The Corporation of the Township of Tehkummah

MUNICIPAL ASSET MANAGEMENT PLAN

Updated December 2016

The first Municipal Asset Management Plan was created by KPMG/exp and adopted by municipal council in 2013. There have been no amendments or updates until this year.

Using the most current available reports, an extensive review was undertaken of the items listed in the original plan:

- The Bridge Inspection report
- Receipts for purchase and sale of vehicles
- Visual inspection of road system
- Ontario Clean Water Agency reports
- Visual inspection of municipally owned or leased buildings

Some items that were non-existent were removed from the original list.
Soft cost Items related to capital projects, such as engineering, were removed from the original list, as those costs would be factored in to the project at time of preparing Tender Documentation.

This updated plan retains many of the strategy statements contained in the Asset Management Plan of 2013:

- Overview of the Asset Management Plan
- Scope of the Asset Management Plan
- Historical, Replacement and Life Cycle Cost
- Data Verification and Condition Assessment Policies
- Asset Management Strategies for
    - Paved Road System
    - Granular Road System
    - Water Distribution Systems
    - Wastewater Collection Systems
    - Storm Water Collection Systems
    - Bridges and Large Culverts
    - Buildings
    - Vehicles and Moveable Equipment
- Capital Financing Policy
- Municipal Debt Policy

This plan shall be monitored for updates on an ongoing basis, through the implementation of an administrative process commencing January 2017.

Overview of the Asset Management Plan

Asset management planning defined

Asset management planning is the process of making the best possible decisions regarding the acquisition, operating, maintaining, renewing, replacing and disposing of infrastructure assets. The objective of an asset management plan is to maximize benefits, manage risk and provide satisfactory levels of service to the public in a sustainable manner. In order to be effective, an asset management plan needs to be based on a thorough understanding of the characteristics and condition of infrastructure assets, as well as the service levels expected from them. Recognizing that funding for infrastructure acquisition and maintenance is often limited, a key element of an asset management plan is the setting of strategic priorities to optimize decision-making as to when and how to proceed with investments. The ultimate success or failure of an asset management plan is dependent on the associated financing strategy, which will identify and secure the funds necessary for asset management activities and allow the Municipality to move from planning to execution.

The purpose of the asset management

The asset management plan outlines the Municipality's planned approach for the acquisition and maintenance of its infrastructure, which in turn allows the Municipality to meet its stated mission and mandate by supporting the delivery of services to its residents. In achieving this objective, the asset management plan:

- Provides elected officials, Municipal staff, funding agencies, community stakeholders and residents with an indication of the Municipality's investment in infrastructure and its current condition;
- Outlines the total financial requirement associated with the management of this infrastructure investment, based on recommended asset management practices that encompass the total life cycle of the assets;
- Prioritizes the Municipality's infrastructure needs, recognizing that the scope of the financial requirement is beyond the capabilities of the Municipality and that some form of prioritization is required; and
- Presents a financial strategy that outlines how the Municipality intends to meet its infrastructure requirements.

It is important to recognize that the asset management plan is just that – a plan. The asset management plan (which has been prepared for the purposes of meeting the requirements of the Municipal Infrastructure Investment Initiative) does not represent a formal, multi-year budget for the Municipality. The approval of operating and capital budgets is undertaken as part of the Municipality's overall annual budget process. Accordingly, the financial performance and priorities outlined in the asset management plan are subject to change based on future decisions of Council with respect to operating and capital costs, taxation levels and changes to regulatory requirements or the condition of the Municipality's infrastructure.

Scope of the Asset Management Plan

The asset management plan encompasses the following components of the Municipality's infrastructure:

Transportation Infrastructure	Water and Wastewater Infrastructure	Other Infrastructure
• Roads • Bridges and culverts • Streetlights • Storm sewers	• Treatment facilities • Water distribution system • Wastewater collection system	• Vehicles • Facilities

For the purposes of developing the asset management plan, a 25-year planning horizon was considered, although the analysis includes a discussion of required activities over the entire life cycle of the Municipality's infrastructure. It is expected that the Municipality will update its asset management plan every four years (to coincide with Council elections) or earlier in the event of a major change in circumstances, which could include:

- New funding programs for infrastructure
- Unforeseen failure of a significant infrastructure component
- Regulatory changes that have a significant impact on infrastructure requirements
- Changes to the Municipality's economic or demographic profile (positive or negative), which would impact on the nature and service level of its infrastructure

Historical, Replacement and Life Cycle Cost

Additional information concerning the Municipality's infrastructure can be found in the following appendices:

- **Appendix A** – Infrastructure profile – roads
- **Appendix B** – Infrastructure profile – water
- **Appendix C** – Infrastructure profile – wastewater
- **Appendix D** – Infrastructure profile – storm sewer
- **Appendix E** – Infrastructure profile – bridges and structures
- **Appendix F** – Infrastructure profile – buildings and facilities
- **Appendix G** – Infrastructure profile – vehicles
- **Appendix H** – Life cycle profiles for linear infrastructure, including recommended activities and costs
- **Appendix I** – Costing estimates for life cycle activities for linear infrastructure

The current replacement value of the Municipality's infrastructure (expressed in 2013 funds) is estimated to be in the order of $86.8 million, almost 90% of which ($76.1 million) relates to the municipal road network. Overall, the replacement value of the Municipality's infrastructure amounts to approximately $213,000 per resident or $246,000 per household, or 8 times the historical cost of infrastructure.

The total life cycle cost associated with the Municipality's linear infrastructure (roads, water and wastewater mains) is just over $180 million, with roads representing the largest category of life cycle costs ($178 million or 98% of total life cycle costs). On average, the Municipality's life cycle costs for its linear infrastructure is $448,000 per resident or $515,000 per household.

Historical, replacement and life cycle costs by component

	Quantity	Useful Life	Replacement Cost	Life Cycle Cost
Roads	82,597 m	60 to 75 years	$76,112,954	$178,116,443
Water distribution network	1,960 m	80 years	$1,251,823	$1,754,572
Wastewater collection network	1,420 m	80 years	$1,493,960	$2,094,308
Total linear infrastructure			$78,858,737	$181,965,323
Bridges and structures	9	75 years	$2,376,215	
Buildings and facilities	19	20 to 75 years	$2,562,304	
Marina	1	20 to 75 years	$1,671,049	
Vehicles and equipment	9	9 to 20 years	$1,327,000	
Total in-scope infrastructure			$86,795,305	

Data Verification and Condition Assessment Policies

On a go-forward basis, the following policies will govern the updating and verification of the condition assessment:

- Condition assessments for bridges will be conducted every two years in accordance with Provincial regulations, with the asset management plan updated accordingly
- Condition assessments for wastewater mains will be assessed every five years through the use of camera inspections
- Condition assessments for facilities will be assessed through an engineering/architectural inspection of the facilities every five years
- Condition assessments for other assets will be based on the percentage of remaining useful life in the absence of a third-party assessment of the assets. On an annual basis, the Town will review the useful lives and condition assessment criteria (good, fair, poor based on percentage of remaining life) and will adjust the asset management plan accordingly

