Project:	2022-RFT-026 821131 – Solid Waste WTS Construction		
Addendum No.	06	**No. of Pages:**	5
Date:	2022-08-17	**Doc. No.:**	P7201-1591092266-188(1.0)

The following change(s) in the Request for Proposal Documents are effective immediately.
This Addendum forms part of the Contract Documents.

The purpose of this Addendum is to clarify and answer for bidder's question on tender 2022-RFT-026 issued for bid on July 12, 2022.

Question 1:
ROOM FINISH SCHEDULE - WTS-A02
The floor finish for room 101 is indicated as HDR HARDENER, however this is the room where the topping will be applied please clarify if the hardener is not required in this room

Response 1
Revise WTS-A02 Room Finish Schedule Room 101 Floor Finish to TOPPING. Revise WTS-A02 Room Finish Schedule Rooms 102, 103, 104, 105 and 106 Floor Finish to SEALER.

Question 2:
Please specify the HDR HARDENER that is required for the rooms A101 to A106. Nothing is specified on sections 03 30 00 neither 03 35 00 for interior slabs.

Response 2
Refer to Response 1.

Question 3:
Please advise on CONCRETE SEALER section 03 30 00 - 2.1.9.1, will it be required on all slabs? In addition to the hardener? and on concrete topping too?

Response 3
Refer to Response 1

Question 4:
The room schedule states for LP Prefinish Liner Panel for ceiling in Rooms 102 to 105. As there is no ceiling plan, and as the sections on drawings does not show any ceiling:

a) Please confirm those ceiling are required
b) Provide detail for support structure for ceiling below mezzanine

Provide the specification for acceptable Prefinish Panel

Response 4
Refer to WTS-A05 R1 Roof Description. Refer to Section 13 34 19 for Roof System Interior Ceiling Liner. Revise WTS-A02 Room Finish Schedule Rooms 102, 103, 104 and 105 Ceiling Finish to EXPOSED.

Additional tender Amendments:

Tender Amendment 1:

Thermosyphon will be supplied by the City of Iqaluit. However, it will be the Contractor's responsibility to install. Hence, Installation/commissioning cost shall be included in the bid submission form.

Tender Amendment 2:
Kindly note the below changes:

SPECIFICATIONS

1. Section 11 40 00 – WTS Equipment
   a. Clause 2.6 delete and replace with

   b. Portable Metal Baler/Logger

      i. General: One (1) portable metal baler/logger.
      ii. Diesel engine, minimum 175 Hp.
      iii. Main cylinder: 170 tonnes.
      iv. Folding box cylinder: 100/150 tonnes.
      v. Open box dimensions (minimum): 60. m x 2.6 m
      vi. Production (average):
         1. Baling: 10 to 14 tonnes per hour.
         2. Logging: 16 to 20 tonnes per hour.
         3. Automobiles: 23-29 to tonnes per hour
      vii. Automatic baling and logging cycles.
      viii. Bale size (average): 100 mm x 600 mm x variable.
      ix. Oil and oil tank heating system.
      x. Manufacturers recommended spare parts.
      xi. Sierra International **Model 6000**, alternatives as per "Instructions to Bidders" (if allowed during bidding).

2. Section 31 32 21 – Geotextiles
   a. Clause 2.1.2 – delete the table and replace with the table below.

Property	Test Method	Qualifier	Terrafix 270R or approved equal	Propex Geotex 3201 or approved equal	Unit
Mass/unit area	ASTM D5261	MARV	-	1085	g/m2
Grab tensile strength	ASTM D4632	MARV	445	2269	N
Tear strength	ASTM D4533	MARV	200	1201	N
Puncture resistance	ASTM D6241	MARV	1320	10173	N

DRAWINGS

Drawing WTS-S03 – Slab Plan

1. For Bollard Detail B1 on WTS-S09, revise steel pipe note to replace ‘200 Dia.’ with ‘DN200 XS’. For Specification Section 05 50 00 Part 2.17.2.1 change ‘200mm diameter’ to ‘DN200 XS’.
2. For Bollard Detail B1 on WTS-S09, revise steel pipe note to replace ‘200 Dia.’ with ‘DN200 XS’. For Specification Section 05 50 00 Part 2.17.2.1 change ‘200mm diameter’ to ‘DN200 XS’.

