

No./No 1

Addendum / Addenda

Project Description / Description de projet M 50 New Steam Regulating Station		
Solicitation No./N° de sollicitation 15-22054	Project No./N° de projet 5046	W.O. No./N° d'ordre de travail A1-006933-06-03
Departmental Representative / représentant ministériel Allan Smith		Date July 30, 2015
<p>Notice: This addendum shall form part of the tender documents and all conditions shall apply and be read in conjunction with the original plans and specifications.</p>		<p>Nota: Cet addenda fait partie intégrale des dossiers d'appel; toutes les conditions énoncées doivent être lues et appliquées en conjonction avec les plans et les devis originaux.</p>

1 See attached Mechanical Addendum #1

Mechanical Addendum #1:

Drawing:

5046-M02:

Detail 1: New Piping Control Valve and Controls Schematic

1. Temperature Sensor:
Change
"SUPPLY PRESSURE"
To
"Steam Vent"

5046-M01

General Project Notes:

Add the following:

20. Contractor shall provide a flanged spool section of piping for the Moisture Separator (MS-1), Steam Meter (SM-1) and Pressure Reducing Valves (50PRV01A and 50PRV01B). Length of spool section of piping shall match length of equipment. Contractor shall include for the installation and removal of the spool sections as required to suit pressure testing, equipment delivery and shutdown schedule. Contractor shall provide new gaskets as required to install new spool section of piping and equipment.
21. Contractor shall provide a Blind Flange to match the inlet of the Safety Relief Valve (50SRV01).
22. Contractor shall provide a custom removable insulation jacket for the Steam Meter (SM-1) and Pressure Reducing Valves (50PRV01A and 50PRV01B). See Section 21 07 19, Part 3.4.3 for requirements of removable jacket.

Detail 4: New Steam Meter Isometric

1. Contractor shall provide a new 100mm diameter flanged gate valve (Class 300) on inlet side of the new steam meter located in tunnel. Valve to be located within 150mm of the 150mm to 100mm eccentric reducer.
2. Shutdown Schedule:

Add the following: In the event that equipment cannot be delivered by the shutdown period. The contractor shall install a new spool section of piping to temporarily replace any equipment that is available. Once equipment has been delivered the equipment shall be installed over an alternate weekend. Exact weekend of second shutdown shall be at NRC

discretions. No demolition work shall be completed in room 037 until the new PRV assembly and safety relief valve have been installed and commissioned.

5046-M03

1. Steam Pressure Reducing Control Valve
 - a. Notes: Add the following: Due to height restriction the height of the control valve from the center of the inlet flange to the top of the actuator shall not exceed 400mm.

5046-M04

Add the following Control Sequences to the drawing.

Control Valve Control Sequences of Operation

1. Steam Pressure Control Valve (M50PRV01A or B): Start point unloaded
 - a. Primary: Modulate from 0 to 85% (4 to 17.6ma) to maintain building supply pressure at pressure transmitter (PT-1) to meet building steam supply pressure to a set point of 50 psig (Note: set point shall be adjustable on Graphics Screen).
 - b. Once primary control valve reaches 85%, Secondary control valve shall become energized.
 - c. Primary control valve shall reduce to 75% (16 ma) open at a rate of 1% per minute (to be adjustable on graphics screen) i.e 10% dead band between control valves. Secondary control valve shall modulate open to maintain building supply pressure at set point.
 - d. Secondary control valve shall modulate as required to maintain building pressure at set point. Once secondary control valve has reached 100% open. Additional steam load capacity shall be controlled by the primary control valve (note minimum capacity unless in alarm state for primary control valve when secondary is active is 75% (16ma).
 - e. Upon reduction in load, once secondary control valve reached 0% (4ma), the primary control valve shall modulate as required to maintain system pressure.
2. Alarm :
 - a. Level 2 alarm shall activate when supply pressure is 5 psig from set pressure.
 - b. Level 1 alarm shall activate when supply pressure is 10 psig from set pressure.
 - c. Level 1 alarm shall activate temperature sensor (Steam Vent) reaches 120F.
3. Manual Mode:
 - a. Provide a manual/auto mode of operation for each control valve.
4. Lockout Mode:
 - a. Provide a lockout mode option (fail closed) for each control valve.
5. Control Valve Position:
 - a. Current valve position shall be displayed on graphic screen for each valve.
6. Steam Flow Meter:
 - a. System shall provide display of current building flow rate in units of lb/hr.
 - b. System shall provide display of building steam load in unite of mega joules.
 - c. System shall provide display of peak maximum building flow rate c/w date and time.

Specifications:

Section 21 07 19 : Thermal Insulation For Piping

Change:

3.5.2.3 Installation: TIAC Code: 1501-C

To:

3.5.2.3 Installation: TIAC Code: 1501-H. See Part 2- Products for custom insulation requirements.