

GANGES SEWER LOCAL SERVICE COMMISSION

Notice of Meeting on **Tuesday, January 12, 2016 at 10:00 am**Salt Spring Public Library, 129 McPhillips Avenue, Salt Spring Island, BC

Wayne McIntyre Gary Utter Rod Scotvold David Toynbee Mike de Carle

AGENDA

- 1. Approval of Agenda
- 2. Approval of Minutes September 10, 2015
- 3. Chair and Director Reports
- 4. Reports
 - 4.1 Ganges Wastewater Infrastructure Renewal Project Summary of Steps To Date, Project plan overview and project schedule

That the Ganges Sewer Local Service Commission receive the report for information and approve the:

- A. Project Plan Overview as presented; and
- B. Preliminary Project Schedule.
- 5. New Business
- 6. Outstanding Business
- 7. Adjournment



Minutes of the Regular Meeting of the Ganges Sewer Local Service Commission Held September 10, 2015 at the Salt Spring Public Library, 129 McPhillips Avenue, Salt Spring Island, BC

DRAFT

PRESENT: Director: Wayne McIntyre

Commission Members: Louis Pepin, Rod Scotvold, John Sprague

Staff: Keith Wahlstrom, Manager, Engineering Salt Spring Electoral Area; Dan Robson, IWS Operations Manager, Peggy Dayton, CRD Finance, Erin Jory,

Recording Secretary Absent: Gary Utter

Commissioner Scotvold called the meeting to order at 10:47 am.

1. Approval of Agenda

MOVED by Director McIntyre, **SECONDED** by Commissioner Sprague, That the Ganges Sewer Local Service Commission agenda of September 10, 2015 be approved.

CARRIED

2. Approval of Minutes – August 18, 2015

MOVED by Commissioner Pepin **SECONDED** by Commissioner Sprague, That the Ganges Sewer Local Service Commission minutes of October 18, 2015, be approved.

CARRIED

3. Chair and Director Reports

3.1 Director's Report

- Attended CRD Board meeting September 9, 2015. A CRD consultant stated the CRD
 has most complex regional system in province with more than 200 services provided.
 Salt Spring could benefit from discussion on complexity of local services.
- Governance study costing study to be completed by September 30th.

4. Reports

4.1 Ganges Wastewater Infrastructure Renewal Project – New Building Canada Fund – Small Communities Fund Grant Application Status and Next Steps

MOVED by Commissioner Sprague, **SECONDED** by Director McIntyre, That the Ganges Sewer Local Service Commission:

- A. Receive the letter from the New Building Canada Fund Small Communities Fund for information;
- B. Update the resolutions from August 18, 2015 Commission meeting and approve the following:
 - i. All work is subject to the 30 day quashing period being completed and the CRD receiving a Certificate of Approval to undertake the necessary borrowing;

- ii. Direct staff to prepare a project plan for the commission's approval at the November meeting;
- iii. Direct staff to gather information required for design contracted services and prepare an RFP work to be done concurrently with developing the project plan;
- iv. Utilize a design-bid-build procurement model to deliver the project works with consideration of design-build (i.e. pump stations);
- v. Approve \$30,000 from Capital Reserves to fund staff time required to prepare an initial RFP and gather information required for design contracted services to be project ready; and
- vi. Reaffirm the approved 2015 budget work to spend up to \$1,222,000 for rehabilitation work. Money will be available by utilizing internal short term burrowing until MFA funds are available.

CARRIED

4.2 2016 Operating and Capital Budget

That the Ganges Sewer Local Service Commission recommends that the Capital Regional District Board:

- 1. Approve the 2016 operating and capital budget for the Ganges Sewer Service as presented;
- 2. Approve the 2016 Parcel Tax of \$136.07 for the Ganges Sewer Service;
- 3. Approve the projected 2016 Average Residential User Charge of \$512.81; and
- 4. Balance the 2015 actual revenue and expense on the 2015 transfer to the capital reserve fund.

CARRIED

CARRIED

5. New Business

No items.

6. Outstanding Business

No items.

7. Adjournment

MOVED by Director McIntyre, **SECONDED** by Commissioner Scotvold, That the meeting be adjourned at 11:55 am.

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CHAIR	
SENIOR MANAGER	



REPORT TO GANGES SEWER LOCAL SERVICE COMMISSION MEETING OF TUESDAY, JANUARY 12, 2016

SUBJECT GANGES WASTEWATER INFRASTRUCTURE RENEWAL PROJECT – SUMMARY OF STEPS TO DATE, PROJECT PLAN OVERVIEW AND PROJECT SCHEDULE

ISSUE

To present to the Ganges Sewer Local Service Commission a Project Plan Overview and a Project Schedule, project update and next steps for the Wastewater Infrastructure Renewal Project.

