



Making a difference...together

FULFORD WATER SERVICES COMMISSION

Notice of Meeting on **Thursday, August 16, 2018 at 3:00 PM**

Creekside Meeting Room, #108 121 McPhillips Ave., Salt Spring Island, BC

LOCATION CHANGED TO SSI LIBRARY

Wayne McIntyre

Anthony Maude

Carol Eyles

Gord Singbell (r)

Alan Martin

(r) regrets

AGENDA

1. Approval of Agenda

2. Approval of Minutes: July 31, 2018

Pages 2-4

3. Director, Chair and Commissioner Reports

4. New Business

4.1

5. Outstanding Business

5.1 Transfer from Capital Reserve to Fulford Water Main Replacement Project

Pages 5 -11

That the Fulford Water Service Commission recommends that the Capital Regional District Board amend the Five Year Financial Plan to include additional funding for the Fulford Water Main Replacement project and that \$46,130 be allocated from the Capital Reserve Fund in 2018 to fund the project.

6. Adjournment

To ensure quorum, advise Tracey Shaver 250 537 4448 if you cannot attend.



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**Minutes of the Meeting of the FULFORD WATER SERVICE COMMISSION
Held Tuesday July 31, 2018 in the Creekside Meeting Room, Suite 108- 121 McPhillips Ave, Salt Spring Island, BC**

DRAFT

Present: CRD Director: Wayne McIntyre
Commission Members: Anthony Maude, Gord Singbell, Alan Martin
Staff: Karla Campbell, Senior Manager, Salt Spring Island Electoral Area; Chris Davidson, Manager Engineering; Tracey Shaver, Recording Secretary
Absent: Carol Eyles

Senior Manager Campbell called the meeting to order at 3:00 pm with a request to nominate a chair to stand for this meeting. Anthony Maude accepted the position.

1. Approval of Agenda

MOVED by Commissioner Maude, **SECONDED** by Commissioner Singbell,
That the Fulford Water Service Commission meeting agenda of July 31, 2018 be approved with the addition of Anthony Maude's name to the agenda heading.

CARRIED

2. Director, Chair and Commissioner Reports

2.1 Director McIntyre briefly reported on the July 30, 2018 meeting on Salt Spring Island with CRD CAO and various Commission Members.

3. New Business

3.1 Transfer from Capital Reserve to Fulford Water Main Replacement Project

Staff reviewed report with Fulford Water Service Commissioners highlighting the following:

- Purpose of the meeting is to inform Commission of project status, budget overruns and obtain permission to transfer funds from the Capital Reserves to complete project.
- Project involves a 10 metre 4" diameter water main of asbestos pipe which is no longer buried in the ground.
- Exposed piping runs across an open stream bed on Ministry of Highways land which channels down into the ocean.
- Potential for a crack in and or catastrophic failure of pipe is considered to be high risk; possible asbestos contamination to treated water and the environment.
- Pre tender cost estimates for project budget were established in 2016 and based on local excavation contractor estimating extent of construction work.
- Previously unforeseen complexities in regulatory requirements contributed to additional project management costs and design work by consultants and CRD staff.
- During preparation of tender documents, potential for budget shortfall was discovered.

- CRD tendering process was followed and two bids within \$1,900 of other were obtained.
- Order of magnitude costs now estimated at an additional \$71,000 to complete project which bring the total project costs up to \$102,000.
- Community Works Funding in the amount of \$20,000 has been proposed to offset some of the additional project costs.
- Due to proximity to riparian areas there is a short construction window from June to September.
- Capital Regional District is experiencing a very high cost construction market across the region
- CRD advised that no guarantee construction costs will come down soon, and even could go up.
- Risks of deferring project include possible: health concerns, environmental concerns and costly emergency repair.

Fulford Commission Members expressed the following points of issue:

- Commission not consulted at discovery of budget shortfall prior to tendering project
- Commissions purpose is to be given the opportunity to protect rate payers from unnecessary cost expenditures
- Poor practice to tender projects late in the busiest part of the construction season especially in an over-heated construction market
- Questionable professional practice over unforeseen permitting process and regulatory requirements
- Requests can be made to extend regulatory permits to a time when construction costs are more favorable
- Unacceptable balance/ratio of project management costs in capital project
- Acknowledgement that there are no guarantees that the costs involved in the construction market will be less in the future and that the newly elected CRD Director (this Fall) may not be willing to offer Community Works Funding to offset project costs.
- Refusal to authorize the coverage of project management/design costs to date in the original budget (roughly \$11,000).
- Reserve funding from budget shortfall and kept project management costs to an industry standard of 25%
- Request made for Fulford Commission Members to meet with the CRD Chairman of the Board

MOVED By Commissioner Martin, **SECONDED** by Commissioner Singbell, That the Fulford Water Service Commission is unhappy with the management of the water main replacement capital project; requests that all work on the project cease and desist; project management costs shall not exceed 25% of total budget to complete this project sometime in the future under better construction costs.