Drawing WTS-S06 – Slab Sections and Details 1

1. For Section A on WTS-S06 and all other note locations referencing HI-60 Rigid Insulation below WTS building concrete slab foundation, replace ‘HI-60 rigid insulation’ with ‘HI-100 rigid insulation by Dupont, or approved equal, to ASTM C578 Type V, 690kPa compressive strength. Extend each side as indicated, stagger and tape all joints.’ Thicknesses shown to remain as indicated.
2. For Section A on WTS-S06 and all other note locations referencing ‘Terrafix 420R over a prefabricated Layfield HAZGARD 635FR Liner or approved equal. (Maximum two prefabricated panels)’ below WTS building concrete slab foundation, revise Terrafix 420R to Propex Geotex 3201. Also, change detail to eliminate wrap upwards at WTS building concrete slab foundation perimeter and instead show extension of geotextile and geomembrane over entire insulation footprint (including the 2.5m extension beyond WTS building footprint). Replace Terrafix 420R in Specification Section 03 30 00 Parts 1.5.7 and 2.1.12 with Propex Geotex 3201.
3. For Sections B and C on WTS-S06, change push wall vertical reinforcement and accompanying dowels from 20M @ 200mm o/c e.f. to 25M @ 250mm o/c e.f.
4. For Section D on WTS-S06, change storage wall vertical reinforcement and accompanying dowels from 15M @ 300mm o/c e.f. to 15M @ 250mm o/c e.f.

Drawing WTS-S09 – Base Plates, Slab Sections & Details

1. For Cross Section A on WTS-S09, change rigid insulation note to read ‘100mm thick HI-60 rigid insulation by Dupont, or approved equal, to ASTM C578 Type VII, 415kPa compressive strength. Extend each side as indicated, stagger and tape all joints’.
2. For Bollard Detail B2 on WTS-S09:
    a. Add note: ‘Above ground portions of bollard to be painted high visibility yellow. The surface section of all piles below 3.0m from final grade elevation shall be properly cleaned and free of paint, lacquer, oil, grease, dirt and excessive rust to promote a good ad-freeze bond.’.
    b. Revise ‘Galv. HSS 168x9.5 steel pipe’ to ‘Galv. HSS 178x9.5 steel pipe’.
    c. Revise ‘168 Dia. 6mm cap plate fully welded’ to ‘6mm cap plate fully welded’.
3. For Bollard Detail B1 on WTS-S09, revise steel pipe note to replace ‘200 Dia.’ with ‘DN200 XS’. For Specification Section 05 50 00 Part 2.17.2.1 change ‘200mm diameter’ to ‘DN200 XS’.

Drawing WTS.M02 – MECHANICAL LAYOUT – HVAC

1. Replace existing drawing WTS.M02 rev 9 with attached rev 10 (enclosed).
2. Add NOx sensors c/w wire guards as shown.
3. Revise GWR piping as shown.

Drawing WTS.M05 – LARGE SCALE BOILER ROOM – HVAC LAYOUT

1. Change note at gridline A-10 to read:

"INDIVIDUAL CHIMNEY VENT STACKS FROM B.1, B.2, AND B.3 c/w RAIN CAPS. COMPLETE CHIMNEY SYSTEM EQUAL TO INDUSTRIAL CHIMNEY COMPANY (ICC) VIP+ PRESSURE VENT SYSTEM. SECURE CHIMNEY TO BUILDING EXTERIOR WALL. CHIMNEY TO EXTEND MIN 1.5M ABOVE PEAK OF ROOF.
SEAL ALL EXTERIOR WALL PENETRATIONS WITH WEATHERPROOF CAULKING. NON-HARDENING MASTIC SEALANT. PENETRATIONS TO BE AIRTIGHT AND WATERTIGHT."