Municipal Paved Road Systems

Anticipated asset life cycle	The life cycle of newly constructed pavement systems are dependent on several factors including the pavement design, material and construction quality, traffic volume, traffic loading, and environmental conditions. The service life can be approximated by the category of road: 60 years for pavement with curb, 60 years for pavement with open ditch, and 10 years for surface treatments.
Integration opportunities	Various other elements may be considered as integrated with paved roads. These include buried assets in the corridor: water sewers, storm sewers, hydro, telephone, natural gas, and cable. Other possible affected elements include traffic signals, street lighting, and sidewalks.
Rehabilitation and replacement criteria	To assess paved roads the Pavement Condition Index (PCI) is used. PCI is a numerical index between 0 and 10 and is based on a visual survey conducted, where 10 represents a new pavement in excellent condition and 0 an impassible pavement. If the PCI ranks at 5, resurfacing should be considered, if PCI ranges from 3 to 5, rehabilitation should be considered. In the case that the PCI falls below 3, reconstruction is a more effective option.
Rehabilitation and replacement strategies	Several different rehabilitation strategies can be implemented. The selection of the strategy is dependent on the following criteria: PCI index, road classification (arterial, collector, local), urban or rural, ditched or curbed, benefit/cost ratio. These strategies include: • Total reconstruction of pavement with 80mm to 120mm of hot mix asphalt (HMA) • Mill and resurface pavement with 50mm to 75mm of HMA • Strip and resurface pavement with 50mm to 75mm of HMA • Pulverize with underlying granular and surface with 50mm to 75mm of HMA • Mill and resurface patches of pavement with 50mm of HMA • Routing and crack sealing pavements
Life cycle consequences	Failure to fund timely pavement rehabilitation will result in a reduction in the pavement PCI. Pavement PCI's below 5 result in exponential increases in pavement rehabilitation costs. It also increases significantly road maintenance costs. Pavements identified by a PCI below 3 typically reflect decreases in level of service and increasing associated degrees of risk and liability.
Integrated asset priorities	The schedule of pavement rehabilitation is often planned in conjunction with underground utility rehabilitation works. Most commonly it is the rehabilitation of pavement systems that prompts the replacement of underground sewer and water services in the infrastructure is also in deteriorating condition and approaching its useful service life. The incorporation of other infrastructure rehabilitation may be done alongside Engineering & Public Works Department internally or with natural gas, hydro, and telephone utilities externally.

Anticipated asset life cycle	The life cycle of newly placed gravel road systems are dependent on several factors including the material and construction quality, design, traffic volume, traffic loading, and environmental conditions. The service life can be approximated by the category of road: 60 years for earth with open ditch and 75 years for gravel with open ditch. Sufficient maintenance provided during the service life will help preserve conditions using such strategies as machine grading, ditching and brushing, and granular top up.
Integration opportunities	Various other elements may be considered as integrated with paved roads. These include buried assets in the utility corridor: water sewers, storm sewers, hydro, telephone, natural gas, and cable.
Rehabilitation and replacement criteria	To assess gravel roads the Gravel Condition Index (GCI) is used. GCI is a numerical index between 0 and 100 and is based on a visual survey conducted, where 100 represents a newly constructed road in excellent condition and 0 an impassible roadway. If the GCI ranges from 3 to 5, rehabilitation should be considered. In the case that the GCI falls below 3, reconstruction is a more effective option.
Rehabilitation and replacement strategies	Several different rehabilitation strategies can be implemented. The selection of the strategy is dependent on the following criteria: GCI index, road classification (collector, local), urban or rural, benefit/cost ratio. In a rehabilitation scenario, the top 50 to 100 mm of gravel type "A" would be replaced. In the case of total reconstruction the work would include the replacement of the granular road base and the granular surface.
Life cycle consequences	The effects of gravel road rehabilitation that is insufficiently funded are reflected in the GCI index which as a result will typically fall below 6. The poor quality of the roadway will be reflected in rising reconstruction and maintenance costs. Roads which are identified by a GCI of 3 or lower typically show signs of a poor level of service increasing the associated degrees of risk and liability.
Integrated asset priorities	The schedule of road rehabilitation is often planned in conjunction with underground utility rehabilitation works. Most commonly it is the rehabilitation of gravel roads that prompts the replacement of underground utilities and sewer and water services if those services are deteriorating and approaching their useful service life.

Anticipated asset life cycle	The life cycle ranges from 30 to 100 years. Examining individual elements, the expected service life of a water plant or pump station varies from 30 to 50 years. Valve replacement typically occurs every 30 to 50 years. Similarly, the hydrant life cycle is predicted as 40 years and chambers as 50 years. For watermains the life cycle can be approximated between 50 and 100 years and 75 years for water storage. These values hold true under the assumption that the elements are properly maintained throughout their service lives.
Integration opportunities	The replacement of these components may either be implemented as part of other construction work or may be conducted as a standalone project. The replacement may be incorporated into resurfacing and road reconstruction work which could include the integration of other utilities (wastewater, telephone, hydro, cable, natural gas, etc). In the case that full road replacement is not intended, standalone replacement of watermains can be carried out using trench cut and repair.
Rehabilitation and replacement criteria	Several criteria used to evaluate and prioritize the watermain replacement schedules include: age, break history of the pipe, material type, size, surrounding soil conditions, pressure related issues, and hydrant spacing. In addition to these criteria other factors, such as the intent of future road rehabilitation, will modify the priority of the replacement schedule accordingly. Available historical data, which includes but is not limited to pipe failures and pipe break history, is used to aid in the replacement criteria. When a continued increase in maintenance costs reaches an uneconomical value, the replacement of the pipe is justified.
Rehabilitation and replacement strategies	The rehabilitation strategy is dependent on the current state of the pipe. It is difficult to assess the state of deterioration in buried services, as such, high pressure cleaning and videotaping of watermains may be instituted. Several different rehabilitation approaches can be taken and include full replacement, cleaning and relining, and potential pipe bursting. Cathodic protection, when used in conjunction with these strategies, prolongs the service life. The strategy is chosen based primarily on the available data including the age, size, material type, break history, and hydraulic requirements.
Life cycle consequences	The repercussions of unexpected failure will be disastrous. Due to unaccounted circumstances and unpredictable events, it is possible that some pipe materials with an expect service life of 100 years will require replacement earlier than expected, after only 30 years. In contrast, pipe materials with an expected life of 100 years may have the service life extended by an additional 50 years, with timely maintenance and rehabilitation.
Integrated asset priorities	Replacement of deteriorating watermains is carried out based on the associated level of risk. The sequence in which rehabilitation or replacement is carried out is reliant on the priority of the watermain and the impact of disruption to service. High priority watermains include those where fire protection, water quality, and service disruption will results in water loss and collateral damage. Typically the integration of road rehabilitation with watermain replacement will increase the priority of the project. The project may also incorporate utilities such as wastewater, hydro, telephone, cable and gas.