CARRIED

4. Outstanding Business- none presented

5. Adjournment

MOVED By Commissioner Martin, **SECONDED** by Commissioner Singbell,
That the meeting adjourn at 3:52 pm.

CHAIR

SENIOR MANAGER



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REPORT TO FULFORD WATER SERVICE COMMISSION MEETING OF THURSDAY, AUGUST 16, 2018

SUBJECT TRANSFER FROM CAPITAL RESERVE TO FULFORD WATER MAIN REPLACEMENT PROJECT

ISSUE

To reconsider transferring sufficient funds from the Capital Reserve Fund to the project budget for the Fulford Water Main Replacement project.

BACKGROUND

The Fulford Water Utility is a semi-rural residential community located on Salt Spring Island. The Fulford Water Utility is comprised of 102 parcels of land with 91 of those parcels connected. Within those 91 parcels, there are 95 single family equivalents (SFE) as the use on some parcels represent more than one dwelling. The Fulford water system is comprised of a water treatment plant (WTP), water reservoir, pump station, various ancillary equipment, and distribution water mains.

One of these water mains is located along Morningside Rd, and crosses under Weston Creek. This water main is 4" diameter asbestos cement pipe. Unfortunately the section of pipe that crosses the creek has become exposed (no longer covered by fill material). This leaves the water main vulnerable to an increased chance of failure, and potentially to tampering/vandalism.

A design was completed to remove a 10 meter section of the water main (including the exposed section), and to install a new section of pipe deeper in the ground and sufficiently bedded. An Invitation to Tender (ITT) procurement process was completed for construction services, and two bids were received. Both bids were compliant with the ITT requirements, and are summarized below:

Company	Bid Total
Ecklundson Construction Ltd.	\$53,100
Leuco Construction Inc.	\$54,930

It is the intent of the CRD to award this contract to Ecklundson Construction Ltd., as they are the lowest bidder and they also have a good working relationship with the CRD on Salt Spring Island. Ecklundson Construction is also the company who completed the Burgoyne Bay Septage receiving station installation for the CRD, and they are currently working on the Ganges Wastewater Treatment Plant upgrades. Since they are on the island already, there will be some savings realized in mobilization and overhead costs.

Existing project budget and expenditures/commitments to date are as per below:

Budget Line Item	Budget	Consultant Spent To Date	Consultant Remaining Committed	CRD Spent to Date	Total Spent and Committed to Date	Remaining
Project Management, Detailed Design, Permitting, and Construction Services	\$15,500	\$13,120	\$2,490	\$8,450	\$24,060	-\$8,560
Pre-Design	\$4,500	\$7,380	\$0	\$0	\$7,380	-\$2,880
Construction	\$12,000	\$0	\$0	\$0	\$0	\$12,000
Project Line Item Totals	\$32,000	\$20,500	\$2,490	\$8,450	\$31,440	\$560
Approved Budget that was Unallocated	\$5,000	\$0	\$0	\$0	\$0	\$5,000
Total Remaining Available Approved Budget						\$5,560

After further review of the budget, it was determined that the original approved amount for this project was \$37,000, and not \$32,000 as had previously been presented. There remains \$5,000 that was never allocated. It is proposed to allocate these funds to the project, as originally approved.

Project budget overruns for Project Management and Design can be attributed to unforeseen complexities around permitting and regulatory requirements. These regulatory requirements further complicated design and project administration, compounding the budget shortfall. Regulatory agencies involved in this project include Vancouver Island Health Authority, Ministry of Transportation and Infrastructure, and Ministry of Forests Lands and Natural Resources. The above mentioned unforeseen complexities resulted from the combination of complicating factors: cutting/removing an asbestos cement pipe, which happens to be a water main, in a stream bed, on Ministry of Transportation right of way.

Below is an overview of the regulatory bodies involved, and permitting requirements to complete this project:

Regulatory Body	Nature of Concern	Permitting Required
Ministry of Forests Lands and Natural Resources (FLNRO)	Environmental	Section 11 Notification.
Ministry of Forests Lands and Natural Resources (FLNRO)	Archaeological	RAAD map search and review.
Ministry of Transportation and Infrastructure (MoTI)	Access Rights	MoTI Construction Permit.
Vancouver Island Health Authority (VIHA)	Public Health	VIHA Construction Permit.
Department of Fisheries and Oceans (DFO)	Fish Safety	No permit required for planned works.

