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MAGIC LAKE ESTATES WATER AND SEWER COMMITTEE
Notice of Meeting on Tuesday, February 14, 2017 at 9:30 a.m.
Main Conference Room, 479 Island Highway, Victoria, BC

Kathy Heslop (Chair)
Director Dave Howe

David Reed
Courtenay Rodash

Jim Petrie
Alex Wilson

Joe Gill

AGENDA

1. Approval of Agenda
2. Adoption of Minutes of December 13, 2016
3. Water Update (verbal report with handout)
4. Wastewater Update (verbal report with handout)
5. Operations Report (verbal report with handout)
6. New Business
7. Motion to Close the Meeting
That the Magic Lake Estates Water and Sewer Committee close the meeting in accordance with the Community Charter, Part 4, Division 3, 90(1)(g) litigation or potential litigation affecting the municipality.
8. Adjournment

To ensure quorum, advise Lorrie Siemens 250.360.3087 or lsiemens@crd.bc.ca if you cannot attend.



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**Minutes of a Meeting of the Magic Lake Estates Water and Sewer Committee
Held Tuesday, December 13, 2016 in the Main Conference Room, 479 Island Highway,
Victoria, BC**

PRESENT: **Committee Members:** K. Heslop (Chair), J. Petrie, A. Wilson, J. Gill, CRD Alternate Electoral Area Director P. LeBlond, C. Rodash, D. Reed
Staff: I. Jesney, Senior Manager, Infrastructure Engineering, M. McCrank, Senior Manager, Infrastructure Operations, M. Cowley, Manager Wastewater Engineering and Planning, L. Siemens (recorder)

The meeting was called to order at 9:34 a.m.

1. Approval of Agenda

MOVED by C. Rodash, **SECONDED** by D. Reed,
That the agenda be approved as distributed.

CARRIED

2. Adoption of Minutes of November 8, 2016

MOVED by A. Wilson, **SECONDED** by J. Gill,
That the minutes of November 8, 2016 be adopted as previously distributed.

CARRIED

3. Buck Lake Sewage Pipe

M. Cowley provided a verbal report regarding flushing of the Buck Lake system and provided information on the Buck Lake-Privateers pipe replacement.

MOVED by J. Gill, **SECONDED** by C. Rodash,
That CRD staff proceed to design for replacement of pipes around Buck Lake and Privateers.

CARRIED

4. Water Leakage

Staff responded to questions from the committee regarding non-revenue water.

5. Chart Drive Project

Staff provided an update on the Chart Drive project.

6. New Projects

Staff provided an update on projects for the Magic Lake Estates water and sewer services.

7. New Business

Dam Access

I. Jesney advised that the CRD Real Estate Services Department is currently working on the dam access issue.

Bylaw Changes

I. Jesney reported that changes to the local services committee/commission bylaws will take place in 2017.

Plant Tour

D. Robson will contact the chair to schedule a tour of the Magic Lake facilities for the committee members.

Effluent

A discussion took place on the need to educate the public on waste disposal to the sewage system. Information packages were inserted in the bills in the past and will again be sent in the next billing mail out.

2017 Meeting Schedule

Meetings will be held on the second Tuesday of each month starting February 14, 2017 and will be cancelled when they are unnecessary. The Annual General Meeting will be held in August. The date is to be confirmed.

8. Adjournment

MOVED by J. Gill, **SECONDED** by D. Reed,
That the meeting be adjourned at 11:25 a.m.

CARRIED



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File: 0360-20

Magic Lake Estates Water and Sewer Committee

Magic Lake Estates Water Service

Magic Lake North Dam License Agreement:

- The CRD Real Estate Services Division has contacted land owners and delivered draft non-exclusive licenses to both land owners for access. Negotiation in progress.

Buck Lake Intake:

- The existing intake line was pressure and vacuum tested. Both tests confirm that the pipeline is not leaking.
- Intake line and pump system assessed with the pump supplier and determined the pump selection is correct for the system hydraulics.
- The pump supplier indicated that air locks can be expected periodically do to the long length of the intake line and due to the fact there is a high point along the alignment.
- The CRD has completed a design/specification for a new air release (high point) and automatic priming system (water addition) for the intake line.
- Staff will present the solution, and budget required, in a staff report at a future committee meeting.
- Upgrades to the intake line are planned to be completed at the same time as the siphon upgrade (below) to reduce mobilization costs.

Magic Lake Dam Safety Upgrade (Siphon):

- The existing siphon line inspected and confirmed to be in satisfactory condition; however, valves and appurtenances need replacement.
- Design and specifications completed for valve upgrade. Work will be undertaken by CRD Operations staff in the summer of 2017.

Signal Hill, Schooner and Capstan Way PRV's:

- The CRD staff, WorkSafe BC and an independent safety consultant, have developed a conceptual design that can be applied to all three sites design to retrofit the existing underground PRV stations and remove confined space entry constraints.
- Removing the confined space entry constraints will reduce operations effort associated with maintenance and improve response time if issues arise with the PRV's.
- The detailed survey has been completed for all three stations.
- A Request for Proposal (RFP) will be issued in March to complete the detailed design and administer construction contract.
- Works will be tendered externally and construction for all three sites is scheduled to take place in the summer of 2017.

Chemical (ISOPAC) Storage and Handling:

- This project has not been initiated but a plan will be developed in the spring.

Buck Lake East Dam Detailed Design:

- The preliminary design has been completed.
- The CRD is currently developing a new dam safety philosophy; and as such, this project has been put on hold.

