

**STAFF REPORT:      ENGINEERING AND PUBLIC WORKS DEPARTMENT**

**REPORT TO:**            Infrastructure & Recreation  
                                 Committee  
**MEETING DATE:**      April 9, 2013  
**REPORT NO.:**          EPW.13.028  
**SUBJECT:**             Arlberg Crescent Wastewater  
                                 Servicing Extension – Project  
                                 Consideration  
**PREPARED BY:**       John Caswell, Manager of Water &  
                                 Wastewater Services

**A.      Recommendations**

THAT Council receive Staff Report EPW.13.028 entitled “Arlberg Crescent Wastewater Servicing Extension – Project Consideration”;

AND THAT Council approve the creation of the Arlberg Crescent Wastewater Extension capital budget in the amount of \$15,000 for engineering services in 2013, and \$10,000 engineering services and \$175,000 contract services in 2014 for a total project value of \$200,000.

**B.      Background**

On February 12, 2013, Mr. Denis Martinek of Tyrolean Village Resorts Limited made a deputation to the Infrastructure and Recreation Committee requesting that the Town install municipal wastewater servicing along Arlberg Crescent. Mr. Martinek indicated that over 90% of the residents on Arlberg Crescent were in favour of Municipal wastewater services and requested that the Town consider financing this project, with construction commencing as soon as possible. Currently, there is one septic system on Arlberg Crescent that has an MOE order that requires the resident to have a certified hauler remove their sewage, and many other septic systems on the street will require repairs or upgrades over the next several years. Mr. Martinek also inquired about the possibility of minor road improvements along Arlberg Crescent to address the deteriorating road conditions.

Mr. Martinek has previously discussed wastewater servicing for both Arlberg Crescent and Birchview Trail with Town Staff over the past few years. The Town currently does not have provision within the Five Year Capital Plan for wastewater servicing on either of these streets. The Town’s position, until now, has required the proponent to finance this project upfront in order to accelerate this servicing.

Arlberg Crescent is approximately 350 metres long with a hard-packed gravel surface that does not have a proper base for drainage. This street is serviced with a municipal 150mm (6”) substandard PVC watermain.

Due to the drop in elevation along Arlberg Crescent, installing a new gravity system into the existing wastewater collection system is not possible. One option is to install a gravity system with a pumping station and backup generator or an oversized wet well. Another alternative is to install a low pressure forcemain system (LPS) that would service each property and discharge to the existing maintenance hole located at the intersection of Brooker Boulevard and Arlberg Crescent. This is the same type of system that the Town constructed on Lake Drive. Each property would be required to have an individual grinder pump installed that is owned and maintained by the property owner. Given the success the Town has experienced with LPS's, Staff propose that this is the means to service Arlberg Crescent.

Due to the condition of the road as well as the aging watermain on Arlberg Crescent, Staff have considered three reconstruction options for servicing along this road:

#### 1. Full Reconstruction

There is an opportunity to proceed with both road and watermain upgrades to Arlberg Crescent during the wastewater installation. If the road is resurfaced or reconstructed, as requested in Mr. Martinek's deputation, the watermain system needs to be upgraded at the same time to avoid tearing up the road in the near future when watermain upgrades are scheduled under the Asset Management Plan. Replacement of the existing substandard watermain system, reconstruction of the existing road with open ditches that would improve drainage and the addition of a turning circle would cost approximately \$600,000. However; the scope of this project alternative would not be possible without placing significant strain on the staff and financial resources that have been set aside for other projects that the Town has already committed to for 2013 and the remaining years in the Town's Five Year Capital Plan. As the scope of this project cannot be done with the current staff and financial resources, Staff do not recommend proceeding with full reconstruction.

#### 2. Defer Project

Under this option, any improvements to Arlberg Crescent will not be done until an Asset Management Plan requires watermain replacement after 2017. A water and wastewater system could be installed at an approximate cost of \$350,000. The Town would also then reconstruct the existing road at this time at an additional cost of approximately \$250,000. However; due to the state of the individual septic systems on Arlberg Crescent, Staff believe it would be advisable to go ahead with wastewater servicing on Arlberg Crescent before 2017. As individual homeowners will ultimately be responsible for the repayment of the wastewater installation, Staff believe that the wastewater system should be installed on Arlberg Crescent before individual homeowners have to inject thousands of dollars into upgrading their septic services over the next five years, only to pay for the wastewater system on top of this.

