Agenda – Standing Policy Committee on Finance and Economic Development – January 16, 2026

REPORTS

Item No. 3 **NEWPCC Upgrade: Power Supply and Headworks Facilities, Project ID: 20310011304, 2031001310 and 203110013B, Quarterly Project Status Report No. 41 For the Period Ended October 31, 2025**

WINNIPEG PUBLIC SERVICE RECOMMENDATION:

1. That the financial status of the NEWPCC Upgrade: Power Supply and Headworks Facilities project, as contained in this report, be received as information.

ADMINISTRATIVE REPORT

Title: **NEWPCC Upgrade: Power Supply and Headworks Facilities, Project ID: 20310011304, 2031001310 and 203110013B, Quarterly Project Status Report No. 41 For the Period Ended October 31, 2025**

Critical Path: Standing Policy Committee on Finance and Economic Development

AUTHORIZATION

Author	Department Head	CFO	CAO
C.D. Wiebe, P. Eng., CAMP, Manager Engineering Services	T. W. Shanks, M. Eng., P. Eng. Director, Water and Waste Department	T. Graham	J. Dunford

EXECUTIVE SUMMARY

Project On Schedule: Yes ☐ No þ **Project On Adopted Budget: Yes ☐ No þ**

Percent of Schedule Complete: 79% **Percent of Adopted Budget Spent:** 72%

On September 25, 2025, Council approved adding $47.5 million to the budget for the North End Sewage Treatment (NEWPCC) Upgrade: Power Supply and Headworks Facilities. This is for the resolution of the disputed contract relief event for COVID related cost escalation and other expected claims. With this change, the total project budget is $565.355 million. So far, $408.916 million has been spent, including $54.605 million during this reporting period.

Headworks Facilities

During this reporting period, Red River Solutions (RRS) has focused on the following construction activities:

- Installation of ducting and electrical cabling in a number of buildings
- Installation of all exterior site lights, receptacles, and interconnecting cabling
- Completion of excavation and earthworks for permanent roads and parking lots
- Installation of water mains and land drainage sewer system piping
- Reinstatement of the Northwest Interceptor (NWI) bypass and the completion of the concrete benching in the H1 Chamber
- Installation of all air handling units and boilers throughout the new Headworks facility
- Installation of motors and drive shafts for the pumps in the Raw Sewage Pumping Station
- Shutdown of existing NEWPCC Grit Tank 1 for modifications to allow for the new Headworks facility tie-in

A total of 161 milestones have been reviewed and paid to the contractor including 20 this reporting period.

A schedule extension was included as part of the resolution of the contract relief event for COVID related cost escalation and other claims. With the schedule extension, the new Headworks Facility is expected to be in operation in Q2 2026 and completed in Q4 2026. The schedule extension does not impact the Biosolids or Nutrient Removal Facilities projects.

Weather has the potential to significantly affect the timing of tie-ins and commissioning. Collaborative planning for upcoming shut down and tie-in for weather sensitive work is underway.

Distributed Control System (DCS) Migration
The Digester area has been migrated. Migration has begun in the Boiler area. The control panels for the Dewatering area are being built.

The General Construction Contractor is installing the control panel for the Boiler area and is working on the pre-wiring of the new cables.

The DCS Migration is expected to be completed in Q4 2027.

Primary Clarification Upgrade
Construction has begun for the scum dewatering building.

The Primary Clarifier Upgrade is expected to be completed in Q3 2027.

Ultraviolet Light (UV) Upgrade
The UV facility was shut down on October 1, 2025, and demolition of the civil and electrical works is underway. The successful Factory Acceptance Test (FAT) for the new disinfection equipment was witnessed in October 2025.

An over-expenditure for the Supply of UV Disinfection equipment in the amount of $46,619.49 was approved for additional sensors that were not included in the original scope of work.

The UV Upgrade is expected to be completed in Q4 2026.

NEWPCC Upgrade Audit
The Public Service is actively engaged in addressing and implementing the audit recommendations. KPMG continues to develop a fit-for-purpose governance structure for the NEWPCC Upgrade projects. The governance structure is expected to be considered by Council in Q4 2025.

The Advisory Committee has reviewed this report and recommends that the report be sent to the Standing Policy Committee on Finance and Economic Development.

RECOMMENDATIONS

That the financial status of the NEWPCC Upgrade: Power Supply and Headworks Facilities project, as contained in this report, be received as information.

REASON FOR THE REPORT

Major Capital Projects are required to report quarterly to the Standing Policy Committee on Finance and Economic Development. The threshold for reporting is reviewed at the beginning of each multi-year budget cycle and revised, if required, for Council consideration. For the 2024-2027 multi-year budget cycle Council approved that the threshold be maintained at $25 million. The Standing Policy Committee on Finance and Economic Development may also request reporting on any capital project.

IMPLICATIONS OF THE RECOMMENDATIONS

No implications.

HISTORY/DISCUSSION

See Appendix C – Key Project Events (History)

Construction (Update from last report)

NEWPCC Upgrade: Power Supply and Headworks Facilities

Headworks Facilities Design Build Execution

Request for Proposal (RFP) 659-2018B:

Significant construction continues on site including progress on exterior works. Highlights include:

- Installation of ducting and electrical cabling in a number of buildings, including all exterior site lights, receptacles, and interconnecting cabling
- Completion of excavation and earthworks for permanent roads and parking lots
- Installation of water mains and land drainage sewer system piping
- Reinstatement of the NWI bypass and the completion of the concrete benching in the H1 Chamber
- Installation of all air handling units and boilers throughout the new Headworks facility
- Installation of motors and drive shafts for the pumps in the Raw Sewage Pumping Station
- Shutdown of existing NEWPCC Grit Tank 1 for modifications to allow for the new Headworks facility tie-in

RRS has applied for a total of 161 milestone inspections to the Independent Certifier and all have been paid.

On September 25, 2025, Council approved a $47.5 million budget increase for the North End Sewage Treatment (NEWPCC) Upgrade: Power Supply and Headworks Facilities project for the resolution of the disputed contract relief event for COVID related cost escalation and other claims. The budget amendment brings the total project cost to $565.355 million.

A contract change report for the Headworks project was submitted to the Chief Administrative Officer on September 29, 2025 for the provision of temporary power and the relocation of a soil stockpile.

