0-43021 (004)	<b>CCC No./N° CCC - FMS No./N° VME</b>
<b>Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2020-08-04</b>	<b>Time Zone Fuseau horaire Mountain Daylight Saving Time MDT</b>
<b>F.O.B. - F.A.B.</b>	
<b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input type="checkbox"/> <b>Other-Autre:</b> <input type="checkbox"/>	
<b>Address Enquiries to: - Adresser toutes questions à:</b> Espedido, Karielen K.	<b>Buyer Id - Id de l'acheteur</b> pwu004
<b>Telephone No. - N° de téléphone</b> (780) 231-4719 ( )	<b>FAX No. - N° de FAX</b> (780) 497-3510
<b>Destination - of Goods, Services, and Construction: Destination - des biens, services et construction:</b>	

**Instructions: See Herein**

**Instructions: Voir aux présentes**

<b>Delivery Required - Livraison exigée</b>	<b>Delivery Offered - Livraison proposée</b>
<b>Vendor/Firm Name and Address Raison sociale et adresse du fournisseur/de l'entrepreneur</b>	
<b>Telephone No. - N° de téléphone Facsimile No. - N° de télécopieur</b>	
<b>Name and title of person authorized to sign on behalf of Vendor/Firm (type or print) Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)</b>	
<b>Signature</b>	<b>Date</b>

Solicitation No. - N° de l'invitation  
EP922-210257/A

Amd. No. - N° de la modif.  
005

Buyer ID - Id de l'acheteur  
pwu004

Client Ref. No. - N° de réf. du client  
AAFC EP922-210257

File No. - N° du dossier  
PWU-0-43020

CCC No./N° CCC - FMS No./N° VME

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This amendment has been raised with the following changes:

**AMENDMENT #005:**

**REVISED CLOSING DATE TO: 02:00 PM MDT on 2020-08-04.**

If your bid has already been forwarded and you wish to revise the same, this revision should reach the Bid Receiving Unit identified on Page 1 before the closing date.

**ADDENDUM #004:**

The following changes to the tender documents are effective immediately and will form part of the Contract documents:

***SPECIFICATIONS & DRAWINGS***

-Please delete "Fuel-Fired Furnaces" of Section 23 54 16 from the original Specifications and replace with Section 23 54 16 Rev 01. See attached.

***BIDDERS' QUESTIONS & ANSWERS***

**Q1:** Can the make and model of the agitator motors and gear boxes be provided? Or photos of these components?

**A1:** Agitator Motor: Lincoln A.C Motor, Frame 215T, 10 Hp, 575 V, 60 Hz, 1745 RPM, 3 Ph, Lincoln Code = T-3014. Photo of name plate attached.

Agitator Gear Box: Lightning Model 74Q-10. Photo of name plate attached.

**END OF AMENDMENT**

Solicitation No. - N° de l'invitation  
EP922-210257/A

Amd. No. - N° de la modif.  
005

Buyer ID - Id de l'acheteur  
pwu004

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CCC No./N° CCC - FMS No./N° VME



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**Part 1            General**

**1.1                REFERENCE STANDARDS**

- .1 American National Standard Institute (ANSI)/American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)
  - .1 ANSI/ASHRAE 52.2-12, Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particulate Size (ANSI approved).
- .2 American National Standards Institute (ANSI)/CSA Group
  - .1 ANSI Z21.47/CSA 2.3-12, Gas-Fired Central Furnaces.
  - .2 ANSI Z83.8/CSA 2.6-13, Gas Unit Heaters, Gas Packaged Heaters, Gas Utility Heaters and Gas-Fired Duct Furnaces.
- .3 CSA Group
  - .1 CSA B149.1-10, Natural Gas and Propane Installation Code.
  - .2 CSA C22.1-18, Canadian Electrical Code, Part 1 (24th Edition), Safety Standard for Electrical Installations.
  - .3 CSA C22.2 No.24-1993 (R2008), Temperature-Indicating and Regulating Equipment.

