

# 2016 Update

## Municipality of Whitestone Asset Management Plan



## **Municipality of Whitestone Asset Management Plan**

### **Executive Summary**

This Asset Management Plan is intended to describe the infrastructure owned, operated, and maintained by the Municipality of Whitestone to support its core services to rate payers. It is a compilation of documents including the asset inventory which was started in 2009 as part of the PSAB 3150 requirements, updated roads needs studies and several financial based analyses. The document is intended to conform to the content and format described in the Province of Ontario's Guide for Municipal Asset Management Plans.

This document, which shall be updated on an annual basis, outlines in detail the Township's ongoing Capital Asset Management strategy including ongoing actions regarding capital asset management, planned asset refurbishment, maintenance, and or replacement requirements including analysis of budgeted funding, including anticipated funding shortfalls. The funding shortfalls (referred to as the Funding Gap) are anticipated to be satisfied through a combination of ratepayer contributions (increased taxation), debt, and continued support from Federal and Provincial grant funding opportunities as they become available over the lifecycle of the capital assets of the Township.

The details of this document provide information on the corporate wide implementation of Asset Management in Whitestone, corporate wide current state of the infrastructure along with current and future activities. Please note there are several supporting detailed appendices.

This document is intended to be compliant with the ministry of infrastructure's "Building Together: Guide for municipal Asset Management Plans – Part III"

### Strategic Overview Municipality of Whitestone Capital Assets

The Municipality of Whitestone is beginning its formal review and documentation of its comprehensive Capital Asset Management Strategy. Conceptually the implementation of a Comprehensive Asset Management Plan provides a number of benefits through improved accountability and a deeper understanding of the extent and effect of aging infrastructure, documentation of shortfalls in sustainable funding levels in a quantifiable and measurable way.

Through the implementation of asset management best practices, infrastructure assets that support core municipal services are monitored and maintained at levels which should enable Whitestone to provide these services at acceptable levels of risk and reliability and confidence to those that receive these services.

It is anticipated that funding will always remain as an ongoing challenge to overcome the accumulated backlog of capital renewals and maintenance deficits (i.e.: current repair and replacement needs often in many cases outweigh current available funding).

This asset management addresses these shortfalls and identifies longer term solutions and techniques.

## **Introduction**

The Province of Ontario definition of municipal core services includes drainage, and road networks.

In the Municipality of Whitestone these core services provide primary transportation, and flood protection. Without these core services, the viability of the municipality from an economic, health, and environmental perspective would be at risk. The Asset Management Plan includes the infrastructure and equipment assets that support these core services: Local Roads and Bridges and related supporting equipment infrastructure. Whitestone is a single-tier municipality and accordingly works directly with the Province of Ontario and local ratepayers in support and delivery of municipal service.

As part of this plan, Whitestone will begin to initiate a formalized Corporate Sustainability Plan which incorporates Whitestone's corporate vision to 'promote and deliver sustainable levels service which satisfy the needs of ratepayers while maintaining a fiscally responsible level of budgetary use and debt structure' and additionally to support ongoing implementation and evolution of Asset Management activities as seen fit in the achievement of the above mandate.

The Municipality of Whitestone has had a relatively stable population for the last 10 years. Consequently there are no major anticipated changes in future infrastructure demands beyond current levels, hence the focus of this plan is around the maintenance of current service levels.

Taxation and user rates have historically fallen short of recognizing the full life-cycle cost of ownership of infrastructure assets resulting in a growing backlog of capital renewals, deferred proactive maintenance, and increasing re-active repairs and replacements. According to the Province of Ontario The Walkerton incident, was the catalyst that identified the need for better oversight, management, and funding of municipal core infrastructure. This plan builds upon that need for the Municipality of Whitestone.

## **Detailed Asset Management Plan**

### **Part A**

This asset management plan incorporates the following roles and objectives:

- Maintain current inventory of assets
- Ongoing and updated documentation of asset condition assessments
- Documentation of strategic and detailed capital planning
- Long-term horizon (10 year to 20 year) capital funding requirement projections
- Formalization of collaboration between Finance; public works and external engineers (as required)
- Promote the utilization of modern technologies to assist in business decisions related to core services delivery

### **Part B**

#### **Asset Inventory / Data Management:**

**Product:** Population of official asset registry (maintained in excel based software spreadsheets)

**Implementation date:** (substantially complete December 31, 2008; updated annually in conjunction with annual external financial audit)

**Current Status:** Continuously augmented/updated through up to date roads needs studies; and annual audit procedures. See Appendix A for complete listing.