Relief Events under Discussion

The City has engaged external legal on the tariff issue for Headworks. RRS has indicated further correspondence is forthcoming on this matter.

Additional contaminated soil excavation occurred in October 2025 associated with the construction of the stormwater retention system. A future over-expenditure will be required.

Relief Event[2] Costs to Date:

Description:	**Cost to Date**
1. Contaminated soils (to date):	3.16 million[1]
2. Differing ground conditions:	8.16 million
3. Design Code Change:	2.03 million
4. Area E Shoring Underground:	0.043 million
Total:	**13.39 million**

Notes:
[1]The total cost of contaminated soil remediation will increase as excavation work continues.
[2]This table only includes relief events, not all changes are considered relief events.

Other Power Supply and Headworks Facilities Projects

DCS Migration

- **RFP 76-2023:** Schneider Electric Systems Canada Inc. is working on the following integration tasks:
    - Finalizing closeout documents for the Digesters area that was successfully migrated
    - Software testing the programmable logic controller (PLC) program for the Boilers area
    - Constructing and testing PLC panel for the Dewatering area
    - Developing the PLC and HMI programs for the Dewatering area

- **Tender 385-2023:** Centec Electric and Controls Ltd. is working on the following general construction tasks:
    - Pre-wiring and installation of the PLC panel for the Boilers area
    - Reviewing the commissioning plan for the Boilers area

- **RFP 182-2015:** An over-expenditure report for the Owner's Advocate in the amount of $2,043,769.24 was approved by the Director of Water and Waste on August 6, 2025 for work funded by the Headworks Facilities and the Biosolids Facilities projects. The approval included $803,504.00 funded by the Headworks Facilities capital budget for increased coordination between the Integrator and Construction contracts and extension of the project schedule on the DCS Migration project.

Primary Clarification Upgrade

- **RFP 785-2020:** Professional consulting and contract administration services are ongoing.

- **Tender 721-2024:** Construction is in progress. Progress to date includes:
    - Completion of building excavation and piling
    - Ongoing concrete works for below grade components (pile caps, concrete walls, basement slabs, etc.)

- **Tender 1003-2022:** Fabrication of the scum dewatering equipment is complete and the equipment was delivered in July 2025. The equipment is being stored by the City until the Construction Contractor is ready for installation.

UV Upgrade

- **RFP 182-2015:** Professional consulting and contract administration services are ongoing.

- **Tender 30-2025:** Construction in the UV facility began on October 1, 2025, with demolition of the existing UV equipment, Motor Control Centres, and transformers.

- **Tender 975-2023**: The successful FAT for the new disinfection equipment was witnessed in October 2025. An over-expenditure in the amount of $46,619.49 was approved by the Director of Water and Waste on September 8, 2025, for the Supply of Ultraviolet Disinfection Equipment for additional sensors that were not included in the original scope of work.

Table 1 – Contracts

Contracts (open or Recently Closed Contracts over $250,000.00)							
Bid Opportunity #	**Company Name**	**Description**	**Original Contract Award Value** (GST & MRST extra as applicable)	**Total Approved Over-Expenditures** (Over-Expenditure amount only)	**Date of Award**	**Date of Total Completion**	**Estimated % Complete**
182-2015 (Phase 2)	AECOM Canada Ltd	Engineering Services for Headworks Upgrade – Phase 2	$ 7,992,827	$ 1,654,424.00	8-Oct-2020	-	60
182-2015 (DCS Migration)	AECOM Canada Ltd	Engineering Services – DCS Migration	$ 2,698,331	$ 863,434.99	8-Oct-2020	-	56
182-2015 (UV Upgrade)[1]	AECOM Canada Ltd	Engineering Services – UV Upgrade	$ 3,503,000	$ -	30-Oct-2023	-	49
102-2017[1]	Blakes Cassels & Graydon LLP	External Legal Counsel - NEWPCC Upgrade Project	$ 387,504	$ 468,125.00	23-Nov-2017	-	38
659-2018 B[1]	Red River Solutions	Design Build of NEWPCC Upgrade: Headworks Facilities	$ 271,611,000	$ 104,471,909.00	11-Jun-2021	-	84
785-2020	AECOM Canada Ltd	Engineering Services - Primary Clarification Upgrades	$ 2,166,775	$ 1,700,762.16	7-Jun-2021	-	55
64-2021[2]	Altus Group Limited	Independent Certifier Services	$ 274,350	$ -	21-Jul-2021	-	90
92-2022[1]	Centec Electric & Controls Ltd	NEWPCC DCS Migration - Fibre Supply and Installation	$ 1,333,196	$ -	16-Jun-2022	-	99
740-2022	Peguis Consultation & Special Projects Inc.	Archaeological and Environmental Monitoring Services	$ 75,000	$ 475,000	31-Aug-2022	-	53
1003-2022[1]	Fournier Industries	NEWPCC Primary Clarifiers - Procurement of Scum Presses and Associated Controls	$ 1,155,405	$ -	2-May-2023	-	10
76-2023[1]	Schneider Electric Systems Canada Inc.	DCS Migration - Integrator Supply and Services	$ 11,950,000	$ -	27-Nov-2023	-	45
385-2023[1]	Centec Electric & Controls Ltd	DCS Migration - General Construction	$ 3,925,375	$ -	6-May-2024	-	25
975-2023[1]	Trojan Technologies ULC	UV Upgrade - Supply of Ultraviolet Disinfection Equipment	$ 7,283,811	$ 46,619.49	6-May-2024	-	20
756-2013 (Extension 2)[1]/ PO 737847	EECOL Electric	UV Upgrade - Supply of Motor Control Centres	$ 460,100	$ -	12-Dec-2024	-	5
1015-2025	Flocor Inc.	UV Upgrade - Supply of Slide Gates and Weir Gates for Wastewater	$ 421,500	$ 29,505.00	20-Feb-2025	-	0
30-2025[1]	Red River Solutions	NEWPCC Ultraviolet (UV) Upgrade	$ 8,795,603	$ -	30-May-2025		12
721-2024[1]	M.D. Steele Construction Ltd.	NEWPCC - Primary Clarification Upgrade Project	$ 19,473,421	$ -	29-May-2025		0
		Total	**$ 343,507,198**	**$ 109,709,780**			

[1]The Original Contract Award Value includes MRST.