Anticipated asset life cycle	The life cycle ranges from 15 to 100 years. Wastewater plants and sewage pump stations vary from 30 to 50 years. Examining individual elements, the expected service life of wastewater plant equipment, pumps, blowers, and SCADA systems ranges from 15 to 50 years. A manhole life cycle is predicted to be between 30 to 75 years and wastewater trunks between 50 to 100 years. These values hold true under the assumption that the elements are properly maintained throughout their service lives.
Integration opportunities	The replacement of these components may either be implemented as part of other construction work or may be conducted as a standalone project. The replacement may be incorporated into resurfacing and road reconstruction work which could include the integration of other utilities (wastewater, telephone, hydro, cable, natural gas, etc). In the case that full road replacement is not intended, standalone replacement of sanitary trunk can be carried out using trench cut and repair.
Rehabilitation and replacement criteria	The assessment of the replacement schedule is determined primarily through conducting a CCTV inspection. The results of the inspection will be evaluated to estimate the degree of deterioration of the infrastructure. Included in the assessment are other criteria such as the material type, visible local collapses, upsizing requirements, and synchronization with roads rehabilitation programs.
Rehabilitation and replacement strategies	The rehabilitation strategy is dependent on the assessed condition rating of the infrastructure. The optimal rehabilitation method is determined by assigning and examining the condition rating of the pipe. Most commonly the selected strategy is replacement of collapsing and deteriorated pipe. For localized damage, other practices may be instituted which include: spot repair, joint sealing, and Cured in Place Pipe (CIPP).
Life cycle consequences	The process of degradation in sanitary sewers is similar to that of storm sewers. The repercussions of failure in sanitary sewers are considerably more substantial. Structural deterioration may lead to infiltration of ground water into the system which results in an increased volume of sewage directed to waste water treatment plants. These plants may not be designed to meet the growing demand result in increase in waste water flow. Infiltration of ground water can also result in the deposition of sediment and debris, significantly reducing the flow capacity for waste water. Continued maintenance and rehabilitation is essential for the performance and reliability of any type of buried infrastructure.
Integrated asset priorities	Replacement of deteriorating sanitary sewers is carried out based on the assessed condition. In the event that replacement is selected as the rehabilitation strategy, the project may expand to include other assets such as sidewalks, road trench cuts, or full pavement. Other utilities may also become included in the scope of work: hydro, telephone, cable, and natural gas. Typically the integration of road rehabilitation will increase the priority of the project.

Anticipated asset life cycle	A manhole life cycle is predicted to be between 30 to 75 years and stormwater trunks to be 50 to 100 years. These values hold true under the assumption that the elements are properly maintained throughout their service lives. A longterm maintenance plan is also necessary for SWM ponds and treatment structures as part of ongoing operational finances, in order to extend the structure replacement to between 30 to 75 years.
Integration opportunities	The replacement may be incorporated into resurfacing and road reconstruction work which could include the integration of other utilities (wastewater, telephone, hydro, cable, natural gas, etc). In the case that full road replacement is not intended, standalone replacement of sanitary trunk can be carried out using trench cut and repair.
Rehabilitation and replacement criteria	The development of the replacement schedule is determined primarily through conducting a CCTV inspection. The results of the inspection will be evaluated to estimate the degree of deterioration of the infrastructure. Included in the assessment are other criteria such as the material type, visible local collapses, upsizing requirements, and synchronization with roads rehabilitation programs. This investigation should be carried out every 20 years, rotating through the storm sewer systems, or when required, to examine system problems/failures. Additional stresses have been imposed on storm sewer systems with climate change and the increasing frequency and intensity of storms. Storm sewer systems are also strained and forced to expand with new land development.
Rehabilitation and replacement strategies	The rehabilitation strategy is dependent on the assessed condition rating of the infrastructure. The optimal rehabilitation method is determined upon assigning and examining the condition rating of the pipe. Most commonly the selected strategy is replacement of collapsing and deteriorated pipe.
Life cycle consequences	The process of degradation in storm sewers is similar to that of sanitary sewers however the repercussions of failure in storm sewers are considerably less substantial. Structural deterioration may lead to infiltration of ground water resulting in the deposition of sediment and debris, significantly reducing the flow of water. Continued maintenance and rehabilitation is essential for the durability of any type of buried infrastructure.
Integrated asset priorities	Replacement of deteriorating storm sewers is carried out based on the assessed condition. In the event that replacement is selected as the rehabilitation strategy, the project may expand to include other assets such as sidewalks, curb/gutter, road trench cuts, or full pavement. Other utilities may also become included in the scope of work: hydro, telephone, cable, and natural gas. Typically the integration of road rehabilitation will increase the priority of the project.

Bridges and Large Culverts

Anticipated asset life cycle	The life cycle of bridges and culverts is considerably variable and dependent on construction methodology and materials, traffic loading, traffic volume, and environmental exposure conditions (temperatures, chloride concentrations, etc). Bridges and concrete culverts constructed after 2000 have an expected life cycle of 75 years, whereas those constructed pre 2000 have an expected life of 50 years. The approximated service life of steel corrugated culverts is 40 years.
Integration opportunities	Typically it is not integrated with the other work other than potential road widening or resurfacing projects.
Rehabilitation and replacement criteria	The ranking of bridge and culvert work is based on several select criteria: safety, level of service, traffic volume and loading, and preservation of infrastructure. To assess the condition of the structures bi-annual visual inspections are conducted and if deemed necessary detailed bridge condition surveys are completed to better evaluate present conditions. In the inspections, bridge components are assessed individually recording the severity and degree of deterioration and the overall condition. Each bridge is assigned a Bridge Condition Index value between 100 and 0 where a value of 100 indicates excellent conditions and a value of 0 indicates poor deteriorating conditions.
Rehabilitation and replacement strategies	The specification of the bridge or culvert rehabilitation strategy is reliant on the structure's age, data and observations acquired through inspections and condition surveys, and the estimated remaining service life. The following strategies should be implemented at the specified age: at 15 years the asphalt deck should be resurfaced and at 30 years the concrete deck should be patched, waterproofed and the joints replaced; at 50 years replace entire concrete deck.
Life cycle consequences	The reduction of bridge and culvert service life endangers user safety and results in a decrease of level of service.
Integrated asset priorities	Typically it is not integrated with the other work other than potential road widening or resurfacing projects.