### **Part C**

#### **Geographic Information System**

**Product:** Via independently prepared roads needs study and CGIS collected Data.

**Implementation Date:** Fall 2013, with continuous updates as required.

**Current Status and planned Utilization:** Utilized by the building department as needed.

## **Part D**

### **Service Requests / Complaint Management**

**Product:** Computerized database / log to record reactive activities related to core services (i.e. rate payer requests and complaints).

**Implementation Date:** To be Determined

**Current Status:** Not Implemented

## **Part E**

### **Current Condition Assessment**

**Product:** Formalized assessment of individual assets based on expert field analyses. Completed in conjunction with Municipal staff and engineering department; and has been directly incorporated in the 10 year financial plan.

**Implementation Date:** Fall 2013

**Current Status:** Completed in conjunction with Municipal staff and engineering department; and has been directly incorporated in the 10 year financial plan.

### **Predictive Modeling**

**Product:** A model of expected failure of assets supported by empirical data.

**Implementation date:** December 2013

**Current Status:** An ongoing review of asset life expectancy / accounting amortization rates is being undertaken as part of this project. Rates will be adjusted as seen fit.

## **State of Whitestone's Infrastructure**

### **Inventory**

Through intensive data collection efforts visa vie annual financial audits of asset procurement, and external engineering studies, Whitestone's asset registry is considered to be a reliable and comprehensive resource for asset information. By assignment of data collection and maintenance tasks it will enable the asset registry to be maintained on an annual timely basis.

### Road Network (Rounded)

Road Type	Historical Cost	Current Value (Accounting Based)	10 year Spending Requirements
All Roads	\$9,568,000	\$3,087,000	\$4,659,000

### Bridges and Major Culverts (Rounded)

Asset Type	Historical Cost	Current Value (Accounting Based)	10 Year Spending Requirements
Bridges & Culverts	\$1,867,000	\$1,149,000	\$2,037,000

### Municipal Vehicles and Roads Equipment

Contains assets required for the maintenance or continued operation of municipally owned roads and road structures.

Asset Type	Historical Cost	Current Value (Accounting Based)	10 Year Spending Requirements
Vehicles & Equipment	\$2,670,000	\$1,108,000	\$640,000

### All other assets

(Includes assets not vital to transportation however vital to the delivery of several key municipal services such as landfill, community enjoyment centers etc.

Historical Cost: \$ 4,071,000

Current Value: \$ 2,622,000

Note: Major municipal office replacement was recently completed.

### Part F

#### Long Term Capital Budget Planning

**Product:** 10 year detailed forecast of operating and capital funding needs using life-cycle analysis of assets and 20 year outlook for operating and capital needs.

**Implementation Date:** December 2013; as an extrapolation from the latest roads needs study; and concurrent input from municipal staff.

**Current Status:** In conjunction with Municipal staff we have identified current capital refurbishment and capital maintenance backlog, including short and long term funding requirements. An annual update of capital maintenance backlog and updated capital funding projections will be required to maintain the accuracy and usability of this plan.

## Part G

### Road Network:

#### Condition

#### Roads

The Municipality has significant rehabilitation work which has been identified on in conjunction with the review of the most recent roads needs study, since the previous AMP update there was a significant material change in the condition of a portion of the Bunny Trail Road, requiring immediate expenditures of approximately \$900,000 in order to continue the service of one of the Municipalities most vital road ways. Council continues to analyze the option of a combination of additional Municipal debt and other Government contributions/transfers as the proposed funding methodology to alleviate the gap in road work which is required. See financial analyses for further details.

#### Bridges

Whitestone has a total of 12 bridge and culvert structures. Which have a combined average age of 32 years according to the AECOM bridge study completed in 2015. The study highlighted anticipated spending over the next decade and we have incorporated this into the 10 year capital plan.

#### Other Assets

Additionally it was determined that there should be an amendment to the Municipal procurement policy with respect to the purchase of vehicles, allowing municipal staff to negotiate with a dealer outside of a regular tendering process as it is felt that this provides the municipality with the best possible price as of 2016 , this had continued to be the process.

#### Rehabilitation Needs

Asset	Urgent	1-5 Years	6-10 Years
Roads	2,050,000	1,850,000	759,000
Bridges	1,659,000	283,000	150,000

## **Part G**

### **Expected Service Levels**

The Municipality of Whitestone has a commitment to its ratepayers to uphold a certain level of service in relation to municipal infrastructure including the following:

- Upkeep of safe and usable roads inclusive of during winter months which have a significant draw on the overall budget and financial results.
- Provide the services of a volunteer fire department which is essential to the safety of the Town's ratepayers as first responders to emergency situations. It is expected that the fire department is adequately supplied and staffed to ensure the level of service meets the needs of the Town.
- Provide access to a community rink; library, court facilities, emergency management locations all of which must remain in good repair in order to appropriately and effectively serve the community.