BACKGROUND

At the September 10, 2015 meeting the Commission passed the following resolution:

"Direct staff to prepare a project plan for the commission's approval at the November meeting"

This report is to provide the Commission with the Project Plan Overview as well as an initial Project Schedule (attached) which highlights the primary work groups of the project. The project schedule is initial and may change depending on shifting priorities or whether some process may realize efficiencies. The following is an update on the previous steps undertaken to obtain approval for the project:

PROGRESS - STEPS IN THE PROCESS

1.	Ganges Commission - Approval of Option 1 (\$3,900,000)	Jan 8 Complete
2.	CRD Board approval of 1st, 2nd & 3rd readings - Loan Authorization Bylaw.	Feb 11 Complete
3.	Send Loan Authorization Bylaw to Inspector of Municipalities (4-6 weeks)	Feb 15 Complete
4.	Submit New Building Canada – Small Communities Fund Grant Application	Feb 18 Complete
5.	Confirm a loan amortization period (20 year selected)	Mar 30 Complete
6.	Approval of Open house	Mar 30 Complete
7.	Prepare draft Community Notice & FAQ	Mar 30 Complete
8.	Ganges Commission Meeting	Mar 30 Complete
9.	CRD Board to establish Referendum question, polls & Officer	May 13 Complete
10.	Based Referendum date of Jul 25 – Approval of Inspector of Municipalities	May 21 Complete
11.	Ganges Commission Meeting – Project Status	Jun 2 Complete
12.	Mail-out Community Notice & FAQ	Jun 17 Complete
13.	Town Hall meeting	Jun 23 Complete
14.	Advertise official notices prior to Referendum	Jun – Jul Complete
15.	Advance voting (Wednesday before vote)	Jul 15, 22 Complete

PROGRESS - STEPS IN THE PROCESS

16.	Referendum Voting Day	Jul 25 Complete
17.	Board receives Referendum results and, if successful, adopts bylaws	Aug 12 Complete
18.	Ganges Commission Meeting – Next Steps	Aug 18 Complete
19.	CRD Finance Committee Approves Temporary Borrowing Bylaw	Sept 2 Complete
20.	Results of the Application for a Grant from the Building Canada Fund - Small Communities Fund	Sept 10 Complete
21.	30-day quashing period ends	Sept 14 Complete
22.	CRD Board Approves Temporary Borrowing Bylaw	Sept 9 Complete
23.	Apply for Certificate of Approval from the Ministry of Community, Sport and Cultural Development	Sept 14 Complete
24.	Secure initial short term borrowing through CRD	Funds Will Be Available As Required
25.	Present Commission with Project Plan	Jan 12 2016
26.	Secure long term borrowing through MFA	Spring 2016

Moving forward, the Commission will be involved in selecting consultants and contractors, however, the steps and timing are variable and will be presented on an as required basis.

Project Plan Overview & Project Schedule

The project plan overview (attached) is a document that outlines:

- The project objectives and scope;
- Critical success factors:
- Target milestones;
- Project budget;
- · Assumptions and constraints;
- · The project team; and
- Identifies risks associated with the project.

All of these items aid in keeping the project focused on the objectives and creates a baseline of understanding for all parties involved with the project. With as much of the project declared as possible, expectations of project delivery and project deliverables

The Preliminary Project Schedule (attached) is an initial timeline and sequencing of project phases. It aids in illustrating the timing of phases of the project and estimates an approximate completion of the project.

ALTERNATIVES

Alternative 1

That the Ganges Sewer Local Service Commission approve the:

- A. Project Plan Overview as presented; and
- B. Preliminary Project Schedule.

Alternative 2

That the Ganges Sewer Local Service Commission receive the report for information and request additional information from staff.

IMPLICATIONS

Alternative 1

The Project Plan Overview and Project schedule are high level planning documents that inform the Commission, CRD staff and the public about critical elements of the project. Approving the plan and schedule sets the targets and baselines for the project moving forward. Requesting staff to modify or adjust components of the Plan or Schedule will adjust the targets and baselines for the project moving forward.

Alternative 2

Delaying the advancement of the project plan and schedule will adjust targets dates and may extend the overall project duration as some of the works are more economical when completed during certain seasons. Equipment may fail during the extended project duration, potentially increasing the cost as temporary solutions will have to be implemented.

CONCLUSION

The Ganges wastewater system requires renewal to maintain the level of service to the Ganges service area while maintaining regulatory compliance. Project funding to renew the wastewater system was approved through a referendum in July 2015. The presented plan and schedule are consistent with the budgets approved by the electors and Commission to obtain funding for the project.

RECOMMENDATION

That the Ganges Sewer Local Service Commission receive the report for information and approve the:

- A. Project Plan Overview as presented; and
- B. Preliminary Project Schedule.

