



Addendum / Addenda

No./N^o

1

Project Description / Description de projet Ammonia System Upgrade		
Solicitation No./ No de sollicitation 15-22083	Project No./N ^o de projet STJ-5089	W.O. No./N ^o d'ordre de travail
Project Engineer / Ingénieur de projet Rod Griffiths		Date September 18, 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 d'offres; toutes les conditions énoncées doivent être lues et appliquées en conjonction avec les plans et les devis originaux.</p>

ADDENDUM NO. 1

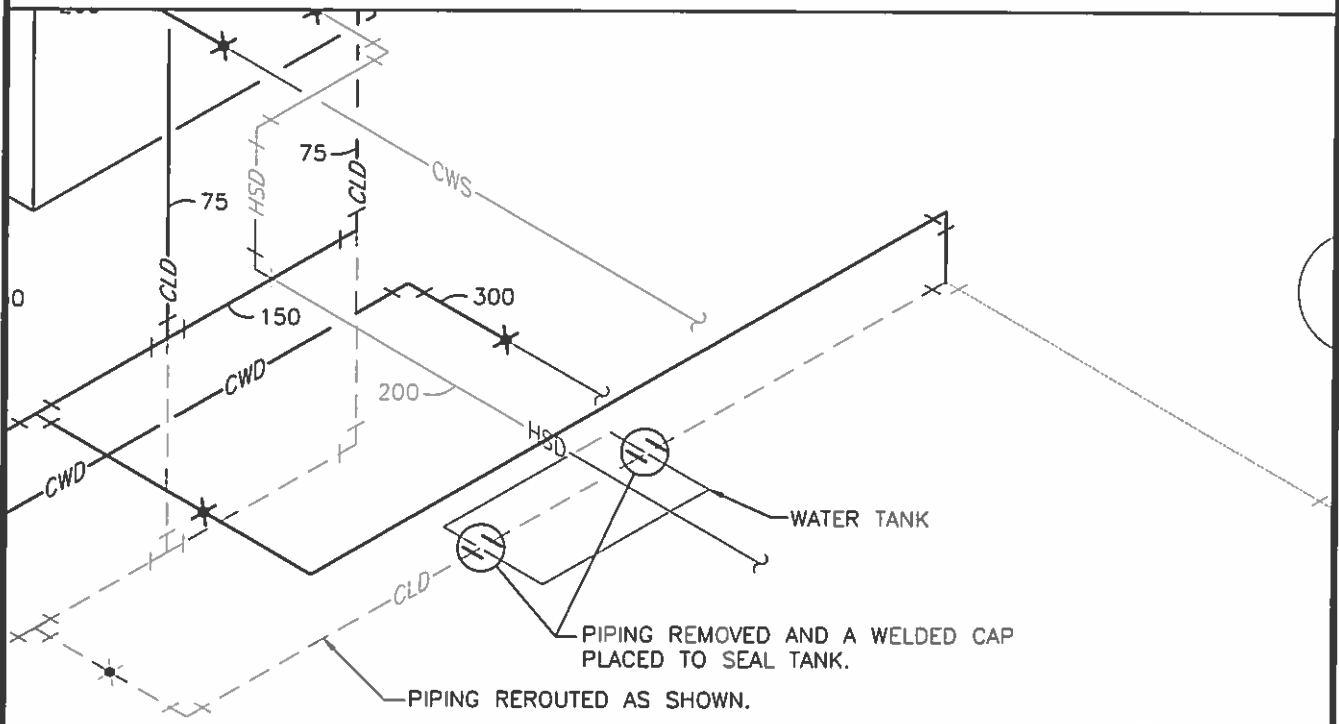
Sept 18, 2015

All Addenda shall form an integral part of the Specification and are to be read in conjunction therewith.

The Addenda shall take precedence over all forms of the aforementioned Specifications and Drawings with which they may prove to be at variance or may otherwise be qualified in writing by authorized personnel.

1. **The drain lines and electric tracing on all 26 evaporators shall be replaced. Piping to be schedule 40 steel and insulated as per the specification. Drain lines shall match existing and run from evaporator to the main drain.**
2. **The existing 26 evaporators are IMECO PAC, propel-air unit coolers. The existing drain pans in 14 units are to be replaced. These pans are to be insulated and constructed of heavy gauge stainless steel. Contractor to remove old pans and install new as required.**
3. **The existing 300mm chilled water main passing along the existing chiller shall be rerouted to allow the second ammonia pump to be installed. This new line is to be reconnected and insulated to match existing. See sketches MSK-2 and MSK-3 attached.**
4. **The rerouting of the ammonia piping from the evaporative condensers means that the existing pipe passing through the sump tank will be removed. When removed the old existing pipe will be cut and left in the concrete sump. However, the pipe will need to be capped on both sides of the concrete sump wall. These four caps will be welded on the existing pipe. See sketch MSK-1 attached.**

- 5. The ammonia charge currently existing shall be removed and stored. It is estimated the system has 9000kg of ammonia. Ammonia to be stored on or off site safely and returned to the system when work is completed.**