Anticipated asset life cycle.	The Life Cycle ranges from 15 to 50 years. Examining individual elements, the expected service life of the roof system varies from 25 to 30 years. Hot boiler or carpeting replacement typically occurs every 15 years. Similarly, the building superstructure life cycle is predicted as 50 or more years. These values hold true under the assumption that the elements are properly maintained throughout their service lives.
Integration opportunities	Assets are appraised separately. The projects however are assembled by asset to make use of the "economics of scale" principle. Special attention is given to ensure that the disruption of asset operations is minimized over its service life.
Rehabilitation and replacement criteria	To assess facilities the Facility Condition Index (FCI) is used. FCI is a ratio of total deferred maintenance, costs/ current replacement value of the facility. The index can be used to assess either individual assets or grouped assets. The FCI is currently accepted throughout North America.
Rehabilitation and replacement strategies	The replacement schedule will be dictated by the actual asset conditions at the time, the stage in its life cycle, and the FCI asset condition summaries. Replacement may also be undertaken to meet any changes in safety, industry or technological specifications and standards. The facility must also be maintained to meet the requirements of the Accessibility for Ontarians with Disabilities Act (AODA) and upgrade ingress/egress points as necessary. Critical components which should be given special attention with annual inspections include facility roof and HVAC systems. Any scheduled improvements should take into consideration the institution of economical energy efficient systems and equipment.
Life cycle consequences	Degradation of the building and its components are noticed, as well as increases in operational costs due to inefficiencies, health and safety concerns, and depreciation of Administration assets.
Integrated asset priorities	The schedule of replacement is dependent on the facility's stage in its life cycle, the actual condition at the time, and the convenience of performing the replacement without disturbing the operations.

Anticipated asset life cycle.	Service life is dependent on the type or vehicle/equipment and service area. The expected life cycle of cars and pickup trucks is 8-10 years, 10 years for duty trucks, 12 years for ice resurfaces, 10-15 years for front loaders, backhoes and tractors, 20 years for graders, and 20-25 years for fire vehicles.
Integration opportunities	Integrated with operation adjustments, modifications in service levels, meeting environmental regulations, technological upgrades and financial plans.
Rehabilitation and replacement criteria	Replacement of fleet will be dictated by the results of lifecycle cost analysis considering the following variables: repairs, insurance, fuel, depreciation, and downtime costs.
Rehabilitation and replacement strategies	In the case that vehicular repairs exceed 40% of replacement costs, replacement is the optimal strategy. Other strategies include leasing opportunities, refurbishing, seasonal rentals, or tendering services to a third party.
Life cycle consequences	Vehicles that are not maintained, or as vehicles reach the end of the service lives the efficiency of vehicles decrease, seeing an increase in cost per km. In the event of service interruption, work force costs are increased due to extended work schedules and overall loss of production.
Integrated asset priorities	Not applicable.

PURPOSE

The goal of the Municipality's capital financing policy shall be to set out the guiding principles for the financing of future capital expenditures in a manner that considers the infrastructure investment requirements of the Municipality as well as affordability issues for taxpayers.

GLOSSARY

Capital Levy – The amount of money raised through taxation that is transferred to the capital fund or reserves to be used to help pay for the cost of capital projects.

Debt – Any obligation for the payment of money. The Municipality considers debt to consist of debentures, cash loans from financial institutions, capital leases, debenture financing approved through bylaw for which no debt has yet been issued, debenture financing approved through the capital budget for which no bylaw has yet been established, outstanding financial commitments, loan guarantees and any debt issue by, or on behalf of the Municipality, including mortgages, debentures or demand loans.

Long-term Debt – Any Debt for which the repayment of any portion of the principal is due beyond one year.

Municipal Levy – The amount of money raised through taxation by the Municipality for the purposes of funding operating costs as well as the Capital Levy.

POLICY STATEMENTS

1. The Municipality shall increase the Municipal Levy by a minimum of 2% per year for each of the next five years (2014 to 2018 inclusive), with the 2% increase being added to the Capital Levy.

2. The increase in the Capital Levy shall only be used for the following purposes:

    a. To fund capital expenditures;

    b. To increase reserve balances in order to finance future capital expenditures; or

    c. To finance the annual costs associated with Long-term Debt issued in connection with capital projects.

3. Subsequent to the five year phase-in period for increases to the Municipal Levy, the Municipality shall increase the Capital Levy by at least the Consumer Price Index, as published by Statistics Canada.

PURPOSE

The goal of the Municipality's debt policy shall be to set out the guiding principles for the approval, issuance and administration of any Municipality debt, which shall adhere to all statutory requirements.

GLOSSARY

Debt – Any obligation for the payment of money. The Municipality considers debt to consist of debentures, cash loans from financial institutions, capital leases, debenture financing approved through bylaw for which no debt has yet been issued, debenture financing approved through the capital budget for which no bylaw has yet been established, outstanding financial commitments, loan guarantees and any debt issue by, or on behalf of the Municipality, including mortgages, debentures or demand loans.

Debt and Financial Obligation Limit – The maximum amount of annual debt servicing costs that a municipality can undertake or guarantee without seeking the approval of the Ontario Municipal Board. The Debt and Financial Obligation Limit is calculated pursuant to *Ontario Regulation 403/02 – Debt and Financial Obligation Limits*.

Lease Financial Agreements – A financial agreement, in accordance with *Ontario Regulation 653/05 – Debt Related Financial Instruments and Financial Agreements*, that a municipality may enter into for the purpose of obtaining long-term financing of a capital undertaking of the municipality.

Long-term Debt – Any Debt for which the repayment of any portion of the principal is due beyond one year.

Material Impact – Under *Ontario Regulation 653/05 – Debt Related Financial Instruments and Financial Agreements*, a Lease Financing Agreement has a material impact on a municipality if the costs or risks associated with the agreement significantly affect the municipality's Debt and Financial Obligation Limit, or would reasonably be expected to have a significant effect on that limit.

POLICY STATEMENTS

1. The Municipality shall only enter into Long-term Debt, including Lease Financing Agreements, where the following conditions are met:

    a. The Long-term Debt will be managed in a manner consistent with other long-term planning, financial and management objectives.

    b. Consideration will be given to the impact on future taxpayers.

    c. Long-term Debt will be managed in a manner to limit financial risk exposure.

    d. The timing, type and term of Long-term Debt will be determined with a view of minimizing long-term cost to the extent possible.

e. The term of Long-term Debt will not exceed the useful life of the particular asset.

f. The issuance of Long-term Debt will not result in the Municipality exceeding its Debt and Financial Obligation Limit.

g. A category of Lease Financing Agreements may be relied upon for non-material or operational leases where the agreements will not, in the opinion of the Treasurer as delegated by Council through this policy, result in a Material Impact for the Municipality.

2. All Debt shall be issued in Canadian dollars.

3. It shall be the general practice to issue Debt where the interest rates will be fixed over its term. The Municipality may issue Debt in which the interest rate will vary where, in the opinion of the Treasurer, it is in the Municipality's best interest to allow the rate to float provided such Debt, in addition to any other Debt, does not exceed fifteen percent (15%) of the total outstanding Debt of the Municipality in accordance with *Ontario Regulation 276/02 – Bank Loans*.