Keith Wahlstrom, P.Eng. Manager, Engineering Salt Spring Island Electoral Area Robert Lapham, MCIP, RPP Chief Administrative Officer Capital Regional District

Karla Campbell Senior Manager Salt Spring Island Electoral Area Concurrence

KW:ts

Attachments: 1:

Project Plan Overview

2:

Preliminary Project Schedule



Project Plan Overview

Ganges Wastewater Infrastructure Renewal

PRINTED: Thursday, January 07, 2016

1. PROJECT OVERVIEW

The Ganges sewer treatment system was constructed in the early 1980's and has only received minor upgrades and repairs/replacements since construction. Many components of the treatment plant, the collection system and the pump stations are at or near end of life. The treatment plant requires rehabilitation of mechanical, electrical and process equipment as well as effluent piping and pumps, the collection system needs upgrades to reduce inflow and infiltration to regain capacity, and rehabilitation of two original pump stations.

The objectives are to: upgrade the equipment to ensure the effluent quality continues to meet the Ministry of Environment discharge requirements; avoid temporary emergency discharge of untreated sewage and allow for better control of discharge quality; minimize emergency operating and maintenance costs and allow a planned approach to improvements. The project does not increase capacity for development.

On February 18, 2015 an application was made to the New Building Canada Fund – Small Community Fund (NBCF-SCF) grant.

On July 25, 2015 a referendum to borrow up to \$3,900,000 to fund the project, the referendum was successful.

A letter from NBCF-SCF was received on August 20, 2015 stating the funding grant application was not successful. Therefore all costs are to be borne by the Ganges Sewer Local Service Area.

The CRD Board has passed a borrowing bylaw (Bylaw 4007) as well as a temporary borrowing bylaw (Bylaw 4036) in order to fund the project.

The following are supporting documents used to develop the project and are available upon request:

Stantec Engineering Assessment Nov 18, 2011

Staff report recommending project as presented to Commission on Oct 17, 2014

Staff reports for sludge disposal options as presented to Commission on Jan 8, 2015

2. CORPORATE PROJECT PURPOSE

The purpose of this project is to complete renewal of major components of the Ganges sewer system in order to ensure the system continues to meet the regulatory requirements set out by the Province. Additional purposes include: implementing new technologies, where appropriate, to improve performance and/or reduce operation and maintenance costs, reclaiming hydraulic capacity at the treatment plant, decreasing the risk of non-compliance during high run-off events, increase operating efficiencies with improved monitoring and equipment and reducing non-scheduled maintenance due to failing components.

3. CRITICAL SUCCESS FACTORS

The following criteria will be the major indicators of success to the project:

- 1. Delivered on-budget.
- 2. Improved sludge handling process.
- 3. Reduce operating and maintenance costs through increase reliability.
- 4. Meeting public awareness and expectations.
- 5. No measured increase in odour.
- 6. Reduced inflow and infiltration to regain hydraulic capacity within the system.
- 7. Continue to meet or exceed performance criteria set by Municipal Sewer Regulations.
- 8. Delivered on-time.

4. SCOPE

In Scope	Out of Scope
Assessment, design, construction management and commissioning for the replacement/rehabilitation of the following components: • fine screens • membrane, cleaning tank heater, recirculation piping; sludge thickening/dewatering • effluent pump station and piping • two collection system pump stations • influent pump station and piping • treatment plant motor control centre • removal and repurposing existing RBC • outfall repairs • miscellaneous appurtenances associated with the treatment plant	Wastewater system improvements for added capacity.
Options analysis of sludge thickening processes included in the basis of design	Strategic Asset Management Plan.
Public communications to notify project status.	Extensive public communications and engagement.
Hydraulic model in conjunction with an inflow and infiltration study - collection system repairs within the budget	

5. TIMELINES

Milestones, etc.	Target Timeline
Delivery of Plan Overview to Commission	January, 2016
Award First Engineering Assignment	April/May, 2016
Complete Basis of Design/Options Analysis for Sludge Handling	October, 2016
Initiate Small Equipment Replacements and Upgrades	October, 2016
Award First Construction Contract	March, 2017
Complete all Construction	October, 2020
Project Complete and all Accounts Closed	December 31, 2020

6. BUDGET

Cost Explanation	Amount (\$)
Construction	2,200,000
Construction Contingency	674,000
Consulting Engineers and Professionals	374,000
Project Administration and Engineering and Construction Management Oversite	243,000
Operations Staff Coordination and Commissioning	174,000
Project Contingency	235,000
Total	3,900,000