[2]This is a biparty agreement with cost shared equally between the design builder and the City. Only the amount related to City is indicated.

Schedule (Update from last report)

A schedule extension was provided as part of the resolution of the disputed contract relief event for COVID related cost escalation and other claims. The schedule extension does not impact the Biosolids or Nutrient Removal Facilities projects. Table 2 has been updated to reflect the new substantial and final completion dates for the Headworks project due to the schedule extension.

Table 2 – Milestones

Project Milestones					
Deliverable		Original Targeted Completion Date	Revised Targeted Completion Date	Actual Completion Date	Estimated % Complete
1	Project Definition Report[1]	2017 Q2	2017 Q2	2017 Q2	100
2	Preliminary Design Report	2018 Q1	2018 Q3	2018 Q3	100
3	Cost Report[2]	2018 Q3	2018 Q3	2018 Q3	100
4	Design Build RFP	2020 Q1	2020 Q1	2020 Q1	100
5	Design Builder Contract Award	2020 Q4	2021 Q2	2021 Q2	100
6	Design Build Substantial Completion	2025 Q4	2026 Q3	-	84
7	Design Build Final Completion	2026 Q4	2026 Q4	-	81
8	DCS Migration Substantial Completion	2027 Q4	-	-	45
9	Primary Clarification Upgrade Substantial Completion	2023 Q4	2027 Q3	-	5
10	UV Upgrade Substantial Completion	2026 Q4	-	-	12

[1]Owner's Advocate Class 5 Estimate

[2]Cost Consultant Class 3 Estimate

Risk (Update from last report)

Two new risks were identified in this reporting period:

- Weather has the potential to significantly affect the timing of tie-ins and commissioning. Collaborative planning for upcoming shut down and tie-in for weather sensitive work is underway.
- A notice regarding the tie-in to the existing land drainage system was received and is under review. This has the potential to increase project costs.

The following are updates for ongoing risks:

- RRS has indicated further correspondence is forthcoming on tariffs. The City has engaged external legal services on this matter.
- The budget amendment and over-expenditure report was approved by Council in September 2025 to resolve the disputed contract relief event for COVID cost escalation and other claims. This has mitigated the potential risk of arbitration and this risk has been moved to closed.
- Heritage resource monitoring has resumed onsite for the excavation of the stormwater retention system. To date, no heritage concerns have been identified.
- Progressive shutdown of the existing NEWPCC Grit Tanks will be undertaken to minimize potential plant and collections system impacts associated with the tie-in work. Work in Grit Tank 1 commenced in October and work in Grit Tanks 2 and 3 is planned for November 2025 and February 2026, respectively.

- There will likely be a shortfall of topsoil needed for site restoration as some of the topsoil originally planned for restoration was found to be contaminated. This has the potential to increase costs.

Table 3 – Significant Risks and Mitigations Strategies

Significant Risks and Mitigation Strategies	
Risk Statement and Explanation	**Risk Mitigation Management Plan**
New:	
RRS has submitted a notice regarding the land drainage system tie-in.	Review notice and determine if there is entitlement under the DBA.
Weather has the potential to affect the schedule for tie-ins and commissioning.	Undetake early collaborative planning with Operations, Design Builder, and Owner's Advocate. Complete flow-sensitive work during low-flow periods (winter) where possible.
Ongoing:	
RRS has submitted a relief event notice regarding tariffs and their potential cost impacts on the project.	Project requirements include tariffs within the definition of change in law which would be treated as a relief event if it occurs. Determine outstanding equipment and material that may be subject to tariffs. Determine if alternate country of origin sources exist that meet quality requirements and supply timelines. A budget amendment may be required for this risk.
Potential for heritage resources to be uncovered during excavation resulting in work stoppages and cost and schedule impacts.	Conduct archaeological test pitting of excavation areas in advance. Engage heritage resource monitors as required.
Delays in access to the existing Grit Area to complete tie-in work which may affect the commissioning schedule for the new Headworks Facility.	Consider options to allow access to the existing Grit Area earlier to mitigate potential schedule impacts.
Budget and schedule risks associated with the NWI failure.	A budget amendment was approved for the additional costs associated with the NWI failure. The City is working with insurers to determine level of coverage. The delay associated with the NWI failure has extended the overall project schedule and the date of substantial completion has been revised. There is potential this may cause coordination issues with future construction projects. Close coordination with other projects is being undertaken.
Impacted soils were discovered by RRS during soil stripping and early excavating work. More impacted soils may be uncovered during next phases of excavation.	Disposal locations for impacted soils have been identified as GFL or Prairie Green depending on the level of contaminant. Disposal plans have been reviewed and approved by the Province. Transportation of impacted soil to disposal sites is in progress. Site delineation plan and Phase 2 environmental soil sampling testing will be conducted for any future impacted soils discovery. The project team will investigate the lowest cost options for soil disposal if required.
Due to multiple construction activities occurring at NEWPCC and construction work occurring in a congested site, limited site access and schedule conflicts/delays may occur affecting tie-ins and shutdowns during construction.	There is regular communications between project managers and consultants to ensure regular coordination of projects at NEWPCC.