Construction bids were higher than originally budgeted for in 2016. This is due again, to the unforeseen complexities around permitting and regulatory requirements, which have translated into more onerous construction practice requirements. Additionally, an incredibly busy construction market has driven costs for materials and labour much higher than originally anticipated.

A preliminary cost estimate to construct the works was received from an on island contractor, for approximately \$6,000. However the amount seemed lower than expected, and so an additional

\$6,000 was added to account for regulatory/permitting requirements that may not have been accounted for, bringing the budgeted total for construction up to \$12,000.

Although the above construction bids (from Ecklundson and Leuco) seem high, the fact that the two independent bids are within approximately 3% of each other, suggests that these prices are fair and competitive for the work, given the current state of the construction market.

The estimated costs to complete construction (and the project) are detailed in the table below. Construction Admin and Engineering is estimated to cost approximately \$2,650. However due to the high potential for risks associated with this project, a large Construction Admin and Engineering Contingency has been included (approximately \$7,970), in case there are unforeseen issues requiring large amounts of site time such as: liaising with regulatory bodies or the public, Archaeological concerns (First Nations), complications with the large maple tree and/or the arborist, unforeseen discoveries during initial excavation, or unplanned stream flow events.

Contracted services	\$53,100
Construction Contingency (15%)	\$7,970
Construction Admin and Engineering (5%)	\$2,650
Construction Admin and Engineering Contingency (15%)	\$7,970
Construction Total Costs	\$71,690
Minus Remaining Available Project Funds	-\$5,560
Estimated Total to Complete Project	\$66,130

To support this work staff will make an application for additional funding. The Electoral Area Director has proposed a contribution of \$20,000 from the Community Works Fund to cover the costs of the water main replacement project. The proposed contribution meets the CWF Agreement terms.

Construction Total Costs	\$71,690
Available Remaining Budget	-\$5,560
Community Works Fund	-\$20,000
Proposed Transfer from Capital Reserve	\$46,130

It is proposed that the remaining amount of \$46,130 will come from the service's Capital Reserve Fund. Currently there are sufficient funds in the Capital Reserve to apply toward the above works without impacting the current 5-year Capital Expenditure Plan.

The total estimated project costs for completion of these works are below:

Design and Admin Costs	\$31,440
Construction Costs	\$71,690
Project Total Costs	\$103,130

Please note that the above Construction Contingency, and Admin and Engineering Contingency will not be spent unless unforeseen circumstances are encountered. It is estimated that the below budget will be closer to final project costs, once all works are completed:

Design and Admin	\$31,440
Contracted services	\$53,100
Construction Admin and Engineering (5%)	\$2,650
Community Works Fund	-\$20,000
Project Total	\$67,195
Total Net CRF Transfer*	\$30,195

*Any unspent project funds would be transferred back into the Capital Reserve Fund, after the project was complete.

REGULATORY CONCERNS WITH DEFERRING THE WORK, OR INTERIM SOLUTIONS

During the previous commission meeting with Fulford LSA on July 31, 2018, the following to alternatives were proposed by commission members:

1. Defer the work, and try to re-tender in January 2019, in hopes of getting a better price on the construction bid.
2. Look at the option of installing a temporary solution to cover the pipe, possibly including a fill/rock cover, or installing a sleeve around the pipe.

Subsequently the respective governing regulatory bodies were contacted regarding the above, and responses were received as per below:

1. Regarding deferring the work, the Vancouver Island Health Authority (VIHA) has advised that yes they do have a concern, as there is a potential for public health concerns if the water main were to fail. They advise that this work should be completed before the pipe fails.
2. Regarding installation of a temporary solution, the Ministry of Forests Lands and Natural Resources has advised that any temporary solution that is installed must not impede fish flow, or stream flow. The only acceptable solution from an environmental standpoint is to bury the water main below the stream bed.

Please note that this is the solution specified by the current design package and for which construction bids have been received.

SUGGESTION TO START A WHOLE NEW DESIGN PROCESS

There has also been suggestions from the commission members that the original concept for this project should be revisited. Restarting this project at the concept design phase would entail the following:

1. RFP for consulting design engineering services (estimated to be approximately \$20,000), for the following services:
 - a. Concept design, evaluation, costing, and recommendation.