7. ASSUMPTIONS / CONSTRAINTS

No.	Description
1	Adequate staff resources will be available to undertake the project
2	Detailed design of renewal works has not been started, however budgets are fixed so limited opportunity to mitigate negative budget impacts
3	Fluctuating currency may make certain components more expensive as they may be imported from the USA
4	All work must fit within the existing property boundaries
5	All work must fit into the existing structures and buildings whenever possible
6	Certain work may have limited construction windows as bypassing the wastewater treatment plant will require approvals from MOE. Duration of any allowable bypass may affect construction processes and choices
7	Inflow and infiltration studies assume quality wet and dry season data is developed
8	Certain works may be need to be done during fisheries windows (outfall repairs)
9	The current time frame for completing all the work is December 2020
10	When contracts require Board approval, assume contract awards go directly to the Board after the Commission's endorsement.
11	Highly publicized project on Salt Spring Island will require public notification to maintain public confidence.

8. PROJECT TEAM

Role	Team Member
Project Sponsor	Robert Lapham, CAO
Senior Manager	Karla Campbell, Senior Manager, SSIEA
Project Manager	Keith Wahlstrom, Manager, Engineering, SSIEA
Project Administrator	TBD
Budget Manager	Keith Wahlstrom, Manager, Engineering, SSIEA
Communications Coordinator	TBD

		Responsibilities
Role	Project Implementation	Project Authorization
Project Sponsor	Project Oversight	Liaise with CRD Board, SSI Electoral Area Director. Approve scope and budget changes.
Senior Manager	Project Oversight	Liaise with Project Sponsor, SSI Electoral Area Director. Approve scope and budget changes.
Project Manager	Project Manager	Overail project process and progress reporting. Identifying risks to schedule and implementing mitigation strategy actions. Coordinate resources to resolve issues

Project Overview Plan- Ganges Wastewater Infrastructure Renewal

		Responsibilities
Role	Project Implementation	Project Authorization
		affecting project progress and schedule. Liaise with local Trustees.
Project Administrator	Project Coordinator	Coordinate project deliverables and carry out planning work. Tender and contract administration. Manage project schedule and budget. Assists with resolution of project issues, needs, and requirements. Report to Sponsor, and Budget Manager.
Budget Manager	Budget Oversight	Track budget expenditures. Prepare monthly financial reporting and budget analysis.
Communications Coordinator	Communications	Assist in developing wording for key messages. Ensure communications that are developed for release to the public meet the corporate standards.

9. RISK IDENTIFICATION

No.	Risks Identification (Related to scope, schedule, budget, stakeholders, etc.)	Likelihood to Occur	Impact if Occurs	High Level Risk Response Strategy (if applicable)
1	Adequate staffing is available to manage and implement the project	Medium	High	Ensure staffing requirements are met through either employees, contract employees or consultants.
2	Project costs are greater than budgeted	Low	Low	Need to undertake value engineering to ensure costs/benefit are accurate. If costs are accurate, defer until additional money is available from either new burrowing or increased user fees. Fluctuating currency may make certain components more expensive as they may be imported from the USA
3	Equipment fails prior to replacement, requiring temporary repairs or accelerated designs and construction, both potentially very expensive	Low	High	Continue with designs as quickly as possible, targeting higher risk components first. Keep contingencies available in the budget.
4	Public opposition	Low	High	Ensure effective community communication strategy throughout the process. Develop mitigation action strategies to address issues.
5	Assume approvals are received on time and with minimal conditions	Low	High	Ensure approvals are sought early to reduce potential delays/costs.

Ganges Sewer Rehabilation Schedule

Capital Regional District

Proposed Ganges Wastewater System Infrastructure Repalcement

PRELIMARY PROJECT SCHEDULE

TASK DESCRIPTION	2016	2017	2018	2019	2020
	JFMAMJJASOND	O S A C C M A M T C	D N O N A N C N O N D	O N O N A N L T	M A M H U
Select Engineering Consultants for Wastewater Treatment Plant Site					
Award Engineering Service For Wastewater Treatment Plant Site (CRD Board)	×				
Basis of Design and Design Of Wastewater Treatment Plant Work	×				
Tender and Construct Wastewater Treatment Plant Work					
Commissioning Wastewater Treatment Plant Work					
Undertake Small Equipment Replacement					
Inflow and Infiltration Analysis			Variable on results of initial results		
Inflow and Infiltration Remediation Work					Variable results of initial results
Rehabilation of System Pump Stations (Harbourhouse and Manson Road)					
Complete Wrap-up					

Notes:

1. Schedule is subject to approvals and will be updated as the project proceeds.

Major contracts to rehabiliate equipment at the Ganges Treatment Plant Site. Actual duration will be dependent on final designs and conditions encountered. Work timeframe and duration may vary as work is completed and on issues encountered.

Smaller projects occur throughout the duration to match timing with major contracts.