Public Engagement for Future Projects and Referendum:

- It is proposed to complete the water (and wastewater) Strategic Asset Management plans to determine the comprehensive future capital implications before conducting the public engagement and subsequent referendum.

Prepared by: Ian Sander, Scott Mason, and Stephen Henderson



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Magic Lake Estates Water and Sewer Committee

February 14, 2017

Magic Lake Estates Wastewater

Wastewater Infrastructure Projects – Phase 1 Update

Chart Drive

- All contractor deficiencies are complete
- Contractor has requested Holdback Release
- Assembling as-built drawings, O&M Manuals, Project Close-Out documentation
- Monitoring pump station performance and site drainage (minor operational optimization may still be required)
- Still waiting to acquire Lot 64 from the Province as Crown Grant Land
- Financial status as of January 31, 2017:

Task	Budget	Actual Cost to Date	Cost to Complete	Variance
Engineering and Administration	\$150,000	\$146,737	\$2,000	\$1,263
Construction Contract	\$540,000	\$491,213	\$20,000	\$28,787
Construction Services	\$70,000	\$48,016	\$10,000	\$11,984
Project Contingency	\$50,000	\$10,492	\$5,000	\$34,508
Total Project	\$810,000	\$696,458	\$37,000	\$76,542

Sewer Pipe Replacement – Buck Lake & Privateers Road

- Survey work is complete and draft base plan is prepared.
- Arranging for CCTV inspection of the pipe
- Evaluate replacement options and costs
- Present information to the Committee when evaluation is complete

Inflow & Infiltration Program

- Flow meters installed to monitor 5 sub-catchment areas
- Data is being obtained and evaluated
- Arranging to re-install the rain gauge at the WTP
- Present initial I&I flow information to the Committee when analysis complete
- Arranging for CCTV and MH inspections of all sewer pipes and manholes
- Analyze pipe condition and prepare defect report

Schooner Tank Assessment

- Prepare document to retain a consultant/material testing firm
- Complete the inspection later this spring

Wastewater Projects - 2017 Capital Plan

Schooner WWTP Blower and Electrical Room Roof Replacement

- A Project Initiation Form, Work Breakdown Structure, and Project Plan will be prepared shortly.
- The new roofing work is tentatively planned for summer 2017.

Schooner Outfall Protection

- A Project Initiation Form, Work Breakdown Structure, and Project Plan will be prepared shortly.
- A consultant will be retained to design the new protective cover.
- The work will be scheduled for summer 2017 during low tide.

Phase 2 Wastewater Infrastructure Upgrades – Public Consultation

- Much of the existing wastewater infrastructure is 50 years old now and needs to be upgraded or replaced including: the pump stations, treatment plants, and sewer pipe.
- Options and cost implications will be developed for Phase 2 of the infrastructure upgrades and presented to the community for input and feedback.
- A public open house will be held in 2017 to communicate the need, rationale, and costs of the upgrades.
- To minimize public engagement costs, the open house will also include water infrastructure projects too.
- Once feedback has been received on the options, a referendum will be scheduled to obtain elector assent for fund the proposed upgrades.

Schooner and Cannon Outfall Inspections

- This project is scheduled for 2018, but the CRD is completing other outfall inspections in other service areas, so a provisional item will be included to inspect these outfalls too.
- It will be more cost-effective to inspect the outfalls all under one contract (less administration, economy-of-scale, etc.), and we could combine the intake inspections from Buck and Magic Lakes.
- The provisional cost to inspect the outfalls will be presented to the Committee for approval once the tender amounts have been received.

Report Prepared by: Malcolm Cowley and Ian Sander



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OPERATIONS REPORT

Water Operations Highlights:

- Major leak repair near the intersection of Privateers and Galleon Way at a fire hydrant connection. This event occurred in late December 2016 and resulted in a number of residences in the local area to be without water overnight. Final repair scheduled for March 2017 when ground conditions improve.
- Significant leak near 38227 Schooner Way reported by local resident. Repairs were performed immediately.
- Cannon Crescent micro flusher station found to be leaking significantly, likely the result of the cold weather. Station repaired.

Wastewater Operations Highlights:

- On December 7, 2016 the CRD received a facility inspection report and warning letter from The BC Ministry of Environment (MOE) for the Cannon Wastewater Treatment Plant (WWTP). The letter states that the facility is non-compliant with its operating permit (220) on a number of findings. The CRD provided a response to MOE on December 21, 2016 confirming and/or clarifying the "non-compliance" findings and any corrective actions that will be taken. Further to this, the CRD and MOE staff are planning to meet in the near future to discuss the warning letter further and additionally to discuss the long-term plan for the Magic Lake Estates sanitary sewer system of which Cannon WWTP is an integral part.
- Operating Permit Regulatory Non-compliance reporting for January 2017:

Facility	# Issued	Cause
Schooner WWTP	4	UV failure (effluent disinfection system) as a result of power outages (typically).
Cannon WWTP	2	Exceeding maximum daily flows due to storm water entering through I&I.

- Treated effluent overflow from a manhole just downstream of the Schooner WWTP. The pipe immediately downstream of the manhole was found to be blocked and was subsequently cleared. Spill report issued as a result.
- Cleared blocked sewer pipe fronting 4876 Pirates Road. No sewage overflow

Capital Improvement work:

- Installation of the safety equipment (emergency eyewash/shower system) in the Magic Lake Water Treatment Plant started. Approximately 50% complete. This work is part of the approved 2016 MLE water capital plan.

Prepared by: Dan Robson and Matt McCrank
Integrated Water Services