4. Upon the repayment of Long-term Debt, the amounts previously committed to annual debt servicing shall not be removed from the Municipality's budget but rather will be reallocated towards:

   a. Debt servicing costs for new Debt issued by the Municipality; and/or

   b. Contributions to reserves for capital purposes.

5. The awarding of any contract under this Policy, unless otherwise authorized by Council, shall follow the requirements as set out in the Municipality's procurement policy.

6. Council, in conjunction with staff, shall review the Municipality's outstanding Debt in conjunction with the annual budget process.

RELEVANT LEGISLATION

- Municipal Act, 2001
- Ontario Regulation 247/01 – Variable Interest Rate Debentures and Foreign Currency Borrowing
- Ontario Regulation 276/02 – Bank Loans
- Ontario Regulation 278/02 – Construction Financing
- Ontario Regulation 403/02 – Debt and Financial Obligation Limits
- Ontario Regulation 653/05 – Debt Related Financial Instruments and Financial Agreements

Municipality Of Tehkummah Created: Dec 28, 2016 Replacement Years: 2000 to 2099

Summary by FIR Classification

FIR Classification	Qty	Price	Residual Value	Est. Replac. Cost	Current cost
General government: Total	**1**	**44,407.00**	**0.00**	**219,664.05**	**78,052.42**
Other	1	44,407.00	0.00	219,664.05	78,052.42
Protection services: Total	**4**	**547,604.89**	**2,000.00**	**998,459.94**	**607,155.24**
Fire	3	517,604.89	2,000.00	961,531.60	577,155.24
Emergency measures	1	30,000.00	0.00	36,928.34	30,000.00
Transportation services: Total	**68**	**4,342,203.90**	**15,500.00**	**14,909,421.67**	**11,750,894.11**
Roads - Paved	26	374,000.00	0.00	1,390,020.79	1,226,011.69
Roads - Unpaved	25	418,700.00	0.00	1,536,249.87	1,383,292.05
Roads - Bridges and Culverts	9	2,556,215.38	0.00	9,823,716.57	7,070,399.43
Winter Control - Except sidewalks, Parking Lots	2	93,475.00	15,000.00	114,723.75	93,881.32
Other	6	899,813.52	500.00	2,044,710.69	1,977,309.62
Environmental services: Total	**14**	**4,187,283.80**	**0.00**	**21,132,849.83**	**6,319,912.52**
Wastewater collection/conveyance	8	2,085,460.70	0.00	10,359,864.09	3,147,608.28
Wastewater treatment & disposal	1	400,000.00	0.00	944,141.51	603,724.31
Water treatment	1	450,000.00	0.00	2,131,170.91	679,189.85
Water distribution/transmission	4	1,251,823.10	0.00	7,697,673.32	1,889,390.08
Recreation and cultural services: Total	**17**	**1,564,268.00**	**0.00**	**3,247,810.43**	**2,702,122.88**
Rec. Fac. - Golf Crs, Marina, Ski Hill	12	1,515,332.00	0.00	3,107,579.35	2,579,316.06
Rec. Fac. - All Other	2	4,621.00	0.00	10,591.81	6,638.97
Museums	2	26,364.00	0.00	83,415.08	80,215.36
Other	1	17,951.00	0.00	46,224.19	35,952.49
Grand Total	**104**	**10,685,767.59**	**17,500.00**	**40,508,205.92**	**21,458,137.17**

Municipality Of Tehkummah Created: Dec 28, 2016 Replacement Years: 2000 to 2099

Summary by Categories

Category	Qty	Price	Residual Value	Est. Replac. Cost	Current cost
Building	5	48,936.00	0.00	140,231.08	122,806.82
Vehicle	5	525,269.00	500.00	845,782.73	818,100.79
Non Building Infrastructure	1	400,000.00	0.00	944,141.51	603,724.31
Road	51	792,700.00	0.00	2,926,270.66	2,609,303.74
Bridges	9	2,556,215.38	0.00	9,823,716.57	7,070,399.43
Pipes	4	1,251,823.10	0.00	7,697,673.32	1,889,390.08
South Baymouth Marina	10	1,436,689.00	0.00	2,870,821.14	2,463,174.45
Grand Total	**104**	**10,685,767.59**	**17,500.00**	**40,508,205.92**	**21,458,137.17**

Municipality Of Tehkummah Created: Dec 28, 2016 Replacement Years: 2000 to 2099

#	Title and description	Purchased	Replace Year	Useful Life	Price	Residual Value	Est. Replac. Cost	Current cost
Fir:General government>Other Cat.: Building								
1	Municipal Building :: 2017-2018 Office carpet to be replaced. Electrical systems to be upgraded.	1989/01/01	2064	75	44,407.00	0.00	219,664.05	78,052.42
Fir:Protection services>Fire Cat.: Building								
2	Fire Department Office and Garage :: Meeting Hall, Office, Garage, Emergency Shelter	2011/01/01	2091	80	67,604.89	0.00	372,855.15	73,619.58
Fir:Protection services>Fire Cat.: Vehicle								
3	1987 Ford Fire Pumper : Fire equipment - heavy :: Fire equipment - heavy: purchased 1987 for $85,481	2006/06/28	2022	16	250,000.00	0.00	342,487.49	303,535.66
4	1987 Ford Pumper Tanker :: 1987 Ford Pumper Tanker refurbished	2016/12/21	2026	10	200,000.00	2,000.00	246,188.96	200,000.00
Fir:Protection services>Emergency measures Cat.: Non Building Infrastructure								
5	Repeater Radio System :: Communication System - Fire / Public Works / Emergency First response	2016/12/01	2026	10	30,000.00	0.00	36,928.34	30,000.00
Fir:Transportation services>Roads - Paved Cat.: Road								
6	10th Sideroad. Start: Range Rd. End: Concession Rd 6 W;3.3 km Surface:LCB :: C.R. 2	1960/01/01	2017	57	10,000.00	0.00	33,434.24	33,037.78
7	Water Street (Highway 6). Start: Church St. (Highway 6). End: Green St.; km:0.21; Surface:HCB :: C.R. 6.5	1960/01/02	2018	58	2,000.00	0.00	6,833.96	6,607.56
8	Fourth Street. Start: Church St. (Highway 6). End: To End; km:0.12; Surface:LCB :: C.R. 6	1960/01/02	2019	59	5,000.00	0.00	17,460.76	16,518.89
9	10th Sideroad. Start: Townline Road W. End: Ontario 542A W. km: 2. Surface: LCB :: C.R. 2	1960/01/02	2019	59	15,000.00	0.00	52,382.29	49,556.68
10	10th Sideroad. Start: Concession Rd 6 W. End: Hwy 6; km:2.3; Surface:LCB :: C.R. 2	1960/01/02	2019	59	10,000.00	0.00	34,921.53	33,037.78
11	First Street. Start: Highway 6. End: To End; km:0.25; Surface:LCB :: C.R. 6	1960/01/02	2019	59	10,000.00	0.00	34,921.53	33,037.78