- b. Detailed design for chosen design.
 - c. Drawing sets for the chosen design: Issue for Review, Issue for Tender, Issue for Construction, Record Set.
 - d. Permitting applications for the new design to all of the regulatory bodies. Please note since this would be a completely new design, the permitting process would start anew:
 - i. FLNRO
 - ii. VIHA
 - iii. MoTI
 - e. Tender Specifications and scope of work document.
 - f. Technical support during procurement process.
 - g. Minor Construction oversight, and requisite inspections.
2. Construction works for the proposed solution (estimated to be approximately \$55,000, based on recent experience).
 3. CRD time to prepare, execute, and oversee the above contracts (estimated to be approximately \$10,000).

Please note that the above costs would be over and above all project expenditures to date. Further, these costs do not include contingencies (add 15% to all costs above, for budgeting purposes).

CONCERNS EXPRESSED OVER POTENTIAL LACK OF PROJECT REPORTING

There was a comment that additional project reporting should have taken place, when some of the project budget line items were over spent (which occurred in July of 2017). This is not typical practice when CRD staff are reporting out on projects.

Further, there was still adequate total project budget available to cover construction costs, based on the construction cost estimate received for this project.

The below was reported to the commission at the Annual General Meeting for 2016 (which took place November 27th, 2017), and is taken directly from page five of the AGM report:

CAPITAL IMPROVEMENTS

The following three capital projects were planned for 2016:

1. Design and Approvals to replace Water Main on Morningside Road at Weston Creek (\$7,000 allocated, \$3,911 spent). The water main along Morningside Road is exposed and spans Weston Creek making it susceptible to damage by people, vehicles, rocks or stream debris. There has been one failure at this site. The design was initiated in 2016, however, not completed. Further, the allocated budget will be exceeded (estimated total cost \$8,500 to \$9,000) due to the need for new ground survey and the overall design costs.

Additionally, the below was reported to the commission at the most recent Annual General Meeting for 2017 (which took place June 4th, 2018), and is taken directly from page five of the AGM report:

Capital Project Updates

The following capital project was planned for 2017:

Design and Approvals to replace Water Main on Morningside Road at Weston Creek (\$32,000 allocated, \$25,874 spent, total project budget). The water main along Morningside Road is exposed and spans Weston Creek making it susceptible to damage by people, vehicles, rocks or stream debris. There has been one failure at this site. The design was initiated in 2016, however, not completed. Design work was partially completed in 2017. Further, the allocated budget will likely be exceeded due to design costs, and anticipated higher than usual construction costs.

No further requests for reporting were made in response to the above reports, which include highlighting that the project budget will likely be exceeded.

Any additional reporting that is required results in more CRD staff time being charged to the respective project. Additional reporting results in increased CRD costs, which results in increased project costs.

In an effort to minimize project costs, and keep CRD costs down, it was decided to not meet with the commission until construction bids were received. This would allow CRD to report accurately on project budget short falls, and propose appropriate funding transfers, if any required.

ALTERNATIVES

Alternative 1

That the Fulford Water Service Commission recommends that the Capital Regional District Board amend the Five Year Financial Plan to include additional funding for the Fulford Water Main Replacement project and that \$46,130 be allocated from the Capital Reserve Fund in 2018 to fund the project.

Alternative 2

That the Fulford Water Service Commission recommends that the Construction of the Fulford Water Main Replacement project be deferred to the next construction season.

IMPLICATIONS

Alternative 1:

By completing the work now, within the existing permitted work window, and while the contractor is already on island for the Ganges WWTP, we are seeing some savings on mobilization and overhead costs.

Alternative 2:

Due to concerns expressed by the Vancouver Island Health Authority, the Ministry of Forests Lands and Natural Resources, and CRD Operations Personnel, it is the view of the CRD that deferring the work presents an unacceptable level of risk. As such funding to complete these works would be referred to the Electoral Area Services Committee to transfer funds from the Fulford LSA Capital Reserve Fund to the Fulford Water Main Replacement project.

CONCLUSION

The Fulford Water Distribution system includes a water main that is located on Morningside Rd, and runs under a creek. This water main is currently exposed, leaving it vulnerable to increased risk of failure, or tampering/vandalism. A design, and subsequent ITT procurement process for construction services were completed. Construction costs will exceed current available project budget. The Capital Reserve currently has adequate resources to fund the project budget shortfall.

RECOMMENDATION

That the Fulford Water Service Commission recommends that the Capital Regional District Board amend the Five Year Financial Plan to include additional funding for the Fulford Water Main Replacement project and that \$46,130 be allocated from the Capital Reserve Fund in 2018 to fund the project.

Submitted by	Karla Campbell, Senior Manager, Salt Spring Island Electoral Area
	Chris Davidson, P.Eng., Manager of Engineering, Salt Spring Island Electoral Area
Concurrence	Robert Lapham, MCIP, RPP, Chief Administrative Officer

KC/CD:ts