Drawing WTS.M06 – MECHANICAL LAYOUT – MEZZANINE

1. Add the following note:

   "PROVIDE SILENCER(S) FOR SUPPLY AIR MAIN. SILENCER(S) SHALL HAVE A MINIMUM INSERTION LOSS OF 25 DB IN THE 250 HZ OCTAVE BAND."

Drawing WTS.M07 – MECHANICAL SECTION – MEZZANINE

1. Add HC-1.1 in horizontal outside air duct for reference.

Drawing WTS.M10 – HYDRONIC HEATING SYSTEM FLOW DIAGRAM

1. Add fuel oil de-aerator upstream of B.2 and B.3 boilers.

Drawing WTS.M12 – MECHANICAL DETAILS

1. Detail 9 – TYPICAL PIPE SUPPORT
   a. Delete adjustable clevis hanger with roller, and trapeze hanger details.

2. Detail 11 – PIPE CLAMP SUPPORT
   a. Delete.

Drawing WTS.M14 – MECHANICAL DETAILS

1. Detail 4 – GAS DETECTION
   a. CO sensor equal to Siemens Evikon Model E2630-CO.
   b. NOx sensor equal to Siemens Evikon Model E2630-NO2-230.
   c. Add the following to the sequence of operation:

      "HRU.1 TO RUN CONTINUOUSLY TO MAINTAIN TEMPERATURE. NOX AND CO DETECTORS ENABLE HRU.1 TO RUN AT HIGH SPEED WHEN GAS IS DETECTED IN THE SPACE. HRU.1 SHALL RUN AT HIGH SPEED UNTIL GAS LEVELS DROP BELOW LOWER LIMIT FOR MIN. 5 MINUTES (ADJUSTABLE)."

2. Detail 12 – BOILER ROOM CONTROLLER SYSTEM ARCHITECTURE
   a. Boiler B.1 to be lead boiler.

3. Add Detail 13 – HRV.1 AND HC.1 CONTROL
   a. Add Control Sequence as follows:

      "WHEN OUTSIDE AIR TEMPERATURE IS BELOW -5°C, THE HRV DEFROST RELAY ENABLES THE PREHEAT COIL CONTROLLER. THE DEFROST MODE SHALL OPERATE ON A TIMER BASED ON OUTSIDE AIR TEMPERATURE.

      THE OUTSIDE AIR TEMPERATURE SHALL BE UPSTREAM OF THE PRE-HEAT COIL.

WHEN THE PREHEAT IS ENABLED, THE 3-WAY VALVE MODULATES TO SATISFY THE DISCHARGE TEMPERATURE (ADJUSTABLE) VIA DUCT TEMPERATURE SENSOR AND MIXING SETPOINT CONTROL.

THE DUCT TEMPERATURE SENSOR SHALL BE INSTALLED DOWNSTREAM OF THE PREHEAT COIL.

WHEN THE OUTSIDE AIR TEMPERATURE IS ABOVE -2°C, THE HRV DEFROST RELAY DISABLES THE PREHEAT COIL CONTROLLER.

HRV CONTROL SYSTEM SHALL BE EQUAL TO TECKMAR TM MIXING SETPOINT CONTROL 153."

Drawing WTS.M15 – MECHANICAL SCHEDULES

1. Pump Schedule
    a. Add the following comment for SP.1:

    "DUPLEX PUMP SET C/W FLOAT CONTROLS, GUIDE RAILS, AND CONTROL PANEL".

2. Air Handling Unit (AHU) Schedule
    a. Add the following comments for HRU.1:

    "VFD'S SHALL BE FACTORY MOUNTED ON THE UNIT.
    UNIT TO BE c/w DUCT MOUNT MOTORIZED DAMPERS EQUAL TO TAMCO SERIES 9000 THERMALLY INSULATED CONTROL DAMPER
    CO AND NOx SENSORS SHALL BE ELECTRICALLY INTERLOCKED TO HRU.1"

