

Minutes - Standing Policy Committee on Finance - June 4, 2015

REPORTS

**Item No. 10 North End Sewage Treatment Plant (NEWPCC) Biological Nutrient
Removal Upgrade Financial Status Report No. 3 for the Period from
January 1, 2015 to March 31, 2015**

STANDING COMMITTEE DECISION:

The Standing Policy Committee on Finance concurred in the recommendation of the Winnipeg Public Service and received the report as information.

Minutes - Standing Policy Committee on Finance - June 4, 2015

DECISION MAKING HISTORY:

Moved by Councillor Gillingham,

That the recommendation of the Winnipeg Public Service be concurred in.

Carried

ADMINISTRATIVE REPORT

Title: NORTH END SEWAGE TREATMENT PLANT (NEWPCC)
BIOLOGICAL NUTRIENT REMOVAL UPGRADE FINANCIAL
STATUS REPORT NO. 3 FOR THE PERIOD FROM JANUARY 1,
2015 TO MARCH 31, 2015

Critical Path: STANDING POLICY COMMITTEE ON FINANCE

AUTHORIZATION

Author	Department Head	CFO	CAO/COO
J. Veilleux, P. Eng. Acting Manager of Engineering Services	G. K. Patton, P. Eng. Acting Director, Water and Waste Department	M. Ruta	M. Jack COO

RECOMMENDATIONS

That this report be received as information.

REASON FOR THE REPORT

At its meeting held on December 16, 1999, City Council adopted a policy whereby all capital projects with a total estimated cost of \$10 Million or more be submitted by the associated Civic Department to the Standing Committee on Fiscal Issues (now the Standing Policy Committee on Finance) for review and recommendation prior to any bid solicitation being issued.

Administrative Directive No. FM-004 requires quarterly reporting to the Standing Committee on Fiscal Issues (now the Standing Policy Committee on Finance).

IMPLICATIONS OF THE RECOMMENDATIONS

The NEWPCC Upgrade will include a digestion facility, therefore a portion of the Biosolids – Alternative Disposal Delivery and Management System budget will be integrated into the NEWPCC - Nutrient removal/Upgrade in the 2016 budget.

There are tight project constraints associated with the installation/removal of high voltage lines into the plant that can only be carried out by Manitoba Hydro in the fall or spring due to high power demands in the summer and winter.

HISTORY

DISCUSSION:

1. MAJOR CAPITAL PROJECT STEERING COMMITTEE

Administrative policy for projects with capital cost exceeding \$10 million requires formation of Major Capital Project Steering Committee. The Committee has been formed and its members are:

Doug McNeil, Chief Administrative Officer
Michael Ruta, Chief Financial Officer
Diane Sacher, Director of Water and Waste
Moirra Geer, Manager of Finance and Administration, Water and Waste
Jackie Veilleux, Project Director, Winnipeg Sewage Treatment Program, Water and Waste

The Committee has reviewed this report and recommended that the report be sent to the Standing Policy Committee on Finance.

2. RISKS AND RISK MITIGATION STRATEGIES

An ongoing risk management strategy has been implemented for the NEWPCC Power Supply Project. It includes a proactive process of identifying risks, performing qualitative and quantitative risk analyses, creating response plan strategies and ongoing monitoring.

Formal risk and opportunity analyses of the project are scheduled to be performed by the Winnipeg Sewage Treatment Program (WSTP), the design consultant and key City stakeholders during conceptual and preliminary design. Since detailed design and construction will be carried out through a design build (DB) contract; the WSTP will be transferring as much risk as reasonable to the design builder through the design build contract.

A project risk register will be kept throughout the project and will be updated by formal analyses. The project will also incorporate structured Hazard and Operability Analysis and Construction Hazard Assessment Implication Review.

3. CHANGES FROM LAST REPORT

NEWPCC Power Supply Upgrade:

The conceptual design for the NEWPCC Power Supply Upgrade is in progress and risk analysis at the conceptual design stage has been completed.

Evaluation of the Request for Proposal (RFP) for the fairness advisor to monitor the NEWPCC Power Supply Upgrade design build procurement process is in progress.

NEWPCC Upgrade:

As recommended by the Biosolids Master Plan, the NEWPCC Upgrade will include a digestion facility, therefore integration of a portion of the Biosolids – Alternative Disposal Delivery and Management System budget into the NEWPCC - Nutrient removal/Upgrade will be carried out in the 2016 budget.