**1.2                ACTION AND INFORMATIONAL SUBMITTALS**

- .1 Submit in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Product Data:
  - .1 Submit manufacturer's instructions, printed product literature and data sheets for furnace units and parts and include product characteristics, performance criteria, physical size, finish and limitations.
- .3 Shop Drawings:
  - .1 Submit drawings submitted to the Department Representative for review.
  - .2 Submit manufacturer's written recommendations.
- .4 Sustainable Design Submittals:
  - .1 Construction Waste Management:
    - .1 Submit project Waste Management Plan highlighting recycling and salvage requirements.

**1.3                CLOSEOUT SUBMITTALS**

- .1 Submit in accordance with Section 01 78 00 - Closeout Submittals.
- .2 Operation and Maintenance Data: submit operation and maintenance data for make up air unit for incorporation into manual.

#### **1.4 MAINTENANCE MATERIAL SUBMITTALS**

- .1 Submit in accordance with Section 01 78 00 - Closeout Submittals.
- .2 Extra Stock Parts:
  - .1 Spare filters: in addition to filters installed immediately prior to acceptance by Departmental Representative, supply 1 complete set of filters for each filter unit or filter bank.

#### **1.5 DELIVERY, STORAGE AND HANDLING**

- .1 Deliver, store and handle materials in accordance with Section 01 61 00 - Common Product Requirements.
- .2 Delivery and Acceptance Requirements: deliver materials to site in original factory packaging, labelled with manufacturer's name and address.
- .3 Storage and Handling Requirements:
  - .1 Store materials in dry location and in accordance with manufacturer's recommendations in clean, dry, well-ventilated area.
  - .2 Store and protect make up air unit from nicks, scratches, and blemishes.
  - .3 Replace defective or damaged materials with new.
- .4 Develop Construction Waste Management Plan related to Work of this Section.

### **Part 2 Products**

#### **2.1 GENERAL**

- .1 Provide CSA approved, packaged factory assembled unit consisting of cabinet, fan, induced fan, fan motor, intake/exhaust assembly, heat exchanger, combustion chamber, burner, controls, air filter and, condensate drain.
- .2 Certification of components and construction of factory assembled gas-fired unit: to ANSI Z83.8/CSA 2.6 for gas fired duct furnace.
- .3 Certification of components and construction of factory assembled oil-fired unit: to CAN/CSA-B140.4.

#### **2.2 CAPACITY**

- .1 AMU-1-1
  - .1 Unit configuration to be an indirect fired, natural gas burning ceiling suspended indoor unit.
  - .2 New unit to utilize existing ceiling mount hardware, if reuse of existing is not possible. Contact the department representative prior to proceeding.
  - .3 The unit is to be equipped with the following options:
    - .1 Insulated blower section
    - .2 Two position motorized damper with manual low limit set.

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- .3 Adjustable belt drive supply fan to achieve the performance indicated below.
  - .4 AMU-1-1 is to be interlocked with exhaust fans as indicated on the Mechanical Plan Set.
  - .5 If existing vibration isolation is not reusable unit is to be provided with new vibration isolation hardware suitable for the application.
  - .4 Output: 26.37 kW at a geodetic elevation of 910 meters.
  - .5 Air flow rate: 500 L/s standard air.
  - .6 External static pressure: 186 Pa.
  - .7 Natural Gas Input: 32.96 kW.
  - .8 Electrical characteristics: 120 V, 60 Hz, 1 Ph
  - .9 Control Type
    - .1 Manufacturer supplied controller with the following options:
      - .1 Supply fan failure visual indicator
      - .2 Dirty fan filter visual indicator.
      - .3 Audible alarm to notify occupants of any of the above alarms.
  - .2 AMU-2-1
    - .1 Unit configuration to be an indirect fired, natural gas burning ceiling suspended indoor unit.
    - .2 New unit to utilize existing ceiling mount hardware, if reuse of existing is not possible. Contact the department representative prior to proceeding.
    - .3 The unit is to be equipped with the following options:
      - .1 Insulated blower section
      - .2 Two position motorized damper with manual low limit set.
      - .3 Adjustable belt drive exhaust fan to achieve the performance indicated below.
      - .4 AMU-2-1 is to be interlocked with exhaust fans as indicated on the Mechanical Plan Set.
      - .5 If existing vibration isolation is not reusable unit is to be provided with new vibration isolation hardware suitable for the application.
    - .4 Output: 26.37 kW at a geodetic elevation of 910 meters.
    - .5 Air flow rate: 500 L/s standard air.
    - .6 External static pressure: 186 Pa.
    - .7 Natural Gas Input: 32.96 kW.
    - .8 Electrical characteristics: 120 V, 60 Hz, 1 Ph
    - .9 Control Type
      - .1 Manufacturer supplied controller with the following options:
        - .1 Supply fan failure visual indicator
        - .2 Dirty fan filter visual indicator.
        - .3 Audible alarm to notify occupants of any of the above alarms.

