



February 8, 2023

Client File No.: 1071.1
Our File Nos.: S-972, S-1146 EMS
020-17-08-11-00
020-17-08-11-0N

Environment, Climate and Parks
Environmental Stewardship Division
Environmental Approvals Branch
1007 Century Street
Winnipeg, MB R3H 0W4

Attention: James Capotosto, Director

**RE: NEWPCC UPGRADE PROJECTS REPORT NO. 7 – Q4 QUARTERLY REPORT FOR
OCTOBER 1 TO DECEMBER 31, 2022 – ENVIRONMENT ACT LICENCE NO. 2684
RRR AND INVESTING IN CANADA INFRASTRUCTURE PROGRAM GIS-EQ-1087**

The City of Winnipeg (the City) is submitting the NEWPCC Upgrade Projects Report No. 7 for Q4 Quarterly Report for the period of October 1 to December 31, 2022. This report is to satisfy conditions identified in the Environmental Act Licence No. 2684RRR as required by Manitoba Conservation and Climate on May 28, 2021, and Investing in Canada Infrastructure Program (ICIP) GIS-EQ-1087 letter dated June 2, 2021. The work tasks required to complete the NEWPCC Upgrades to meet the Environmental Act Licence requirements are summarized in this report.

The works to be conducted as part of the NEWPCC Upgrades include the Power Supply and Headworks Facilities, Biosolids Facilities, and Nutrient Removal Facilities projects.

Power Supply

Total Performance of the Power Supply Upgrade project to be achieved when closeout documents, such as O&M manuals, have been submitted and accepted by the City. The Design Build (DB) contractor is making progress on the submission of these documents. Liquidated damages are being applied to the DB contract until Total Performance is achieved.

Headworks Facilities

The following key work elements were advanced or completed by the contractor during this period:

- Continued submission of various 60% and 90% Design Submission packages
- Secant pile installation at H1 is complete and Y5 is substantially complete
- Excavation of H2 (Pump Station) shaft is excavated to tunneling elevation. Excavation of H1 shaft will begin when the ring beam is complete
- The walls of the Grit Building have been poured. The north and south chambers are being prepared to be poured shortly

- The overflow chamber inner walls and rebar work for the Fine Screening Area is complete
- All three generators and radiators have been installed on their pads at the Standby Power Generation Building. Main slab was poured and backfilling around the main slab is complete. Generator Building installation will begin next month
- Driven pile installation is planned to be complete next month
- Disposal of impacted soil to licenced facilities as approved by the Province continues as new contaminated areas are excavated. Reusable soil is being stored on site for future use
- Heritage Resource Assessment work commenced in October. The pedestrian survey, excavation of test pits and four archaeological exploration holes have been completed. Pile pre-drill monitoring is ongoing

Critical milestones for the Headworks Facility are included in Table 1.

Overall, the contractor is tracking behind schedule. The graphical representation in Table 2: Earned Value compares the performance measurement baseline (baseline schedule of how they intended to do the work) to the actual schedule (work actually complete). It shows the contractor planned to be 41.5% complete by the end of December 2022, but is only 26.3% complete.

The main issues affecting the schedule relate to the installation of the secant piles. The delays are a function of equipment breakdowns and varying ground conditions which have affected the design and drilling depths.

Biosolids Facilities

On December 20, 2022, written confirmation was received of the Biosolids Facilities inclusion in the Investing in Canada Infrastructure Program (ICIP). This tri-level government funding is based on the current approved budget of \$552 million.

The City has concluded its market sounding to determine the market's tolerance for delivering the project as a fixed price design build. The City is preparing Request for Qualification and Request for Proposal documents based on the feedback received in the market soundings.

The results are pending from the additional environmental and geotechnical assessments completed in the fall of 2022. The City's Heritage Resource Impact Assessment Report for Biosolids is currently being drafted. This report will be submitted to the Province's Heritage Resource Branch for their review.

Canadian Pacific Railway has granted permission for the City to proceed with legal surveys and preparation of detailed design drawings for a surface and subsurface crossing between NEWPCC's Parcel A to Parcel B.

The City is currently engaging with stakeholders about the social procurement bidding requirements mandated by City Council on February 24, 2022.

A schedule of key milestones for the Biosolids Facilities is identified in Table 3.

Nutrient Removal

The Nutrient Removal Facilities project currently remains unfunded

A constructability review for the full NEWPCC Upgrade works will be prepared by December 31, 2023. This will help inform the construction timeline for the Nutrient Removal project.



