



385-2023 ADDENDUM 1

NEWPCC DCS MIGRATION – GENERAL CONSTRUCTION PACKAGE

URGENT

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

ISSUED: January 25, 2024
BY: Scott Symons
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**THIS ADDENDUM SHALL BE INCORPORATED
INTO THE BID/PROPOSAL AND SHALL FORM
A PART OF THE CONTRACT DOCUMENTS**

Template Version: Add 2021-03-05

Please note the following and attached changes, corrections, additions, deletions, information and/or instructions in connection with the Bid/Proposal, and be governed accordingly. Failure to acknowledge receipt of this Addendum in Paragraph 10 of Form A: Bid/Proposal may render your Bid/Proposal non-responsive.

FORM B: PRICES

Replace: 385-2023 Form B: Prices with 385-2023 Addendum 1 - Form B: Prices. The following is a summary of changes incorporated in the replacement Form B: Prices:

Form B(R1): Replace: 385-2023_Form_B: Prices with 385-2023 Addendum 1-Form_B-Prices.

PART B – BIDDING PROCEDURES

Revise: B2.1 to read: The Submission Deadline is 12:00 noon Winnipeg time, **February 9, 2024**.

PART E – SPECIFICATIONS

Revise: E1.4 to read: The following are applicable to the Work:

<u>Specification No.</u>	<u>Specification Title</u>
01 31 19	Project Meetings
01 32 16	Construction Progress
01 33 00	Submittals
01 43 00	Quality Requirements
01 45 00	Quality Control
01 50 00	Temporary Facilities
01 66 10	Delivery, Storage and Handling
01 74 23	Cleaning Up
01 77 00	Contract Closeout
01 91 31	Commissioning Plan
26 05 10	Common Work Results – Electrical
26 05 20	Electric Wires and Cables
26 05 29	Hangers and Supports for Electrical Systems
26 05 31	Splitters, Junction Boxes, Pull Boxes, and Cabinets
26 05 34	Conduits, Conduit Fastenings, and Conduit Fittings
26 05 36	Cable Trays for Electrical Systems
26 05 53	Electrical Identification
26 08 10	Electrical System Demonstrations
40 61 13	Instrument Loop Drawings
40 61 93	IO Lists
40 95 13	Control Panels

40 99 92 Automation Testing and Commissioning

<u>Drawing No.</u>	<u>Drawing Name/Title</u>
1-0101-AAAA-A000-001	DRAWING COVER PAGE
1-0101-AAAA-A001-001	LEGEND
1-0101-AGAD-B001-001	INSTRUMENTATION GENERAL ARRANGEMENT BOILER AREA CONTROL ROOM
1-0101-AGAD-C001-001	INSTRUMENTATION GENERAL ARRANGEMENT CENTRATE AREA CONTROL ROOM
1-0101-AGAD-D001-001	INSTRUMENTATION GENERAL ARRANGEMENT DIGESTER AREA CONTROL ROOM
1-0101-AGAD-G001-001	INSTRUMENTATION GENERAL ARRANGEMENT GRIT AREA CONTROL ROOM
1-0101-AGAD-M001-001	INSTRUMENTATION GENERAL ARRANGEMENT MAIN SERVER ROOM
1-0101-AGAD-P001-001	INSTRUMENTATION GENERAL ARRANGEMENT PRIMARY CLARIFIER AREA CONTROL ROOM
1-0101-AGAD-R001-001	INSTRUMENTATION GENERAL ARRANGEMENT HPO AREA CONTROL ROOM
1-0101-AGAD-S001-001	INSTRUMENTATION GENERAL ARRANGEMENT SECONDARY CLARIFIER AREA CONTROL ROOM
1-0101-AGAD-U001-001	INSTRUMENTATION GENERAL ARRANGEMENT UV AREA CONTROL ROOM
1-0101-AGAD-W001-001	INSTRUMENTATION GENERAL ARRANGEMENT DEWATERING AREA CONTROL ROOM
1-0101-ANET-A003-001	PLANT CONTROL NETWORK LOOP DIAGRAM
1-0101-ANET-A004-001	GENERAL BLOCK DIAGRAM NETWORK ARCHITECTURE AREAS U & M - MAIN CONTROL & SERVER ROOMS
1-0101-ANET-A005-001	GENERAL BLOCK DIAGRAM NETWORK ARCHITECTURE AREAS G, E, P & S - MAIN CONTROL & SERVER ROOMS
1-0101-ANET-A006-001	GENERAL BLOCK DIAGRAM NETWORK ARCHITECTURE AREAS R, C, B & D - MAIN CONTROL & SERVER ROOMS
1-0101-ANET-A007-001	GENERAL BLOCK DIAGRAM NETWORK ARCHITECTURE AREAS W, Y & X - MAIN CONTROL & SERVER ROOMS
1-0101-ANET-B101-001	BOILERS NETWORK DIAGRAM
1-0101-ANET-C101-001	CENTRATE NETWORK DIAGRAM
1-0101-ANET-D101-001	DIGESTERS NETWORK DIAGRAM
1-0101-ANET-G101-001	GRIT NETWORK DIAGRAM
1-0101-ANET-M101-001	MAIN BUILDING NETWORK DIAGRAM
1-0101-ANET-P101-001	PRIMARY CLARIFIERS NETWORK DIAGRAM
1-0101-ANET-R101-001	REACTORS NETWORK DIAGRAM
1-0101-ANET-S101-001	SECONDARY CLARIFIERS NETWORK DIAGRAM
1-0101-ANET-U101-001	UV NETWORK DIAGRAM
1-0101-ANET-W101-001	DEWATERING & PHOSPHORUS NETWORK DIAGRAM
1-0101-AWDG-A001-001	TYPICAL IO MODULE WIRING DIAGRAM ANALOG INPUT – EXTERNAL POWERED - ISOLATED
1-0101-AWDG-A002-001	TYPICAL IO MODULE WIRING DIAGRAM ANALOG INPUT - LOOP POWERED
1-0101-AWDG-A003-001	TYPICAL IO MODULE WIRING DIAGRAM ANALOG OUTPUT - ISOLATED
1-0101-AWDG-A004-001	TYPICAL IO MODULE WIRING DIAGRAM DISCRETE INPUT – 24VDC
1-0101-AWDG-A005-001	TYPICAL IO MODULE WIRING DIAGRAM DISCRETE OUTPUT – 120VAC
1-0101-AWDG-A005-002	TYPICAL IO MODULE WIRING DIAGRAM DISCRETE OUTPUT – 120VAC

