



**REPORT TO JUAN DE FUCA WATER DISTRIBUTION COMMISSION
MEETING OF TUESDAY, APRIL 1, 2014**

SUBJECT WATER MAIN REPLACEMENT DESIGN WORK FOR 2015

ISSUE

Funding is requested to undertake advanced design of the 2015 water main replacement projects in order to improve overall coordination with municipalities and our efficiency and effectiveness, including tendering of materials.

BACKGROUND

Historically, the design work for both the Water Distribution Main Replacement Program and the Five Year Accelerated Fire Upgrade Program has been done in the same year as the construction; all within the same budget year. It has been determined that completing the designs for both the Water Distribution Main Replacement Program and the Fire Flow Upgrade Program projects one year in advance, would improve the overall effectiveness of the project delivery, including the following benefits:

- Improved coordination with Municipal capital project plans through earlier collaboration between Municipal and Capital Regional District (CRD) staff;
- Decreased timing sensitivity on external design and construction approvals, such as Municipal and Island Health approvals;
- Advanced project scheduling and determination of staffing resource requirements;
- Improved ability to 'bundle' construction material tenders, such as pipe supply and asphalt paving, with larger quantities, resulting in more competitive pricing; and
- Earlier consideration of local neighbourhood impacts, resulting in improved customer service and satisfaction.

In early 2014, it is proposed to identify the 2015 water main replacement projects within the two programs, consult with the stakeholders, and undertake design work utilizing engineering consulting services for design under CRD project management. The 2015 water main replacement project designs and approvals and 2015 construction schedule would be set by December 2014. Moving forward, Infrastructure Engineering staff, with support from engineering consultants as required, would continue with the process of completing advanced designs on an on-going basis.

Staff are seeking the approval to allocate up to \$120,000 of the 2014 water main replacement program budgets (\$4.12 million in total) to a 2015 water main replacement project design budget.

ALTERNATIVES

Alternative 1: That the Juan de Fuca Water Distribution Commission approve the allocation of up to \$120,000 from the 2014 water main replacement program budgets to a 2015 water main replacement project design budget, to allow advanced completion of project design work.

Alternative 2: That the Juan de Fuca Water Distribution Commission not approve the allocation of 2014 funding to allow advanced completion of the 2015 water main replacement project design work.

IMPLICATIONS

Alternative 1: This new approach would yield a number of important benefits, including those noted in the background of this report.

Alternative 2: While the traditional approach of producing designs in the same year as construction, has been in place for many years, there have been frequent scheduling challenges due to the need to produce designs 'just in time' to allow construction and project completion in the calendar year and within the annual budget cycle.

CONCLUSION

Completing the designs for both the Water Distribution Main Replacement Program and the Fire Flow Upgrade Program projects one year in advance of the planned construction year would improve the overall effectiveness of the project delivery. With the Juan de Fuca Water Distribution Commission's approval to allocate up to \$120,000 from the current 2014 program budgets, in early 2014, it is proposed to identify the 2015 water main replacement projects within the two programs, consult with the stakeholders, and undertake design work utilizing engineering consulting services for design under CRD project management. The 2015 water main replacement project designs and approvals and 2015 construction schedule would be set by December 2014.

RECOMMENDATION

That the Juan de Fuca Water Distribution Commission approve the allocation of up to \$120,000 from the 2014 water main replacement program budgets to a 2015 water main replacement project design budget to allow advanced completion of project design work.

Scott Mason, BSc, PEng
Manager, Regional Water
Infrastructure Engineering

Tim Tanton, MPA, PEng
Senior Manager, Infrastructure Engineering
Concurrence

Ted Robbins, BSc, CTech
General Manager, Integrated Water Services
Concurrence

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