**2.3 TYPE**

- .1 Horizontal type with gas burner.

**2.4 HEAT EXCHANGER**

- .1 Primary: heavy duty aluminized steel tube with aluminum fins.
- .2 Secondary: aluminized steel tube with aluminum fins.
- .3 Warranty: 1 Year

**2.5 COMBUSTION CHAMBER**

- .1 Sealed type: 100% outside air, to ANSI Z21.47/CSA 2.3.

**2.6 CIRCULATION BLOWER MOTOR ASSEMBLY**

- .1 Blower: centrifugal type:
  - .1 Statically and dynamically balanced.
  - .2 Rubber mounted.
  - .3 Speed adjustment: adjustable V-belt sheave.
- .2 Motor: 190 W motor, variable speed , overload protection, adjustable mounts.

**2.7 AIR FILTER(S)**

- .1 Filter(s): 508 mm by 508 mm with a minimum thickness of 51 mm or as specified by the manufacturer to satisfy a face velocity of 0.96 m/s.
- .2 Filter to be a replaceable media type filter with a rating of MERV 3 or greater.
- .3 Media filter to be mounted within a metal frame.

**2.8 HEATER BURNER**

- .1 General: to bear CSA and ULC labels.
- .2 Gas burner:
  - .1 Continuous port steel or multi-slotted, non-clogging cast iron with adjustable combustion air supply.

**2.9 INTAKE AND VENT ASSEMBLY**

- .1 Intake and venting piping to be in accordance with CSA B149.

**2.10 CONDENSATE DRAIN**

- .1 Provide PVC condensate drain trap.

**2.11 CONTROLS**

- .1 General: conform to CSA C22.2 No.24.

- .2 Gas firing:
  - .1 Operating controls:
    - .1 Heating-cooling thermostat.
    - .2 Electronic pilot ignition.
    - .3 Manual main shut-off valve, automatic safety pilot, automatic electric valve and gas pressure regulator.
    - .4 With alarm for dirty filter and unit malfunction.
  - .2 Safety controls:
    - .1 Electronic combustion control relay with flame rectification sensor to detect and supervise flame by shutting off fuel upon flame failure or safety interlock signal within seconds, in sequence pre-purge-pilot ignition, supervision-main valve opening-pilot cut-off-burner operation and roll out switch.
    - .2 Blocked vent shut-off switch or control system.
    - .3 Limit control to shut down furnace if heat exchanger temperature exceeds limit setting. Combination fan and limit control to be spiral wound.
    - .4 Door interlock switch on fan compartment access panel to shut down furnace when panel is removed.
    - .5 Electronic board built-in diagnostics.

### **Part 3 Execution**

#### **3.1 INSTALLATION**

- .1 Install in accordance with manufacturer's instructions, regulations of authorities having jurisdiction and to CSA B149.1.
- .2 Provide Departmental Representative written report of test results.

#### **3.2 CLEANING**

- .1 Progress Cleaning: clean in accordance with Section 01 74 11 - Cleaning.
  - .1 Leave Work area clean at end of each day.
- .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 74 11 - Cleaning.

**END OF SECTION**