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PROJECT: NRC AMMONIA UPGRADE-5089

DRAWING TITLE: SKETCH 1

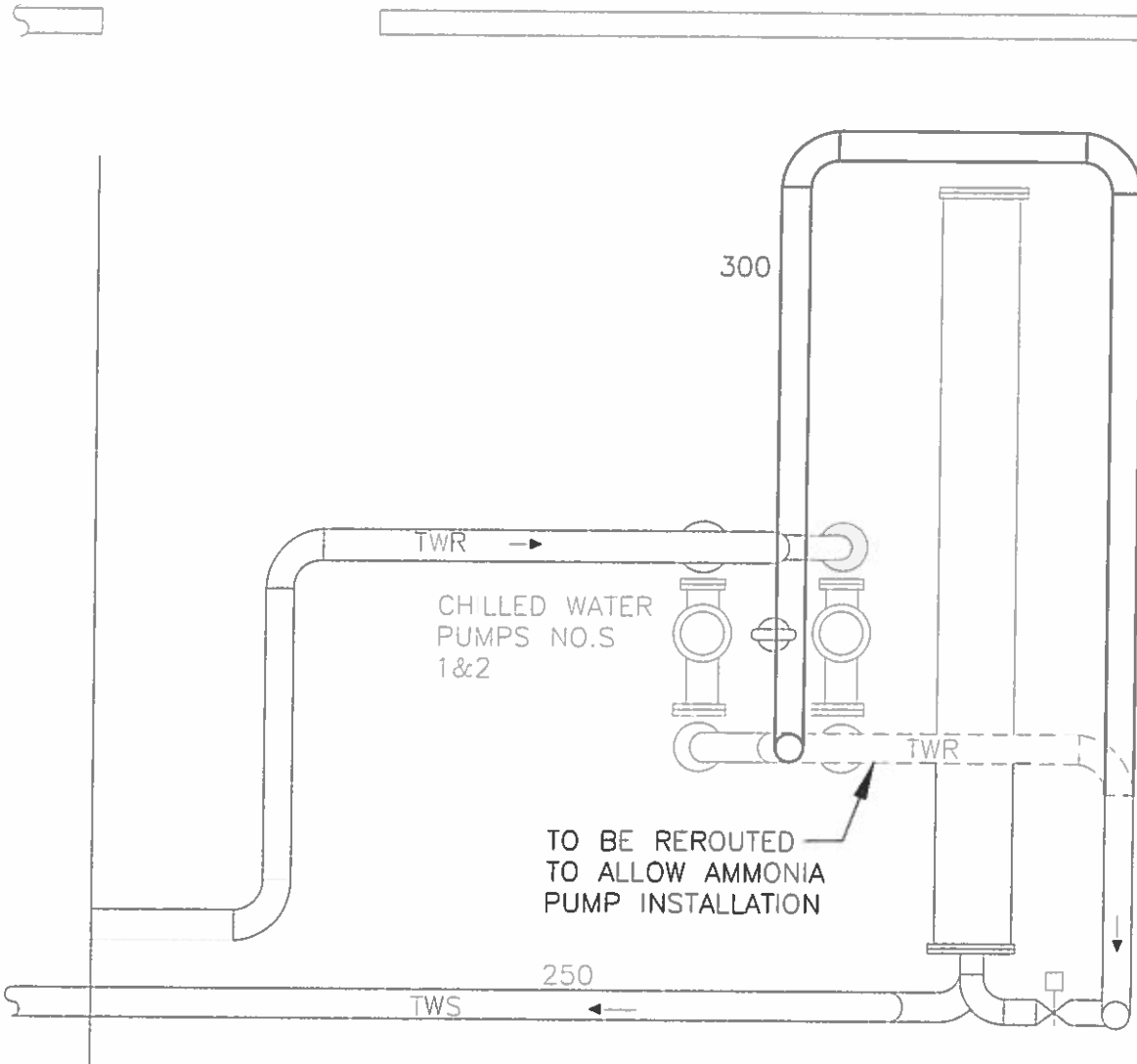
DATE: SEPT 18/2015

DRAWN BY: CL SCALE: N.T.S.

1. DO NOT SCALE FROM THIS DRAWING
2. UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE IN MILLIMETRES.
3. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS ON SITE.
4. CONTRACTOR SHALL DO ALL WORK IN ACCORDANCE WITH THE APPLICABLE STANDARDS AND CODES INCL., BUT NOT LIMITED TO NBC(CANADA), CURRENT EDITION

DRAWING #:

MSK-1



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PROJECT: NRC AMMONIA UPGRADE - 5089