Municipality Of Tehkummah Created: Dec 28, 2016 Replacement Years: 2000 to 2099

#	Title and description	Purchased	Replace Year	Useful Life	Price	Residual Value	Est. Replac. Cost	Current cost
12	Second Street. Start: Green Street. End: Highway 6; km:0.18; Surface:LCB :: C.R. 6	1960/01/02	2019	59	10,000.00	0.00	34,921.53	33,037.78
13	Water Street (Highway 6). Start: Huron St.. End: Minto St.; km:0.15; Surface:HCB :: C.R. 6.5	1960/01/02	2019	59	1,000.00	0.00	3,492.15	3,303.78
14	Second Street. Start: Highway 6. End: To End; km:0.097; Surface:LCB :: C.R. 6	1960/01/02	2019	59	5,000.00	0.00	17,460.76	16,518.89
15	Third Street. Start: Highway 6. End: To End; km:0.14; Surface:LCB :: C.R. 6	1960/01/02	2019	59	5,000.00	0.00	17,460.76	16,518.89
16	Green Street. Start: Highway 6. End: Second Street; km:0.45; Surface:LCB :: C.R. 6	1960/01/02	2020	60	5,000.00	0.00	17,844.90	16,518.89
17	Given Street. Start: Water Street (Highway 6). End: Church St. (Highway 6); km:0.45; Surface:LCB :: C.R. 6.5	1960/01/02	2020	60	5,000.00	0.00	17,844.90	16,518.89
18	6th Concession Road West. Start: 15th Sideroad. End: 10th Sideroad; km:1.9; Surface:LCB :: C.R. 7	1960/01/02	2020	60	15,000.00	0.00	53,534.70	49,556.68
19	6th Concession Road West. Start: 10th Sideroad. End: Highway 6; km:1.9; Surface:LCB :: C.R. 7	1960/01/02	2020	60	15,000.00	0.00	53,534.70	49,556.68
20	6th Concession Road East (Church Rd.). Start: Highway 6. End: Lakeshore Road North; km:1.2; Surface:LCB :: C.R. 7	1960/01/02	2020	60	15,000.00	0.00	53,534.70	49,556.68
21	10th Sideroad. Start: Ontario 542A W. End: Range Rd; km:0.75; Surface:LCB :: C.R. 2	1960/01/02	2020	60	10,000.00	0.00	35,689.80	33,037.78
22	Water Street (Highway 6). Start: Green St.. End: 5 Street; km:0.13; Surface:HCB :: C.R. 6.5	1960/01/02	2021	61	2,000.00	0.00	7,295.00	6,607.56
23	Water Street (Highway 6). Start: 5 Street. End: Huron St.; km:0.4; Surface:HCB :: C.R. 6.5	1960/01/02	2021	61	2,000.00	0.00	7,295.00	6,607.56
24	Government Road. Start: Carter's Bay Road. End: Yonge St.; km:3.5; Surface:LCB :: C.R. 7	1960/01/02	2021	61	17,500.00	0.00	63,831.21	57,816.12
25	Government Road. Start: 10th Sideroad. End: Michael's Bay Road; km:6.3; Surface:LCB :: C.R. 7	1960/01/01	2022	62	65,000.00	0.00	242,303.27	214,745.60

Municipality Of Tehkummah Created: Dec 28, 2016 Replacement Years: 2000 to 2099

#	Title and description	Purchased	Replace Year	Useful Life	Price	Residual Value	Est. Replac. Cost	Current cost
26	Government Road. Start: Michael's Bay Road. End: Carter's Bay Road; km:3.1; Surface:LCB :: C.R. 7	1960/01/02	2022	62	45,000.00	0.00	167,748.41	148,670.03
27	6th Concession Road East (Church Rd.). Start: Lakeshore Road North. End: Slash Rd.; km:1.2; Surface:LCB :: C.R. 7	1960/01/02	2023	63	15,000.00	0.00	57,146.29	49,556.68
28	Pentecostal Church Road (Church St. (Highway 6)). Start: Given Road. End: Third St.; km:0.15; Surface:LCB :: C.R. 7	1960/01/02	2024	64	2,500.00	0.00	9,733.92	8,259.45
29	Government Road. Start: Yonge St.. End: Ontario 551N; km:7.8; Surface:LCB :: C.R. 7	1960/01/02	2025	65	80,000.00	0.00	318,338.08	264,302.28
30	Pentecostal Church Road (Church St. (Highway 6)). Start: Water Street (Highway 6). End: Given Road; km:0.24; Surface:LCB :: C.R. 7	1960/01/02	2030	70	2,000.00	0.00	8,873.26	6,607.56
31	Cedar Grove Drive. Start: 10th Sideroad. End: To End; km:0.13; Surface:LCB :: C.R. 7	2000/01/02	2070	70	5,000.00	0.00	22,183.14	6,917.44
Fir:Transportation services>Roads - Unpaved Cat.: Road								
32	Martin Road. Start: Range Road. End: To End; km:0.95; Surface:GR :: C.R. 7	1960/01/02	2017	57	10,000.00	0.00	33,434.24	33,037.78
33	Michael's Bay Road. Start: Government Road. End: To End; km:4.6; Surface:GR :: C.R. 7	1960/01/02	2017	57	46,000.00	0.00	153,797.50	151,973.81
34	Lakeshore Road. Start: Lakeshore Road North. End: Roger's Creek Road; km:2; Surface:GR :: C.R. 6.5	1960/01/02	2018	58	20,000.00	0.00	68,339.58	66,075.57
35	Oswald Rd. Start: Hwy 6. End: To End; km:0.3; Surface:GR :: C.R. 6	1960/01/02	2018	58	3,000.00	0.00	10,250.94	9,911.34
36	15th Sideroad. Start: Concession Road 2. End: Government Road; km:1.7; Surface:GR :: C.R. 6.5	1960/01/02	2020	60	1,700.00	0.00	6,067.27	5,616.42
37	15th Sideroad. Start: Government Road. End: Concession Road 6 W; km:2.4; Surface:GR :: C.R. 6.5	1960/01/02	2020	60	24,000.00	0.00	85,655.52	79,290.68