NEWPCC is a continuously operating sew age treatment plant, the design builder may cause unintended shut dow ns or disruptions resulting in failure to meet the Environment Act Licence.	Project requirements include details on how the design builder coordinates w ith the City prior to tying in to the existing plant. Payment adjustments are included in the contract if unintended shut dow ns or disruptions occur.
There could be excess noise, dust, and light during construction as a result of the project.	The project requirements include construction requirements related to noise. The design builder is also required to have a community impact mitigation plan to avoid such issues.
Due to multiple construction activities occurring at NEWPCC and construction w ork occurring in a congested site, limited site access and schedule conflicts/delays may occur affecting tie-ins and shutdow ns during construction.	There is regular communications betw een project managers and consultants to ensure regular coordination of projects at NEWPCC.
NEWPCC is a continuously operating sew age treatment plant, the design builder may cause unintended shut dow ns or disruptions resulting in failure to meet the Environment Act Licence.	Project requirements include details on how the design builder coordinates w ith the City prior to tying in to the existing plant. Payment adjustments are included in the contract if unintended shut dow ns or disruptions occur.
There could be excess noise, dust, and light during construction as a result of the project.	The project requirements include construction requirements related to noise. The design builder is also required to have a community impact mitigation plan to avoid such issues.
Due to construction occurring around existing infrastructure, destabilization or damage to existing structures may occur resulting in increased costs and potential schedule delays.	Project requirements include detailed requirements for w orking around existing infrastructure.
Accidents may occur on an active project construction site resulting in injuries and damaged property causing project delays and reduction in productivity.	Project requirements includes details on safety measures and the design builder is required to be COR certified.
There may be unknow n conditions that may be associated w ith reusing existing facilities.	The DB agreement includes mechanism to deal w ith unforeseen conditions of existing facilities.
Unknow n existing conditions related to geotechnical, environmental, and hazardous material may be encountered during construction causing schedule delays and additional	Geotechnical investigations and environmental impact assessments are being carried out prior to construction to minimize unknow ns.
Mitigated:	
Risk of failure of the Main Street Interceptor during construction.	A steel liner w as installed w ithin the Main Street Interceptor to minimize the risk of the interceptor failing during
The existing automation system requires migration to an updated automation system as it is at end of life. Due to the age, there may be unforeseen circumstances resulting in quality issues, schedule delays and operational impacts.	This risk is best handled by the City; as a result, the scope w as separated as a stand alone design bid build project. This risk also requires know ledgeable and qualified personnel. As part of Phase 2 of their existing contract, the design consultant w ill carry out the w ork due to their qualifications and extensive know ledge and experience on the existing automation system.
Closed:	
RRS has submitted a claim for cost increases for labour, material, equipment and subcontractors.	Review claims as they occur and determine if there is entitlement to relief under the Design Build Agreement. A budget amendment and over-expenditure report w as approved by Council for this issue.
Potential for insufficient budget to complete the NEWPCC Primary Clarification Upgrade Project.	City aw arded a new tender w ith a revised scope of w ork. A budget amendment or deferral of project w as not
Bid prices for other contracts w ithin the Headw orks Facilities budget may be higher due to existing market conditions as result of the pandemic.	All major procurements have been aw arded. A budget amendment or deferral of project w as not required.
The standard good equipment provider has stated a significantly increased price and delivery timeline for motor control centers (MCC).	The standardized agreement for motor control centres w as renew ed after the aw ard of the Headw orks project and has affected the standardized pricing. An over-expenditure w as considered in November 2024 for this item.

Differing ground conditions as defined by the Design Build Agreement w ere encountered in tw o of the deep shafts. As a result, the contractor is claiming an increase in costs and a delay.	An over-expenditure w as approved for the additional costs associated w ith the differing ground conditions. The schedule substantial completion date has been revised to account for the delay.
Excavation w ork under the UV outfall filled w ith w ater. RRS believes it is secondary effluent. The City disagrees as sampling results are more indicative of groundw ater. The City rejected the claim for costs related to additional investigations but RRS has still proceeded. RRS may come back w ith further claims as a relief event depending on the findings of their investigation.	Additional excavation and sampling occurred and confirmed the w ater encountered w as groundw ater.
The Public Service submitted funding application for NEWPCC Headw orks DB project for the Federal and Provincial funding under the Investing in Canada Infrastructure Program based on Council approval. Delay of the funding agreement or an agreement in principle may result in loss of a construction season causing increase in project costs and schedule delays.	This risk is now closed as the ICIP funding w as approved and the design build agreement w as executed before the proposal validity period.
No existing legislation on odour release threshold causing potential impact and complaints from neighbors resulting in post - construction renovations or changes in operation at additional cost.	A field study w ith dispersion modelling has been carried out. Since this risk is mainly applicable to the NEWPCC Upgrade: Nutrient Removal Project it w ill be identified at the start of that project.
* Not every risk need be disclosed but those significant in nature to the project should be disclosed and monitored. Risks should be in order from higher to low er assessed risk and revised on an ongoing basis.	

Financial (Update from last report)

For further information, refer to Appendix B – Financial Forecast

The City continues to work with their Insurers to determine the level of coverage for the NWI failure. To date, the City has received $7.07 million in insurance proceeds for the NWI failure which have been returned to the contingency allowance.

Funding (Update from last report)

N/A

Table 4 – Project Funding Forecast

Funding Forecast			
Funding Source	**Adopted Budget[1] (in millions)**	**Amended Budget[2] (in millions)**	**Committed (in millions)**
Class of Estimate	**Class 5**	**Class 3**	**Class 3**
NEWPCC Upgrade:			
Power Supply			
Retained Earnings[8]		20.03	20.03
Environmental Projects Reserve[8]		32.25	32.25
Total Power Supply		52.28	52.28
Headworks Facilities			
Retained Earnings[6]	87.64	87.08	87.08
External Debt[3, 6]	690.29	147.72	147.72
Environmental Projects Reserve[3, 4, 7]	17.66	65.41	65.41
Federal Government[3, 5]		116.11	116.11
Provincial Government[3, 5]		96.75	96.75
Total Headworks Facilities	795.59	513.07	513.07
Total	**795.59**	**565.35**	**565.35**

[1] Council adopted budget in 2016

[2] On February 28, 2019 Council approved the existing project be amended to consist of three projects. Project 1: Power Supply and Headworks Facilities; Project 2: Biosolids Facilities; Project 3: Nutrient Removal Facilities.

[3] In a letter dated April 1, 2021, the Province of Manitoba confirmed that funding for Headworks Project would be reduced to $96.749 million from $100.300 million (Province) and to $116.111 million from $120.373 million (Federal), resulting in an increase of $7.813 million to the City's share of costs.

[4] On May 27, 2021 Council approved a budget increase of $65 million funded by $32.5 million debt and $32.5 million Environmental Projects Reserve.

[5] On July 23, 2021 Federal and Provincial ICIP funding of $212.86 million was announced for the Headworks Project.

[6] On February 22, 2024 Council approved a budget increase of $65 million funded by $25 million debt and $19.475 million Retained Earnings.

[7] On September 25, 2025, Council approved a budget increase of $47.5 million funded by Environmental Projects Reserve.

[8] Major Capital Projects Steering Committee requested that the Power Supply project and other work considered ineligible for Provincial and Federal funding be reported separately.