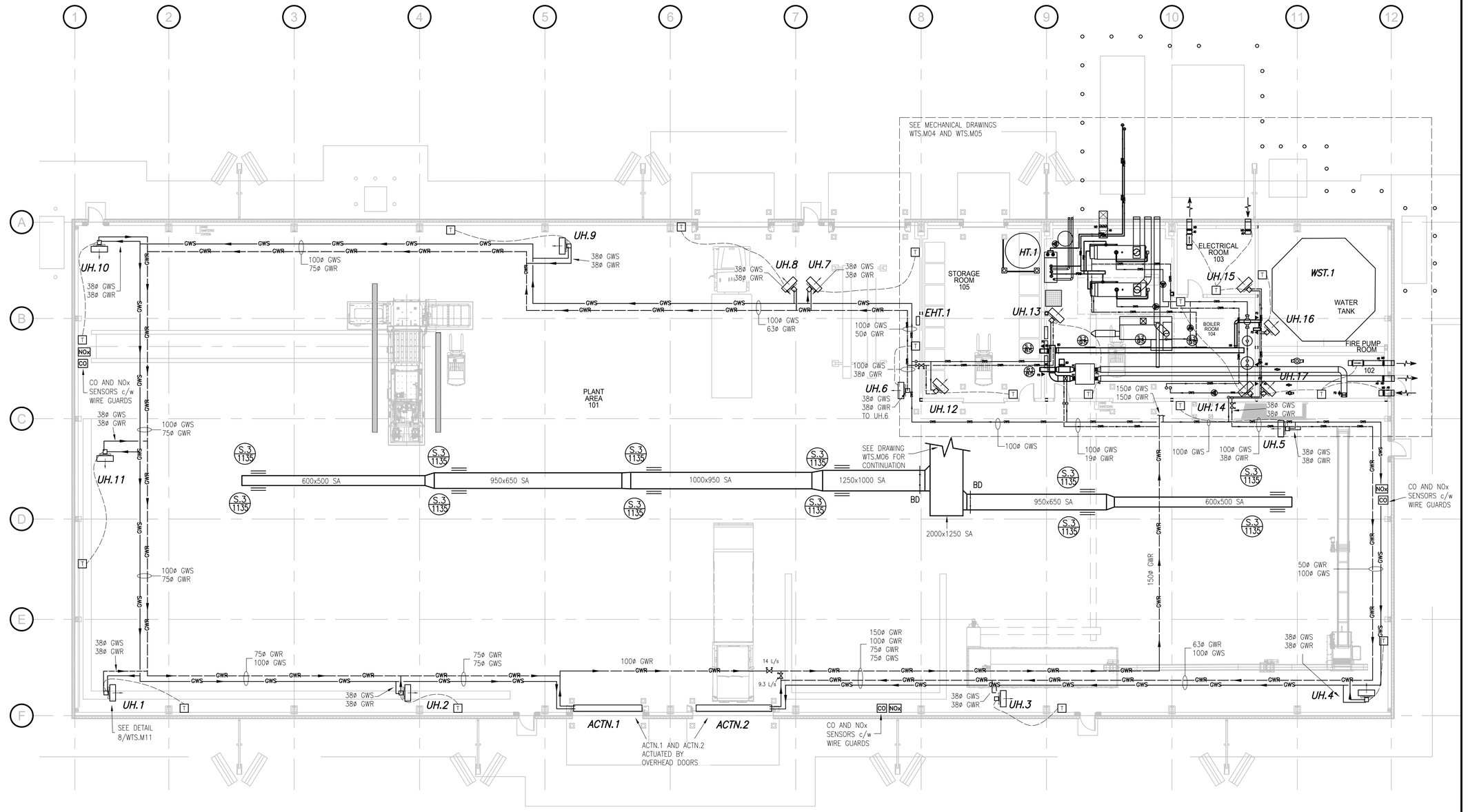
3. Air Curtain Schedule
    a. Capacity for ACTN.1 and ACTN.2 to be 210 kW each.

4. Duct Insulation Schedule
    a. Add following comment to supply air (S/A) duct system:

    "INSULATION NOT REQUIRED ON SUPPLY AIR DUCTWORK IN PLANT AREA 101."