Municipality Of Tehkummah Created: Dec 28, 2016 Replacement Years: 2000 to 2099

#	Title and description	Purchased	Replace Year	Useful Life	Price	Residual Value	Est. Replac. Cost	Current cost
38	15th Sideroad. Start: Concession Road 6 W. End: To End; km:0.5; Surface:GR :: C.R. 6.5	1960/01/02	2020	60	5,000.00	0.00	17,844.90	16,518.89
39	15th Sideroad. Start: Townline Road W. End: Concession Road 2; km:2; Surface:GR :: C.R. 6.5	1960/01/02	2020	60	20,000.00	0.00	71,379.60	66,075.57
40	Lakeshore Road. Start: Lakeshore Road. End: Concession Road 6; km:2; Surface:GR :: C.R. 6.5	1960/01/02	2021	61	20,000.00	0.00	72,949.95	66,075.57
41	Smeltzer's Road. Start: Ontario 542A. End: Ontario 542E; km:2.3; Surface:GR :: C.R. 7	1960/01/02	2021	61	23,000.00	0.00	83,892.44	75,986.91
42	20th sideroad. Start: North End. End: Concession Road 2; km:0.4; Surface:GR :: C.R. 7	1960/01/02	2022	62	5,000.00	0.00	18,638.71	16,518.89
43	20th Sideroad. Start: Concession Road 2. End: Government Road; km:1.5; Surface:GR :: C.R. 7	1960/01/02	2022	62	15,000.00	0.00	55,916.14	49,556.68
44	Lakeshore Road. Start: Highway 6. End: Lakeshore Road North; km:3.6; Surface:GR :: C.R. 6.5	1960/01/02	2022	62	36,000.00	0.00	134,198.73	118,936.03
45	Lakeshore Road. Start: Roger's Creek Road. End: Church Road.; km:1.1; Surface:GR :: C.R. 6.5	1960/01/02	2022	62	11,000.00	0.00	41,005.17	36,341.56
46	Range Road. Start: 10th Sideroad. End: Martin Road; km:0.75; Surface:GR :: C.R. 7	1960/01/02	2022	62	7,500.00	0.00	27,958.07	24,778.34
47	Range Road. Start: Martin Road. End: Ontario 542A; km:0.55; Surface:GR :: C.R. 7	1960/01/02	2022	62	5,500.00	0.00	20,502.58	18,170.78
48	2nd Concession Road. Start: West End. End: 20th Sideroad; km:1.2; Surface:GR :: C.R. 7	1960/01/02	2022	62	12,000.00	0.00	44,732.91	39,645.34
49	5th Sideroad. Start: Concession Road 5. End: Lakeshore Road; km:2.6; Surface:GR :: C.R. 7	1960/01/02	2023	63	26,000.00	0.00	99,053.58	85,898.24
50	Ducks Bay Road. Start: Hwy 6. End: To End; km:1; Surface:GR :: C.R. 6	1960/01/02	2023	63	10,000.00	0.00	38,097.53	33,037.78
51	3rd Concession Road. Start: 20th Sideroad. End: 15th Sideroad; km:2; Surface:GR :: C.R. 7	1960/01/02	2023	63	20,000.00	0.00	76,195.06	66,075.57
52	Townline Road West. Start: Ontario 542W. End: 15th Sideroad; km:4; Surface:GR :: C.R. 7	1960/01/02	2023	63	40,000.00	0.00	152,390.12	132,151.14

Municipality Of Tehkummah Created: Dec 28, 2016 Replacement Years: 2000 to 2099

#	Title and description	Purchased	Replace Year	Useful Life	Price	Residual Value	Est. Replac. Cost	Current cost
53	4th Concession Road. Start: 15th Sideroad. End: 10th Sideroad; km:2; Surface:GR :: C.R. 7	1960/01/02	2023	63	20,000.00	0.00	76,195.06	66,075.57
54	4th Concession Road. Start: Government Road. End: 15th Sideroad; km:2.1; Surface:GR :: C.R. 7	1960/01/02	2023	63	21,000.00	0.00	80,004.81	69,379.35
55	Townline Road West. Start: 15th Sideroad. End: To End; km:0.8; Surface:GR :: C.R. 7	1960/01/02	2024	64	8,000.00	0.00	31,148.54	26,430.23
56	Townline Road East. Start: Ontario 542W. End: To End; km:0.9; Surface:GR :: C.R. 7	1960/01/02	2026	66	9,000.00	0.00	36,600.92	29,734.01

Flr:Transportation services>Roads - Bridges and Culverts Cat.: Bridges

57	Tehkummah/ Sandfield Townline over Manitou River :: Steel Beam, Timber Deck :: Concrete :: 1970	1970/01/01	2017	47	265,500.03	0.00	714,080.30	705,612.94
58	Lakeshore Road over Rogers Creek (Adjacent to South Bay) :: Steel Beam, Timber Deck :: Stone/ Timber Cribs :: 1960	1960/01/01	2017	57	582,986.08	0.00	1,949,169.55	1,926,056.87
59	Blue Jay Creek CSP 10th Concession :: CSP/ Multi Plate :: :: 1960	1960/01/02	2017	57	90,000.00	0.00	300,908.14	297,340.06
60	Lakeshore Road over Rogers Creek :: Steel Beam, Timber Deck :: Stone/Timber Crib / Stone Abutments :: 1960	1960/01/01	2023	63	395,080.31	0.00	1,505,158.35	1,305,257.83
61	Concession 2 over Manitou River :: Steel Beam, Timber Deck :: Steel Beam, Timber Deck :: 1960	1960/01/01	2025	65	272,694.53	0.00	1,085,113.15	900,922.32
62	20th Side Road over Manitou River :: Steel Beam, Timber Deck :: Stone Abutments/Concrete center Peir :: 1960	1960/01/01	2025	65	324,912.62	0.00	1,292,900.73	1,073,439.32
63	Blue Jay Creek CSP 6th Concession :: CSP/ Multi Plate :: 1960	1960/01/02	2035	75	90,000.00	0.00	445,194.78	297,340.06
64	Government Road over Black Creek :: CSP/ Multi Plate :: 2002	2002/01/01	2052	50	72,000.00	0.00	206,712.94	95,368.68
65	Government Road over Manitou River :: Complete replacement 2015	2015/07/01	2090	75	463,041.81	0.00	2,324,478.63	469,061.35

Flr:Transportation services>Winter Control - Except sidewalks, Parking Lots Cat.: Vehicle