Property Acquisition (Update from last report)

N/A

Stakeholder Engagements/Communications (Update from last report)

The Public Service continues to work with a number of stakeholders on this project including:

- Peguis First Nation regarding the cultural interest in the NEWPCC lands
- The Manitoba Government as the Provincial regulator
- The International Institute for Sustainable Development, Lake Winnipeg Foundation, and Lake Winnipeg Indigenous Collective as environmental stakeholders

Heritage resource monitoring with Peguis First Nation resumed in October 2025 for the excavation of the stormwater retention system. To date, no concerns have been identified.

UV treatment at NEWPCC was temporarily shut off on October 1, 2025, to allow the system to be upgraded. The system will be returned to service by March 15, 2026. Public, First Nation, and Stakeholder notification activities were undertaken in September 2025 in advance of the shutdown. Some public concerns were raised about potential effects of the shutdown on the City's drinking water. The UV shutdown will not affect the City's drinking water.

Audit (Update from last report)

The Public Service is actively implementing a number of audit recommendations. The quarterly Implementation of Audit Recommendation Reports can be found here: https://winnipeg.ca/audit/reports.stm#tab-QuarterlyReports

KPMG continues to develop a fit-for-purpose governance structure for the NEWPCC Upgrade projects. KPMG considered input from the Public Service and City Councillors while developing the new governance structure. The proposed governance structure is anticipated to be considered by Council in Q4 2025.

Subsequent Events after Report Period End Date

The gates and actuators to be provided under a supply contract for the UV Upgrade were not delivered by the date specified. This has the potential to affect the schedule for the UV Upgrade. Legal Services has been engaged.

An over-expenditure will be forthcoming for the NEWPCC Primary Clarification Upgrade Project for required architectural, electrical, and structural modifications to the new Scum Dewatering Building that were identified during construction.

FINANCIAL IMPACT

Financial Impact Statement **Date:** November 24, 2025

Project Name:

NEWPCC Upgrade: Power Supply and Headworks Facilities,
Project ID: 20310011304, 2031001310 and 2013110013B
Quarterly Project Status Report No. 41
For the Period Ended October 31, 2025

COMMENTS:

Financial forecast for the NEWPCC Upgrade Projects can be found in Appendix B.

Lucy Szkwarek, FCPA, FCGA

Lucy Szkwarek, FCPA, FCGA
Manager of Finance and Administration

CONSULTATION

This Report has been prepared in consultation with:

N/A

OURWINNIPEG POLICY ALIGNMENT

This report aligns OurWinnipeg 2045, Policy 2.17 Regional Water Resource Management, by addressing long-term capacity of water-related systems including wastewater management. Objective: Protect and value ecosystems as essential components to quality of life through municipal activities and urban environment.

WINNIPEG CLIMATE ACTION PLAN ALIGNMENT

Consideration was given as to whether this report connects to the Winnipeg Climate Action Plan (CAP), and it was determined that the CAP is not applicable to this specific report.

WINNIPEG POVERTY REDUCTION STRATEGY ALIGNMENT

Consideration was given as to whether this report connects to the Winnipeg Poverty Reduction Strategy (PRS) and its Goals and Objectives, and it was determined that the PRS is not applicable to this specific report.

SUBMITTED BY

Department: Water and Waste Department
Division: Engineering Services Division
Prepared by: Linda McCusker, Project Director
Date: November 27, 2025

Appendices

Appendix A – Key Project Facts

Appendix B – Financial Forecast

Appendix C – Key Project Events (History)

Appendix D – Funding

Appendix A – Key Project Facts

Appendix A - Key Project Facts	
Project Name	NEWPCC Upgrade: Power Supply & Headworks Facilities
Business Owner (Department)	Water and Waste Department
Project ID	2031001304, 2031001310, and 203110013B
Project Sponsor	Director of Water and Waste
Department Responsible for Project Delivery	Water and Waste Department
Consultant Engineer (Company Name)	KGS Group Consulting Engineers and AECOM Canada Ltd.
Adopted Budget	$795.95 million
Class of Estimate (Adopted)	Class 5
Range of Estimate (Adopted)	-50% to +100% $397.80 million to $1,591.18 million
Amended Budget	565.355
Class of Estimate (Amended)	Class 3
Range of Estimate (Amended)	-20% to +30% $452.284 million to $734.961 million
Project Description (Scope)	
The Power Supply and Headworks Facilities projects will address end-of-life equipment at the front end of the plant and upgrade the power supply to provide adequate power capacity for the NEWPCC Upgrade Projects. The Project design will accommodate expected influent flows and loads to 2037 and take into account future regulatory trends and long term planning to year 2067.	
Committee Membership:	
- Joseph Dunford, Chief Administrative Officer - Tracy Graham. Chief Financial Officer - Rob Taylor, Director of Assets and Project Management - Danny Tooth, Acting Manager of Capital Projects Oversight and Reporting - Tim Shanks, Director of Water and Waste - Cynthia Wiebe, Manager of Engineering Services, Water and Waste - Lucy Szkwarek, Manager of Finance and Administration, Water and Waste - Linda McCusker, Project Director, Winnipeg Sewage Treatment Program, Water and Waste	

Appendix B – Financial Forecast

Appendix B - North End Sewage Treatment Plant (NEWPCC) Upgrade Projects Financial Forecast
As of Oct 31, 2025

Project Component Deliverables	Budget (in 000's)			Expenditure Forecast (in 000's)							Surplus (Deficit) From Amended Budget	Variance Last Report	Change in Variance
	Adopted Budget	Council Approved Change	Amended Budget[1]	Actual Costs To Oct 31, 2025	Projected Costs 2025	2026	2027	2028	2029	Total Forecasted Costs			
Power Supply & Headworks Facilities Project[2]													
Engineering, Design and Other	$ 57,196	$ (2,959)	$ 54,237	$ 44,608	$ 1,423	$ 6,256	$ 3,613	$ 314	$ -	$ 56,214	$ (1,977)	$ (1,149)	$ (828)
Construction	$ 621,011	$ (177,799)	$ 443,212	$ 358,645	$ 19,446	$ 71,826	$ 15,084	$ 1,455	$ -	$ 466,456	$ (23,244)	$ (21,892)	$ (1,352)
Land Acquisition	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Internal Financing/Overhead Costs	$ -	$ 21,718	$ 21,718	$ 5,663	$ 4,501	$ 8,446	$ 1,372	$ 1,053	$ -	$ 21,035	$ 683	$ 699	$ (16)
Contingency	$ 117,383	$ (71,195)	$ 46,188						$ 21,650	$ 21,650	$ 24,538	$ 22,342	$ 2,196
Total Project Budget	**$ 795,590**	**$ (230,235)**	**$ 565,355**	**$ 408,916**	**$ 25,370**	**$ 86,528**	**$ 20,069**	**$ 2,822**	**$ 21,650**	**$ 565,355**	**$ -**	**$ -**	**$ -**