MECHANICAL LEGEND

SYMBOL	DESCRIPTION	
— — —	HOT WATER	(HW)
—NPC—	NONPOTABLE COLD WATER	(NPC)
— — —	SANITARY WASTE LINE	(SAN)
———	SANITARY VENT	(V)(VENT)
— - - —	SANITARY STORM	(STORM)(RWL)
—TP—	TRAP PRIMER LINE	(TP)
—FOS—	FUEL OIL SUPPLY	(FOS)
—FOR—	FUEL OIL RETURN	(FOR)
—GWS—	GLYCOL WATER SUPPLY	(GWS)
—GWR—	GLYCOL WATER RETURN	(GWR)
—HWS—	HEATING WATER SUPPLY	(HWS)
—HWR—	HEATING WATER RETURN	(HWR)
	PIPE DOWN	(DN)
	PIPE UP	(UP)
	CLEAN OUT	(C.O.)
	SAN. WASTE "P"TRAP	
	FLOOR DRAIN	(FD)
	FUNNEL FLOOR DRAIN	(FFD)
	SCUPPER FLOOR DRAIN	(SFD)
	ROOF DRAIN	(RD)
	SAN. VENT THRU ROOF	(MIN.3")
	HOSE BIB	(HB)
	PLUMBING FIXTURE	
WC1	PLUMBING FIXTURE DESIGNATION	
	SHUT–OFF VALVE	
	BALL VALVE	
	GLOBE VALVE	
	PRESS. REDUCING VALVE	(PRV)
	SOLENOID VALVE	
	TEMP. & PRESS. RELIEF (T&P) ANGLE	
	CHECK VALVE	
	BALANCING VALVE	
	STRAINER	
	STRAINER c/w BLOW DOWN VALVE	
	BACKFLOW PREVENTER	
	PIPE UNION	
	VACUUM BREAKER	
	THERMOMETER	
	PRESSURE GAUGE c/w PETCOCK	
	AUTOMATIC AIR VENT	(AAV)
	MANUAL AIR VENT	(MAV)
	CIRCULATOR / PUMP	
T	THERMOSTAT (ELECTRONIC)	
S/A	SUPPLY AIR	
R/A	RETURN AIR	
E/A	EXHAUST AIR	
O/A	OUTSIDE AIR	
	BALANCING DAMPER	(BD)
	MOTORIZED DAMPER	
	DUCT OFFSET	
	DUCT UP (S/A)	
	DUCT UP (R/A or E/A)	
	DUCT DOWN (S/A)	
	DUCT DOWN (R/A or E/A)	
	DUCT WORK	
	A/H UNIT HEATING COIL	
	VERTICAL FIRE DAMPER	(FD)
	HORIZONTAL FIRE DAMPER	(FD)
	FLEXIBLE CONNECTION	
A4 / 500	DIFFUSER/GRILLE DESIGNATION (SEE DIFFUSER/GRILLE SCHEDULE)	
HWT.1	EQUIPMENT TAG	
1099	ROOM NUMBER	



1 / M02 HVAC LAYOUT – PLANT

1:125

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No.	ISSUED FOR	DATE	BY
10	ISSUED FOR ADDENDUM	2022/08/15	G.H.
9	RELEASED FOR TENDER	2022/07/06	G.H.
8	ADDITIONAL REVIEW	2022/05/18	K.B.
7	TENDER	2022/04/14	K.B.
6	REVIEW	2021/09/24	K.B.
5	REVIEW	2021/06/25	K.B.
4	100% ISSUED FOR APPROVAL	2020/10/30	K.B.
3	90% REVIEW	2020/01/24	K.B.
2	50% REVIEW	2019/10/23	K.B.

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GH	DLP
DRAWN	CHECKED BY
GH	KAM
DATE	
AUGUST 2022	
SCALE	
NOTED	

CITY OF IQALUIT
WASTE TRANSFER STATION

MECHANICAL LAYOUT - HVAC

PROJECT NO. 19-9543

SHEET NO. WTS.M02