The digestion process is being considered as part of the NEWPCC - Nutrient Removal/Upgrade to:

- Reduce the risks associated with the phasing of the tie-ins and process commissioning;
- Improve the biosolids implementation schedule; and
- Facilitate a more optimized layout for the entire NEWPCC site.

The Department will engage the services of a professional consulting firm to act as both the owner's advocate for the design build and the consultant for the design bid build. The Department is currently developing the consultant RFP and it will be posted on the City's Materials Management Website in April.

4. ISSUES/RISKS REQUIRING FURTHER ATTENTION

Cost risk

The project preliminary budget is currently estimated to be \$569.37 Million. The estimate is based on Class 5 cost estimate with an expected accuracy range of between -50% and + 100%. It is anticipated that the estimate will be refined based on cost estimates from design consultants for the NEWPCC Power Supply and the NEWPCC upgrade projects at the completion of the conceptual design and preliminary design phases.

It is American Association of Cost Engineering (AACE) International accepted practice that cost estimates are adjusted as design progresses.

Schedule

Current planned key schedule milestones for the professional engineering services for the NEWPCC Power Supply Upgrade project as provided by the consultant is as follows:

Milestone Description	Timeline
Complete Project Definition Report	July 2015
Complete Preliminary Design Report	March 2016
Issue Design builder RFP	May 2016
Design Builder Contract Award	February 2017

- Detailed design and construction schedule for the NEWPCC Power Supply Upgrade project will be provided upon project award to the design builder.

Project schedules for the NEWPCC BNR upgrade will be included in future reports when design commences.

Sewage Treatment Program Funding

The Province of Manitoba has committed \$234.8 million towards the sewage treatment plant upgrades:

- \$25 million is committed from the Canada Strategic Infrastructure Fund program.
- \$11 million is committed from the Green Infrastructure Fund program.

- \$3.8 million is committed from the 2004 Urban Capital Projects Allocation.
- \$195 million committed by the Province of Manitoba in its 2007 Throne Speech.

Of the total \$234.8 million committed to sewage treatment plant upgrades, the City projects provincial funding of \$195 million towards the north end sewage treatment plant upgrade.

There are no federal funds committed for this project.

Funding for the NEWPCC and the WSTP is outlined in Appendix 1.

5. WINNIPEG SEWAGE TREATMENT PROGRAM (WSTP)

Under the WSTP, Veolia is to provide advice to the City of Winnipeg in the design and construction of the NEWPCC projects. As indicated in the latest WSTP Annual Report (tabled at City Council on June 25, 2014), Veolia is delivering value to the City of Winnipeg. In this project, the City of Winnipeg is benefitting from:

- Savings from reduced rates in consulting services.
- Provision of expert advice on NEWPCC Power supply upgrade and procurement strategy of the future NEWPCC upgrade.
- Sharing in the risks of the capital project delivery.

6. FINANCIAL ANALYSIS

The status of current Requests for Proposal and Bid Opportunities are as follows:

RFP or Bid Opportunity	Description	Current Status	Contract Value (GST & MRST extra as applicable)
40-2014	Professional engineering consulting services for the NEWPCC Power Supply Upgrade	Contract awarded	\$1,180,110.00
10-2015	Fairness Advisor for the NEWPCC Power Supply Upgrade Project	Under Evaluation	TBD

7. PROJECT FUNDING

The approved capital and current projected budget are as follows:

YEAR	CAPITAL PROGRAM	ACTUAL + PROJECTED CASH FLOWS	CUMULATIVE CAPITAL BUDGET REMAINING
Up to 2015	143,214,000 ¹	3,684,000	139,530,000
2016	426,156,000 ²	27,830,000	537,856,000
2017		31,063,000	506,793,000
2018		169,619,000	337,174,000
2019		143,792,000	193,382,000
Beyond 2019		193,382,000	0
Total	569,370,000	569,370,000	

¹Capital budget approved by Council

²Capital Program requirements included in the 2015 - 2019 Capital Budget Estimates

A summary of the budget to forecast comparison is included in Appendix 2.

Project funding sources are as follows:

This project will receive \$195 Million in Provincial funding. The balance of \$374.37 Million will be funded using a combination of cash, Environmental Projects reserve and debt funding. Each of these sources is internally funded by rates as forecast in the Council approved rate report.