% of Project Budget Spent[3]	
Power Supply & Headworks Facilities	72%

[1]Amended budget and actual costs to date have been agreed to the City's general ledger and Monthly Capital Expenditures Report and include closed budget years

[2]On May 27, 2021, Council approved a budget increase of $65M; On February 22, 2024 Council approved a budget increase of $44.475M; On September 25, 2025 Council approved a budget increase of $47.5M.

[3]Actual costs to date / Amended budget

		Power Supply & Headworks Facilities Amount in '000's	
Project ID	**Project Year**	**Amended Budget**	**Costs to Date**
2031001304[4]	2004	$214	$214
2031001310[4]	2010	$305	$305
203110013B	2012 – 2025	$564,836	$408,397
Total Combined Project Budget		$565,355	$408,916
Breakdown by Project			
Power Supply Project[6]		$52,281	$52,281
Headworks Facilities Projec		$513,074	$356,635

[4]Does not appear in the Capital Expenditures Monthly Report as the funds have been expended and it is designated as a closed Project ID.

[5]Headworks Facility Project segregated for reporting purposes.

[6]Cost incurred before ICIP project approval date of May 28, 2021 are deemed ineligible.

Appendix C – Key Project Events (History)

THE PROJECT

The goal of this project is to upgrade the North End Sewage Treatment Plant (NEWPCC) to meet new Regulatory Licence requirements regarding the maximization of nutrient removal and biosolids reuse and new effluent limits for nitrogen and phosphorous. The upgrade will also add wet weather treatment capability; add a new facility to treat the sludge from all three plants; and replace end-of-life equipment. The Project design will accommodate expected influent flows and loads to 2037. It will also consider future regulatory trends and long-term planning to the year 2067 to facilitate effective process or facility modifications should they be required.

A new power sub-station is required at the NEWPCC to accommodate the additional power demand of the upgrades at the facility. The power supply upgrade was delivered as a separate project from the main NEWPCC upgrade to allow for early procurement of long-lead items, such as transformers, to ensure that the electrical power upgrade is available for the new processes when needed.

The delivery method for NEWPCC Power Supply and Headworks Facilities Upgrade Projects is largely design build (DB) with a small scope being procured as design bid build (DBB).

The upgraded facility will have an economical whole-life cost and be an efficient and safe workplace for operational personnel. In addition, the plant must operate continuously during the work and continue to meet current effluent limits. The impact of construction and commissioning to the capacity of the treatment facility will be minimized as much as possible.

In 2003 Clean Environment Commission Hearings on the City's wastewater collection and treatment systems, Manitoba Conservation and Water Stewardship (now Manitoba Sustainable Development, the Regulator) notified the City that it intended to issue a licence for the NEWPCC that would require control of nutrients discharged to the Red River.

On May 16, 2007, Council authorized the Chief Administrative Officer to finalize the terms and conditions of a contribution agreement with the Government of Canada and the Province of Manitoba for funding of Wastewater Treatment Plant upgrades under the Canada Strategic Infrastructure Fund (CSIF).

On November 19, 2008, City Council authorized the Winnipeg Public Service to:

- Begin the procurement of a strategic partner that could bring private sector experience to the design, construction, finance, and potentially the operation of the North and South End Sewage Treatment Plants as well as potential operation of the West End Sewage Treatment Plant

- Authorize the Chief Administrative Officer to approve and issue the Request for Expressions of Interest followed by a Request for Qualifications and the Request for Proposals

On May 6, 2009, the Environment Act Licence (EAL) No. 2684 RRR was issued for the NEWPCC.

On May 19, 2010, Council:

- Directed the Chief Administrative Officer to approve and issue a Letter of Notification to Veolia in order to immediately begin design and construction of the South and North End Sewage Treatment Plant upgrades and expansion and biosolids handling facility

- Delegated the authority to the Chief Administrative Officer to "approve contract awards for upcoming South and North End Sewage Treatment Plant capital projects where the value of each contract does not exceed $30 million and there are sufficient funds in a budget approved by Council

On June 16, 2011, the Save Lake Winnipeg Act amending sections of the Water Protection Act (Act) came into effect. Section 4.2(3) of the amended Act required the City to submit a plan that details how the City will comply with subsections 4.2(1) and (2).

The NEWPCC Upgrading Plan was submitted to the Regulator in compliance with Section 4.2(3) of the amended Water Protection Act on June 15, 2012. The Regulator approved the Upgrading Plan on October 2, 2012. The Department submitted the NEWPCC Master Plan and the revised NEWPCC Master Plan on September 27, 2013 and April 28, 2014 respectively. The Master Plan was approved by the Regulator on May 29, 2014.

In the Regulator's Licence alteration Letter dated December 30, 2014, the project completion date was specified as December 2019. However, the Regulator was notified on June 23, 2016 that the project schedule was not achievable. Manitoba Sustainable Development acknowledged receipt of this notice on August 16, 2016 and indicated they had "no concerns at this time." Regular schedule updates and progress reports continue to be submitted to Manitoba Sustainable Development on a quarterly basis.

In the second quarter of 2017, the Department reported that an updated conceptual design project cost estimate was received from the design consultant. This new information indicated costs over a billion dollars, much higher than the currently approved budget of $795.59 million (Class 5 estimate).

The Adopted Budget, $795.59 million, was based on a Class 5 cost estimate which has an Association for the Advancement of Cost Engineering (AACE) expected accuracy range of -50% and + 100% or $397.80 million to $1,591.18 million.