DRAWING TITLE: SKETCH 2

DATE: SEPT. 18/2015

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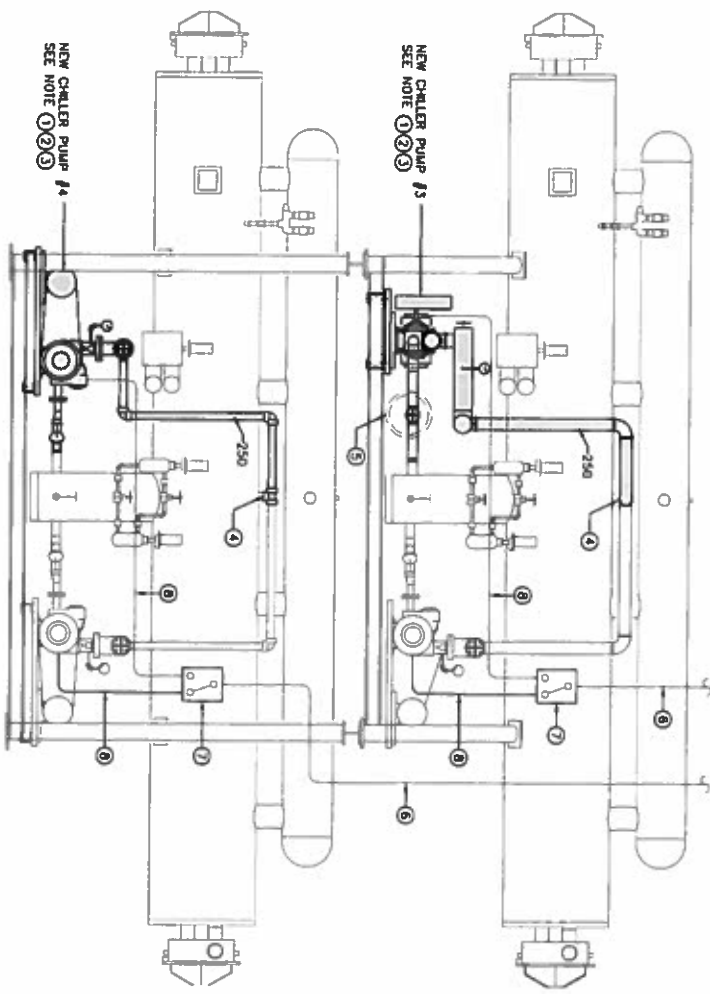
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DRAWING #:

MSK-2

DRAINING NOTES:

- ① NEW CHILLER PUMPS TO BE POSITIVE DISPLACEMENT TYPE FOR R717 APPLICATION. PUMPS TO BE BASE MOUNTED ON ALL VALVES, FITTINGS AND CONTROLS AS REQUIRED. CHILLER PUMPS TO BE BASE MOUNTED ON ALL VALVES, FITTINGS AND CONTROLS AS REQUIRED. NEW PUMPS C/W STATUS OUTPUT AND START/STOP OPERATION, SIGNAL TO EXISTING PUMPS.
- ② THE CONTRACTOR TO SUPPLY AND INSTALL TWO NEW R717 PUMPS AS INDICATED. THESE PUMPS WILL MATCH THE EXISTING AND WILL BE TIED INTO THE EXISTING SYSTEM AND SHALL HAVE NEW VALVES AS SHOWN. LOCATE PUMPS AS SHOWN AND PROVIDE UNRESTRAINED SUPPORT. ADDITIONAL STRUCTURAL STEEL AS REQUIRED. PAINT AND FINISH TO MATCH EXISTING.
- ③ CHILLER PUMPS #3 & #4:
 - BACKWATER MODEL, LEADS ON EQUIVALENT
 - MOTOR: 3 HP
 - SPEED: 1750 RPM
 - FLOOR: 137 CM (MATCH FLOW TO EXISTING PUMP FLOW)
 - MAX OPERATING PRESSURE: 60 PS
 - ELECTRICAL: 600V/3/50
- ④ CONNECT NEW PUMP TO EXISTING AT THE APPROPRIATE LOCATION. PROVIDE ADDITIONAL PIPING AND FITTINGS AS REQUIRED TO MAKE CONNECTION. COORDINATE EXACT ROUTING ON SITE WITH EXISTING EQUIPMENT.
- ⑤ CHILLER PUMPS TO BE BASE MOUNTED ON ALL VALVES, FITTINGS AND CONTROLS AS REQUIRED. NEW PUMPS C/W STATUS OUTPUT AND START/STOP OPERATION, SIGNAL TO EXISTING PUMPS.
- ⑥ EXISTING WIRING TO CHILLER PUMP, TIE TO CABINET, PAINTED BLUE.
- ⑦ SUPPLY AND INSTALL NEW 30A, 60V, 1P W/ULTRAVIOLET PROTECTIVE COVER. ALL ELECTRICAL WORK TO BE CARRIED OUT IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE. PROVIDE UNRESTRAINED SUPPORT FOR SWITCH, LOCATE UNRESTRICT TO EXISTING STRUCTURAL STEEL AS SHOWN IN LOCATIONS.
- ⑧ SUPPLY AND INSTALL NEW 3/16" COPPER TIE TO CABINET BETWEEN NEW SWITCH AND EXISTING SWITCH. PROVIDE UNRESTRAINED SUPPORT FOR EACH INDICATED LENGTH.



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PROJECT: NRC AMMONIA UPGRADE - 5089

DRAWING TITLE: SKETCH 3

DATE: SEPT. 18/2015

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DRAWING #:
MSK-3