Municipality Of Tehkummah Created: Dec 28, 2016 Replacement Years: 2000 to 2099

#	Title and description	Purchased	Replace Year	Useful Life	Price	Residual Value	Est. Replac. Cost	Current cost
66	Public Works Plow Truck #4 2003 Sterling :: 2003 Sterling Plow truck	2015/10/22	2025	10	31,255.00	5,000.00	38,134.37	31,661.32
67	Public Works Plow Truck #5 Peterbilt :: 2009 Peterbilt Plow Truck	2016/10/20	2026	10	62,220.00	10,000.00	76,589.38	62,220.00
Fir:Transportation services>Other Cat.: Building								
68	Public Works Garage :: Building: Year of Construction: 1963	1963/01/02	2018	55	374,544.52	0.00	1,198,927.96	1,159,208.83
Fir:Transportation services>Other Cat.: Vehicle								
69	1988 Champion Grader :: Grader	1989/01/02	2017	28	350,000.00	0.00	622,563.28	615,181.10
70	Public Works Patrol Truck #2. 2005 GMC Sierra :: 2005 Pick-up truck	2005/08/11	2017	12	35,000.00	500.00	43,951.04	43,429.88
71	2008 John Deere Backhoe : Backhoe and loader :: Backhoe and loader	2008/01/02	2020	12	90,000.00	0.00	113,016.96	104,618.97
72	Used Massey Ferguson Tractor :: Farm Tractor	2000/01/02	2023	23	12,000.00	0.00	19,144.42	16,601.84
73	Public Works Patrol Truck #1 2016 Dodge :: 2016 Dodge Ram 2500	2016/09/14	2026	10	38,269.00	0.00	47,107.03	38,269.00
Fir:Environmental services>Wastewater collection/conveyance Cat.: Building								
74	Pumping Station #1 :: Building: Year of Construction: 1996	1996/01/01	2026	30	118,300.00	0.00	219,786.99	178,551.46
75	Pumping Station #2 :: Building: Year of Construction: 1996	1996/01/02	2026	30	118,300.00	0.00	219,786.99	178,551.46
76	Pumping Station #3 :: Building: Year of Construction: 1996	1996/01/02	2069	73	118,300.00	0.00	560,261.15	178,551.46
77	Pumping Station #4 :: Building: Year of Construction: 1996	1996/01/02	2069	73	118,300.00	0.00	560,261.15	178,551.46
78	Pumping Station #5 :: Building: Year of Construction: 1996	1996/01/02	2069	73	118,300.00	0.00	560,261.15	178,551.46
Fir:Environmental services>Wastewater collection/conveyance Cat.: Pipes								
79	Sanitary Sewer Network - Pipes :: Diameter: 200, Length:620, year 1996, replacement 2076, installed 1996	1996/01/02	2076	80	652,292.70	0.00	3,597,531.08	984,512.40

Municipality Of Tehkummah Created: Dec 28, 2016 Replacement Years: 2000 to 2099

#	Title and description	Purchased	Replace Year	Useful Life	Price	Residual Value	Est. Replac. Cost	Current cost
80	Sanitary Sewer Network - Pipes :: Diameter: 150, Length:220, year 1996, replacement 2076, installed 1996	1996/01/02	2076	80	231,458.70	0.00	1,276,543.28	349,343.11
81	Sanitary Sewer Network - Pipes :: Diameter: 100, Length:580, year 1996, replacement 2076, installed 1996	1996/01/02	2076	80	610,209.30	0.00	3,365,432.30	920,995.47
Fir:Environmental services>Wastewater treatment & disposal Cat.: Non Building Infrastructure								
82	Lagoon :: Building: Year of Construction: 1996	1996/01/01	2037	41	400,000.00	0.00	944,141.51	603,724.31
Fir:Environmental services>Water treatment Cat.: Building								
83	Water Treatment Plant :: Building: Year of Construction: 1996	1996/01/01	2069	73	450,000.00	0.00	2,131,170.91	679,189.85
Fir:Environmental services>Water distribution/transmission Cat.: Pipes								
84	Potable Water Distribution System -Mains :: Diameter: 200, Length:30, year 1996, replacement 2081	1996/01/01	2081	85	22,458.30	0.00	138,099.91	33,896.55
85	Potable Water Distribution System -Mains :: Diameter: 150, Length:1170, year 1996, replacement 2081	1996/01/01	2081	85	785,198.70	0.00	4,828,320.46	1,185,108.85
86	Potable Water Distribution System -Mains :: Diameter: 100, Length:300, year 1996, replacement 2081	1996/01/01	2081	85	189,333.00	0.00	1,164,240.84	285,762.34
87	Potable Water Distribution System -Mains :: Diameter: 75, Length:460, year 1996, replacement 2081, installed 1996	1996/01/01	2081	85	254,833.10	0.00	1,567,012.11	384,622.34
Fir:Recreation and cultural services>Rec. Fac. - Golf Crs, Marina, Ski Hill Cat.: Building								
88	Marina - Building #2 :: Harbourmaster Office	1997/01/02	2023	26	10,000.00	0.00	17,029.96	14,768.21
89	Marina - Building #1 :: Cafe, Laundry Facility, Public Washroom/Shower	1997/01/02	2052	55	68,643.00	0.00	219,728.25	101,373.40
Fir:Recreation and cultural services>Rec. Fac. - Golf Crs, Marina, Ski Hill Cat.: South Baymouth Marina								

Municipality Of Tehkummah Created: Dec 28, 2016 Replacement Years: 2000 to 2099

#	Title and description	Purchased	Replace Year	Useful Life	Price	Residual Value	Est. Replac. Cost	Current cost
90	Fuel Dispensing Equipment :: Two tanks with a separate fuel pump per tank.	2016/05/02	2017	1	60,000.00	0.00	60,720.00	60,000.00
91	Finger Docks :: Finger Docks - floating. Replaced on a rotational basis	1988/01/02	2017	29	73,499.67	0.00	133,613.93	132,029.58
92	Parking - asphalt surface :: South Baymouth Marina	1988/01/02	2018	30	160,902.24	0.00	298,936.77	289,033.33
93	Headwall South Baymouth Marina :: Headwall	1990/01/02	2020	30	452,670.00	0.00	841,005.74	778,512.80
94	Main Docks :: Main docks	1988/01/02	2023	35	299,486.15	0.00	620,366.69	537,975.60
95	Boardwalk :: South Baymouth Marina	1980/01/02	2025	45	17,630.94	0.00	45,400.03	37,693.67
96	Lighting :: South Baymouth Marina	1988/01/02	2025	37	160,000.00	0.00	346,173.24	287,412.61
97	Fuel Handling (TSSA) TANKS :: Fuel Tanks - Gasoline for Vessels	2016/05/02	2026	10	35,000.00	0.00	43,083.07	35,000.00
98	Sewage Pumpout :: South Baymouth Marina	2016/10/13	2026	10	65,000.00	0.00	80,011.41	65,000.00
99	Boat Launch :: Cement pad boat launch	1980/01/02	2040	60	112,500.00	0.00	401,510.26	240,516.86
Fir:Recreation and cultural services>Rec. Fac. - All Other Cat.: Building								
100	John Budd Memorial Park Pavillion :: Building: Year of Construction: 1995	1995/01/02	2035	40	3,000.00	0.00	6,928.63	4,627.55
101	John Budd Memorial Park - Public Washroom / Showerhouse :: Building: Year of Construction: 2005	2005/01/02	2044	39	1,621.00	0.00	3,663.18	2,011.42
Fir:Recreation and cultural services>Museums Cat.: Building								
102	Museum Exhibit Display and Storage :: Exhibit Display and Hall	1968/01/02	2018	50	25,364.00	0.00	72,820.37	70,407.92
103	Museum, Old School House :: Costructed 1898. 2017-2018 roof and electrical work required	1910/01/01	2020	110	1,000.00	0.00	10,594.71	9,807.44
Fir:Recreation and cultural services>Other Cat.: Building								
104	Tehkummah Hall :: Building: Year of Construction: 1983	1983/01/02	2028	45	17,951.00	0.00	46,224.19	35,952.49