Table 1: Tasks and Critical Milestones for NEWPCC Upgrade: Headworks Facilities

Task Description	% Complete Q3 Report	% Complete October Report	% Complete November Report	% Complete December Report**	Original Targeted Completion Date	Revised Targeted Completion Date	Actual Completion Dates
Procurement and Contract Award	100%	100%	100%	100%	June 30, 2021		June 11, 2021
DB Mobilization Complete	100%	100%	100%	100%	December 31, 2021		December 15, 2021
30% Design	100%	100%	100%	100%	December 14, 2021		December 14, 2021
60% Design	67%	67%	67%	67%	September 30, 2022	March 6, 2023	
90% Design	6%	6%	6%	6%	January 23, 2023	May 29, 2023	
IFC Design	2%	2%	2%	2%	April 17, 2023	September 6, 2023	
Driven Piles (All Areas)	49%	67%	67%	75%	August 19, 2022	February 10, 2023	
Secant Piles (H2, H1, Y5)	50%	66%	82%	82%	September 29, 2022	January 16, 2023	
Microtunneling (H1 to H2 & H1 to Y5)	0%	0%	0%	0%	December 20, 2022	November 7, 2023	
Generator Building, Structural & External Finishes	0%	0%	0%	0%	March 14, 2023	August 18, 2023	
Standby Generators, Install	0%	0%	0%	0%	August 3, 2023	January 23, 2024	
Raw Sewage Pumping Station (H2), Concrete	0%	0%	0%	0%	August 7, 2023	November 8, 2023	
H1 Chamber	0%	0%	0%	0%	September 5, 2023	July 22, 2024	
Standby Generator Facility & Fuel Storage System, Complete	0%	0%	0%	0%	September 15, 2023	March 6, 2024	
Grit Removal System, Install	0%	0%	0%	0%	September 18, 2023	December 21, 2023	
Y5 Chamber	0%	0%	0%	0%	December 7, 2023	October 23, 2024	
Raw Sewage Pumps, Install	0%	0%	0%	0%	January 23, 2024	April 25, 2024	
Headworks Building, Structural & External Finishes	0%	0%	0%	0%	June 7, 2024	June 12, 2024	
Odour Control System, Install	0%	0%	0%	0%	July 8, 2024	July 9, 2024	
Civil Works & Landscaping	0%	0%	0%	0%	July 26, 2024	April 11, 2025	
Headworks Building, Complete	0%	0%	0%	0%	November 5, 2024	February 5, 2025	
Commissioning	0%	0%	0%	0%	March 31, 2025	May 11, 2025	
Decommissioning	0%	0%	0%	0%	May 14, 2025	July 28, 2025	
*Substantial Completion	0%	0%	0%	0%	June 30, 2025		

*Substantial Completion: This is the only milestone that is contractual and cannot slide without penalty.

**Data source: Red River Solution's November 2022 Monthly Report submitted December 13, 2023.

ENGINEERING SERVICES DIVISION

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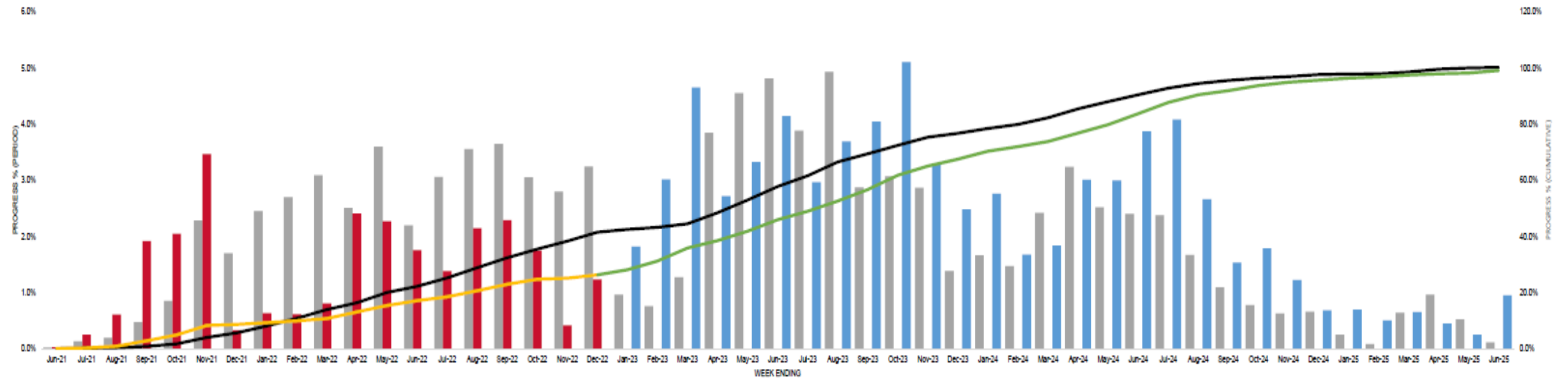
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Table 2: Earned Value