1-0101-AWDG-A006-001	TYPICAL IO MODULE WIRING DIAGRAM DISCRETE INPUT – 120VAC
1-0101-AWDG-A006-002	TYPICAL IO MODULE WIRING DIAGRAM DISCRETE INPUT – 120VAC
1-0101-DGAD-A001-001	GENERAL ARRANGEMENT - SITE LAYDOWN

DRAWINGS

Replace: Drawing 385-2023_Drawing_1-0101-ANET-A003-001-R1 with Addendum Drawing 385-2023_Drawing_1-0101-ANET-A003-001-R2

Drawing 385-2023_Drawing_1-0101-ANET-A007-001-R1 with Addendum Drawing 385-2023_Drawing_1-0101-ANET-A007-001-R2

Add: 385-2023_Addendum_1-Drawing_1-0101-DGAD-A001-001-R1

QUESTIONS AND ANSWERS

Q1: Are the autocad drawings on the contractor to develop and provide for close out or is this captured in contract 76-2023 with Schneider Electric as the integrator?

A1: The integrator shall develop individual detailed loops drawings for the City and these will be provided to the contractor. The contractor shall mark the loop drawings up in the field and scan and submit the redlines to the City.

Q2: Please clarify the expectation of the contractor for commissioning.

A2: The contractor shall provide automation testing and commissioning equipment and calibration as specified in 40 99 92, Part 2. The contractor shall assist the integrator in commissioning as per Appendix G and Section 40 99 92, Part 3.4. This includes but is not limited to simulating and reading values (DI, DO, AI, AO), reconnecting devices after simulation, and verifying the device is automatically and correctly communicating with the PCS. The contractor shall perform loop checks and provide checklists for all installed circuits as per Specification 26 05 10 1.1.3.8. The contractor is not required to commission or modify the loop wiring from the field end to the marshaling/FDP/termination/HVAC panels unless otherwise specified.

Q3: Please clarify the scope of work shown on drawing 1-0101-ANET-A007

A3: The pedestals and associated power and network wiring in areas X and Y are existing. Updated drawings issued.

Q4: Do the PLC panels have an opening that allows cables to be installed without disconnecting the backplane? If so, are all ancillary items provided, such as top hats?

A4: The integrator will provide custom-fabricated panels to allow for installation without disconnecting backplane. Currently, the integrator panel designs are not finalized. At the minimum, there will be a removable opening at the top for panels that will require a temporary backplane or cables can be terminated to the panel installed in the final enclosure through cable glands from top or bottom of the panel for permanent connections, sufficient cable slack shall be left to move the panels to the final location. Ancillary items for cabinet penetrations will be provided as part of the cabinet. However, additional sealing may be required by the contractor after the location is finalized.

Q5: Is it permissible for the contractor to use existing outlets that are not being utilized in work areas during construction?

A5: The use of existing outlets is permitted. The contractor shall notify the City prior to utilizing existing outlets on site. The City shall indicate which receptacles are to be used.

Q6: Will existing housekeeping pads need to be extended or partially removed to match the footprint of the new cabinets?

A6: No, modification of existing housekeeping pads is not required.

Q7: Is there a maximum conductor restriction for the use of cables with multiple conductors, pairs, or triads?

A7: No, there is no maximum conductor restriction. However, it is important to consider the bending radius and segregation of the cable given the application and the installation.

Q8: Is there a spare conductor requirement for the use of cables with multiple conductors, pairs, or triads?

A8: There is no spare conductor requirement. The spare input and output signals are to be wired between the marshaling panel and the PLC. No additional spare conductors are required beyond this requirement.

Q9: In rooms with a finished ceiling, is it acceptable to surface run conduits in those rooms?

A9: It is acceptable to surface run conduits in areas with finished ceilings, except for in office areas including control rooms. Office areas, control rooms and areas with suspended ceilings shall have conduit run in the plenum space.

Q10: Can the holes of demolished conduits be patched with fire stop?

A10: Fire stop is acceptable. Patch and finish to match the existing surface.

Q11: Please provide information regarding the raised floors for flooring repairs.

A11: The City will provide replacement tiles for areas with raised floors. Contractor to cut and modify tiles as required for installation.

Q12: Please provide information regarding laminate tiles for flooring repairs.

A12: The City will provide replacement laminate tiles.

Q13: Is there any asbestos that could be potentially disturbed in the areas where the scope of work is happening?

A13: Certain areas have asbestos that could be potentially disturbed depending on means and methods. Please refer to the asbestos reports attached to this addendum.

Q14: Will the new panels be bottom fed or top fed?

A14: In general, follow the existing cable routing from the marshalling/FDP/Termination/HVAC panels to the DCS for the routing to the PLCs. generally, the panels are bottom-fed for areas with false floors and the panels are top-fed for all other areas. Contractor may use either bottom or top routing to the panels as part of their means and methods.

Q15: Will the side panels of existing termination and network cabinets need to be replaced?

A15: No, the side panels will not need to be replaced.