## **Part H**

### **Determination of Capital Refurbishment and Deferred Maintenance Backlog and Financing and Funding Strategies**

The Canadian Infrastructure Report Card has estimated that the average household in Canada has a combined infrastructure deficit of \$13,813 in water, storm water, wastewater, and road infrastructure.

Whitestone, like many other organizations has traditionally followed a pay-as-you-go financial approach in which there is hesitation to assume debt as part of an overall financial strategy. Additionally, public pressure has resulted in many years of lower than inflation increases in rates and taxes that resulted in incremental increased deficits in capital renewal and operating programs. Infrastructure, being mostly roads, with service life of more than 30 years continued to perform without obvious effects. A number of public infrastructure failures in other municipalities and resulting regulations is changing the understanding of the need to fully finance the full life-cycle cost of infrastructure from both a capital and operating perspective that will continued service delivery of core services to Whitestone into the future.

The long range financial plan incorporates updated capital spending requirements on capital asset inventory identifying an estimated backlog of \$7,310,000 in core asset spending requirements in order to maintain current asset service levels. This translates to roughly a 4.5-6.5 million dollar funding gap over the next decade. This plan incorporates the use of Gas Tax Funding (as available) to assist in funding backlog in roads renewal and other assets as determined in this part of the Capital Asset Management Plan. However the funding gap represents the current best estimate of unfunded asset replacement that is required over the next 10 years.

Whitestone has identified the following historical and potential future sources of funding/financing in meeting its capital plan funding requirements and to address the estimate funding gap:

### Projected Infrastructure Grants

Grant	Funding	Usage	Benefit
OCIF	810,000	Road Rehabilitation	To continue past service level of Bunny Trail road.

### Debt Financing

Whitestone will explore leveraging debt financing in a number of required upcoming infrastructure projects as may be appropriate.

### User Rates

User fees are not material and do not currently impact capital planning in Whitestone.

### Development Charges

To be assessed as applicable.

### Reserves

Whitestone utilizes reserves to fund various activities. With respect to core services, the following outlines the structure:

#### Roads

A shared capital / operational reserve at the corporate level currently exists. A restricted capital reserve is to be funded annually through property taxation targeting levels in the 10 year approved capital forecast.

Note see reserve schedule attached.

### Part I

#### **ASSET RENEWAL FINANCIAL FORECASTING (Appendix C)**

Asset renewal forecasting is presented at two levels: 10 Year detailed Capital Plan and 20 Year Outlook Capital funding Forecast.

#### *10 Year Capital Planning Forecast*

This is a public and Council endorsed plan that address short term financing needs for infrastructure through an annual official budget process. The infrastructure needs are based on systematic integrated condition assessment process in which infrastructure needs based on condition are reviewed and prioritized and matched to available funding.

Typically, specific projects are identified in the 10 Year Capital Forecast document for a period of 5 years. Allocations for renewal are identified for years 6-10 based on condition-based needs

assessments, estimates, and projected available funding. Some particularly large or contentious project may be identified and listed in years 6-10.

At this time, unfunded infrastructure renewal needs are not published as part of the budget process, but are identified within Asset Management. Many of these projects have been, or in process of, preliminary design to enable the project to start-up in relatively short time should additional funding opportunities become available.

#### *20 Year Capital Planning Forecast*

Forecast of infrastructure renewal needs are calculated annually based on current replacement value, funded and un-funded infrastructure needs, and supplemented with life-cycle estimates. These forecasts are done on individual infrastructure groups. Although not used to set rates, it provides insight into the degree of infrastructure renewal activity that needs to occur beyond the 10 year capital project plan adopted by Council. It provides a perspective that is used to identify the effect of carrying a backlog of renewal into the future.

This information is a primary input to setting rates to fund current capital renewal along with building reserves that will address immediate and longer term renewal activities and provide a financial net for unexpected expenses.

At this time Whitestone has concluded that its capital spending requirements beyond 10 year timeframe lack verifiability and would contain unreliable funding requirements and analysis. The uncertainty of longer term estimates is particularly impacted by the small size of the Municipality. Accordingly for the purposes of this plan; the Municipality has assumed that spending in the 10 – 20 year time frame will closely mirror that of the 1-10 year plan; however spread across different assets.