On February 28, 2019, Council approved the recommendation to split the planned NEWPCC Upgrade Project into three distinct projects and execute them based on process criticality and available funding. The recommendation to Council requested approval to proceed with the project scope for Power Supply and Headworks Facilities. Other levels of Government funding for the remaining projects to complete the plant upgrade are required.

The three capital projects and Class 3 cost estimates (including interest charges) to complete the NEWPCC Upgrade are identified as:

1. NEWPCC Upgrade: Power Supply and Headworks Facilities - $473 million

2. NEWPCC Upgrade: Biosolids Facilities - $1.035 billion (revised from $553 million)
3. NEWPCC Upgrade: Nutrient Removal Facilities - $828 million

The total budget to upgrade NEWPCC is approximately $1.854 billion; based on a class 3 cost estimate which has an AACE expected accuracy range of -20% and +30% or $1.48 billion to $2.41 billion. This amount includes an estimated $155 million in interest charges to be capitalized during the construction period. The total budget was updated from $1.789 billion to $1.854 billion as a result of the budget amendment increase of $65 million for the NEWPCC Upgrade: Power Supply and Headworks Facilities Capital Budget. The budget increase was approved by Council on May 27, 2021.

On December 5, 2019, a response was received from Manitoba Conservation and Climate, Environmental Approvals Branch with regards to the Notice of Alteration (NOA) for NEWPCC submitted by the City July 30, 2019. The response indicated that the NOA was not approved and that the City will be out of compliance with the Environmental Act Licence 2684 RRR and with the phosphorus compliance plan pursuant to the Water Protection Act in January 1, 2020. In the absence of an approved phosphorus compliance plan, the City was required to participate in two project committees namely; the Project Steering Committee and Project Advisory Committee.

On September 26, 2019, Council approved a 2019 capital project budget of $552.712 million, for NEWPCC Upgrade: Biosolids Facilities, subject to final written confirmation of federal and provincial funding satisfactory to the Chief Financial Officer.

On January 30, 2020, Council approved $15.334 million from the Biosolids Facilities Budget to commence engineering services.

On February 19, 2020, Minister Squires sent a letter to the Mayor indicating that additional funding of $21.8 million is an initial payment to be allocated to the NEWPCC Upgrade Project under any potential ICIP arrangements, along with the previous allocation of $34.4 million for a total of $56.2 million.

On September 20, 2020 Council approved that the City agree to transfer $321.24 million of Federal Government's funding under the ICIP from the Public Transit Infrastructure Stream to the Green Infrastructure Stream to fund the Federal Government's funding portion for the NEWPCC Upgrade: Headworks Facilities Project and the NEWPCC Upgrade: Biosolids Facilities Project as per the Province of Manitoba's requirement, subject to certain conditions. The design build of the NEWPCC Power Supply Project was substantially completed in Q4 2020.

On March 25, 2021, Council adopted that:

- The Government of Canada and the Province of Manitoba be requested to provide confirmation of approval of ICIP for the NEWPCC Upgrade Projects: Headworks Facility Project and Biosolids Facility Project
- The Province of Manitoba be requested to confirm the City's recommended procurement methodology for the Biosolids Facility Project
- The Public Service be directed not to proceed with detailed engineering design for the

Biosolids Facility design-bid-build project, in the amount of $15.334 million, as approved by Council on January 30, 2020, until such time as the confirmation requested in recommendations 1 and 2 have been received

In a letter dated April 1, 2021, the Province of Manitoba confirmed that funding for the Headworks Project will be reduced to $96.749 million from $100.300 million (Province) and to $116.111 million from $120.373 million (Federal). This means that the City's share of costs will increase by $7.813 million as a result of the owner advocate costs incurred.

On May 18, 2021, the Executive Policy Committee concurred in the recommendation of the Public Service, as amended, that:

- The current Operation and Maintenance of Winnipeg's sewage treatment utility shall remain public and that the Operation and Maintenance not be included as part of the P3 market sounding
- That a single source contract be approved with Deloitte LLP of up to $400 thousand to conduct a market sounding for a Design, Build and Financing P3 for the Biosolids and Nutrient Removal facilities projects of the NEWPCC upgrades
- That the Public Service report back to Council on the results of the market sounding and analysis

On May 27, 2021, Council approved:

- Red River Solutions, an Aecon Oscar Renda Joint Venture, as the Preferred Proponent for the Design Build of the NEWPCC Upgrade: Headworks Facilities Project
- A budget amendment increases of $65 million for the NEWPCC Upgrade: Power Supply and Headworks Facilities Capital Budget, to be funded 50/50 through utility rates and debt financing
- Review of the AACE Class 3 cost estimates for Biosolids and Nutrient Removal Facilities projects and refer any increases to the 2022 capital budget process; and to update the ten-year water and sewer financial plan and report back to Council in October 2021

On May 31, 2021, the NEWPCC Upgrade: Headworks Facilities was approved for Federal and Provincial funding under the ICIP – Green Infrastructure – Environmental Quality Sub-stream, with Federal contributions up to $116.111 million and Provincial Contributions up to $96.750 million. Accordingly, the agreement for the design build of the NEWPCC Upgrade: Headworks Facilities was executed with RRS on June 11, 2021.

On July 23, 2021, a formal press release regarding the approval of funding through the ICIP application for the NEWPCC Upgrade: Headworks Facilities was carried out at the NEWPCC. All three levels of government were in attendance.

A joint news release by the Province of Manitoba and the City was issued on November 24, 2021, regarding the advancement of the City's funding application to the Federal Government of Canada for the NEWPCC Upgrade: Biosolids Facilities Project through the ICIP.

On February 24, 2022, Council approved that future tenders for the NEWPCC Upgrade Projects require bidders to include the following as part of their bid submissions:

- Specific information on its intended partnerships or self-directed plans to secure a skilled project labour workforce
- Estimated numbers of and classifications of skilled tradespersons to be employed
- Specific commitments to engage skilled labour including targets for employment of Indigenous peoples and other under-represented groups within the Manitoba market

  Proposed plans and partnerships with organizations to promote employment and training initiatives for Indigenous and other under-represented groups within the Manitoba market.