Month	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25				
Plan (Period)	0.0%	0.1%	0.2%	0.5%	0.9%	2.3%	1.7%	2.4%	2.7%	3.1%	2.5%	3.6%	2.2%	3.1%	3.5%	3.6%	3.1%	2.6%	3.2%	1.0%	0.8%	1.3%	3.8%	4.5%	4.8%	3.9%	4.9%	2.9%	3.1%	2.9%	1.4%	1.7%	1.5%	2.4%	3.0%	3.0%	2.5%	2.4%	2.4%	1.7%	1.1%	0.8%	0.6%	0.7%	0.2%	0.1%	0.6%	1.0%	0.5%	0.1%			
Earned (Period)	0.0%	0.2%	0.6%	1.9%	2.0%	3.5%	0.3%	0.6%	0.6%	0.8%	2.4%	2.3%	1.8%	1.4%	2.1%	2.3%	1.7%	0.4%	1.2%																																		
Forecast (Period)																				1.8%	3.0%	4.6%	2.7%	3.3%	4.1%	3.0%	3.7%	4.0%	5.1%	3.3%	2.5%	2.8%	1.7%	1.8%	3.0%	3.0%	3.9%	4.1%	2.7%	1.5%	1.8%	1.2%	0.7%	0.7%	0.5%	0.6%	0.4%	0.2%	0.9%				
Plan (Cumulative)	0.0%	0.1%	0.3%	0.8%	1.7%	3.9%	5.6%	8.1%	10.8%	13.9%	16.4%	19.9%	22.1%	25.2%	28.7%	32.4%	35.4%	38.2%	41.5%	42.4%	43.2%	44.4%	48.3%	52.8%	57.6%	61.5%	66.4%	69.3%	72.4%	75.2%	76.6%	78.3%	79.7%	82.1%	85.4%	87.9%	90.3%	92.7%	94.3%	95.4%	96.2%	96.8%	97.5%	97.7%	97.8%	98.4%	99.4%	99.9%	100.0%				
Earned (Cumulative)	0.0%	0.3%	0.9%	2.8%	4.8%	8.3%	8.6%	9.2%	9.9%	10.7%	13.1%	15.3%	17.1%	18.5%	20.6%	22.9%	24.6%	25.1%	26.3%																																		
Forecast (Cumulative)																				28.1%	31.1%	35.8%	38.5%	41.8%	45.9%	48.9%	52.6%	56.6%	61.7%	65.0%	67.4%	70.2%	71.9%	73.7%	76.7%	79.7%	83.6%	87.6%	90.3%	91.8%	93.6%	94.8%	95.5%	96.2%	96.7%	97.3%	97.8%	98.0%	99.0%				



Table 3: Tasks and Critical Milestones for NEWPCC Upgrade: Biosolids Facilities

Description	% Complete Q3 Report	% Complete October Report	% Complete November Report	% Complete December Report	Original Targeted Completion Date	Revised Targeted Completion Date	Actual Completion Dates
Updated Preliminary Design & Procurement Strategy	100%	100%	100%	100%	December 31, 2021	April 1, 2022	April 14, 2022 Council Approved July 21, 2022
Post RFQ	N/A	60%	65%	70%	March 31, 2023		
Preselected Proponents Named	N/A	0%	0%	0%	August 31, 2023		
Post RFP	N/A	50%	55%	60%	October 31, 2023		
Contract Award	0%	0%	0%	0%	December 31, 2023	November 30, 2024	
Substantial Completion	0%	0%	0%	0%	September 30, 2029	December 31, 2030	



**Water and Waste
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Should you have any questions, please contact Colin Javra at 204-986-4480 or by email at cjavra@winnipeg.ca.

Sincerely,

A handwritten signature in black ink that reads "C Wiebe".

Cynthia Wiebe, P. Eng., CAMP
Manager of Engineering Services

CJ/dr

- c: K. Harman, Manitoba Conservation and Climate (email)
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Figure 1: Secant Piles and Ring Beam at H1 Area



Figure 2: Grit Building



Figure 3: Standby Generator Building