### 3. Low Pressure System Only

Staff have considered the option of installing only a LPS on Arlberg Crescent and reinstate the road to its existing condition. In January 2010, when there had been an earlier inquiry about Arlberg servicing, Town Staff received a cost proposal for the installation of a LPS. It is estimated that the total construction value is \$175,000 and the total engineering fee would be approximately \$25,000, bringing the total project cost estimate to \$200,000. Since this option is very similar to the Hoover Lane and Teskey Drive project that is about to start, Staff feel that the Arlberg Crescent project can be included with the award for the wastewater installation on Hoover Lane and Teskey Drive at an economy of scale. Although these projects are not within the same geographic location, Staff are expecting cost efficiencies by combining the work for Arlberg Crescent with Hoover Lane and Teskey Drive. The construction tenders may also be combined. The RFP and tender would be structured to separate the costs of these two projects. Without the ability to combine the Arlberg Project with the Hoover Lane and Teskey Drive Project, Staff feel that taking on another capital project will be too much to manage in addition to normal duties.

Staff recommend that the Town finance this project; commencing in 2013 first with a Request For Proposal to retain engineering services in order to complete the design and acquire approvals to install a LPS with the road being reinstated to the existing condition. The construction of this project would then take place in 2014. A low pressure forcemain system does not require a deep trench and therefore; will not affect a large portion of the existing road surface. Once the wastewater system is installed, the road surface would be reinstated to the existing condition.

## **C. The Blue Mountains' Strategic Plan**

Extending wastewater servicing along Arlberg Crescent furthers The Town of The Blue Mountains Strategic Plan Goal #2. – “Addressing the Town’s Municipal Infrastructure needs.”

## **D. Environmental Impacts**

Silt fencing will be required adjacent to the existing creek to mitigate any erosion runoff. This project will enable the decommissioning of existing septic systems located very close to the ravines and will have a positive effect on the environment.

## **E. Financial Impact**

Under Section 581.06 of the Municipal Act, the Town can impose charges for the use of a sewage system, with priority lien status for the recovery of any amounts financed by the Town. Wastewater Servicing Extensions have historically been financed by the Town, with repayment from respective homeowners over a period of time based on Council approved affordability guidelines.

Based on the latest figures (2010), the \$200,000 project would be divided between the 18 benefitting units, resulting in an estimated service cost of \$11,111 per unit, plus a Craighleith Wastewater Treatment Plant Charge of \$2,564 per unit for a total estimated cost of \$13,675 to an individual homeowner. Based on current affordability guidelines, repayment of Town financing would be established between 7-10 years.

If Council agrees with the recommendation of Staff, the Town will not be responsible for any costs related to the project, given the project is limited to only wastewater servicing and road reinstatement to its existing level. The entire project cost will be the responsibility of the homeowners along Arlberg Crescent. As costs are based on 2010 figures, any cost variance will be the responsibility of the homeowners. Finance staff recommends that any significant changes in costs (over 15% of \$200,000 or \$30,000) be approved by Council prior to the award of construction.

The cost of borrowing and resources required to administer this project should be carefully considered. As illustrated in the Table below, the Town has proposed or committed to \$4.4 million in local improvement or servicing projects in 2013. This could lead to a potential \$3.3 million added to the Town's receivable balances due from benefitting property owners.

Project	Status	Total Project Cost (estimate)	Owner Costs to be Financed by Town	Estimated Project Date
Wensley Drive	Committed	\$1.90M	\$0.80M	2013-2014
Grey Condo 28 Internal Servicing	Committed	\$0.90M	\$0.90M	2013
Castle Glen Engineering Assessment	Committed	\$0.08M	\$0.08M	2013
Castle Glen Road Reconstruction	Proposed	\$0.80M	\$0.80M	2014
Hoover Lane and Teskey Drive	Design Committed Construction 2014 Proposed Budget	\$0.50M	\$0.50M	2013-2015
Arlberg Crescent	Proposed	\$0.20M	\$0.20M	2013-2014
<b>Total 2013 Proposed &amp; Committed Projects</b>		<b>\$4.40M</b>	<b>\$3.30M</b>	
Current Receivables From Past Servicing Projects			\$5.00M	
<b>Total Estimated Servicing Receivables</b>			<b>\$8.30M</b>	

Finance staff recommends internally financing the Arlberg project until a long term strategy is updated and the need for long term debt financing can be assessed. As in past practice, the Town would seek to recover the cost of borrowing through the interest rate charged to residential unit owners.

Council should also consider future infrastructure replacement costs, as the installation of any additional infrastructure replacement in future years will require the Town to set aside sufficient reserve funds.

**F. In Consultation With**

John Metras - Town solicitor  
Renee Ouellette - Financial Accountant

**G. Attached**

None.

Respectfully submitted,

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