FINANCIAL IMPACT

Financial Impact Statement

Date: April 28, 2015

Project Name:

**NORTH END SEWAGE TREATMENT PLANT (NEWPCC) BIOLOGICAL
NUTRIENT REMOVAL UPGRADE FINANCIAL STATUS REPORT NO. 3 FOR
THE PERIOD FROM JANUARY 1, 2015 TO MARCH 31, 2015**

COMMENTS:

As this report is submitted for informational purposes only, there is no financial impact associated with this recommendation.

"Original signed by M. L. Geer, CA"

Maira L. Geer, C. A.

Manager of Finance and Administration

CONSULTATION

In preparing this report there was consultation with: N/A

SUBMITTED BY

Water and Waste Department
Engineering Services Division
Prepared by: R.Y. Adedapo, P. Eng.
Date: April 30, 2015
File No.: S-972

**Funding: North End Sewage Treatment Plant (NEWPCC) and Winnipeg Sewage Treatment Program (WSTP)
Appendix 1**

1) Funding for the NEWPCC is as follows:

NEWPCC Nutrient Removal/Upgrade (in \$millions)	Total Cost	Funded to Date		Funding Pending		Total Funding		City Share of Costs
		Canada	Manitoba	Canada	Manitoba	Canada	Manitoba	
Provincial Funding								
Environment Act Licence Driven	\$ 466.00		\$ 26.94		\$ 168.06	\$ -	\$ 195.00	\$ 271.00
Other	\$ 103.37							\$ 103.37
Estimated Program Costs	\$ 569.37	\$ -	\$ 26.94	\$ -	\$ 168.06	\$ -	\$ 195.00	\$ 374.37

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

WSTP All Projects (in \$millions)	Total Cost	Funded to Date		Funding Pending		Total Funding		City Share of Costs
		Canada	Manitoba	Canada	Manitoba	Canada	Manitoba	
WEWPCC Biological Nutrient Removal	\$ 33.23	\$ 5.07	\$ 8.19			\$ 5.07	\$ 8.19	\$ 19.97
NEWPCC Centrate and UV Disinfection	\$ 52.08	\$ 5.59	\$ 14.54			\$ 5.59	\$ 14.54	\$ 31.95
SEWPCC Nutrient Removal/Expansion	\$ 335.60	\$ 2.11	\$ 6.08	\$ 40.23	\$ 11.00	\$ 42.34	\$ 17.08	\$ 276.19
NEWPCC Nutrient Removal/Upgrade	\$ 569.37		\$ 26.94		\$ 168.06	-	\$ 195.00	\$ 374.37
Estimated Program Costs	\$ 990.28	\$ 12.77	\$ 55.74	\$ 40.23	\$ 179.06	\$ 53.00	\$ 234.81	\$ 702.48

Notes:

- WEWPCC Biological Nutrient Removal and NEWPCC Centrate and UV Disinfection have been completed.

**NEWPCC BNR UPGRADE
WATER AND WASTE DEPARTMENT - ENGINEERING DIVISION
APPENDIX 2
As at March 16, 2015**

Components	Approved Budgeted To Date ¹	Costs Incurred up to last report	COSTS		Total Costs Incurred to Date (per G/L) 16-Mar-15	PROJECTED COSTS TO COMPLETE				Total Costs Remaining to Complete	TOTAL Total Project Cost	VARIANCE Variance from Budget (Unfavourable)
			Costs submitted this report	Total Costs		2015	2016	2017	2018			
A PROFESSIONAL² SERVICES	59,565,000	2,148,000	217,000	2,365,000	1,217,000	17,830,000	15,663,000	18,919,000	3,571,000	59,565,000	0	
B CONSTRUCTION	509,805,000	102,000	0	102,000	0	10,000,000	15,400,000	150,700,000	333,603,000	509,805,000	0	
TOTALS	569,370,000	2,250,000	217,000	2,467,000	1,217,000	27,830,000	31,063,000	169,619,000	337,174,000	569,370,000	0	

¹ Total budget of \$569.37 Million for the NEWPCC BNR Upgrade and Distribution of costs to Components A) and B) was done by the Water and Waste Department. These are estimates and will be revised as the project progresses.

² Professional Services include Professional Engineering Services, other expert design and cost review, overhead and administration charges