On July 21, 2022, the City Council approved:

1. That the NEWPCC Upgrade: Biosolids Facilities Project be delivered using a Design Build procurement model
2. That the revised cost estimate for the NEWPCC Upgrade: Biosolids Facilities Capital Budget be referred to the 2024-2027 Multi-Year Budget Process
3. That the $15,334,000.00 2019 Capital Budget for the NEWPCC Upgrade: Biosolids Facilities, approved on January 30, 2020, as part of the 2020-2023 Water and Sewer Rate Report, be funded from the Environmental Projects Reserve rather than external debt

On August 16, 2022, a formal press release regarding the approval of funding through the ICIP application for the NEWPCC Upgrade: Biosolids Facilities was carried out at the NEWPCC. All three levels of government were in attendance.

On February 22, 2024, Council approved a $44.475 million budget increase for the NEWPCC Upgrade: Power Supply and Headworks Facilities project due to costs associated with the Northwest Interceptor failure. The budget amendment brings the total project cost to $517.855 million.

On February 27, 2025, Council approved delegation of authority to approve contract over-expenditures for the NEWPCC Upgrade: Power Supply and Headworks Facilities projects and over-expenditures for the Owner's Advocate Engineer (RFP No. 182-2015). This report followed from audit recommendations 2: Authority and Accountability and 40: Change Order Approval timelines.

On September 25, 2025, Council approved a budget amendment in the amount of $47.5 million to resolve a disagreement on a contract relief event, resolve other claims, and restore project contingency funds. The budget amendment brings the total project cost to $565.355 million.

RISKS AND RISK MITIGATION STRATEGIES

There are risks associated with the cost and schedule for a project that is this large and complex especially at the early stages. In addition, the final bid amounts for projects are unknown until the project agreement is finalized with the Design Builder.

An ongoing risk management strategy has been implemented for both the NEWPCC Upgrade Power Supply and Headworks Facilities Projects. It includes a proactive process of identifying

risks, performing qualitative and quantitative risk analyses, creating response plan strategies, and ongoing monitoring. The risk management process is an active part of the management of the projects. The projects will also incorporate structured Hazard and Operability Analysis and a Construction Hazard Assessment Implication Review. Since detailed design and construction will be carried out through a DB contract, the Winnipeg Sewage Treatment Program will be identifying and transferring as much risk as reasonable to the Design Builder.

The Risk Registers for each of the Projects contain cost and schedule risks associated with design, procurement, construction, operation, and unknown events. This is reviewed and updated regularly.

Appendix D

North End Sewage Treatment Plant (NEWPCC) and Winnipeg Sewage Treatment Program (WSTP)

1) Funding for the NEWPCC is as follows:

NEWPCC Upgrade (in $millions)	Total Cost	Funded to Date Canada	Funded to Date Manitoba	Funding Pending Canada	Funding Pending Manitoba	Total Funding Canada	Total Funding Manitoba	City Share of Costs
Funding by Project								
Power Supply and Headworks Facilities	$ 565.35							
Power Supply and Other Ineligible	52.28	-	-	-	-	-	-	$ 52.28
Headworks Facilities	421.10	$ 102.96	$ 85.79	$ 13.15	$ 10.96	$ 116.11	$ 96.75	$ 208.24
Headworks Facilities - NWI* Failure	44.47	-	-	-	-	-	-	44.47
Headworks Facilities - Covid and other potential claims	47.50							47.50
Biosolids Facilities	1,035.00	-	$ -	200.87	$ 197.38	200.87	197.38	636.75
Funding Dependent								
Nutrient Removal Facilities	1,570.00	-	-	-	-	-	-	28.89
Estimated Program Costs	**$ 3,170.35**	**$ 102.96**	**$ 85.79**	**$ 214.02**	**$ 208.34**	**$ 316.98**	**$ 294.13**	**$ 1,018.13**

2) Funding for the Winnipeg Sewage Treatment Programs is as follows:

WSTP All Projects (in $millions)	Total Cost	Funded to Date Canada	Funded to Date Manitoba	Funding Pending Canada	Funding Pending Manitoba	Total Funding Canada	Total Funding Manitoba	City Share of Costs
WEWPCC Biological Nutrient Removal [1]	$ 33.23	$ 5.07	$ 8.19	-	-	$ 5.07	$ 8.19	$ 19.97
NEWPCC Centrate and UV Disinfection [1]	52.08	5.59	14.54	-	-	5.59	14.54	31.95
SEWPCC Nutrient Removal/Expansion [5]	385.60	37.04	15.98	5.30	1.10	42.34	17.08	326.18
NEWPCC Power Supply and Headworks [2]	565.35	102.96	85.79	$ 13.15	$ 10.96	116.11	96.75	352.49
NEWPCC Biosolids [3]	1,035.00	-	-	200.87	197.38	200.87	197.38	636.75
NEWPCC Nutrient Removal [4]	1,570.00	-	-	-	-	-	-	28.89
Estimated Program Costs	**$ 3,641.26**	**$ 150.66**	**$ 124.50**	**$ 219.32**	**$ 209.44**	**$ 369.98**	**$ 333.94**	**$ 1,396.23**

[1] WEWPCC Biological Nutrient Removal and NEWPCC Centrate and UV Disinfection have been completed.

[2] On July 23, 2021 the Federal and Provincial governments announced $212.86 million in Investment in Canada Infrastructure Program (ICIP) funding for the NEWPCC Upgrade Power Supply and Headworks project. $116.11 million in Federal and $96.75 million in Provincial funding.

[3] On August 16, 2022 the Federal and Provincial governments announced an additional $368.25 million in ICIP funding for the NEWPCC Upgrade Biosolids project. $200.87 million in Federal and $167.38 million in Provincial funding. On March 28, 2025, the Provincial government signed an agreement for an additional $30 million in SIB funding for the NEWPCC Upgrade Biosolids project.

[4] NEWPCC Upgrade Nutrient Removal project has not been approved. The cost estimate for the NEWPCC Upgrade Nutrient Removal project was updated from $828.06 million to $1,491.03 million in 2025. An additional $10.894 million in City funding was approved for the NEWPCC Upgrade Nutrient Removal project by Council on March 27, 2025.

[5] An additional $10 million in City funding was approved for the SEWPCC Nutrient Removal/Upgrade project by Council on May 2, 2025.

* Northwest Interceptor (NWI)